## Technical Data

Original Instructions

# PowerFlex 750-Series Products with TotalFORCE Control


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Rockwell Automation

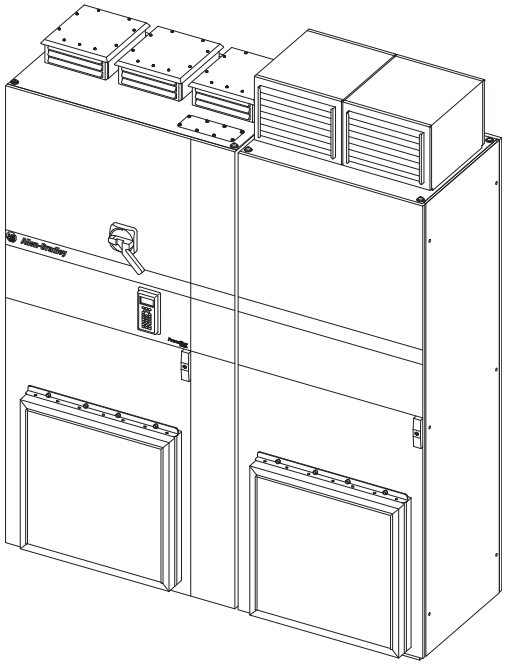
# Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes. Translated versions are not always available for each revision.

| Topic | Page |
|---|---|
| Corrosive Gas Protection code added to catalog number explanation. | 5 |
| Normal duty AC input and DC output ratings added to catalog number explanation for bus supplies. | 8, 9 |
| Product selection tables added. | 37 |
| Ecodesign Directive category added to specifications. | 42 |
| Corrosive atmosphere category added to specifications. | 42 |
| TLink high-speed drive-to-drive communications option module (20-750-TLINK-XT) added to Communication Option Kits and Accessories section. | 266 |
| TLink option module specifications added. | 267 |

## Introduction

PowerFlex® 750-Series products with TotalFORCE™ technology offer precise motor control along with solutions for harmonic mitigation, regeneration, and common-bus system configurations. TotalFORCE technology delivers exceptional motor control through precise, adaptive control of position, velocity, and torque for electric motors. It incorporates several patented features that are designed to help optimize your system and maintain productivity.

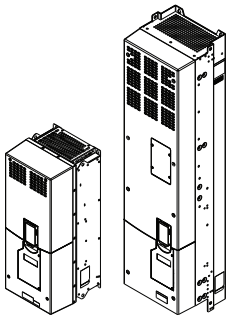


Maximize your productivity by taking advantage of the following key features that are offered in the PowerFlex 750-Series products with TotalFORCE technology:

- **PowerFlex 755TL Drive** – Provides harmonic mitigation and power factor correction by using active front end technology.
- **PowerFlex 755TR Drive** – Features built-in regeneration capability that helps reduce energy consumption by delivering regenerative energy from motors back to the incoming supply. Line regeneration can reduce the need for braking resistors and associated cooling equipment and helps avoid wasteful dissipation of energy. The drive also offers harmonic mitigation.
- **PowerFlex 755TM Drive System** – Select from a series of predesigned configurations for regenerative bus supplies and common bus inverters to optimize your system design and power consumption. Gain energy efficiency with motors that share energy between regenerating and motoring loads. A common bus drive system offers advantages such as design flexibility, energy optimization, and reduced installation costs. Systems provide harmonic mitigation and built-in regeneration capability.
- **Corrosive Gas Protection (XT)** – The PowerFlex TL, TR, and TM products are now manufactured with corrosive gas protection (XT) as a standard. Our drives with XT combine conformal coating with several additional design enhancements to provide improved performance in environments with corrosive gases such as tire and rubber, wastewater, pulp and paper, and metals to name a few.
- **Built-in Reflected Wave Filter** – This option provides improved motor protection in a cost effective prematched, space-saving package that eliminates the need for wiring to an external device.
- **Predictive Maintenance** – Helps improve productivity by estimating the remaining life span of drive components so preventive action can be taken before component wear-out causes unplanned downtime.
- **Market-leading power density** – High power ratings in a relatively compact footprint.
- **Serviceability** – Fast and easy servicing of drive helps save you time and reduce costs.
- **Roll in/roll out design** – Makes the drive easy to install and service. Power wiring can stay connected while unit is rolled out.
- **Patented slot-based hardware structure** – Allows you to select option modules for safety, feedback, communications, and I/O.
- **Safe Torque Off and Safe Speed Monitor** – Provide a choice for safety levels depending on your application requirements.
- **Load Observer** – Maintain productivity with control that adapts to operating conditions.
- **Voltage Boost** – Provides full voltage to the motor in applications where less than motor rated voltage is available.
- **Ride-Through** – Helps keep equipment running through power quality disturbances.
- **TorqProve™** – Patented control coordinates motor torque and brake operation in hoist applications.
- **Communications** – The PowerFlex 755T products feature built-in dual EtherNet/IP™ ports.

### PowerFlex 755TL Low Harmonics Drives

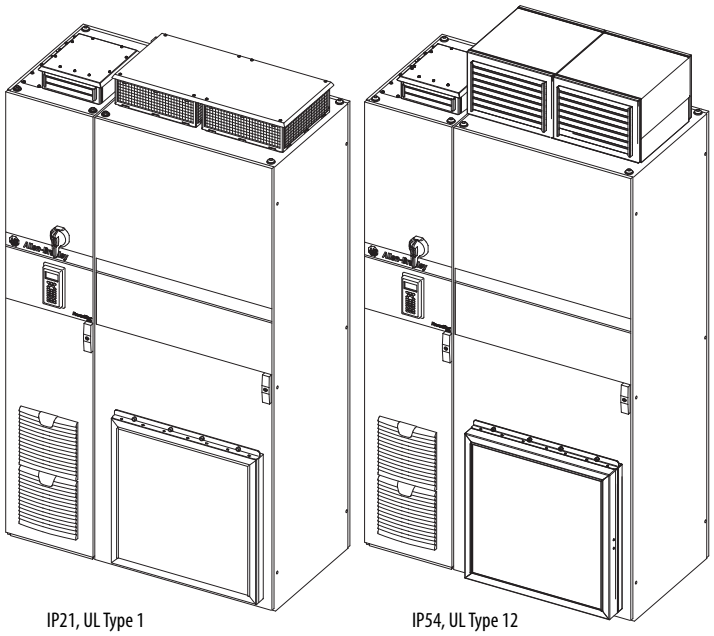
- Low harmonics drive non-regenerative applications from 10...1800 Hp, 7.5...1400 kW, 400/480/600/690V
- IP20, UL Open Type/IP21, UL Type 1/IP54, UL Type 12



IP20, UL Open Type

### PowerFlex 755TR Regenerative Drives

- Regenerative applications from 10...6000 Hp, 7.5...4500 kW, 400/480/600/690V
- Reduction of Harmonic content
- IP20, UL Open Type/IP21, UL Type 1/IP54, UL Type 12

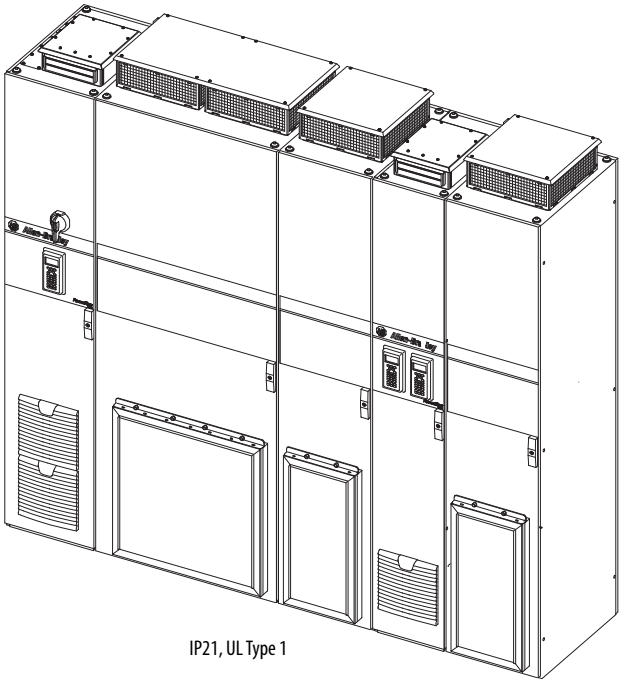


IP21, UL Type 1

IP54, UL Type 12

### PowerFlex 755TM Drive Systems

- Low harmonics drive non-regenerative applications from 250...6000 Hp, 160...2300 kW (AC), 70...4800 kW (DC)
- Regenerative bus supplies
- Common bus inverters
- IP21, UL Type 1/IP54, UL Type 12 and Open Type (IP00)



IP21, UL Type 1

# Catalog Number Explanation

Catalog number positions 1...7 identify the product type and voltage rating.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | E | G | 3 | D | 740 | L | N | A | N | N | N | N | N | -C0-P15… |
| | **A** | **B** | **C** | **D** | **E** | | | | | | | | | |

**A**

| Drive | | |
|---|---|---|
| **Code** | **Type** | **Frames** |
| 20G | PowerFlex 755TL Drives | 5…10 |
| | PowerFlex 755TR Drives | 5…15 |
| | PowerFlex 755TM Common Bus Inverters | 8…15 |
| 20J | PowerFlex 755TM Bus Supplies | 6…15 |

**B**

| Corrosive Gas Protection and Cooling Type | | | |
|---|---|---|---|
| **Code** | **Description** | **Frames** | **Firmware** |
| 1 | Standard Protection, Forced Air | 5…15 | 6.*xxx* and earlier |
| E | Corrosive Gas Protection (XT), Forced Air | 5…15 | 10.*xxx* and later |

**C**

| Input Type | | |
|---|---|---|
| **Code** | **Description** | **Frames** |
| 6 | Regenerative and Low Harmonic AFE, 755TR Drives | 5…7 |
| | Regenerative and Low Harmonic AFE, 755TM Bus Supplies | 6…7 |
| 7 | Low Harmonic AFE, 755TL Drives | 5…7 |
| D | Common Bus with DC Precharge | 8…15 |
| E | Common Bus without DC Precharge | 8…15 |
| F | Regenerative and Low Harmonic AFE, 755TR Drives | 8…15 |
| | Regenerative and Low Harmonic AFE, 755TM Bus Supplies | 8…15 |
| G | Low Harmonic AFE, 755TL Drives | 8…10 |

**D**

| Enclosure | | |
|---|---|---|
| **Code** | **Description** | **Frames** |
| N | IP00, UL Open Type | 5…6 |
| 3 | IP21, UL Type 1; Floor Mount | 7…15 |
| 4 | IP54, UL Type 12; Floor Mount | 7…15 |

**E**

| Voltage Rating | |
|---|---|
| **Code** | **Voltage** |
| C | 400V AC; 3 PH |
| D | 480V AC; 3 PH |
| E | 600V AC; 3 PH |
| F | 690V AC; 3 PH |

Catalog number positions 8...10 identify the product normal duty rating.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | 1 | G | 3 | D | 740 | L | N | A | N | N | N | N | N | -C0-P15… |
| | | | | | **F1…F4** | | | | | | | | | |

**F1**

**PowerFlex 755T ND Drive Ratings**

400V, 50 Hz Input

| Code | Amps | kW | Frame |
|---|---|---|---|
| 015 | 15.4 | 7.5 | 5 |
| 022 | 22 | 11 | |
| 030 | 30 | 15 | |
| 037 | 37 | 18.5 | |
| 043 | 43 | 22 | |
| 060 | 60 | 30 | |
| 072 | 72 | 37 | |
| 085 | 85 | 45 | |
| 104 | 104 | 55 | |
| 140 | 140 | 75 | 6 |
| 176 | 170 | 90 | |
| 205 | 205 | 110 | |
| 260 | 260 | 132 | |
| 302 | 302 | 160 | 7 |
| 367 | 367 | 200 | |
| 460 | 460 | 250 | |
| 540 | 540 | 315 | |
| 585 | 600 | 315 | |
| 302 | 302 | 160 | 8 |
| 367 | 367 | 200 | |
| 460 | 460 | 250 | |
| 540 | 540 | 315 | |
| 585 | 585 | 315 | |
| 650 | 650 | 355 | |
| 750 | 750 | 400 | |
| 770 | 770 | 400 | |
| 920 | 920 | 500 | 9 |
| 1K0 | 1040 | 560 | |
| 1K1 | 1112 | 630 | |
| 1K2 | 1175 | 710 | |
| 1K4 | 1463 | 800 | |
| 1K6 | 1590 | 850 | 10 |
| 1K7 | 1715 | 1000 | |
| 2K1 | 2156 | 1250 | |
| 2K8 | 2849 | 1650 | 11 |
| 3K5 | 3542 | 2000 | 12 |
| 4K2 | 4235 | 2200 | 13 |
| 5K6 | 5621 | 2920 | 14 |
| 7K0 | 7007 | 3640 | 15 |

**F2**

**PowerFlex 755T ND Drive Ratings**

480V, 60 Hz Input

| Code | Amps | Hp | Frame |
|---|---|---|---|
| 014 | 14 | 10 | 5 |
| 022 | 22 | 15 | |
| 027 | 27 | 20 | |
| 034 | 34 | 25 | |
| 040 | 40 | 30 | |
| 052 | 52 | 40 | |
| 065 | 65 | 50 | |
| 077 | 77 | 60 | |
| 096 | 96 | 75 | |
| 125 | 125 | 100 | 6 |
| 156 | 156 | 125 | |
| 186 | 186 | 150 | |
| 248 | 248 | 200 | |
| 302 | 302 | 250 | 7 |
| 361 | 361 | 300 | |
| 430 | 430 | 350 | |
| 505 | 505 | 400 | |
| 617 | 600 | 500 | |
| 302 | 302 | 250 | 8 |
| 361 | 361 | 300 | |
| 430 | 430 | 350 | |
| 505 | 505 | 400 | |
| 545 | 545 | 450 | |
| 617 | 617 | 500 | |
| 710 | 710 | 600 | |
| 740 | 740 | 650 | |
| 800 | 800 | 700 | 9 |
| 960 | 960 | 800 | |
| 1K0 | 1045 | 900 | |
| 1K1 | 1135 | 1000 | |
| 1K3 | 1365 | 1100 | |
| 1K4 | 1420 | 1250 | 10 |
| 1K6 | 1655 | 1500 | |
| 2K0 | 2072 | 1800 | |
| 2K6 | 2738 | 2400 | 11 |
| 3K4 | 3404 | 3000 | 12 |
| 4K0 | 4070 | 3600 | 13 |
| 5K4 | 5402 | 4800 | 14 |
| 6K7 | 6734 | 6000 | 15 |

**F3**

**PowerFlex 755T ND Drive Ratings**

600V, 60 Hz Input

| Code | Amps | Hp | Frame |
|---|---|---|---|
| 011 | 11 | 10 | 5 |
| 017 | 17 | 15 | |
| 022 | 22 | 20 | |
| 027 | 27 | 25 | |
| 032 | 32 | 30 | |
| 041 | 41 | 40 | |
| 052 | 52 | 50 | |
| 062 | 62 | 60 | |
| 077 | 77 | 75 | 6 |
| 099 | 99 | 100 | |
| 125 | 125 | 125 | |
| 144 | 144 | 150 | |
| 192 | 192 | 200 | 7 |
| 242 | 242 | 250 | |
| 295 | 295 | 300 | |
| 355 | 355 | 350 | |
| 395 | 395 | 400 | |
| 242 | 242 | 250 | 8 |
| 295 | 295 | 300 | |
| 355 | 355 | 350 | |
| 395 | 395 | 400 | |
| 435 | 435 | 450 | |
| 545 | 545 | 550 | |
| 595 | 580 | 600 | 9 |
| 690 | 690 | 700 | |
| 760 | 760 | 800 | |
| 825 | 825 | 900 | |
| 980 | 980 | 1000 | |
| 1K1 | 1045 | 1100 | 10 |
| 1K2 | 1220 | 1250 | |
| 1K5 | 1430 | 1500 | |
| 2K0 | 1946 | 2000 | 11 |
| 2K4 | 2420 | 2500 | 12 |
| 2K9 | 2998 | 3100 | 13 |
| 3K9 | 3979 | 4100 | 14 |
| 4K9 | 4960 | 5100 | 15 |

**F4**

**PowerFlex 755T ND Drive Ratings**

690V, 50 Hz Input

| Code | Amps | kW | Frame |
|---|---|---|---|
| 015 | 15 | 11 | 5 |
| 020 | 20 | 15 | |
| 023 | 23 | 18.5 | |
| 030 | 30 | 22 | |
| 034 | 34 | 30 | |
| 046 | 46 | 37 | |
| 050 | 50 | 45 | |
| 061 | 61 | 55 | |
| 082 | 82 | 75 | 6 |
| 098 | 98 | 90 | |
| 119 | 119 | 110 | |
| 142 | 142 | 132 | |
| 171 | 171 | 160 | 7 |
| 215 | 215 | 200 | |
| 265 | 265 | 250 | |
| 330 | 330 | 315 | |
| 370 | 370 | 355 | |
| 215 | 215 | 200 | 8 |
| 265 | 265 | 250 | |
| 330 | 330 | 315 | |
| 370 | 370 | 355 | |
| 415 | 415 | 400 | |
| 505 | 505 | 500 | |
| 565 | 565 | 560 | 9 |
| 650 | 650 | 630 | |
| 735 | 735 | 710 | |
| 820 | 820 | 800 | |
| 920 | 920 | 900 | |
| 1K0 | 1030 | 1000 | 10 |
| 1K1 | 1150 | 1100 | |
| 1K4 | 1419 | 1400 | |
| 1K8 | 1865 | 1800 | 11 |
| 2K3 | 2318 | 2300 | 12 |
| 2K7 | 2778 | 2750 | 13 |
| 3K6 | 3687 | 3650 | 14 |
| 4K5 | 4596 | 4550 | 15 |

Catalog number positions 8...10 identify the product normal duty rating.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20J | 1 | F | 3 | C | 1K6 | L | N | A | N | N | N | N | N | -C1-P16… |
| | | | | | **G1…G4** | | | | | | | | | |

**G1**

**PowerFlex 755TM ND Bus Supply Ratings**

400V AC, 50 Hz Input
580V DC Output

| Code<br>Rated AC Input Amps | DC Amps | DC kW | Frame |
|---|---|---|---|
| 140 | 150 | 87 | 6 |
| 176 | 182 | 106 | |
| 205 | 220 | 128 | |
| 260 | 279 | 162 | |
| 302 | 324 | 188 | 7 |
| 367 | 394 | 228 | |
| 460 | 494 | 286 | |
| 540 | 579 | 336 | |
| 585 | 644 | 373 | |
| 302 | 324 | 188 | 8 |
| 367 | 394 | 228 | |
| 460 | 494 | 286 | |
| 540 | 579 | 336 | |
| 585 | 628 | 364 | |
| 650 | 698 | 405 | |
| 750 | 805 | 467 | |
| 770 | 826 | 479 | |
| 920 | 987 | 572 | 9 |
| 1K0 | 1116 | 647 | |
| 1K1 | 1193 | 692 | |
| 1K2 | 1261 | 731 | |
| 1K4 | 1570 | 910 | |
| 1K6 | 1697 | 984 | 10 |
| 1K7 | 1840 | 1067 | |
| 2K1 | 2314 | 1342 | |
| 2K8 | 3057 | 1772 | 11 |
| 3K5 | 3801 | 2204 | 12 |
| 4K2 | 4543 | 2634 | 13 |
| 5K6 | 6030 | 3496 | 14 |
| 7K0 | 7517 | 4358 | 15 |

**G2**

**PowerFlex 755TM ND Bus Supply Ratings**

480V AC, 60 Hz Input
696V DC Output

| Code<br>Rated AC Input Amps | DC Amps | DC kW | Frame |
|---|---|---|---|
| 125 | 129 | 90 | 6 |
| 156 | 160 | 111 | |
| 186 | 191 | 133 | |
| 248 | 255 | 177 | |
| 302 | 311 | 216 | 7 |
| 361 | 371 | 258 | |
| 430 | 442 | 307 | |
| 505 | 519 | 361 | |
| 617 | 617 | 429 | |
| 302 | 311 | 216 | 8 |
| 361 | 371 | 258 | |
| 430 | 442 | 307 | |
| 505 | 519 | 361 | |
| 545 | 560 | 390 | |
| 617 | 635 | 442 | |
| 710 | 730 | 508 | |
| 740 | 761 | 529 | |
| 800 | 823 | 573 | 9 |
| 960 | 987 | 687 | |
| 1K0 | 1075 | 748 | |
| 1K1 | 1167 | 812 | |
| 1K3 | 1404 | 977 | |
| 1K4 | 1460 | 1016 | 10 |
| 1K6 | 1702 | 1184 | |
| 2K0 | 2131 | 1483 | |
| 2K6 | 2816 | 1959 | 11 |
| 3K4 | 3501 | 2436 | 12 |
| 4K0 | 4186 | 2912 | 13 |
| 5K4 | 5555 | 3865 | 14 |
| 6K7 | 6925 | 4818 | 15 |

**G3**

**PowerFlex 755TM ND Bus Supply Ratings**

600V AC, 60 Hz Input
870V DC Output

| Code<br>Rated AC Input Amps | Amps | kW | Frame |
|---|---|---|---|
| 077 | 79 | 69 | 6 |
| 099 | 102 | 89 | |
| 125 | 129 | 112 | |
| 144 | 148 | 129 | |
| 192 | 197 | 171 | 7 |
| 242 | 249 | 217 | |
| 295 | 303 | 263 | |
| 355 | 365 | 317 | |
| 395 | 406 | 353 | |
| 242 | 249 | 217 | 8 |
| 295 | 303 | 263 | |
| 355 | 365 | 317 | |
| 395 | 406 | 353 | |
| 435 | 447 | 389 | |
| 545 | 560 | 487 | |
| 595 | 596 | 518 | 9 |
| 690 | 710 | 617 | |
| 760 | 782 | 680 | |
| 825 | 848 | 737 | |
| 980 | 1008 | 877 | |
| 1K1 | 1075 | 935 | 10 |
| 1K2 | 1255 | 1091 | |
| 1K5 | 1471 | 1279 | |
| 2K0 | 2001 | 1740 | 11 |
| 2K4 | 2489 | 2164 | 12 |
| 2K9 | 3080 | 2678 | 13 |
| 3K9 | 4088 | 3555 | 14 |
| 4K9 | 5096 | 4432 | 15 |

**G4**

**PowerFlex 755TM ND Bus Supply Ratings**

690V AC, 50 Hz Input
1000V DC Output

| Code<br>Rated AC Input Amps | Amps | kW | Frame |
|---|---|---|---|
| 082 | 84 | 84 | 6 |
| 098 | 101 | 101 | |
| 119 | 122 | 122 | |
| 142 | 146 | 146 | |
| 171 | 176 | 176 | 7 |
| 215 | 221 | 221 | |
| 265 | 272 | 272 | |
| 330 | 339 | 339 | |
| 370 | 380 | 380 | |
| 215 | 221 | 221 | 8 |
| 265 | 272 | 272 | |
| 330 | 339 | 339 | |
| 370 | 380 | 380 | |
| 415 | 426 | 426 | |
| 505 | 518 | 518 | |
| 565 | 580 | 580 | 9 |
| 650 | 667 | 667 | |
| 735 | 754 | 754 | |
| 820 | 842 | 842 | |
| 920 | 944 | 944 | |
| 1K0 | 1057 | 1057 | 10 |
| 1K1 | 1180 | 1180 | |
| 1K4 | 1456 | 1456 | |
| 1K8 | 1914 | 1914 | 11 |
| 2K3 | 2379 | 2379 | 12 |
| 2K7 | 2849 | 2849 | 13 |
| 3K6 | 3781 | 3781 | 14 |
| 4K5 | 4714 | 4714 | 15 |

Catalog number positions 8...10 identify the product normal duty rating.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | 1 | D | 3 | F | 2K3 | M | N | D | N | N | N | N | N | -C0-C11-P15… |
| | | | | | **H1…H4** | | | | | | | | | |

**H1**

**PowerFlex 755T ND CBI Ratings**

400V, 50 Hz Input

| Code | Amps | kW | Frame |
|---|---|---|---|
| 302 | 302 | 160 | 8 |
| 367 | 367 | 200 | |
| 460 | 460 | 250 | |
| 540 | 540 | 315 | |
| 585 | 585 | 315 | |
| 650 | 650 | 355 | |
| 750 | 750 | 400 | |
| 770 | 770 | 400 | |
| 920 | 920 | 500 | 9 |
| 1K0 | 1040 | 560 | |
| 1K1 | 1112 | 630 | |
| 1K2 | 1175 | 710 | |
| 1K4 | 1463 | 800 | |
| 1K6 | 1590 | 850 | 10 |
| 1K7 | 1715 | 1000 | |
| 2K1 | 2156 | 1250 | |
| 2K8 | 2849 | 1650 | 11 |
| 3K5 | 3542 | 2000 | 12 |
| 4K2 | 4235 | 2200 | 13 |
| 5K6 | 5621 | 2920 | 14 |
| 7K0 | 7007 | 3640 | 15 |

**H2**

**PowerFlex 755T ND CBI Ratings**

480V, 60 Hz Input

| Code | Amps | Hp | Frame |
|---|---|---|---|
| 302 | 302 | 250 | 8 |
| 361 | 361 | 300 | |
| 430 | 430 | 350 | |
| 505 | 505 | 400 | |
| 545 | 545 | 450 | |
| 617 | 617 | 500 | |
| 710 | 710 | 600 | |
| 740 | 740 | 650 | |
| 800 | 800 | 700 | 9 |
| 960 | 960 | 800 | |
| 1K0 | 1045 | 900 | |
| 1K1 | 1135 | 1000 | |
| 1K3 | 1365 | 1100 | |
| 1K4 | 1420 | 1250 | 10 |
| 1K6 | 1655 | 1500 | |
| 2K0 | 2072 | 1800 | |
| 2K6 | 2738 | 2400 | 11 |
| 3K4 | 3404 | 3000 | 12 |
| 4K0 | 4070 | 3600 | 13 |
| 5K4 | 5402 | 4800 | 14 |
| 6K7 | 6734 | 6000 | 15 |

**H3**

**PowerFlex 755T ND CBI Ratings**

600V, 60 Hz Input

| Code | Amps | Hp | Frame |
|---|---|---|---|
| 242 | 242 | 250 | 8 |
| 295 | 295 | 300 | |
| 355 | 355 | 350 | |
| 395 | 395 | 400 | |
| 435 | 435 | 450 | |
| 545 | 545 | 550 | |
| 595 | 580 | 600 | 9 |
| 690 | 690 | 700 | |
| 760 | 760 | 800 | |
| 825 | 825 | 900 | |
| 980 | 980 | 1000 | |

**H4**

**PowerFlex 755T ND CBI Ratings**

690V, 50 Hz Input

| Code | Amps | kW | Frame |
|---|---|---|---|
| 215 | 215 | 200 | 8 |
| 265 | 265 | 250 | |
| 330 | 330 | 315 | |
| 370 | 370 | 355 | |
| 415 | 415 | 400 | |
| 505 | 505 | 500 | |
| 565 | 565 | 560 | 9 |
| 650 | 650 | 630 | |
| 735 | 735 | 710 | |
| 820 | 820 | 800 | |
| 920 | 920 | 900 | |

**H3**

| PowerFlex 755T ND CBI Ratings<br>600V, 60 Hz Input | | | |
|---|---|---|---|
| **Code** | **Amps** | **Hp** | **Frame** |
| 1K1 | 1045 | 1100 | 10 |
| 1K2 | 1220 | 1250 | |
| 1K5 | 1430 | 1500 | |
| 2K0 | 1946 | 2000 | 11 |
| 2K4 | 2420 | 2500 | 12 |
| 2K9 | 2998 | 3100 | 13 |
| 3K9 | 3979 | 4100 | 14 |
| 4K9 | 4960 | 5100 | 15 |

**H4**

| PowerFlex 755T ND CBI Ratings<br>690V, 50 Hz Input | | | |
|---|---|---|---|
| **Code** | **Amps** | **kW** | **Frame** |
| 1K0 | 1030 | 1000 | 10 |
| 1K1 | 1150 | 1100 | |
| 1K4 | 1419 | 1400 | |
| 1K8 | 1865 | 1800 | 11 |
| 2K3 | 2318 | 2300 | 12 |
| 2K7 | 2778 | 2750 | 13 |
| 3K6 | 3687 | 3650 | 14 |
| 4K5 | 4596 | 4550 | 15 |

Catalog number positions 11...13 identify additional product configuration.

| *1…3* | *4* | *5* | *6* | *7* | *8…10* | *11* | *12* | *13* | *14* | *15* | *16* | *17* | *18* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | 1 | G | 3 | D | 740 | L | N | A | N | N | N | N | N | -C0-P15… |
| | | | | | | **I** | **J** | **K** | | | | | | |

**I**

| Filtering and CM Cap Configuration | | | | | | |
|---|---|---|---|---|---|---|
| **Code** | **EMC Filtering (4)** | **PE-A (5)** | **PE-B** | **DR (6)** | **Reflective Wave Filtering** | **Frames** |
| J (1) | Yes | Installed | Removed | — | No | 8…15 |
| K (1) | Yes | Installed | Removed | — | Yes | 8…15 |
| L (2) | No | Installed | Removed | Installed | No | 5…15 |
| M (2) | No | Installed | Removed | — | Yes | 8…15 |
| P (3) | Yes | Installed | Removed | — | No | 7 |

(1) Does not provide a C2 solution (C3 compliant), but does include some filtering.
(2) C3 compliant without additional filtering.
(3) Filtering with C2 compliance.
(4) EMC C2 ratings, conducted and radiated (IP54) or EMC C2 conducted only (IP21), are provided by 'P' filtering option for frame 7; C2 solutions kits are also available for frames 5, 6, and 8…10. See Accessory Kits on page 263.
(5) Configuration does not apply to product type 20G with input types D and E. PE-A jumpers are removed when bus conditioner for marine applications (-P51) is selected.
(6) The DR jumper only applies to frame 5 and 6 drives.

**J**

| Dynamic Braking (1) | | | |
|---|---|---|---|
| **Code** | **Internal Resistor** | **Internal Transistor** | **Frames** |
| N | No | No | 5…15 |

(1) Not available on Frames 8…15, specify Code 'N'.

**K**

| Door-mounted HIM (Frames 7…15) | | |
|---|---|---|
| **Code** | **Operator Interface and Control** | **Frames** |
| A | No HIM with TotalFORCE Control | 5…15 |
| D | Enhanced LCD, Full Numeric, IP66, NEMA Type 4X/12 with TotalFORCE Control | 7…15 |

Catalog number positions 14...18 are not used.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | 1 | G | 3 | D | 740 | L | N | A | N | N | N | N | N | -C0-P15… |

Power and control options are listed in the unnumbered field to right of position 18.

| 1…3 | 4 | 5 | 6 | 7 | 8…10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20G | 1 | G | 3 | D | 740 | L | N | A | N | N | N | N | N | -C0-P15… |

**20G Control Options Selection**

| Code | Option | Frames | Input Type |
|---|---|---|---|
| C0 | Torque Accuracy Module | 5…12 | D, E, F, G, 6, 7 |
| | | 13…15 | D, E |
| C11 | Single Pod (with Control Bay) (1) | 8…15 | D, E |
| C12 | Dual Pod (with Control Bay) (1) | 8…15 | D, E |

(1) When code 'D' is selected in position 13, code C11 includes one door-mounted HIM and code C12 includes two door-mounted HIMs.

**20J Control Options Selection**

| Code | Option | Frames | Input Type |
|---|---|---|---|
| C1 | Control Transformer (Internal 240V) (1) | 8…15 | F |

(1) This option only applies to 755TM regenerative and low harmonic bus supplies. If this option is not selected, a 240V AC, single-phase, neutral grounded external power source must be supplied by the customer.

**20G Power Options Selection**

| Code | Option | Frames | Input Type |
|---|---|---|---|
| P15 | Top Cable Exit with wiring bay | 8…15 | D, E, F, G |
| P16 | Top Cable Entry with wiring bay | 10…15 | F, G |
| P17 | Top Cable Entry no wiring bay | 8…9 | F, G |
| P46 | System DC Bus (4700 Amp) | 8…10 | D, E, F, G |
| P50 | DC Bus Conditioner | 8…15 | D, E, F, G |
| P51 | DC Bus Conditioner – Marine Applications | 5…12 | D, E, F, G, 6, 7 |
| P60 | Back-to-back configuration | 13…15 | D, E, F, G |

**20J Power Options Selection**

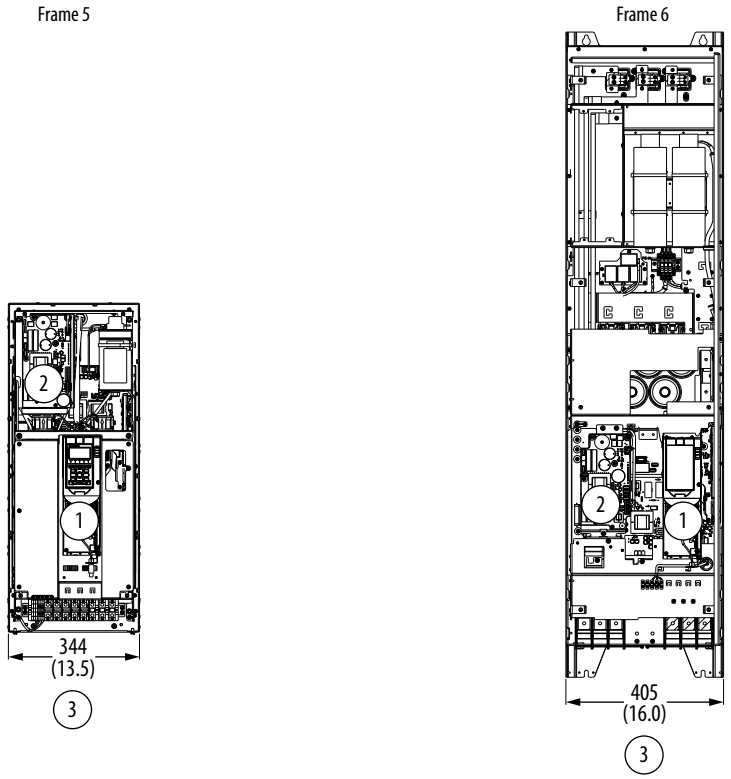
| Code | Option | Frames | Input Type |
|---|---|---|---|
| P16 | Top Cable Entry with wiring bay | 10…15 | F |
| P17 | Top Cable Entry no wiring bay | 8…9 | F |
| P46 | System DC Bus (4700 Amp) | 8…10 | F |
| P50 | DC Bus Conditioner | 8…15 | F |
| P51 | DC Bus Conditioner – Marine Applications | 8…12 | F |

## Frame Size Explanation

PowerFlex 750-Series products with TotalFORCE control are assigned frame size designators. These designations represent the various configurations of modules and hardware components that are packaged in a specific manner to obtain the full range of product offerings and power ratings. The products that are made possible through the combination of modular components and the assigned frame size designators are explained and illustrated in this section. All dimensions that are shown in the illustrations in this section are listed in millimeters and (inches).

### PowerFlex 755TL and 755TR Drives

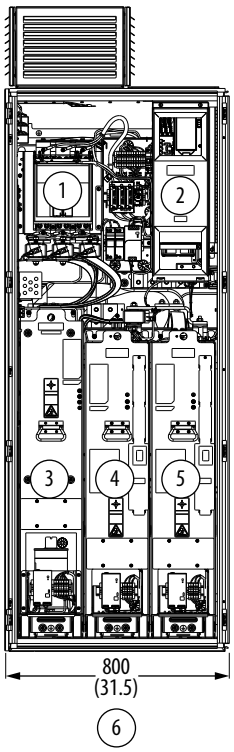
PowerFlex 755TL drive products are assigned frame sizes 5...12. PowerFlex 755TR drive products are assigned frame sizes 5...15. The major drive components shown in these illustrations.




Frame 5 enclosures are 357 mm (14 in.) deep. Frame 6 enclosures are 360.7 mm (14.2 in.) deep.
IP20, UL Open Type Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Chassis |

Frame 7

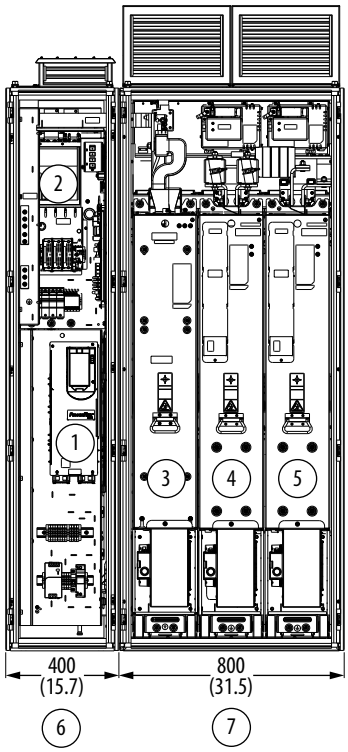



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

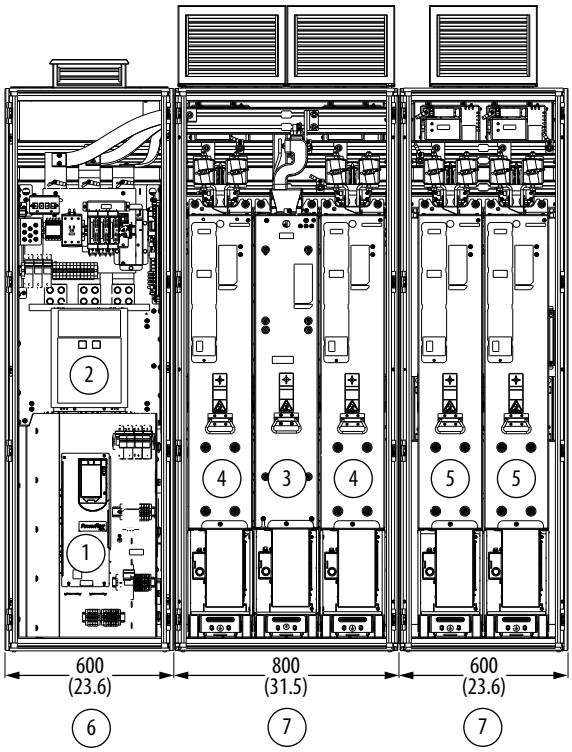
| Item | Description |
|---|---|
| 1 | AC precharge section |
| 2 | Control pod |
| 3 | LCL filter |

| Item | Description |
|---|---|
| 4 | Line side converter |
| 5 | Motor side inverter |
| 6 | Cabinet |

Frame 8




Frame 9

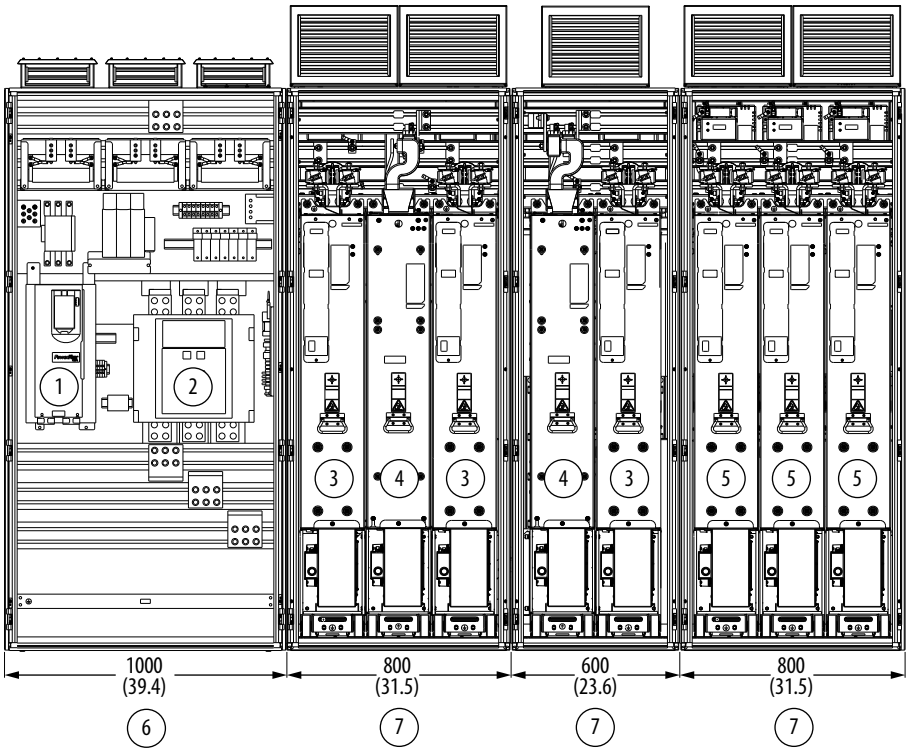



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge module |
| 3 | LCL filter |
| 4 | Line side converter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

Frame 10

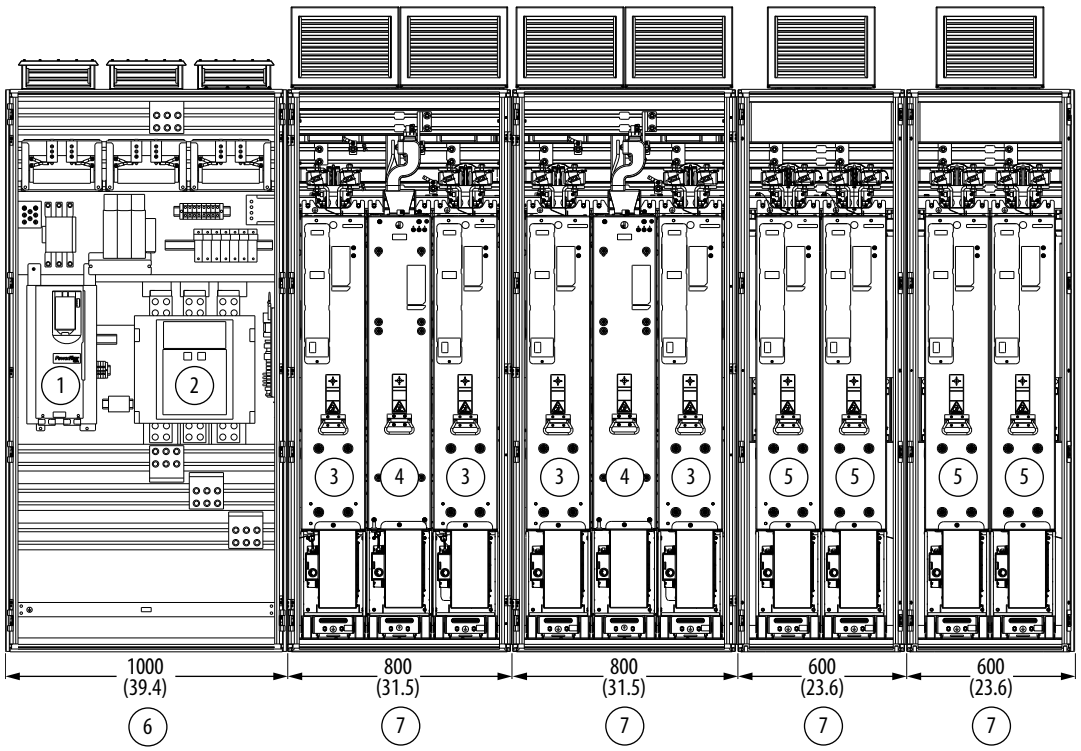



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

Frame 11

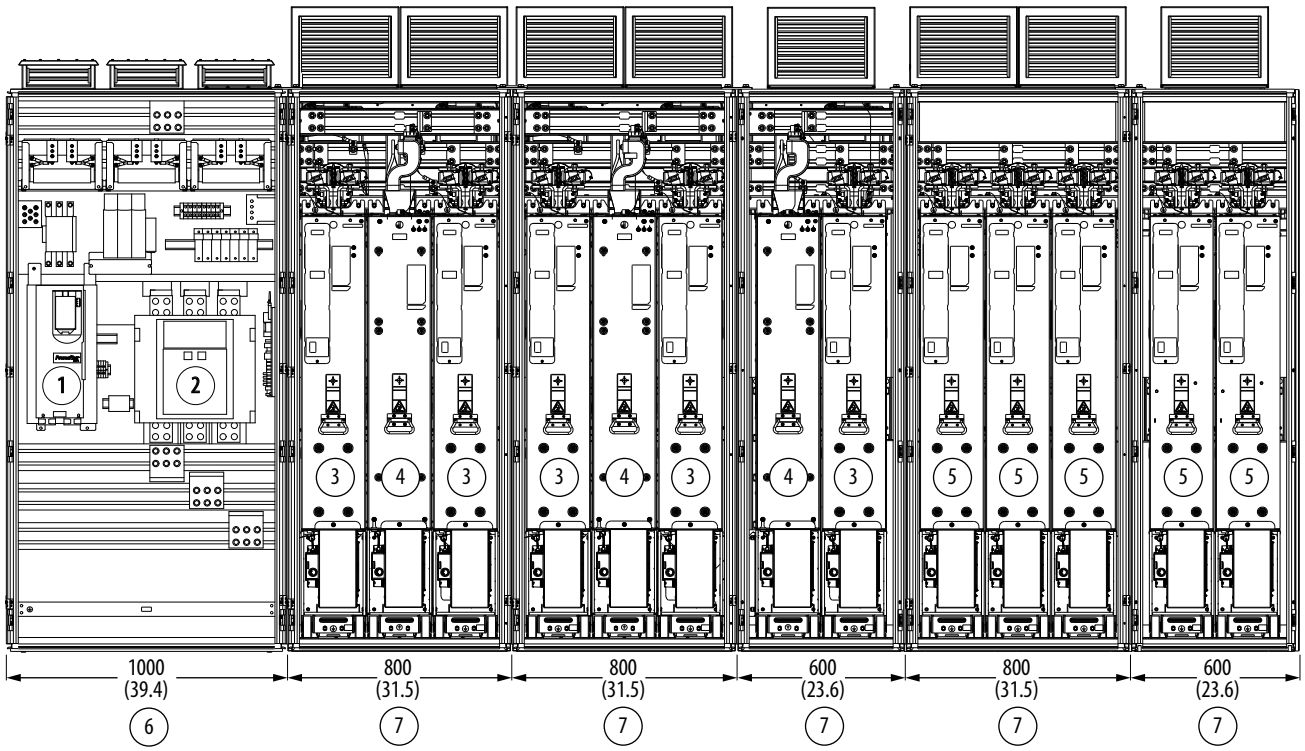



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

Frame 12

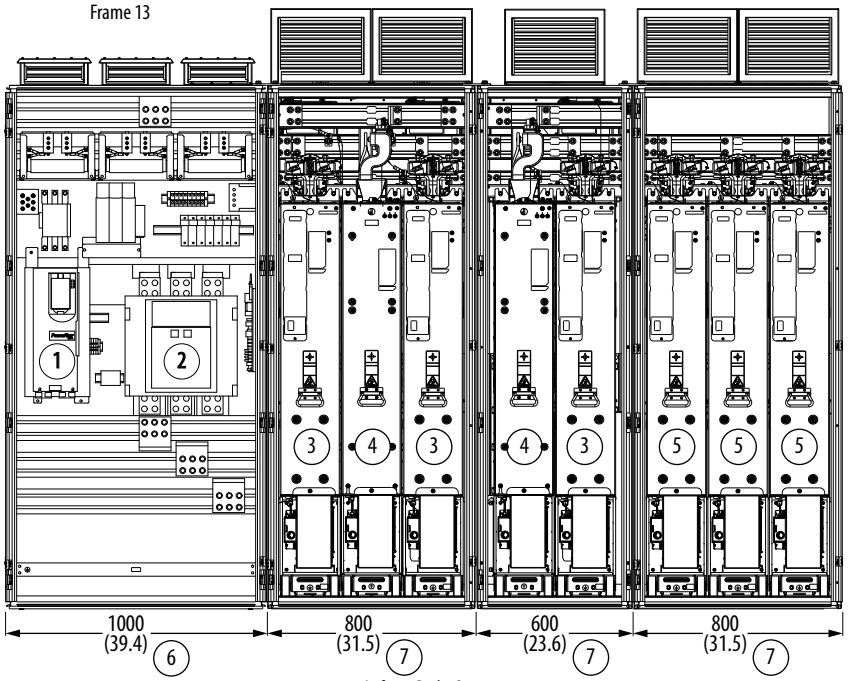



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

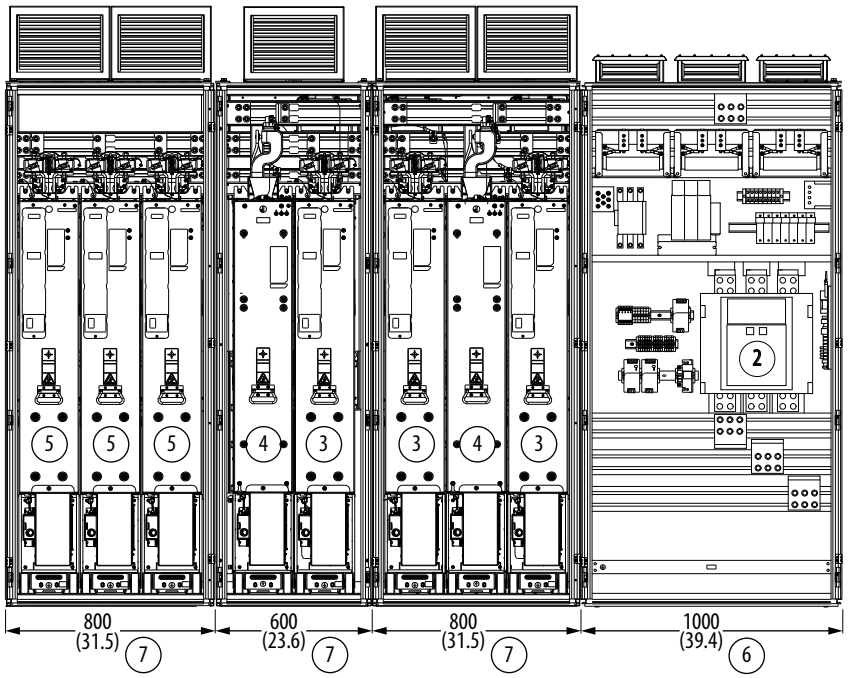
| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

Frame 13




Left-to-Right Orientation



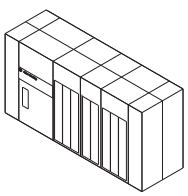

Right-to-Left Orientation

All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

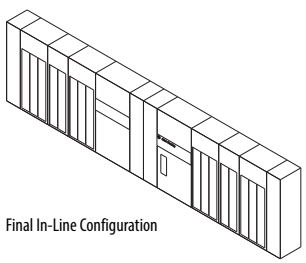
Entry and exit wire bays are omitted from this illustration.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

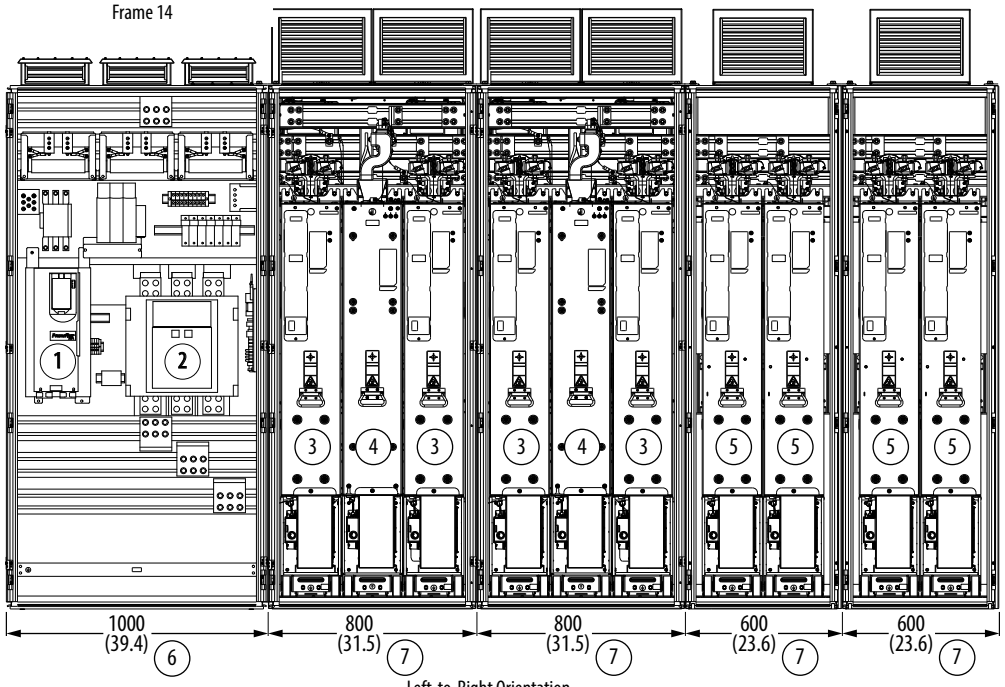


Final Back-to-Back Configuration



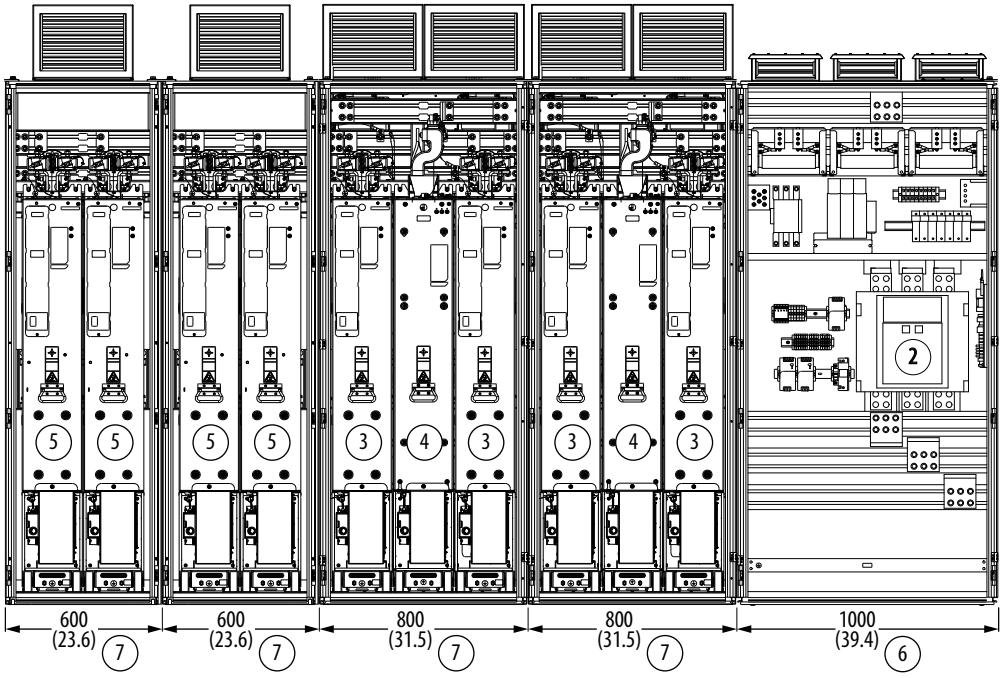
Final In-Line Configuration

Frame 14




Left-to-Right Orientation

All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

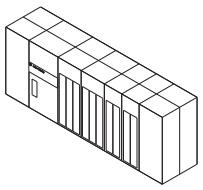



Right-to-Left Orientation

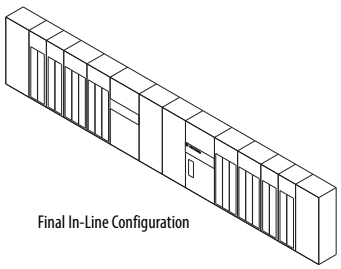
Entry and exit wire bays are omitted from this illustration.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |

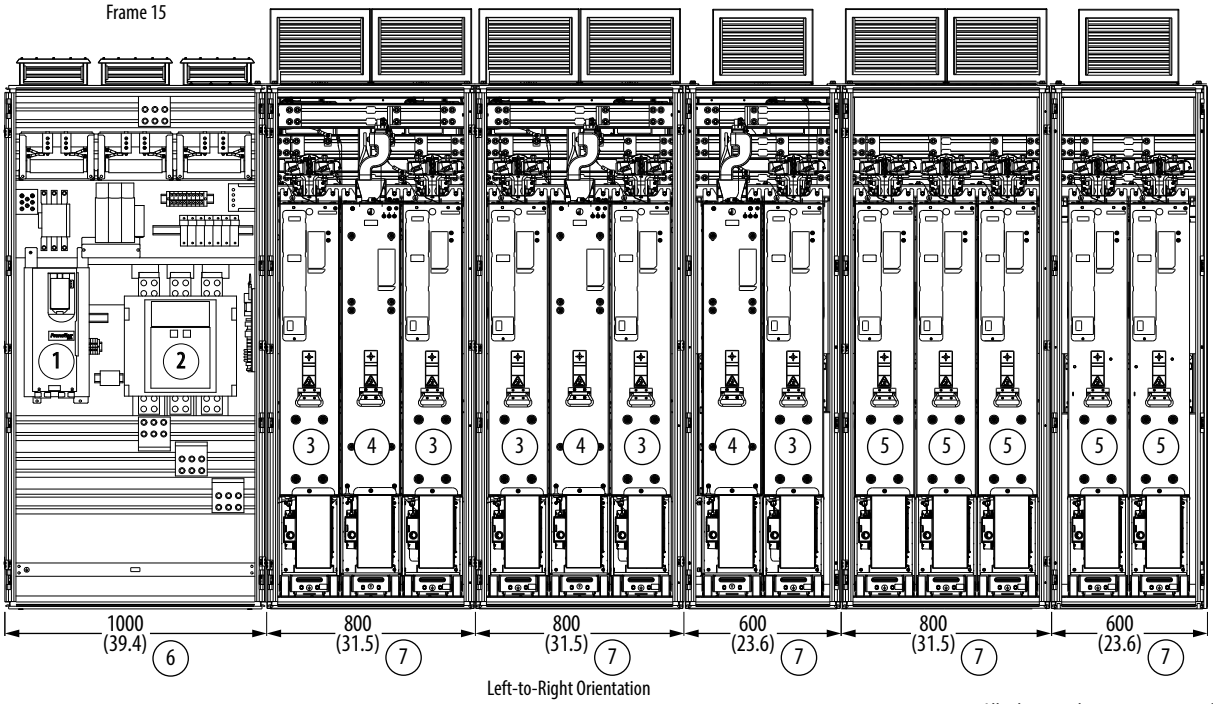


Final Back-to-Back Configuration



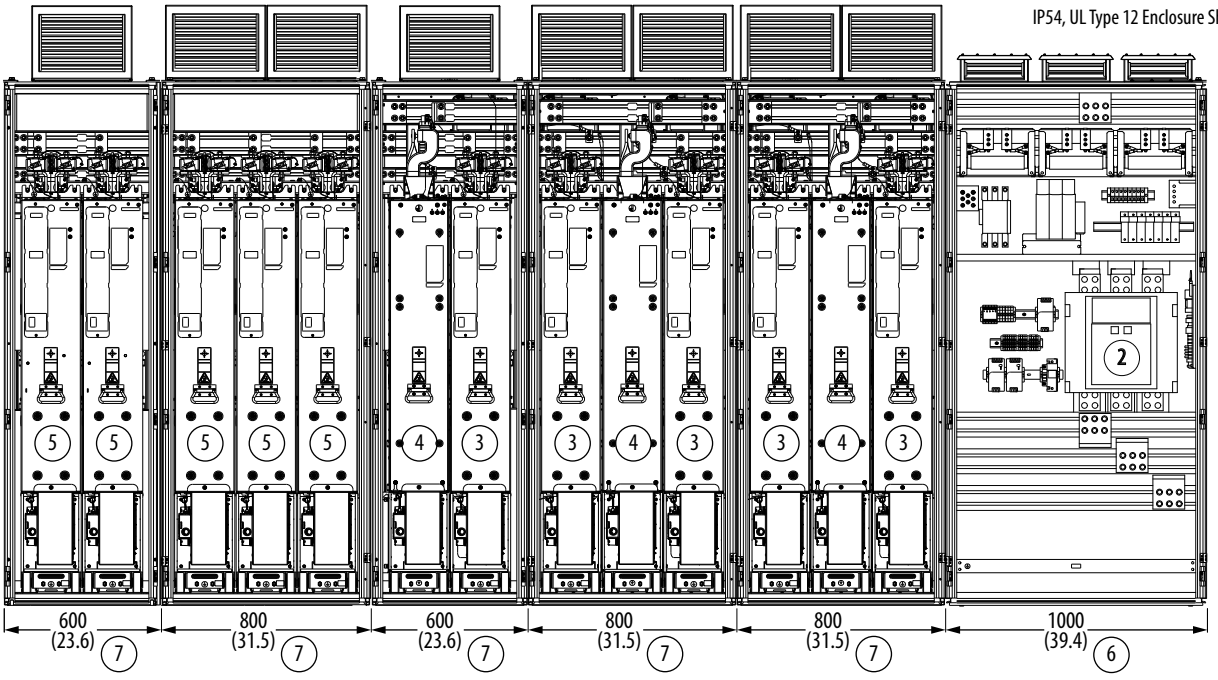
Final In-Line Configuration

Frame 15




Left-to-Right Orientation

All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

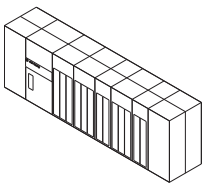



Right-to-Left Orientation

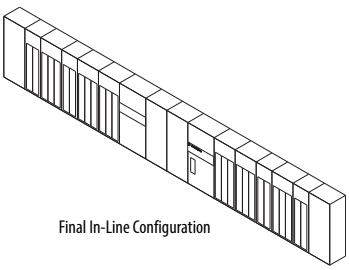
Entry and exit wire bays are omitted from this illustration.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |
| 4 | LCL filter |

| Item | Description |
|---|---|
| 5 | Motor side inverter |
| 6 | Input bay |
| 7 | Power bay |



Final Back-to-Back Configuration

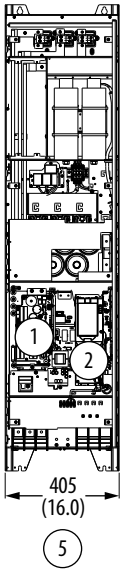


Final In-Line Configuration

## PowerFlex 755TM Bus Supplies

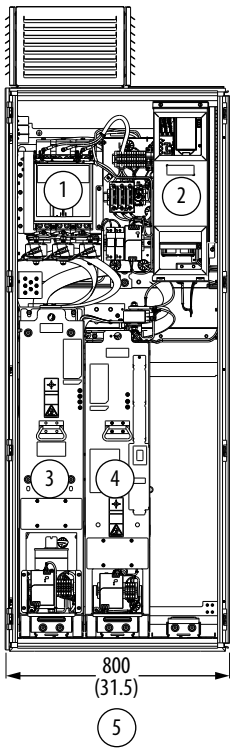
PowerFlex 755TM bus supply products are assigned frame sizes 6...15. The major components shown in these illustrations.

Frame 6




Frame 6 enclosures are 361 mm (14.2 in.) deep.
IP20, UL Open Type Enclosure Shown.

Frame 7

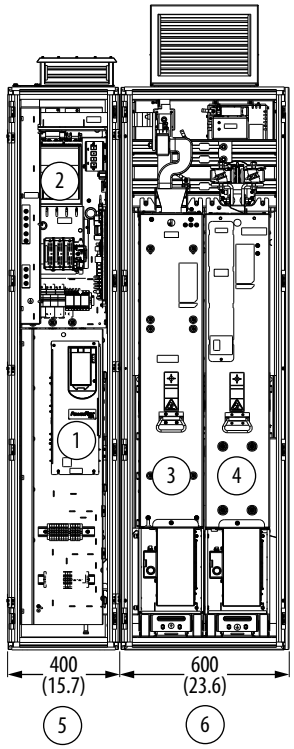



All cabinet enclosures are 600 mm (23.6 in.) deep.
Frame 7 IP54, UL Type 12 Enclosure Shown.

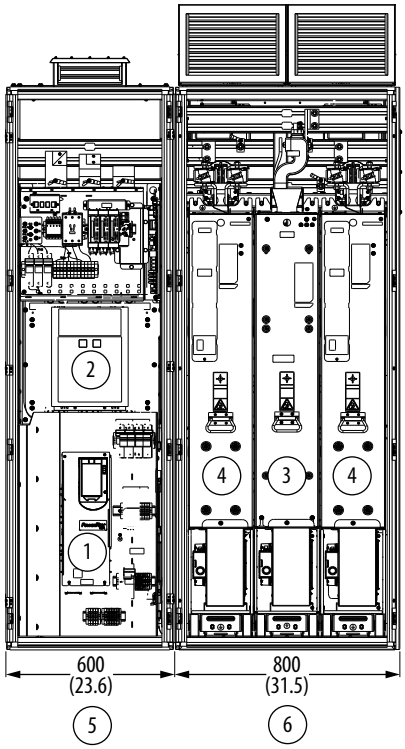
| Item | Description |
|---|---|
| 1 | AC precharge section |
| 2 | Control pod |
| 3 | LCL filter |

| Item | Description |
|---|---|
| 4 | Line side converter |
| 5 | Chassis / Cabinet |

Frame 8




Frame 9

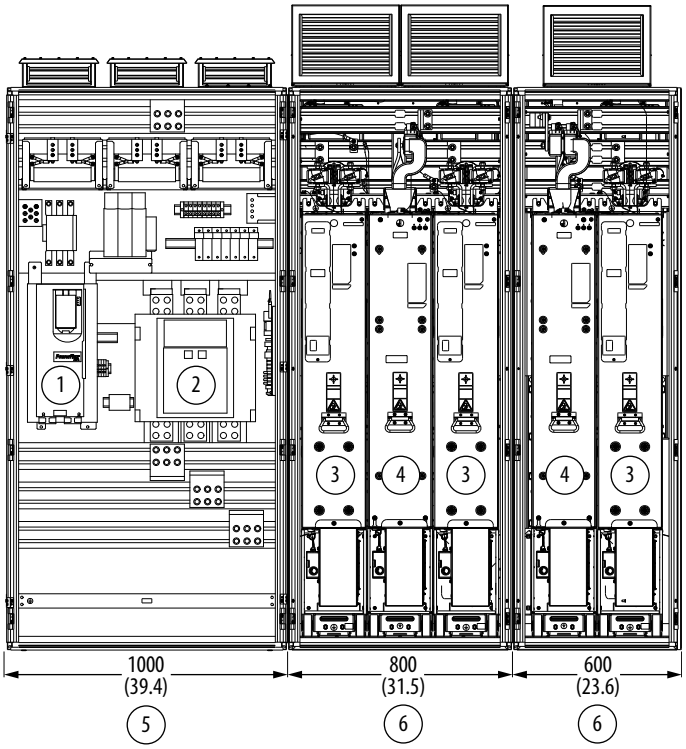



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | LCL filter |

| Item | Description |
|---|---|
| 4 | Line side converter |
| 5 | Input bay |
| 6 | Power bay |

Frame 10

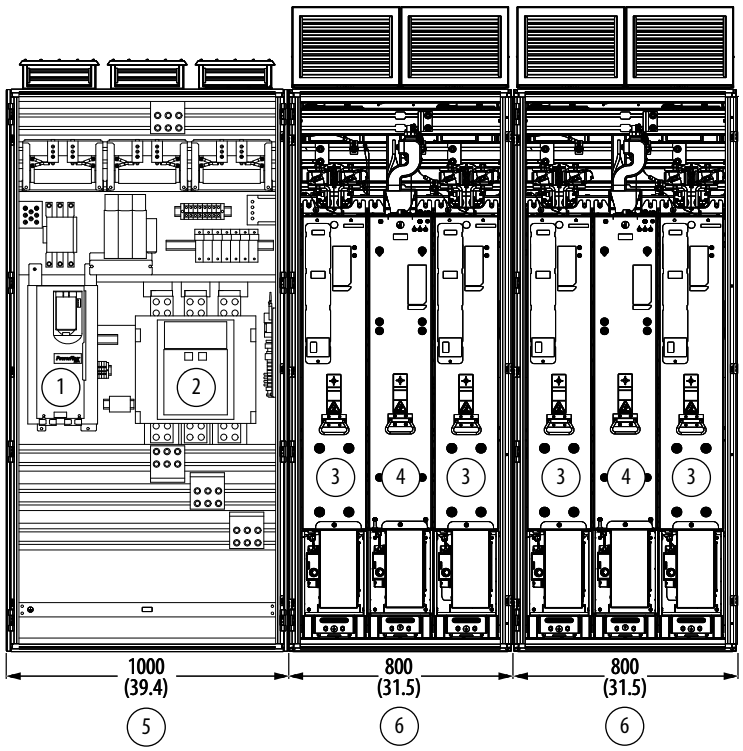



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |

| Item | Description |
|---|---|
| 4 | LCL filter |
| 5 | Input bay |
| 6 | Power bay |

Frame 11

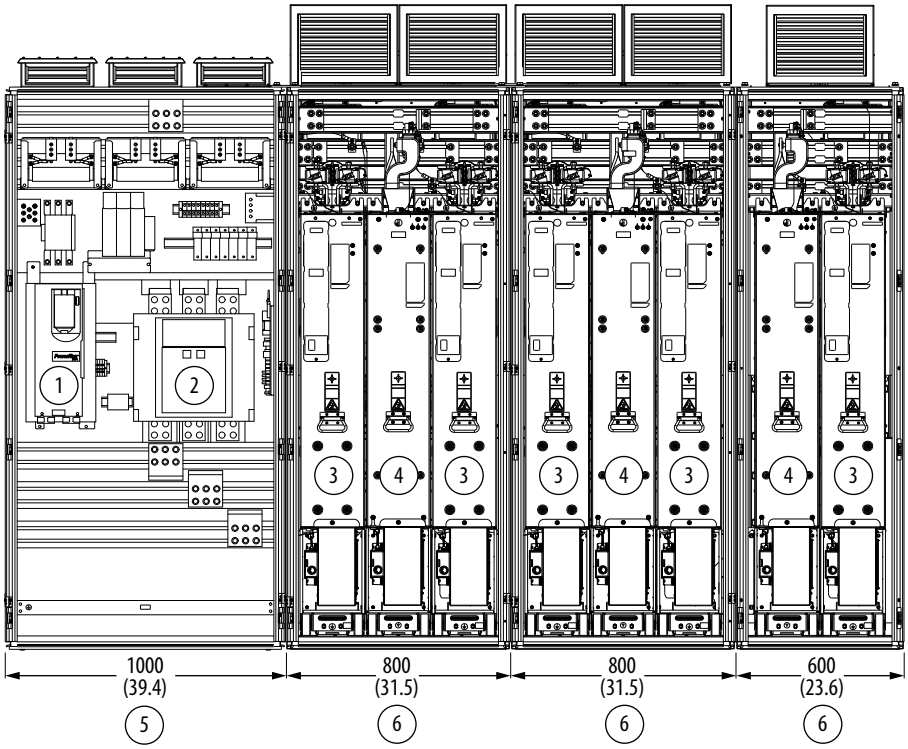



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |

| Item | Description |
|---|---|
| 4 | LCL filter |
| 5 | Input bay |
| 6 | Power bay |

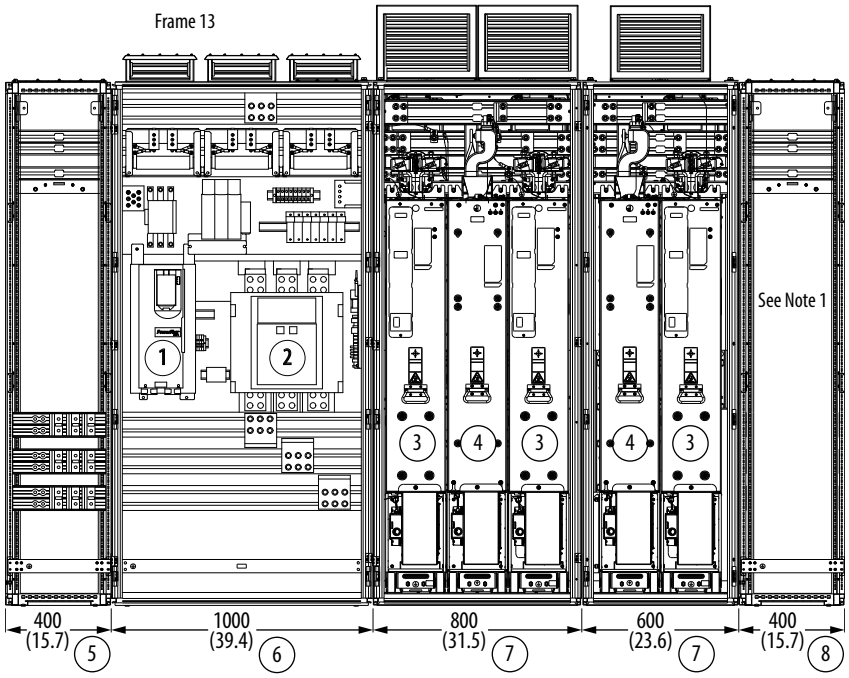
Frame 12



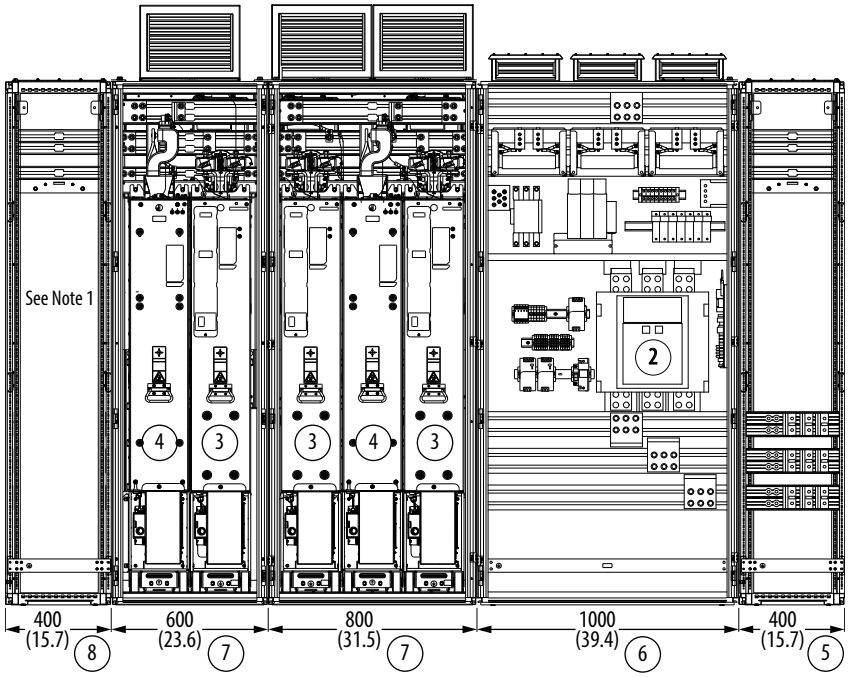

All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | AC precharge section |
| 3 | Line side converter |

| Item | Description |
|---|---|
| 4 | LCL filter |
| 5 | Input bay |
| 6 | Power bay |




Left-to-Right Orientation

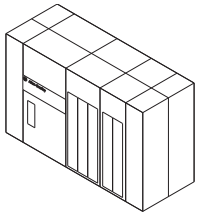



Right-to-Left Orientation

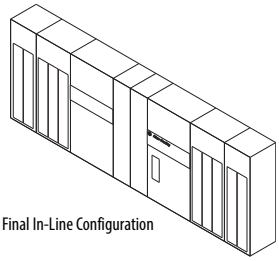
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

| Item | Description | Item | Description |
|---|---|---|---|
| 1 | Control pod | 5 | Entry wire bay |
| 2 | AC precharge section | 6 | Input bay |
| 3 | Line side converter | 7 | Power bay |
| 4 | LCL filter | 8 | Voltage balance bay |

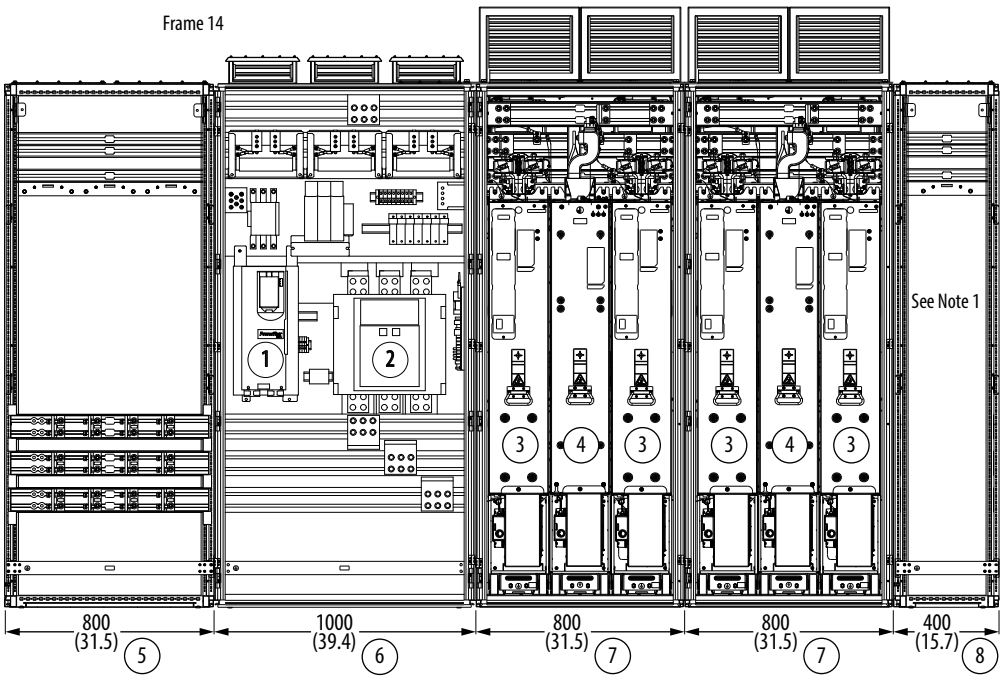


Final Back-to-Back Configuration



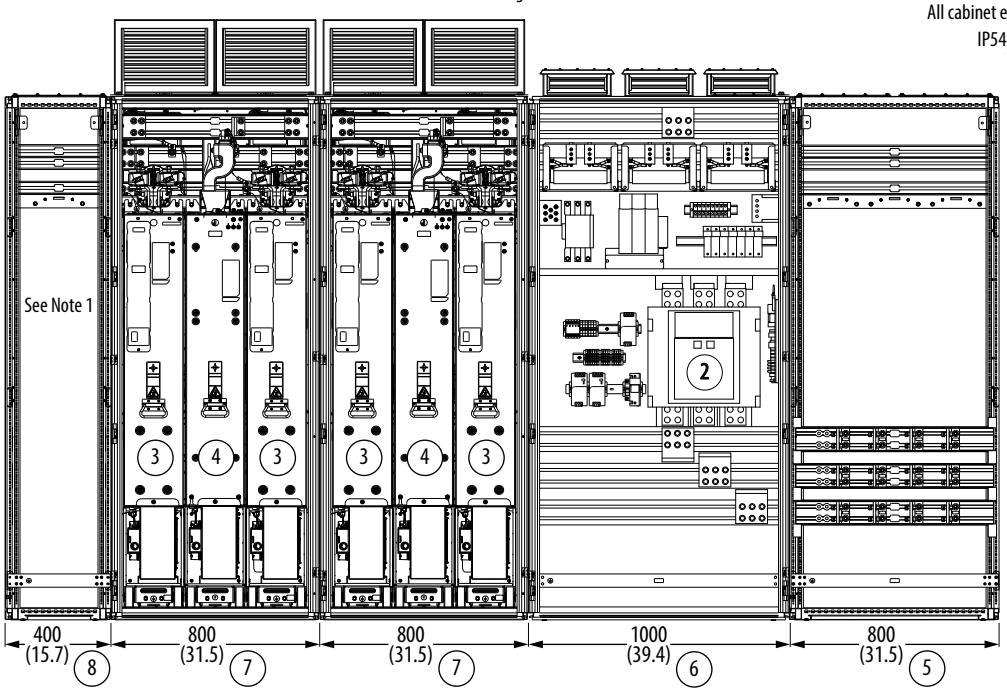
Final In-Line Configuration

Frame 14




Left-to-Right Orientation

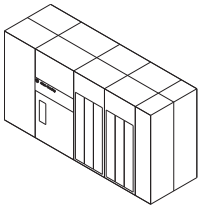
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



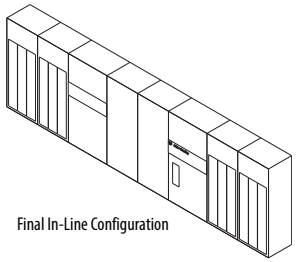

Right-to-Left Orientation

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

| Item | Description | Item | Description |
|---|---|---|---|
| 1 | Control pod | 5 | Entry wire bay |
| 2 | AC precharge section | 6 | Input bay |
| 3 | LCL filter | 7 | Power bay |
| 4 | Line side converter | 8 | Voltage balance bay |

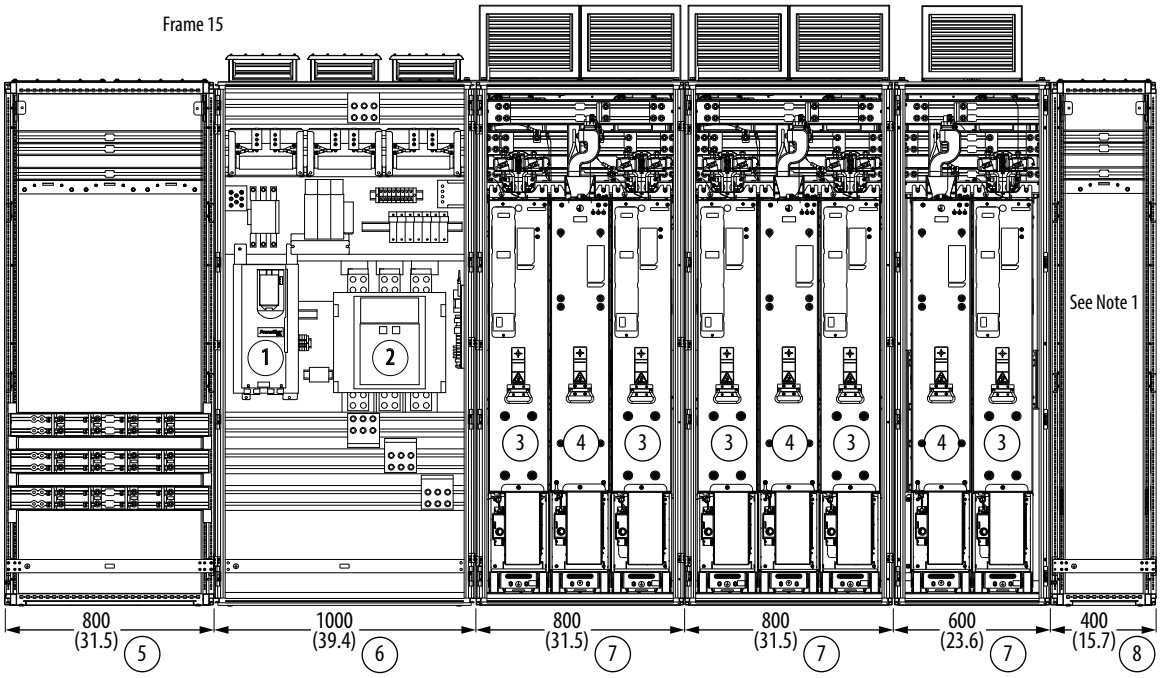


Final Back-to-Back Configuration



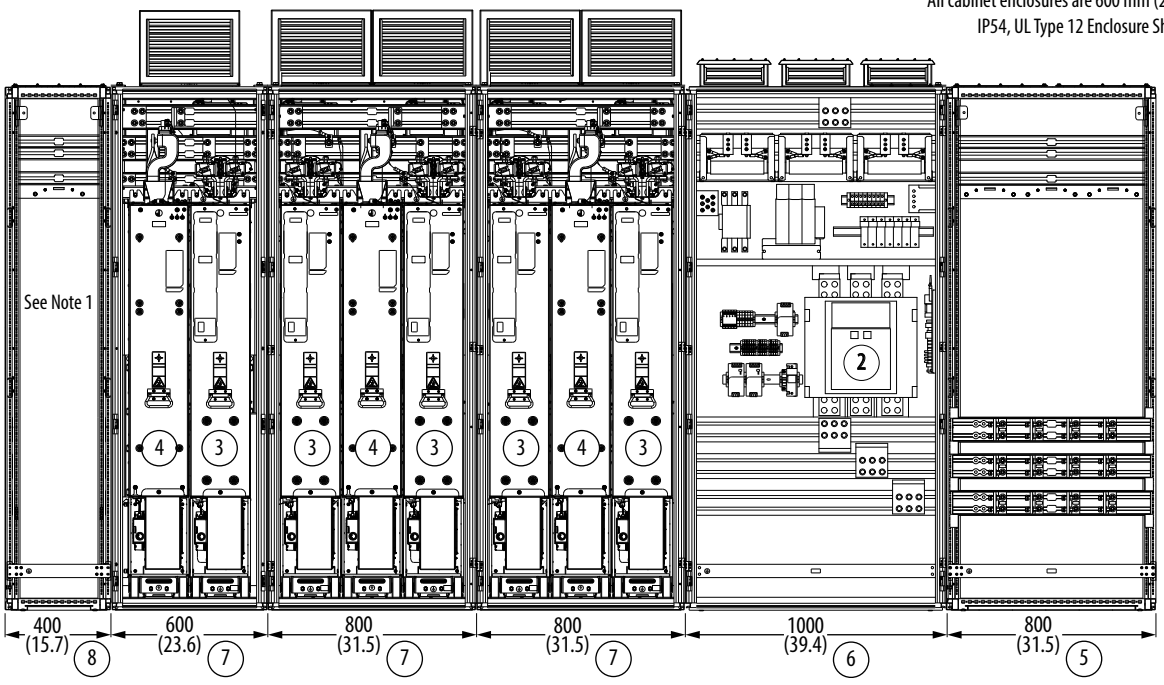
Final In-Line Configuration

Frame 15




Left-to-Right Orientation

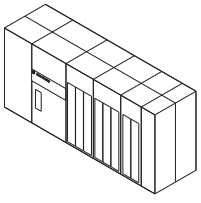
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



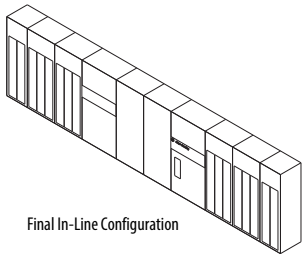

Right-to-Left Orientation

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

| Item | Description | Item | Description |
|---|---|---|---|
| 1 | Control pod | 5 | Entry wire bay |
| 2 | AC precharge section | 6 | Input bay |
| 3 | Line side converter | 7 | Power bay |
| 4 | LCL filter | 8 | Voltage balance bay |



Final Back-to-Back Configuration

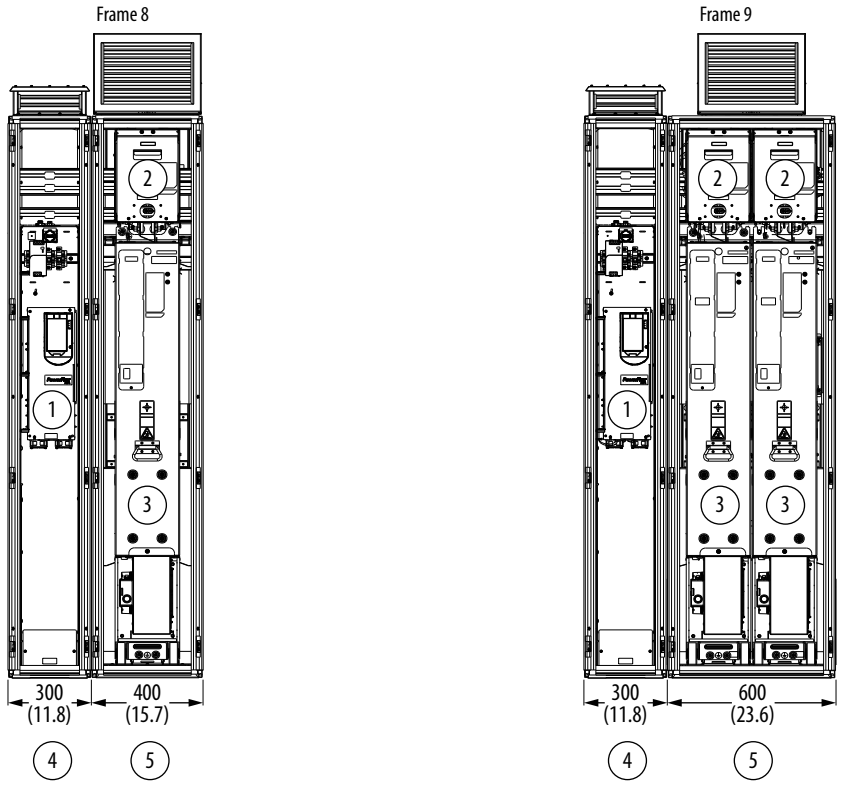


Final In-Line Configuration

## PowerFlex 755TM Common Bus Inverters

The common bus inverter offerings provide power structures that are combined with a bus supply to provide power to multiple motor applications.

One control pod is required for each PowerFlex 755TM Common Bus Inverter in the system. Single pod control bays (catalog option C11) with single power bays are depicted on pages 30...35. A dual pod control bay (catalog option C12) with dual power bays is depicted on page 36.

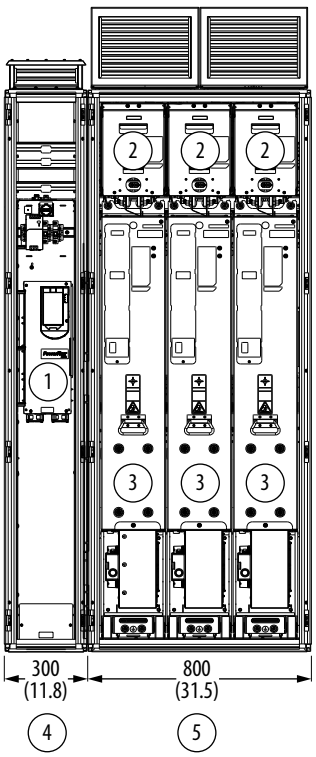



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

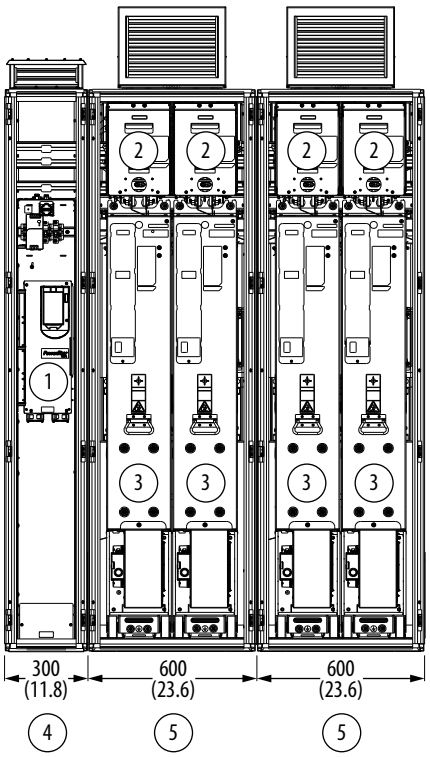
| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |

Frame 10




Frame 11

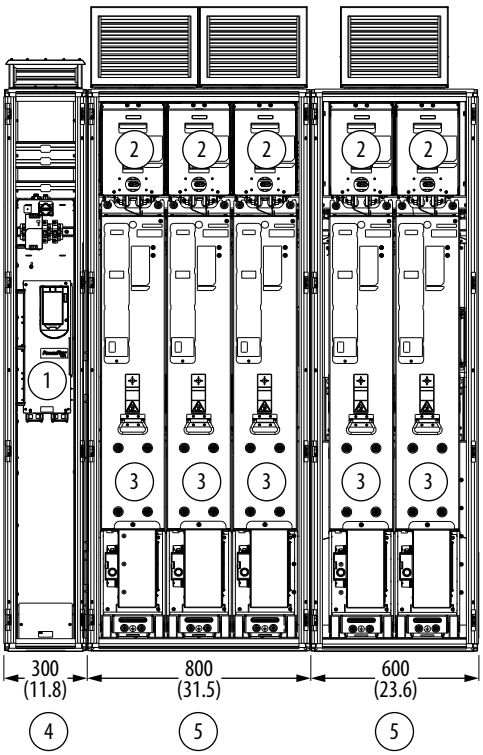



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |

Frame 12

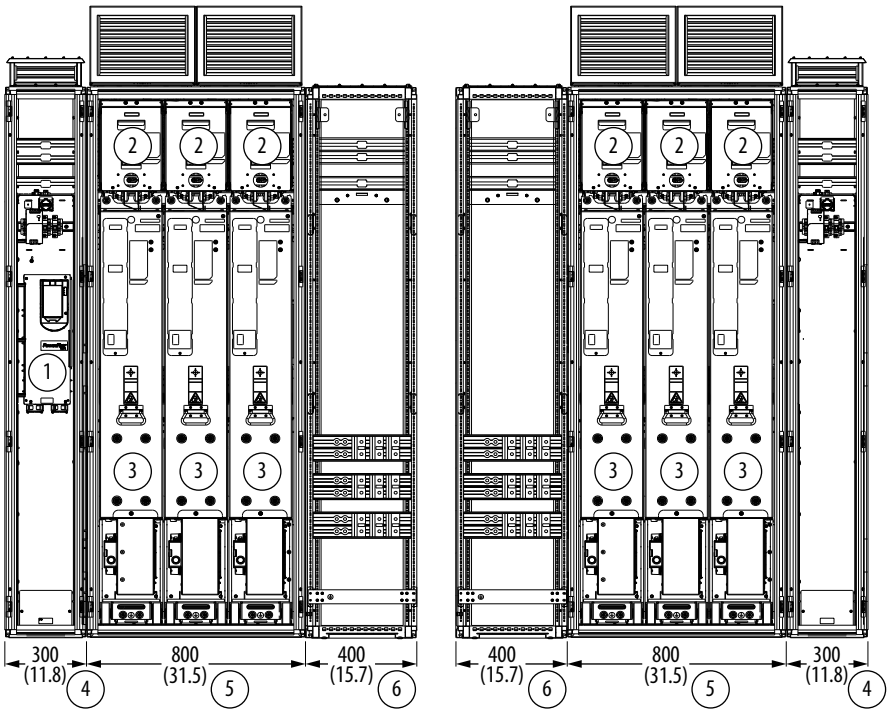



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |

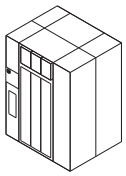
Frame 13




All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

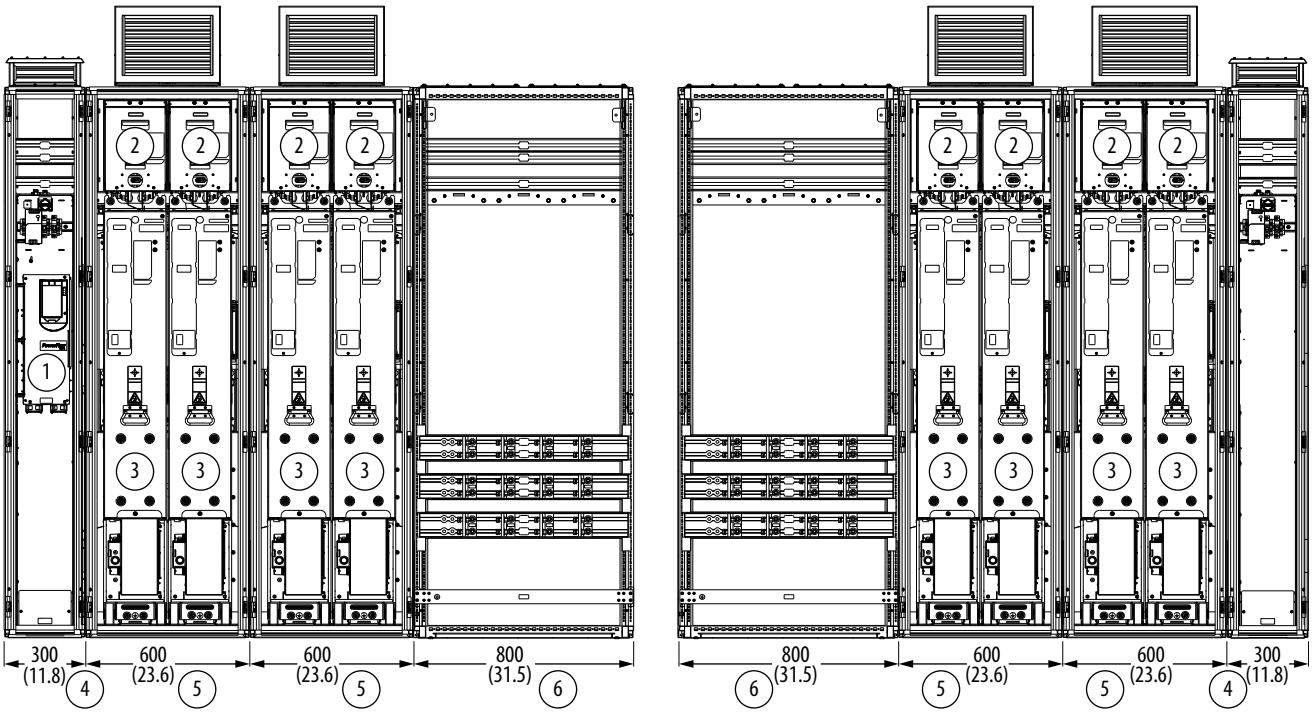
| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |
| 6 | Voltage balance bay |



Final Back-to-Back Configuration

Frame 14



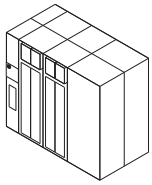

Right-to-Left Orientation

Left-to-Right Orientation

All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

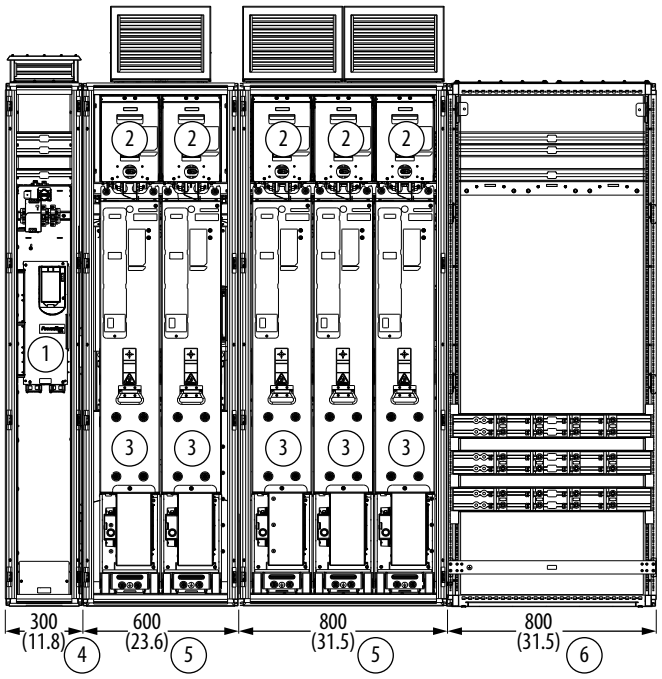
| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |
| 6 | Voltage balance bay |



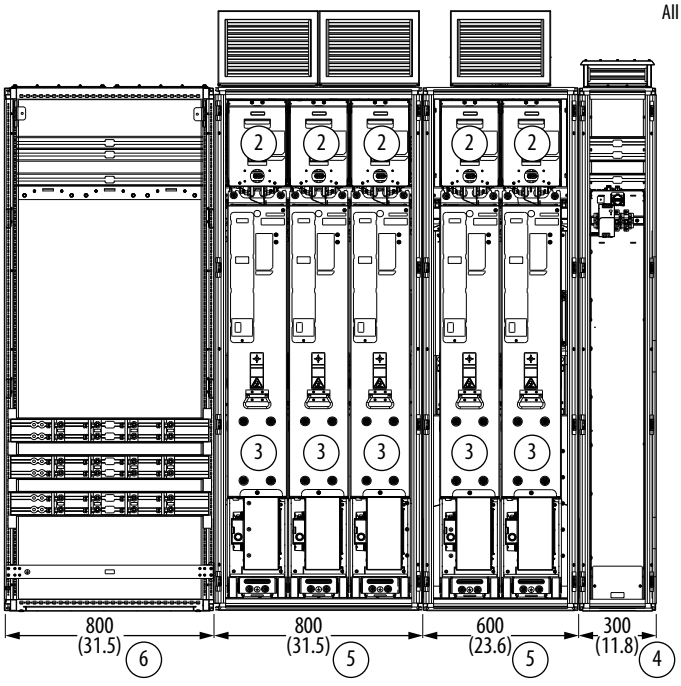
Final Back-to-Back Configuration

Frame 15




Left-to-Right Orientation

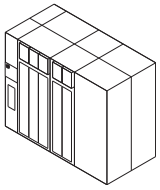
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.




Right-to-Left Orientation

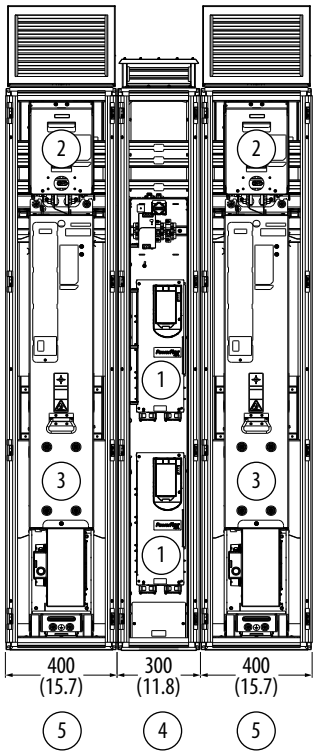
| Item | Description |
|---|---|
| 1 | Control pod |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C11) |
| 5 | Power bay |
| 6 | Voltage balance bay |



Final Back-to-Back Configuration

Two Frame 8 Common Bus Inverters with Common Control Bay




All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

| Item | Description |
|---|---|
| 1 | Control pod (Two pods shown) |
| 2 | DC precharge module |
| 3 | Motor side inverter |

| Item | Description |
|---|---|
| 4 | Control bay (Option C12) |
| 5 | Power bay |

## Product Selection

### 400V AC, Three-phase Drives — IP21/IP54, UL Types 1/12

| Light Duty | | | Normal Duty | | | | | Heavy Duty | | | | | Base Cat. No. | Frame Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kW | Cont. | 1 min | kW | Cont. | 1 min | 3 s | Hp | kW | Cont. | 1 min | 3 s | Hp | | |
| 11 | 22 | 24 | 7.5 | 15.4 | 17 | 23 | 10 | 5.5 | 11.5 | 17 | 21 | 7.5 | 20GExxC015xNxNNNNN-Cx-Px | 5 |
| 15 | 30 | 33 | 11 | 22 | 24 | 33 | 15 | 7.5 | 15.4 | 23 | 28 | 10 | 20GExxC022xNxNNNNN-Cx-Px | |
| 18.5 | 37 | 41 | 15 | 30 | 33 | 45 | 20 | 11 | 22 | 33 | 40 | 15 | 20GExxC030xNxNNNNN-Cx-Px | |
| 22 | 43 | 47 | 18.5 | 37 | 41 | 56 | 25 | 15 | 30 | 45 | 54 | 20 | 20GExxC037xNxNNNNN-Cx-Px | |
| 30 | 60 | 66 | 22 | 43 | 47 | 65 | 30 | 19 | 37 | 56 | 67 | 25 | 20GExxC043xNxNNNNN-Cx-Px | |
| 37 | 72 | 79 | 30 | 60 | 66 | 90 | 40 | 22 | 43 | 65 | 77 | 30 | 20GExxC060xNxNNNNN-Cx-Px | |
| 45 | 85 | 94 | 37 | 72 | 79 | 108 | 50 | 30 | 60 | 90 | 108 | 40 | 20GExxC072xNxNNNNN-Cx-Px | |
| 55 | 104 | 114 | 45 | 85 | 94 | 128 | 60 | 37 | 72 | 108 | 130 | 50 | 20GExxC085xNxNNNNN-Cx-Px | |
| 55 | 104 | 114 | 55 | 104 | 114 | 156 | 75 | 45 | 85 | 128 | 153 | 60 | 20GExxC104xNxNNNNN-Cx-Px | |
| 90 | 170 | 187 | 75 | 140 | 154 | 210 | 100 | 55 | 104 | 156 | 187 | 75 | 20GExxC140xNxNNNNN-Cx-Px | 6 |
| 110 | 205 | 226 | 90 | 170 | 194 | 264 | 125 | 75 | 140 | 210 | 252 | 100 | 20GExxC176xNxNNNNN-Cx-Px | |
| 132 | 260 | 286 | 110 | 205 | 226 | 308 | 150 | 90 | 170 | 255 | 306 | 125 | 20GExxC205xNxNNNNN-Cx-Px | |
| 160 | 302 | 332 | 132 | 260 | 286 | 390 | 200 | 110 | 205 | 308 | 369 | 150 | 20GExxC260xNxNNNNN-Cx-Px | |
| 200 | 367 | 404 | 160 | 302 | 332 | 453 | 250 | 132 | 260 | 390 | 468 | 200 | 20GExxC302xNxNNNNN-Cx-Px | 7 |
| 250 | 460 | 506 | 200 | 367 | 404 | 551 | 300 | 160 | 302 | 453 | 544 | 250 | 20GExxC367xNxNNNNN-Cx-Px | |
| 315 | 540 | 594 | 250 | 460 | 506 | 690 | 350 | 200 | 367 | 551 | 661 | 300 | 20GExxC460xNxNNNNN-Cx-Px | |
| 315 | 585 | 644 | 315 | 540 | 594 | 810 | 400 | 250 | 460 | 690 | 828 | 350 | 20GExxC540xNxNNNNN-Cx-Px | |
| 315 | 617 | 679 | 315 | 585 | 644 | 878 | 500 | 250 | 500 | 750 | 900 | 400 | 20GExxC585xNxNNNNN-Cx-Px | |
| 200 | 367 | 404 | 160 | 302 | 332 | 453 | 200 | 132 | 260 | 390 | 468 | 200 | 20GExxC302xNxNNNNN-Cx-Px | 8 |
| 250 | 460 | 506 | 200 | 367 | 404 | 551 | 250 | 160 | 302 | 453 | 544 | 250 | 20GExxC367xNxNNNNN-Cx-Px | |
| 315 | 540 | 594 | 250 | 460 | 506 | 690 | 300 | 200 | 367 | 551 | 661 | 300 | 20GExxC460xNxNNNNN-Cx-Px | |
| 315 | 585 | 644 | 315 | 540 | 594 | 810 | 350 | 250 | 460 | 690 | 828 | 350 | 20GExxC540xNxNNNNN-Cx-Px | |
| 355 | 650 | 715 | 315 | 585 | 644 | 878 | 350 | 250 | 472 | 708 | 850 | 350 | 20GExxC585xNxNNNNN-Cx-Px | |
| 400 | 750 | 825 | 355 | 650 | 715 | 975 | 400 | 315 | 540 | 810 | 972 | 400 | 20GExxC650xNxNNNNN-Cx-Px | |
| 450 | 796 | 876 | 400 | 750 | 825 | 1125 | 450 | 315 | 585 | 878 | 1053 | 450 | 20GExxC750xNxNNNNN-Cx-Px | |
| 450 | 832 | 915 | 400 | 770 | 847 | 1155 | 500 | 355 | 650 | 975 | 1170 | 500 | 20GExxC770xNxNNNNN-Cx-Px | |
| 560 | 1040 | 1144 | 500 | 920 | 1012 | 1380 | 600 | 400 | 770 | 1155 | 1386 | 600 | 20GExxC920xNxNNNNN-Cx-Px | 9 |
| 630 | 1090 | 1199 | 560 | 1040 | 1144 | 1560 | 700 | 500 | 920 | 1380 | 1656 | 700 | 20GExxC1K0xNxNNNNN-Cx-Px | |
| 710 | 1182 | 1300 | 630 | 1112 | 1223 | 1668 | 750 | 500 | 1040 | 1560 | 1872 | 750 | 20GExxC1K1xNxNNNNN-Cx-Px | |
| 800 | 1465 | 1612 | 710 | 1175 | 1293 | 1763 | 800 | 560 | 1090 | 1635 | 1962 | 800 | 20GExxC1K2xNxNNNNN-Cx-Px | |
| 850 | 1581 | 1739 | 800 | 1465 | 1612 | 2198 | 900 | 630 | 1175 | 1763 | 2115 | 900 | 20GExxC1K4xNxNNNNN-Cx-Px | |
| 1000 | 1715 | 1887 | 850 | 1590 | 1749 | 2385 | 1000 | 710 | 1465 | 2198 | 2637 | 1000 | 20GExxC1K6xNxNNNNN-Cx-Px | 10 |
| 1250 | 2150 | 2365 | 1000 | 1715 | 1887 | 2573 | 1100 | 800 | 1480 | 2220 | 2664 | 1100 | 20GExxC1K7xNxNNNNN-Cx-Px | |
| 1400 | 2330 | 2563 | 1250 | 2156 | 2372 | 3234 | 1500 | 1000 | 1715 | 2573 | 3087 | 1500 | 20GExxC2K1xNxNNNNN-Cx-Px | |
| 1800 | 3078 | 3386 | 1650 | 2849 | 3134 | 4274 | 2000 | 1400 | 2330 | 3495 | 4194 | 2000 | 20GExxC2K8xNxNNNNN-Cx-Px | 11 |
| 2200 | 3846 | 4231 | 2000 | 3542 | 3896 | 5313 | 2400 | 1650 | 3032 | 4548 | 5458 | 2400 | 20GExxC3K5xNxNNNNN-Cx-Px | 12 |
| 2475 | 4576 | 5034 | 2200 | 4235 | 4659 | 6353 | 3600 | 1953 | 3575 | 5363 | 6435 | 2800 | 20GExxC4K2xNxNNNNN-Cx-Px | 13 |
| 3285 | 6074 | 6681 | 2920 | 5621 | 6183 | 8432 | 4800 | 2592 | 4745 | 7118 | 8541 | 3700 | 20GExxC5K6xNxNNNNN-Cx-Px | 14 |
| 4095 | 7571 | 8328 | 3640 | 7007 | 7708 | 10511 | 6000 | 3231 | 5915 | 8873 | 10647 | 4600 | 20GExxC7K0xNxNNNNN-Cx-Px | 15 |

### 480V AC, Three-phase Drives — IP21/IP54, UL Types 1/12

| Light Duty | | | | Normal Duty | | | | | Heavy Duty | | | | | Base Cat. No. | Frame Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kW | Cont. | 1 min | Hp | kW | Cont. | 1 min | 3 s | Hp | kW | Cont. | 1 min | 3 s | Hp | | |
| 11 | 22 | 24 | 15 | 7.5 | 14 | 15 | 21 | 10 | 5.5 | 11 | 17 | 20 | 7.5 | 20GExxD014xNxNNNNN-Cx-Px | 5 |
| 15 | 27 | 30 | 20 | 11 | 22 | 24 | 33 | 15 | 7.5 | 14 | 21 | 25 | 10 | 20GExxD022xNxNNNNN-Cx-Px | |
| 19 | 34 | 37 | 25 | 15 | 27 | 30 | 41 | 20 | 11 | 22 | 33 | 40 | 15 | 20GExxD027xNxNNNNN-Cx-Px | |
| 22 | 40 | 44 | 30 | 19 | 34 | 37 | 51 | 25 | 15 | 27 | 41 | 49 | 20 | 20GExxD034xNxNNNNN-Cx-Px | |
| 30 | 52 | 57 | 40 | 22 | 40 | 44 | 60 | 30 | 19 | 34 | 51 | 61 | 25 | 20GExxD040xNxNNNNN-Cx-Px | |
| 37 | 65 | 72 | 50 | 30 | 52 | 57 | 78 | 40 | 22 | 40 | 60 | 72 | 30 | 20GExxD052xNxNNNNN-Cx-Px | |
| 45 | 77 | 85 | 60 | 37 | 65 | 72 | 98 | 50 | 30 | 52 | 78 | 94 | 40 | 20GExxD065xNxNNNNN-Cx-Px | |
| 55 | 96 | 106 | 75 | 45 | 77 | 85 | 116 | 60 | 37 | 65 | 98 | 117 | 50 | 20GExxD077xNxNNNNN-Cx-Px | |
| 55 | 96 | 106 | 75 | 55 | 96 | 106 | 144 | 75 | 45 | 77 | 116 | 139 | 60 | 20GExxD096xNxNNNNN-Cx-Px | 6 |
| 90 | 156 | 172 | 125 | 75 | 125 | 138 | 188 | 100 | 55 | 96 | 144 | 173 | 75 | 20GExxD125xNxNNNNN-Cx-Px | |
| 110 | 186 | 205 | 150 | 90 | 156 | 172 | 234 | 125 | 75 | 125 | 188 | 225 | 100 | 20GExxD156xNxNNNNN-Cx-Px | |
| 132 | 248 | 273 | 200 | 110 | 186 | 205 | 279 | 150 | 90 | 156 | 234 | 281 | 125 | 20GExxD186xNxNNNNN-Cx-Px | |
| 160 | 302 | 332 | 250 | 132 | 248 | 273 | 372 | 200 | 110 | 186 | 279 | 335 | 150 | 20GExxD248xNxNNNNN-Cx-Px | |
| 200 | 361 | 397 | 300 | 160 | 302 | 332 | 453 | 250 | 132 | 248 | 372 | 446 | 200 | 20GExxD302xNxNNNNN-Cx-Px | 7 |
| 250 | 430 | 473 | 350 | 200 | 361 | 397 | 542 | 300 | 160 | 302 | 453 | 544 | 250 | 20GExxD361xNxNNNNN-Cx-Px | |
| 315 | 485 | 534 | 400 | 250 | 430 | 473 | 645 | 350 | 200 | 361 | 542 | 650 | 300 | 20GExxD430xNxNNNNN-Cx-Px | |
| 315 | 545 | 600 | 450 | 315 | 505 | 556 | 758 | 400 | 250 | 430 | 645 | 774 | 350 | 20GExxD505xNxNNNNN-Cx-Px | |
| 315 | 617 | 679 | 500 | 315 | 600 | 660 | 900 | 500 | 250 | 500 | 750 | 900 | 400 | 20GExxD617xNxNNNNN-Cx-Px | |
| 200 | 361 | 397 | 300 | 186 | 302 | 332 | 453 | 250 | 149 | 248 | 372 | 446 | 200 | 20GExxD302xNxNNNNN-Cx-Px | 8(1) |
| 250 | 430 | 473 | 350 | 224 | 361 | 397 | 542 | 300 | 186 | 302 | 453 | 544 | 250 | 20GExxD361xNxNNNNN-Cx-Px | |
| 315 | 485 | 534 | 400 | 261 | 430 | 473 | 645 | 350 | 224 | 361 | 542 | 650 | 300 | 20GExxD430xNxNNNNN-Cx-Px | |
| 315 | 545 | 600 | 450 | 298 | 505 | 556 | 758 | 400 | 261 | 430 | 645 | 774 | 350 | 20GExxD505xNxNNNNN-Cx-Px | |
| 355 | 617 | 679 | 500 | 336 | 545 | 600 | 818 | 450 | 261 | 454 | 681 | 817 | 350 | 20GExxD545xNxNNNNN-Cx-Px | |
| 400 | 710 | 781 | 600 | 373 | 617 | 679 | 926 | 500 | 298 | 485 | 728 | 873 | 400 | 20GExxD617xNxNNNNN-Cx-Px | |
| 450 | 765 | 842 | 650 | 447 | 710 | 781 | 1065 | 600 | 336 | 545 | 818 | 981 | 450 | 20GExxD710xNxNNNNN-Cx-Px | |
| 450 | 800 | 880 | 700 | 485 | 740 | 814 | 1110 | 650 | 373 | 617 | 926 | 1111 | 500 | 20GExxD740xNxNNNNN-Cx-Px | |
| 560 | 960 | 1056 | 800 | 522 | 800 | 880 | 1200 | 700 | 447 | 740 | 1110 | 1332 | 600 | 20GExxD800xNxNNNNN-Cx-Px | 9(1) |
| 630 | 1045 | 1150 | 900 | 597 | 960 | 1056 | 1440 | 800 | 522 | 800 | 1200 | 1440 | 700 | 20GExxD960xNxNNNNN-Cx-Px | |
| 710 | 1135 | 1249 | 1000 | 671 | 1045 | 1150 | 1568 | 900 | 559 | 960 | 1440 | 1728 | 750 | 20GExxD1K0xNxNNNNN-Cx-Px | |
| 800 | 1365 | 1502 | 1100 | 746 | 1135 | 1249 | 1703 | 1000 | 597 | 1045 | 1568 | 1881 | 800 | 20GExxD1K1xNxNNNNN-Cx-Px | |
| 850 | 1520 | 1672 | 1250 | 820 | 1365 | 1502 | 2048 | 1100 | 671 | 1135 | 1703 | 2043 | 900 | 20GExxD1K3xNxNNNNN-Cx-Px | |
| 1000 | 1655 | 1821 | 1500 | 932 | 1420 | 1562 | 2130 | 1250 | 746 | 1365 | 2048 | 2457 | 1000 | 20GExxD1K4xNxNNNNN-Cx-Px | 10(1) |
| 1250 | 2070 | 2277 | 1800 | 1119 | 1655 | 1821 | 2483 | 1500 | 820 | 1420 | 2130 | 2556 | 1100 | 20GExxD1K6xNxNNNNN-Cx-Px | |
| 1400 | 2240 | 2464 | 2000 | 1342 | 2072 | 2279 | 3108 | 1800 | 1119 | 1655 | 2483 | 2979 | 1500 | 20GExxD2K0xNxNNNNN-Cx-Px | |
| 1800 | 2960 | 3256 | 2600 | 1790 | 2738 | 3012 | 4107 | 2400 | 1491 | 2240 | 3360 | 4032 | 2000 | 20GExxD2K6xNxNNNNN-Cx-Px | 11 |
| 2200 | 3696 | 4066 | 3300 | 2237 | 3404 | 3744 | 5106 | 3000 | 1790 | 2980 | 4470 | 5364 | 2400 | 20GExxD3K4xNxNNNNN-Cx-Px | 12 |
| 2475 | 4400 | 4840 | 3900 | 2200 | 4070 | 4477 | 6105 | 3600 | 1953 | 3394 | 5091 | 6109 | 2800 | 20GExxD4K0xNxNNNNN-Cx-Px | 13 |
| 3285 | 5840 | 6424 | 5200 | 2920 | 5402 | 5942 | 8103 | 4800 | 2592 | 4504 | 6756 | 8107 | 3700 | 20GExxD5K4xNxNNNNN-Cx-Px | 14 |
| 4095 | 7280 | 8008 | 6400 | 3640 | 6734 | 7407 | 10101 | 6000 | 3231 | 5615 | 8423 | 10107 | 4600 | 20GExxD6K7xNxNNNNN-Cx-Px | 15 |

(1) Low harmonic AFE (755TL) is only available in frame sizes 8, 9, and 10.

### 600V AC, Three-phase Drives — IP21/IP54, UL Types 1/12

| Light Duty | | | | Normal Duty | | | | | Heavy Duty | | | | | Base Cat. No. | Frame Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kW | Cont. | 1 min | Hp | kW | Cont. | 1 min | 3 s | Hp | kW | Cont. | 1 min | 3 s | Hp | | |
| 15 | 17 | 19 | 15 | 11 | 11 | 12 | 17 | 10 | 8 | 9 | 14 | 16 | 8 | 20GExxE011xNxNNNNN-Cx-Px | 5 |
| 19 | 22 | 24 | 20 | 15 | 17 | 19 | 26 | 15 | 10 | 11 | 17 | 20 | 10 | 20GExxE017xNxNNNNN-Cx-Px | |
| 22 | 27 | 30 | 25 | 19 | 22 | 24 | 33 | 20 | 15 | 17 | 26 | 31 | 15 | 20GExxE022xNxNNNNN-Cx-Px | |
| 30 | 32 | 35 | 30 | 22 | 27 | 30 | 41 | 25 | 20 | 22 | 33 | 40 | 20 | 20GExxE027xNxNNNNN-Cx-Px | |
| 37 | 41 | 45 | 40 | 30 | 32 | 35 | 48 | 30 | 24 | 27 | 41 | 49 | 25 | 20GExxE032xNxNNNNN-Cx-Px | |
| 45 | 52 | 57 | 50 | 37 | 41 | 45 | 62 | 40 | 29 | 32 | 48 | 58 | 30 | 20GExxE041xNxNNNNN-Cx-Px | |
| 55 | 62 | 68 | 60 | 45 | 52 | 57 | 78 | 50 | 37 | 41 | 62 | 74 | 40 | 20GExxE052xNxNNNNN-Cx-Px | |
| 75 | 77 | 85 | 75 | 55 | 62 | 68 | 93 | 60 | 45 | 52 | 78 | 94 | 50 | 20GExxE062xNxNNNNN-Cx-Px | 6 |
| 90 | 99 | 109 | 100 | 75 | 77 | 85 | 116 | 75 | 55 | 62 | 93 | 112 | 60 | 20GExxE077xNxNNNNN-Cx-Px | |
| 110 | 125 | 138 | 125 | 90 | 99 | 109 | 149 | 100 | 75 | 77 | 116 | 139 | 75 | 20GExxE099xNxNNNNN-Cx-Px | |
| 132 | 144 | 158 | 150 | 110 | 125 | 138 | 188 | 125 | 90 | 99 | 149 | 178 | 100 | 20GExxE125xNxNNNNN-Cx-Px | |
| 160 | 192 | 211 | 200 | 132 | 144 | 158 | 216 | 150 | 110 | 125 | 188 | 225 | 125 | 20GExxE144xNxNNNNN-Cx-Px | 7 |
| 200 | 242 | 266 | 250 | 160 | 192 | 211 | 288 | 200 | 132 | 144 | 216 | 259 | 150 | 20GExxE192xNxNNNNN-Cx-Px | |
| 250 | 295 | 325 | 300 | 200 | 242 | 266 | 363 | 250 | 160 | 192 | 288 | 346 | 200 | 20GExxE242xNxNNNNN-Cx-Px | |
| 315 | 355 | 391 | 350 | 250 | 295 | 325 | 443 | 300 | 200 | 242 | 363 | 436 | 250 | 20GExxE295xNxNNNNN-Cx-Px | |
| 355 | 395 | 435 | 400 | 315 | 355 | 391 | 533 | 350 | 250 | 295 | 443 | 531 | 300 | 20GExxE355xNxNNNNN-Cx-Px | |
| 400 | 435 | 479 | 450 | 355 | 395 | 435 | 593 | 400 | 315 | 355 | 533 | 639 | 350 | 20GExxE395xNxNNNNN-Cx-Px | |
| 224 | 295 | 325 | 300 | 186 | 242 | 266 | 363 | 250 | 149 | 192 | 288 | 346 | 200 | 20GExxE242xNxNNNNN-Cx-Px | 8(1) |
| 261 | 355 | 391 | 350 | 224 | 295 | 325 | 443 | 300 | 186 | 242 | 363 | 436 | 250 | 20GExxE295xNxNNNNN-Cx-Px | |
| 298 | 395 | 435 | 400 | 261 | 355 | 391 | 533 | 350 | 224 | 295 | 443 | 531 | 300 | 20GExxE355xNxNNNNN-Cx-Px | |
| 336 | 435 | 479 | 450 | 298 | 395 | 435 | 593 | 400 | 261 | 355 | 533 | 639 | 350 | 20GExxE395xNxNNNNN-Cx-Px | |
| 373 | 510 | 561 | 500 | 336 | 435 | 479 | 653 | 450 | 298 | 395 | 593 | 711 | 400 | 20GExxE435xNxNNNNN-Cx-Px | |
| 447 | 580 | 638 | 600 | 410 | 545 | 600 | 818 | 550 | 335 | 450 | 675 | 810 | 450 | 20GExxE545xNxNNNNN-Cx-Px | |
| 522 | 690 | 759 | 700 | 447 | 580 | 638 | 870 | 600 | 410 | 545 | 818 | 981 | 550 | 20GExxE595xNxNNNNN-Cx-Px | 9(1) |
| 597 | 760 | 836 | 800 | 485 | 690 | 759 | 1035 | 700 | 373 | 595 | 893 | 1071 | 600 | 20GExxE690xNxNNNNN-Cx-Px | |
| 671 | 825 | 908 | 900 | 597 | 760 | 836 | 1140 | 800 | 522 | 690 | 1035 | 1242 | 700 | 20GExxE760xNxNNNNN-Cx-Px | |
| 746 | 980 | 1078 | 1000 | 671 | 825 | 908 | 1238 | 900 | 597 | 760 | 1140 | 1368 | 800 | 20GExxE825xNxNNNNN-Cx-Px | |
| 820 | 1102 | 1212 | 1100 | 746 | 980 | 1078 | 1470 | 1000 | 671 | 825 | 1238 | 1485 | 900 | 20GExxE980xNxNNNNN-Cx-Px | |
| 932 | 1220 | 1342 | 1250 | 820 | 1045 | 1150 | 1568 | 1100 | 746 | 980 | 1470 | 1764 | 1000 | 20GExxE1K1xNxNNNNN-Cx-Px | 10(1) |
| 1119 | 1430 | 1573 | 1500 | 932 | 1220 | 1342 | 1830 | 1250 | 820 | 1045 | 1568 | 1881 | 1100 | 20GExxE1K2xNxNNNNN-Cx-Px | |
| 1193 | 1624 | 1786 | 1600 | 1119 | 1430 | 1573 | 2145 | 1500 | 932 | 1220 | 1830 | 2196 | 1250 | 20GExxE1K5xNxNNNNN-Cx-Px | |
| 1566 | 2146 | 2361 | 2100 | 1491 | 1946 | 2141 | 2919 | 2000 | 1342 | 1700 | 2550 | 3060 | 1800 | 20GExxE2K0xNxNNNNN-Cx-Px | 11 |
| 1939 | 2668 | 2935 | 2600 | 1864 | 2420 | 2662 | 3630 | 2500 | 1566 | 2070 | 3105 | 3726 | 2100 | 20GExxE2K4xNxNNNNN-Cx-Px | 12 |
| 3080 | 3190 | 3509 | 3300 | 2750 | 2998 | 3298 | 4497 | 3100 | 2200 | 2475 | 3713 | 4455 | 2500 | 20GExxE2K9xNxNNNNN-Cx-Px | 13 |
| 4088 | 4234 | 4657 | 4400 | 3650 | 3979 | 4377 | 5969 | 4100 | 2920 | 3285 | 4928 | 5913 | 3300 | 20GExxE3K9xNxNNNNN-Cx-Px | 14 |
| 5096 | 5278 | 5806 | 5500 | 4550 | 4960 | 5456 | 7440 | 5100 | 3640 | 4095 | 6143 | 7371 | 4100 | 20GExxE4K9xNxNNNNN-Cx-Px | 15 |

(1) Low harmonic AFE (755TL) is only available in frame sizes 8, 9, and 10.

### 690V AC, Three-phase Drives — IP21/IP54, UL Types 1/12

| Light Duty | | | | Normal Duty | | | | | Heavy Duty | | | | | Base Cat. No. | Frame Size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| kW | Cont. | 1 min | Hp | kW | Cont. | 1 min | 3 s | Hp | kW | Cont. | 1 min | 3 s | Hp | | |
| 15 | 20 | 22 | 15 | 11 | 15 | 17 | 23 | 10 | 8 | 12 | 18 | 22 | 8 | 20GExxF015xNxNNNNN-Cx-Px | 5 |
| 19 | 23 | 25 | 20 | 15 | 20 | 22 | 30 | 15 | 11 | 15 | 23 | 27 | 10 | 20GExxF020xNxNNNNN-Cx-Px | |
| 22 | 30 | 33 | 25 | 18.5 | 23 | 25 | 35 | 20 | 15 | 20 | 30 | 36 | 15 | 20GExxF023xNxNNNNN-Cx-Px | |
| 30 | 34 | 37 | 30 | 22 | 30 | 33 | 45 | 25 | 19 | 23 | 35 | 41 | 20 | 20GExxF030xNxNNNNN-Cx-Px | |
| 37 | 46 | 51 | 40 | 30 | 34 | 37 | 51 | 30 | 22 | 30 | 45 | 54 | 25 | 20GExxF034xNxNNNNN-Cx-Px | |
| 45 | 50 | 55 | 50 | 37 | 46 | 51 | 69 | 40 | 30 | 34 | 51 | 61 | 30 | 20GExxF046xNxNNNNN-Cx-Px | |
| 55 | 61 | 67 | 60 | 45 | 50 | 55 | 75 | 50 | 37 | 46 | 69 | 83 | 40 | 20GExxF050xNxNNNNN-Cx-Px | |
| 75 | 82 | 90 | 75 | 55 | 61 | 67 | 92 | 60 | 45 | 50 | 75 | 90 | 50 | 20GExxF061xNxNNNNN-Cx-Px | |
| 90 | 98 | 108 | 100 | 75 | 82 | 90 | 123 | 75 | 55 | 61 | 92 | 110 | 60 | 20GExxF082xNxNNNNN-Cx-Px | 6 |
| 110 | 119 | 131 | 125 | 90 | 98 | 108 | 147 | 100 | 75 | 82 | 123 | 148 | 75 | 20GExxF098xNxNNNNN-Cx-Px | |
| 132 | 142 | 156 | 150 | 110 | 119 | 131 | 179 | 125 | 90 | 98 | 147 | 176 | 100 | 20GExxF119xNxNNNNN-Cx-Px | |
| 160 | 171 | 188 | 200 | 132 | 142 | 156 | 213 | 150 | 110 | 119 | 179 | 214 | 125 | 20GExxF142xNxNNNNN-Cx-Px | |
| 200 | 215 | 237 | 250 | 160 | 171 | 188 | 257 | 200 | 132 | 142 | 213 | 256 | 150 | 20GExxF171xNxNNNNN-Cx-Px | 7 |
| 250 | 265 | 292 | 300 | 200 | 215 | 237 | 323 | 250 | 160 | 171 | 257 | 308 | 200 | 20GExxF215xNxNNNNN-Cx-Px | |
| 315 | 330 | 363 | 350 | 250 | 265 | 292 | 398 | 300 | 200 | 215 | 323 | 387 | 250 | 20GExxF265xNxNNNNN-Cx-Px | |
| 355 | 370 | 407 | 400 | 315 | 330 | 363 | 495 | 350 | 250 | 265 | 398 | 477 | 300 | 20GExxF330xNxNNNNN-Cx-Px | |
| 400 | 415 | 457 | 450 | 355 | 370 | 407 | 555 | 400 | 315 | 330 | 495 | 594 | 350 | 20GExxF370xNxNNNNN-Cx-Px | |
| 250 | 265 | 292 | 335 | 200 | 215 | 237 | 323 | 268 | 160 | 171 | 257 | 308 | 215 | 20GExxF215xNxNNNNN-Cx-Px | 8(1) |
| 315 | 330 | 363 | 422 | 250 | 265 | 292 | 398 | 335 | 200 | 215 | 323 | 387 | 268 | 20GExxF265xNxNNNNN-Cx-Px | |
| 355 | 370 | 407 | 476 | 315 | 330 | 363 | 495 | 422 | 250 | 265 | 398 | 477 | 335 | 20GExxF330xNxNNNNN-Cx-Px | |
| 400 | 415 | 457 | 536 | 355 | 370 | 407 | 555 | 476 | 315 | 330 | 495 | 594 | 422 | 20GExxF370xNxNNNNN-Cx-Px | |
| 450 | 460 | 506 | 603 | 400 | 415 | 457 | 623 | 536 | 355 | 370 | 555 | 666 | 476 | 20GExxF415xNxNNNNN-Cx-Px | |
| 560 | 565 | 622 | 751 | 500 | 505 | 556 | 758 | 671 | 400 | 415 | 623 | 747 | 536 | 20GExxF505xNxNNNNN-Cx-Px | |
| 630 | 650 | 715 | 845 | 560 | 565 | 622 | 848 | 751 | 500 | 505 | 758 | 909 | 671 | 20GExxF565xNxNNNNN-Cx-Px | 9(1) |
| 710 | 735 | 809 | 952 | 630 | 650 | 715 | 975 | 845 | 560 | 565 | 848 | 1017 | 751 | 20GExxF650xNxNNNNN-Cx-Px | |
| 800 | 820 | 902 | 1073 | 710 | 735 | 809 | 1103 | 952 | 630 | 650 | 975 | 1170 | 845 | 20GExxF735xNxNNNNN-Cx-Px | |
| 900 | 920 | 1012 | 1207 | 800 | 820 | 902 | 1230 | 1073 | 710 | 735 | 1103 | 1323 | 952 | 20GExxF820xNxNNNNN-Cx-Px | |
| 1000 | 1074 | 1181 | 1341 | 900 | 920 | 1012 | 1380 | 1207 | 800 | 820 | 1230 | 1476 | 1073 | 20GExxF920xNxNNNNN-Cx-Px | |
| 1100 | 1150 | 1265 | 1475 | 1000 | 1030 | 1133 | 1545 | 1341 | 900 | 920 | 1380 | 1656 | 1207 | 20GExxF1K0xNxNNNNN-Cx-Px | 10(1) |
| 1250 | 1344 | 1478 | 1676 | 1100 | 1150 | 1265 | 1725 | 1475 | 1000 | 1030 | 1545 | 1854 | 1341 | 20GExxF1K1xNxNNNNN-Cx-Px | |
| 1500 | 1582 | 1740 | 2012 | 1400 | 1419 | 1561 | 2129 | 1877 | 1100 | 1162 | 1743 | 2092 | 1475 | 20GExxF1K4xNxNNNNN-Cx-Px | |
| 2000 | 2091 | 2300 | 2682 | 1800 | 1865 | 2052 | 2798 | 2414 | 1500 | 1535 | 2303 | 2763 | 2012 | 20GExxF1K8xNxNNNNN-Cx-Px | 11 |
| 2500 | 2599 | 2859 | 3353 | 2300 | 2318 | 2550 | 3477 | 3084 | 2000 | 2020 | 3030 | 3636 | 2682 | 20GExxF2K3xNxNNNNN-Cx-Px | 12 |
| 3080 | 3108 | 3419 | 3300 | 2750 | 2778 | 3056 | 4167 | 3100 | 2200 | 2283 | 3425 | 4109 | 2500 | 20GExxF2K7xNxNNNNN-Cx-Px | 13 |
| 4088 | 4125 | 4538 | 4400 | 3650 | 3687 | 4056 | 5531 | 4100 | 2920 | 3030 | 4545 | 5454 | 3300 | 20GExxF3K6xNxNNNNN-Cx-Px | 14 |
| 5096 | 5142 | 5656 | 5500 | 4550 | 4596 | 5056 | 6894 | 5100 | 3640 | 3777 | 5666 | 6799 | 4100 | 20GExxF4K5xNxNNNNN-Cx-Px | 15 |

(1) Low harmonic AFE (755TL) is only available in frame sizes 8, 9, and 10.

## Certifications and Specifications

| | |
|---|---|
| Product certifications | Rockwell Automation maintains current product certification information on its website at:<br>http://www.rockwellautomation.com/global/certification/overview |
| CE | In conformity with the following European Directives:<br>EMC Directive (2014/30/EU)<br>Low Voltage Directive (2014/35/EU)<br>RoHS Directive (2011/65/EU)<br>Standards applied:<br>EN 61800-3<br>EN 61800-5-1<br>Exposure to harmonics per Table 24 of IEC 61800-3 (second environment) results in drive shutdown in a safe condition. |
| China RoHS2 | Compliant with China Restriction of Hazardous Substances Directive. |
| c-UL-us | UL: Listed to UL61800-5-1 up to 600V AC |
| EMC | In conformity with EMC Directive (2014/30/EU).<br>C3 Directive for Conducted and Radiated Emissions:<br>All PowerFlex 755T drives, bus supplies, and common bus inverters<br>C2 Directive for Conducted and Radiated Emissions:<br>Frame 5 with 20-750-EMC2-F5 accessory kit installed<br>Frame 6 with 20-750-EMC2-F6 accessory kit installed<br>Frame 7 with IP54, UL Type 12 enclosure and 'P' filtering option<br>C2 Directive for Conducted Emissions:<br>Frame 7 with IP21, UL Type 1 enclosure and 'P' filtering option<br>Frame 8 with 20-750-MEMCC2-F8 and 20-750-MEMCC2-F8910 accessory kits installed<br>Frame 9 with 20-750-MEMCC2-F9 and 20-750-MEMCC2-F8910 accessory kits installed<br>Frame 10 with 20-750-MEMCC2-F10 and 20-750-MEMCC2-F8910 accessory kits installed |
| Functional safety | TÜV and Rheinland - Certification applies to 20-750-S, 20-750-S1, 20-750-S3 safety, and 20-750-S4 options when they are installed in the drive and are configured according to the appropriate safety manual. See Additional Resources on page 271 for list of publications. |
| | Standards applied:<br>IEC 61508 PARTS 1…7 — EN ISO 13849-1<br>EN 61800-3 — IEC 62061<br>EN 61800-5-1 — ISO 60204-1<br>IEC 61800-5-2 — Machinery Directive (2006/42/EC) |
| IEEE-519 | PowerFlex 755TL, 755TR, and 755TM products meet or exceed the requirements of IEEE-519. Achieving less than 5% Total Harmonic Distortion (THD) at the point of common coupling.<br>PowerFlex 755TL, 755TR, and 755TM products comply to IEEE-519 as written. Individual current harmonics and Total Demand Distortion (TDD) are specified at 100% rating only.<br>Compliance does not include the following frame 5 drive ratings:<br>400/480V, 22 kW/30 Hp and lower<br>600/690V, 30 Hp/30 kW and lower |
| KCC | Korean KC registration |
| Network communication | ODVA Declaration of Conformity to the EtherNet/IP Specification |
| Packaging directive | In conformity with the Packaging Directive (94/62/EC and amendments 2004/12/EC and 2005/20/EC) |
| REACH | Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). |
| Regulatory compliance mark (RCM) | Australian Communications and Media Authority<br>In conformity with the following:<br>Radiocommunications Act: 1992<br>Radiocommunications Standard: 2008<br>Radiocommunications Labeling Notice: 2008<br>Standards applied:<br>EN 61800-3:2012 |

| | |
|---|---|
| SEMI F47 | Certified compliant with the SEMI F47 standard. |
| Ecodesign Directive | Ecodesign Directive 2009/125/EC as implemented by Commission Regulation (EU) 2019/1781: PowerFlex PowerFlex 755T drives, bus supplies, and common bus inverters are exempt from the efficiency requirements of Commission Regulation (EU) 2019/1781 on the basis of Article 2(3c) and (3d). |

| Category | Specification |
|---|---|
| Environmental compliance | Rockwell Automation maintains current product environmental information on its website at:<br>http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page |
| Altitude<br>Based on load | See Derating Guidelines starting on page 55. |
| Based on voltage | Based on EN61800-5-1 (Electro-thermal Safety Standard for drives) |

**Altitude Limit Above Sea Level (1)**

| System and Ground Configuration | Overvoltage Category (2) | 400/480V AC | 600V AC | 690V AC |
|---|---|---|---|---|
| Center Grounded (Y Neutral) w/Solid Ground | II | 9000 m (3) | 7500 m (3) | 7500 m (3) |
| | III | 4800 m | 4800 m | 4800 m |
| Ungrounded, Impedance Grounded, or Corner Grounded | II | 4800 m | 7500 m (3) | 4800 m |
| | III | 2000 m | 4800 m | 2000 m |

(1) Excluding failure from cosmic radiation. Cosmic radiation will increase rate of IGBT malfunction at altitudes greater than 3000 m above sea level. Concrete walls and ceilings or concrete walls and large bottles of water overhead are examples of ways to shield against cosmic radiation.
(2) Overvoltage Categories:
Category II (Isolation Transformer Level) - Typically two levels of isolation or protection from outdoor power lines.
Category III (Most Common) Distribution Level Inside a Building - Typically one level of isolation or protection from outdoor power lines.
(3) Product is limited to a maximum of 4800 m thermally. See the Ambient Temperature/Load Derating Guidelines starting on page 55.

| | | | |
|---|---|---|---|
| Atmospheric protection<br>IEC | Conformity with IEC 60721-3-3, 3C2 and 3S2, for components manufactured by Rockwell Automation.<br>A suitable IP54, UL Type 12 Cabinet is required to meet the 3S2 requirement. | | |
| ISA | Harsh environments with a copper or silver reactivity level greater than 1000 angstroms per 30 days exposure are not allowed. No condensation is allowed. Maximum allowable humidity is 60% in the presence of corrosive gases. See ISA-71.04-2013 for details on how to measure reactivity levels on copper and silver test coupons. | | |
| Environmental impact | EU Environmental Directive:<br>Restriction of Hazardous Substances (RoHS) Directive (2011/65/EU) – CE mark is required for the EU<br>Registration, Evaluation and Authorization of Chemicals (REACH) Regulation (1907/2006)<br>Packaging Directive (94/62/EC as amended by 2004/12/EC and 2005/20/EC)<br>China Restriction of Hazardous Substance (RoHS) Directive | | |
| Surrounding air temperature | IP00, UL Open Type: | -20…+40 °C (-4…+104 °F) | Frames 5 and 6, all ratings |
| Ambient temperature | IP20, UL Type 1: | -20…+40 °C (-4…+104 °F) | Frames 5 and 6, all ratings |
| | IP21, UL Type 1: | -20…+40 °C (-4…+104 °F) | Frames 7…15, all ratings |
| | IP54, UL Type 12: | -20…+40 °C (-4…+104 °F) | Frames 7…15, all ratings |
| Surrounding air or ambient temperature with derating | 50 °C (122 °F) or 60 °C (140 °F):<br>50 °C (122 °F) or 55 °C (134 °F): | Frames 5 and 6, all ratings<br>Frames 7…15, all ratings | See Debating Guidelines on page 55. |
| Corrosive atmosphere<br>ASTM B845-97 Method K Accelerated Test (30 Day Exposure) | Severity Level GX per ANSI/ISA 71.03-2013, Airborne contaminants-gases. Severity level GX is defined as up to 2100 angstroms of film growth per 30 days of copper or silver reactivity.<br>Severity Level CX per IEC 60721-3-3: 2019, Chemically Active Substances.<br>For the product to meet the corrosive atmosphere rating, these conditions must be met:<br>• The PowerFlex 755T product has the Corrosive Gas Protection (XT) option.<br>• Protective covers must remain installed in unused connectors during storage and operation.<br>• The product or kit must be stored in the original packaging. | | |
| Storage temperature | -40…+70 °C (-40…+158 °F) | | |
| Relative humidity | 5…95% non-condensing | | |

<table>
<tr><th>Category</th><th>Specification</th></tr>
<tr><td>UV radiation</td><td>The HIM is not UV rated.</td></tr>
<tr><td>Shock<br>Operating<br><br>Packaged for shipment</td><td><br>Frames 5…15:<br><br>Frames 5…15:</td><td><br>Cabinet packaged products – 10 g peak for 11 ms duration (±1.0 ms), three shocks in each direction in each axis<br>Meets ASTM International standards</td></tr>
<tr><td>Vibration<br>Operating<br>Packaged for shipment</td><td><br>Frames 5…15:<br>Frames 5…15:</td><td><br>Cabinet packaged products – 1.000 mm (0.040 in.) displacement, 1 g peak<br>Meets ASTM International standards</td></tr>
<tr><td>Required volumetric airflow rate</td><td>
<table>
<tr><th rowspan="2">Frame</th><th colspan="2">755TL and 755TR Drives</th><th colspan="2">755TM Bus Supplies</th><th colspan="2">755TM CBIs</th></tr>
<tr><th>CFM (ft³/min)</th><th>CMS (m³/sec)</th><th>CFM (ft³/min)</th><th>CMS (m³/sec)</th><th>CFM (ft³/min)</th><th>CMS (m³/sec)</th></tr>
<tr><td>5</td><td>580</td><td>0.27</td><td>—</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>6</td><td>642</td><td>0.30</td><td>642</td><td>0.30</td><td>—</td><td>—</td></tr>
<tr><td>7</td><td>1555</td><td>0.73</td><td>1090</td><td>0.51</td><td>—</td><td>—</td></tr>
<tr><td>8</td><td>2375</td><td>1.12</td><td>1675</td><td>0.79</td><td>975</td><td>0.46</td></tr>
<tr><td>9</td><td>3775</td><td>1.78</td><td>2375</td><td>1.12</td><td>1675</td><td>0.79</td></tr>
<tr><td>10</td><td>6500</td><td>3.07</td><td>4400</td><td>2.08</td><td>2375</td><td>1.12</td></tr>
<tr><td>11</td><td>7900</td><td>3.73</td><td>5100</td><td>2.41</td><td>3075</td><td>1.45</td></tr>
<tr><td>12</td><td>10,000</td><td>4.72</td><td>6500</td><td>3.07</td><td>3775</td><td>1.78</td></tr>
<tr><td>13</td><td>13,004</td><td>6.14</td><td>8802</td><td>4.15</td><td>5044</td><td>2.38</td></tr>
<tr><td>14</td><td>15,804</td><td>7.46</td><td>10,202</td><td>4.81</td><td>6850</td><td>3.23</td></tr>
<tr><td>15</td><td>20,004</td><td>9.44</td><td>13,002</td><td>6.14</td><td>8250</td><td>3.89</td></tr>
</table>
<table>
<tr><th colspan="3">Entry and Exit Wire Bay</th></tr>
<tr><th>Width</th><th>CFM (ft³/min)</th><th>CMS (m³/sec)</th></tr>
<tr><td>400 mm (16 in.)</td><td>147</td><td>0.07</td></tr>
<tr><td>800 mm (31 in.)</td><td>350</td><td>0.17</td></tr>
</table>
</td></tr>
<tr><td>Sound</td><td>Mean sound pressure levels measured at 2 meters. Values are expressed in dB(A).
<table>
<tr><th rowspan="2">Frame</th><th colspan="4">755TL and 755TR Drives</th><th colspan="2">755TM Bus Supplies</th><th colspan="2">755TM CBIs</th></tr>
<tr><th>IP00<br>UL Open Type</th><th>IP20 (1)<br>UL Type 1 (2)</th><th>IP21<br>UL Type 1</th><th>IP54<br>UL Type 12</th><th>IP21<br>UL Type 1</th><th>IP54<br>UL Type 12</th><th>IP21<br>UL Type 1</th><th>IP54<br>UL Type 12</th></tr>
<tr><td>5</td><td>—</td><td>78</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>6</td><td>—</td><td>80</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>7</td><td>—</td><td>—</td><td>—</td><td>77</td><td>—</td><td>—</td><td>—</td><td>—</td></tr>
<tr><td>8</td><td>—</td><td>—</td><td>79</td><td>78</td><td>77</td><td>76</td><td>76</td><td>75</td></tr>
<tr><td>9</td><td>—</td><td>—</td><td>81</td><td>80</td><td>80</td><td>79</td><td>77</td><td>76</td></tr>
<tr><td>10</td><td>—</td><td>—</td><td>84</td><td>83</td><td>84</td><td>83</td><td>79</td><td>78</td></tr>
<tr><td>11</td><td>—</td><td>—</td><td>83</td><td>82</td><td>83</td><td>82</td><td>80</td><td>79</td></tr>
<tr><td>12</td><td>—</td><td>—</td><td>84</td><td>83</td><td>84</td><td>83</td><td>81</td><td>80</td></tr>
<tr><td>13</td><td>—</td><td>—</td><td>87</td><td>86</td><td>87</td><td>86</td><td>82</td><td>81</td></tr>
<tr><td>14</td><td>—</td><td>—</td><td>86</td><td>85</td><td>86</td><td>85</td><td>83</td><td>82</td></tr>
<tr><td>15</td><td>—</td><td>—</td><td>87</td><td>86</td><td>87</td><td>86</td><td>84</td><td>83</td></tr>
</table>
(1) The optional conduit box is required to meet the IP20 enclosure rating.<br>(2) The optional conduit box and debris hood is required to meet the UL Type 1 enclosure rating.</td></tr>
<tr><td>Surrounding environment</td><td>Pollution Degree 1 and 2: All enclosures acceptable.<br>Pollution Degree 3 and 4: Enclosure that meets or exceeds IP54, UL Type 12 required.<br>(See page 219 for descriptions of each pollution degree rating.)</td></tr>
</table>

| Category | Specification | | | | |
|---|---|---|---|---|---|
| **Protection** | | **Motor Voltage** | | | |
| | | **400V** | **480V** | **600V** | **690V** |
| | AC line input overvoltage trip (1) | 542V AC | 542V AC | 780V AC | 780V AC |
| | AC line input undervoltage trip (1) | 348V AC | 418V AC | 522V AC | 600V AC |
| | Bus overvoltage trip | 815V DC | 815V DC | 1172V DC | 1172V DC |
| | Bus undervoltage shutoff | 453V DC | 543V DC | 678V DC | 781V DC |
| | Nominal bus voltage (full load), 6-pulse front end | 540V DC | 650V DC | 810V DC | 932V DC |
| | Nominal bus voltage (full load), AFE front end | 580V DC | 696V DC | 870V DC | 1000V DC |
| | (1) AC line overvoltage and AC line undervoltage trip levels represent the minimum and maximum AC input line voltage needed to prevent product undervoltage/overvoltage fault condition. | | | | |
| | Drive overcurrent trip | | | | |

| | Light Duty | Normal Duty | Heavy Duty |
|---|---|---|---|
| Software overcurrent trip | 177% of LD drive rating | 177% of ND drive rating | 219% of HD drive rating |
| Instantaneous current limit | 110% of LD drive rating | 150% of ND drive rating | 180% of HD drive rating |

Calculations are based on the 400V current rating for 400/480V power structures and the 600V current rating for 600/690V power structures.
Bus supply overcurrent is based on the rating of an equivalent 755T inverter/converter rating.

| | |
|---|---|
| Line transients | Up to 2000V line-to-line and 4000Vline-to-ground per IEC 61800-3 |
| Control logic noise immunity | Meets EMC standards. |
| Power ride-thru | 15 milliseconds at full load.<br>No load ride-thru up to 10 minutes. |
| Logic control ride-thru | 0.5 seconds minimum, 2 seconds typical (40 milliseconds without logic power) |
| Ground fault trip | Phase-to-ground on drive output |
| Short circuit trip | Phase-to-phase on drive output |

<table>
<tr><th>Category</th><th colspan="3">Specification</th></tr>
<tr><td rowspan="15">Electrical</td><td>AC input voltage tolerance</td><td colspan="2">See page 49 for full power and operating range.</td></tr>
<tr><td>Frequency tolerance</td><td colspan="2">47…63 Hz</td></tr>
<tr><td>Three phase input</td><td colspan="2">Three-phase input provides full rating for all drives. Single-phase operation is not permitted.</td></tr>
<tr><td>DC input voltage tolerance</td><td colspan="2">±10% of Nominal Bus Voltage. See the Protection category in this table on page 44.</td></tr>
<tr><td>Displacement power factor</td><td colspan="2">0.98 across entire speed range. Can be as good as unity (1.0). This is regulated by algorithms in the active front end converter.<br>The kVAR for power factor compensation setting is adjustable. When the kVAR command is set to zero, the converter regulates reactive current to maintain unity power factor. When a nonzero value is entered, it requests the amount of kVAR to command. Negative values are a lagging power factor and positive values are a leading power factor. When the converter is not delivering current, 67% of the full current rating of the converter is available to produce kVAR. As real current increases, while motoring or regenerating, the reactive current limit is automatically reduced.</td></tr>
<tr><td>Efficiency<br>Bus supplies and common bus inverters:<br>Regenerative drives:</td><td colspan="2"><br>97% at rated amps<br>97% at rated amps</td></tr>
<tr><td>Maximum short circuit current rating</td><td colspan="2">Suitable for use on a circuit capable of delivering not more than 100 kA rms symmetrical amperes, up to 600V maximum and 65 kA rms symmetrical amperes at 690V maximum.</td></tr>
<tr><td>Actual short circuit current rating</td><td colspan="2">May be further limited by AIC rating of customer supplied branch circuit fuse/circuit breaker.</td></tr>
<tr><td>Drive to motor power ratio</td><td>Minimum:<br>Maximum:</td><td>Recommended not less than 1:2 ratio<br>Recommended not greater than 2:1 ratio</td></tr>
<tr><td>Current draw</td><td colspan="2">Control pod (20-750-MCPODn): 5.5A at 24V</td></tr>
<tr><td>Digital input</td><td colspan="2"><table><tr><th></th><th>DC</th><th>AC</th></tr><tr><td>Nominal:</td><td>24V DC</td><td>120V AC</td></tr><tr><td>Maximum:</td><td>30V DC</td><td>132V AC</td></tr><tr><td>High State:</td><td>20…24V DC</td><td>100…132V AC</td></tr><tr><td>Low State:</td><td>0…5V DC</td><td>0…30V AC</td></tr></table></td></tr>
<tr><td rowspan="2">Power supplies</td><td colspan="2">240V AC ±10%</td></tr>
<tr><td colspan="2">24V DC ±5%: Vout +24V, Vmin +24.8V (-5%), V Nominal +24V, V Maximum +25.2V (+5%)</td></tr>
<tr><td>24V DC power requirements</td><td colspan="2"><table><tr><th rowspan="3">Product</th><th colspan="11">Max Power (Watts)</th></tr><tr><th colspan="11">Frame</th></tr><tr><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th></tr><tr><td>755TL and 755TR drives</td><td>240</td><td>240</td><td>240</td><td>213</td><td>276</td><td>339</td><td>402</td><td>465</td><td>528</td><td>654</td><td>780</td></tr><tr><td>755TM bus supplies</td><td>—</td><td>240</td><td>209</td><td>182</td><td>213</td><td>245</td><td>276</td><td>308</td><td>339</td><td>402</td><td>465</td></tr><tr><td>755TM bus supplies with one 755TM common bus inverter</td><td>—</td><td>—</td><td>—</td><td>157</td><td>188</td><td>220</td><td>251</td><td>283</td><td>314</td><td>377</td><td>440</td></tr><tr><td>755TM bus supplies with two 755TM common bus inverters</td><td>—</td><td>—</td><td>—</td><td>313</td><td>376</td><td>439</td><td>—</td><td>—</td><td>—</td><td>—</td><td>—</td></tr></table></td></tr>
<tr><td>Method</td><td colspan="2">Sine coded PWM with carrier frequency.</td></tr>
<tr><td>Carrier frequency</td><td colspan="2">Motor Side Inverter on Frames 5 and 6: 2 (Default), 4, 8, 12 kHz<br>Motor Side Inverter on Frames 7 and 15: 1.33 (Default), 2, 4 kHz<br>Line Side Converter All Frames: 4 kHz (Fixed)</td></tr>
<tr><td>Output voltage range</td><td colspan="2">0 to rated motor voltage</td></tr>
<tr><td>Output frequency range</td><td colspan="2">0…325 Hz @ 1.33 and 2 kHz carrier<br>0…590 Hz @ 4 kHz carrier<br>90 Hz max for power modules with reflected wave filters (20-750-MI3-xnnnxnnn)</td></tr>
</table>

| Category | Specification | | |
|---|---|---|---|
| **Control** | Frequency accuracy<br>Digital input<br>Analog input | <br>Within ±0.01% of set output frequency<br>Within ±0.4% of set output frequency | |
| | Frequency control | Speed regulation with slip compensation (V/Hz and Sensorless Vector modes), 0.5% of base speed across 40:1 speed range, 40:1 operating range | |
| | Open-Loop[(1)] (0 dB crossing) Velocity Loop Bandwidth | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Bandwidth (Hz)<br>73<br>32<br>28<br>20<br>16 |
| | Open-Loop[(1)] (0 dB crossing) Position Loop Bandwidth | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Bandwidth (Hz)<br>26<br>12<br>10<br>10<br>11 |
| | Closed-Loop[(1)] (-3 dB crossing) Velocity Loop Bandwidth | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Bandwidth (Hz)<br>72<br>44<br>37<br>27<br>21 |
| | Closed-Loop[(1)] (-3 dB crossing) Position Loop Bandwidth | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Bandwidth (Hz)<br>54<br>34<br>28<br>23<br>20 |
| | Velocity Tracking Error for 1 Hz Oscillating Command | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Tracking Error (dB)<br>-57<br>-42<br>-41<br>-36<br>-33 |
| | Position Tracking Error for 1 Hz Oscillating Command | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Tracking Error (dB)<br>-45<br>-35<br>-32<br>-29<br>-27 |
| | Velocity Disturbance Rejection for 1 Hz Oscillating Command | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Disturbance Rejection (dB)<br>-61<br>-63<br>-66<br>-67<br>-71 |
| | Position Disturbance Rejection for 1 Hz Oscillating Command | Load Ratio<br>1:0 (unloaded)<br>5:1<br>10:1<br>20:1<br>50:1 | Disturbance Rejection (dB)<br>49<br>50<br>48<br>47<br>42 |

| Category | Specification | |
|---|---|---|
| **Control** | Torque accuracy with encoder feedback<br>(with optional torque accuracy module, see option C0 in 20G Control Options Selection on page 12) | ±2% motor rated torque |
| | Selectable motor control | • Induction Motor Volts per Hertz control<br>• Induction Motor Sensorless Vector control<br>• Induction Motor Economizer control<br>• Induction Motor Flux Vector control (with and without encoder feedback)<br>• Permanent Magnet Motor Control Closed/Open loop Flux Vector (Interior Permanent Magnet and Surface Permanent Magnet)<br>• Permanent Magnet Motor Control Open Loop Flux Vector (Surface Mount Permanent Magnet) |
| | Stop modes | Multiple programmable stop modes including - Coast, Ramp, Current Limit, Fast Brake, and Decel to Hold. |
| | Accel/decel | Two independently programmable accel and decel times. Each time may be programmed from 0.1…3600 seconds in 0.1 second increments (0 to motor nameplate speed). |
| | S Curve time | Adjustable from 0 to 100% of ramp time (normal duty rating) |
| | Intermittent overload<br>(All PowerFlex 755T products) | Light Duty: 110% Overload capability for up to 1 minute out of 10 minutes<br>Normal Duty: 110% Overload capability for up to 1 minute out of 10 minutes<br>150% Overload capability for up to 3 seconds out of 60 seconds<br>Heavy Duty: 150% Overload capability for up to 1 minute out of 10 minutes<br>180% Overload capability for up to 3 seconds out of 60 seconds |
| | Current limit capability | Proactive current limit programmable from 20 to 160% of rated output current. Independently programmable proportional and integral gain. |
| | Electronic motor overload protection | Class 10 motor overload protection according to NEC article 430 and motor over-temperature protection according to NEC article 430.126 (A)(2). UL61800-5-1 File E59272. |

(1) Open and closed loop bandwidth do not refer to control without and with encoder feedback. It refers to closed loop (-3 dB) and open loop (0 dB crossing) control loop characterization. See the following Explanation of Bandwidth section for details.

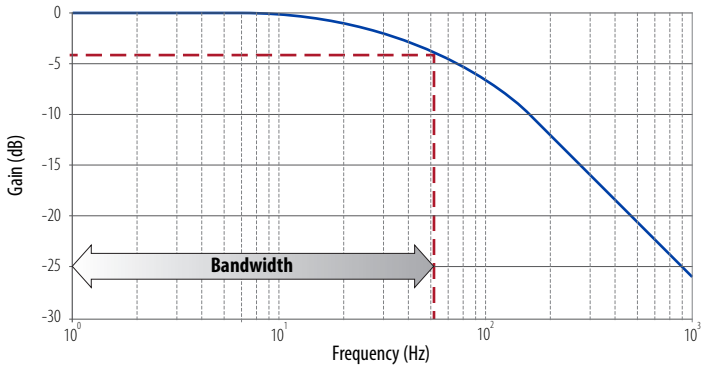
## Explanation of Bandwidth

Bandwidth is a term that is used to indicate performance.

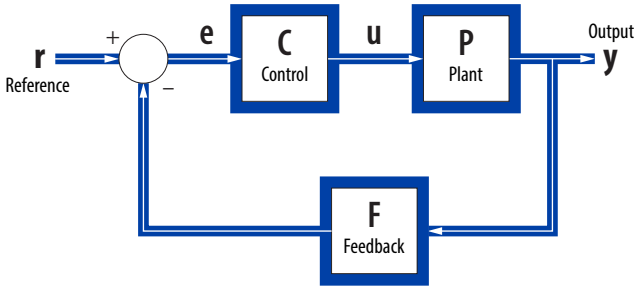
### Closed Loop

Closed loop bandwidth is defined as the usable range of frequencies where the gain through a system is above -3 dB.

*System Gain Versus Frequency*

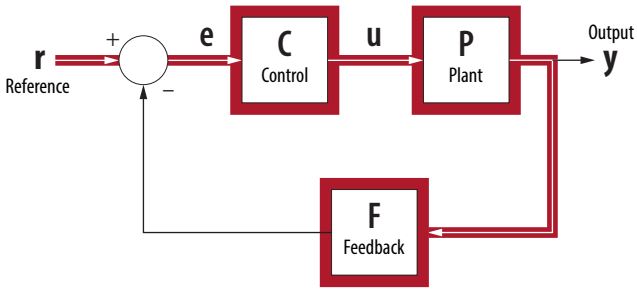



Closed loop bandwidth is a characterization of the entire classical system. Closed loop bandwidth reflects the propagation delays that are related to Control, Plant (motor and load), and Feedback (encoder and encoder input).



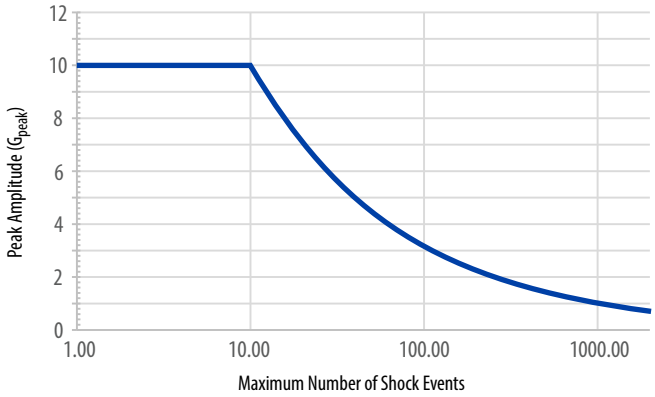

### Open Loop Bandwidth

Open loop bandwidth is a characterization of the part of the system. It reflects propagation delays related to Control and Plant. This characterization excludes Feedback. Some control experts refer to this as '0 dB crossing' bandwidth.



## Shock Events

PowerFlex 750-Series products can withstand a finite number of shock events. The maximum allowable number of shock events increases as the peak amplitude decreases. Below 0.7 G peak, the maximum total shock events should not exceed 2000 cycles.

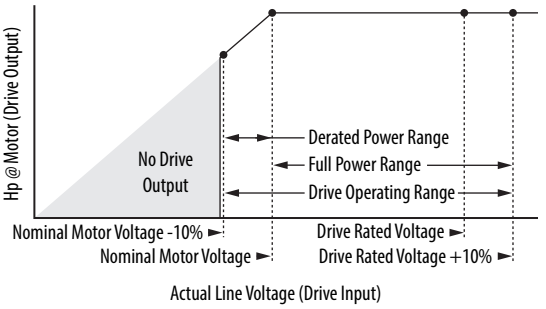



## Design Considerations

This section provides information for design considerations.

### Input Voltage Tolerance

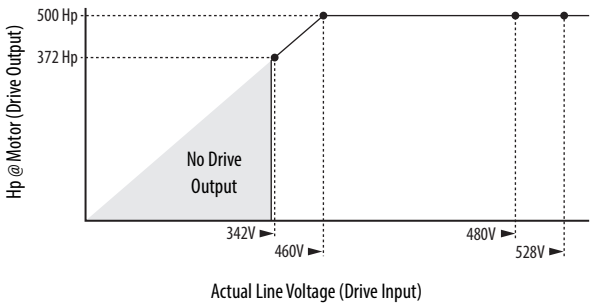
| Drive Rating | Nominal Line Voltage | Nominal Motor Voltage | Drive Full Power Range | Drive Operating Range |
|---|---|---|---|---|
| 380…480 | 380 | 380 | 380…528 | 342…528 |
| | 400 | 400 | 400…528 | |
| | 480 | 460 | 460…528 | |
| 600…690 | 600 | 575 | 575…759 | 517…759 |
| | 690 | 660 | 660…759 | |
| Drive Full Power Range = | Nominal Motor Voltage to Drive Rated Voltage + 10%. Rated current is available across the entire Drive Full Power Range | | | |
| Drive Operating Range = | Lowest Nominal Motor Voltage - 10% to Drive Rated Voltage + 10%. Drive Output is linearly derated when Actual Line Voltage is less than the Nominal Motor Voltage | | | |




**EXAMPLE** Calculate the maximum power of a 500 Hp, 460V motor connected to a 480V-rated drive supplied with 348V Actual Line Voltage input.

- Actual Line Voltage / Nominal Motor Voltage = 74.3%
- 74.3% x 500 Hp = 372 Hp
- 74.3% x 60 Hz = 44.6 Hz

At 348V Actual Line Voltage, the maximum power the 500 Hp, 460V motor can produce is 372 Hp at 44.6 Hz.




**IMPORTANT** For maximum protection of the drive and its internal components, Rockwell Automation prefers the use of fast acting semiconductor fuses to other methods of circuit protection. This reduces risk of drive damage from power quality events, and improves machine and process utilization, thus maximizing productivity. See Fuses and Circuit Breakers on page 188.

## Control Transformer

Bus supplies include 240V fusing and control transformer when selected. See control option code C1 on page 12. These components are sized for loads representative of the number of common bus inverters for the frame rating.

## Approximate Watts Loss

The following table lists watts loss data for drives, bus supplies, and common bus inverters products running at full load, full speed, and default carrier frequency in light duty mode.

**Watts Loss for 400V 755T Devices**

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…C015 | 5 | 11 | 22 | 752 | — |
| 20G…C022 | 5 | 15 | 30 | 892 | — |
| 20G…C030 | 5 | 18.5 | 37 | 1,031 | — |
| 20G…C037 | 5 | 22 | 43 | 1,161 | — |
| 20G…C043 | 5 | 30 | 60 | 1,588 | — |
| 20G…C060 | 5 | 37 | 72 | 1,737 | — |
| 20G…C072 | 5 | 45 | 85 | 2,084 | — |
| 20G…C085 | 5 | 55 | 104 | 2,656 | — |
| 20G…C104 | 5 | 55 | 104 | 2,656 | — |
| 20G…C140 | 6 | 90 | 170 | 3,650 | — |
| 20G…C176 | 6 | 110 | 205 | 4,543 | — |
| 20G…C205 | 6 | 132 | 260 | 5,127 | — |
| 20G…C260 | 6 | 160 | 302 | 6,146 | — |
| 20G…C302 | 7 | 200 | 367 | 6,707 | — |
| 20G…C367 | 7 | 250 | 460 | 8,699 | — |
| 20G…C460 | 7 | 315 | 540 | 10,634 | — |
| 20G…C540 | 7 | 315 | 585 | 11,812 | — |
| 20G…C585 | 7 | 315 | 617 | 12,689 | — |
| 20G…C302 | 8 | 200 | 367 | 11,340 | 4,811 |
| 20G…C367 | 8 | 250 | 460 | 14,803 | 6,162 |
| 20G…C460 | 8 | 315 | 540 | 18,267 | 7,508 |
| 20G…C540 | 8 | 315 | 585 | 20,414 | 8,340 |
| 20G…C585 | 8 | 355 | 650 | 18,146 | 7,707 |
| 20G…C650 | 8 | 400 | 750 | 23,110 | 9,692 |
| 20G…C750 | 8 | 450 | 796 | 23,990 | 10,048 |
| 20G…C770 | 8 | 450 | 832 | 26,835 | 11,200 |
| 20G…C920 | 9 | 560 | 1040 | 31,740 | 13,993 |
| 20G…C1K0 | 9 | 630 | 1090 | 33,828 | 14,884 |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| 20J…C140 | 6 | 106 | 182 | 2,648 |
| 20J…C176 | 6 | 128 | 220 | 3,285 |
| 20J…C205 | 6 | 162 | 279 | 3,422 |
| 20J…C260 | 6 | 188 | 324 | 4,066 |
| 20J…C302 | 7 | 228 | 394 | 4,086 |
| 20J…C367 | 7 | 286 | 494 | 5,358 |
| 20J…C460 | 7 | 336 | 579 | 6,608 |
| 20J…C540 | 7 | 364 | 628 | 7,375 |
| 20J…C585 | 7 | 384 | 662 | 7,948 |
| 20J…C302 | 8 | 228 | 394 | 6,594 |
| 20J…C367 | 8 | 286 | 494 | 8,740 |
| 20J…C460 | 8 | 336 | 579 | 10,894 |
| 20J…C540 | 8 | 364 | 628 | 12,231 |
| 20J…C585 | 8 | 387 | 667 | 10,615 |
| 20J…C650 | 8 | 467 | 805 | 13,673 |
| 20J…C750 | 8 | 479 | 826 | 14,209 |
| 20J…C770 | 8 | 518 | 893 | 15,947 |
| 20J…C920 | 9 | 647 | 1116 | 17,991 |
| 20J…C1K0 | 9 | 678 | 1170 | 19,211 |

**Watts Loss for 400V 755T Devices (continued)**

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…C1K1 | 9 | 710 | 1182 | 31,010 | 13,958 |
| 20G…C1K2 | 9 | 800 | 1465 | 41,344 | 18,527 |
| 20G…C1K4 | 9 | 850 | 1581 | 46,064 | 20,615 |
| 20G…C1K6 | 10 | 1000 | 1715 | 45,311 | 20,435 |
| 20G…C1K7 | 10 | 1250 | 2150 | 60,912 | 27,393 |
| 20G…C2K1 | 10 | 1400 | 2330 | 68,143 | 30,622 |
| 20G…C2K8 | 11 | 1800 | 3078 | 86,593 | 40,450 |
| 20G…C3K5 | 12 | 2200 | 3846 | 111,599 | 51,249 |
| 20G…C4K2 | 13 | 2475 | 4576 | 136,286 | 61,244 |
| 20G…C5K6 | 14 | 3285 | 6074 | 173,186 | 80,900 |
| 20G…C7K0 | 15 | 4095 | 7571 | 223,198 | 102,498 |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| 20J…C1K1 | 9 | 735 | 1268 | 17,367 |
| 20J…C1K2 | 9 | 911 | 1572 | 23,298 |
| 20J…C1K4 | 9 | 983 | 1696 | 26,007 |
| 20J…C1K6 | 10 | 1067 | 1840 | 25,316 |
| 20J…C1K7 | 10 | 1337 | 2307 | 34,207 |
| 20J…C2K1 | 10 | 1449 | 2500 | 38,328 |
| 20J…C2K8 | 11 | 1915 | 3303 | 47,198 |
| 20J…C3K5 | 12 | 2393 | 4127 | 61,667 |
| 20J…C4K2 | 13 | 2848 | 4912 | 76,656 |
| 20J…C5K6 | 14 | 3779 | 6519 | 94,396 |
| 20J…C7K0 | 15 | 4711 | 8126 | 123,334 |

**Watts Loss for 480V 755T Devices**

| Catalog Number | Frame | Light Duty Hp Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…D014 | 5 | 15 | 22 | 796 | — |
| 20G…D022 | 5 | 20 | 27 | 892 | — |
| 20G…D027 | 5 | 25 | 34 | 1,042 | — |
| 20G…D034 | 5 | 30 | 40 | 1,185 | — |
| 20G…D040 | 5 | 40 | 52 | 1,510 | — |
| 20G…D052 | 5 | 50 | 65 | 1,656 | — |
| 20G…D065 | 5 | 60 | 77 | 1,980 | — |
| 20G…D077 | 5 | 75 | 96 | 2,562 | — |
| 20G…D096 | 5 | 75 | 96 | 2,562 | — |
| 20G…D125 | 6 | 125 | 156 | 3,539 | — |
| 20G…D156 | 6 | 150 | 186 | 4,327 | — |
| 20G…D186 | 6 | 200 | 248 | 4,975 | — |
| 20G…D248 | 6 | 250 | 302 | 6,279 | — |
| 20G…D302 | 7 | 300 | 361 | 6,854 | — |
| 20G…D361 | 7 | 350 | 430 | 8,320 | — |
| 20G…D430 | 7 | 400 | 485 | 9,597 | — |
| 20G…D505 | 7 | 450 | 545 | 11,100 | — |
| 20G…D617 | 7 | 500 | 617 | 13,054 | — |
| 20G…D302 | 8 | 300 | 361 | 11,568 | 4840 |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| 20J…D125 | 6 | 111 | 160 | 2,583 |
| 20J…D156 | 6 | 133 | 191 | 3,148 |
| 20J…D186 | 6 | 177 | 255 | 3,285 |
| 20J…D248 | 6 | 216 | 311 | 4,089 |
| 20J…D302 | 7 | 258 | 371 | 4,154 |
| 20J…D361 | 7 | 307 | 442 | 5,072 |
| 20J…D430 | 7 | 347 | 499 | 5,879 |
| 20J…D505 | 7 | 390 | 560 | 6,837 |
| 20J…D617 | 7 | 441 | 635 | 8,091 |
| 20J…D302 | 8 | 258 | 371 | 6786 |

### Watts Loss for 480V 755T Devices (continued)

| Catalog Number | Frame | Light Duty Hp Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…D361 | 8 | 350 | 430 | 14,170 | 5825 |
| 20G…D430 | 8 | 400 | 485 | 16,493 | 6701 |
| 20G…D505 | 8 | 450 | 545 | 19,280 | 7748 |
| 20G…D545 | 8 | 500 | 617 | 17,322 | 7383 |
| 20G…D617 | 8 | 600 | 710 | 21,861 | 9189 |
| 20G…D710 | 8 | 650 | 765 | 23,149 | 9709 |
| 20G…D740 | 8 | 700 | 800 | 25,852 | 10,799 |
| 20G…D800 | 9 | 800 | 960 | 29,208 | 12,903 |
| 20G…D960 | 9 | 900 | 1045 | 32,645 | 14,365 |
| 20G…D1K0 | 9 | 1000 | 1135 | 29,520 | 13,387 |
| 20G…D1K1 | 9 | 1100 | 1365 | 38,046 | 17,180 |
| 20G…D1K3 | 9 | 1250 | 1520 | 44,113 | 19,881 |
| 20G…D1K4 | 10 | 1500 | 1655 | 44,394 | 20,019 |
| 20G…D1K6 | 10 | 1800 | 2070 | 59,059 | 26,537 |
| 20G…D2K0 | 10 | 2000 | 2240 | 65,776 | 29,525 |
| 20G…D2K6 | 11 | 2600 | 2960 | 83,398 | 38,960 |
| 20G…D3K4 | 12 | 3300 | 3696 | 106,950 | 48,975 |
| 20G…D4K0 | 13 | 3900 | 4400 | 131,552 | 59,050 |
| 20G…D5K4 | 14 | 5200 | 5840 | 166,796 | 77,920 |
| 20G…D6K7 | 15 | 6400 | 7280 | 213,900 | 97,950 |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| 20J…D361 | 8 | 307 | 442 | 8425 |
| 20J…D430 | 8 | 347 | 499 | 9893 |
| 20J…D505 | 8 | 390 | 560 | 11,658 |
| 20J…D545 | 8 | 422 | 607 | 10,086 |
| 20J…D617 | 8 | 508 | 730 | 12,882 |
| 20J…D710 | 8 | 529 | 761 | 13,668 |
| 20J…D740 | 8 | 573 | 823 | 15,319 |
| 20J…D800 | 9 | 687 | 987 | 16,498 |
| 20J…D960 | 9 | 748 | 1075 | 18,507 |
| 20J…D1K0 | 9 | 802 | 1153 | 16,394 |
| 20J…D1K1 | 9 | 977 | 1404 | 21,250 |
| 20J…D1K3 | 9 | 1087 | 1563 | 24,707 |
| 20J…D1K4 | 10 | 1184 | 1702 | 24,751 |
| 20J…D1K6 | 10 | 1481 | 2129 | 33,109 |
| 20J…D2K0 | 10 | 1603 | 2304 | 36,937 |
| 20J…D2K6 | 11 | 2118 | 3044 | 45,334 |
| 20J…D3K4 | 12 | 2632 | 3784 | 59,082 |
| 20J…D4K0 | 13 | 3149 | 4527 | 73,874 |
| 20J…D5K4 | 14 | 4180 | 6008 | 90,668 |
| 20J…D6K7 | 15 | 5210 | 7489 | 118,164 |

### Watts Loss for 600V 755T Devices

| Catalog Number | Frame | Light Duty Hp Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…E011 | 5 | 15 | 17 | 825 | — |
| 20G…E017 | 5 | 20 | 22 | 934 | — |
| 20G…E022 | 5 | 25 | 27 | 1,051 | — |
| 20G…E027 | 5 | 30 | 32 | 1,177 | — |
| 20G…E032 | 5 | 40 | 41 | 1,427 | — |
| 20G…E041 | 5 | 50 | 52 | 1,772 | — |
| 20G…E052 | 5 | 60 | 62 | 2,124 | — |
| 20G…E062 | 5 | 75 | 77 | 2,719 | — |
| 20G…E077 | 6 | 100 | 99 | 2,836 | — |
| 20G…E099 | 6 | 125 | 125 | 3,516 | — |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| 20J…E077 | 6 | 89 | 102 | 1,899 |
| 20J…E099 | 6 | 112 | 129 | 2,308 |

**Watts Loss for 600V 755T Devices (continued)**

| Catalog Number | Frame | Light Duty Hp Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…E125 | 6 | 150 | 144 | 4,048 | — |
| 20G…E144 | 6 | 200 | 192 | 5,526 | — |
| 20G…E192 | 7 | 250 | 242 | 5,954 | — |
| 20G…E242 | 7 | 300 | 295 | 7,319 | — |
| 20G…E295 | 7 | 350 | 355 | 9,039 | — |
| 20G…E355 | 7 | 400 | 395 | 10,288 | — |
| 20G…E395 | 7 | 450 | 435 | 11,619 | — |
| 20G…E242 | 8 | 300 | 295 | 13,483 | 5312 |
| 20G…E295 | 8 | 350 | 355 | 16,499 | 6344 |
| 20G…E355 | 8 | 400 | 395 | 18,702 | 7090 |
| 20G…E395 | 8 | 450 | 435 | 21,059 | 7883 |
| 20G…E435 | 8 | 500 | 510 | 22,039 | 8483 |
| 20G…E545 | 8 | 600 | 580 | 25,885 | 9827 |
| 20G…E595 | 9 | 700 | 690 | 28,996 | 11,969 |
| 20G…E690 | 9 | 800 | 760 | 33,206 | 13,256 |
| 20G…E760 | 9 | 900 | 825 | 35,657 | 14,516 |
| 20G…E825 | 9 | 1000 | 980 | 38,230 | 15,908 |
| 20G…E980 | 9 | 1100 | 1102 | 44,018 | 18,202 |
| 20G…E1K1 | 10 | 1250 | 1220 | 48,145 | 19,811 |
| 20G…E1K2 | 10 | 1500 | 1430 | 57,543 | 23,430 |
| 20G…E1K5 | 10 | 1600 | 1624 | 66,994 | 27,059 |
| 20G…E2K0 | 11 | 2100 | 2146 | 84,849 | 35,627 |
| 20G…E2K4 | 12 | 2600 | 2668 | 108,608 | 44,685 |
| 20G…E2K9 | 13 | 3300 | 3190 | 133,988 | 54,118 |
| 20G…E3K9 | 14 | 4400 | 4234 | 169,698 | 71,254 |
| 20G…E4K9 | 15 | 5500 | 5278 | 217,216 | 89,370 |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| 20J…E125 | 6 | 129 | 148 | 2,632 |
| 20J…E144 | 6 | 171 | 197 | 3,545 |
| 20J…E192 | 7 | 217 | 249 | 3,475 |
| 20J…E242 | 7 | 263 | 303 | 4,282 |
| 20J…E295 | 7 | 317 | 365 | 5,307 |
| 20J…E355 | 7 | 353 | 406 | 6,056 |
| 20J…E395 | 7 | 389 | 447 | 6,858 |
| 20J…E242 | 8 | 263 | 303 | 8212 |
| 20J…E295 | 8 | 317 | 365 | 10,212 |
| 20J…E355 | 8 | 353 | 406 | 11,681 |
| 20J…E395 | 8 | 389 | 447 | 13,258 |
| 20J…E435 | 8 | 456 | 524 | 13,667 |
| 20J…E545 | 8 | 518 | 596 | 16,200 |
| 20J…E595 | 9 | 617 | 710 | 17,130 |
| 20J…E690 | 9 | 680 | 782 | 20,073 |
| 20J…E760 | 9 | 737 | 848 | 21,285 |
| 20J…E825 | 9 | 877 | 1008 | 22,523 |
| 20J…E980 | 9 | 985 | 1133 | 26,068 |
| 20J…E1K1 | 10 | 1091 | 1255 | 28,541 |
| 20J…E1K2 | 10 | 1279 | 1471 | 34,395 |
| 20J…E1K5 | 10 | 1452 | 1670 | 40,298 |
| 20J…E2K0 | 11 | 1919 | 2207 | 49,697 |
| 20J…E2K4 | 12 | 2386 | 2744 | 64,508 |
| 20J…E2K9 | 13 | 2851 | 3278 | 80,596 |
| 20J…E3K9 | 14 | 3784 | 4351 | 99,394 |
| 20J…E4K9 | 15 | 4717 | 5424 | 129,016 |

**Watts Loss for 690V 755T Devices**

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…F015 | 5 | 15 | 20 | 937 | — |
| 20G…F020 | 5 | 18.5 | 23 | 1,005 | — |
| 20G…F023 | 5 | 22 | 30 | 1,173 | — |
| 20G…F030 | 5 | 30 | 34 | 1,276 | — |

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |

**Watts Loss for 690V 755T Devices (continued)**

| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. Output Amps | Total Watts Loss | |
|---|---|---|---|---|---|
| | | | | 755TL/TR Drives | 755TM Common Bus Inverters |
| 20G…F034 | 5 | 37 | 46 | 1,615 | — |
| 20G…F046 | 5 | 45 | 50 | 1,738 | — |
| 20G…F050 | 5 | 55 | 61 | 2,103 | — |
| 20G…F061 | 5 | 75 | 82 | 2,905 | — |
| 20G…F082 | 6 | 90 | 98 | 3,043 | — |
| 20G…F098 | 6 | 110 | 119 | 3,641 | — |
| 20G…F119 | 6 | 132 | 142 | 4,343 | — |
| 20G…F142 | 6 | 160 | 171 | 5,299 | — |
| 20G…F171 | 7 | 200 | 215 | 5,740 | — |
| 20G…F215 | 7 | 250 | 265 | 7,035 | — |
| 20G…F265 | 7 | 315 | 330 | 8,918 | — |
| 20G…F330 | 7 | 355 | 370 | 10,190 | — |
| 20G…F370 | 7 | 400 | 415 | 11,723 | — |
| 20G…F215 | 8 | 250 | 265 | 12,875 | 5057 |
| 20G…F265 | 8 | 315 | 330 | 16,200 | 6171 |
| 20G…F330 | 8 | 355 | 370 | 18,459 | 6917 |
| 20G…F370 | 8 | 400 | 415 | 21,194 | 7814 |
| 20G…F415 | 8 | 450 | 460 | 20,668 | 7971 |
| 20G…F505 | 8 | 560 | 565 | 26,512 | 9990 |
| 20G…F565 | 9 | 630 | 650 | 24,768 | 10,319 |
| 20G…F650 | 9 | 710 | 735 | 33,893 | 13,383 |
| 20G…F735 | 9 | 800 | 820 | 37,242 | 15,075 |
| 20G…F820 | 9 | 900 | 920 | 37,736 | 15,605 |
| 20G…F920 | 9 | 1000 | 1074 | 45,212 | 18,529 |
| 20G…F1K0 | 10 | 1100 | 1150 | 48,104 | 19,660 |
| 20G…F1K1 | 10 | 1250 | 1344 | 56,985 | 23,033 |
| 20G…F1K4 | 10 | 1500 | 1582 | 68,911 | 27,546 |
| 20G…F1K8 | 11 | 2000 | 2091 | 87,377 | 36,268 |
| 20G…F2K3 | 12 | 2500 | 2599 | 111,745 | 45,474 |
| 20G…F2K7 | 13 | 3080 | 3108 | 137,822 | 55,092 |
| 20G…F3K6 | 14 | 4088 | 4125 | 174,754 | 72,536 |
| 20G…F4K5 | 15 | 5096 | 5142 | 223,490 | 90,948 |

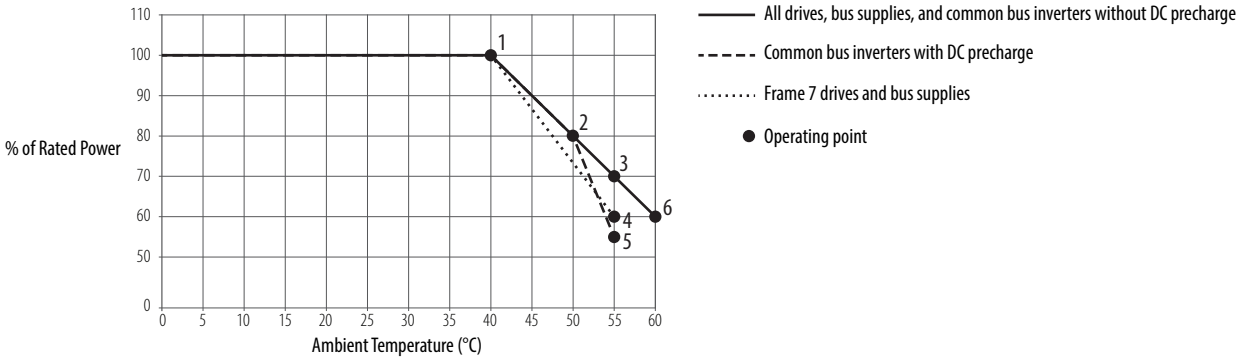
| Catalog Number | Frame | Light Duty kW Output | Light Duty Cont. DC Output Amps | Total Watts Loss |
|---|---|---|---|---|
| | | | | 755TM Bus Supplies |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| — | — | — | — | — |
| F082 | 6 | 101 | 101 | 2,045 |
| F098 | 6 | 122 | 122 | 2,411 |
| F119 | 6 | 146 | 146 | 2,847 |
| F142 | 6 | 176 | 176 | 3,451 |
| F171 | 7 | 221 | 221 | 3,424 |
| F215 | 7 | 272 | 272 | 4,199 |
| F265 | 7 | 339 | 339 | 5,340 |
| F330 | 7 | 380 | 380 | 6,116 |
| F370 | 7 | 426 | 426 | 7,058 |
| 20J…F215 | 8 | 272 | 272 | 7851 |
| 20J…F265 | 8 | 339 | 339 | 10,079 |
| 20J…F330 | 8 | 380 | 380 | 11,602 |
| 20J…F370 | 8 | 426 | 426 | 13,455 |
| 20J…F415 | 8 | 472 | 472 | 12,788 |
| 20J…F505 | 8 | 580 | 580 | 16,657 |
| 20J…F565 | 9 | 580 | 580 | 14,519 |
| 20J…F650 | 9 | 754 | 754 | 20,625 |
| 20J…F735 | 9 | 842 | 842 | 22,308 |
| 20J…F820 | 9 | 944 | 944 | 22,308 |
| 20J…F920 | 9 | 1102 | 1102 | 26,922 |
| 20J…F1K0 | 10 | 1180 | 1180 | 28,629 |
| 20J…F1K1 | 10 | 1380 | 1380 | 34,201 |
| 20J…F1K4 | 10 | 1624 | 1624 | 41,708 |
| 20J…F1K8 | 11 | 2146 | 2146 | 51,558 |
| 20J…F2K3 | 12 | 2668 | 2668 | 66,824 |
| 20J…F2K7 | 13 | 3190 | 3190 | 83,416 |
| 20J…F3K6 | 14 | 4234 | 4234 | 103,116 |
| 20H…F4K5 | 15 | 5278 | 5278 | 133,648 |

## Derating Guidelines

The following sections describe conditional derating guidelines.

### Ambient Temperature Derating

The PowerFlex 750T products are designed to operate at -20...+40 °C (-4...+104 °F) ambient without derating. The following graph shows the derating curves for ambient temperatures above 40 °C (104 °F) at default carrier frequency.



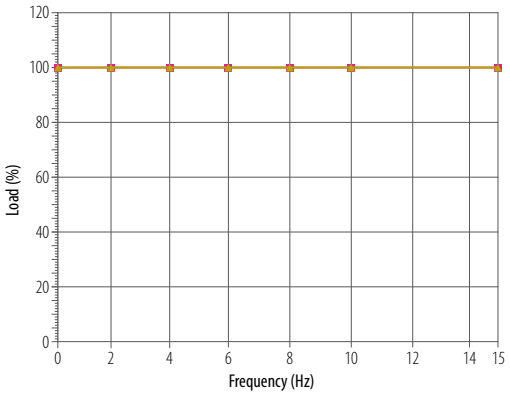
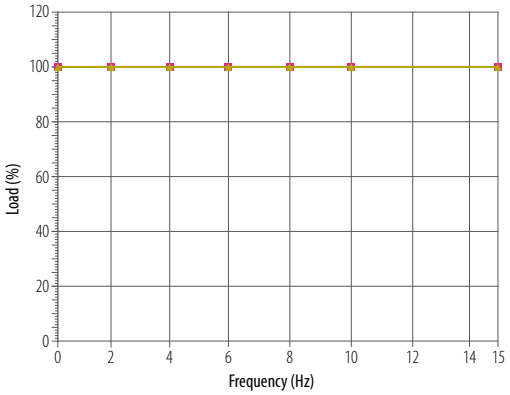
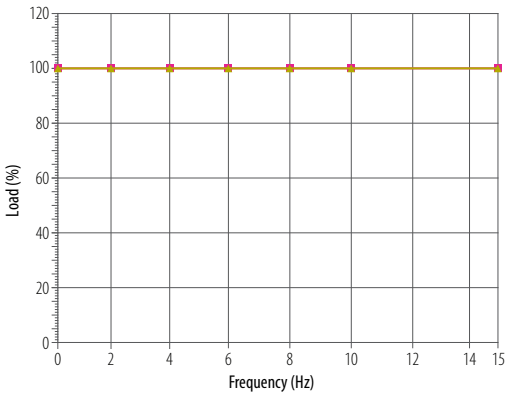

| Operating Point | Ambient Temperature | Description |
|---|---|---|
| 1 | 40 °C (104 °F) | All drives, bus supplies, and common bus inverters operate at 100% rated current. |
| 2 | 50 °C (122 °F) | All drives, bus supplies, and common bus inverters operate at 80% rated current. |
| 3 | 55 °C (134 °F) | Drives, bus supplies, and common bus inverters without DC precharge operate at 70% rated current. |
| 4 | 55 °C (134 °F) | Frame 7 drives and bus supplies operate at 60% rated current. |
| 5 | 55 °C (134 °F) | Drives and common bus inverters with DC precharge operate at 55% rated current. |
| 6 | 60 °C (140 °F) | Frame 5 and 6 drives operate at 60% rated current. |

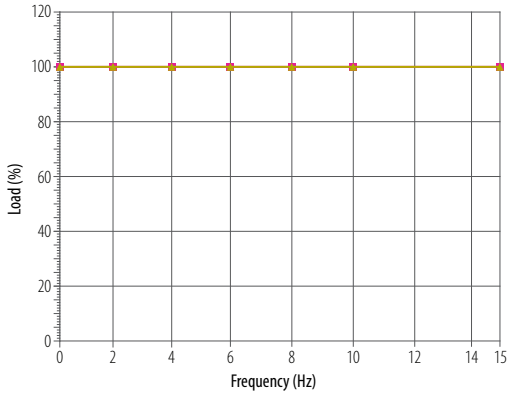
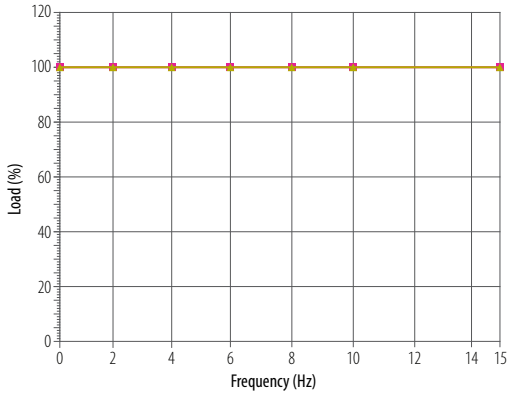
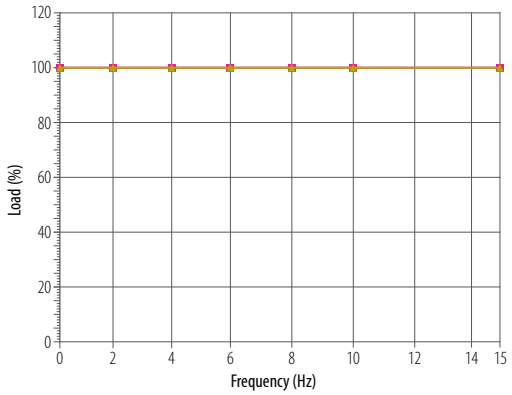
### Voltage Boost Derating

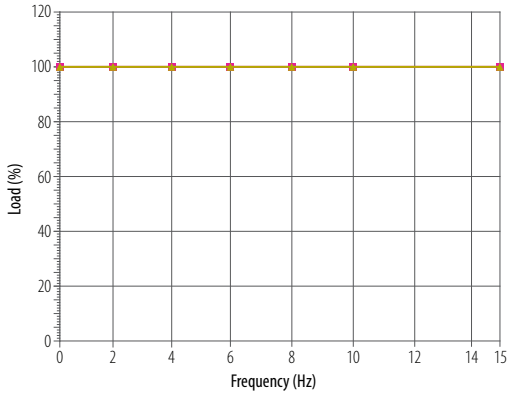
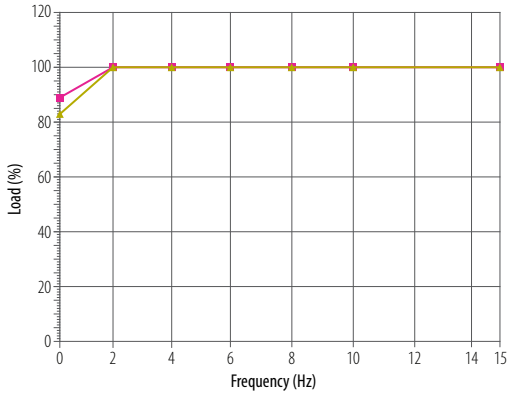
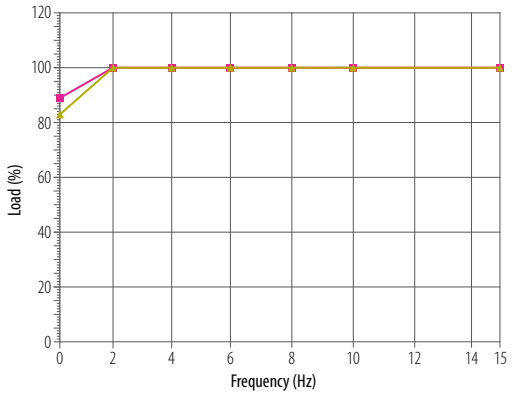
When voltage control parameters are used to set the DC bus voltage reference to a value that is greater than the default value, the DC bus output current is reduced. This voltage boost does not affect overload capabilities. Consult factory for derate information.

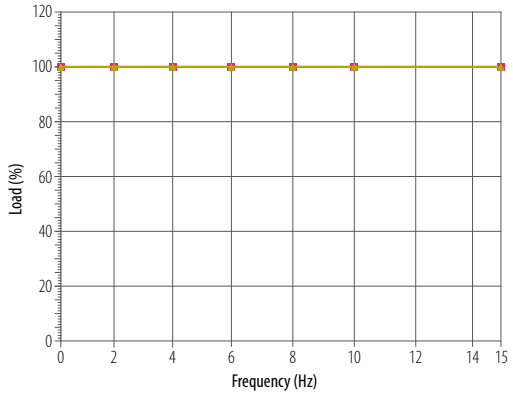
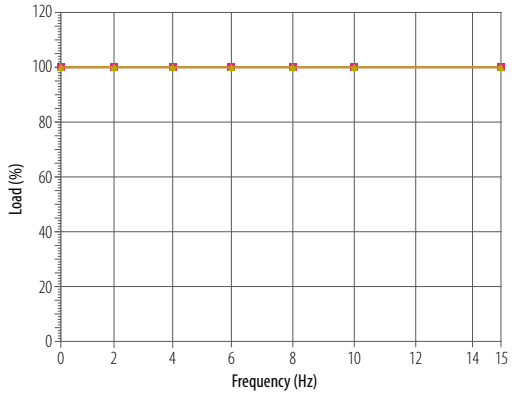
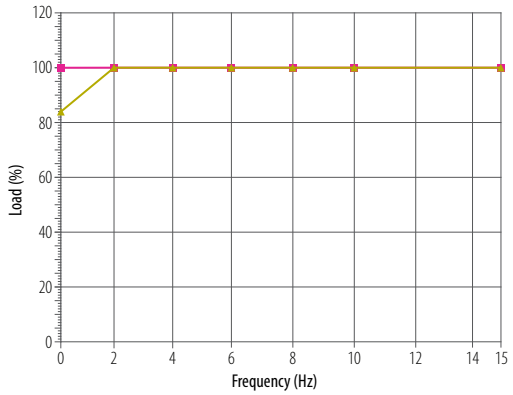
## Low Speed Derating with Reduced Carrier Frequency

The following graphs show the reduced carrier frequency deratings for motor side inverters. If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 55 are followed.

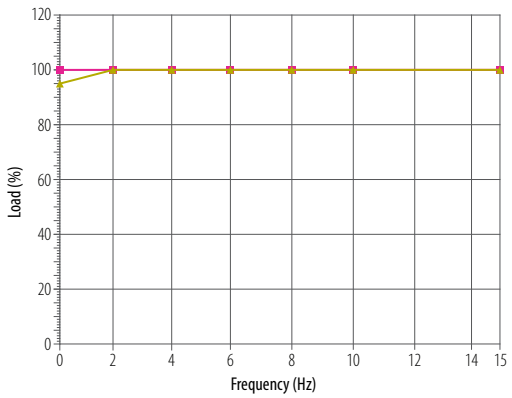
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | 0.666 kHz 1.33 kHz |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| C015 | 5 | 11 | 22 | 7.5 | 15.4 | 11.5 | 5.5 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C022 | 5 | 15 | 30 | 11 | 22 | 7.5 | 15.4 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C030 | 5 | 18.5 | 37 | 15 | 30 | 11 | 22 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| C037 | 5 | 22 | 43 | 18.5 | 37 | 15 | 30 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C043 | 5 | 30 | 60 | 22 | 43 | 18.5 | 37 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C060 | 5 | 37 | 72 | 30 | 60 | 22 | 43 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

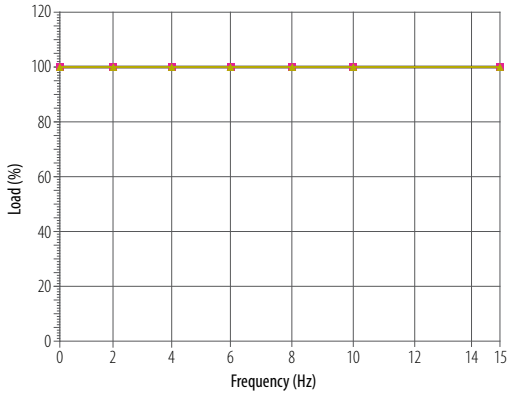
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| C072 | 5 | 45 | 85 | 37 | 72 | 30 | 60 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C085 | 5 | 55 | 104 | 45 | 85 | 37 | 72 | 0 | 89 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C104 | 5 | 55 | 104 | 55 | 104 | 45 | 85 | 0 | 89 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

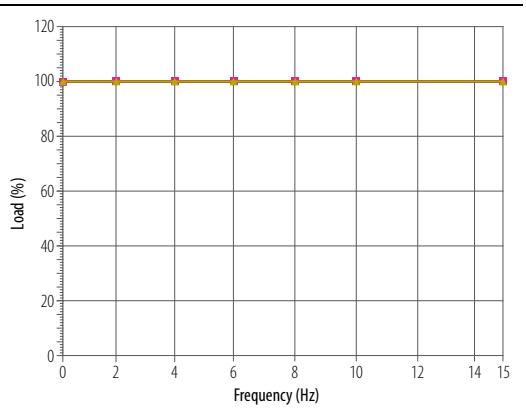
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| C140 | 6 | 90 | 170 | 75 | 140 | 55 | 104 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C176 | 6 | 110 | 205 | 90 | 170 | 75 | 140 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| C205 | 6 | 132 | 260 | 110 | 205 | 90 | 170 | 0 | 100 | 84 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

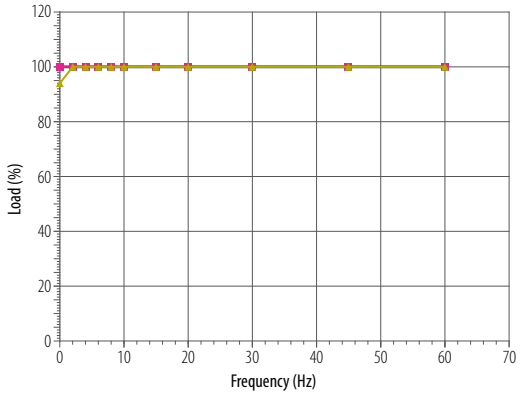
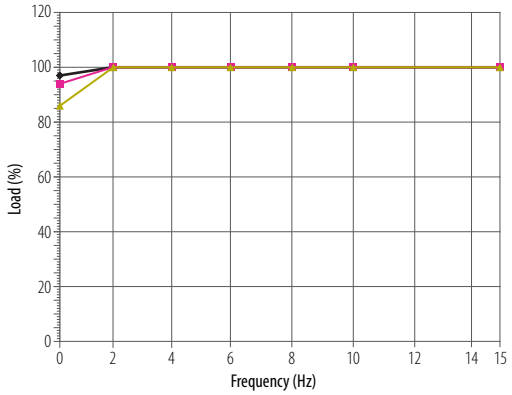
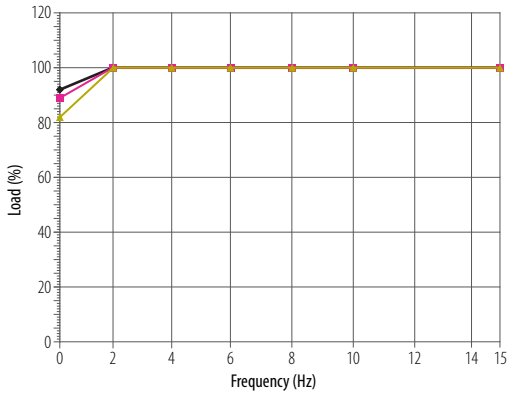
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz |
| C260 | 6 | 160 | 302 | 132 | 260 | 110 | 205 | 0 | 100 | 95 |
| | | | | | | | | 2 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 |

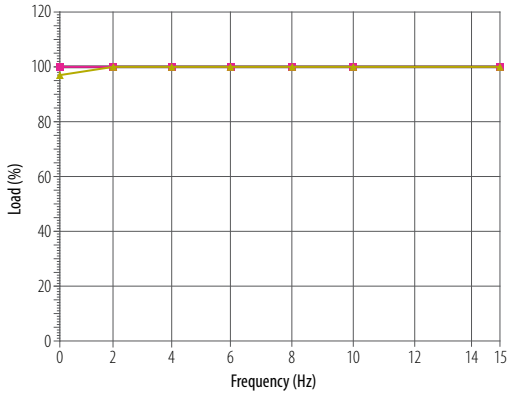
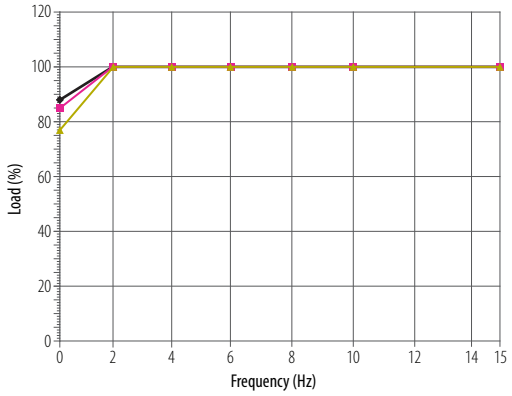
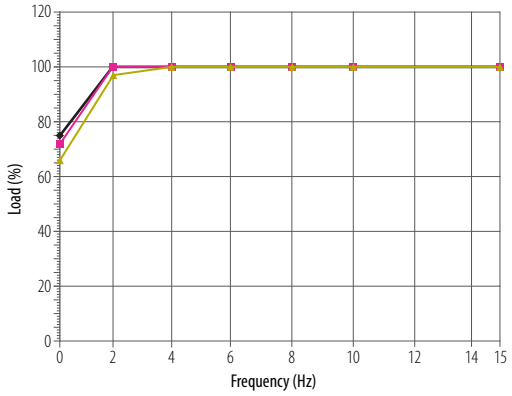


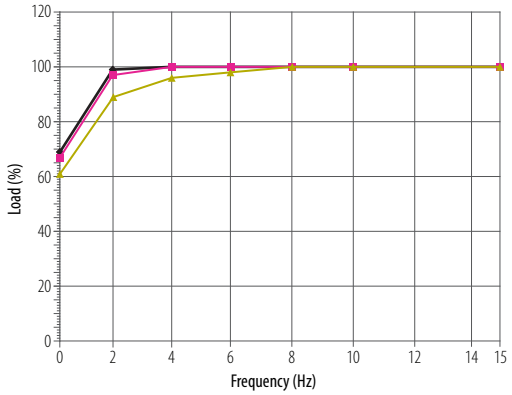
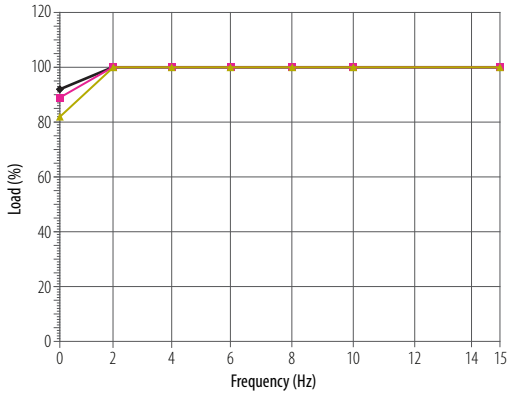
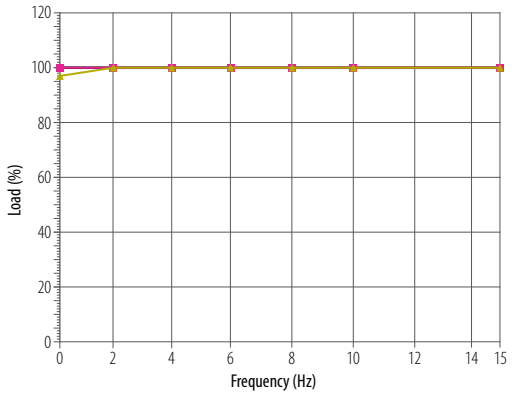

| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz |
| C302 | 7 | 200 | 367 | 160 | 302 | 132 | 260 | 0 | 100 | 100 | 100 |
| | | | | | | | | 2 | 100 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |
| C367 | 7 | 250 | 460 | 200 | 367 | 160 | 302 | 0 | 100 | 100 | 100 |
| | | | | | | | | 2 | 100 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |

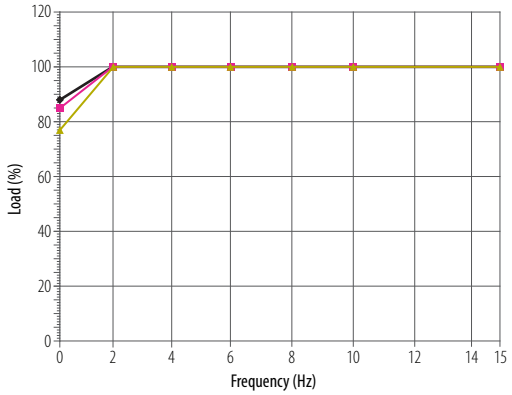
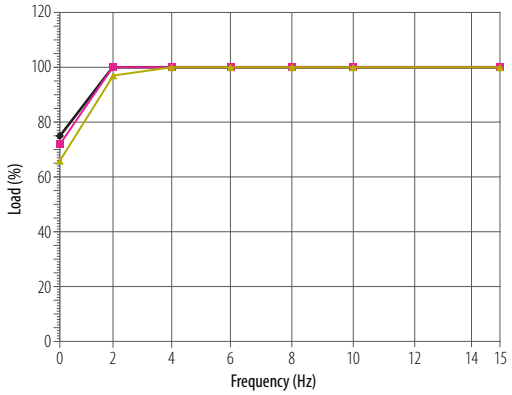
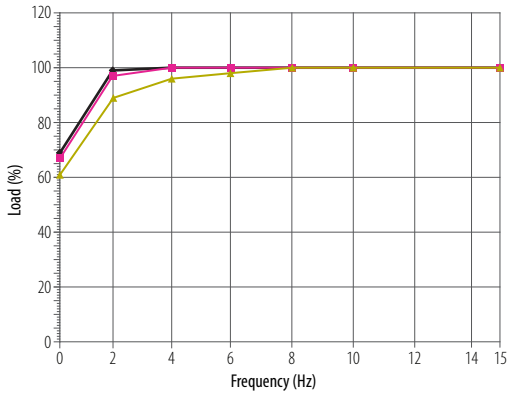


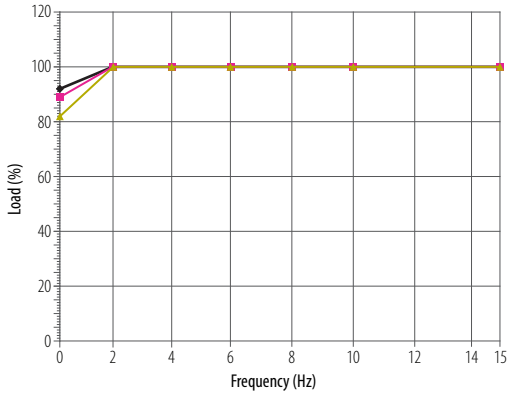
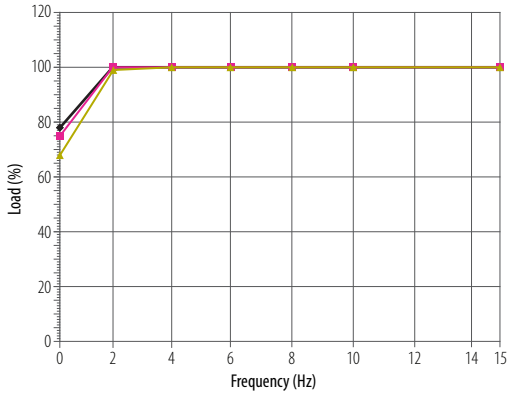
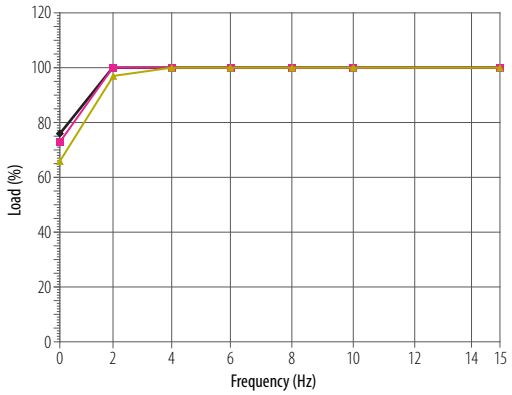



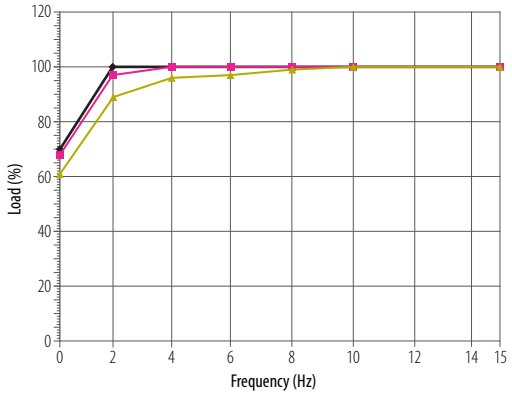
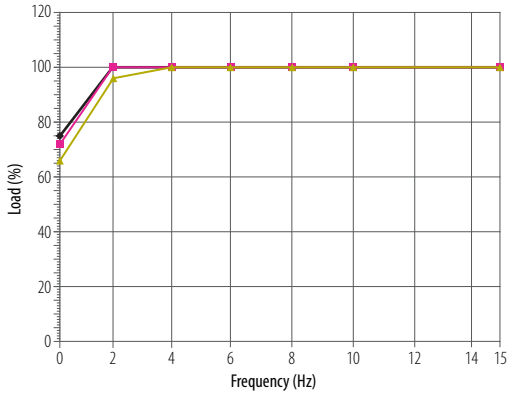
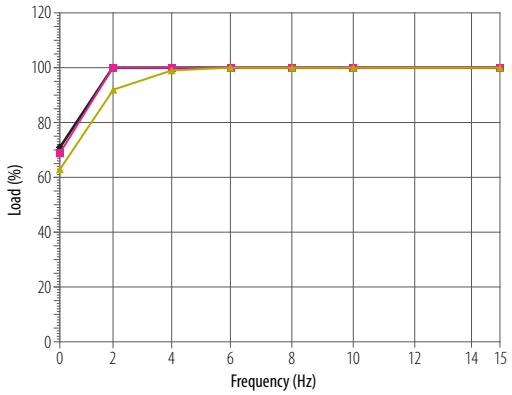
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C460 | 7 | 315 | 540 | 250 | 460 | 200 | 367 | 0 | 100 | 100 | 94 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C540 | 7 | 315 | 585 | 315 | 540 | 250 | 460 | 0 | 97 | 94 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C585 | 7 | 315 | 617 | 315 | 600 | 250 | 500 | 0 | 92 | 89 | 82 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

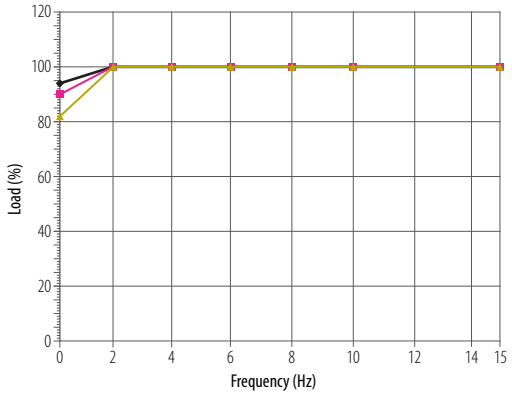
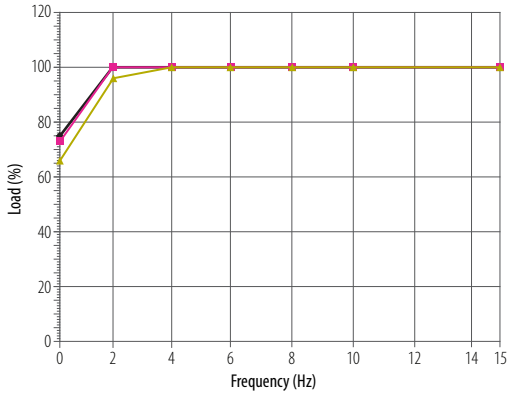
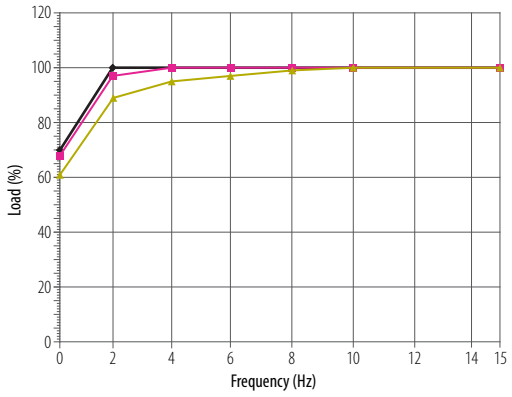
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C302 | 8 | 200 | 367 | 160 | 302 | 132 | 260 | 0 | 100 | 100 | 97 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C367 | 8 | 250 | 460 | 200 | 367 | 160 | 302 | 0 | 88 | 85 | 77 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C460 | 8 | 315 | 540 | 250 | 460 | 200 | 367 | 0 | 75 | 72 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

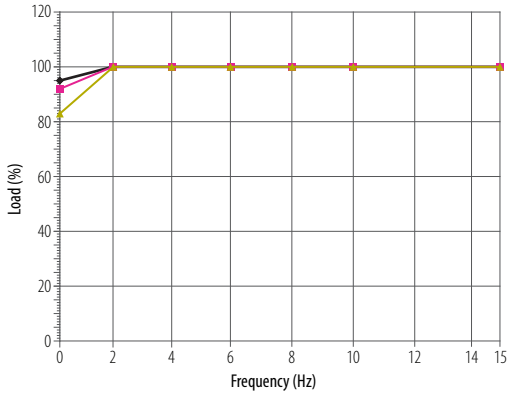
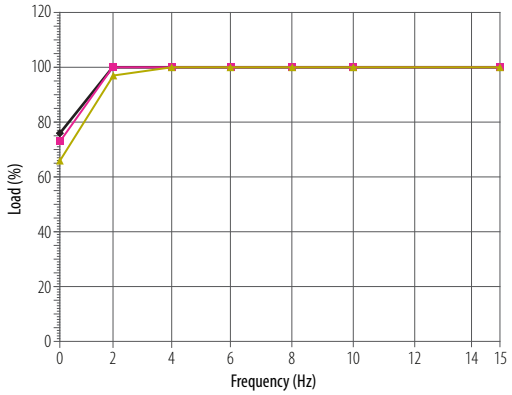
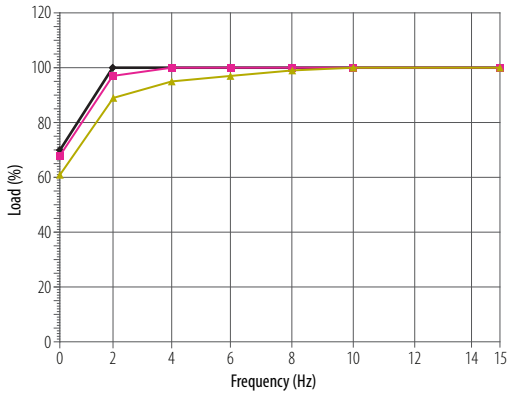
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C540 | 8 | 315 | 585 | 315 | 540 | 250 | 460 | 0 | 69 | 67 | 61 |  |
| | | | | | | | | 2 | 99 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 98 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C585 | 8 | 355 | 650 | 315 | 585 | 250 | 472 | 0 | 82 | 75 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 88 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C302 | 8 | 200 | 367 | 160 | 302 | 132 | 260 | 0 | 100 | 100 | 97 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C367 | 8 | 250 | 460 | 200 | 367 | 160 | 302 | 0 | 88 | 85 | 77 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C460 | 8 | 315 | 540 | 250 | 460 | 200 | 367 | 0 | 75 | 72 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C540 | 8 | 315 | 585 | 315 | 540 | 250 | 460 | 0 | 69 | 67 | 61 |  |
| | | | | | | | | 2 | 99 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 98 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

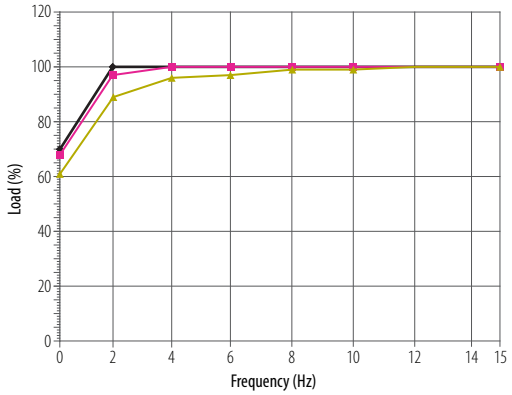
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C585 | 8 | 355 | 650 | 315 | 585 | 250 | 472 | 0 | 94 | 90 | 82 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C650 | 8 | 400 | 750 | 355 | 650 | 315 | 540 | 0 | 78 | 75 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 99 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C750 | 8 | 450 | 796 | 400 | 750 | 315 | 585 | 0 | 76 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

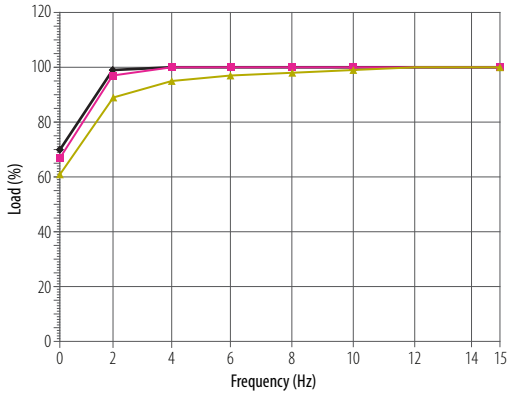
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| C770 | 8 | 450 | 832 | 400 | 770 | 355 | 650 | 0 | 70 | 68 | 61 |  |
| | | | | | | | | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C920 | 9 | 560 | 1040 | 500 | 920 | 400 | 770 | 0 | 75 | 72 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K0 | 9 | 630 | 1090 | 560 | 1040 | 500 | 920 | 0 | 71 | 69 | 63 |  |
| | | | | | | | | 2 | 100 | 100 | 92 | |
| | | | | | | | | 4 | 100 | 100 | 99 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| C1K1 | 9 | 710 | 1182 | 630 | 1112 | 500 | 1040 | 0 | 94 | 90 | 82 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K2 | 9 | 800 | 1465 | 710 | 1175 | 560 | 1090 | 0 | 75 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K4 | 9 | 850 | 1581 | 800 | 1463 | 630 | 1175 | 0 | 70 | 68 | 61 |  |
| | | | | | | | | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

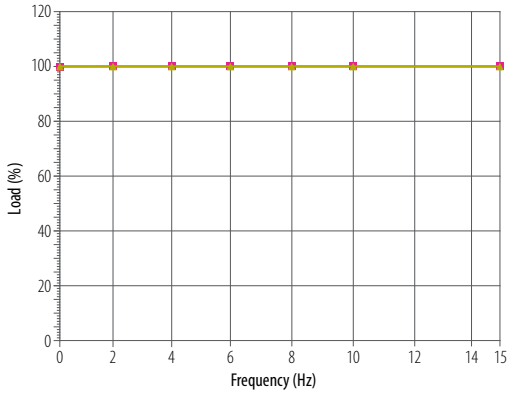
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| C1K6 | 10 | 1000 | 1715 | 850 | 1590 | 710 | 1465 | 0 | 95 | 92 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K7 | 10 | 1250 | 2150 | 1000 | 1715 | 800 | 1480 | 0 | 76 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C2K1 | 10 | 1400 | 2330 | 1250 | 2156 | 1000 | 1715 | 0 | 70 | 68 | 61 |  |
| C4K2 | 13 | 2475 | 4576 | 2200 | 4235 | 1953 | 3575 | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

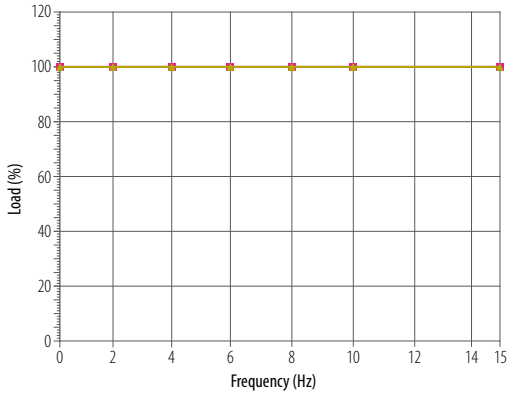
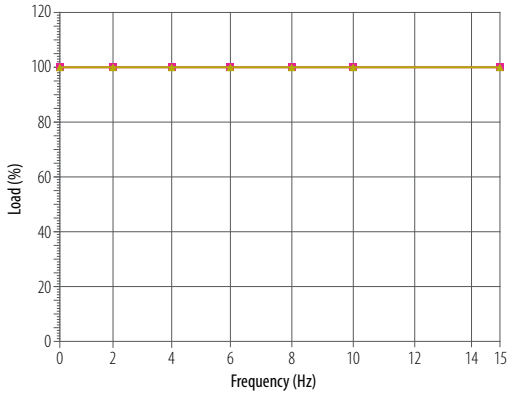
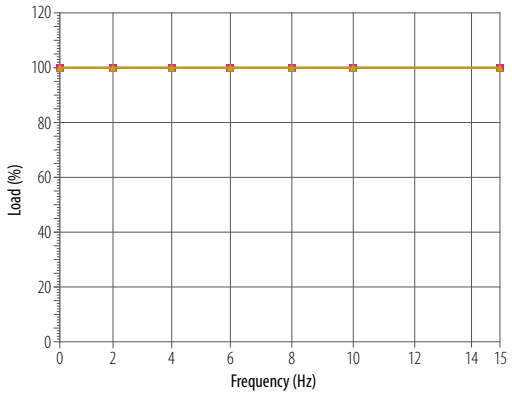
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz |
| C2K8<br>C5K6 | 11<br>14 | 1800<br>3285 | 3078<br>6074 | 1650<br>2920 | 2849<br>5621 | 1400<br>2592 | 2330<br>4745 | 0 | 70 | 68 | 61 |
| | | | | | | | | 2 | 100 | 97 | 89 |
| | | | | | | | | 4 | 100 | 100 | 96 |
| | | | | | | | | 6 | 100 | 100 | 97 |
| | | | | | | | | 8 | 100 | 100 | 99 |
| | | | | | | | | 10 | 100 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |
| C3K5<br>C7K0 | 12<br>15 | 2200<br>4095 | 3846<br>7571 | 2000<br>3640 | 3542<br>7007 | 1650<br>3231 | 3032<br>5915 | 0 | 70 | 67 | 61 |
| | | | | | | | | 2 | 99 | 97 | 89 |
| | | | | | | | | 4 | 100 | 100 | 95 |
| | | | | | | | | 6 | 100 | 100 | 97 |
| | | | | | | | | 8 | 100 | 100 | 98 |
| | | | | | | | | 10 | 100 | 100 | 99 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |

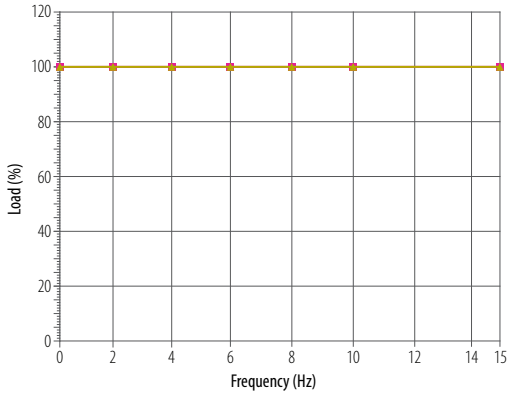
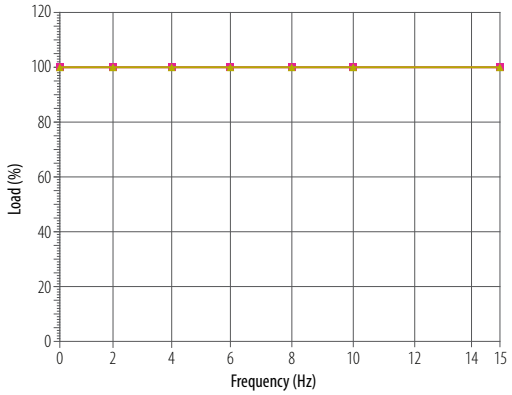
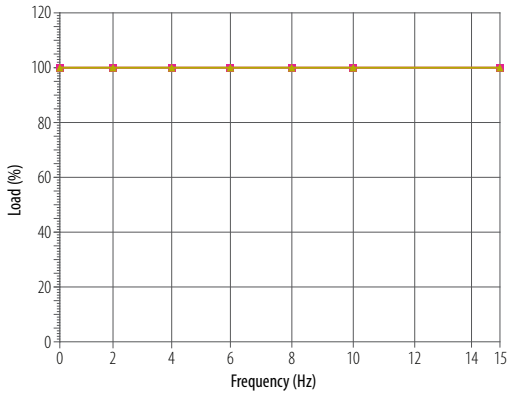


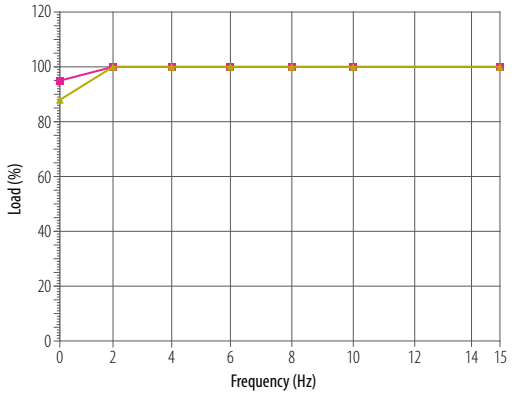
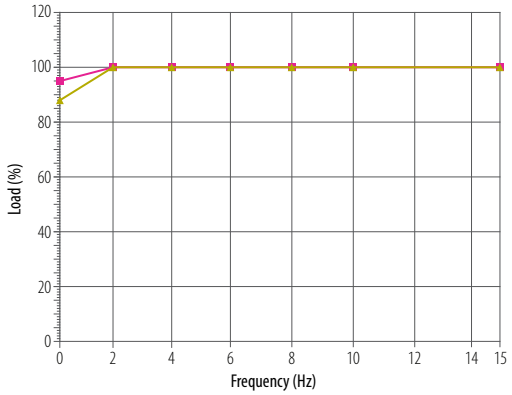
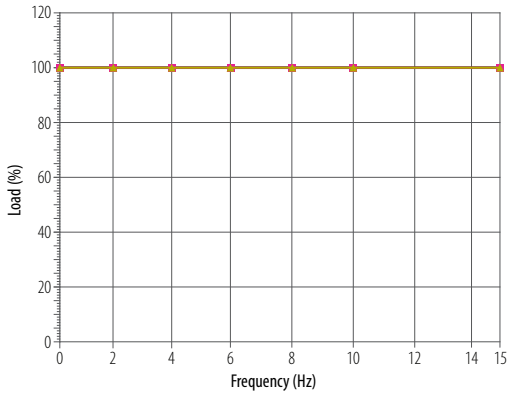



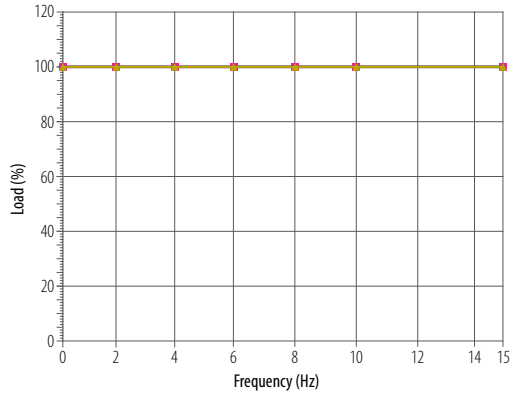
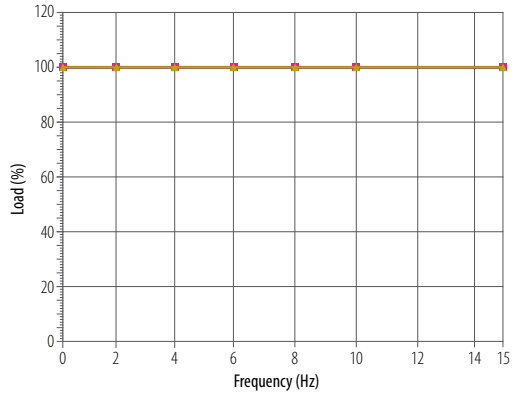
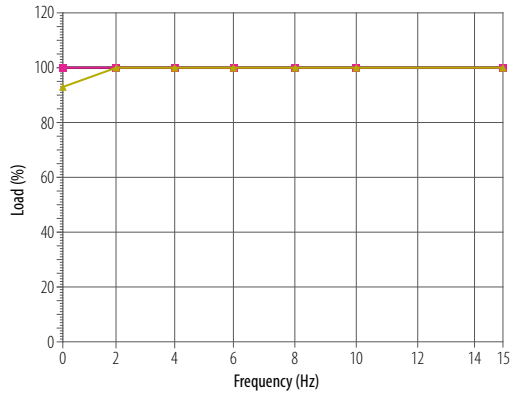

| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz |
| D014 | 5 | 15 | 22 | 10 | 14 | 7.5 | 11 | 0 | 100 | 100 |
| | | | | | | | | 2 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 |

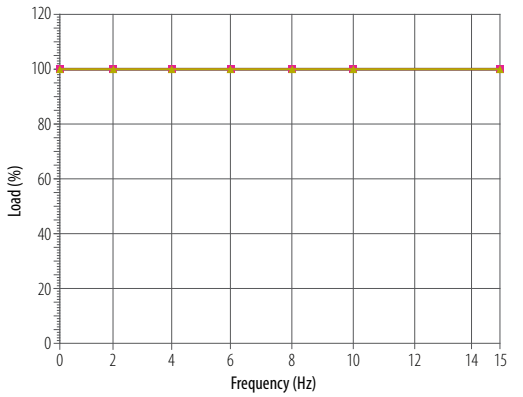
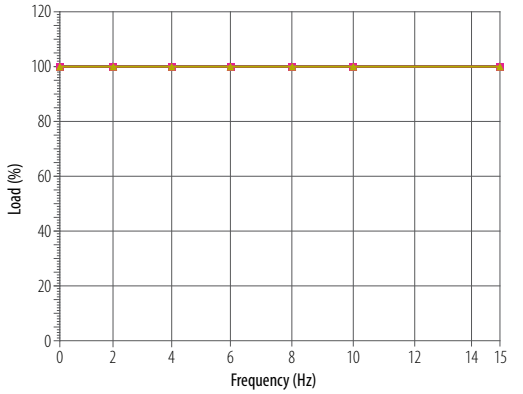
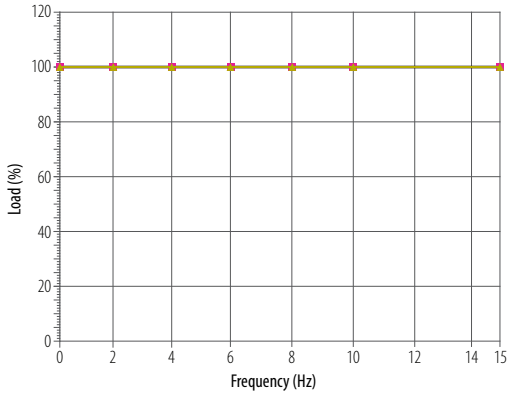


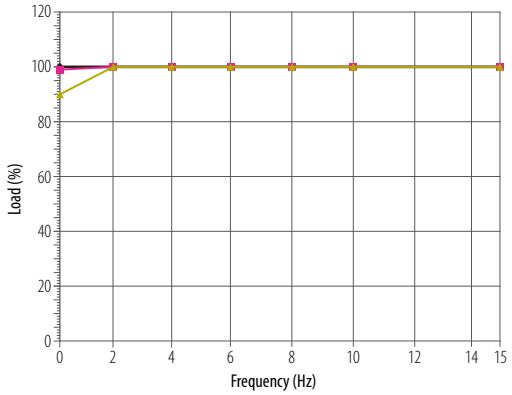
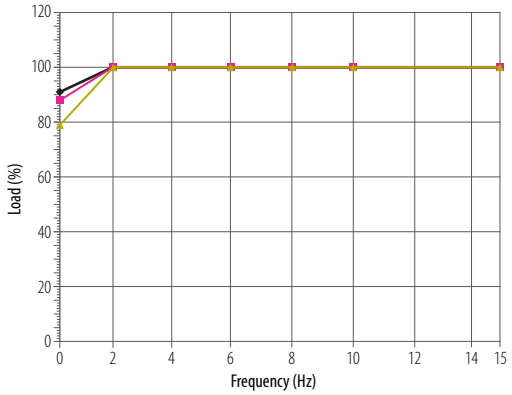
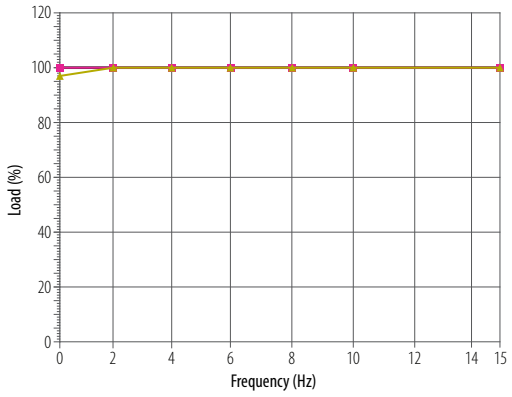
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| D022 | 5 | 20 | 27 | 15 | 22 | 10 | 14 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D027 | 5 | 25 | 34 | 20 | 27 | 15 | 22 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D034 | 5 | 30 | 40 | 25 | 34 | 20 | 27 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

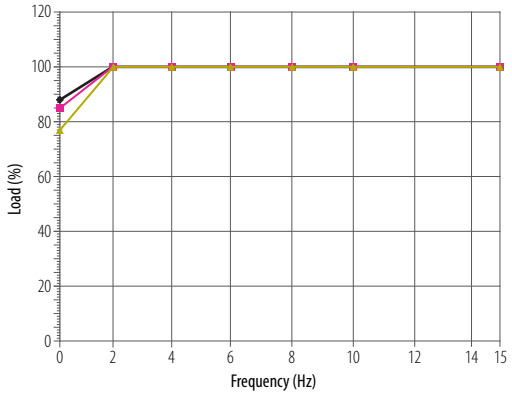
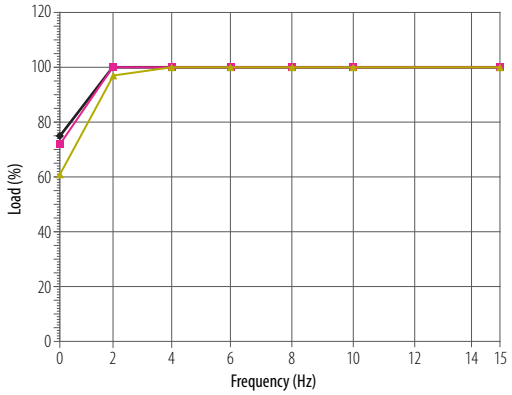
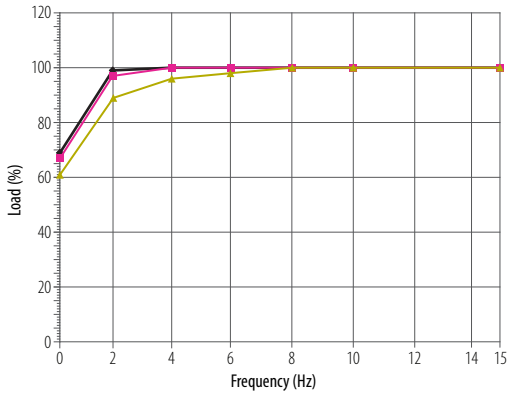
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| D040 | 5 | 40 | 52 | 30 | 40 | 25 | 34 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D052 | 5 | 50 | 65 | 40 | 52 | 30 | 40 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D065 | 5 | 60 | 77 | 50 | 65 | 40 | 52 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

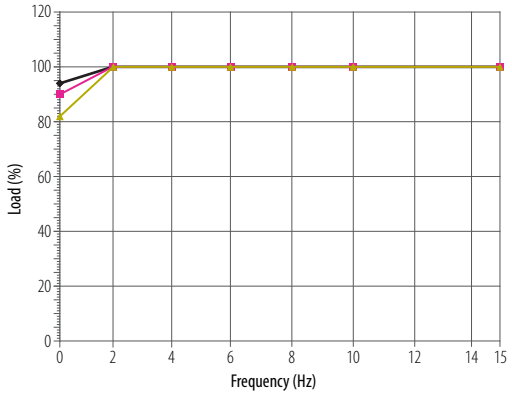
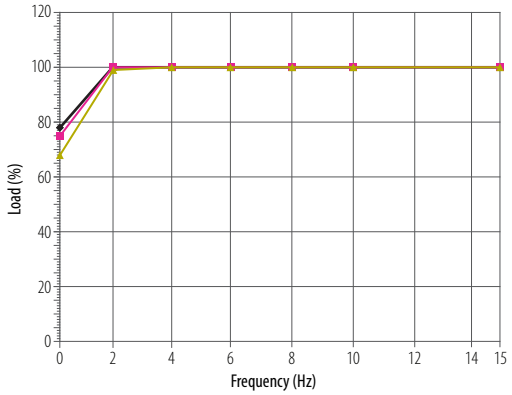
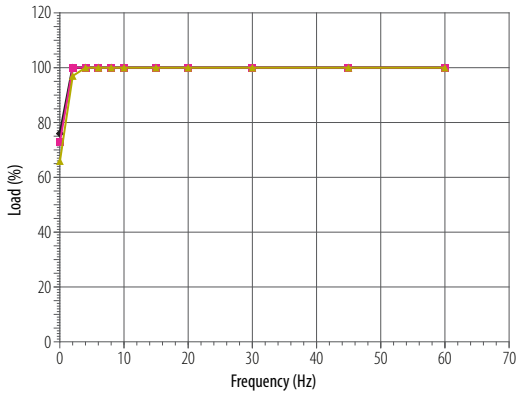
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| D077 | 5 | 75 | 96 | 60 | 77 | 50 | 65 | 0 | 95 | 88 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D096 | 5 | 75 | 96 | 75 | 96 | 60 | 77 | 0 | 95 | 88 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D125 | 6 | 125 | 156 | 100 | 125 | 75 | 96 | 0 | 100 | 100 |   |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

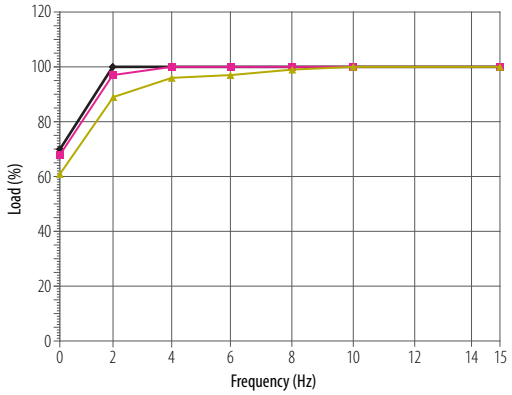
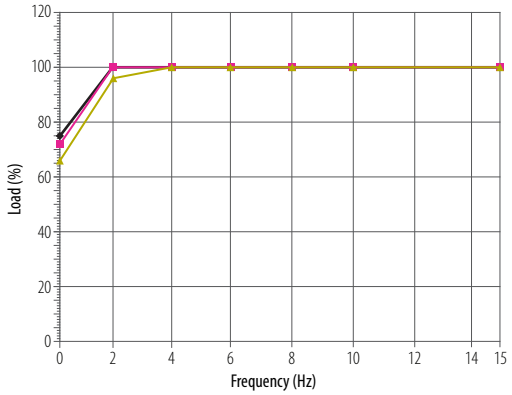
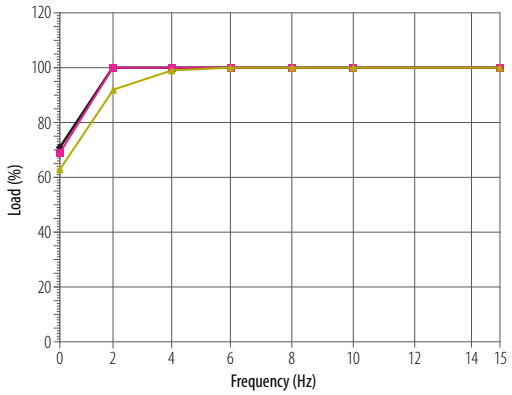
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| D156 | 6 | 150 | 186 | 125 | 156 | 100 | 125 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D186 | 6 | 200 | 248 | 150 | 186 | 125 | 156 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| D248 | 6 | 250 | 302 | 200 | 248 | 150 | 186 | 0 | 100 | 93 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

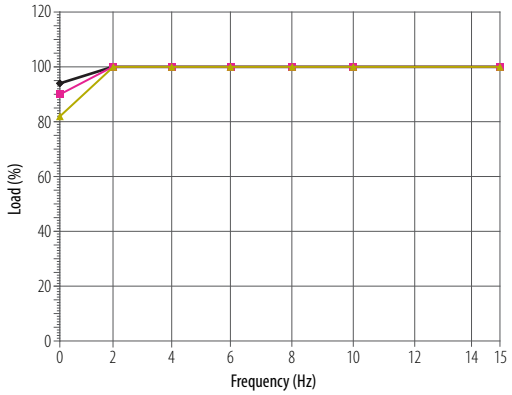
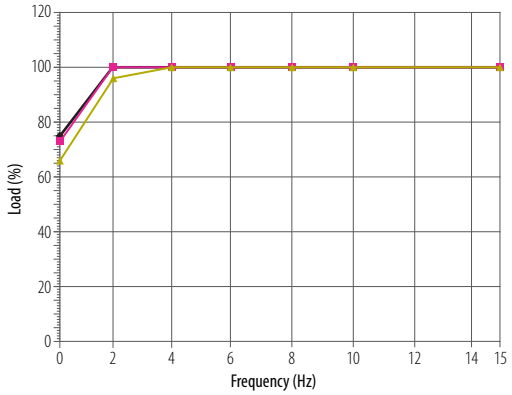
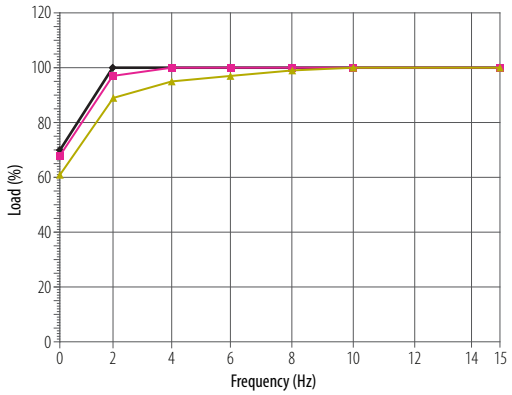
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D302 | 7 | 300 | 361 | 250 | 302 | 200 | 248 | 0 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D361 | 7 | 350 | 430 | 300 | 361 | 250 | 302 | 0 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D430 | 7 | 400 | 485 | 350 | 430 | 300 | 361 | 0 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

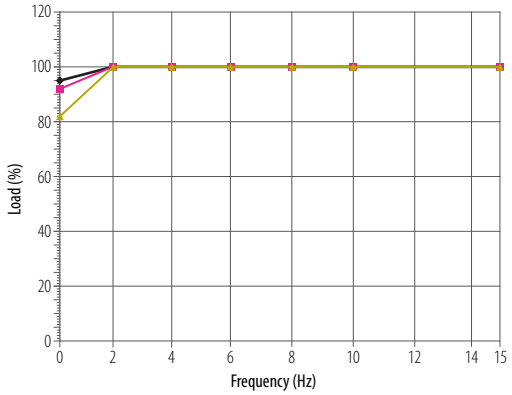
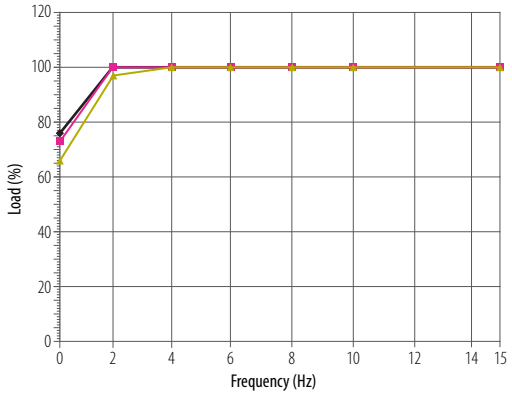
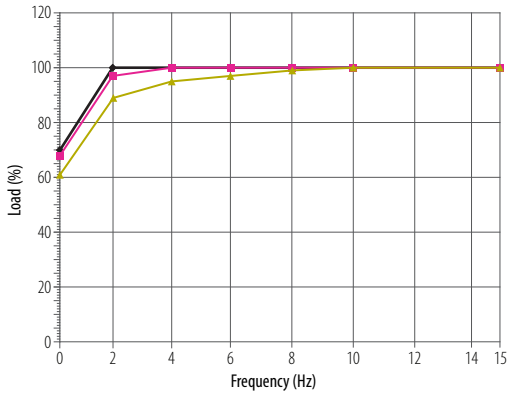
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz, 0.666 kHz, 1.33 kHz |
| D505 | 7 | 450 | 545 | 400 | 505 | 350 | 430 | 0 | 100 | 99 | 90 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D617 | 7 | 500 | 617 | 500 | 600 | 400 | 500 | 0 | 91 | 88 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D302 | 8 | 300 | 361 | 250 | 302 | 200 | 248 | 0 | 100 | 100 | 97 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

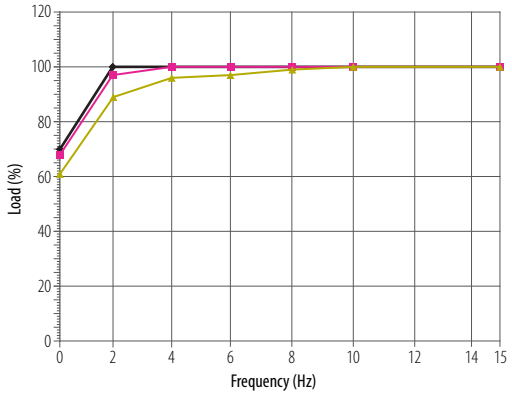
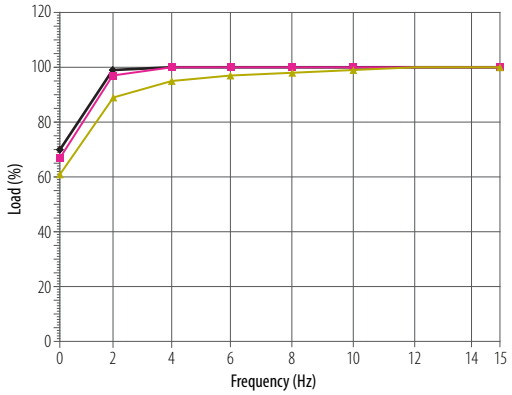
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D361 | 8 | 350 | 430 | 300 | 361 | 250 | 302 | 0 | 88 | 85 | 77 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D430 | 8 | 400 | 485 | 350 | 430 | 300 | 361 | 0 | 75 | 72 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D505 | 8 | 450 | 545 | 400 | 505 | 350 | 430 | 0 | 69 | 67 | 61 |  |
| | | | | | | | | 2 | 99 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 98 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D545 | 8 | 500 | 617 | 450 | 545 | 350 | 454 | 0 | 94 | 90 | 82 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D617 | 8 | 600 | 710 | 500 | 617 | 400 | 485 | 0 | 78 | 75 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 99 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D710 | 8 | 650 | 765 | 600 | 710 | 450 | 545 | 0 | 76 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

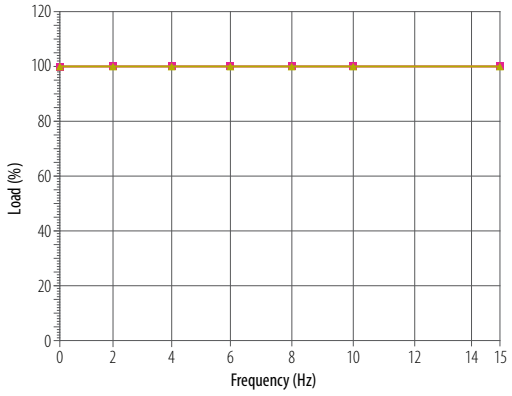
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D740 | 8 | 700 | 800 | 650 | 740 | 500 | 617 | 0 | 70 | 68 | 61 |  |
| | | | | | | | | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D800 | 9 | 800 | 960 | 700 | 800 | 600 | 740 | 0 | 75 | 72 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D960 | 9 | 900 | 1045 | 800 | 960 | 700 | 800 | 0 | 71 | 69 | 63 |  |
| | | | | | | | | 2 | 100 | 100 | 92 | |
| | | | | | | | | 4 | 100 | 100 | 99 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

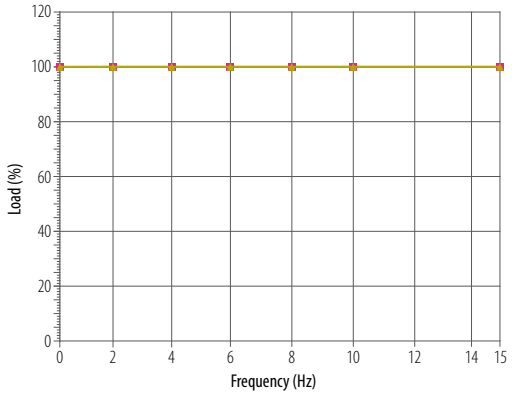
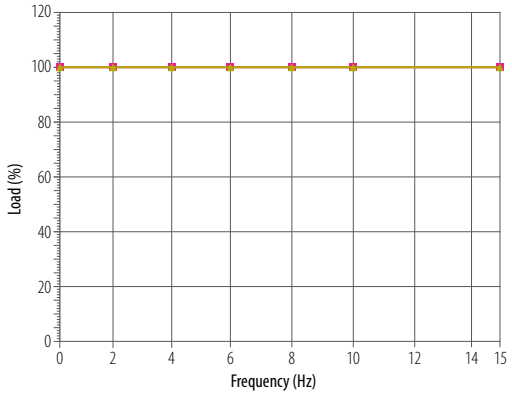
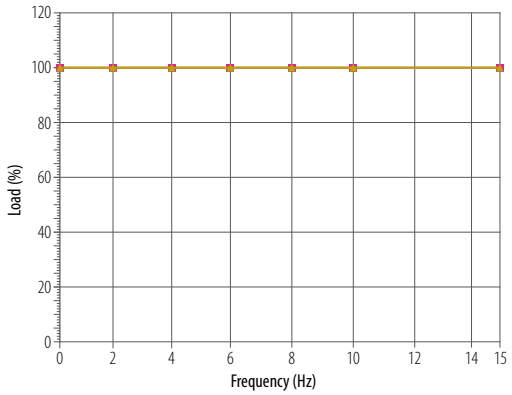
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D1K0 | 9 | 1000 | 1135 | 900 | 1045 | 750 | 960 | 0 | 94 | 90 | 82 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D1K1 | 9 | 1100 | 1365 | 1000 | 1135 | 800 | 1045 | 0 | 75 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D1K3 | 9 | 1250 | 1520 | 1100 | 1365 | 900 | 1135 | 0 | 70 | 68 | 61 |  |
| | | | | | | | | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

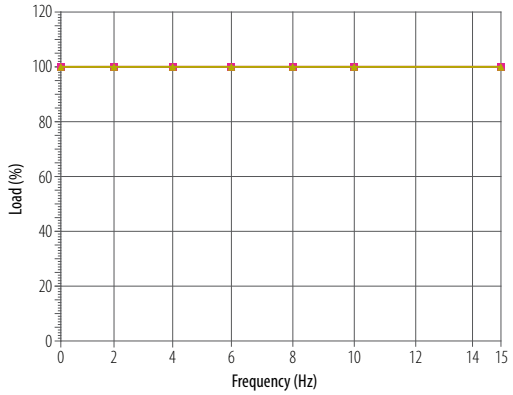
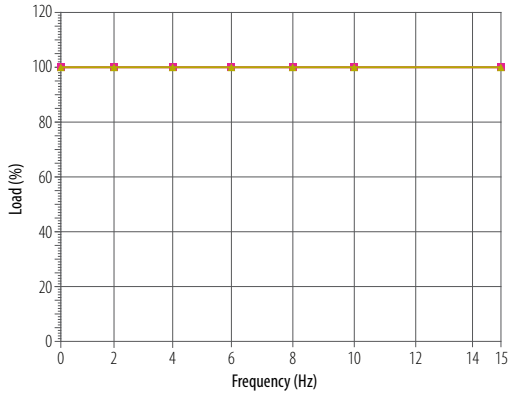
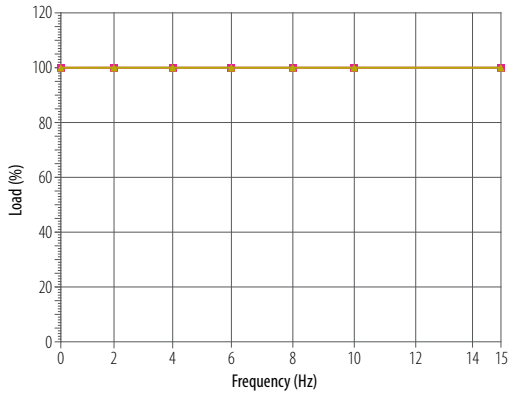
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D1K4 | 10 | 1500 | 1655 | 1250 | 1420 | 1000 | 1365 | 0 | 95 | 92 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D1K6 | 10 | 1800 | 2070 | 1500 | 1655 | 1100 | 1420 | 0 | 76 | 73 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D2K0<br>D4K0 | 10<br>13 | 2000<br>3900 | 2240<br>4400 | 1800<br>3600 | 2072<br>4070 | 1500<br>2800 | 1655<br>3394 | 0 | 70 | 68 | 61 |  |
| | | | | | | | | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

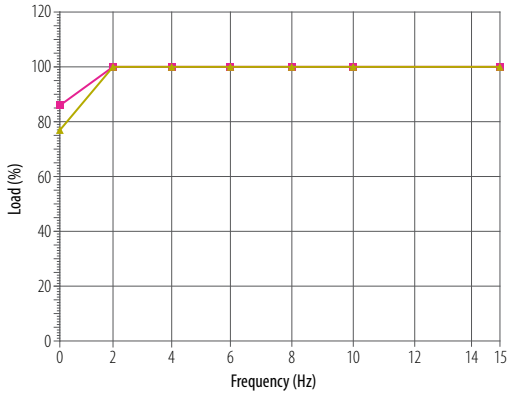
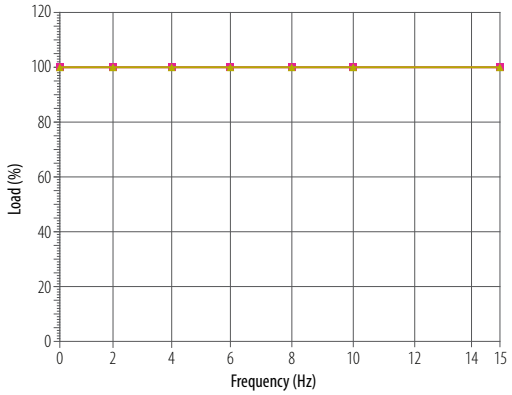
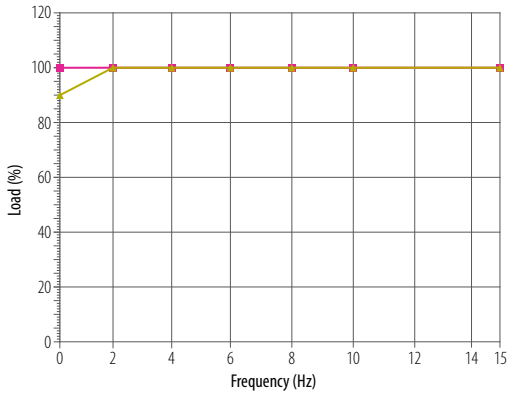
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| D2K6 | 11 | 2600 | 2960 | 2400 | 2738 | 2000 | 2240 | 0 | 70 | 68 | 61 |  |
| D5K4 | 14 | 5200 | 5840 | 4800 | 5402 | 3700 | 4504 | 2 | 100 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 96 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D3K4 | 12 | 3300 | 3696 | 3000 | 3404 | 2400 | 2980 | 0 | 70 | 67 | 61 |  |
| D6K7 | 15 | 6400 | 7280 | 6000 | 6734 | 4600 | 5615 | 2 | 99 | 97 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 98 | |
| | | | | | | | | 10 | 100 | 100 | 99 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

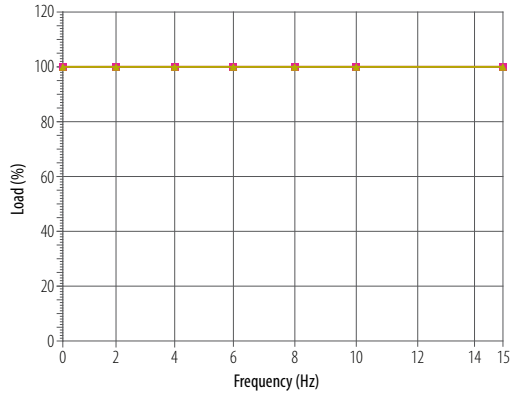
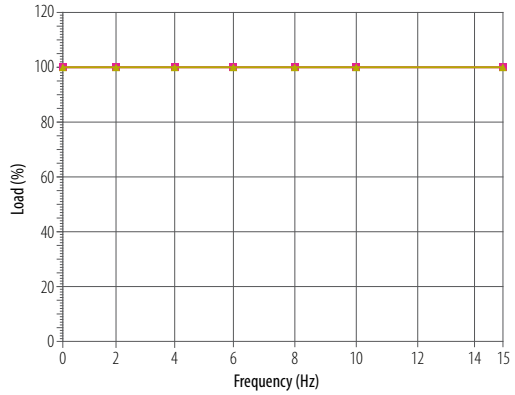


| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| E011 | 5 | 15 | 17 | 10 | 11 | 7.5 | 9 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | 0.666 kHz 1.33 kHz |
| E017 | 5 | 20 | 22 | 15 | 17 | 10 | 11 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E022 | 5 | 25 | 27 | 20 | 22 | 15 | 17 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E027 | 5 | 30 | 32 | 25 | 27 | 20 | 22 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

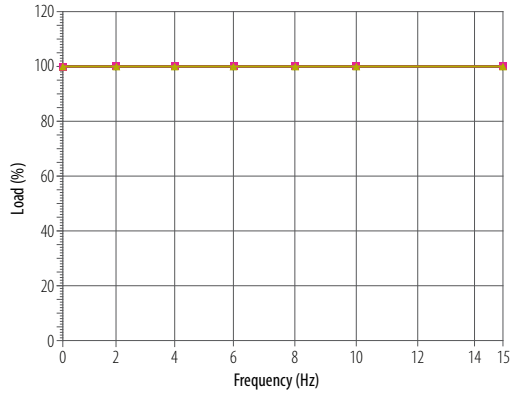
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| E032 | 5 | 40 | 41 | 30 | 32 | 25 | 27 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E041 | 5 | 50 | 52 | 40 | 41 | 30 | 32 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E052 | 5 | 60 | 62 | 50 | 52 | 40 | 41 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

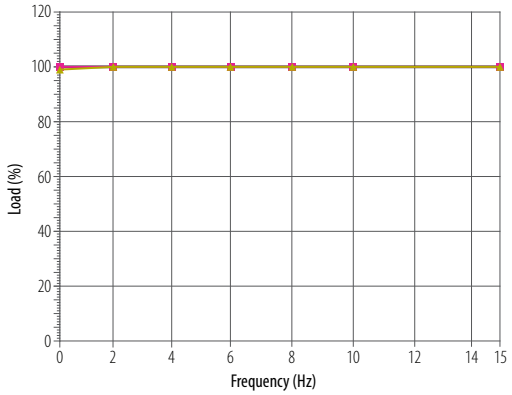
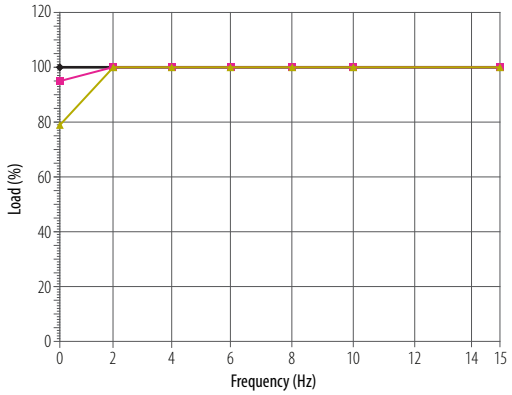
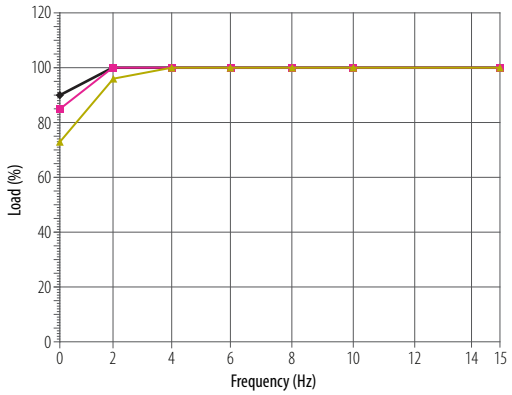
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| E062 | 5 | 75 | 77 | 60 | 62 | 50 | 52 | 0 | 86 | 77 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E077 | 6 | 100 | 99 | 75 | 77 | 60 | 62 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E099 | 6 | 125 | 125 | 100 | 99 | 75 | 77 | 0 | 100 | 90 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

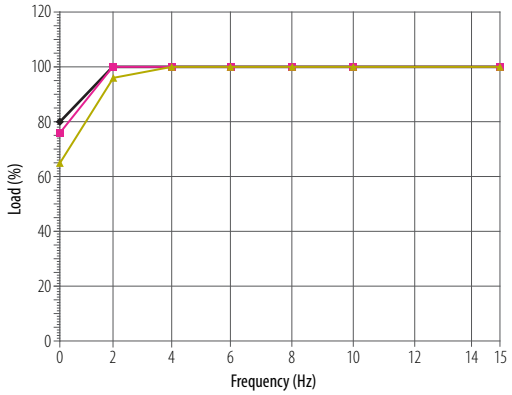
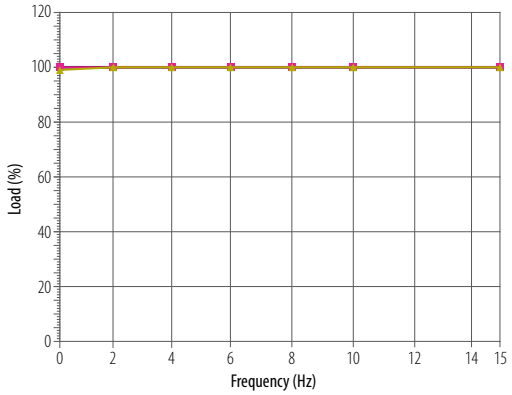
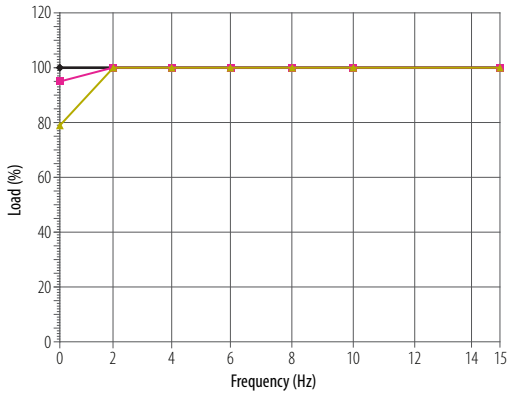
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.666 kHz | 1.33 kHz | |
| E125 | 6 | 150 | 144 | 125 | 125 | 100 | 99 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| E144 | 6 | 200 | 192 | 150 | 144 | 125 | 125 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

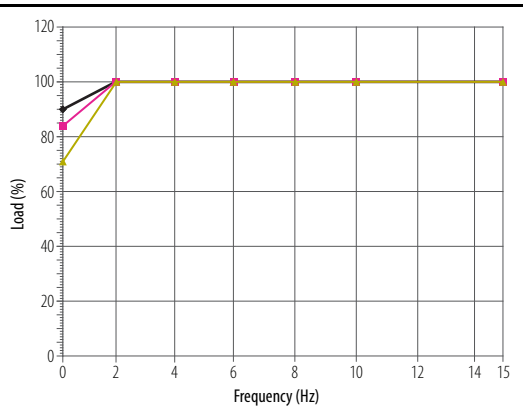
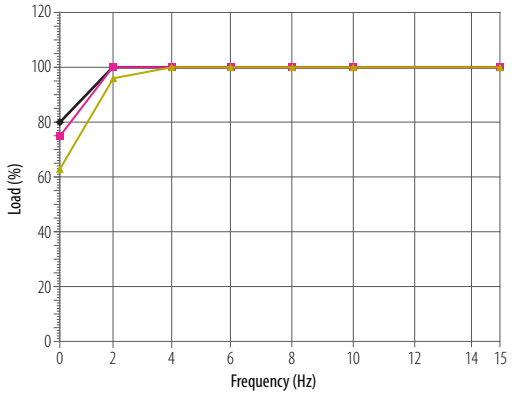
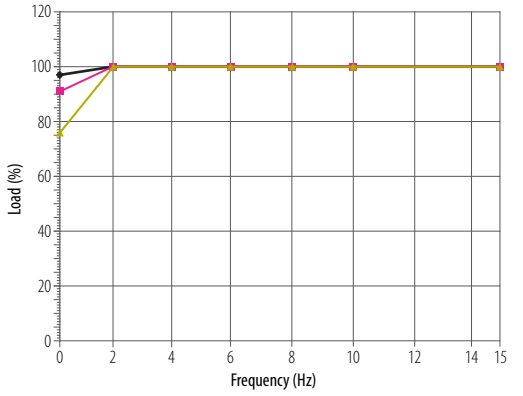


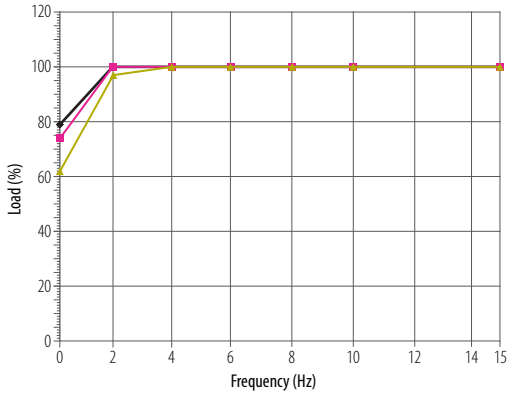
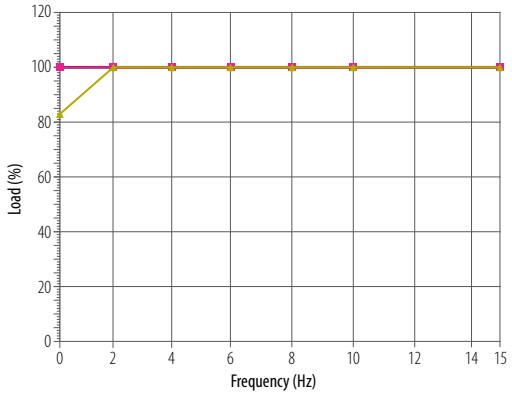
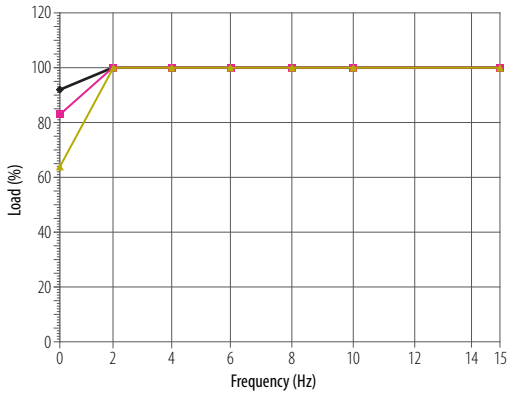
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz |
| E192 | 7 | 250 | 242 | 200? ????? | 192 | 150 | 144 | 0 | 100 | 100 | 100 |
| | | | | | | | | 2 | 100 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |

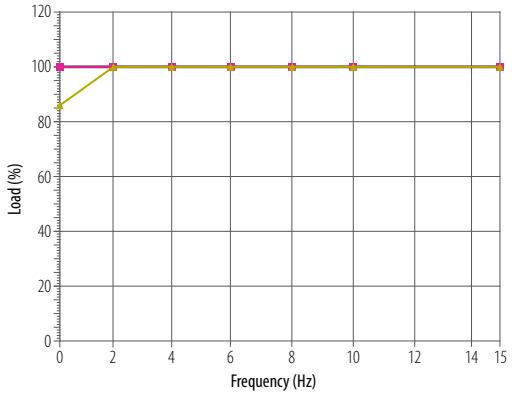
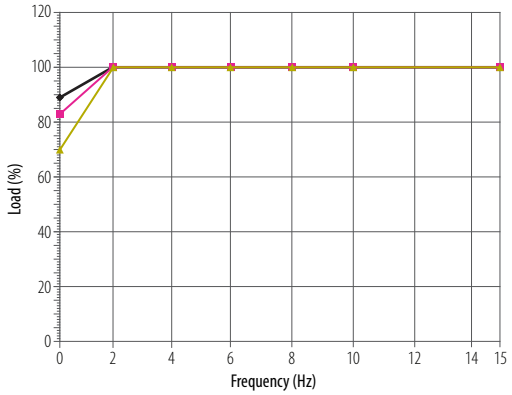
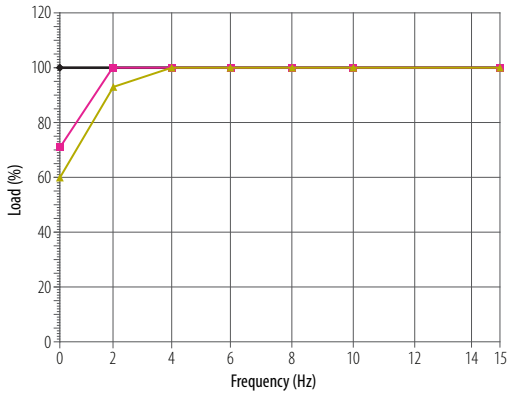


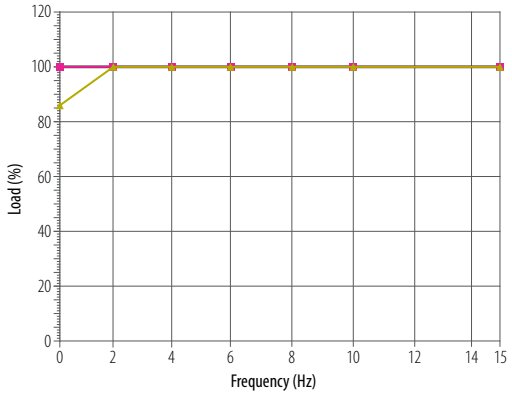
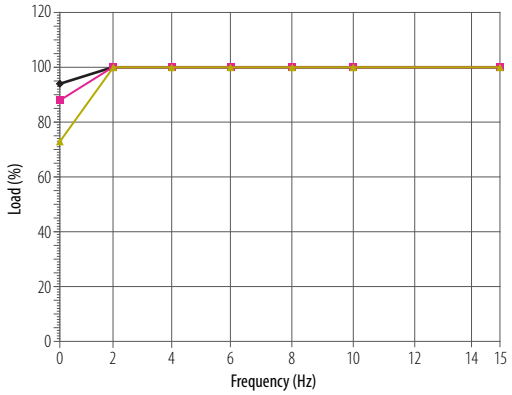
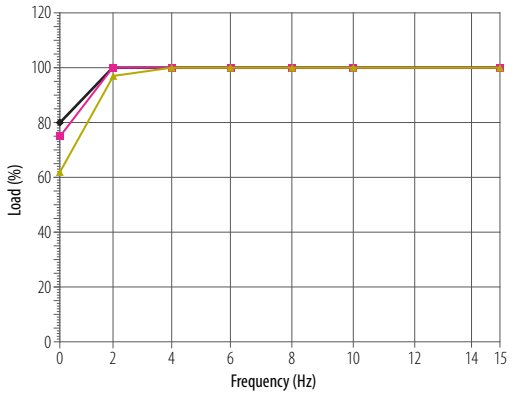
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| E242 | 7 | 300 | 295 | 250? ???? | 242 | 200 | 192 | 0 | 100 | 100 | 99 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E295 | 7 | 350 | 355 | 300? ???? | 295 | 250 | 242 | 0 | 100 | 95 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E355 | 7 | 400 | 395 | 350 | 355 | 300 | 295 | 0 | 90 | 85 | 73 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

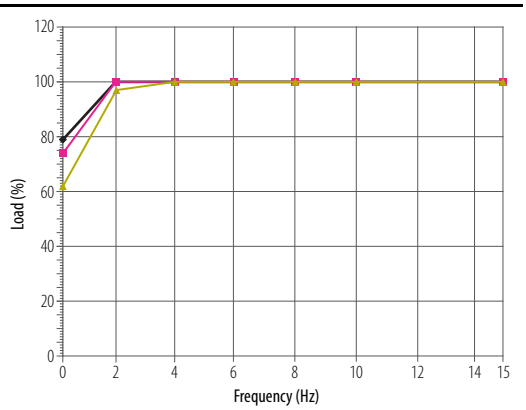
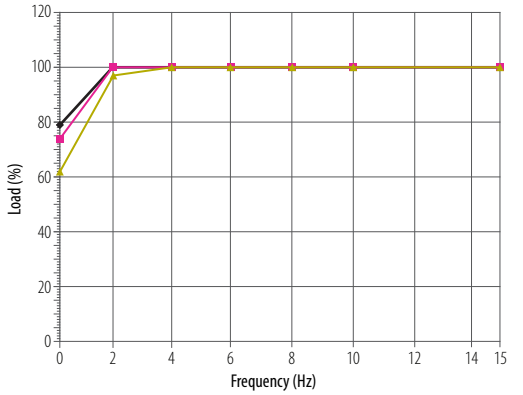
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz, 0.666 kHz, 1.33 kHz |
| E395 | 7 | 450 | 435 | 400 | 395 | 350 | 355 | 0 | 80 | 76 | 65 |  |
| | | | | | | | | 2 | 100 | 100 | 95 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E242 | 8 | 300 | 295 | 250 | 242 | 200 | 192 | 0 | 100 | 100 | 99 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E295 | 8 | 350 | 355 | 300 | 295 | 250 | 242 | 0 | 100 | 95 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| E355 | 8 | 400 | 395 | 350 | 355 | 300 | 295 | 0 | 90 | 84 | 71 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E395 | 8 | 450 | 435 | 400 | 395 | 350 | 355 | 0 | 80 | 75 | 63 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E435 | 8 | 500 | 510 | 450 | 435 | 400 | 395 | 0 | 97 | 91 | 76 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

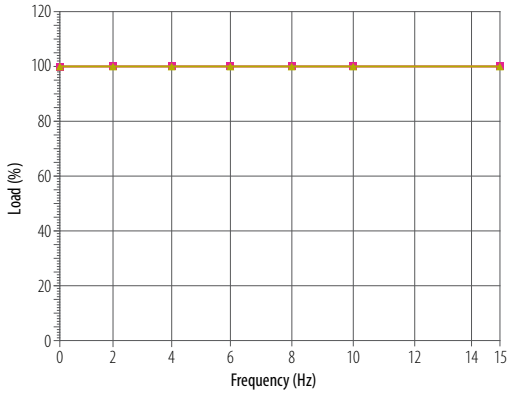
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| E545 | 8 | 600 | 580 | 550 | 545 | 450 | 450 | 0 | 79 | 74 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E595 | 9 | 700 | 690 | 600 | 580 | 550 | 545 | 0 | 100 | 100 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E690 | 9 | 800 | 760 | 700 | 690 | 600 | 595 | 0 | 92 | 83 | 64 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

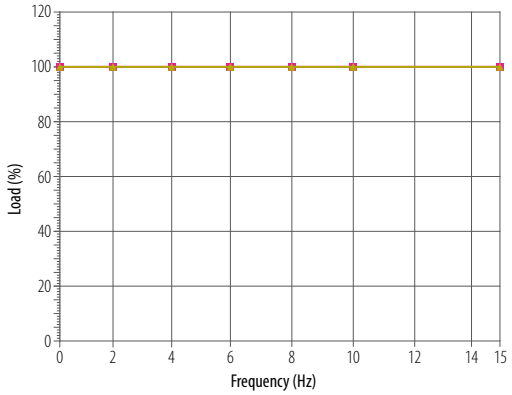
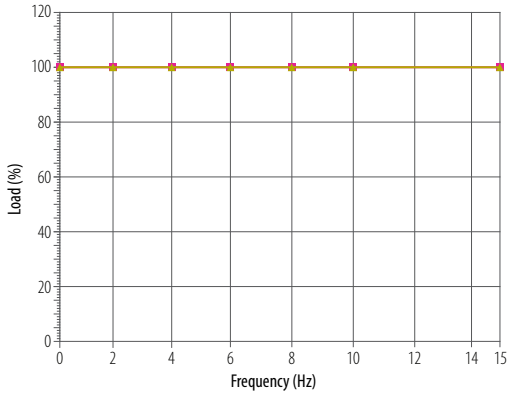
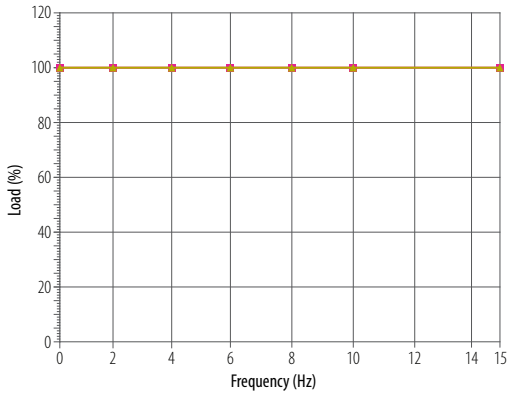
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| E760 | 9 | 900 | 825 | 800 | 760 | 700 | 690 | 0 | 100 | 100 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E825 | 9 | 1000 | 980 | 900 | 825 | 800 | 760 | 0 | 89 | 83 | 70 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E980 | 9 | 1100 | 1102 | 1000 | 980 | 900 | 825 | 0 | 76 | 71 | 60 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

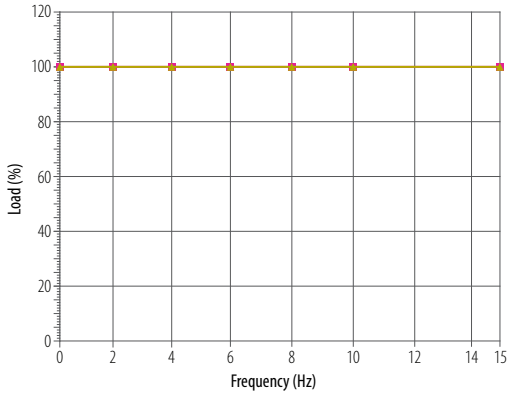
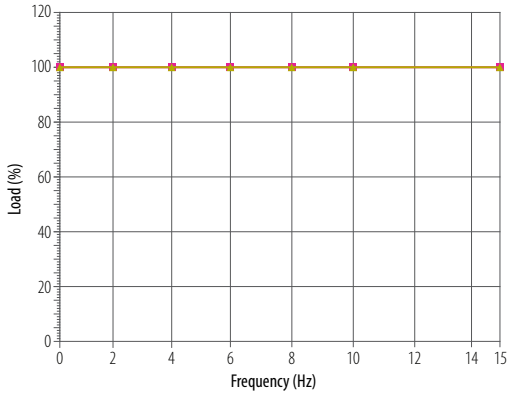
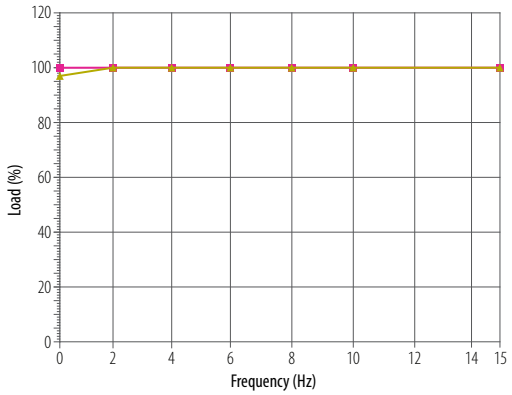
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| E1K1 | 10 | 1250 | 1220 | 1100 | 1045 | 1000 | 980 | 0 | 100 | 100 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E1K2 | 10 | 1500 | 1430 | 1250 | 1220 | 1100 | 1045 | 0 | 94 | 88 | 73 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E1K5<br>E2K9 | 10<br>13 | 1600<br>3300 | 1624<br>3190 | 1500<br>3100 | 1430<br>2998 | 1250<br>2500 | 1220<br>2475 | 0 | 80 | 75 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

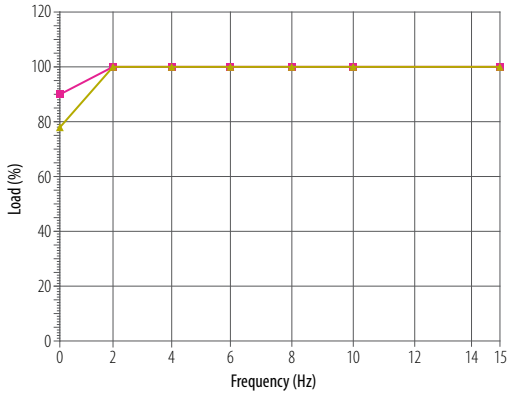
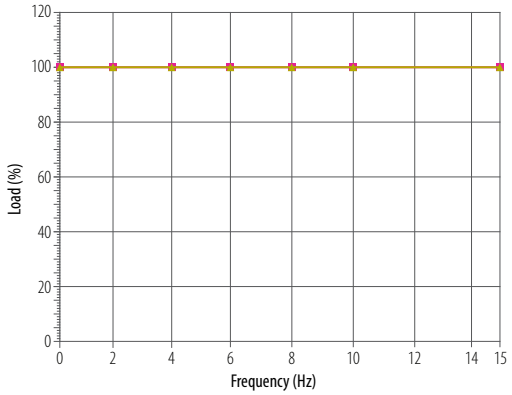
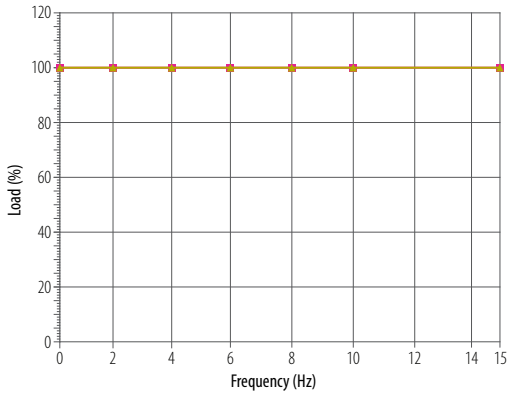
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| E2K0<br>E3K9 | 11<br>14 | 2100<br>4400 | 2146<br>4234 | 2000<br>4100 | 1946<br>3979 | 1800<br>3300 | 1700<br>3285 | 0 | 79 | 74 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E2K4<br>E4K9 | 12<br>15 | 2600<br>5500 | 2668<br>5278 | 2500<br>5100 | 2420<br>4960 | 2100<br>4100 | 2070<br>4095 | 0 | 79 | 74 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

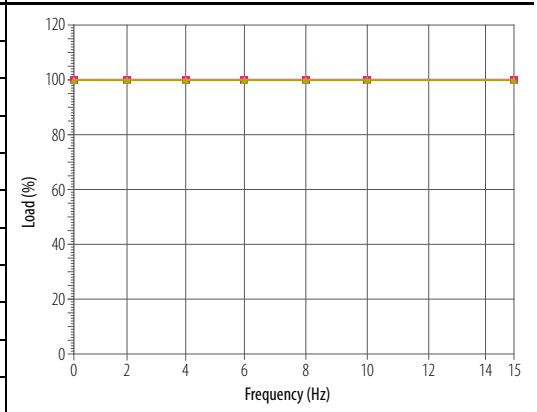
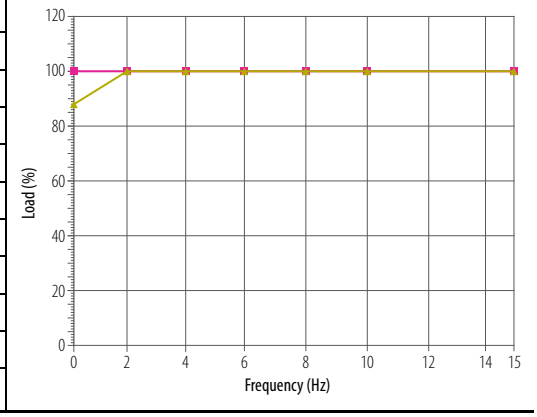


| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | |
| F015 | 5 | 15 | 20 | 11 | 15 | 7.5 | 12 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 0.666 kHz / 1.33 kHz |
| F020 | 5 | 18.5 | 23 | 15 | 20 | 11 | 15 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F023 | 5 | 22 | 30 | 18.5 | 23 | 15 | 20 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F030 | 5 | 30 | 34 | 22 | 30 | 18.5 | 23 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

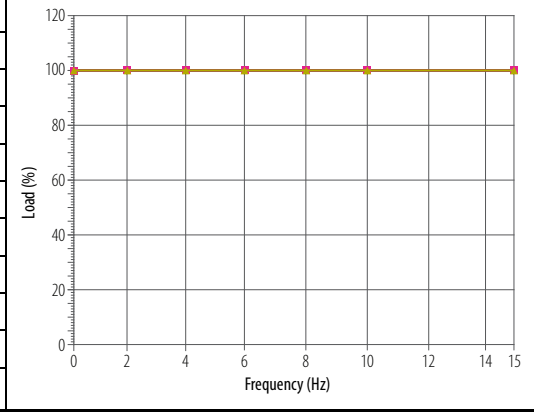
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 0.666 kHz / 1.33 kHz |
| F034 | 5 | 37 | 46 | 30 | 34 | 22 | 30 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F046 | 5 | 45 | 50 | 37 | 46 | 30 | 34 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F050 | 5 | 55 | 61 | 45 | 50 | 37 | 46 | 0 | 100 | 97 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

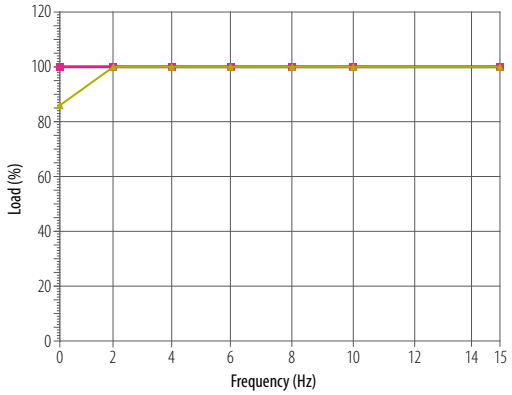
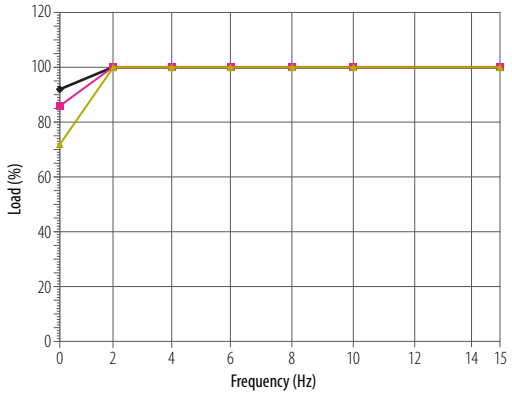
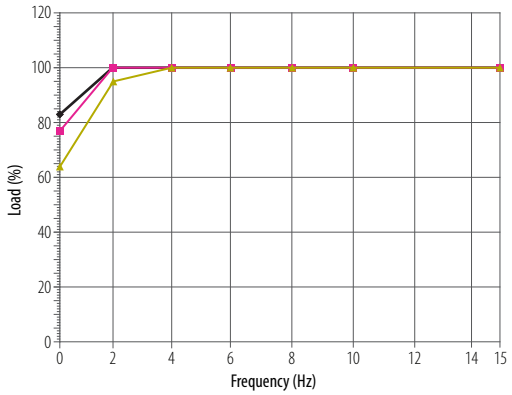
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 0.666 kHz / 1.33 kHz |
| F061 | 5 | 75 | 82 | 55 | 61 | 45 | 50 | 0 | 90 | 78 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F082 | 6 | 90 | 98 | 75 | 82 | 55 | 61 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F098 | 6 | 110 | 119 | 90 | 98 | 75 | 82 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

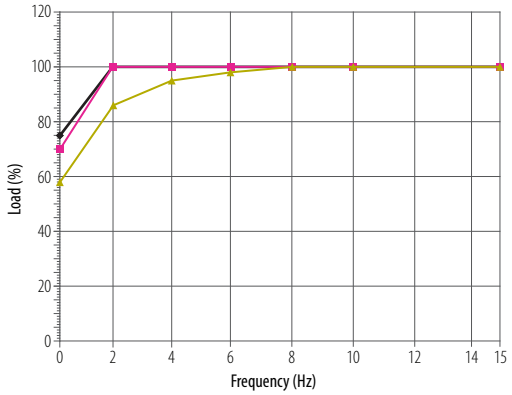
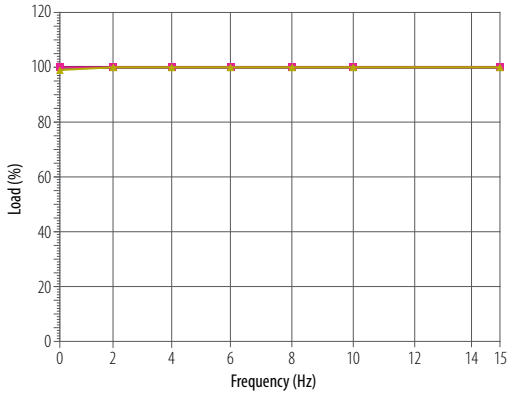
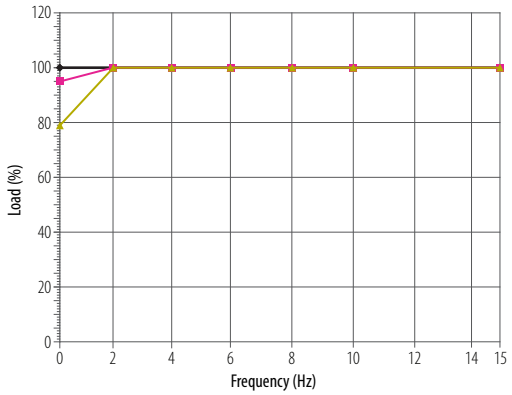
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | |
| F119 | 6 | 132 | 142 | 110 | 119 | 90 | 98 | 0 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |
| F142 | 6 | 160 | 171 | 132 | 142 | 110 | 119 | 0 | 100 | 88 |  |
| | | | | | | | | 2 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | |

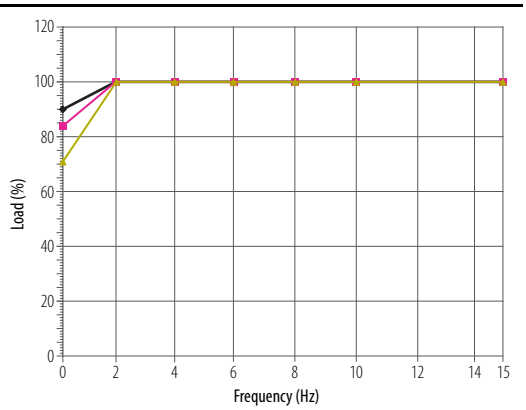
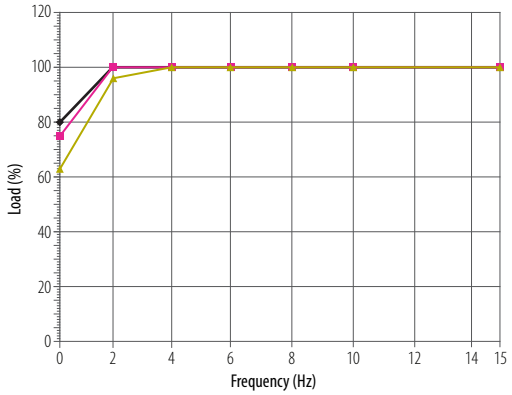
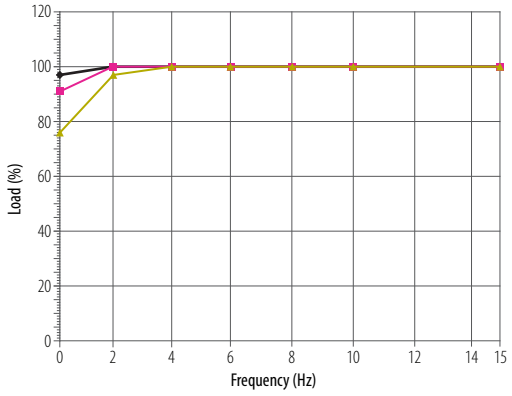


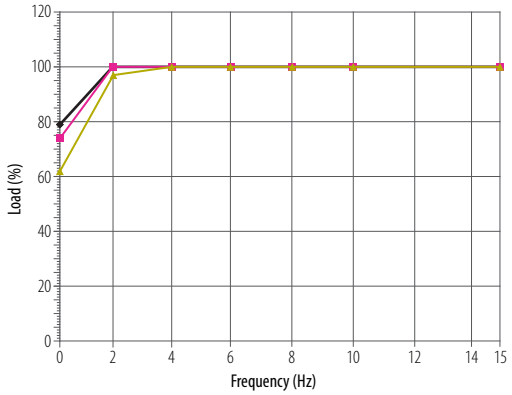
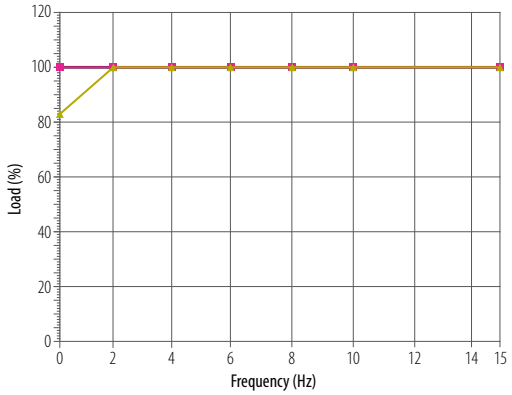
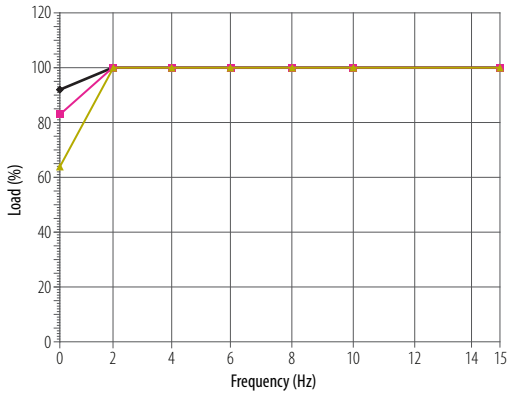
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz |
| F171 | 7 | 200 | 215 | 160 | 171 | 132 | 142 | 0 | 100 | 100 | 100 |
| | | | | | | | | 2 | 100 | 100 | 100 |
| | | | | | | | | 4 | 100 | 100 | 100 |
| | | | | | | | | 6 | 100 | 100 | 100 |
| | | | | | | | | 8 | 100 | 100 | 100 |
| | | | | | | | | 10 | 100 | 100 | 100 |
| | | | | | | | | 15 | 100 | 100 | 100 |
| | | | | | | | | 20 | 100 | 100 | 100 |
| | | | | | | | | 30 | 100 | 100 | 100 |
| | | | | | | | | 45 | 100 | 100 | 100 |
| | | | | | | | | 60 | 100 | 100 | 100 |

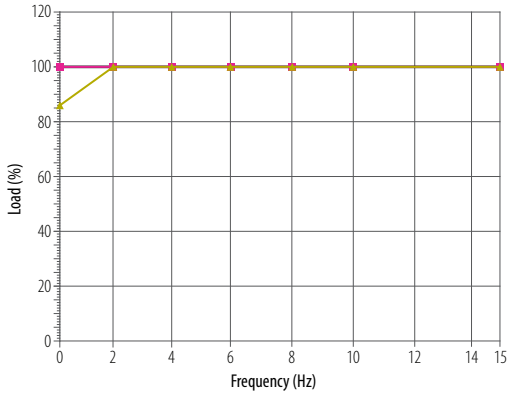
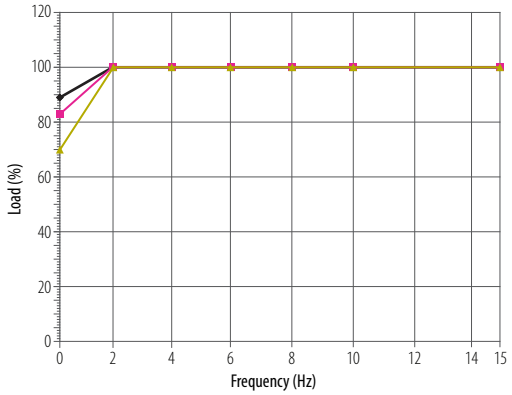
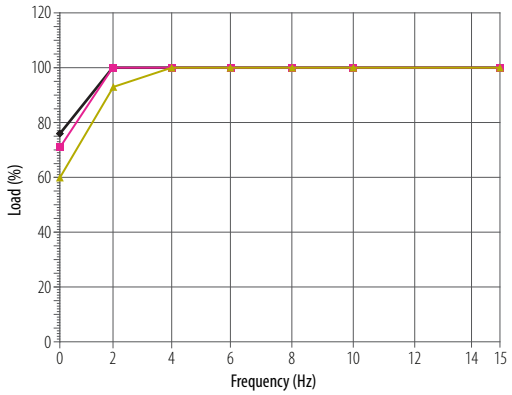


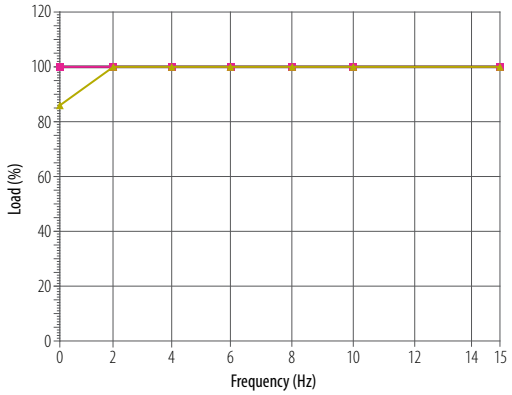
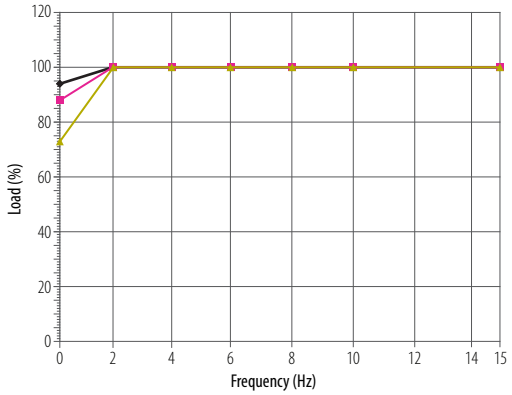
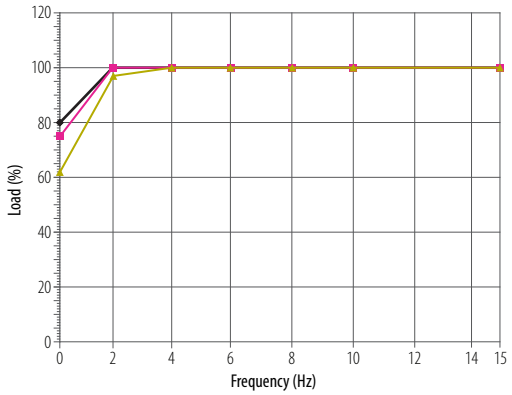
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| F215 | 7 | 250 | 265 | 200 | 215 | 160 | 171 | 0 | 100 | 100 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F265 | 7 | 315 | 330 | 250 | 265 | 200 | 215 | 0 | 92 | 86 | 72 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F330 | 7 | 355 | 370 | 315 | 330 | 250 | 265 | 0 | 83 | 77 | 64 |  |
| | | | | | | | | 2 | 100 | 100 | 95 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

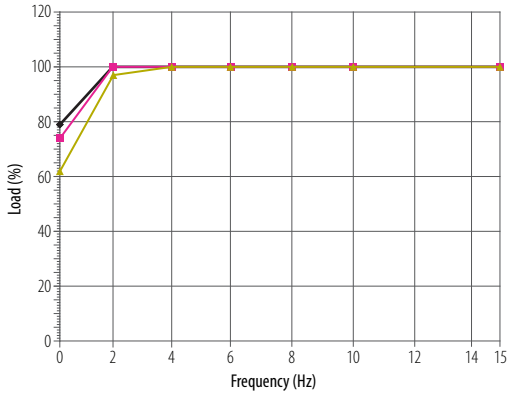
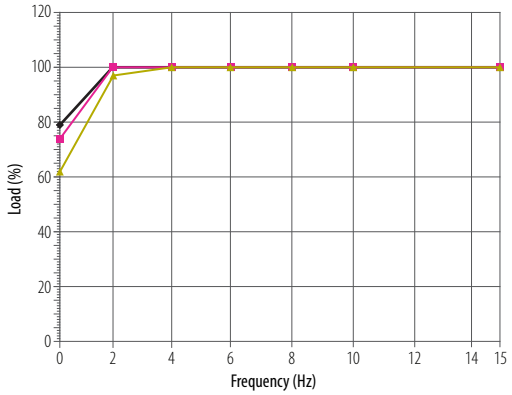
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| F370 | 7 | 400 | 415 | 355 | 370 | 315 | 330 | 0 | 75 | 70 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 86 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 98 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F215 | 8 | 250 | 265 | 200 | 215 | 160 | 171 | 0 | 100 | 100 | 99 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F265 | 8 | 315 | 330 | 250 | 265 | 200 | 215 | 0 | 100 | 95 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| F330 | 8 | 355 | 370 | 315 | 330 | 250 | 265 | 0 | 90 | 84 | 71 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F370 | 8 | 400 | 415 | 355 | 370 | 315 | 330 | 0 | 80 | 75 | 63 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F415 | 8 | 450 | 460 | 400 | 415 | 355 | 370 | 0 | 97 | 91 | 76 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| F505 | 8 | 560 | 565 | 500 | 505 | 400 | 415 | 0 | 79 | 74 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F565 | 9 | 630 | 650 | 560 | 565 | 500 | 505 | 0 | 100 | 100 | 83 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F650 | 9 | 710 | 735 | 630 | 650 | 560 | 565 | 0 | 92 | 83 | 64 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

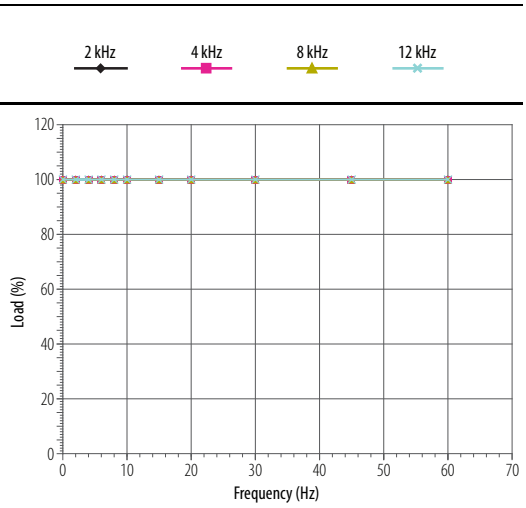
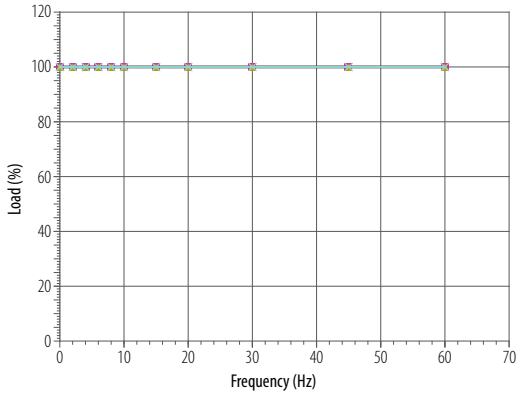
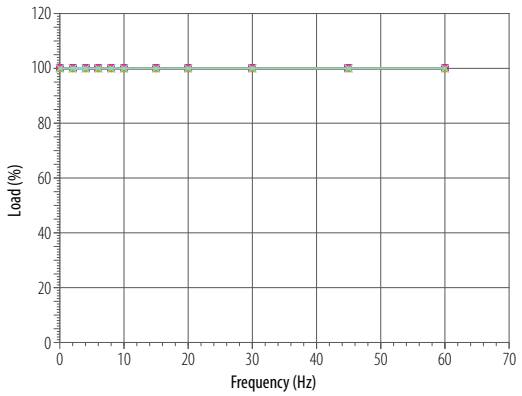
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | |
| F735 | 9 | 800 | 820 | 710 | 735 | 630 | 650 | 0 | 100 | 100 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F820 | 9 | 900 | 920 | 800 | 820 | 710 | 735 | 0 | 89 | 83 | 70 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F920 | 9 | 1000 | 1074 | 900 | 920 | 800 | 820 | 0 | 76 | 71 | 60 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

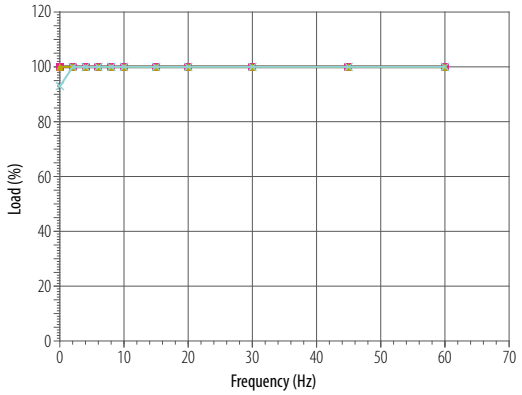
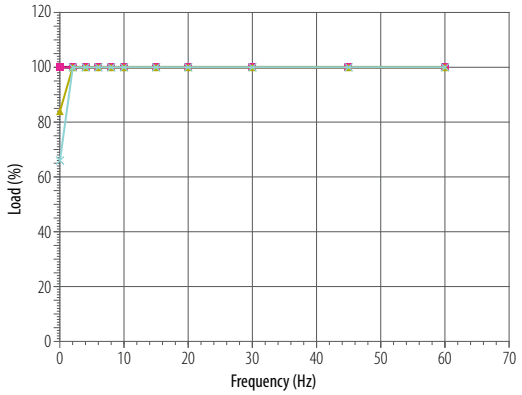
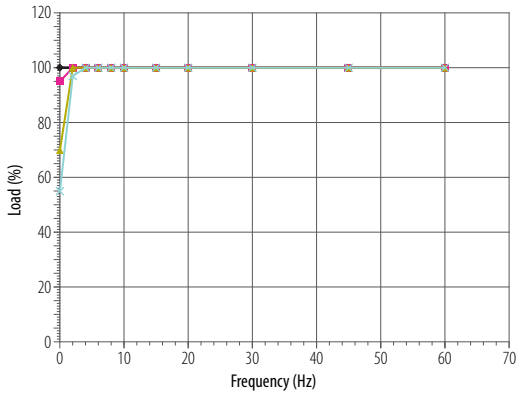
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| F1K0 | 10 | 1100 | 1150 | 1000 | 1030 | 900 | 920 | 0 | 100 | 100 | 86 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F1K1 | 10 | 1250 | 1344 | 1100 | 1150 | 1000 | 1030 | 0 | 94 | 88 | 73 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F1K4<br>F2K7 | 10<br>13 | 1500<br>3080 | 1582<br>3108 | 1400<br>2750 | 1419<br>2778 | 1100<br>2200 | 1162<br>2283 | 0 | 80 | 75 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

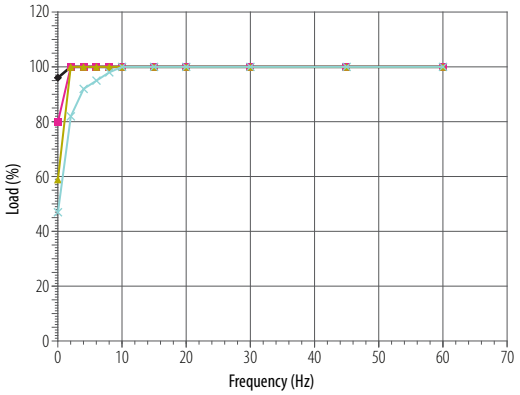
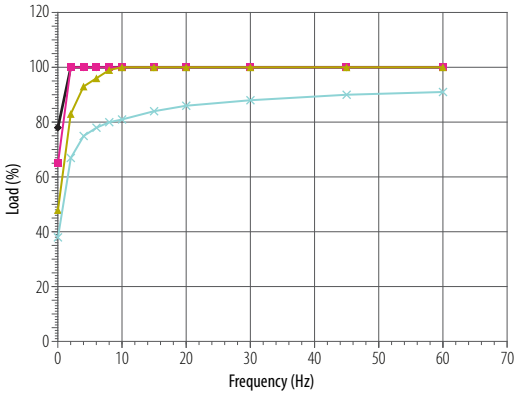
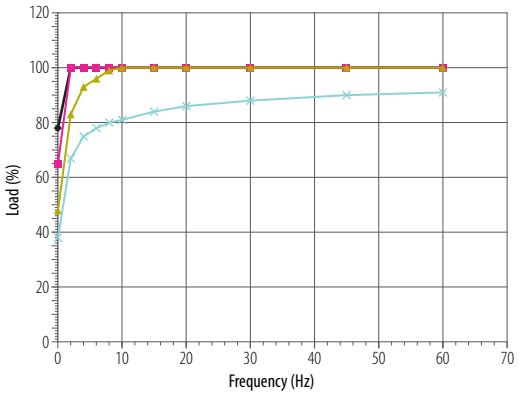
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 0.444 kHz | 0.666 kHz | 1.33 kHz | 0.444 kHz 0.666 kHz 1.33 kHz |
| F1K8 | 11 | 2000 | 2091 | 1800 | 1865 | 1500 | 1535 | 0 | 79 | 74 | 62 |  |
| F3K6 | 14 | 4088 | 4125 | 3650 | 3687 | 2920 | 3030 | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F2K3 | 12 | 2500 | 2599 | 2300 | 2318 | 2000 | 2020 | 0 | 79 | 74 | 62 |  |
| F4K5 | 15 | 5096 | 5142 | 4550 | 4596 | 3640 | 3777 | 2 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

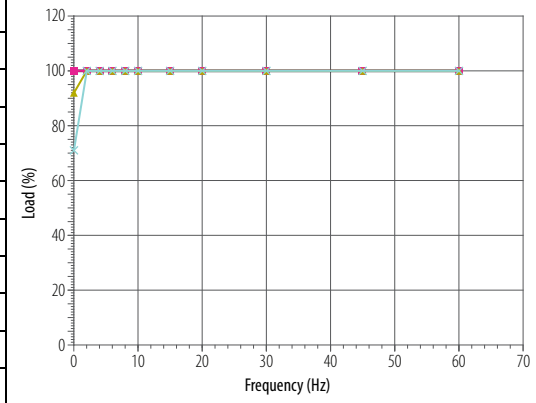
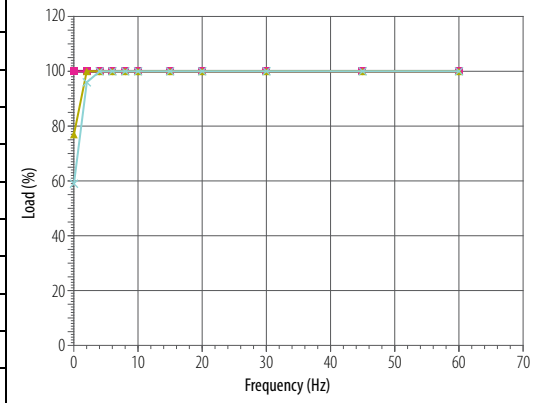
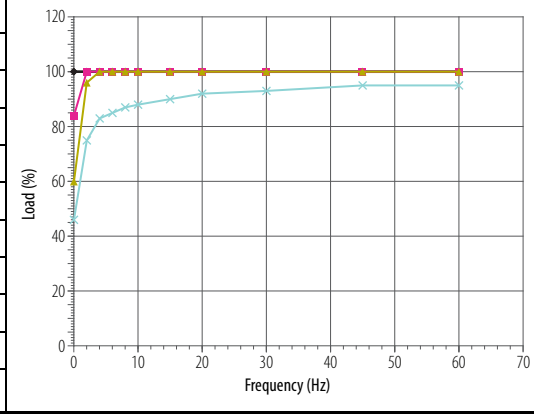
## Low Speed Derating

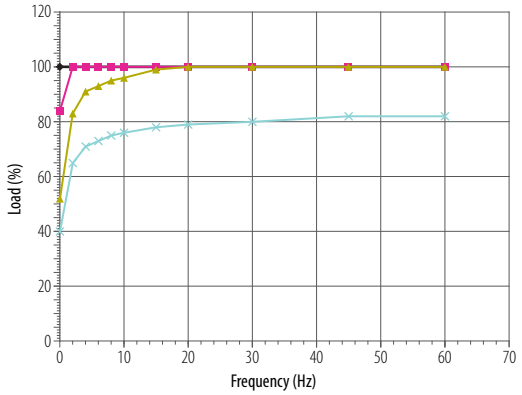
The following graphs show the carrier frequency deratings for motor side inverters. If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 55 are followed.

| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| C015 | 5 | 11 | 22 | 7.5 | 15.4 | 11.5 | 5.5 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C022 | 5 | 15 | 30 | 11 | 22 | 7.5 | 15.4 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C030 | 5 | 18.5 | 37 | 15 | 30 | 11 | 22 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

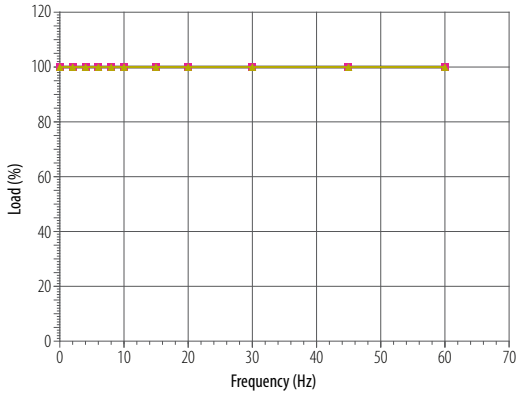
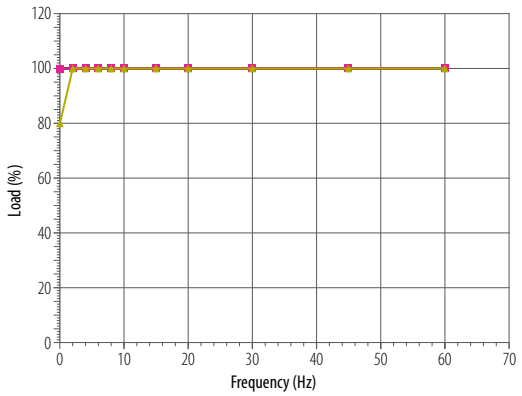
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| C037 | 5 | 22 | 43 | 18.5 | 37 | 15 | 30 | 0 | 100 | 100 | 100 | 93 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C043 | 5 | 30 | 60 | 22 | 43 | 18.5 | 37 | 0 | 100 | 100 | 84 | 66 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C060 | 5 | 37 | 72 | 30 | 60 | 22 | 43 | 0 | 100 | 95 | 70 | 55 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

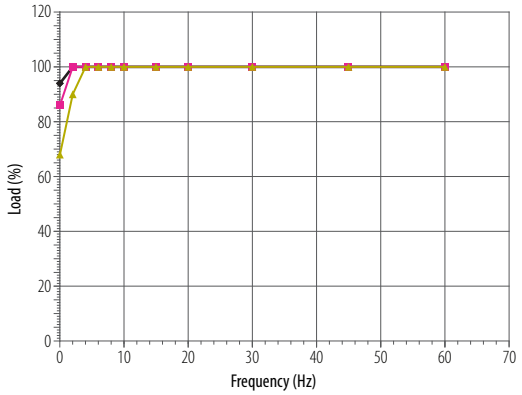
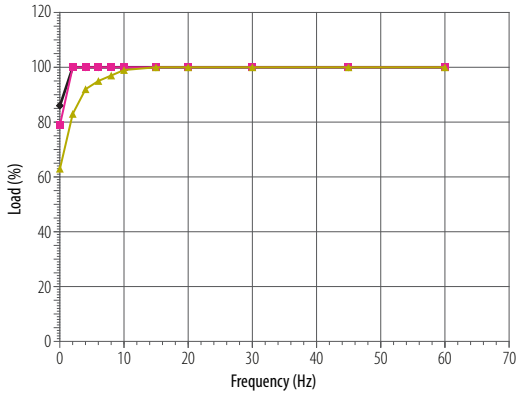
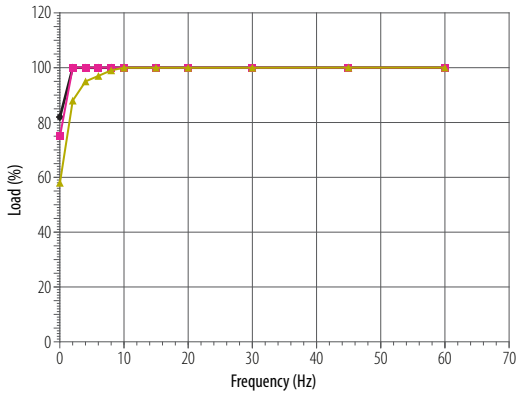
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| C072 | 5 | 45 | 85 | 37 | 72 | 30 | 60 | 0 | 96 | 80 | 59 | 47 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 92 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 95 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 98 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C085 | 5 | 55 | 104 | 45 | 85 | 37 | 72 | 0 | 78 | 65 | 48 | 38 |  |
| | | | | | | | | 2 | 100 | 100 | 83 | 67 | |
| | | | | | | | | 4 | 100 | 100 | 93 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 96 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 84 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 91 | |
| C104 | 5 | 55 | 104 | 55 | 104 | 45 | 85 | 0 | 78 | 65 | 48 | 38 |  |
| | | | | | | | | 2 | 100 | 100 | 83 | 67 | |
| | | | | | | | | 4 | 100 | 100 | 93 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 96 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 84 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 91 | |

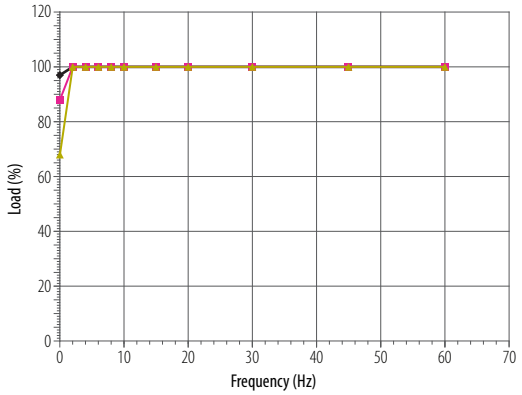
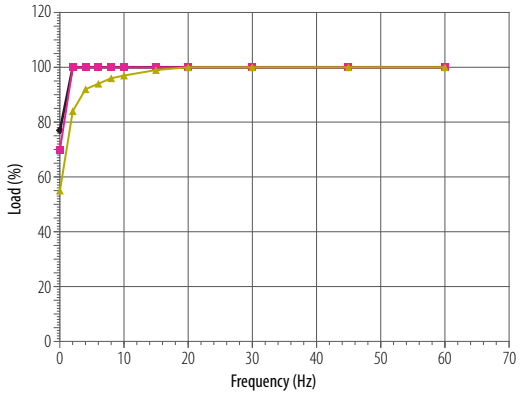
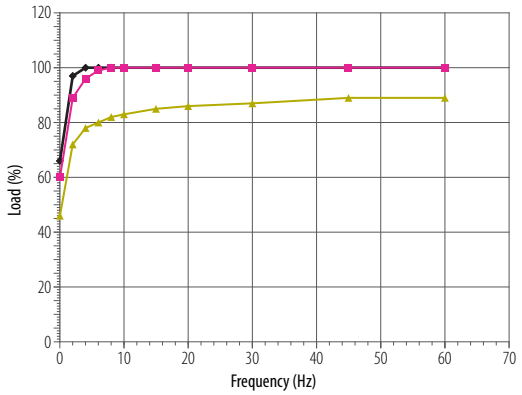
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| C140 | 6 | 90 | 170 | 75 | 140 | 55 | 104 | 0 | 100 | 100 | 92 | 71 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C176 | 6 | 110 | 205 | 90 | 170 | 75 | 140 | 0 | 100 | 100 | 77 | 59 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| C205 | 6 | 132 | 260 | 110 | 205 | 90 | 170 | 0 | 100 | 84 | 60 | 46 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | 75 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 83 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 85 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 93 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 95 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 95 | |

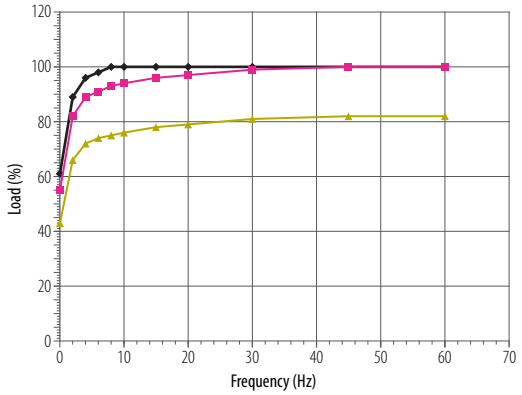
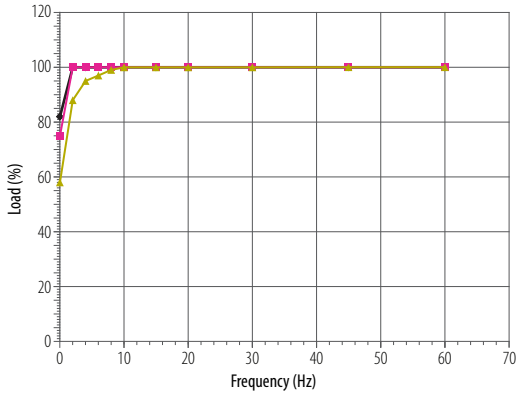
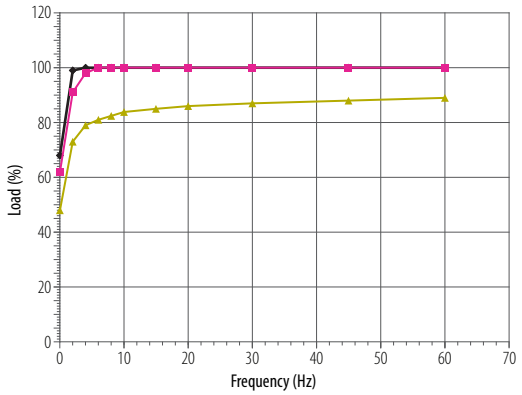
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| C260 | 6 | 160 | 302 | 132 | 260 | 110 | 205 | 0 | 89 | 72 | 52 | 40 |  |
| | | | | | | | | 2 | 100 | 100 | 83 | 65 | |
| | | | | | | | | 4 | 100 | 100 | 91 | 71 | |
| | | | | | | | | 6 | 100 | 100 | 93 | 73 | |
| | | | | | | | | 8 | 100 | 100 | 95 | 75 | |
| | | | | | | | | 10 | 100 | 100 | 96 | 76 | |
| | | | | | | | | 15 | 100 | 100 | 99 | 78 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 79 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 80 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 82 | |

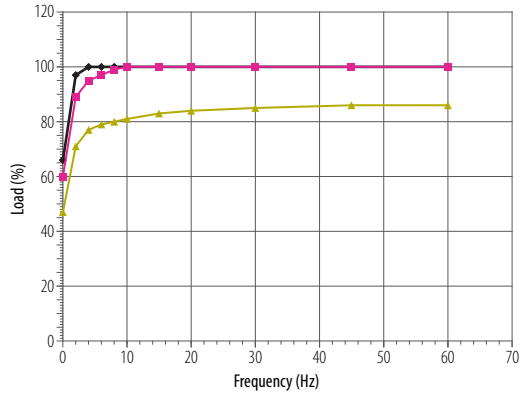
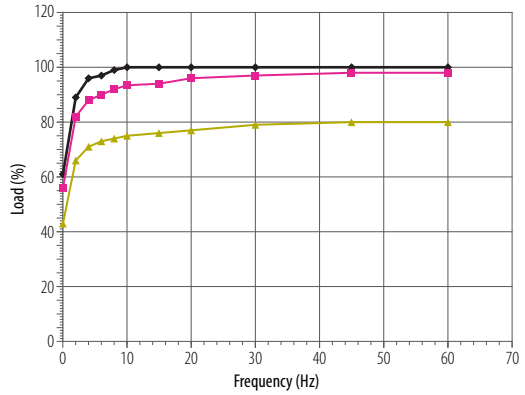
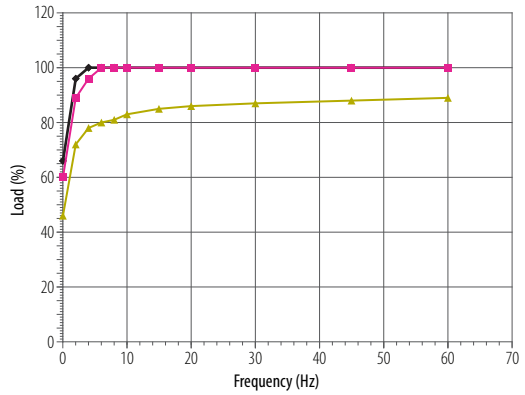


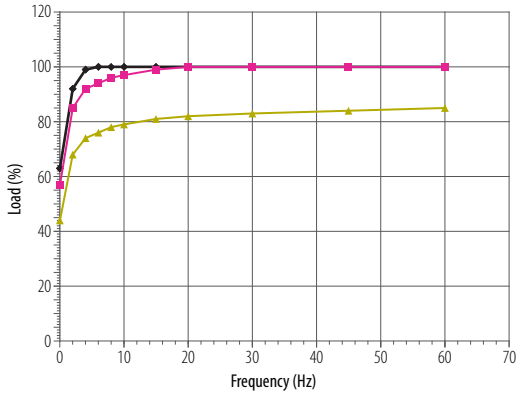
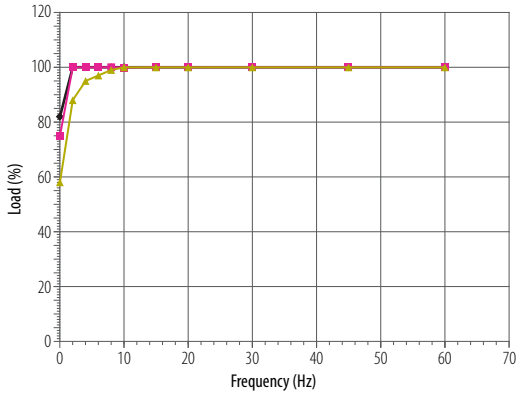
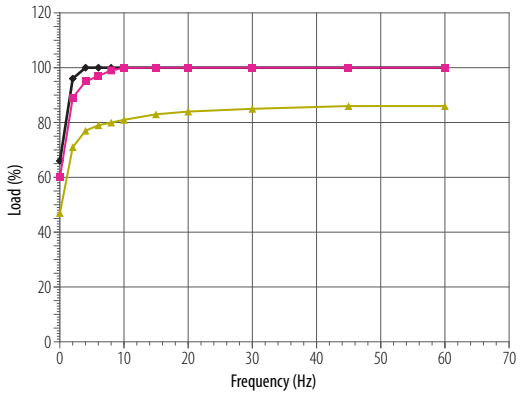
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| C302 | 7 | 200 | 367 | 160 | 302 | 132 | 260 | 0 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C367 | 7 | 250 | 460 | 200 | 367 | 160 | 302 | 0 | 100 | 100 | 80 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

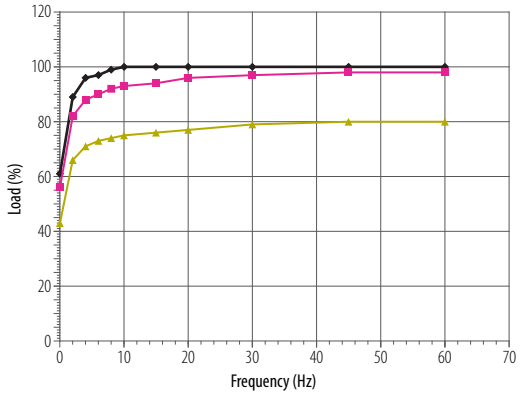
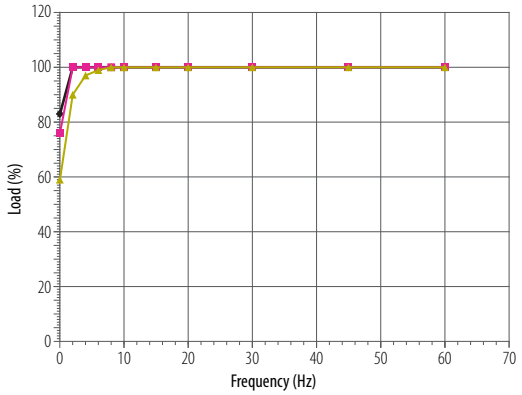
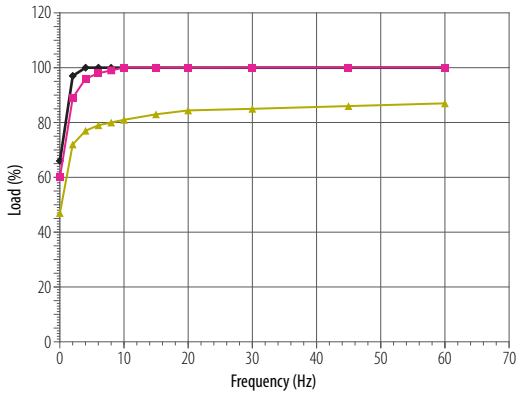
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| C460 | 7 | 315 | 540 | 250 | 460 | 200 | 367 | 0 | 94 | 86 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 90 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C540 | 7 | 315 | 585 | 315 | 540 | 250 | 460 | 0 | 86 | 79 | 63 |  |
| | | | | | | | | 2 | 100 | 100 | 83 | |
| | | | | | | | | 4 | 100 | 100 | 92 | |
| | | | | | | | | 6 | 100 | 100 | 95 | |
| | | | | | | | | 8 | 100 | 100 | 97 | |
| | | | | | | | | 10 | 100 | 100 | 99 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C585 | 7 | 315 | 617 | 315 | 600 | 250 | 500 | 0 | 82 | 75 | 60 |  |
| | | | | | | | | 2 | 100 | 97 | 79 | |
| | | | | | | | | 4 | 100 | 100 | 87 | |
| | | | | | | | | 6 | 100 | 100 | 90 | |
| | | | | | | | | 8 | 100 | 100 | 92 | |
| | | | | | | | | 10 | 100 | 100 | 94 | |
| | | | | | | | | 15 | 100 | 100 | 97 | |
| | | | | | | | | 20 | 100 | 100 | 99 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

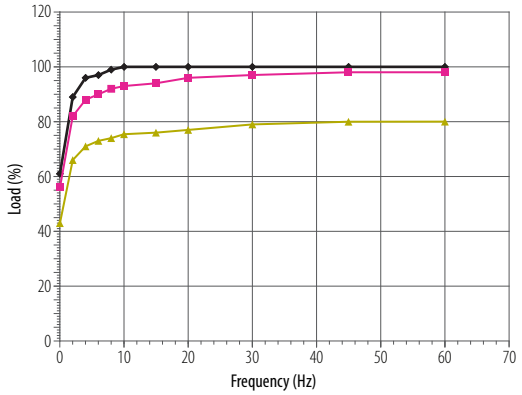
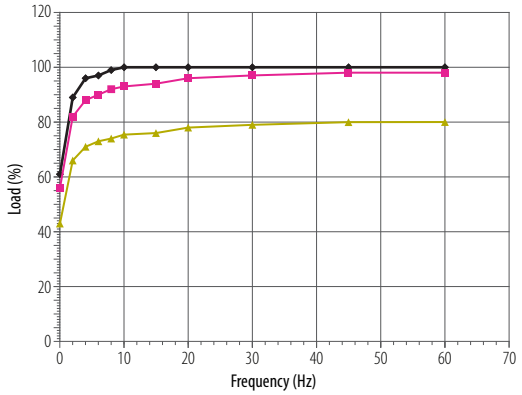
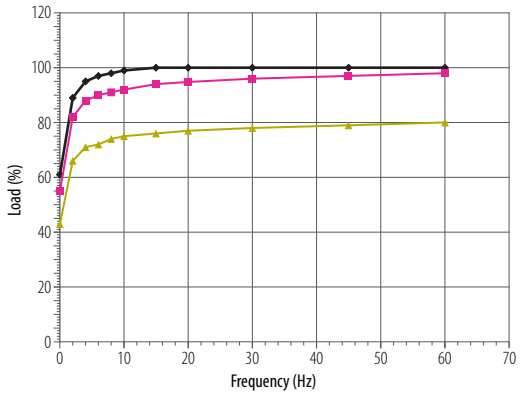
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| C302 | 8 | 200 | 367 | 160 | 302 | 132 | 260 | 0 | 97 | 88 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C367 | 8 | 250 | 460 | 200 | 367 | 160 | 302 | 0 | 77 | 70 | 55 |  |
| | | | | | | | | 2 | 100 | 100 | 84 | |
| | | | | | | | | 4 | 100 | 100 | 92 | |
| | | | | | | | | 6 | 100 | 100 | 94 | |
| | | | | | | | | 8 | 100 | 100 | 96 | |
| | | | | | | | | 10 | 100 | 100 | 97 | |
| | | | | | | | | 15 | 100 | 100 | 99 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C460 | 8 | 315 | 540 | 250 | 460 | 200 | 367 | 0 | 66 | 60 | 46 |  |
| | | | | | | | | 2 | 97 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 78 | |
| | | | | | | | | 6 | 100 | 99 | 80 | |
| | | | | | | | | 8 | 100 | 100 | 82 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 89 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

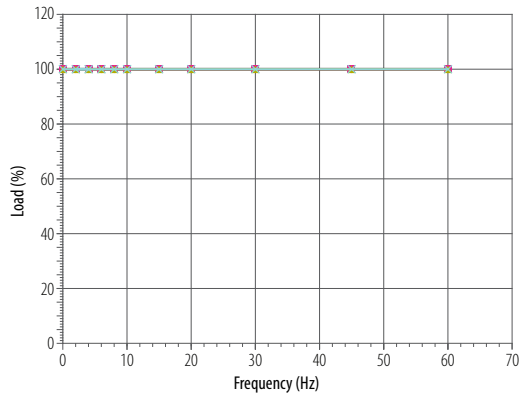
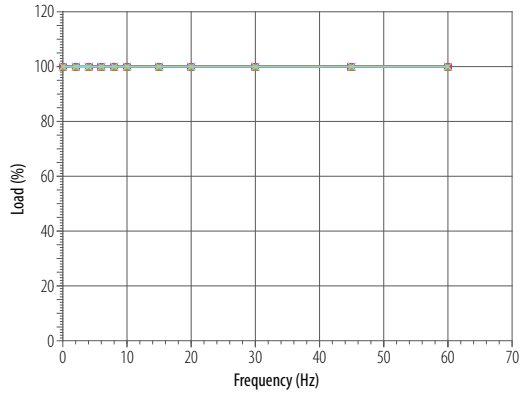
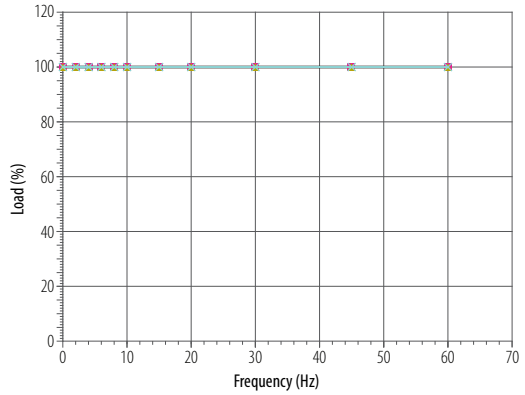
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| C540 | 8 | 315 | 585 | 315 | 540 | 250 | 460 | 0 | 61 | 55 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 89 | 72 | |
| | | | | | | | | 6 | 98 | 91 | 74 | |
| | | | | | | | | 8 | 100 | 93 | 75 | |
| | | | | | | | | 10 | 100 | 94 | 76 | |
| | | | | | | | | 15 | 100 | 96 | 78 | |
| | | | | | | | | 20 | 100 | 97 | 79 | |
| | | | | | | | | 30 | 100 | 99 | 81 | |
| | | | | | | | | 45 | 100 | 100 | 82 | |
| | | | | | | | | 60 | 100 | 100 | 82 | |
| C585 | 8 | 355 | 650 | 315 | 585 | 250 | 472 | 0 | 82 | 75 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 88 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C650 | 8 | 400 | 750 | 355 | 650 | 315 | 540 | 0 | 68 | 62 | 48 |  |
| | | | | | | | | 2 | 99 | 91 | 73 | |
| | | | | | | | | 4 | 100 | 98 | 79 | |
| | | | | | | | | 6 | 100 | 100 | 81 | |
| | | | | | | | | 8 | 100 | 100 | 82 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

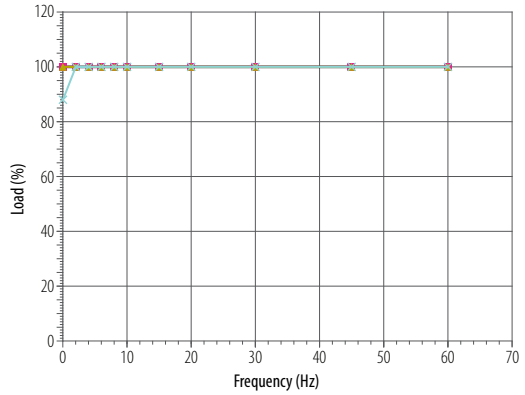
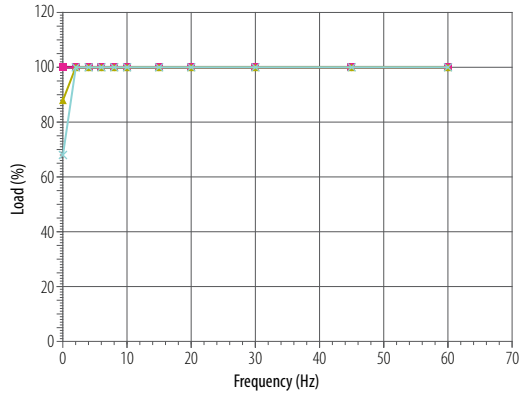
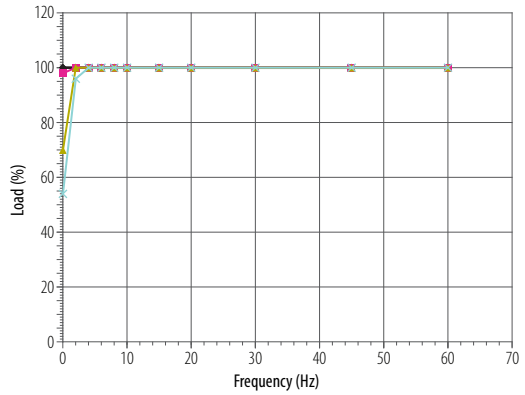
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| C750 | 8 | 450 | 796 | 400 | 750 | 315 | 585 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 97 | 89 | 71 | |
| | | | | | | | | 4 | 100 | 95 | 77 | |
| | | | | | | | | 6 | 100 | 97 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 86 | |
| C770 | 8 | 450 | 832 | 400 | 770 | 355 | 650 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| C920 | 9 | 560 | 1040 | 500 | 920 | 400 | 770 | 0 | 66 | 60 | 46 |  |
| | | | | | | | | 2 | 96 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 78 | |
| | | | | | | | | 6 | 100 | 99 | 80 | |
| | | | | | | | | 8 | 100 | 100 | 81 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

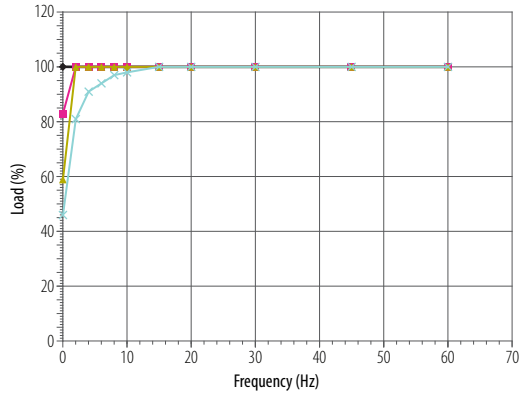
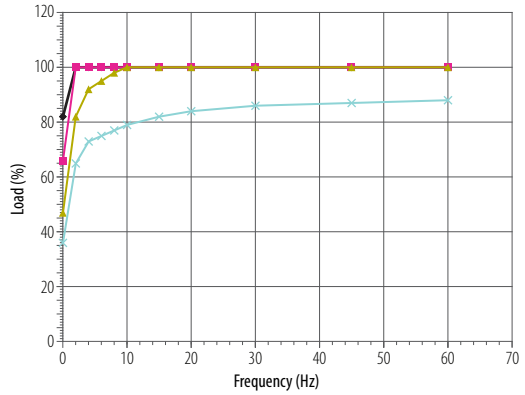
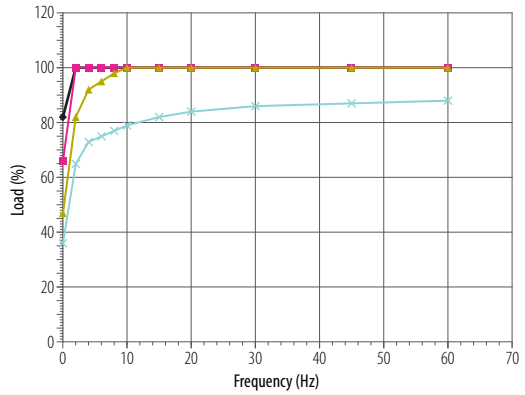
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| C1K0 | 9 | 630 | 1090 | 560 | 1040 | 500 | 920 | 0 | 63 | 57 | 44 |  |
| | | | | | | | | 2 | 92 | 85 | 68 | |
| | | | | | | | | 4 | 99 | 92 | 74 | |
| | | | | | | | | 6 | 100 | 94 | 76 | |
| | | | | | | | | 8 | 100 | 96 | 78 | |
| | | | | | | | | 10 | 100 | 97 | 79 | |
| | | | | | | | | 15 | 100 | 99 | 81 | |
| | | | | | | | | 20 | 100 | 100 | 82 | |
| | | | | | | | | 30 | 100 | 100 | 83 | |
| | | | | | | | | 45 | 100 | 100 | 84 | |
| | | | | | | | | 60 | 100 | 100 | 85 | |
| C1K1 | 9 | 710 | 1182 | 630 | 1112 | 500 | 1040 | 0 | 82 | 75 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 88 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K2 | 9 | 800 | 1465 | 710 | 1175 | 560 | 1090 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 96 | 89 | 71 | |
| | | | | | | | | 4 | 100 | 95 | 77 | |
| | | | | | | | | 6 | 100 | 97 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 86 | |

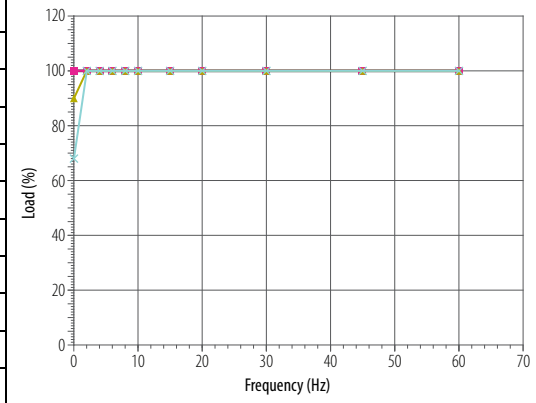
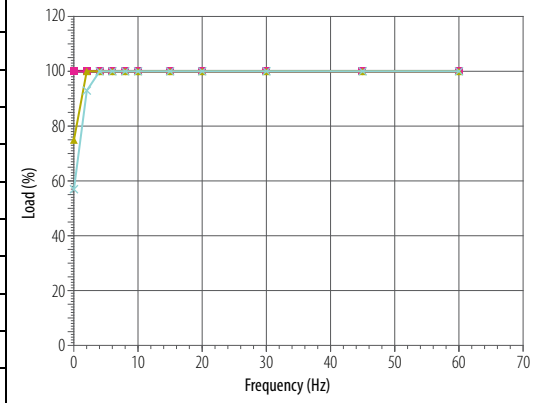
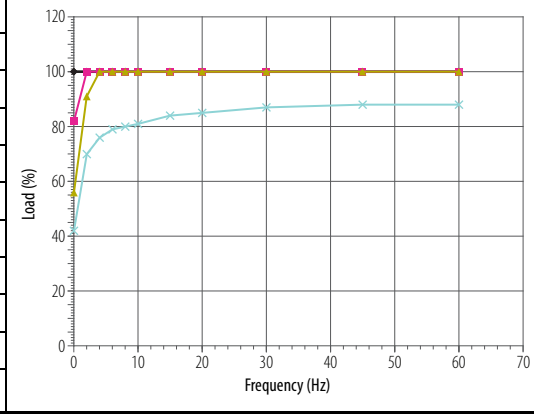
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| C1K4 | 9 | 850 | 1581 | 800 | 1463 | 630 | 1175 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| C1K6 | 10 | 1000 | 1715 | 850 | 1590 | 710 | 1465 | 0 | 83 | 76 | 59 |  |
| | | | | | | | | 2 | 100 | 100 | 90 | |
| | | | | | | | | 4 | 100 | 100 | 97 | |
| | | | | | | | | 6 | 100 | 100 | 99 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| C1K7 | 10 | 1250 | 2150 | 1000 | 1715 | 800 | 1480 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 97 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 77 | |
| | | | | | | | | 6 | 100 | 98 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 87 | |

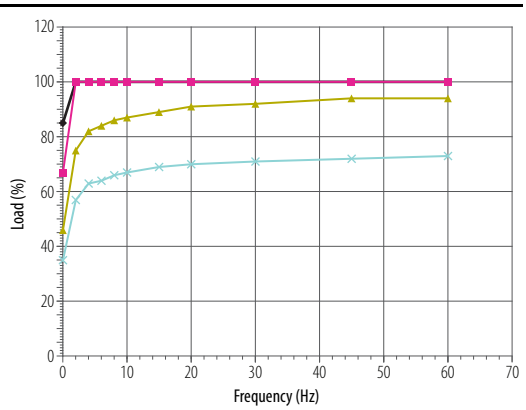
| Cat. No. 20G… | Frame | 400V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| C2K1 | 10 | 1400 | 2330 | 1250 | 2156 | 1000 | 1715 | 0 | 61 | 56 | 43 |  |
| C4K2 | 13 | 2475 | 4576 | 2200 | 4235 | 1953 | 3575 | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| C2K8 | 11 | 1800 | 3078 | 1650 | 2849 | 1400 | 2330 | 0 | 61 | 56 | 43 |  |
| C5K6 | 14 | 3285 | 6074 | 2920 | 5621 | 2592 | 4745 | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 78 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| C3K5 | 12 | 2200 | 3846 | 2000 | 3542 | 1650 | 3032 | 0 | 61 | 55 | 43 |  |
| C7K0 | 15 | 4095 | 7571 | 3640 | 7007 | 3231 | 5915 | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 95 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 72 | |
| | | | | | | | | 8 | 98 | 91 | 74 | |
| | | | | | | | | 10 | 99 | 92 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 95 | 77 | |
| | | | | | | | | 30 | 100 | 96 | 78 | |
| | | | | | | | | 45 | 100 | 97 | 79 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |

| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| D014 | 5 | 15 | 22 | 10 | 14 | 7.5 | 11 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D022 | 5 | 20 | 27 | 15 | 22 | 10 | 14 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D027 | 5 | 25 | 34 | 20 | 27 | 15 | 22 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

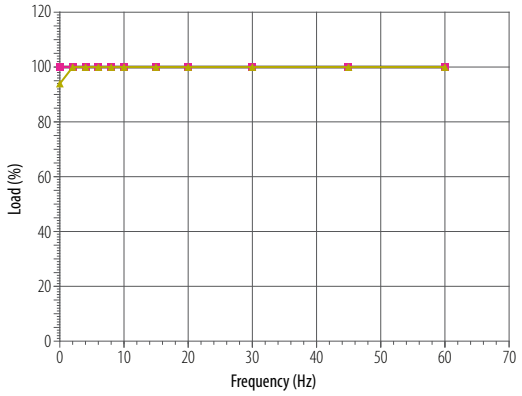
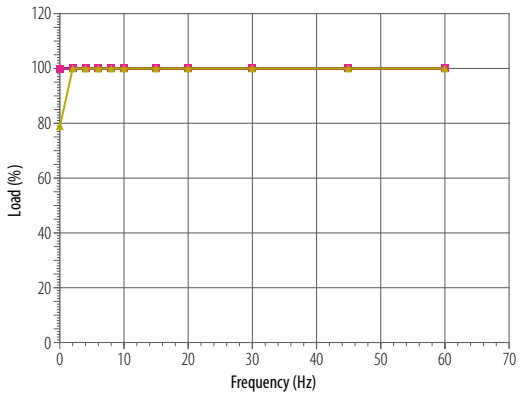
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| D034 | 5 | 30 | 40 | 25 | 34 | 20 | 27 | 0 | 100 | 100 | 100 | 88 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D040 | 5 | 40 | 52 | 30 | 40 | 25 | 34 | 0 | 100 | 100 | 88 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D052 | 5 | 50 | 65 | 40 | 52 | 30 | 40 | 0 | 100 | 98 | 70 | 54 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 96 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

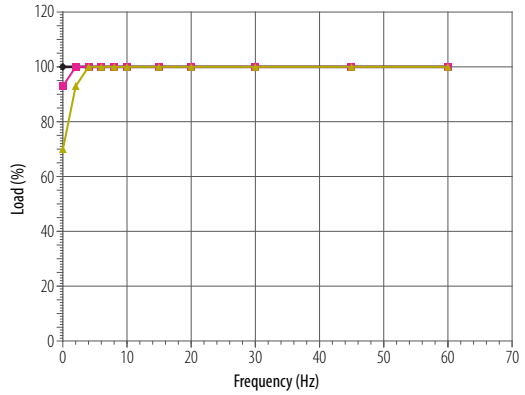
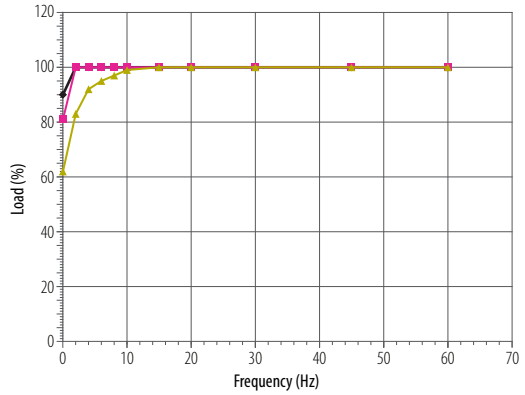
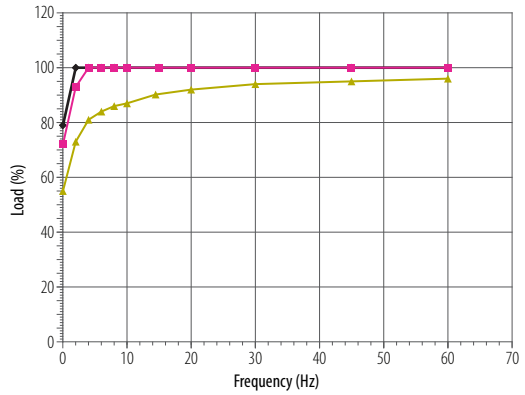
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| D065 | 5 | 60 | 77 | 50 | 65 | 40 | 52 | 0 | 100 | 83 | 59 | 46 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 81 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 91 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 94 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 97 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 98 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D077 | 5 | 75 | 96 | 60 | 77 | 50 | 65 | 0 | 82 | 66 | 47 | 36 |  |
| | | | | | | | | 2 | 100 | 100 | 82 | 65 | |
| | | | | | | | | 4 | 100 | 100 | 92 | 73 | |
| | | | | | | | | 6 | 100 | 100 | 95 | 75 | |
| | | | | | | | | 8 | 100 | 100 | 98 | 77 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 79 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 86 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 88 | |
| D096 | 5 | 75 | 96 | 75 | 96 | 60 | 77 | 0 | 82 | 66 | 47 | 36 |  |
| | | | | | | | | 2 | 100 | 100 | 82 | 65 | |
| | | | | | | | | 4 | 100 | 100 | 92 | 73 | |
| | | | | | | | | 6 | 100 | 100 | 95 | 75 | |
| | | | | | | | | 8 | 100 | 100 | 98 | 77 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 79 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 86 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 88 | |

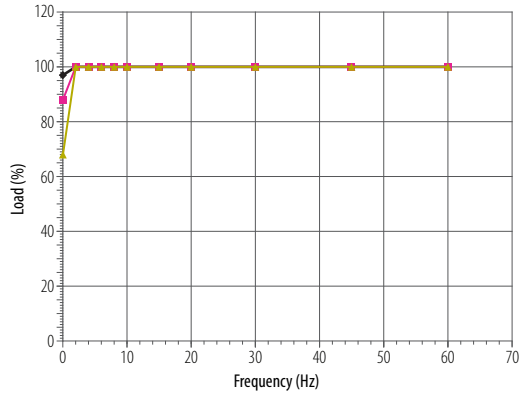
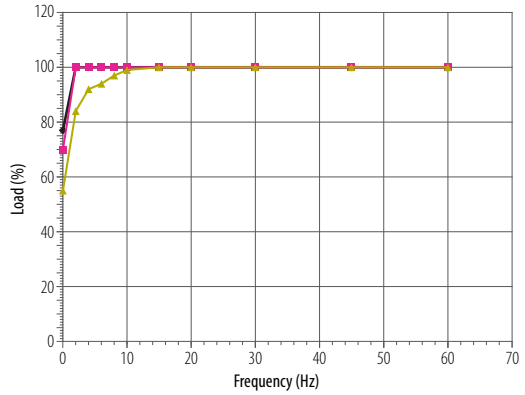
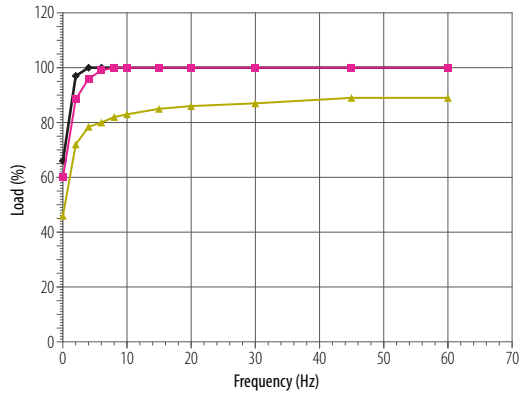
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| D125 | 6 | 125 | 156 | 100 | 125 | 75 | 96 | 0 | 100 | 100 | 90 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D156 | 6 | 150 | 186 | 125 | 156 | 100 | 125 | 0 | 100 | 100 | 75 | 57 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| D186 | 6 | 200 | 248 | 150 | 186 | 125 | 156 | 0 | 100 | 82 | 56 | 42 |  |
| | | | | | | | | 2 | 100 | 100 | 91 | 70 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 76 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 79 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 84 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 85 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 88 | |

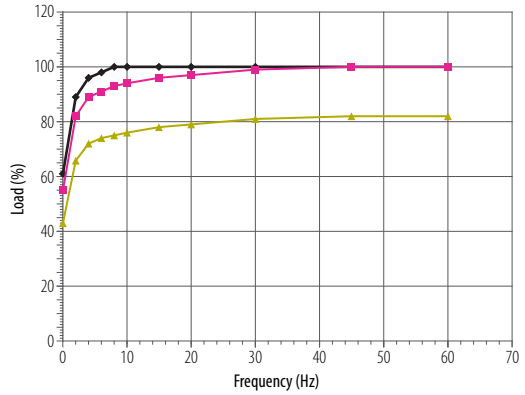
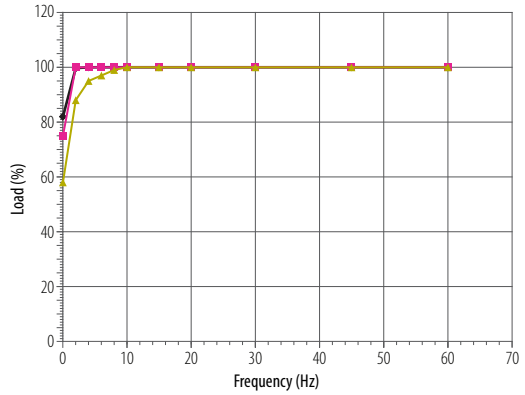
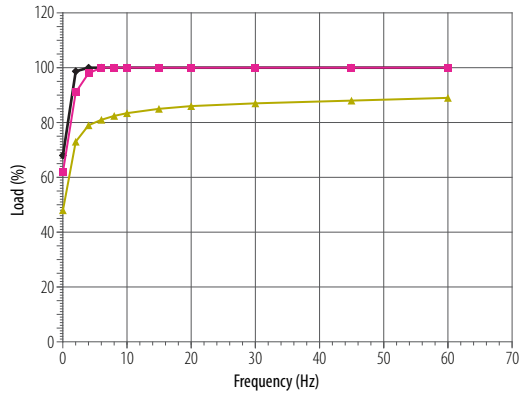
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| D248 | 6 | 250 | 302 | 200 | 248 | 150 | 186 | 0 | 85 | 67 | 46 | 35 |  |
| | | | | | | | | 2 | 100 | 100 | 75 | 57 | |
| | | | | | | | | 4 | 100 | 100 | 82 | 63 | |
| | | | | | | | | 6 | 100 | 100 | 84 | 64 | |
| | | | | | | | | 8 | 100 | 100 | 86 | 66 | |
| | | | | | | | | 10 | 100 | 100 | 87 | 67 | |
| | | | | | | | | 15 | 100 | 100 | 89 | 69 | |
| | | | | | | | | 20 | 100 | 100 | 91 | 70 | |
| | | | | | | | | 30 | 100 | 100 | 92 | 71 | |
| | | | | | | | | 45 | 100 | 100 | 94 | 72 | |
| | | | | | | | | 60 | 100 | 100 | 94 | 73 | |

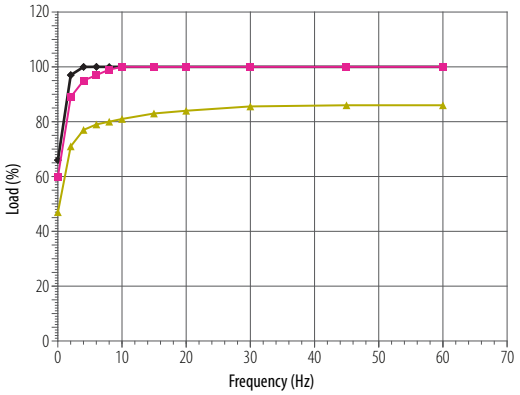
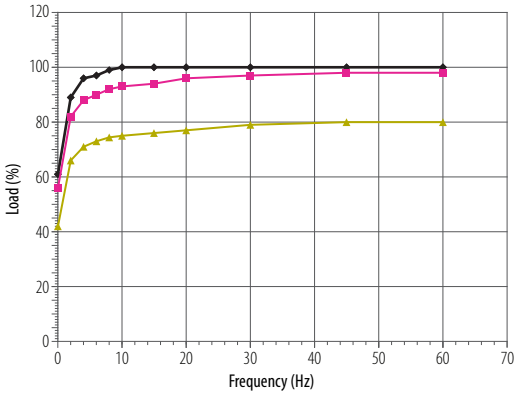
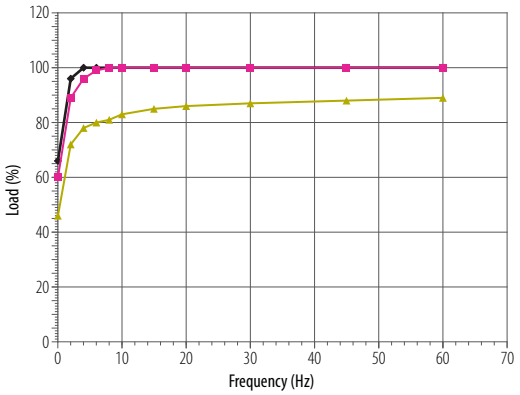


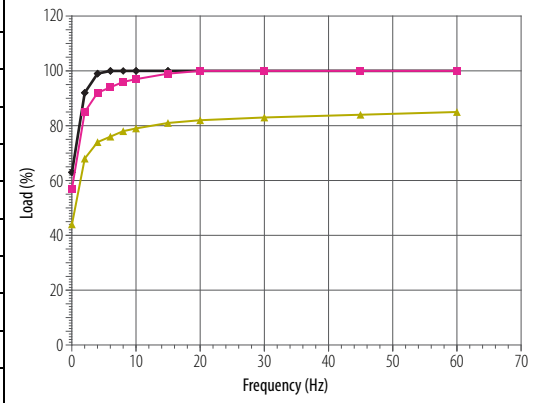
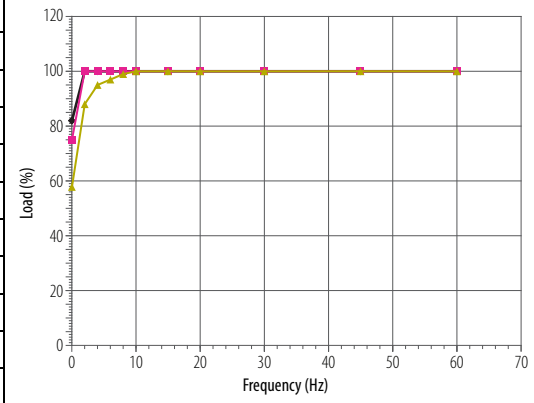
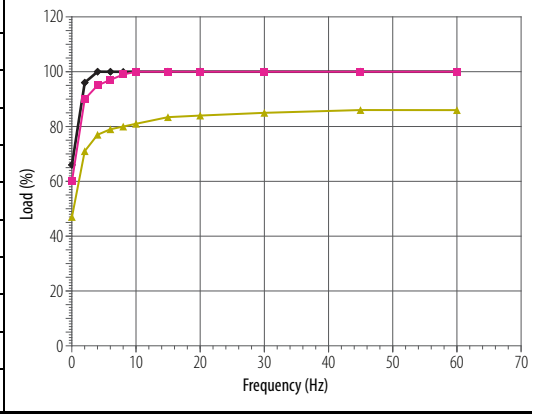
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D302 | 7 | 300 | 361 | 250 | 302 | 200 | 248 | 0 | 100 | 100 | 94 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D361 | 7 | 350 | 430 | 300 | 361 | 250 | 302 | 0 | 100 | 100 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

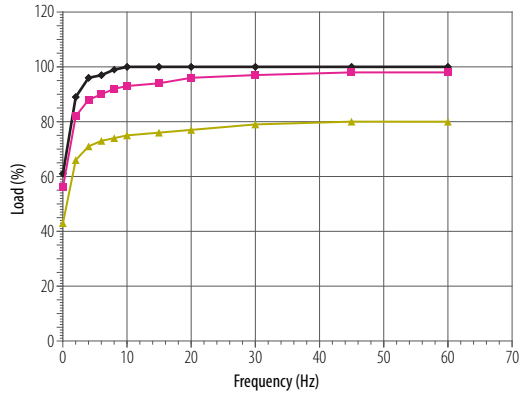
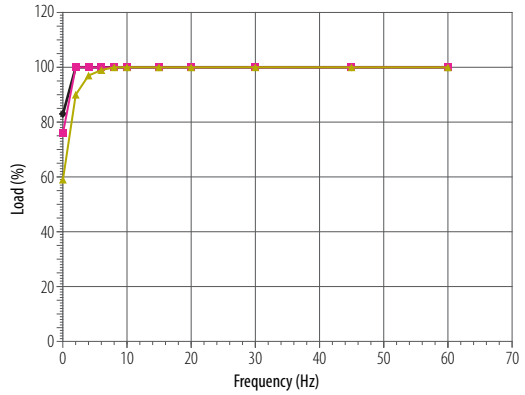
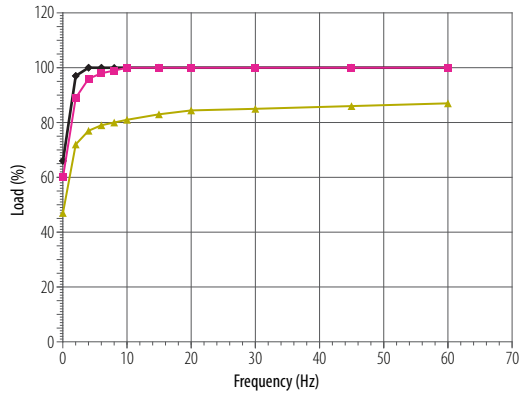
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D430 | 7 | 400 | 485 | 350 | 430 | 300 | 361 | 0 | 100 | 91 | 70 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D505 | 7 | 450 | 545 | 400 | 505 | 350 | 430 | 0 | 90 | 81 | 62 |  |
| | | | | | | | | 2 | 100 | 100 | 83 | |
| | | | | | | | | 4 | 100 | 100 | 92 | |
| | | | | | | | | 6 | 100 | 100 | 95 | |
| | | | | | | | | 8 | 100 | 100 | 97 | |
| | | | | | | | | 10 | 100 | 100 | 99 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D617 | 7 | 500 | 617 | 500 | 600 | 400 | 500 | 0 | 79 | 72 | 55 |  |
| | | | | | | | | 2 | 100 | 93 | 73 | |
| | | | | | | | | 4 | 100 | 100 | 81 | |
| | | | | | | | | 6 | 100 | 100 | 84 | |
| | | | | | | | | 8 | 100 | 100 | 86 | |
| | | | | | | | | 10 | 100 | 100 | 87 | |
| | | | | | | | | 15 | 100 | 100 | 90 | |
| | | | | | | | | 20 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 94 | |
| | | | | | | | | 45 | 100 | 100 | 95 | |
| | | | | | | | | 60 | 100 | 100 | 96 | |

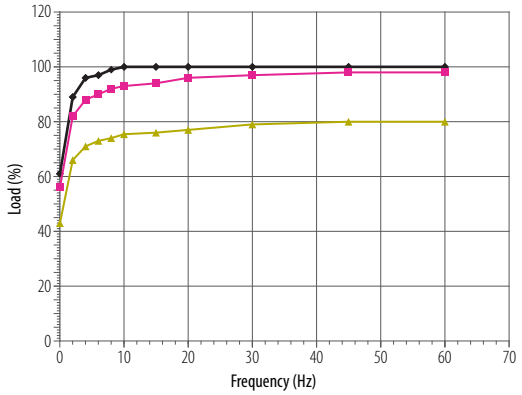
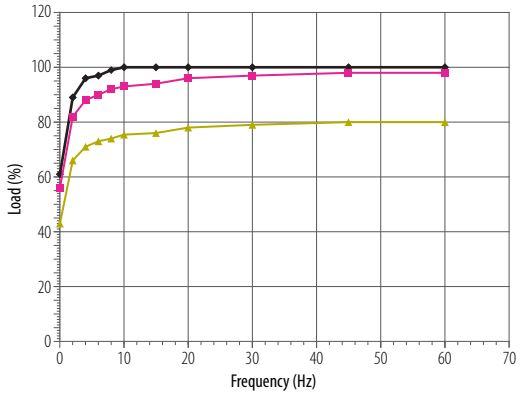
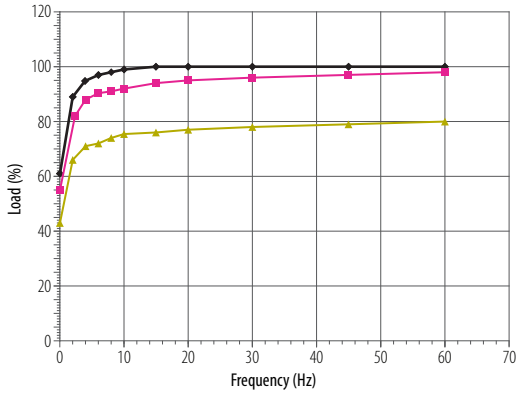
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D302 | 8 | 300 | 361 | 250 | 302 | 200 | 248 | 0 | 97 | 88 | 68 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D361 | 8 | 350 | 430 | 300 | 361 | 250 | 302 | 0 | 77 | 70 | 55 |  |
| | | | | | | | | 2 | 100 | 100 | 84 | |
| | | | | | | | | 4 | 100 | 100 | 92 | |
| | | | | | | | | 6 | 100 | 100 | 94 | |
| | | | | | | | | 8 | 100 | 100 | 96 | |
| | | | | | | | | 10 | 100 | 100 | 97 | |
| | | | | | | | | 15 | 100 | 100 | 99 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D430 | 8 | 400 | 485 | 350 | 430 | 300 | 361 | 0 | 66 | 60 | 46 |  |
| | | | | | | | | 2 | 97 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 78 | |
| | | | | | | | | 6 | 100 | 99 | 80 | |
| | | | | | | | | 8 | 100 | 100 | 82 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 89 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

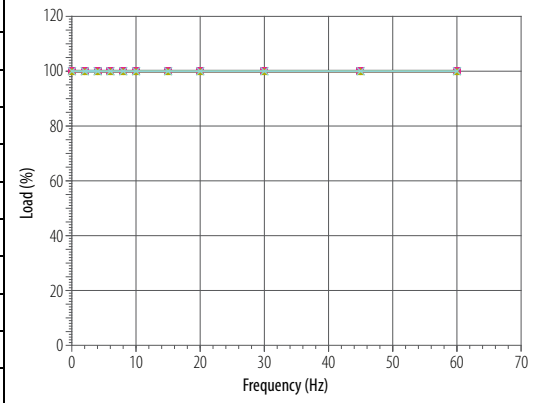
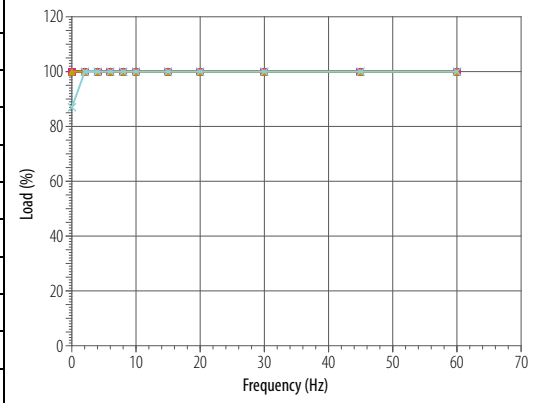
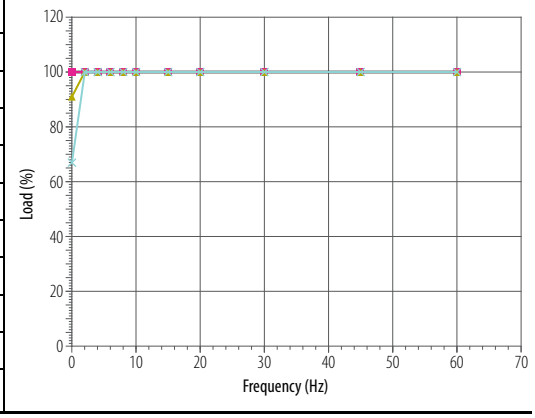
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D505 | 8 | 450 | 545 | 400 | 505 | 350 | 430 | 0 | 61 | 55 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 89 | 72 | |
| | | | | | | | | 6 | 98 | 91 | 74 | |
| | | | | | | | | 8 | 100 | 93 | 75 | |
| | | | | | | | | 10 | 100 | 94 | 76 | |
| | | | | | | | | 15 | 100 | 96 | 78 | |
| | | | | | | | | 20 | 100 | 97 | 79 | |
| | | | | | | | | 30 | 100 | 99 | 81 | |
| | | | | | | | | 45 | 100 | 100 | 82 | |
| | | | | | | | | 60 | 100 | 100 | 82 | |
| D545 | 8 | 500 | 617 | 450 | 545 | 350 | 454 | 0 | 82 | 75 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 88 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D617 | 8 | 600 | 710 | 500 | 617 | 400 | 485 | 0 | 68 | 62 | 48 |  |
| | | | | | | | | 2 | 99 | 91 | 73 | |
| | | | | | | | | 4 | 100 | 98 | 79 | |
| | | | | | | | | 6 | 100 | 100 | 81 | |
| | | | | | | | | 8 | 100 | 100 | 82 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

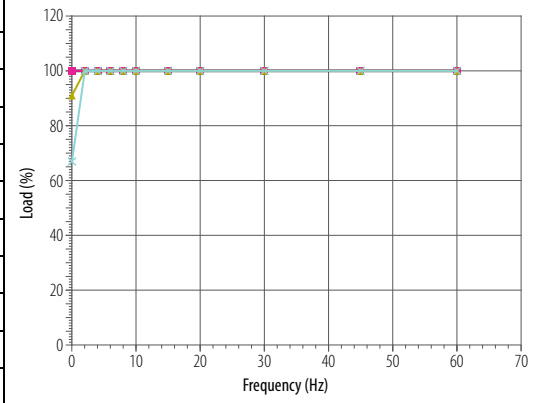
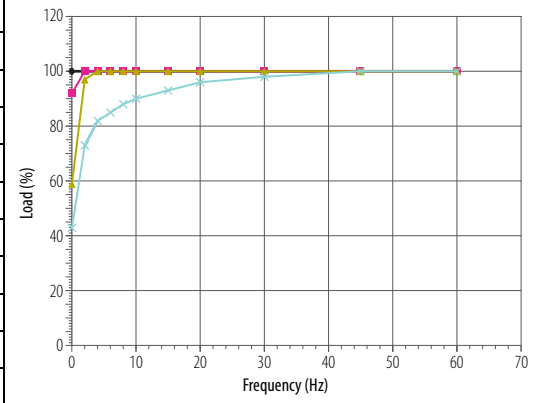
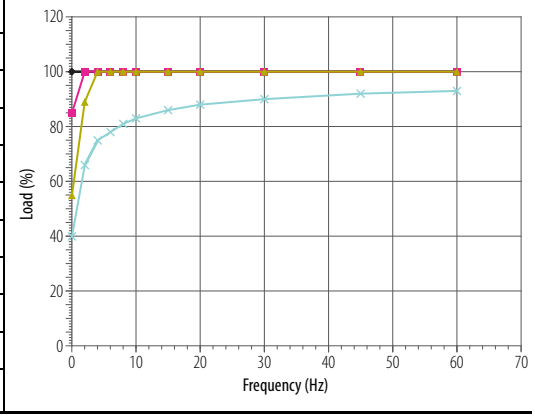
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| D710 | 8 | 650 | 765 | 600 | 710 | 450 | 545 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 97 | 89 | 71 | |
| | | | | | | | | 4 | 100 | 95 | 77 | |
| | | | | | | | | 6 | 100 | 97 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 86 | |
| D740 | 8 | 700 | 800 | 650 | 740 | 500 | 617 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| D800 | 9 | 800 | 960 | 700 | 800 | 600 | 740 | 0 | 66 | 60 | 46 |  |
| | | | | | | | | 2 | 96 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 78 | |
| | | | | | | | | 6 | 100 | 99 | 80 | |
| | | | | | | | | 8 | 100 | 100 | 81 | |
| | | | | | | | | 10 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 87 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 89 | |

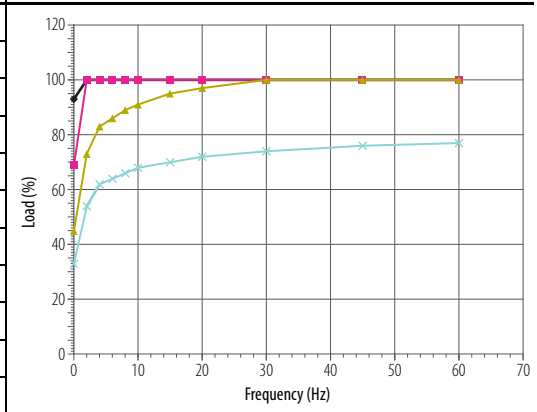
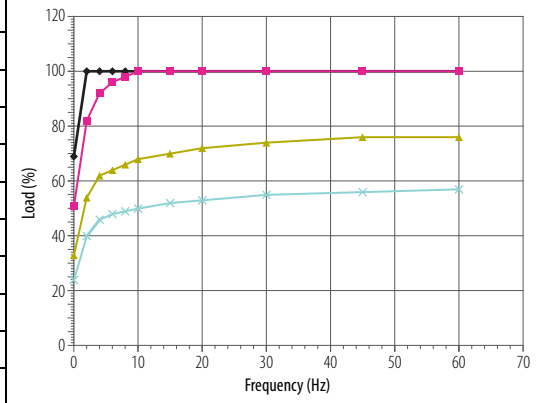
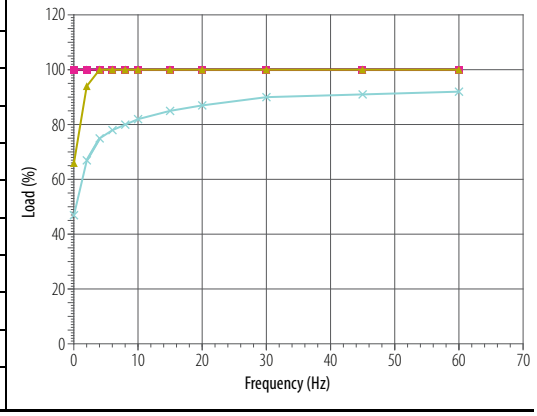
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D960 | 9 | 900 | 1045 | 800 | 960 | 700 | 800 | 0 | 63 | 57 | 44 |  |
| | | | | | | | | 2 | 92 | 85 | 68 | |
| | | | | | | | | 4 | 99 | 92 | 74 | |
| | | | | | | | | 6 | 100 | 94 | 76 | |
| | | | | | | | | 8 | 100 | 96 | 78 | |
| | | | | | | | | 10 | 100 | 97 | 79 | |
| | | | | | | | | 15 | 100 | 99 | 81 | |
| | | | | | | | | 20 | 100 | 100 | 82 | |
| | | | | | | | | 30 | 100 | 100 | 83 | |
| | | | | | | | | 45 | 100 | 100 | 84 | |
| | | | | | | | | 60 | 100 | 100 | 85 | |
| D1K0 | 9 | 1000 | 1135 | 900 | 1045 | 750 | 960 | 0 | 82 | 75 | 58 |  |
| | | | | | | | | 2 | 100 | 100 | 88 | |
| | | | | | | | | 4 | 100 | 100 | 95 | |
| | | | | | | | | 6 | 100 | 100 | 97 | |
| | | | | | | | | 8 | 100 | 100 | 99 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D1K1 | 9 | 1100 | 1365 | 1000 | 1135 | 800 | 1045 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 96 | 89 | 71 | |
| | | | | | | | | 4 | 100 | 95 | 77 | |
| | | | | | | | | 6 | 100 | 97 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 86 | |

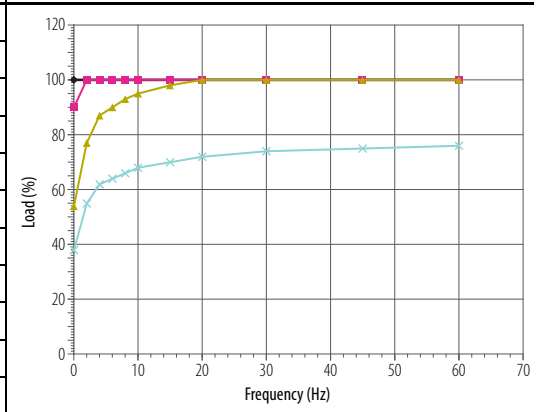
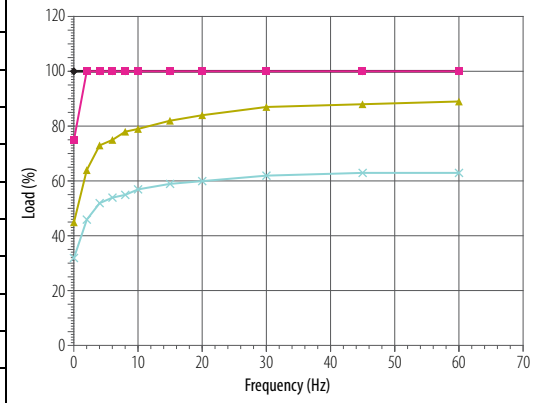
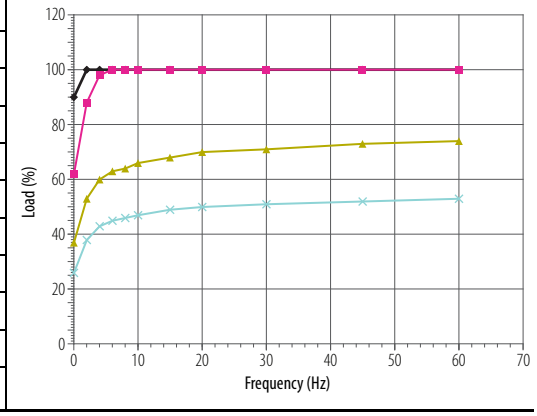
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D1K3 | 9 | 1250 | 1520 | 1100 | 1365 | 900 | 1135 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| D1K4 | 10 | 1500 | 1655 | 1250 | 1420 | 1000 | 1365 | 0 | 83 | 76 | 59 |  |
| | | | | | | | | 2 | 100 | 100 | 90 | |
| | | | | | | | | 4 | 100 | 100 | 97 | |
| | | | | | | | | 6 | 100 | 100 | 99 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| D1K6 | 10 | 1800 | 2070 | 1500 | 1655 | 1100 | 1420 | 0 | 66 | 60 | 47 |  |
| | | | | | | | | 2 | 97 | 89 | 72 | |
| | | | | | | | | 4 | 100 | 96 | 77 | |
| | | | | | | | | 6 | 100 | 98 | 79 | |
| | | | | | | | | 8 | 100 | 99 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 81 | |
| | | | | | | | | 15 | 100 | 100 | 83 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 85 | |
| | | | | | | | | 45 | 100 | 100 | 86 | |
| | | | | | | | | 60 | 100 | 100 | 87 | |

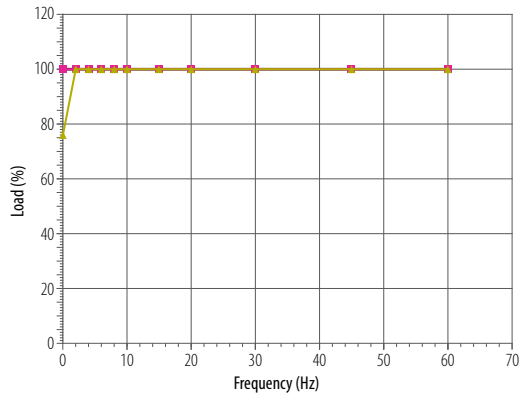
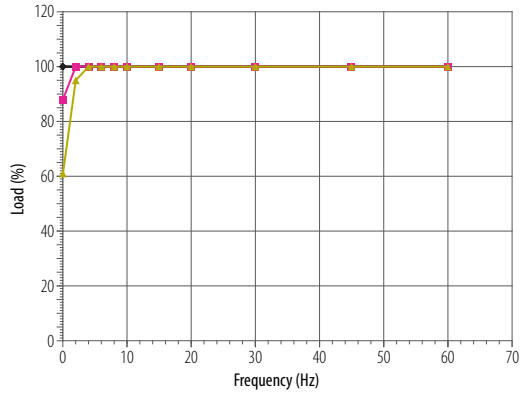
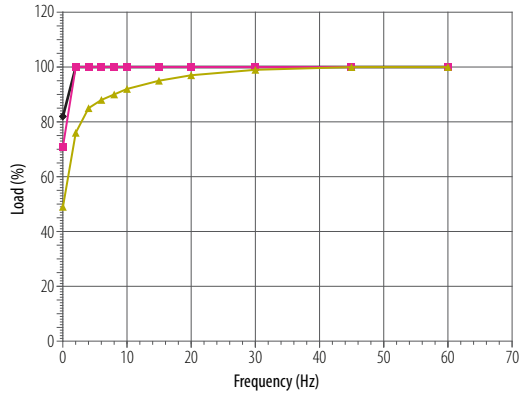
| Cat. No. 20G… | Frame | 480V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| D2K0<br>D4K0 | 10<br>13 | 2000<br>3900 | 2240<br>4400 | 1800<br>3600 | 2072<br>4070 | 1500<br>2800 | 1655<br>3394 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 77 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| D2K6<br>D5K4 | 11<br>14 | 2600<br>5200 | 2960<br>5840 | 2400<br>4800 | 2738<br>5402 | 2000<br>3700 | 2240<br>4504 | 0 | 61 | 56 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 96 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 73 | |
| | | | | | | | | 8 | 99 | 92 | 74 | |
| | | | | | | | | 10 | 100 | 93 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 96 | 78 | |
| | | | | | | | | 30 | 100 | 97 | 79 | |
| | | | | | | | | 45 | 100 | 98 | 80 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |
| D3K4<br>D6K7 | 12<br>15 | 3300<br>6400 | 3696<br>7280 | 3000<br>6000 | 3404<br>6734 | 2400<br>4600 | 2980<br>5615 | 0 | 61 | 55 | 43 |  |
| | | | | | | | | 2 | 89 | 82 | 66 | |
| | | | | | | | | 4 | 95 | 88 | 71 | |
| | | | | | | | | 6 | 97 | 90 | 72 | |
| | | | | | | | | 8 | 98 | 91 | 74 | |
| | | | | | | | | 10 | 99 | 92 | 75 | |
| | | | | | | | | 15 | 100 | 94 | 76 | |
| | | | | | | | | 20 | 100 | 95 | 77 | |
| | | | | | | | | 30 | 100 | 96 | 78 | |
| | | | | | | | | 45 | 100 | 97 | 79 | |
| | | | | | | | | 60 | 100 | 98 | 80 | |

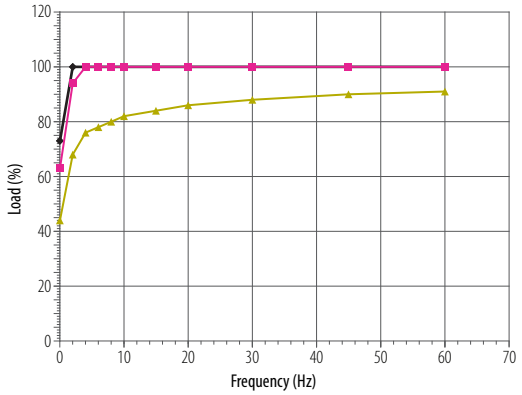
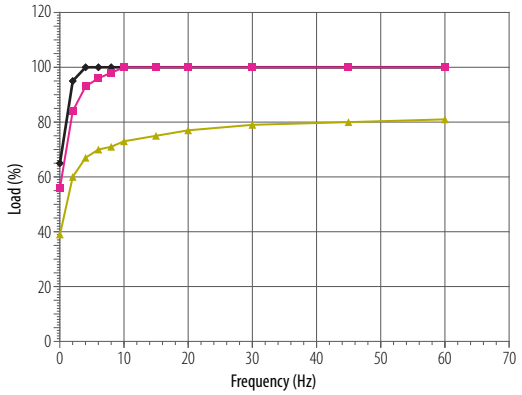
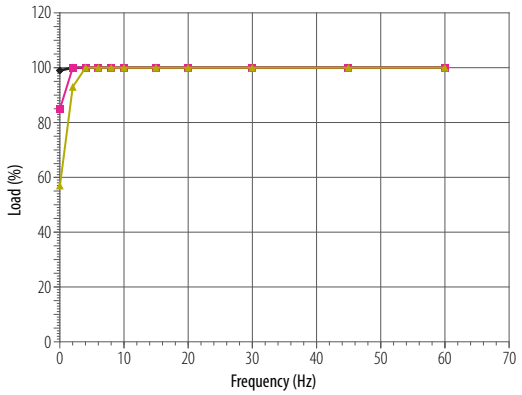
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| E011 | 5 | 15 | 17 | 10 | 11 | 7.5 | 9 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| E017 | 5 | 20 | 22 | 15 | 17 | 10 | 11 | 0 | 100 | 100 | 100 | 87 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| E022 | 5 | 25 | 27 | 20 | 22 | 15 | 17 | 0 | 100 | 100 | 91 | 67 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

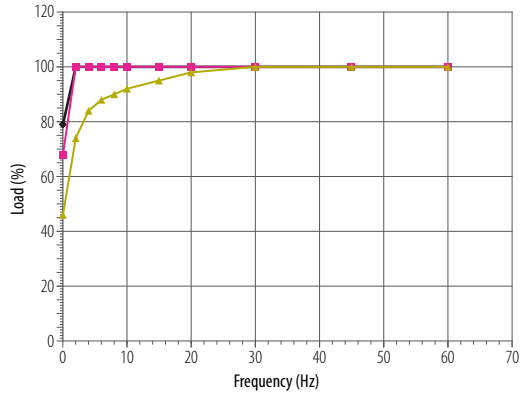
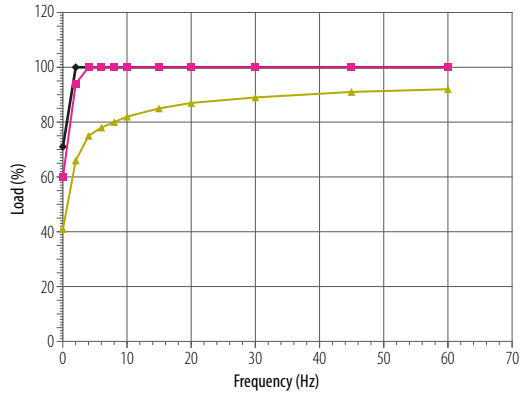
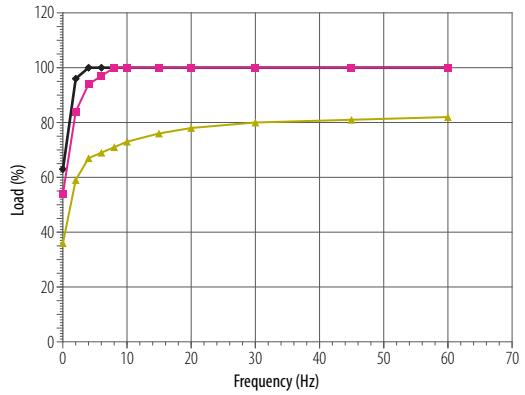
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| E027 | 5 | 30 | 32 | 25 | 27 | 20 | 22 | 0 | 100 | 100 | 81 | 59 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 97 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| E032 | 5 | 40 | 41 | 30 | 32 | 25 | 27 | 0 | 100 | 92 | 59 | 43 |  |
| | | | | | | | | 2 | 100 | 100 | 97 | 72 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 85 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 93 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 96 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 98 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| E041 | 5 | 50 | 52 | 40 | 41 | 30 | 32 | 0 | 100 | 85 | 55 | 40 |  |
| | | | | | | | | 2 | 100 | 100 | 89 | 66 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 81 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 83 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 86 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 88 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 92 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 93 | |

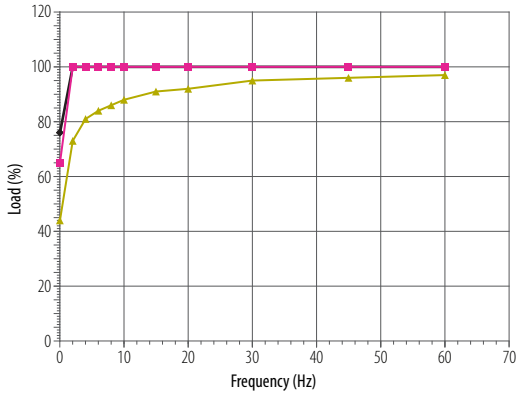
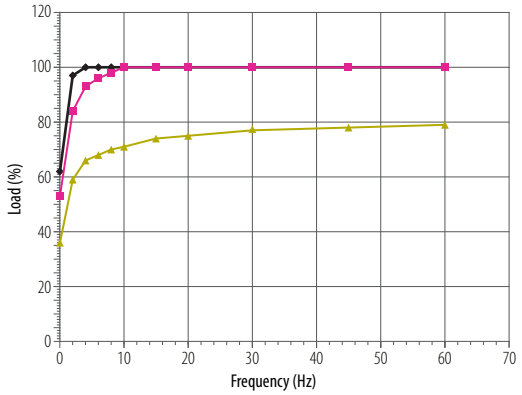
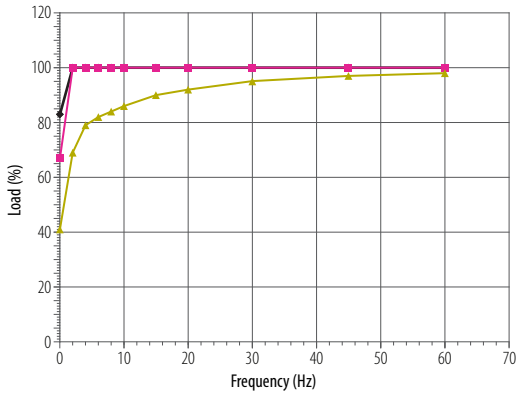
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| E052 | 5 | 60 | 62 | 50 | 52 | 40 | 41 | 0 | 93 | 69 | 45 | 33 |  |
| | | | | | | | | 2 | 100 | 100 | 73 | 54 | |
| | | | | | | | | 4 | 100 | 100 | 83 | 62 | |
| | | | | | | | | 6 | 100 | 100 | 86 | 64 | |
| | | | | | | | | 8 | 100 | 100 | 89 | 66 | |
| | | | | | | | | 10 | 100 | 100 | 91 | 68 | |
| | | | | | | | | 15 | 100 | 100 | 95 | 70 | |
| | | | | | | | | 20 | 100 | 100 | 97 | 72 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 74 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 76 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 77 | |
| E062 | 5 | 75 | 77 | 60 | 62 | 50 | 52 | 0 | 69 | 51 | 33 | 24 |  |
| | | | | | | | | 2 | 100 | 82 | 54 | 40 | |
| | | | | | | | | 4 | 100 | 92 | 62 | 46 | |
| | | | | | | | | 6 | 100 | 96 | 64 | 48 | |
| | | | | | | | | 8 | 100 | 98 | 66 | 49 | |
| | | | | | | | | 10 | 100 | 100 | 68 | 50 | |
| | | | | | | | | 15 | 100 | 100 | 70 | 52 | |
| | | | | | | | | 20 | 100 | 100 | 72 | 53 | |
| | | | | | | | | 30 | 100 | 100 | 74 | 55 | |
| | | | | | | | | 45 | 100 | 100 | 76 | 56 | |
| | | | | | | | | 60 | 100 | 100 | 76 | 57 | |
| E077 | 6 | 100 | 99 | 75 | 77 | 60 | 62 | 0 | 100 | 100 | 66 | 47 |  |
| | | | | | | | | 2 | 100 | 100 | 94 | 67 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 82 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 91 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 92 | |

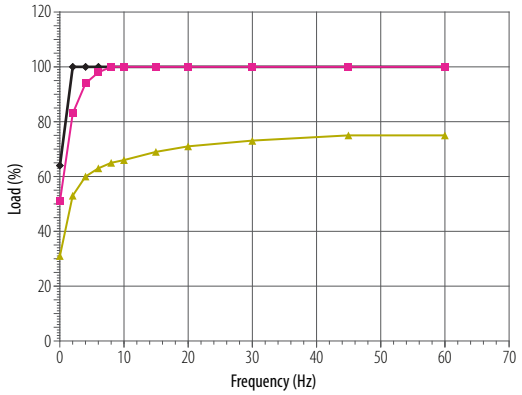
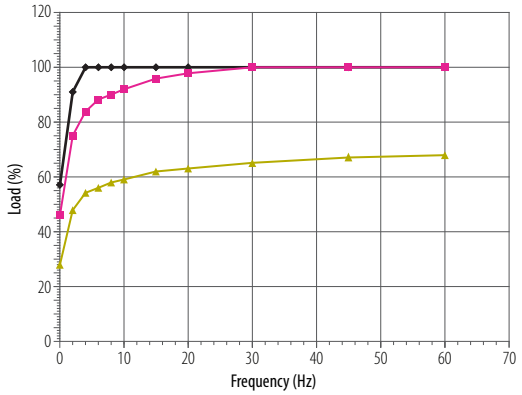
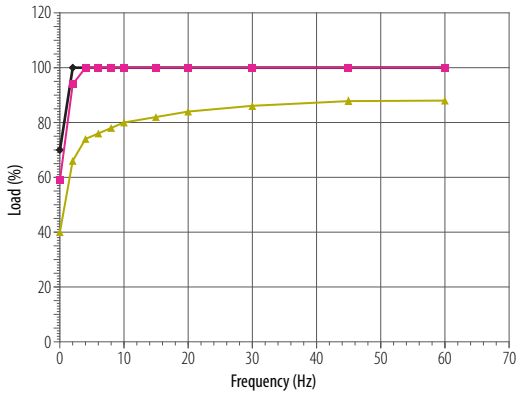
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| E099 | 6 | 125 | 125 | 100 | 99 | 75 | 77 | 0 | 100 | 90 | 54 | 38 |  |
| | | | | | | | | 2 | 100 | 100 | 77 | 55 | |
| | | | | | | | | 4 | 100 | 100 | 87 | 62 | |
| | | | | | | | | 6 | 100 | 100 | 90 | 64 | |
| | | | | | | | | 8 | 100 | 100 | 93 | 66 | |
| | | | | | | | | 10 | 100 | 100 | 95 | 68 | |
| | | | | | | | | 15 | 100 | 100 | 98 | 70 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 72 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 74 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 75 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 76 | |
| E125 | 6 | 150 | 144 | 125 | 125 | 100 | 99 | 0 | 100 | 75 | 45 | 32 |  |
| | | | | | | | | 2 | 100 | 100 | 64 | 46 | |
| | | | | | | | | 4 | 100 | 100 | 73 | 52 | |
| | | | | | | | | 6 | 100 | 100 | 75 | 54 | |
| | | | | | | | | 8 | 100 | 100 | 78 | 55 | |
| | | | | | | | | 10 | 100 | 100 | 79 | 57 | |
| | | | | | | | | 15 | 100 | 100 | 82 | 59 | |
| | | | | | | | | 20 | 100 | 100 | 84 | 60 | |
| | | | | | | | | 30 | 100 | 100 | 86 | 62 | |
| | | | | | | | | 45 | 100 | 100 | 88 | 63 | |
| | | | | | | | | 60 | 100 | 100 | 89 | 63 | |
| E144 | 6 | 200 | 192 | 150 | 144 | 125 | 125 | 0 | 90 | 62 | 37 | 26 |  |
| | | | | | | | | 2 | 100 | 88 | 53 | 38 | |
| | | | | | | | | 4 | 100 | 98 | 60 | 43 | |
| | | | | | | | | 6 | 100 | 100 | 63 | 45 | |
| | | | | | | | | 8 | 100 | 100 | 64 | 46 | |
| | | | | | | | | 10 | 100 | 100 | 66 | 47 | |
| | | | | | | | | 15 | 100 | 100 | 68 | 49 | |
| | | | | | | | | 20 | 100 | 100 | 70 | 50 | |
| | | | | | | | | 30 | 100 | 100 | 71 | 51 | |
| | | | | | | | | 45 | 100 | 100 | 73 | 52 | |
| | | | | | | | | 60 | 100 | 100 | 74 | 53 | |

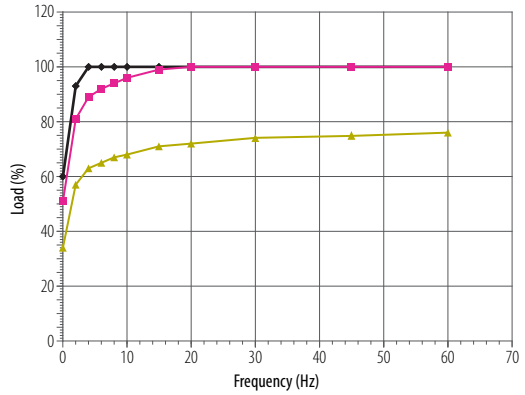
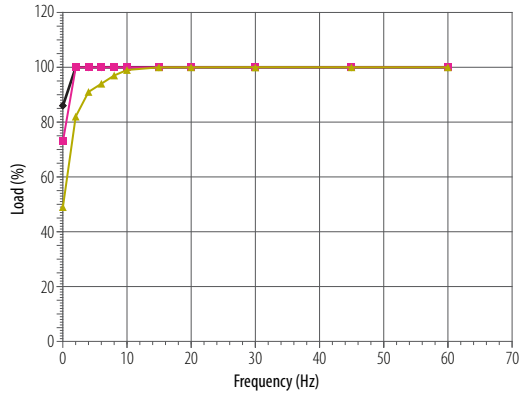
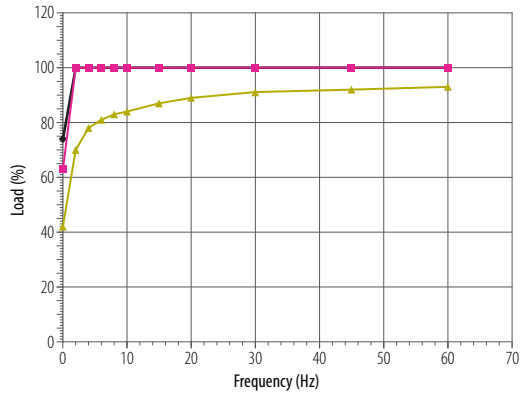
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E192 | 7 | 250 | 242 | 200 | 192 | 150 | 144 | 0 | 100 | 100 | 76 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E242 | 7 | 300 | 295 | 250 | 242 | 200 | 192 | 0 | 100 | 88 | 61 |  |
| | | | | | | | | 2 | 100 | 100 | 95 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E295 | 7 | 350 | 355 | 300 | 295 | 250 | 242 | 0 | 82 | 71 | 49 |  |
| | | | | | | | | 2 | 100 | 100 | 76 | |
| | | | | | | | | 4 | 100 | 100 | 85 | |
| | | | | | | | | 6 | 100 | 100 | 88 | |
| | | | | | | | | 8 | 100 | 100 | 90 | |
| | | | | | | | | 10 | 100 | 100 | 92 | |
| | | | | | | | | 15 | 100 | 100 | 95 | |
| | | | | | | | | 20 | 100 | 100 | 97 | |
| | | | | | | | | 30 | 100 | 100 | 99 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

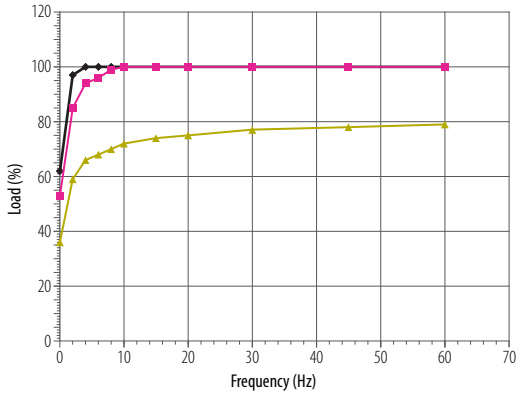
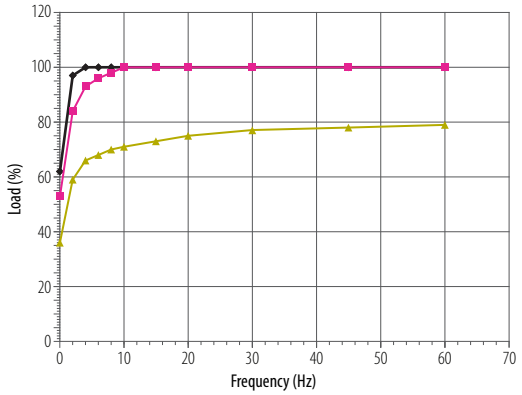
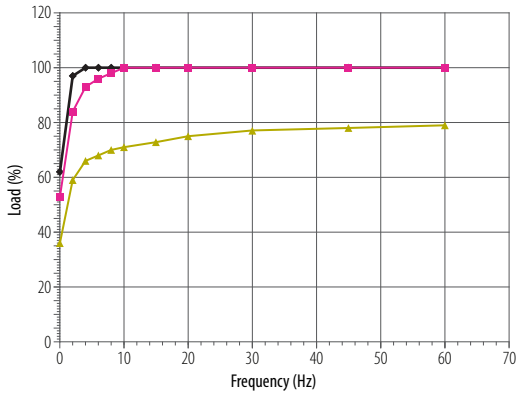
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E355 | 7 | 400 | 395 | 350 | 355 | 300 | 295 | 0 | 73 | 63 | 44 |  |
| | | | | | | | | 2 | 100 | 94 | 68 | |
| | | | | | | | | 4 | 100 | 100 | 76 | |
| | | | | | | | | 6 | 100 | 100 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 82 | |
| | | | | | | | | 15 | 100 | 100 | 84 | |
| | | | | | | | | 20 | 100 | 100 | 86 | |
| | | | | | | | | 30 | 100 | 100 | 88 | |
| | | | | | | | | 45 | 100 | 100 | 90 | |
| | | | | | | | | 60 | 100 | 100 | 91 | |
| E395 | 7 | 450 | 435 | 400 | 395 | 350 | 355 | 0 | 65 | 56 | 39 |  |
| | | | | | | | | 2 | 95 | 84 | 60 | |
| | | | | | | | | 4 | 100 | 93 | 67 | |
| | | | | | | | | 6 | 100 | 96 | 70 | |
| | | | | | | | | 8 | 100 | 98 | 71 | |
| | | | | | | | | 10 | 100 | 100 | 73 | |
| | | | | | | | | 15 | 100 | 100 | 75 | |
| | | | | | | | | 20 | 100 | 100 | 77 | |
| | | | | | | | | 30 | 100 | 100 | 79 | |
| | | | | | | | | 45 | 100 | 100 | 80 | |
| | | | | | | | | 60 | 100 | 100 | 81 | |
| E242 | 8 | 300 | 295 | 250 | 242 | 200 | 192 | 0 | 99 | 85 | 57 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

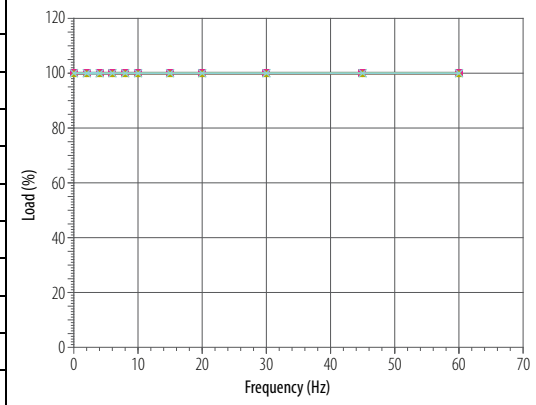
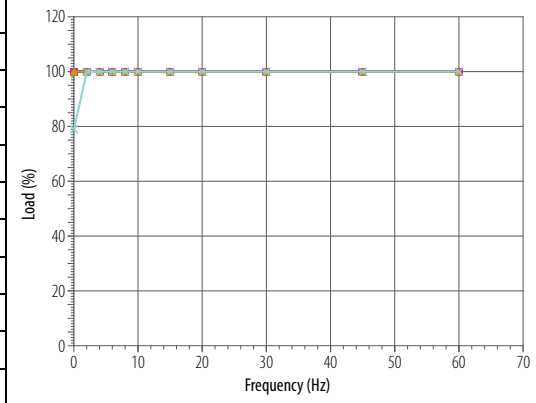
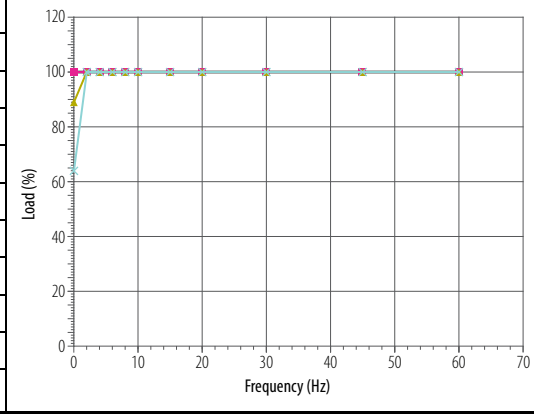
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| E295 | 8 | 350 | 355 | 300 | 295 | 250 | 242 | 0 | 79 | 68 | 46 |  |
| | | | | | | | | 2 | 100 | 100 | 74 | |
| | | | | | | | | 4 | 100 | 100 | 84 | |
| | | | | | | | | 6 | 100 | 100 | 88 | |
| | | | | | | | | 8 | 100 | 100 | 90 | |
| | | | | | | | | 10 | 100 | 100 | 92 | |
| | | | | | | | | 15 | 100 | 100 | 95 | |
| | | | | | | | | 20 | 100 | 100 | 98 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E355 | 8 | 400 | 395 | 350 | 355 | 300 | 295 | 0 | 71 | 60 | 41 |  |
| | | | | | | | | 2 | 100 | 94 | 66 | |
| | | | | | | | | 4 | 100 | 100 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 82 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 87 | |
| | | | | | | | | 30 | 100 | 100 | 89 | |
| | | | | | | | | 45 | 100 | 100 | 91 | |
| | | | | | | | | 60 | 100 | 100 | 92 | |
| E395 | 8 | 450 | 435 | 400 | 395 | 350 | 355 | 0 | 63 | 54 | 36 |  |
| | | | | | | | | 2 | 96 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 94 | 67 | |
| | | | | | | | | 6 | 100 | 97 | 69 | |
| | | | | | | | | 8 | 100 | 100 | 71 | |
| | | | | | | | | 10 | 100 | 100 | 73 | |
| | | | | | | | | 15 | 100 | 100 | 76 | |
| | | | | | | | | 20 | 100 | 100 | 78 | |
| | | | | | | | | 30 | 100 | 100 | 80 | |
| | | | | | | | | 45 | 100 | 100 | 81 | |
| | | | | | | | | 60 | 100 | 100 | 82 | |

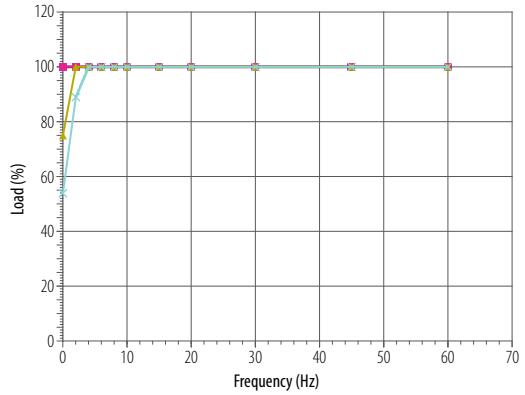
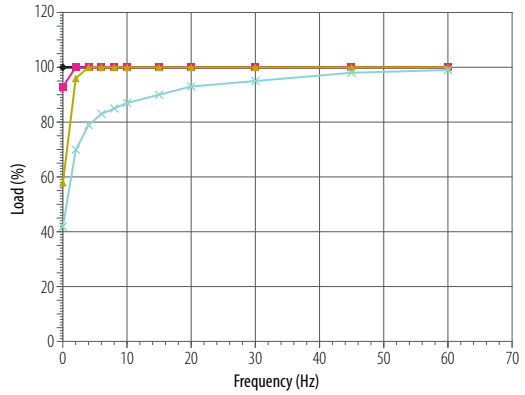
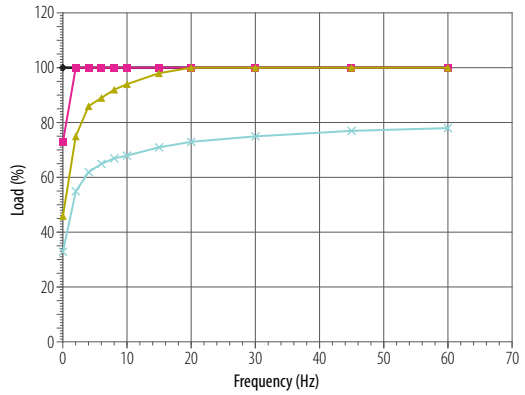
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E435 | 8 | 500 | 510 | 450 | 435 | 400 | 395 | 0 | 76 | 65 | 44 |  |
| | | | | | | | | 2 | 100 | 100 | 73 | |
| | | | | | | | | 4 | 100 | 100 | 81 | |
| | | | | | | | | 6 | 100 | 100 | 84 | |
| | | | | | | | | 8 | 100 | 100 | 86 | |
| | | | | | | | | 10 | 100 | 100 | 88 | |
| | | | | | | | | 15 | 100 | 100 | 91 | |
| | | | | | | | | 20 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 95 | |
| | | | | | | | | 45 | 100 | 100 | 96 | |
| | | | | | | | | 60 | 100 | 100 | 97 | |
| E545 | 8 | 600 | 580 | 550 | 545 | 450 | 450 | 0 | 62 | 53 | 36 |  |
| | | | | | | | | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 74 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| E595 | 9 | 700 | 690 | 600 | 580 | 550 | 545 | 0 | 83 | 67 | 41 |  |
| | | | | | | | | 2 | 100 | 100 | 69 | |
| | | | | | | | | 4 | 100 | 100 | 79 | |
| | | | | | | | | 6 | 100 | 100 | 82 | |
| | | | | | | | | 8 | 100 | 100 | 84 | |
| | | | | | | | | 10 | 100 | 100 | 86 | |
| | | | | | | | | 15 | 100 | 100 | 90 | |
| | | | | | | | | 20 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 95 | |
| | | | | | | | | 45 | 100 | 100 | 97 | |
| | | | | | | | | 60 | 100 | 100 | 98 | |

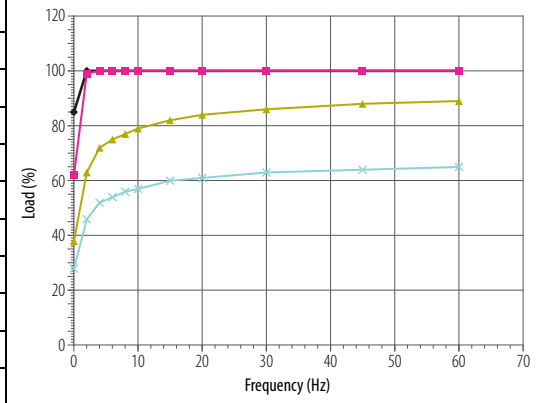
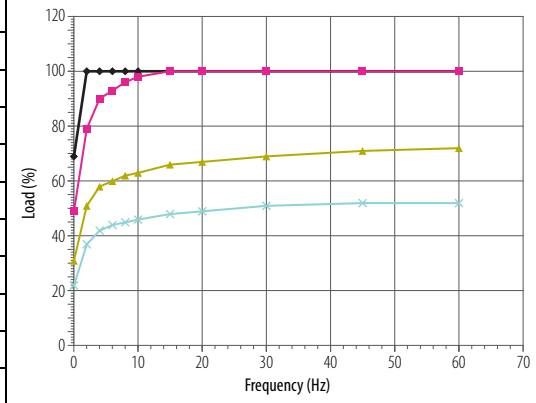
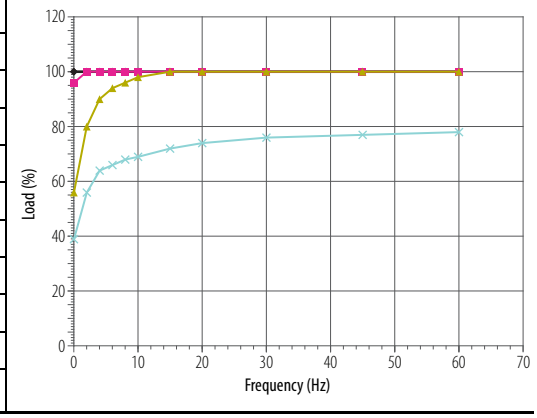
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E690 | 9 | 800 | 760 | 700 | 690 | 600 | 595 | 0 | 64 | 51 | 31 |  |
| | | | | | | | | 2 | 100 | 83 | 53 | |
| | | | | | | | | 4 | 100 | 94 | 60 | |
| | | | | | | | | 6 | 100 | 98 | 63 | |
| | | | | | | | | 8 | 100 | 100 | 65 | |
| | | | | | | | | 10 | 100 | 100 | 66 | |
| | | | | | | | | 15 | 100 | 100 | 69 | |
| | | | | | | | | 20 | 100 | 100 | 71 | |
| | | | | | | | | 30 | 100 | 100 | 73 | |
| | | | | | | | | 45 | 100 | 100 | 75 | |
| | | | | | | | | 60 | 100 | 100 | 75 | |
| E760 | 9 | 900 | 825 | 800 | 760 | 700 | 690 | 0 | 57 | 46 | 28 |  |
| | | | | | | | | 2 | 91 | 75 | 47 | |
| | | | | | | | | 4 | 100 | 84 | 54 | |
| | | | | | | | | 6 | 100 | 88 | 56 | |
| | | | | | | | | 8 | 100 | 90 | 58 | |
| | | | | | | | | 10 | 100 | 92 | 59 | |
| | | | | | | | | 15 | 100 | 96 | 62 | |
| | | | | | | | | 20 | 100 | 98 | 63 | |
| | | | | | | | | 30 | 100 | 100 | 65 | |
| | | | | | | | | 45 | 100 | 100 | 67 | |
| | | | | | | | | 60 | 100 | 100 | 68 | |
| E825 | 9 | 1000 | 980 | 900 | 825 | 800 | 760 | 0 | 70 | 59 | 40 |  |
| | | | | | | | | 2 | 100 | 94 | 66 | |
| | | | | | | | | 4 | 100 | 100 | 74 | |
| | | | | | | | | 6 | 100 | 100 | 76 | |
| | | | | | | | | 8 | 100 | 100 | 78 | |
| | | | | | | | | 10 | 100 | 100 | 80 | |
| | | | | | | | | 15 | 100 | 100 | 82 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 86 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 88 | |

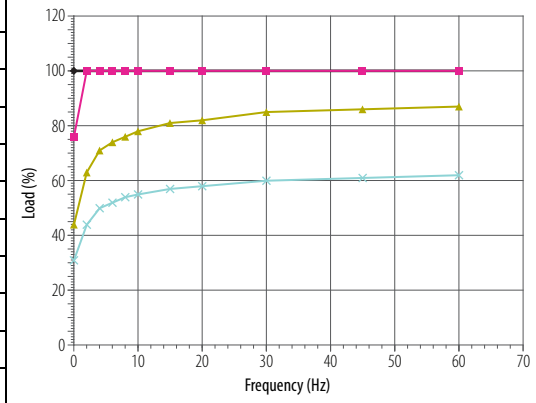
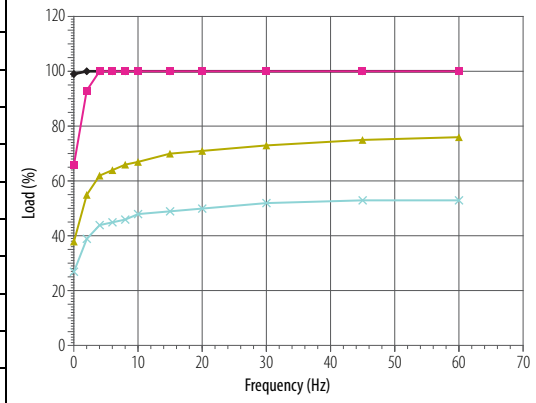
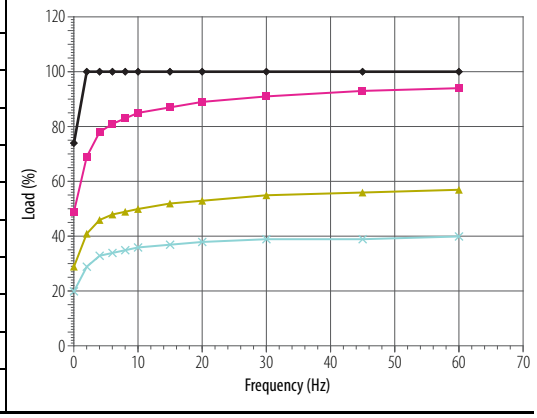
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E980 | 9 | 1100 | 1102 | 1000 | 980 | 900 | 825 | 0 | 60 | 51 | 34 |  |
| | | | | | | | | 2 | 93 | 81 | 57 | |
| | | | | | | | | 4 | 100 | 89 | 63 | |
| | | | | | | | | 6 | 100 | 92 | 65 | |
| | | | | | | | | 8 | 100 | 94 | 67 | |
| | | | | | | | | 10 | 100 | 96 | 68 | |
| | | | | | | | | 15 | 100 | 99 | 71 | |
| | | | | | | | | 20 | 100 | 100 | 72 | |
| | | | | | | | | 30 | 100 | 100 | 74 | |
| | | | | | | | | 45 | 100 | 100 | 75 | |
| | | | | | | | | 60 | 100 | 100 | 76 | |
| E1K1 | 10 | 1250 | 1220 | 1100 | 1045 | 1000 | 980 | 0 | 86 | 73 | 49 |  |
| | | | | | | | | 2 | 100 | 100 | 82 | |
| | | | | | | | | 4 | 100 | 100 | 91 | |
| | | | | | | | | 6 | 100 | 100 | 94 | |
| | | | | | | | | 8 | 100 | 100 | 97 | |
| | | | | | | | | 10 | 100 | 100 | 99 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| E1K2 | 10 | 1500 | 1430 | 1250 | 1220 | 1100 | 1045 | 0 | 74 | 63 | 42 |  |
| | | | | | | | | 2 | 100 | 100 | 70 | |
| | | | | | | | | 4 | 100 | 100 | 78 | |
| | | | | | | | | 6 | 100 | 100 | 81 | |
| | | | | | | | | 8 | 100 | 100 | 83 | |
| | | | | | | | | 10 | 100 | 100 | 84 | |
| | | | | | | | | 15 | 100 | 100 | 87 | |
| | | | | | | | | 20 | 100 | 100 | 89 | |
| | | | | | | | | 30 | 100 | 100 | 91 | |
| | | | | | | | | 45 | 100 | 100 | 92 | |
| | | | | | | | | 60 | 100 | 100 | 93 | |

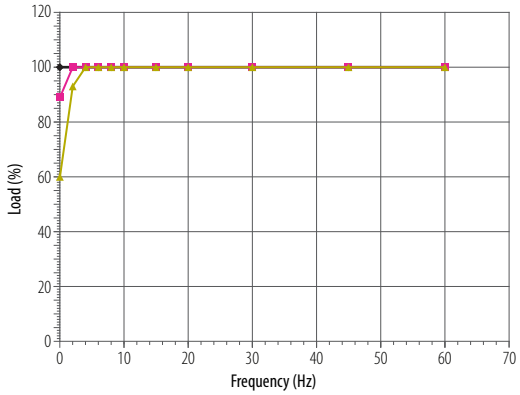
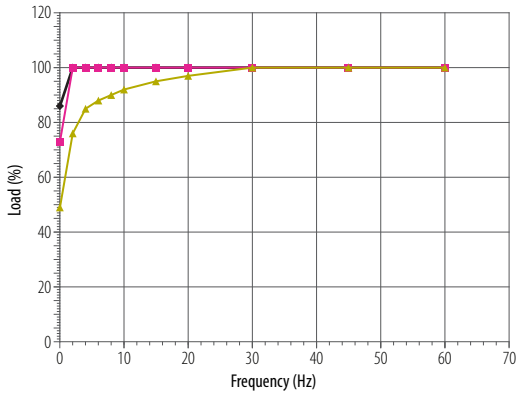
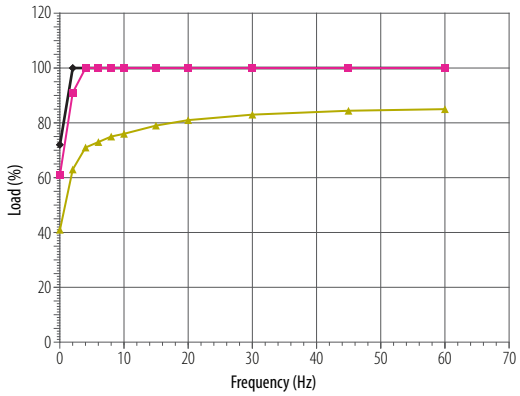
| Cat. No. 20G… | Frame | 600V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| E1K5<br>E2K9 | 10<br>13 | 1600<br>3300 | 1624<br>3190 | 1500<br>3100 | 1430<br>2998 | 1250<br>2500 | 1220<br>2475 | 0 | 62 | 53 | 36 |  |
| | | | | | | | | 2 | 97 | 85 | 59 | |
| | | | | | | | | 4 | 100 | 94 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 99 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 72 | |
| | | | | | | | | 15 | 100 | 100 | 74 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| E2K0<br>E3K9 | 11<br>14 | 2100<br>4400 | 2146<br>4234 | 2000<br>4100 | 1946<br>3979 | 1800<br>3300 | 1700<br>3285 | 0 | 62 | 53 | 36 |  |
| | | | | | | | | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 73 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| E2K4<br>E4K9 | 12<br>15 | 2600<br>5500 | 2668<br>5278 | 2500<br>5100 | 2420<br>4960 | 2100<br>4100 | 2070<br>4095 | 0 | 62 | 53 | 36 |  |
| | | | | | | | | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 73 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |

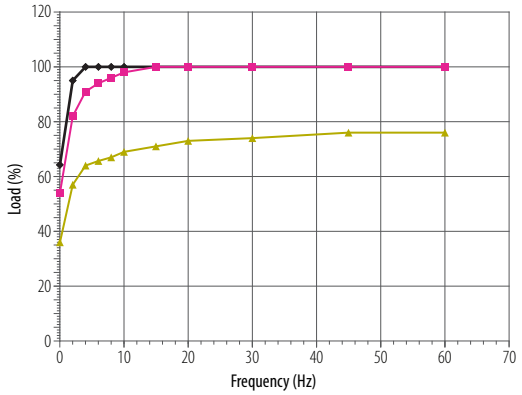
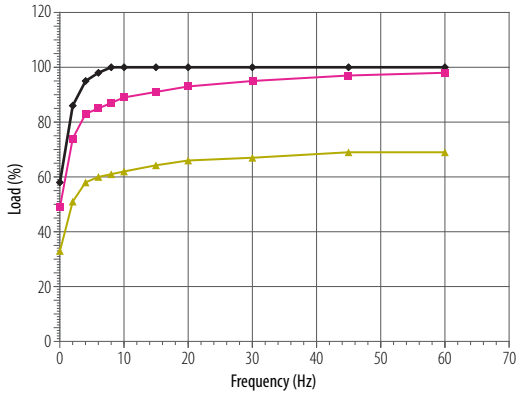
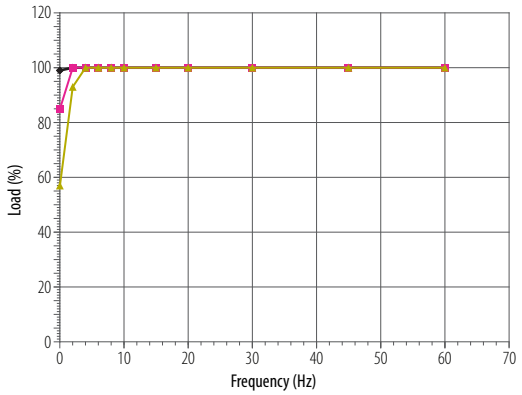
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| F015 | 5 | 15 | 20 | 11 | 15 | 7.5 | 12 | 0 | 100 | 100 | 100 | 100 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| F020 | 5 | 18.5 | 23 | 15 | 20 | 11 | 15 | 0 | 100 | 100 | 100 | 79 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| F023 | 5 | 22 | 30 | 18.5 | 23 | 15 | 20 | 0 | 100 | 100 | 89 | 64 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |

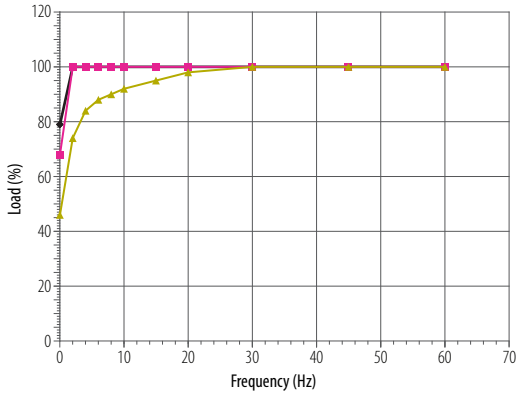
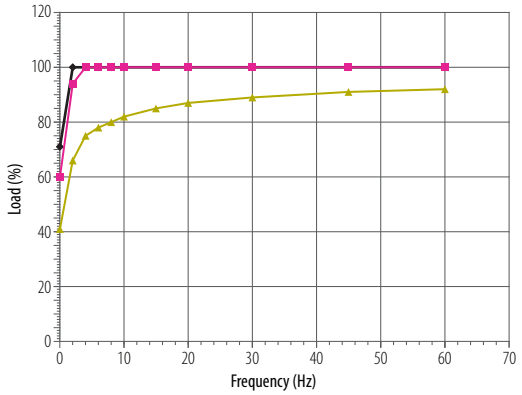
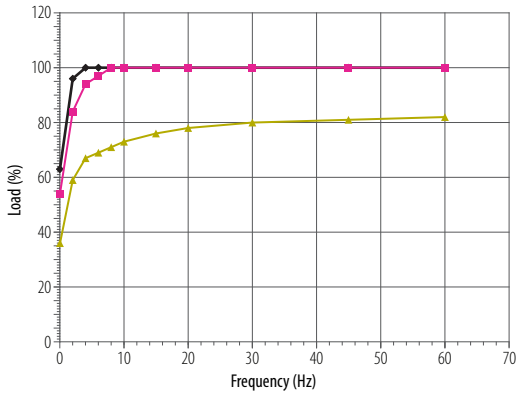
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| F030 | 5 | 30 | 34 | 22 | 30 | 18.5 | 23 | 0 | 100 | 100 | 75 | 54 |  |
| | | | | | | | | 2 | 100 | 100 | 100 | 89 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 100 | |
| F034 | 5 | 37 | 46 | 30 | 34 | 22 | 30 | 0 | 100 | 93 | 58 | 42 |  |
| | | | | | | | | 2 | 100 | 100 | 96 | 70 | |
| | | | | | | | | 4 | 100 | 100 | 100 | 79 | |
| | | | | | | | | 6 | 100 | 100 | 100 | 83 | |
| | | | | | | | | 8 | 100 | 100 | 100 | 85 | |
| | | | | | | | | 10 | 100 | 100 | 100 | 87 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 90 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 93 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 95 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 98 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 99 | |
| F046 | 5 | 45 | 50 | 37 | 46 | 30 | 34 | 0 | 100 | 73 | 46 | 33 |  |
| | | | | | | | | 2 | 100 | 100 | 75 | 55 | |
| | | | | | | | | 4 | 100 | 100 | 86 | 62 | |
| | | | | | | | | 6 | 100 | 100 | 89 | 65 | |
| | | | | | | | | 8 | 100 | 100 | 92 | 67 | |
| | | | | | | | | 10 | 100 | 100 | 94 | 68 | |
| | | | | | | | | 15 | 100 | 100 | 98 | 71 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 73 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 75 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 77 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 78 | |

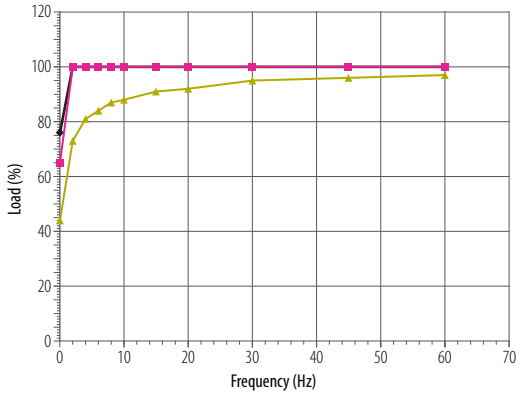
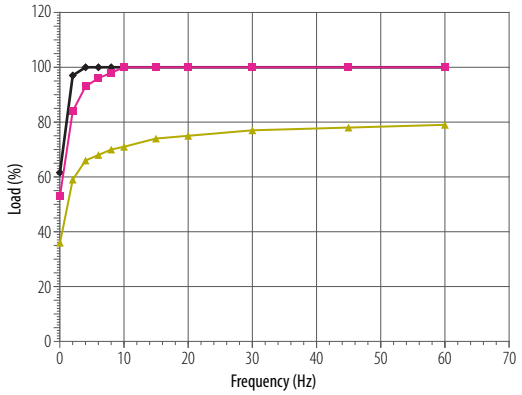
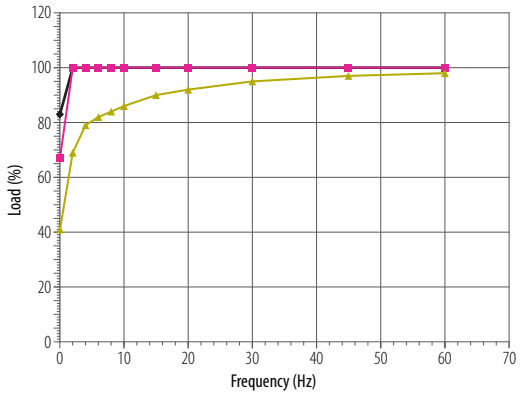
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| F050 | 5 | 55 | 61 | 45 | 50 | 37 | 46 | 0 | 85 | 62 | 38 | 28 |  |
| | | | | | | | | 2 | 100 | 99 | 63 | 46 | |
| | | | | | | | | 4 | 100 | 100 | 72 | 52 | |
| | | | | | | | | 6 | 100 | 100 | 75 | 54 | |
| | | | | | | | | 8 | 100 | 100 | 77 | 56 | |
| | | | | | | | | 10 | 100 | 100 | 79 | 57 | |
| | | | | | | | | 15 | 100 | 100 | 82 | 60 | |
| | | | | | | | | 20 | 100 | 100 | 84 | 61 | |
| | | | | | | | | 30 | 100 | 100 | 86 | 63 | |
| | | | | | | | | 45 | 100 | 100 | 88 | 64 | |
| | | | | | | | | 60 | 100 | 100 | 89 | 65 | |
| F061 | 5 | 75 | 82 | 55 | 61 | 45 | 50 | 0 | 69 | 49 | 31 | 22 |  |
| | | | | | | | | 2 | 100 | 79 | 51 | 37 | |
| | | | | | | | | 4 | 100 | 90 | 58 | 42 | |
| | | | | | | | | 6 | 100 | 93 | 60 | 44 | |
| | | | | | | | | 8 | 100 | 96 | 62 | 45 | |
| | | | | | | | | 10 | 100 | 98 | 63 | 46 | |
| | | | | | | | | 15 | 100 | 100 | 66 | 48 | |
| | | | | | | | | 20 | 100 | 100 | 67 | 49 | |
| | | | | | | | | 30 | 100 | 100 | 69 | 51 | |
| | | | | | | | | 45 | 100 | 100 | 71 | 52 | |
| | | | | | | | | 60 | 100 | 100 | 72 | 52 | |
| F082 | 6 | 90 | 98 | 75 | 82 | 55 | 61 | 0 | 100 | 96 | 56 | 39 |  |
| | | | | | | | | 2 | 100 | 100 | 80 | 56 | |
| | | | | | | | | 4 | 100 | 100 | 90 | 64 | |
| | | | | | | | | 6 | 100 | 100 | 94 | 66 | |
| | | | | | | | | 8 | 100 | 100 | 96 | 68 | |
| | | | | | | | | 10 | 100 | 100 | 98 | 69 | |
| | | | | | | | | 15 | 100 | 100 | 100 | 72 | |
| | | | | | | | | 20 | 100 | 100 | 100 | 74 | |
| | | | | | | | | 30 | 100 | 100 | 100 | 76 | |
| | | | | | | | | 45 | 100 | 100 | 100 | 77 | |
| | | | | | | | | 60 | 100 | 100 | 100 | 78 | |

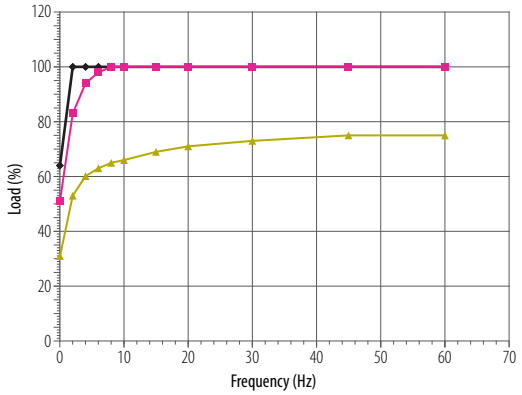
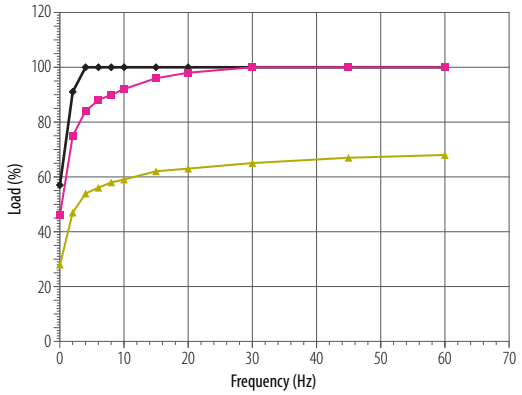
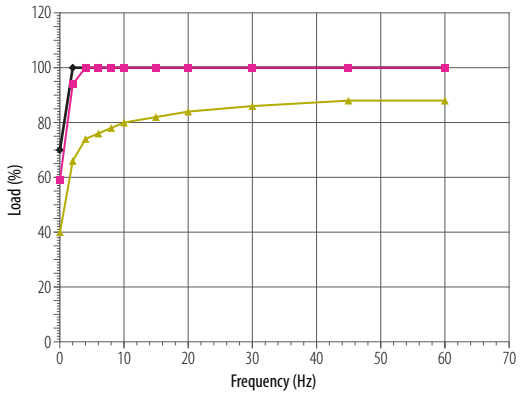
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP00, UL Open Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 2 kHz | 4 kHz | 8 kHz | 12 kHz | |
| F098 | 6 | 110 | 119 | 90 | 98 | 75 | 82 | 0 | 100 | 76 | 44 | 31 |  |
| | | | | | | | | 2 | 100 | 100 | 63 | 44 | |
| | | | | | | | | 4 | 100 | 100 | 71 | 50 | |
| | | | | | | | | 6 | 100 | 100 | 74 | 52 | |
| | | | | | | | | 8 | 100 | 100 | 76 | 54 | |
| | | | | | | | | 10 | 100 | 100 | 78 | 55 | |
| | | | | | | | | 15 | 100 | 100 | 81 | 57 | |
| | | | | | | | | 20 | 100 | 100 | 82 | 58 | |
| | | | | | | | | 30 | 100 | 100 | 85 | 60 | |
| | | | | | | | | 45 | 100 | 100 | 86 | 61 | |
| | | | | | | | | 60 | 100 | 100 | 87 | 62 | |
| F119 | 6 | 132 | 142 | 110 | 119 | 90 | 98 | 0 | 99 | 66 | 38 | 27 |  |
| | | | | | | | | 2 | 100 | 93 | 55 | 39 | |
| | | | | | | | | 4 | 100 | 100 | 62 | 44 | |
| | | | | | | | | 6 | 100 | 100 | 64 | 45 | |
| | | | | | | | | 8 | 100 | 100 | 66 | 46 | |
| | | | | | | | | 10 | 100 | 100 | 67 | 48 | |
| | | | | | | | | 15 | 100 | 100 | 70 | 49 | |
| | | | | | | | | 20 | 100 | 100 | 71 | 50 | |
| | | | | | | | | 30 | 100 | 100 | 73 | 52 | |
| | | | | | | | | 45 | 100 | 100 | 75 | 53 | |
| | | | | | | | | 60 | 100 | 100 | 76 | 53 | |
| F142 | 6 | 160 | 171 | 132 | 142 | 110 | 119 | 0 | 74 | 49 | 29 | 20 |  |
| | | | | | | | | 2 | 100 | 69 | 41 | 29 | |
| | | | | | | | | 4 | 100 | 78 | 46 | 33 | |
| | | | | | | | | 6 | 100 | 81 | 48 | 34 | |
| | | | | | | | | 8 | 100 | 83 | 49 | 35 | |
| | | | | | | | | 10 | 100 | 85 | 50 | 36 | |
| | | | | | | | | 15 | 100 | 87 | 52 | 37 | |
| | | | | | | | | 20 | 100 | 89 | 53 | 38 | |
| | | | | | | | | 30 | 100 | 92 | 55 | 39 | |
| | | | | | | | | 45 | 100 | 93 | 56 | 39 | |
| | | | | | | | | 60 | 100 | 94 | 57 | 40 | |

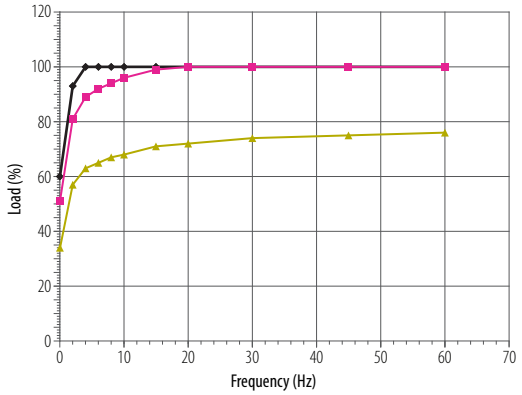
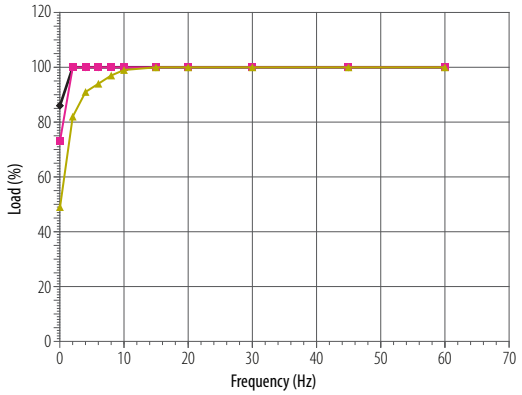
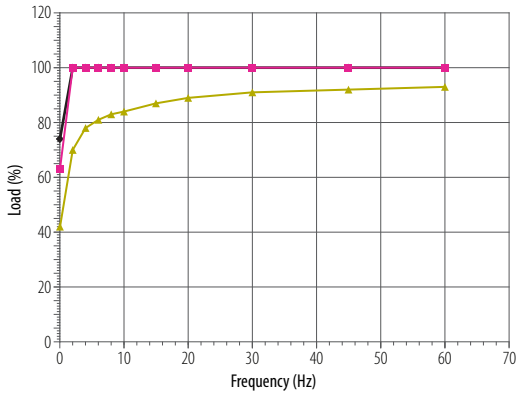
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F171 | 7 | 200 | 215 | 160 | 171 | 132 | 142 | 0 | 100 | 89 | 60 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F215 | 7 | 250 | 265 | 200 | 215 | 160 | 171 | 0 | 86 | 73 | 49 |  |
| | | | | | | | | 2 | 100 | 100 | 76 | |
| | | | | | | | | 4 | 100 | 100 | 85 | |
| | | | | | | | | 6 | 100 | 100 | 88 | |
| | | | | | | | | 8 | 100 | 100 | 90 | |
| | | | | | | | | 10 | 100 | 100 | 92 | |
| | | | | | | | | 15 | 100 | 100 | 95 | |
| | | | | | | | | 20 | 100 | 100 | 97 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F265 | 7 | 315 | 330 | 250 | 265 | 200 | 215 | 0 | 72 | 61 | 41 |  |
| | | | | | | | | 2 | 100 | 91 | 63 | |
| | | | | | | | | 4 | 100 | 100 | 71 | |
| | | | | | | | | 6 | 100 | 100 | 73 | |
| | | | | | | | | 8 | 100 | 100 | 75 | |
| | | | | | | | | 10 | 100 | 100 | 76 | |
| | | | | | | | | 15 | 100 | 100 | 79 | |
| | | | | | | | | 20 | 100 | 100 | 81 | |
| | | | | | | | | 30 | 100 | 100 | 83 | |
| | | | | | | | | 45 | 100 | 100 | 84 | |
| | | | | | | | | 60 | 100 | 100 | 85 | |

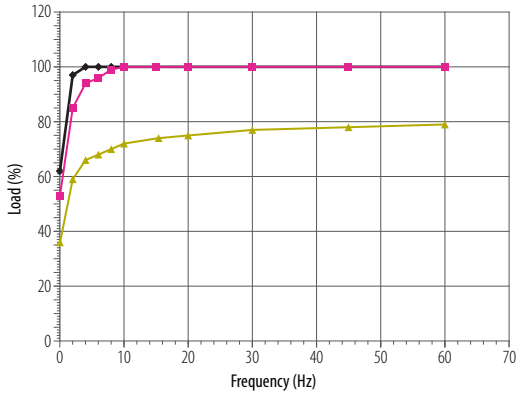
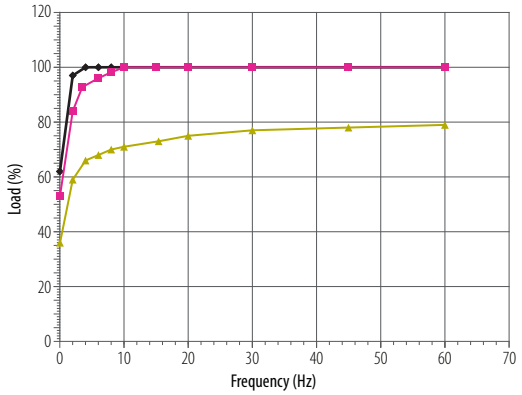
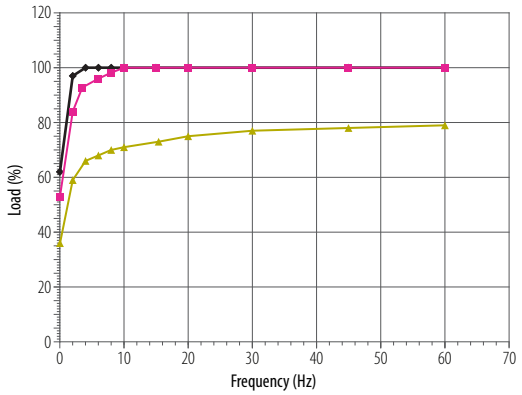
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | |
| F330 | 7 | 355 | 370 | 315 | 330 | 250 | 265 | 0 | 64 | 54 | 36 |  |
| | | | | | | | | 2 | 95 | 82 | 57 | |
| | | | | | | | | 4 | 100 | 91 | 64 | |
| | | | | | | | | 6 | 100 | 94 | 66 | |
| | | | | | | | | 8 | 100 | 96 | 67 | |
| | | | | | | | | 10 | 100 | 98 | 69 | |
| | | | | | | | | 15 | 100 | 100 | 71 | |
| | | | | | | | | 20 | 100 | 100 | 73 | |
| | | | | | | | | 30 | 100 | 100 | 74 | |
| | | | | | | | | 45 | 100 | 100 | 76 | |
| | | | | | | | | 60 | 100 | 100 | 76 | |
| F370 | 7 | 400 | 415 | 355 | 370 | 315 | 330 | 0 | 58 | 49 | 33 |  |
| | | | | | | | | 2 | 86 | 74 | 51 | |
| | | | | | | | | 4 | 95 | 83 | 58 | |
| | | | | | | | | 6 | 98 | 85 | 60 | |
| | | | | | | | | 8 | 100 | 87 | 61 | |
| | | | | | | | | 10 | 100 | 89 | 62 | |
| | | | | | | | | 15 | 100 | 91 | 64 | |
| | | | | | | | | 20 | 100 | 93 | 66 | |
| | | | | | | | | 30 | 100 | 95 | 67 | |
| | | | | | | | | 45 | 100 | 97 | 69 | |
| | | | | | | | | 60 | 100 | 98 | 69 | |
| F215 | 8 | 250 | 265 | 200 | 215 | 160 | 171 | 0 | 99 | 85 | 57 |  |
| | | | | | | | | 2 | 100 | 100 | 93 | |
| | | | | | | | | 4 | 100 | 100 | 100 | |
| | | | | | | | | 6 | 100 | 100 | 100 | |
| | | | | | | | | 8 | 100 | 100 | 100 | |
| | | | | | | | | 10 | 100 | 100 | 100 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F265 | 8 | 315 | 330 | 250 | 265 | 200 | 215 | 0 | 79 | 68 | 46 |  |
| | | | | | | | | 2 | 100 | 100 | 74 | |
| | | | | | | | | 4 | 100 | 100 | 84 | |
| | | | | | | | | 6 | 100 | 100 | 88 | |
| | | | | | | | | 8 | 100 | 100 | 90 | |
| | | | | | | | | 10 | 100 | 100 | 92 | |
| | | | | | | | | 15 | 100 | 100 | 95 | |
| | | | | | | | | 20 | 100 | 100 | 98 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F330 | 8 | 355 | 370 | 315 | 330 | 250 | 265 | 0 | 71 | 60 | 41 |  |
| | | | | | | | | 2 | 100 | 94 | 66 | |
| | | | | | | | | 4 | 100 | 100 | 75 | |
| | | | | | | | | 6 | 100 | 100 | 78 | |
| | | | | | | | | 8 | 100 | 100 | 80 | |
| | | | | | | | | 10 | 100 | 100 | 82 | |
| | | | | | | | | 15 | 100 | 100 | 85 | |
| | | | | | | | | 20 | 100 | 100 | 87 | |
| | | | | | | | | 30 | 100 | 100 | 89 | |
| | | | | | | | | 45 | 100 | 100 | 91 | |
| | | | | | | | | 60 | 100 | 100 | 92 | |
| F370 | 8 | 400 | 415 | 355 | 370 | 315 | 330 | 0 | 63 | 54 | 36 |  |
| | | | | | | | | 2 | 96 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 94 | 67 | |
| | | | | | | | | 6 | 100 | 97 | 69 | |
| | | | | | | | | 8 | 100 | 100 | 71 | |
| | | | | | | | | 10 | 100 | 100 | 73 | |
| | | | | | | | | 15 | 100 | 100 | 76 | |
| | | | | | | | | 20 | 100 | 100 | 78 | |
| | | | | | | | | 30 | 100 | 100 | 80 | |
| | | | | | | | | 45 | 100 | 100 | 81 | |
| | | | | | | | | 60 | 100 | 100 | 82 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F415 | 8 | 450 | 460 | 400 | 415 | 355 | 370 | 0 | 76 | 65 | 44 |  |
| | | | | | | | | 2 | 100 | 100 | 73 | |
| | | | | | | | | 4 | 100 | 100 | 81 | |
| | | | | | | | | 6 | 100 | 100 | 84 | |
| | | | | | | | | 8 | 100 | 100 | 86 | |
| | | | | | | | | 10 | 100 | 100 | 88 | |
| | | | | | | | | 15 | 100 | 100 | 91 | |
| | | | | | | | | 20 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 95 | |
| | | | | | | | | 45 | 100 | 100 | 96 | |
| | | | | | | | | 60 | 100 | 100 | 97 | |
| F505 | 8 | 560 | 565 | 500 | 505 | 400 | 415 | 0 | 62 | 53 | 36 |  |
| | | | | | | | | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 74 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| F565 | 9 | 630 | 650 | 560 | 565 | 500 | 505 | 0 | 83 | 67 | 41 |  |
| | | | | | | | | 2 | 100 | 100 | 69 | |
| | | | | | | | | 4 | 100 | 100 | 79 | |
| | | | | | | | | 6 | 100 | 100 | 82 | |
| | | | | | | | | 8 | 100 | 100 | 84 | |
| | | | | | | | | 10 | 100 | 100 | 86 | |
| | | | | | | | | 15 | 100 | 100 | 90 | |
| | | | | | | | | 20 | 100 | 100 | 92 | |
| | | | | | | | | 30 | 100 | 100 | 95 | |
| | | | | | | | | 45 | 100 | 100 | 97 | |
| | | | | | | | | 60 | 100 | 100 | 98 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F650 | 9 | 710 | 735 | 630 | 650 | 560 | 565 | 0 | 64 | 51 | 31 |  |
| | | | | | | | | 2 | 100 | 83 | 53 | |
| | | | | | | | | 4 | 100 | 94 | 60 | |
| | | | | | | | | 6 | 100 | 98 | 63 | |
| | | | | | | | | 8 | 100 | 100 | 65 | |
| | | | | | | | | 10 | 100 | 100 | 66 | |
| | | | | | | | | 15 | 100 | 100 | 69 | |
| | | | | | | | | 20 | 100 | 100 | 71 | |
| | | | | | | | | 30 | 100 | 100 | 73 | |
| | | | | | | | | 45 | 100 | 100 | 75 | |
| | | | | | | | | 60 | 100 | 100 | 75 | |
| F735 | 9 | 800 | 820 | 710 | 735 | 630 | 650 | 0 | 57 | 46 | 28 |  |
| | | | | | | | | 2 | 91 | 75 | 47 | |
| | | | | | | | | 4 | 100 | 84 | 54 | |
| | | | | | | | | 6 | 100 | 88 | 56 | |
| | | | | | | | | 8 | 100 | 90 | 58 | |
| | | | | | | | | 10 | 100 | 92 | 59 | |
| | | | | | | | | 15 | 100 | 96 | 62 | |
| | | | | | | | | 20 | 100 | 98 | 63 | |
| | | | | | | | | 30 | 100 | 100 | 65 | |
| | | | | | | | | 45 | 100 | 100 | 67 | |
| | | | | | | | | 60 | 100 | 100 | 68 | |
| F820 | 9 | 900 | 920 | 800 | 820 | 710 | 735 | 0 | 70 | 59 | 40 |  |
| | | | | | | | | 2 | 100 | 94 | 66 | |
| | | | | | | | | 4 | 100 | 100 | 74 | |
| | | | | | | | | 6 | 100 | 100 | 76 | |
| | | | | | | | | 8 | 100 | 100 | 78 | |
| | | | | | | | | 10 | 100 | 100 | 80 | |
| | | | | | | | | 15 | 100 | 100 | 82 | |
| | | | | | | | | 20 | 100 | 100 | 84 | |
| | | | | | | | | 30 | 100 | 100 | 86 | |
| | | | | | | | | 45 | 100 | 100 | 88 | |
| | | | | | | | | 60 | 100 | 100 | 88 | |

| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F920 | 9 | 1000 | 1074 | 900 | 920 | 800 | 820 | 0 | 60 | 51 | 34 |  |
| | | | | | | | | 2 | 93 | 81 | 57 | |
| | | | | | | | | 4 | 100 | 89 | 63 | |
| | | | | | | | | 6 | 100 | 92 | 65 | |
| | | | | | | | | 8 | 100 | 94 | 67 | |
| | | | | | | | | 10 | 100 | 96 | 68 | |
| | | | | | | | | 15 | 100 | 99 | 71 | |
| | | | | | | | | 20 | 100 | 100 | 72 | |
| | | | | | | | | 30 | 100 | 100 | 74 | |
| | | | | | | | | 45 | 100 | 100 | 75 | |
| | | | | | | | | 60 | 100 | 100 | 76 | |
| F1K0 | 10 | 1100 | 1150 | 1000 | 1030 | 900 | 920 | 0 | 86 | 73 | 49 |  |
| | | | | | | | | 2 | 100 | 100 | 82 | |
| | | | | | | | | 4 | 100 | 100 | 91 | |
| | | | | | | | | 6 | 100 | 100 | 94 | |
| | | | | | | | | 8 | 100 | 100 | 97 | |
| | | | | | | | | 10 | 100 | 100 | 99 | |
| | | | | | | | | 15 | 100 | 100 | 100 | |
| | | | | | | | | 20 | 100 | 100 | 100 | |
| | | | | | | | | 30 | 100 | 100 | 100 | |
| | | | | | | | | 45 | 100 | 100 | 100 | |
| | | | | | | | | 60 | 100 | 100 | 100 | |
| F1K1 | 10 | 1250 | 1344 | 1100 | 1150 | 1000 | 1030 | 0 | 74 | 63 | 42 |  |
| | | | | | | | | 2 | 100 | 100 | 70 | |
| | | | | | | | | 4 | 100 | 100 | 78 | |
| | | | | | | | | 6 | 100 | 100 | 81 | |
| | | | | | | | | 8 | 100 | 100 | 83 | |
| | | | | | | | | 10 | 100 | 100 | 84 | |
| | | | | | | | | 15 | 100 | 100 | 87 | |
| | | | | | | | | 20 | 100 | 100 | 89 | |
| | | | | | | | | 30 | 100 | 100 | 91 | |
| | | | | | | | | 45 | 100 | 100 | 92 | |
| | | | | | | | | 60 | 100 | 100 | 93 | |

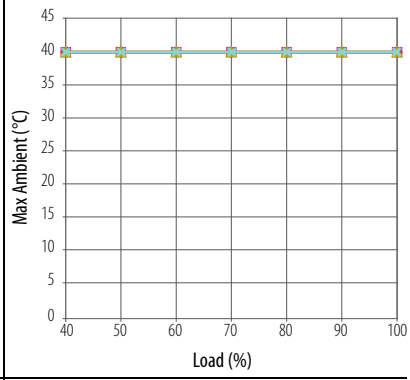
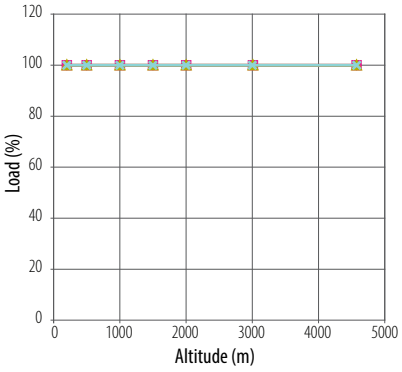
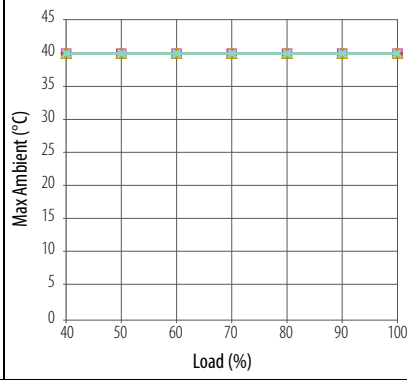
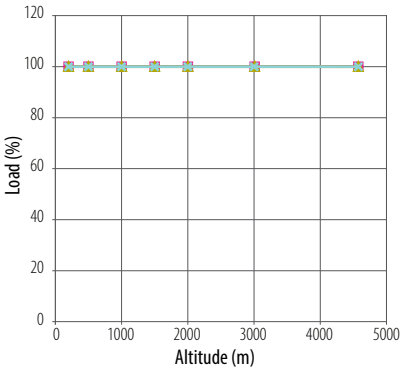
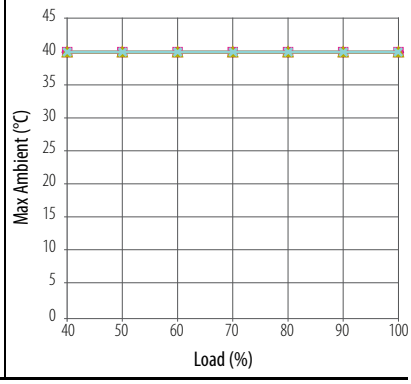
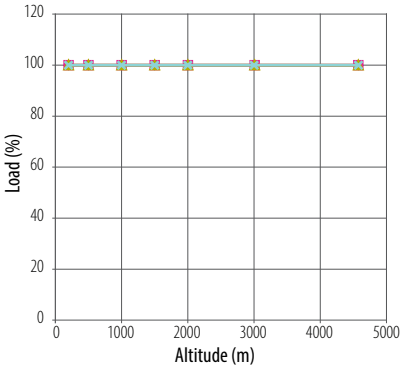
| Cat. No. 20G… | Frame | 690V AC Power Rating | | | | | | Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LD | | ND | | HD | | Output Freq. | PWM Frequency | | | |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | Hz | 1.33 kHz | 2 kHz | 4 kHz | 1.33 kHz 2 kHz 4 kHz |
| F1K4 | 10 | 1500 | 1582 | 1400 | 1419 | 1100 | 1162 | 0 | 62 | 53 | 36 |  |
| F2K7 | 13 | 3080 | 3108 | 2750 | 2778 | 2200 | 2283 | 2 | 97 | 85 | 59 | |
| | | | | | | | | 4 | 100 | 94 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 99 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 72 | |
| | | | | | | | | 15 | 100 | 100 | 74 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| F1K8 | 11 | 2000 | 2091 | 1800 | 1865 | 1500 | 1535 | 0 | 62 | 53 | 36 |  |
| F3K6 | 14 | 4088 | 4125 | 3650 | 3687 | 2920 | 3030 | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 73 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |
| F2K3 | 12 | 2500 | 2599 | 2300 | 2318 | 2000 | 2020 | 0 | 62 | 53 | 36 |  |
| F4K5 | 15 | 5096 | 5142 | 4550 | 4596 | 3640 | 3777 | 2 | 97 | 84 | 59 | |
| | | | | | | | | 4 | 100 | 93 | 66 | |
| | | | | | | | | 6 | 100 | 96 | 68 | |
| | | | | | | | | 8 | 100 | 98 | 70 | |
| | | | | | | | | 10 | 100 | 100 | 71 | |
| | | | | | | | | 15 | 100 | 100 | 73 | |
| | | | | | | | | 20 | 100 | 100 | 75 | |
| | | | | | | | | 30 | 100 | 100 | 77 | |
| | | | | | | | | 45 | 100 | 100 | 78 | |
| | | | | | | | | 60 | 100 | 100 | 79 | |

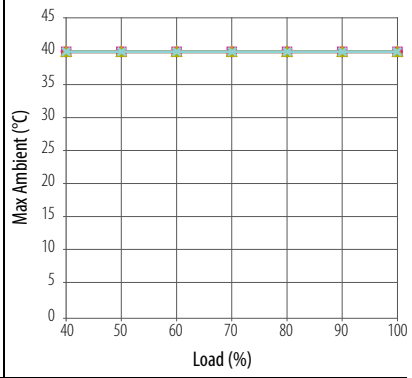
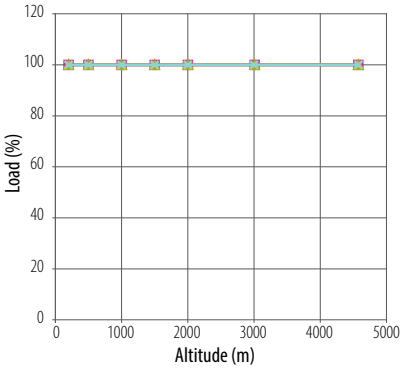
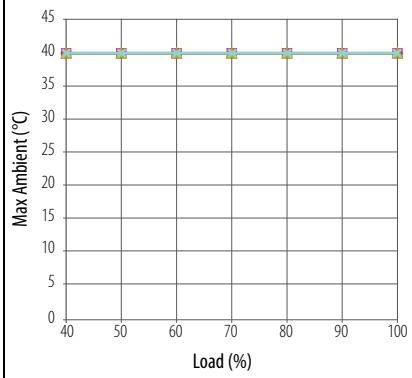
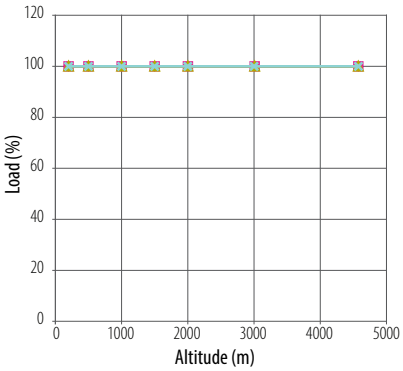
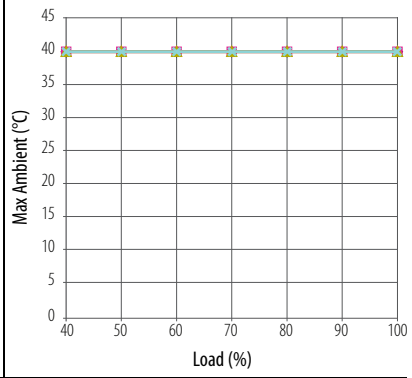
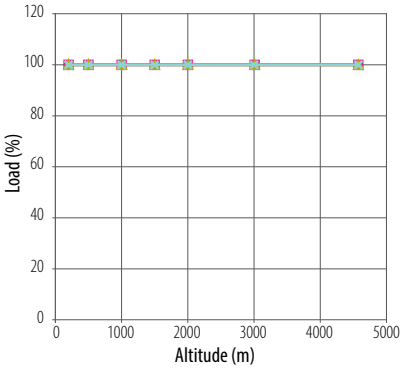
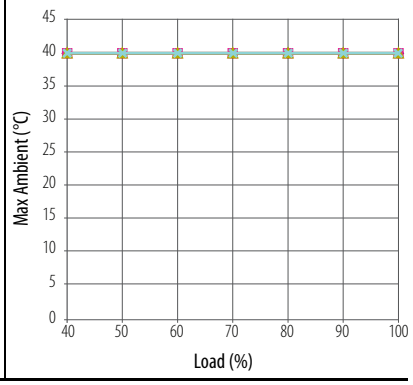
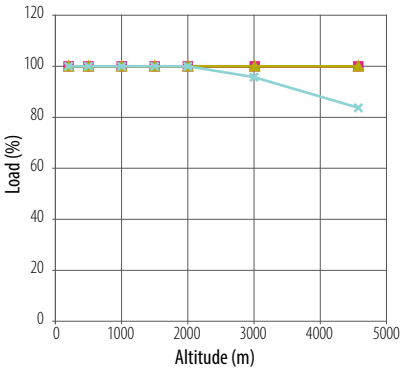
## Temperature and Altitude Derating

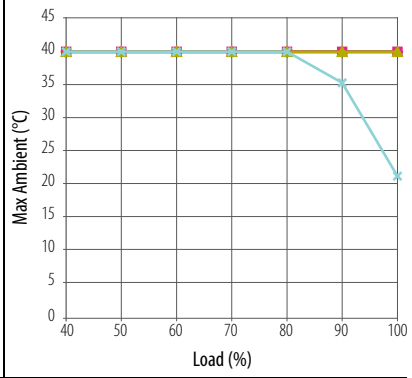
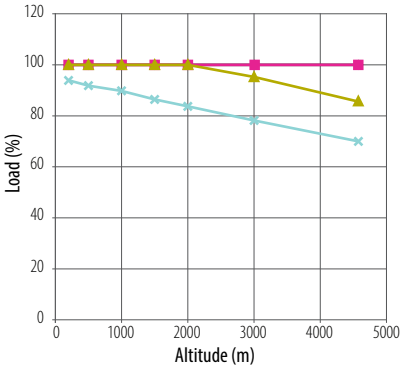
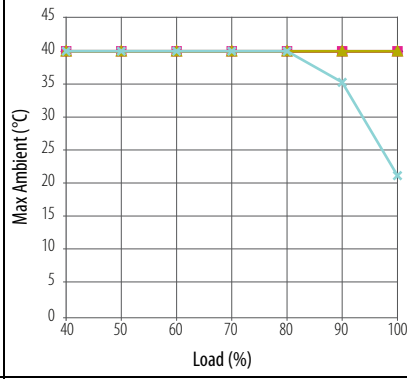
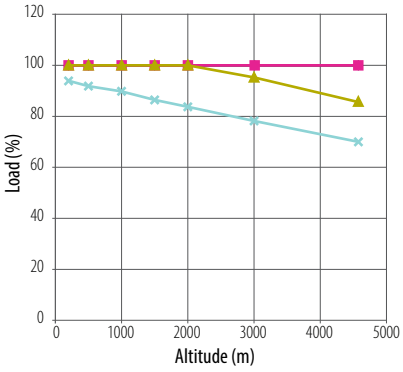
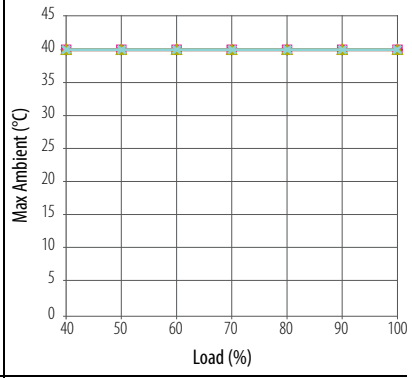
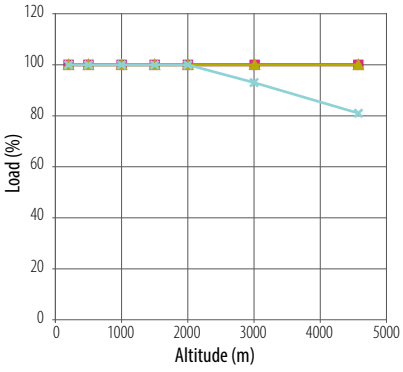
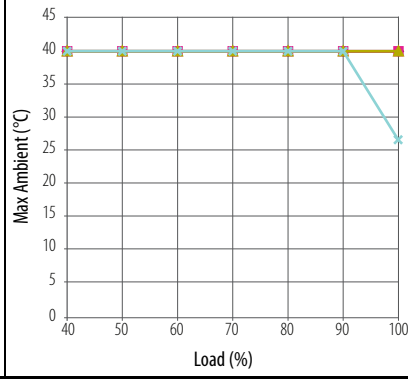
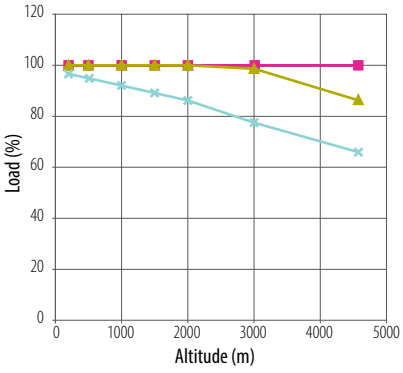
The following graphs show the ambient temperature and altitude deratings for PowerFlex 755T products.

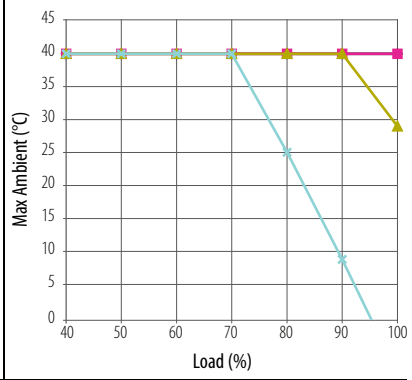
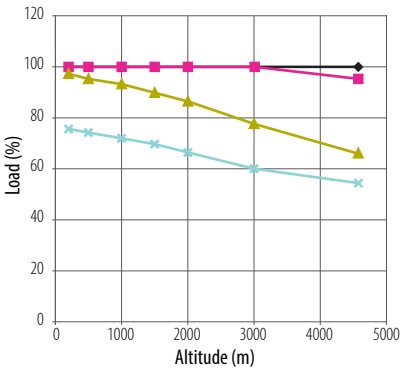
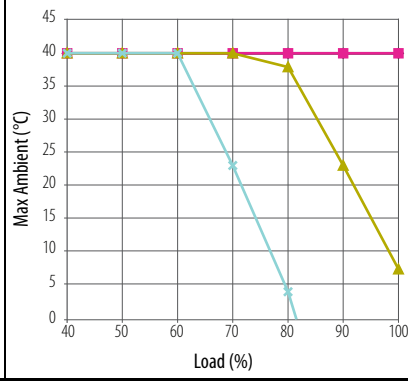
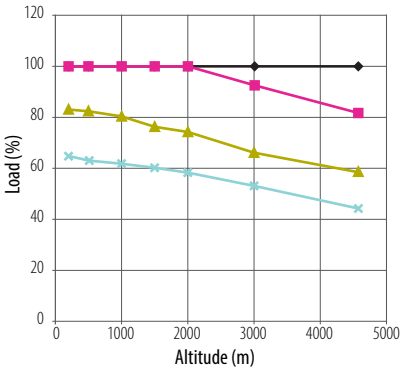
- Each carrier frequency curve is valid for both drives and common bus inverters.
- The lowest carrier frequency curve is valid for bus supplies.

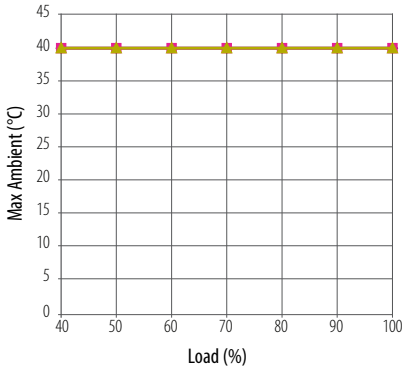
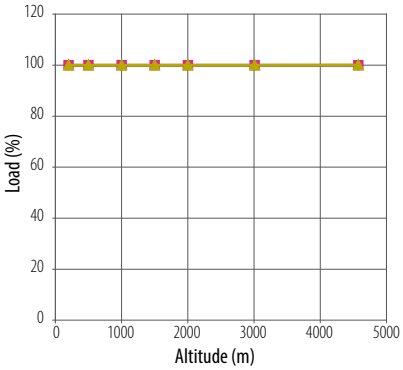
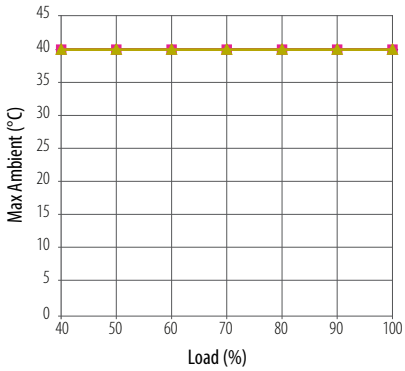
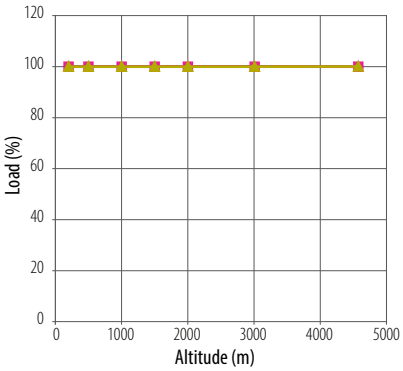
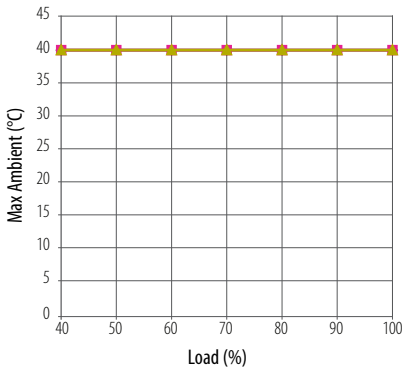
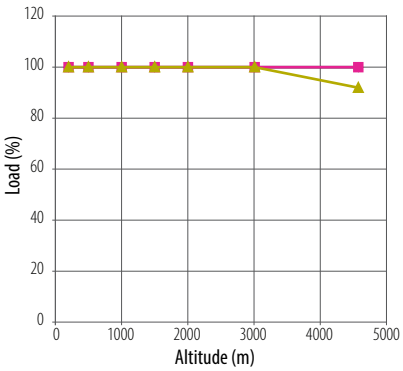
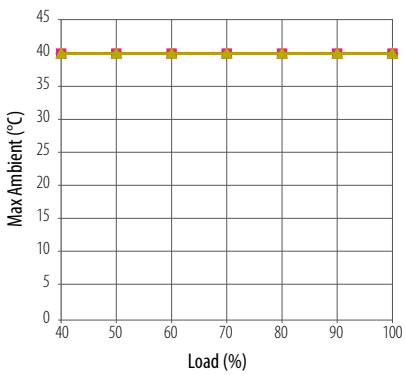
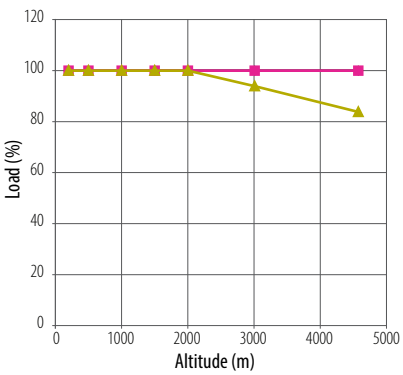
If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 55 are followed.

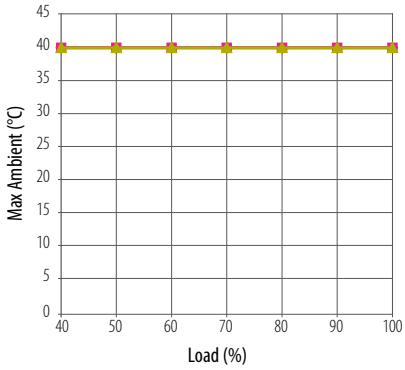
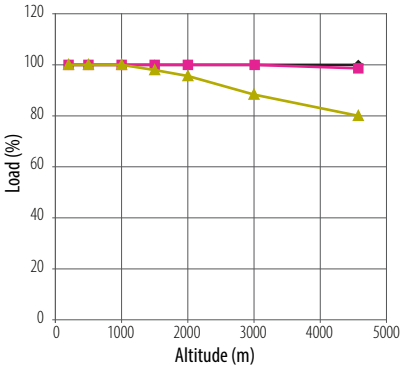
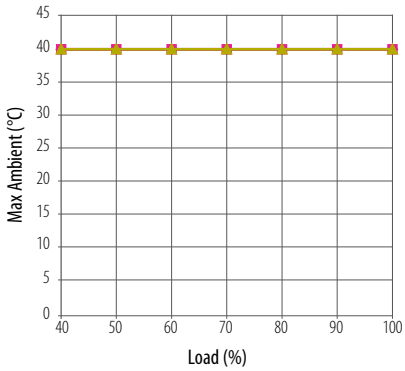
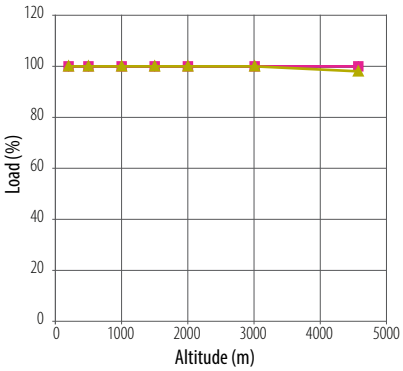
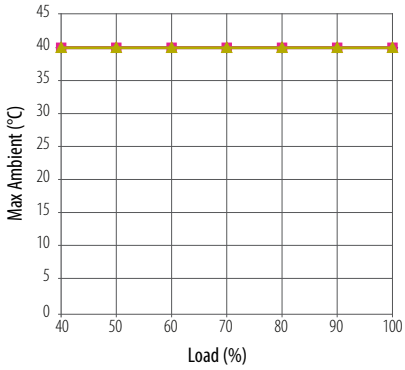
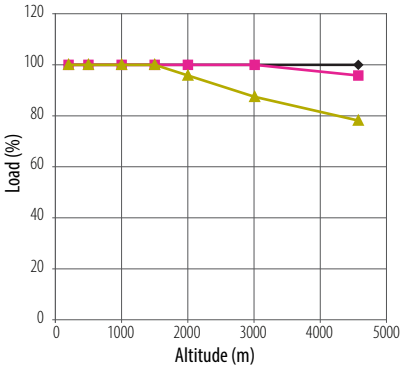
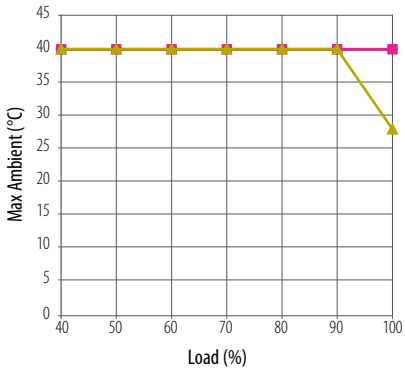
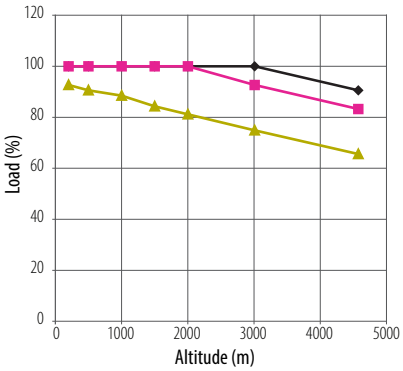
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 2 kHz, 4 kHz, 8 kHz, 12 kHz | 2 kHz, 4 kHz, 8 kHz, 12 kHz |
| 20G…C015 | 5 | 11 | 22 | 7.5 | 15.4 | 11.5 | 5.5 |  |  |
| 20G…C022 | 5 | 15 | 30 | 11 | 22 | 7.5 | 15.4 |  |  |
| 20G…C030 | 5 | 18.5 | 37 | 15 | 30 | 11 | 22 |  |  |

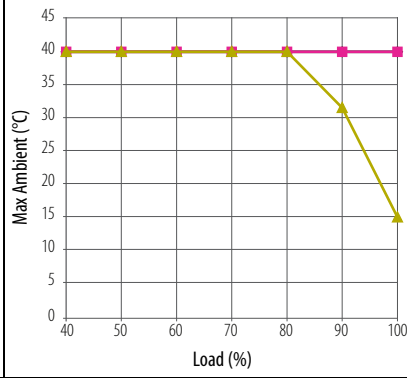
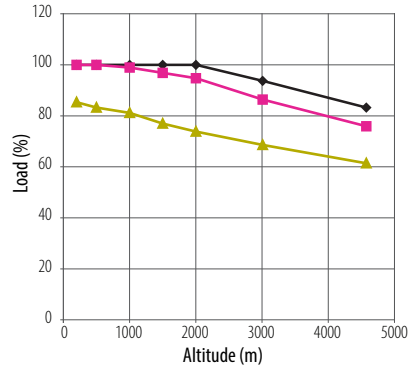
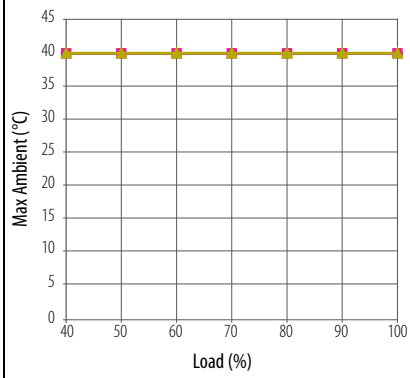
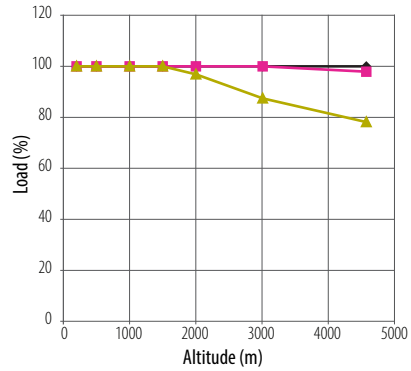
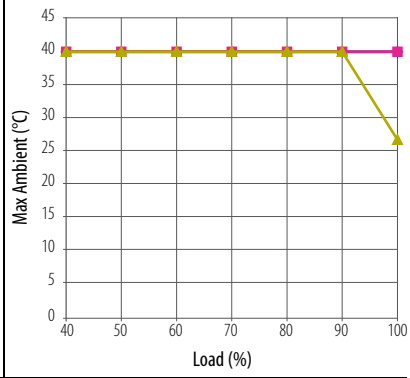
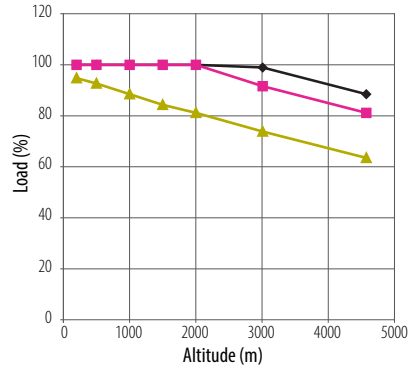
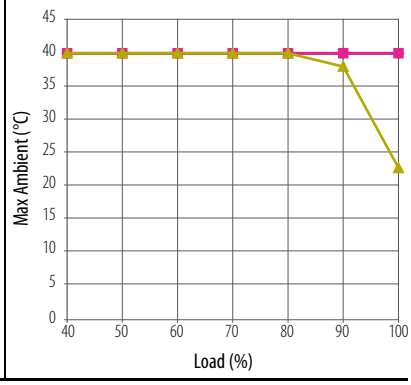
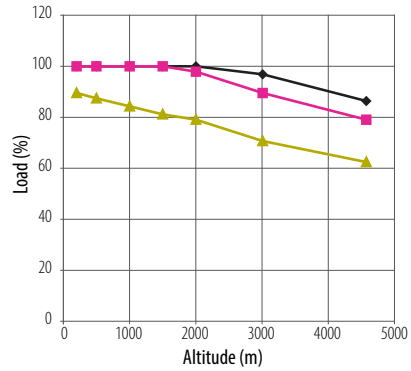
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | | |
| 20G…C037 | 5 | 22 | 43 | 18.5 | 37 | 15 | 30 |  |  |
| 20G…C043 | 5 | 30 | 60 | 22 | 43 | 18.5 | 37 |  |  |
| 20G…C060 | 5 | 37 | 72 | 30 | 60 | 22 | 43 |  |  |
| 20G…C072 | 5 | 45 | 85 | 37 | 72 | 30 | 60 |  |  |

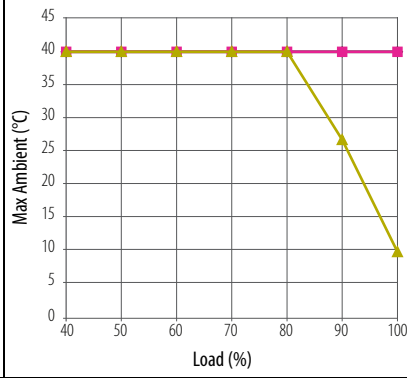
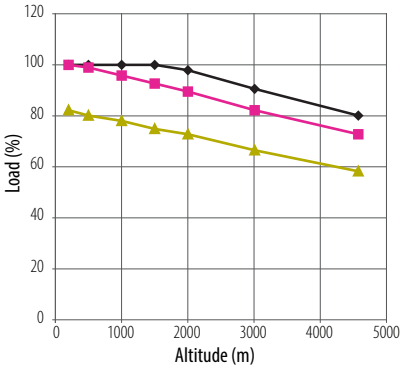
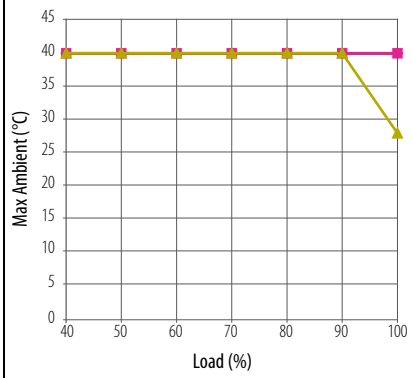
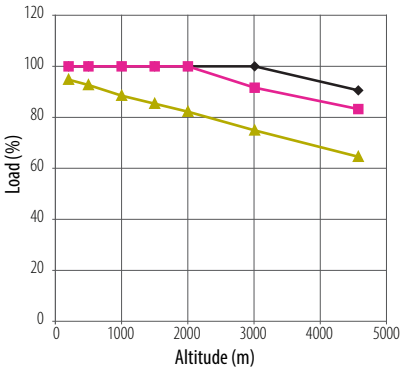
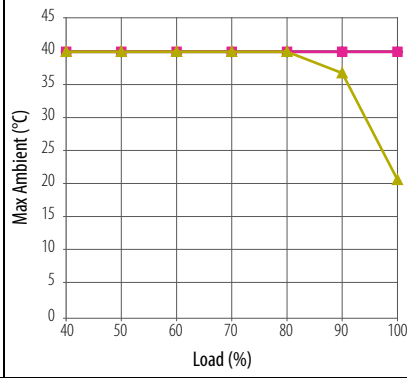
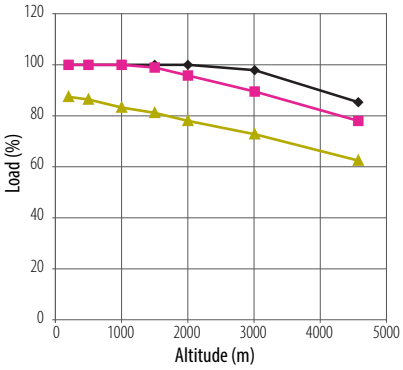
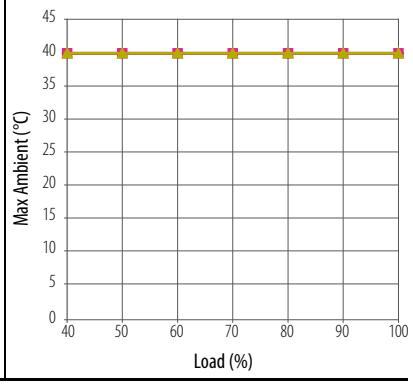
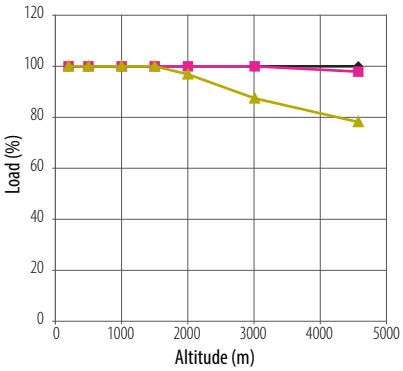
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | | |
| 20G…C085 | 5 | 55 | 104 | 45 | 85 | 37 | 72 |  |  |
| 20G…C104 | 5 | 55 | 104 | 55 | 104 | 45 | 85 |  |  |
| 20G…C140 | 6 | 90 | 170 | 75 | 140 | 55 | 104 |  |  |
| 20G…C176 | 6 | 110 | 205 | 90 | 170 | 75 | 140 |  |  |

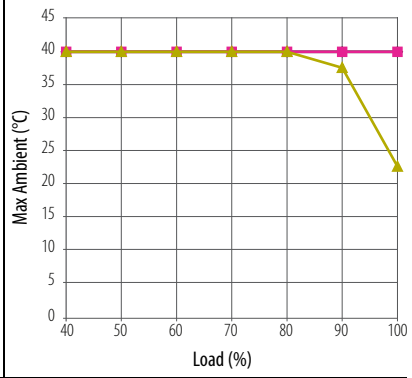
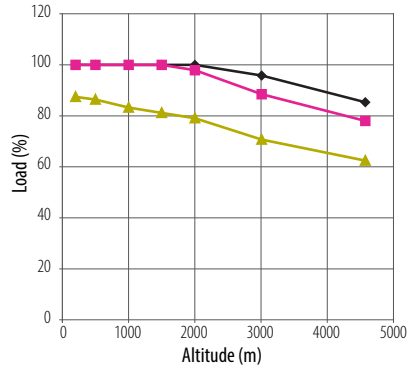
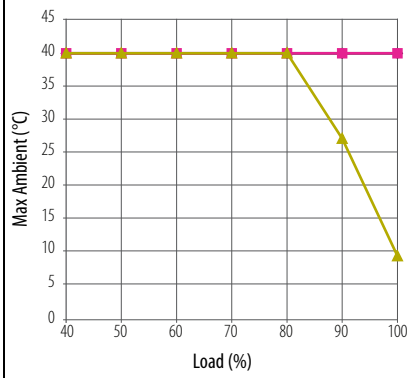
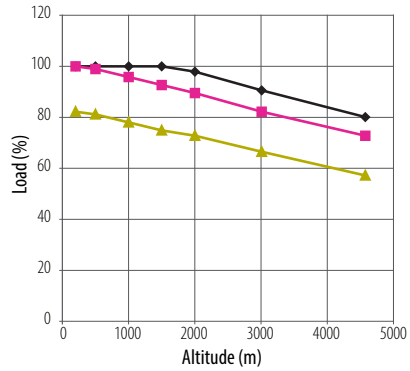
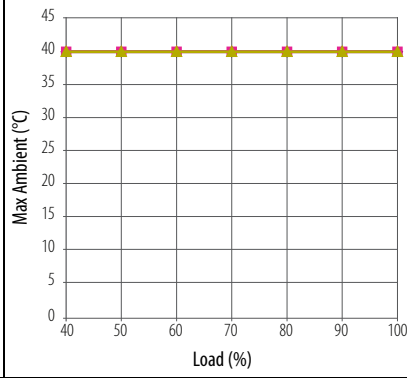
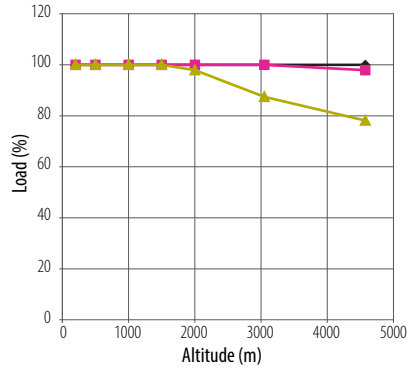
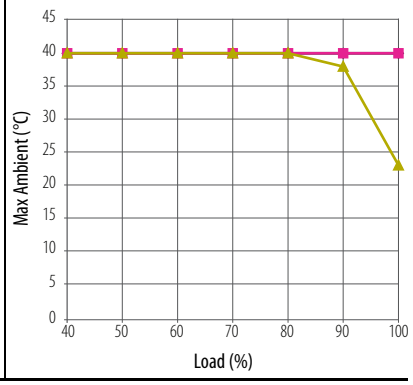
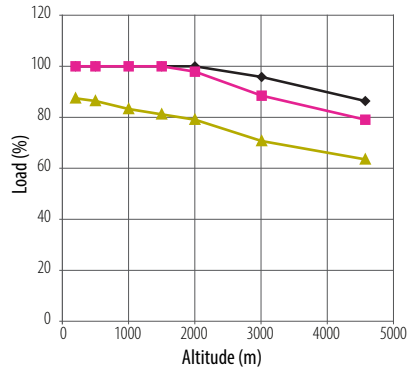
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | | |
| 20G…C205 | 6 | 132 | 260 | 110 | 205 | 90 | 170 |  |  |
| 20G…C260 | 6 | 160 | 302 | 132 | 260 | 110 | 205 |  |  |

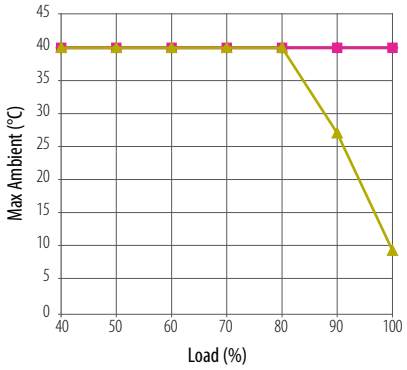
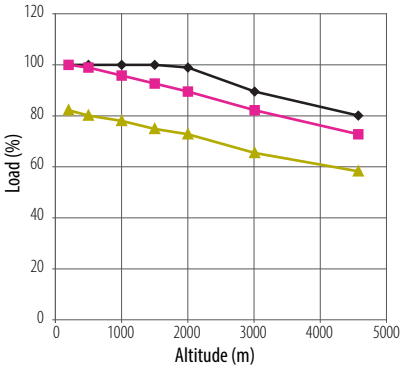
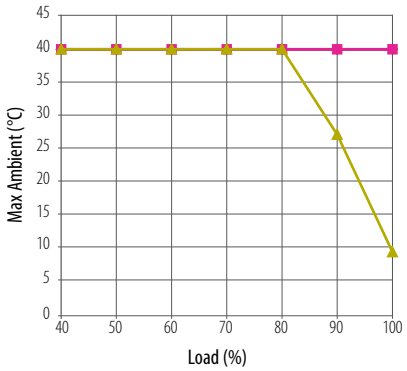
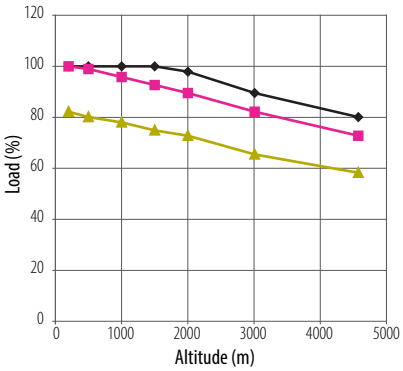
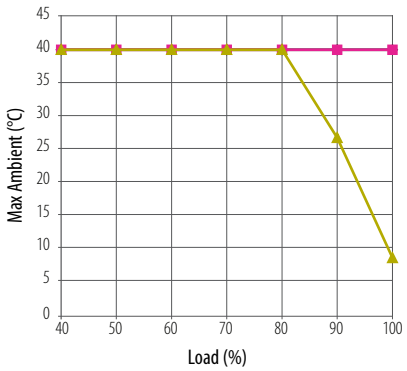
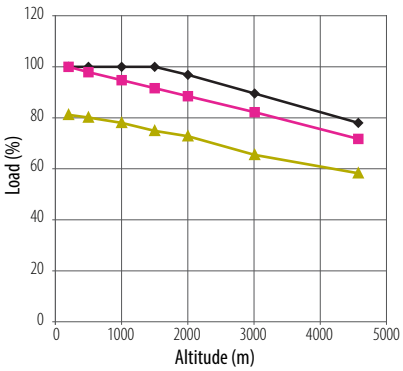
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C302 | 7 | 200 | 367 | 160 | 302 | 132 | 260 |  |  |
| 20G…C367 | 7 | 250 | 460 | 200 | 367 | 160 | 302 |  |  |
| 20G…C460 | 7 | 315 | 540 | 250 | 460 | 200 | 367 |  |  |
| 20G…C540 | 7 | 315 | 585 | 315 | 540 | 250 | 460 |  |  |

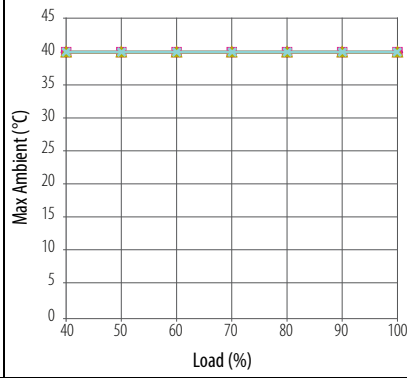
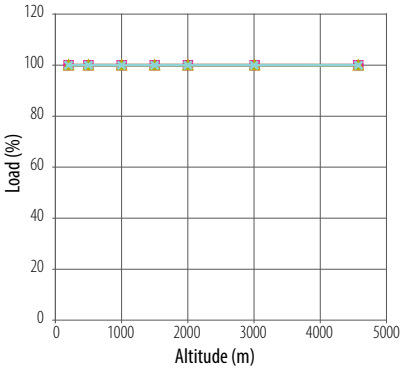
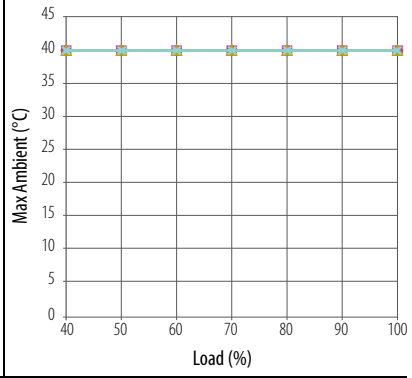
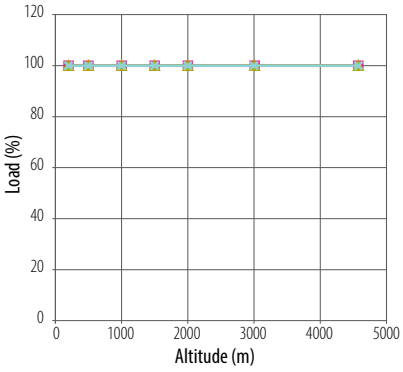
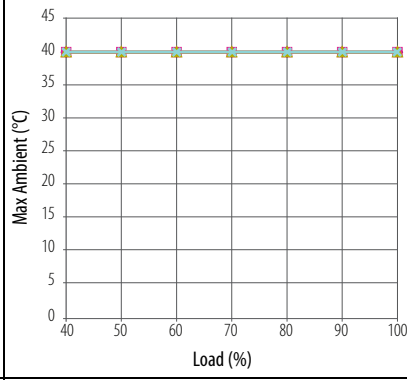
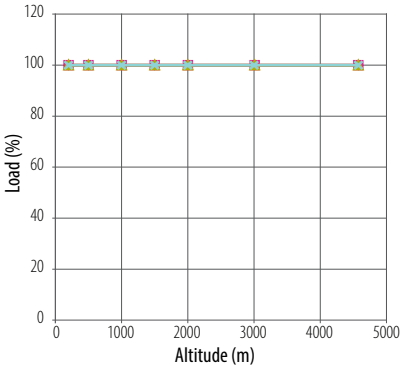
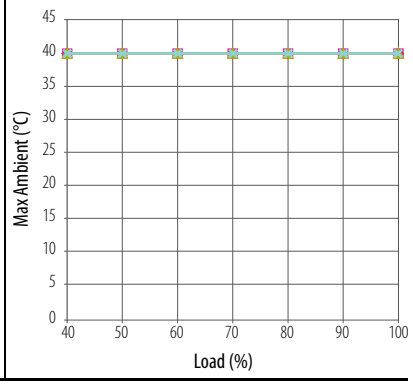
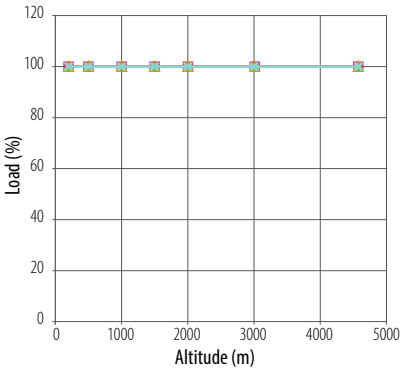
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C585 | 7 | 315 | 617 | 315 | 600 | 250 | 500 |  |  |
| 20G…C302 | 8 | 200 | 367 | 160 | 302 | 132 | 260 |  |  |
| 20G…C367 | 8 | 250 | 460 | 200 | 367 | 160 | 302 |  |  |
| 20G…C460 | 8 | 315 | 540 | 250 | 460 | 200 | 367 |  |  |

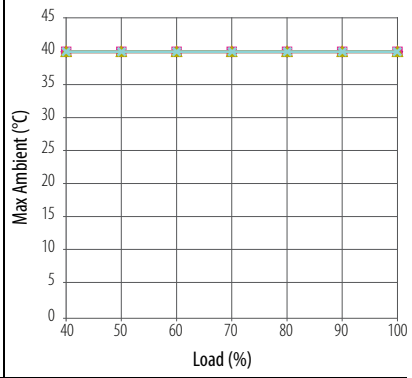
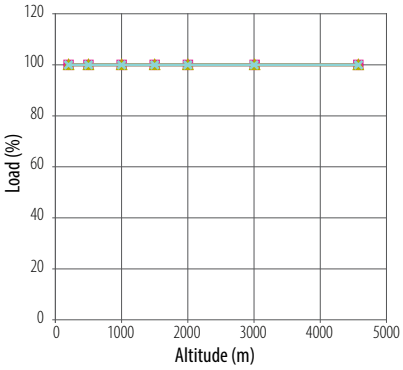
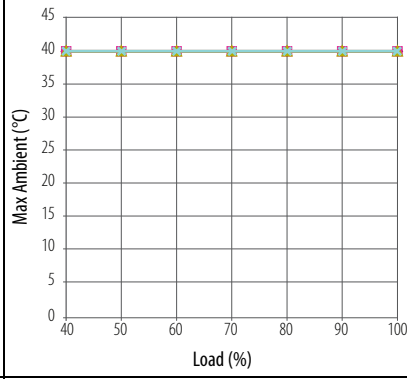
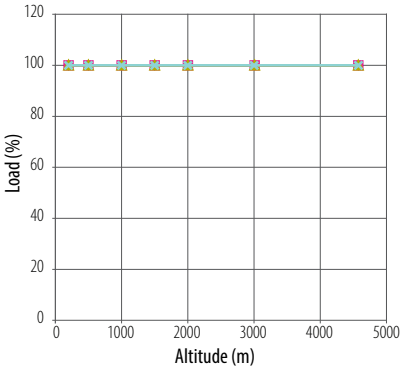
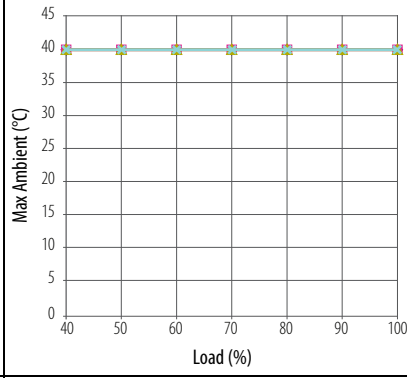
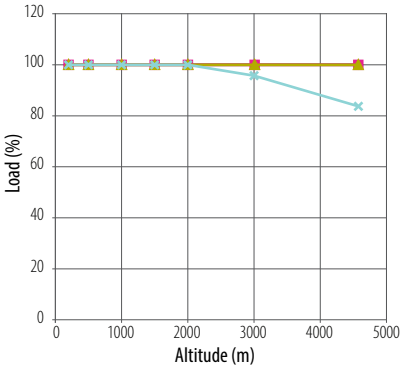
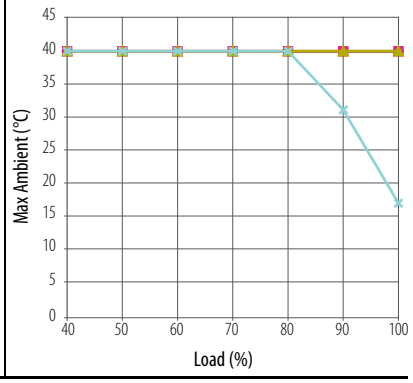
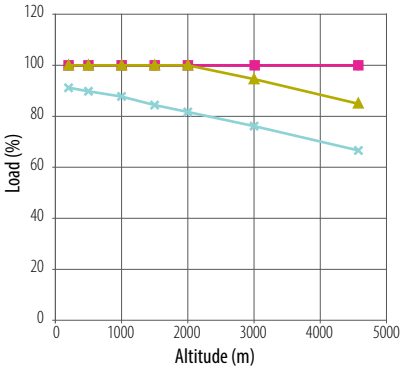
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C540 | 8 | 315 | 585 | 315 | 540 | 250 | 460 |  |  |
| 20G…C585 | 8 | 355 | 650 | 315 | 585 | 250 | 472 |  |  |
| 20G…C650 | 8 | 400 | 750 | 355 | 650 | 315 | 540 |  |  |
| 20G…C750 | 8 | 450 | 796 | 400 | 750 | 315 | 585 |  |  |

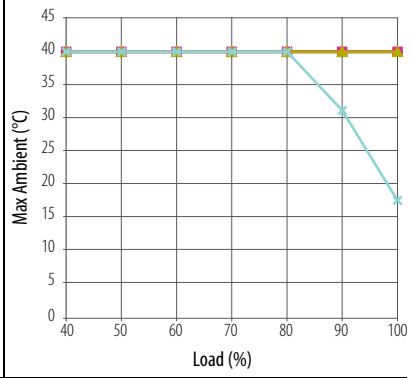
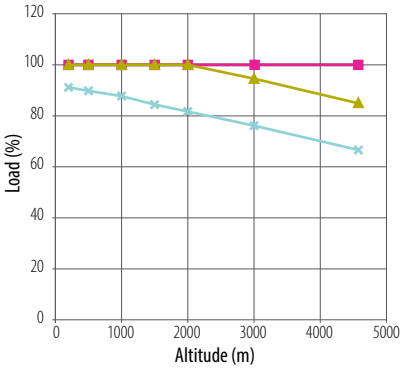
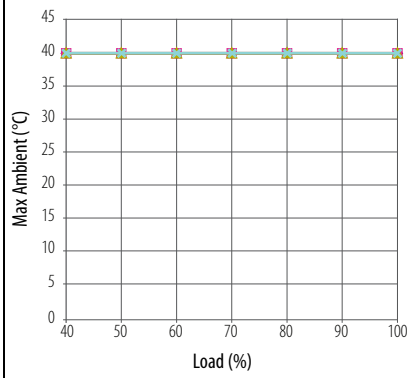
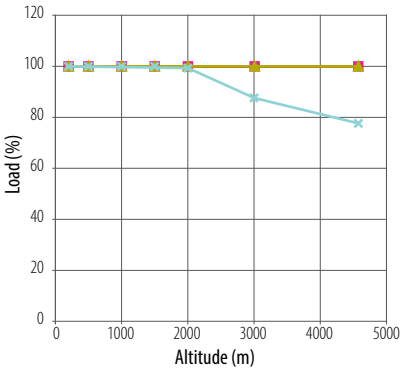
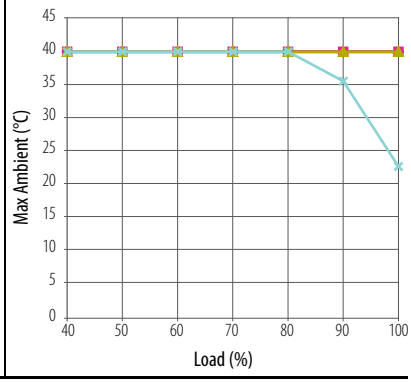
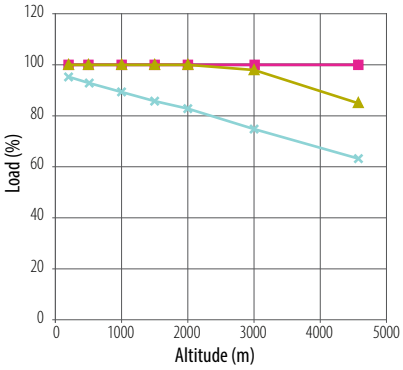
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C770 | 8 | 450 | 832 | 400 | 770 | 355 | 650 |  |  |
| 20G…C920 | 9 | 560 | 1040 | 500 | 920 | 400 | 770 |  |  |
| 20G…C1K0 | 9 | 630 | 1090 | 560 | 1040 | 500 | 920 |  |  |
| 20G…C1K1 | 9 | 710 | 1182 | 630 | 1112 | 500 | 1040 |  |  |

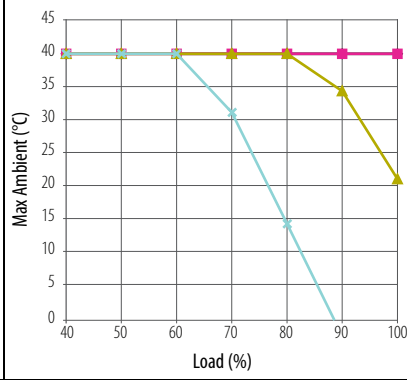
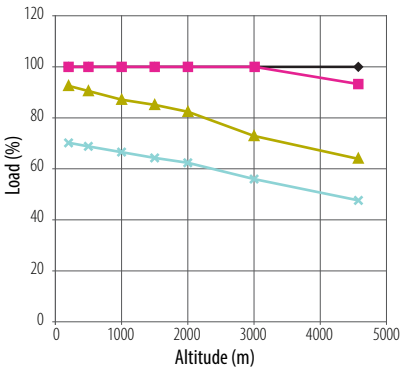
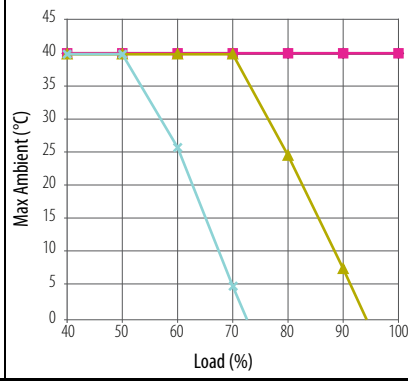
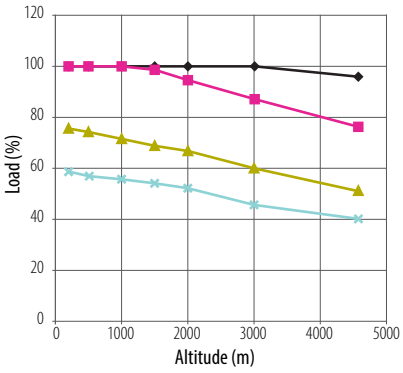
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C1K2 | 9 | 800 | 1465 | 710 | 1175 | 560 | 1090 |  |  |
| 20G…C1K4 | 9 | 850 | 1581 | 800 | 1463 | 630 | 1175 |  |  |
| 20G…C1K6 | 10 | 1000 | 1715 | 850 | 1590 | 710 | 1465 |  |  |
| 20G…C1K7 | 10 | 1250 | 2150 | 1000 | 1715 | 800 | 1480 |  |  |

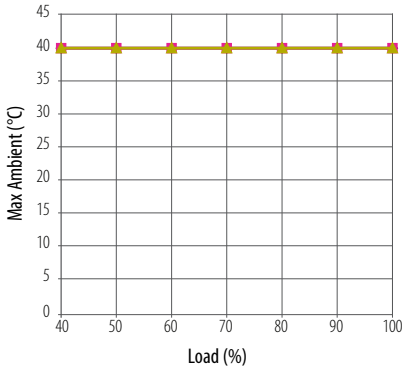
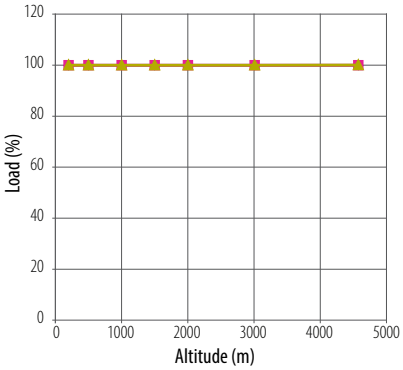
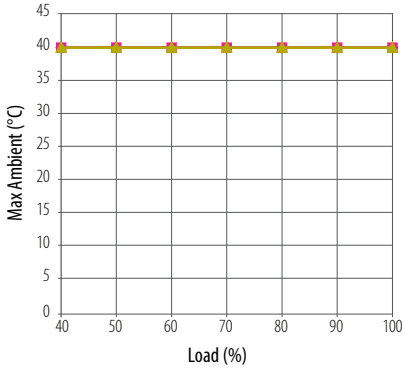
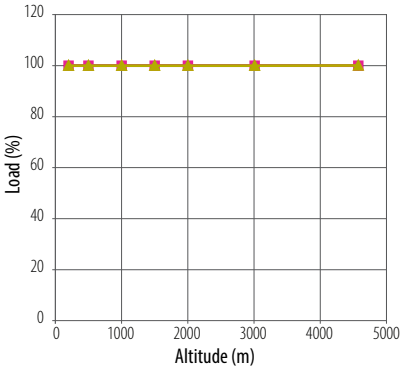
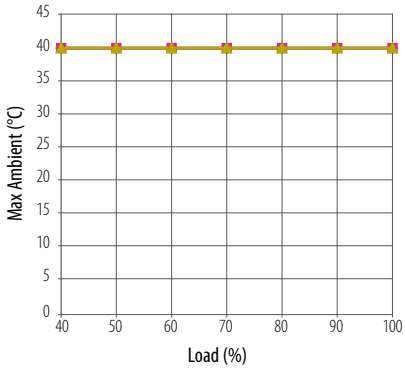
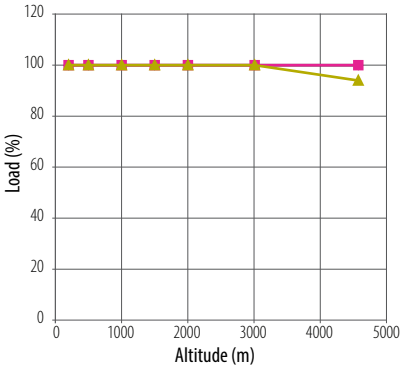
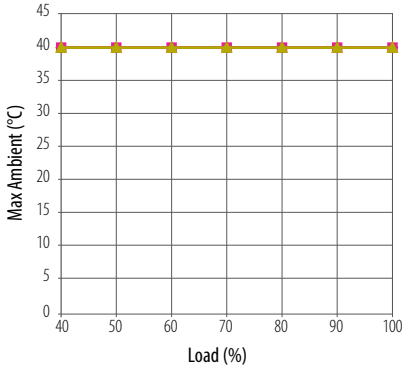
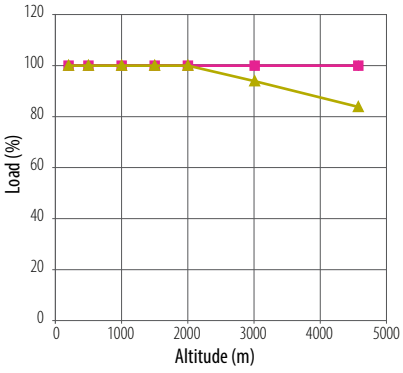
| Catalog Number | Frame | 400V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…C2K1 | 10 | 1400 | 2330 | 1250 | 2156 | 1000 | 1715 |  |  |
| 20G…C2K1 | 13 | 2475 | 4576 | 2200 | 4235 | 1953 | 3575 | | |
| 20G…C2K8 | 11 | 1800 | 3078 | 1650 | 2849 | 1400 | 2330 |  |  |
| 20G…C5K6 | 14 | 3285 | 6074 | 2920 | 5621 | 2592 | 4745 | | |
| 20G…C3K5 | 12 | 2200 | 3846 | 2000 | 3542 | 1650 | 3032 |  |  |
| 20G…C7K0 | 15 | 4095 | 7571 | 3640 | 7007 | 3231 | 5915 | | |

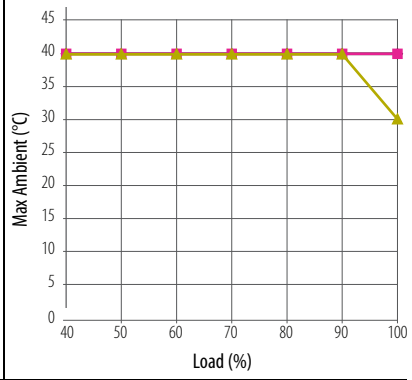
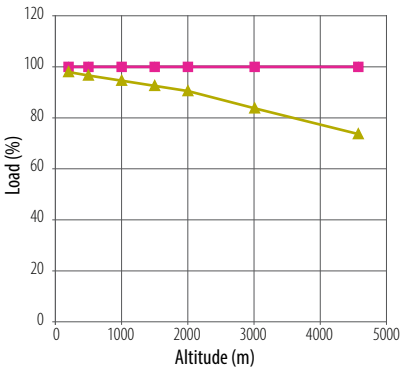
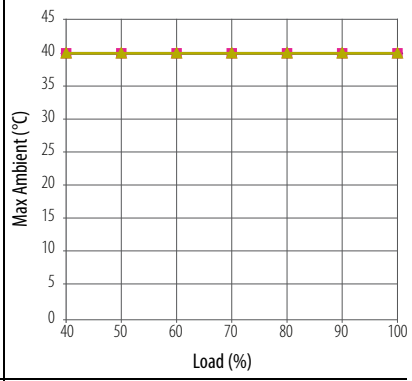
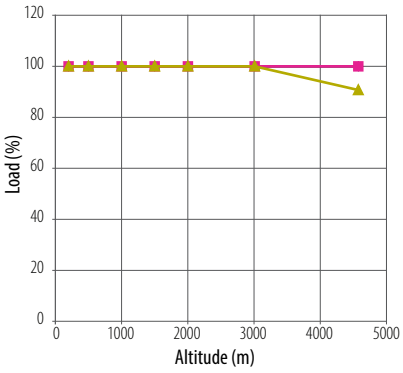
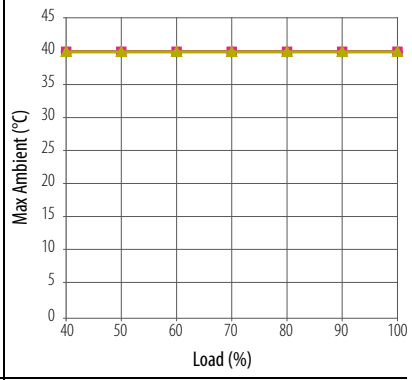
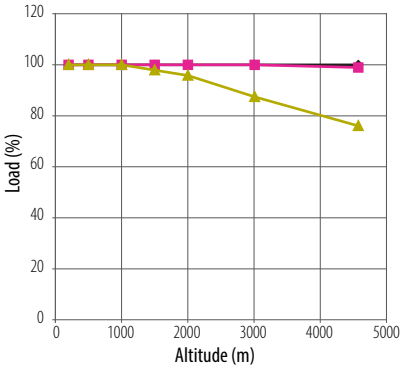
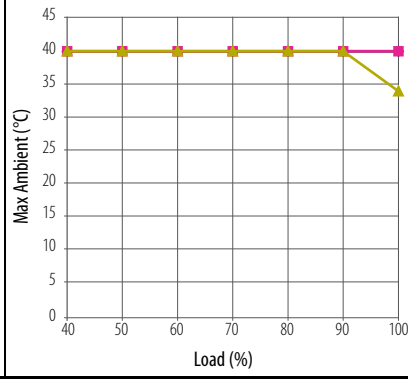
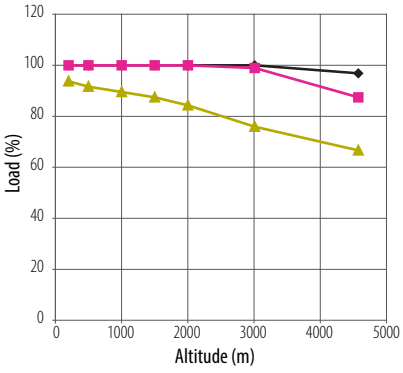
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 2 kHz, 4 kHz, 8 kHz, 12 kHz | 2 kHz, 4 kHz, 8 kHz, 12 kHz |
| 20G…D014 | 5 | 15 | 22 | 7.5 | 14 | 5.5 | 11 |  |  |
| 20G…D022 | 5 | 20 | 27 | 15 | 22 | 10 | 14 |  |  |
| 20G…D027 | 5 | 25 | 34 | 20 | 27 | 15 | 22 |  |  |
| 20G…D034 | 5 | 30 | 40 | 25 | 34 | 20 | 27 |  |  |

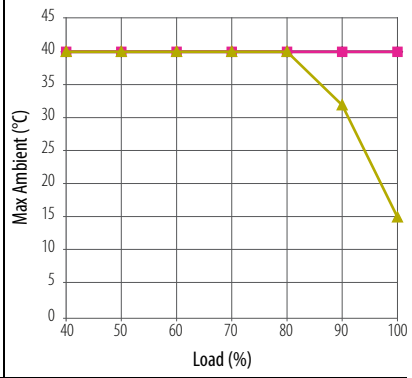
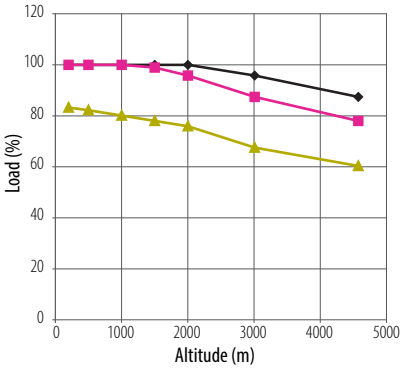
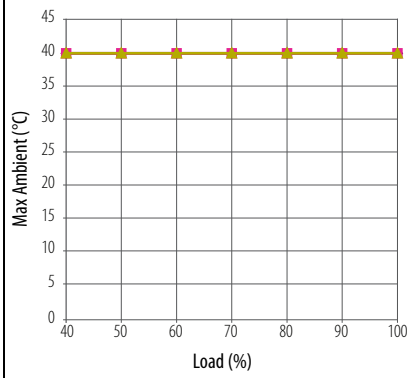
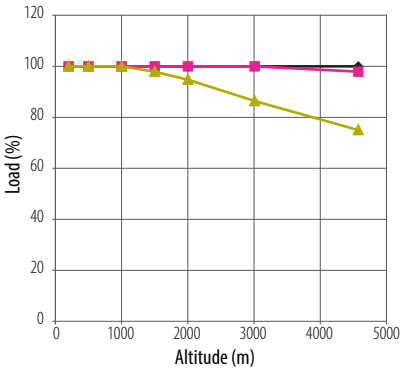
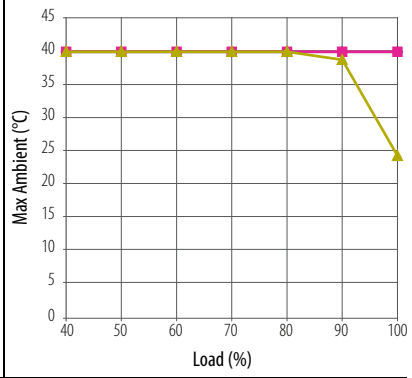
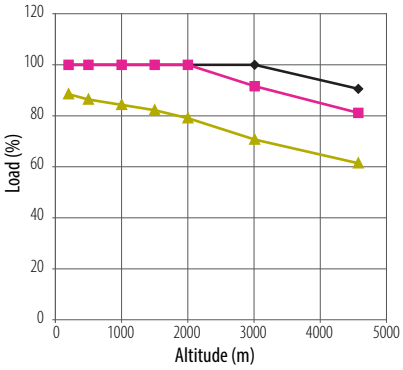
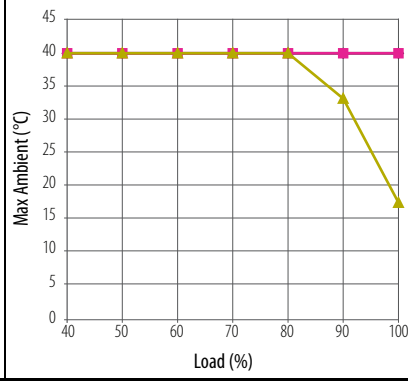
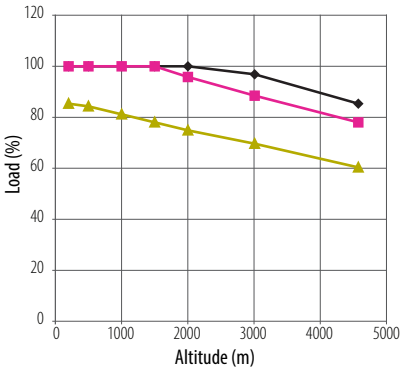
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | | |
| 20G…D040 | 5 | 40 | 52 | 30 | 40 | 25 | 34 |  |  |
| 20G…D052 | 5 | 50 | 65 | 40 | 52 | 30 | 40 |  |  |
| 20G…D065 | 5 | 60 | 77 | 50 | 65 | 40 | 52 |  |  |
| 20G…D077 | 5 | 75 | 96 | 60 | 77 | 50 | 65 |  |  |

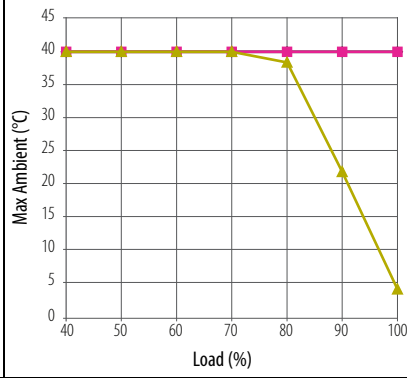
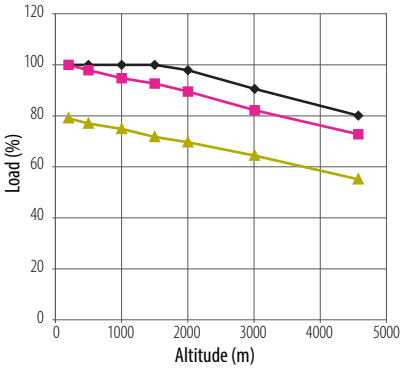
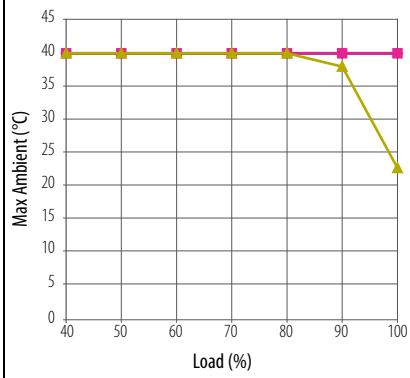
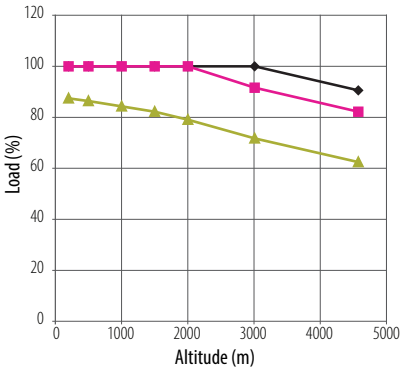
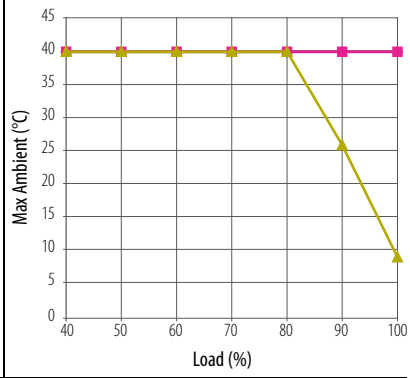
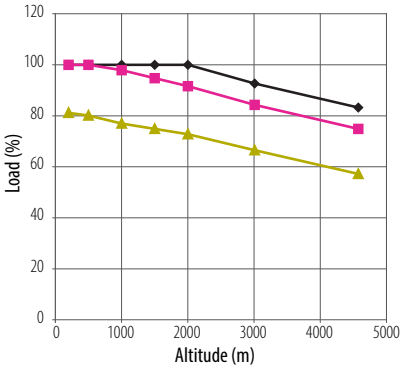
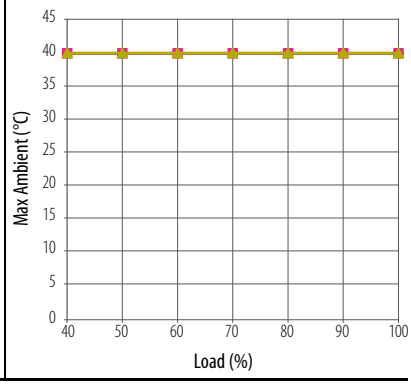
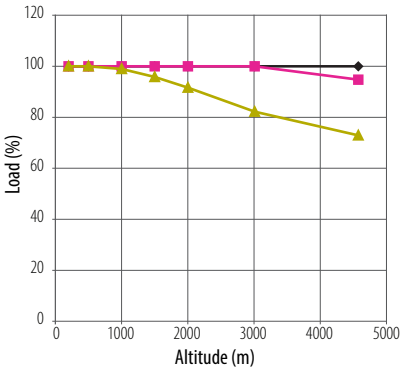
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | | |
| 20G…D096 | 5 | 75 | 96 | 75 | 96 | 60 | 77 |  |  |
| 20G…D125 | 6 | 125 | 156 | 100 | 125 | 75 | 96 |  |  |
| 20G…D156 | 6 | 150 | 186 | 125 | 156 | 100 | 125 |  |  |

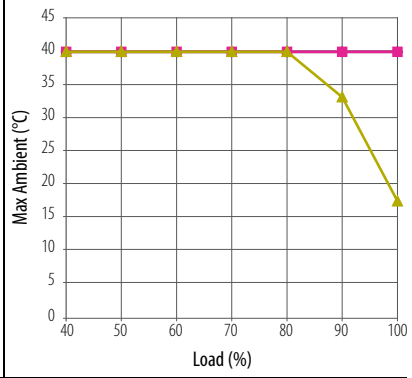
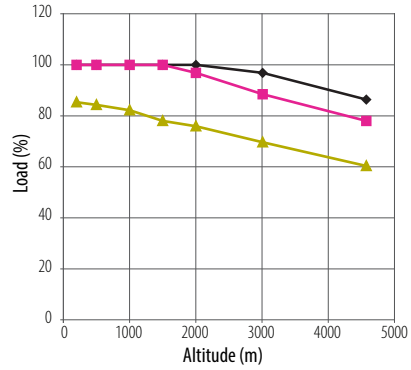
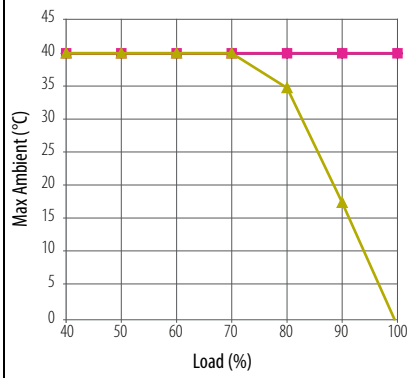
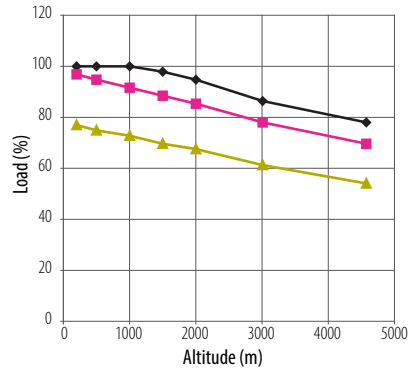
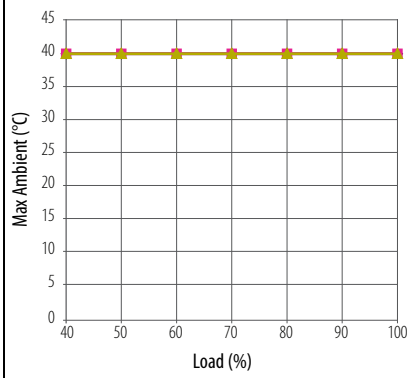
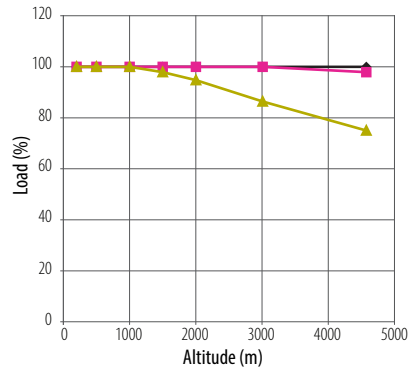
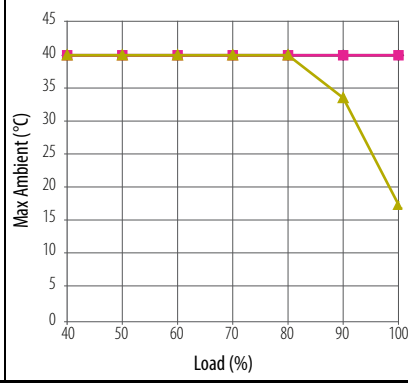
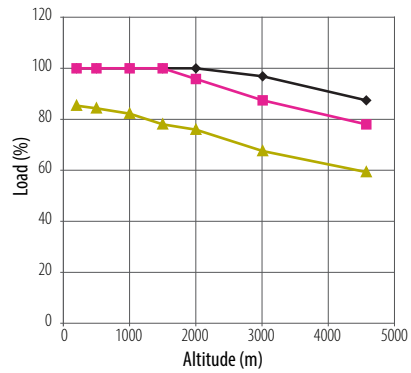
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | | |
| 20G…D186 | 6 | 200 | 248 | 150 | 186 | 125 | 156 |  |  |
| 20G…D248 | 6 | 250 | 302 | 200 | 248 | 150 | 186 |  |  |

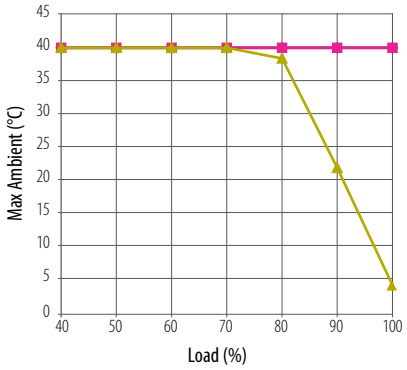
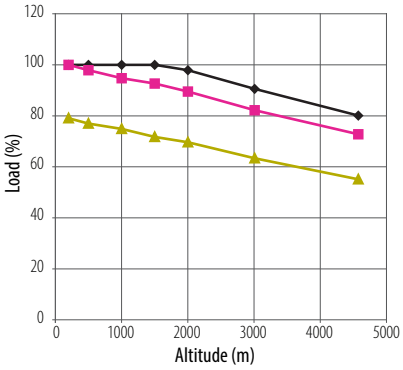
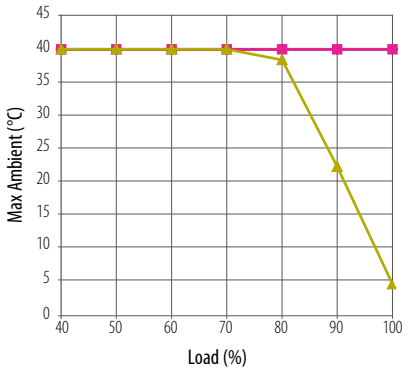
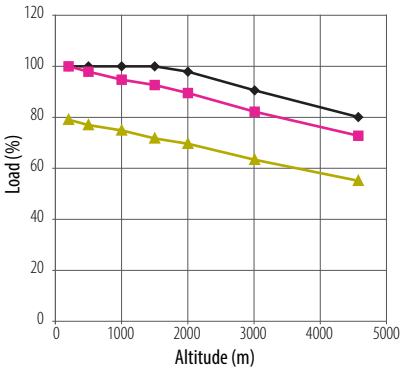
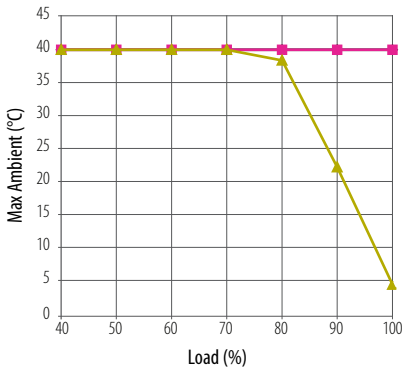
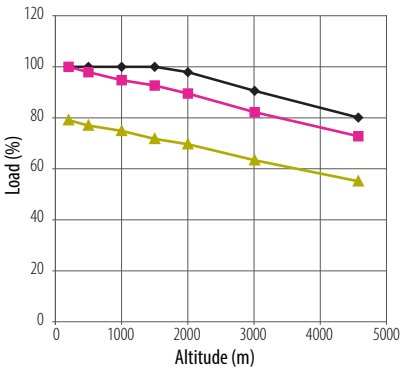
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D302 | 7 | 300 | 361 | 250 | 302 | 200 | 248 |  |  |
| 20G…D361 | 7 | 350 | 430 | 300 | 361 | 250 | 302 |  |  |
| 20G…D430 | 7 | 400 | 485 | 350 | 430 | 300 | 361 |  |  |
| 20G…D505 | 7 | 450 | 545 | 400 | 505 | 350 | 430 |  |  |

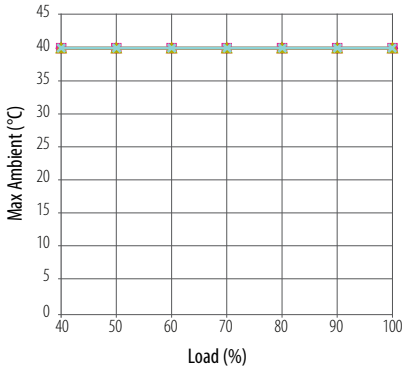
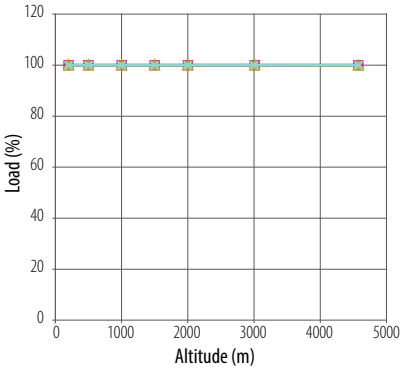
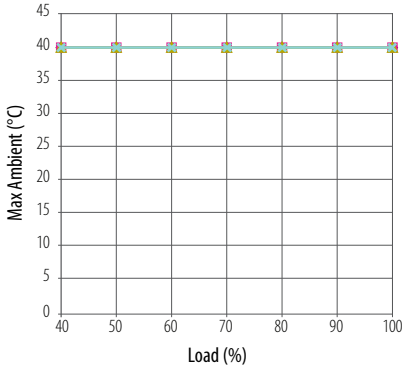
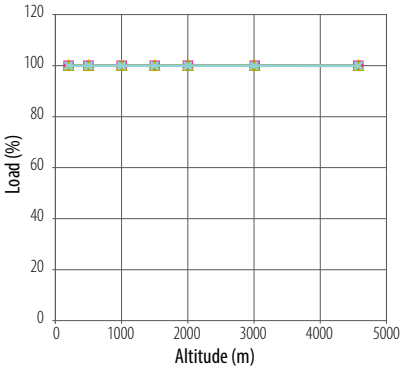
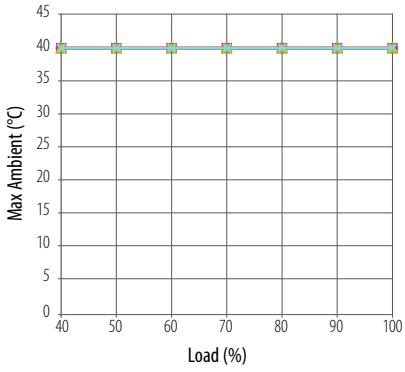
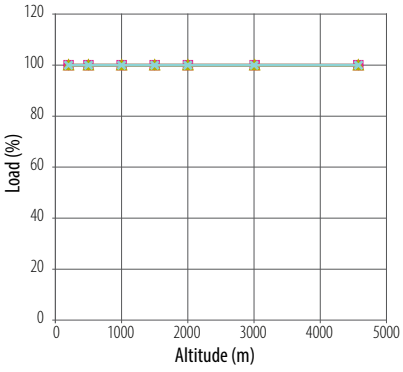
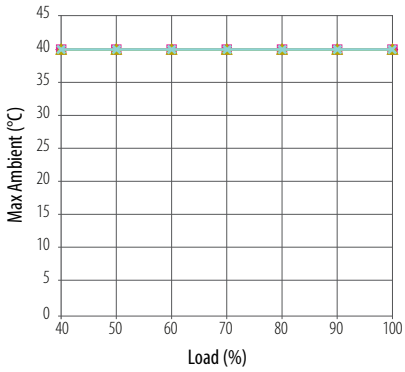
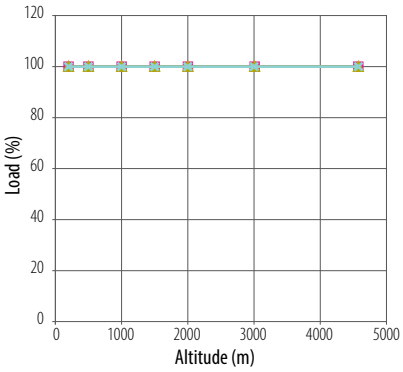
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D617 | 7 | 500 | 617 | 500 | 600 | 400 | 500 |  |  |
| 20G…D302 | 8 | 300 | 361 | 250 | 302 | 200 | 248 |  |  |
| 20G…D361 | 8 | 350 | 430 | 300 | 361 | 250 | 302 |  |  |
| 20G…D430 | 8 | 400 | 485 | 350 | 430 | 300 | 361 |  |  |

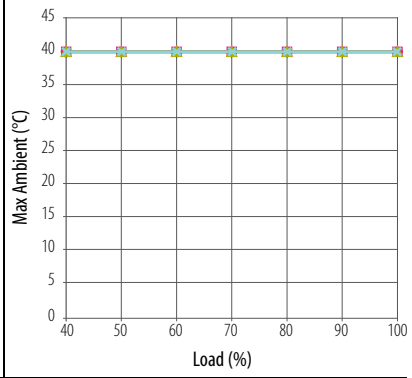
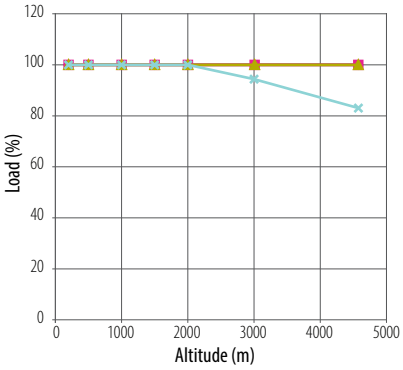
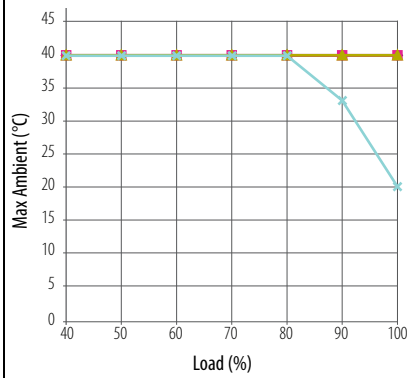
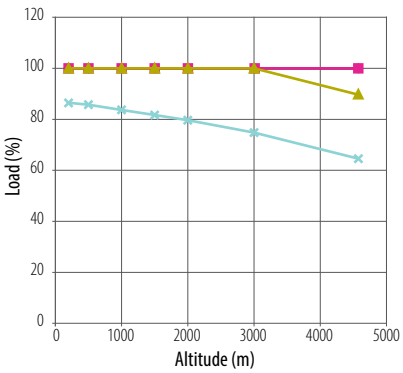
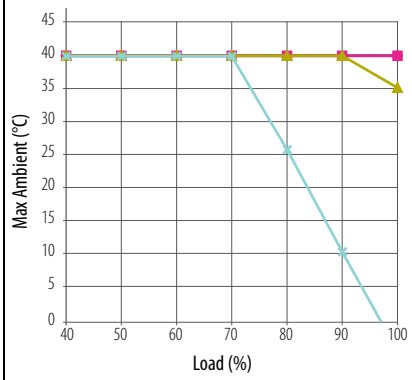
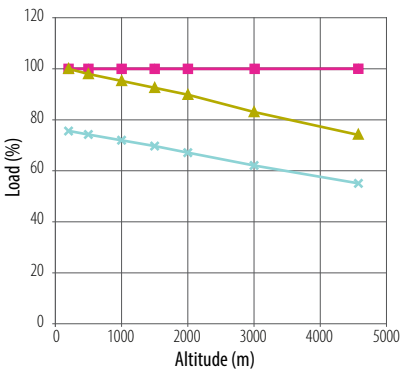
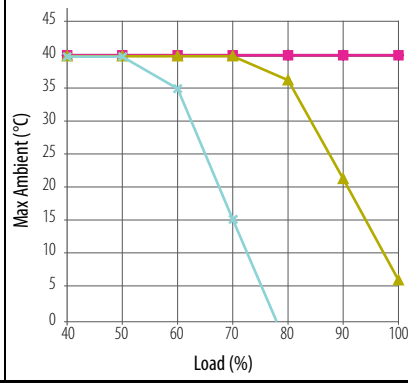
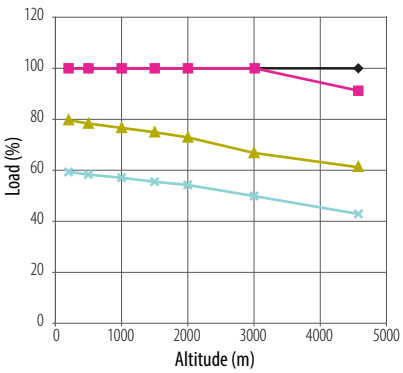
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D505 | 8 | 450 | 545 | 400 | 505 | 350 | 430 |  |  |
| 20G…D545 | 8 | 500 | 617 | 450 | 545 | 350 | 454 |  |  |
| 20G…D617 | 8 | 600 | 710 | 500 | 617 | 400 | 485 |  |  |
| 20G…D710 | 8 | 650 | 765 | 600 | 710 | 450 | 545 |  |  |

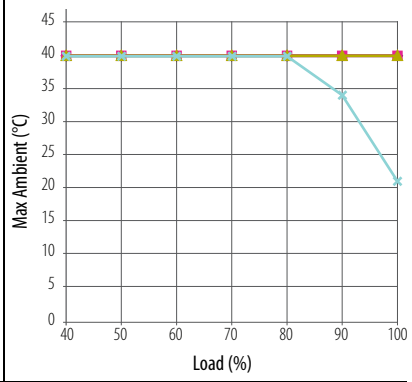
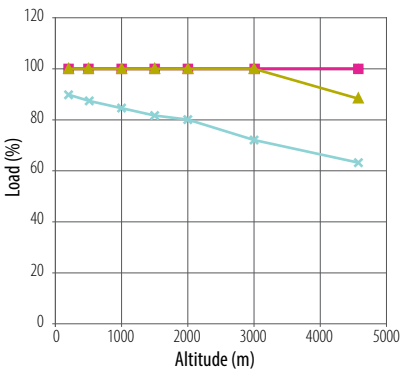
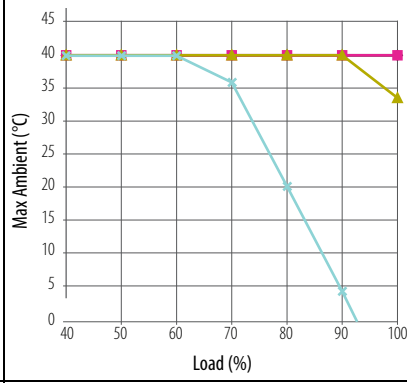
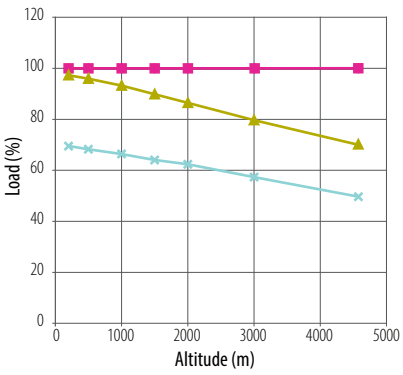
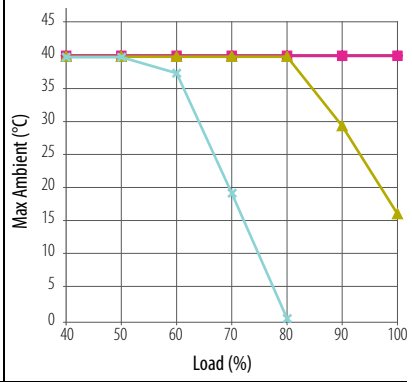
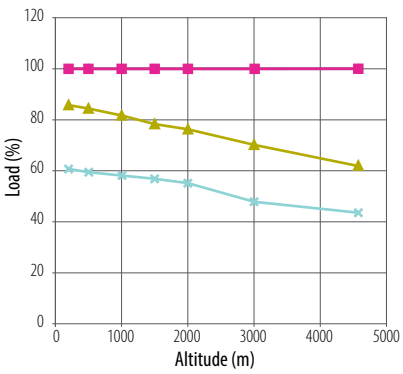
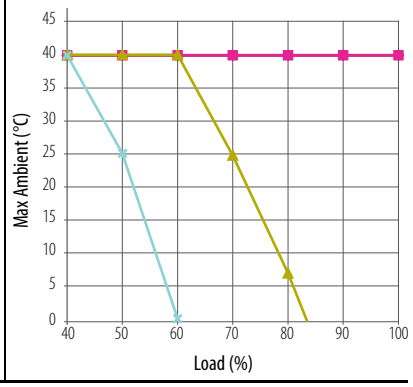
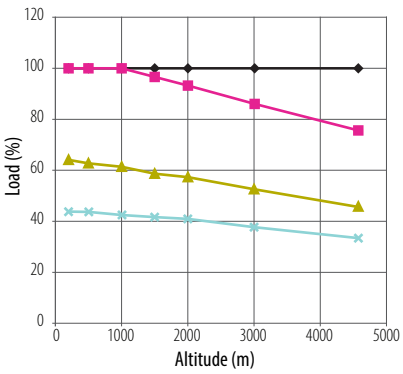
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D740 | 8 | 700 | 800 | 650 | 740 | 500 | 617 |  |  |
| 20G…D800 | 9 | 800 | 960 | 700 | 800 | 600 | 740 |  |  |
| 20G…D960 | 9 | 900 | 1045 | 800 | 960 | 700 | 800 |  |  |
| 20G…D1K0 | 9 | 1000 | 1121 | 900 | 1045 | 750 | 960 |  |  |

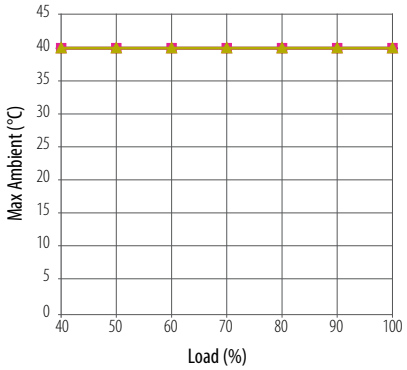
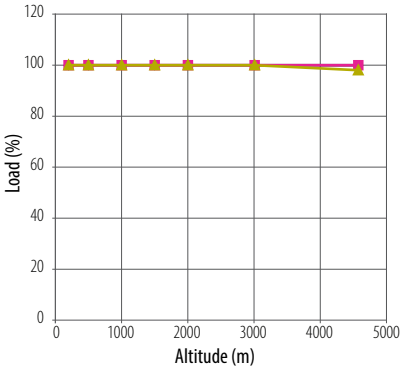
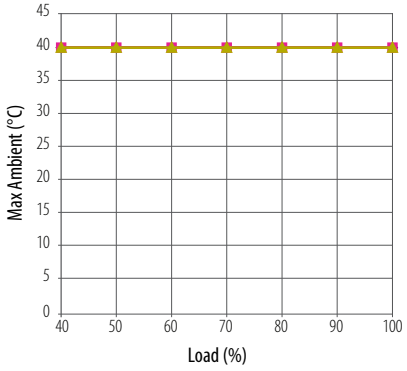
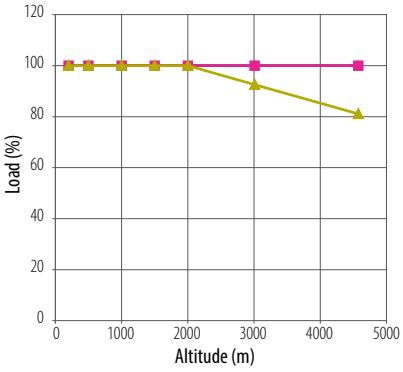
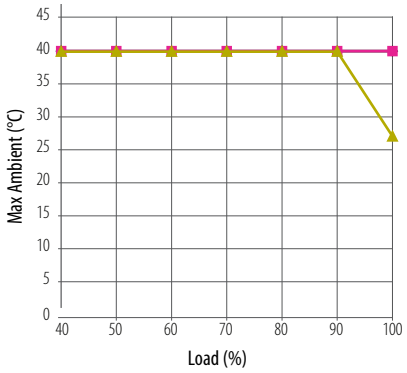
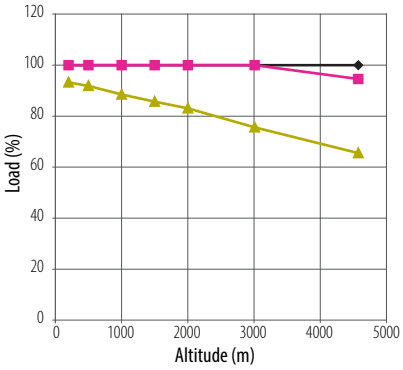
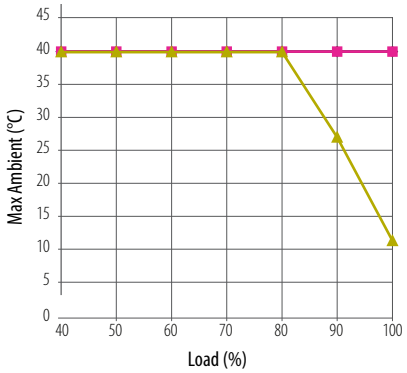
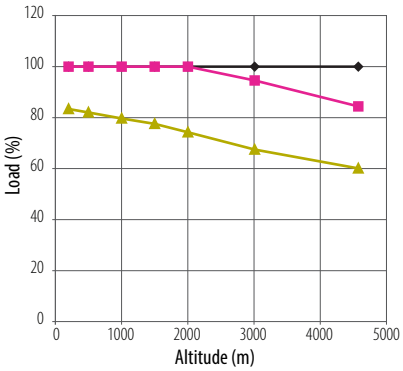
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D1K1 | 9 | 1100 | 1365 | 1000 | 1135 | 800 | 1045 |  |  |
| 20G…D1K3 | 9 | 1250 | 1520 | 1100 | 1365 | 900 | 1135 |  |  |
| 20G…D1K4 | 10 | 1500 | 1655 | 1250 | 1420 | 1000 | 1365 |  |  |
| 20G…D1K6 | 10 | 1800 | 2070 | 1500 | 1655 | 1100 | 1420 |  |  |

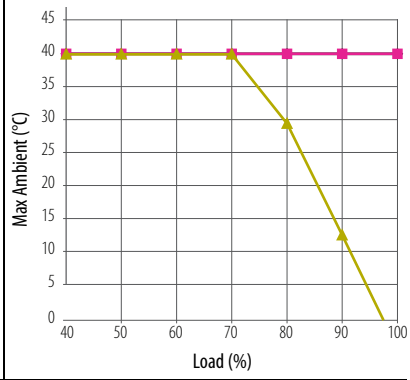
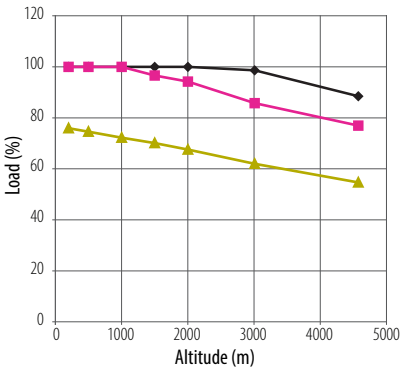
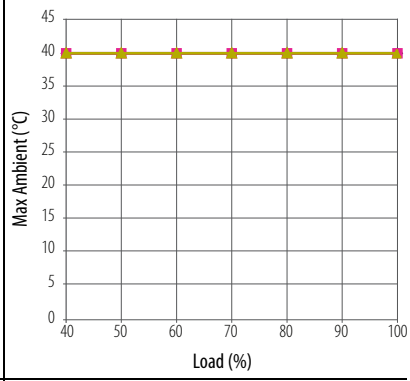
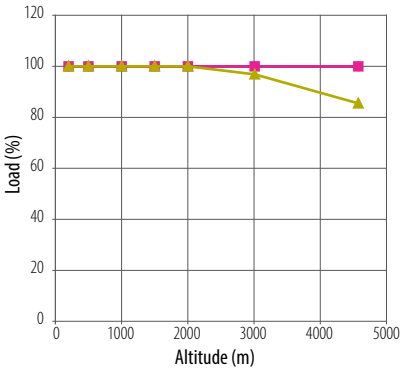
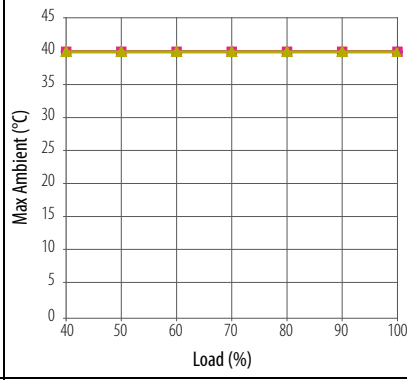
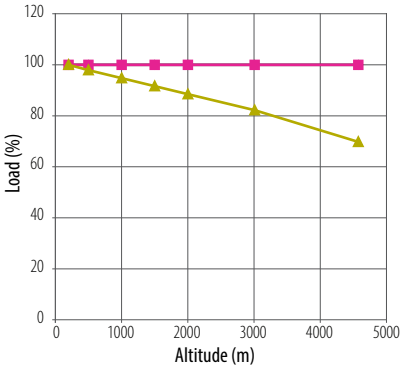
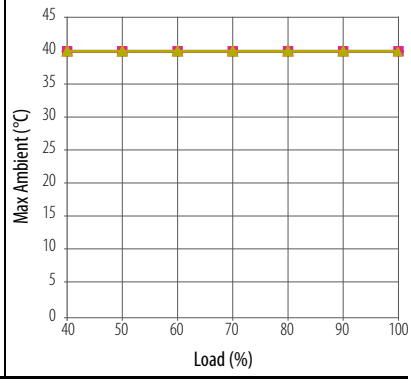
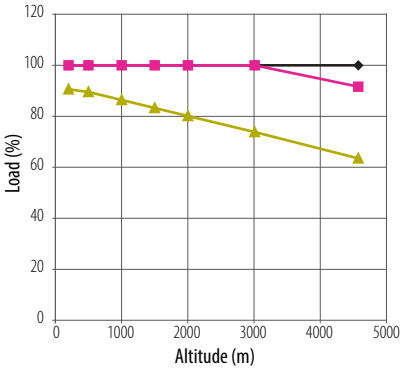
| Catalog Number | Frame | 480V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…D2K0 | 10 | 2000 | 2240 | 1800 | 2072 | 1500 | 1655 |  |  |
| 20G…D4K0 | 13 | 3900 | 4400 | 3600 | 4070 | 2800 | 3394 | | |
| 20G…D2K6 | 11 | 2600 | 2960 | 2400 | 2738 | 2000 | 2240 |  |  |
| 20G…D5K4 | 14 | 5200 | 5840 | 4800 | 5402 | 3700 | 4504 | | |
| 20G…D3K4 | 12 | 3300 | 3696 | 3000 | 3404 | 2400 | 2980 |  |  |
| 20G…D7K0 | 15 | 6400 | 7280 | 600 | 6734 | 4600 | 5615 | | |

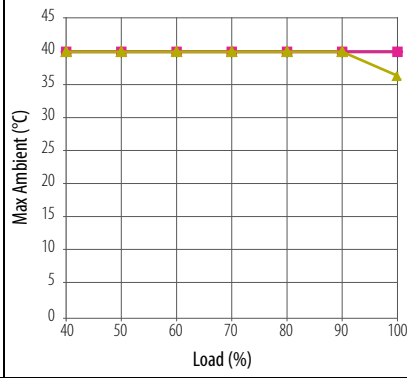
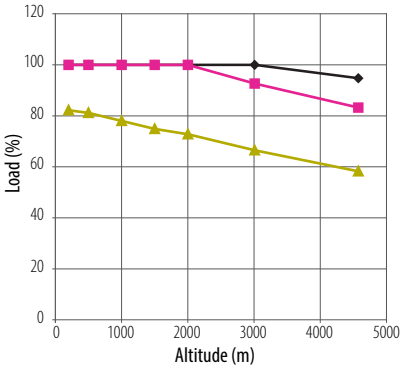
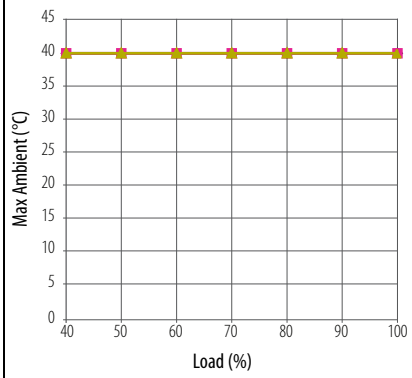
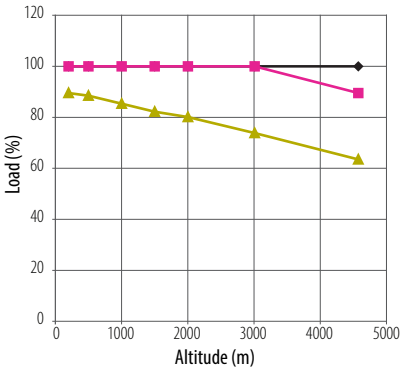
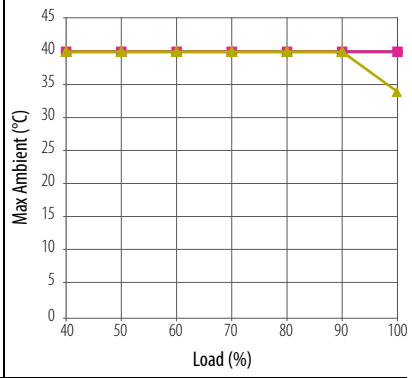
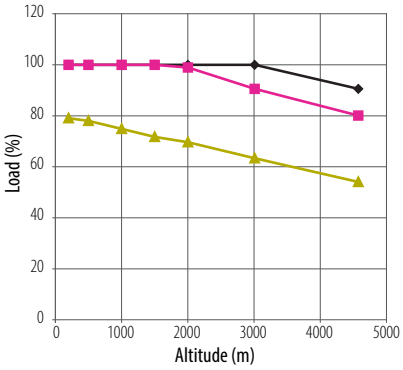
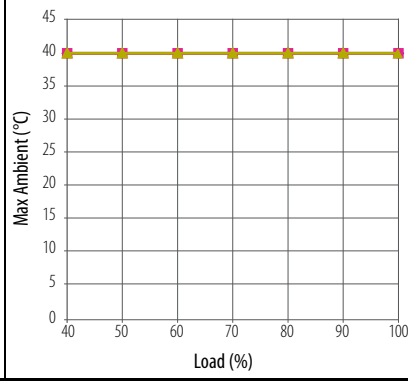
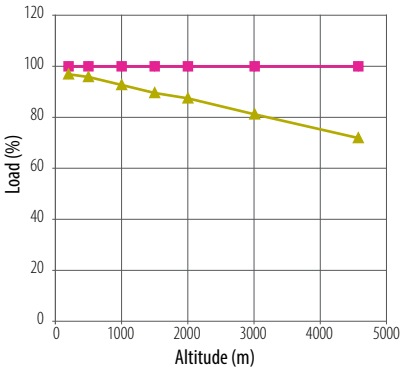
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 2 kHz, 4 kHz, 8 kHz, 12 kHz | 2 kHz, 4 kHz, 8 kHz, 12 kHz |
| 20G…E011 | 5 | 15 | 17 | 10 | 11 | 7.5 | 9 |  |  |
| 20G…E017 | 5 | 20 | 22 | 15 | 17 | 10 | 11 |  |  |
| 20G…E022 | 5 | 25 | 27 | 20 | 22 | 15 | 17 |  |  |
| 20G…E027 | 5 | 30 | 32 | 25 | 27 | 20 | 22 |  |  |

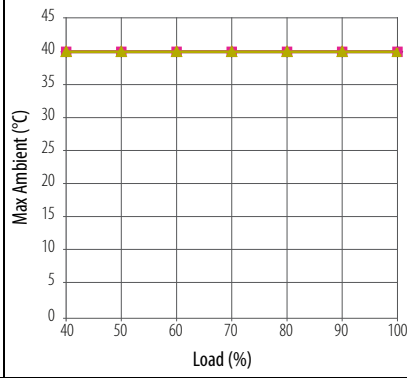
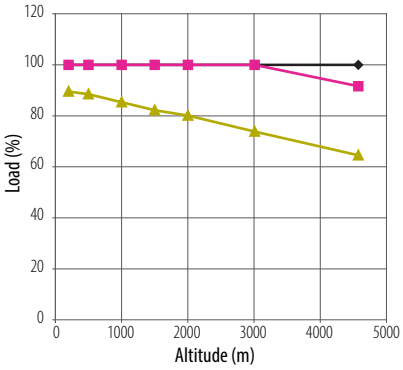
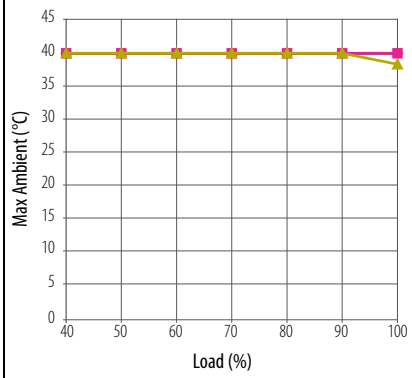
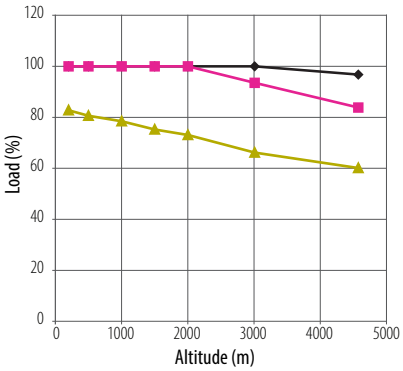
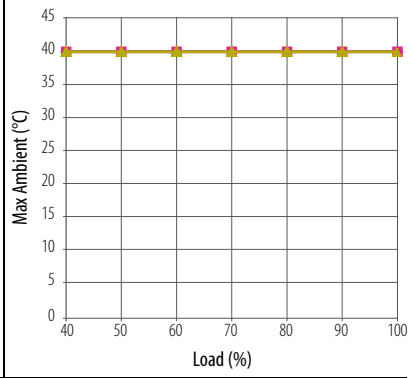
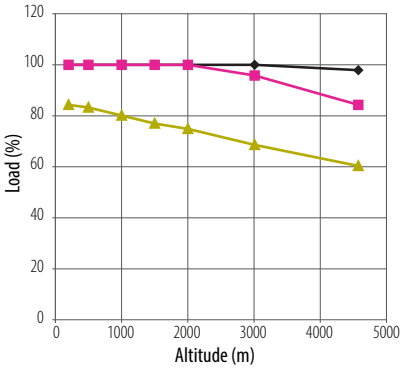
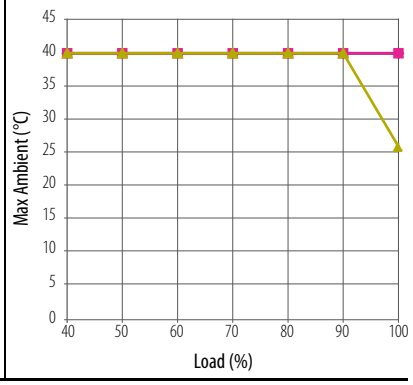
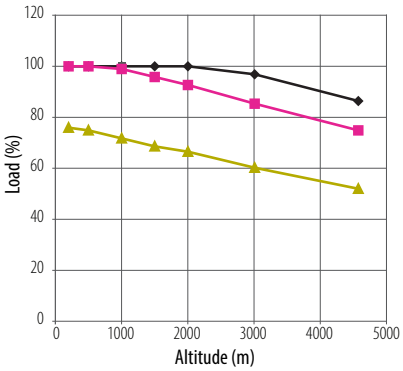
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | | |
| 20G…E032 | 5 | 40 | 41 | 30 | 32 | 25 | 27 |  |  |
| 20G…E041 | 5 | 50 | 52 | 40 | 41 | 30 | 32 |  |  |
| 20G…E052 | 5 | 60 | 62 | 50 | 52 | 40 | 41 |  |  |
| 20G…E062 | 5 | 75 | 77 | 60 | 62 | 50 | 52 |  |  |

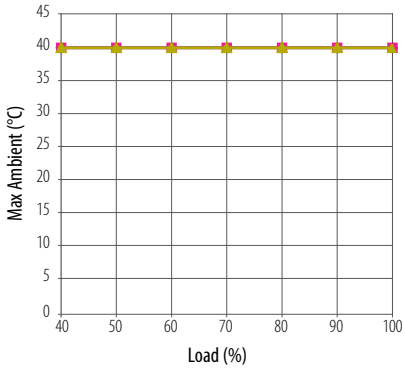
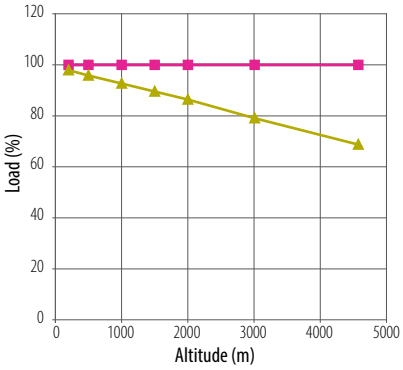
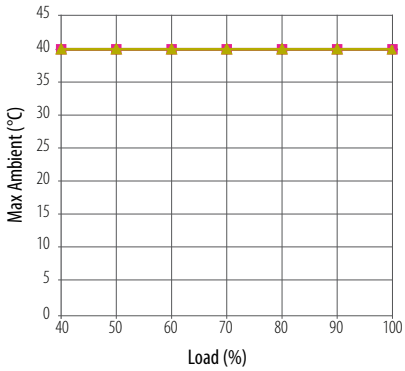
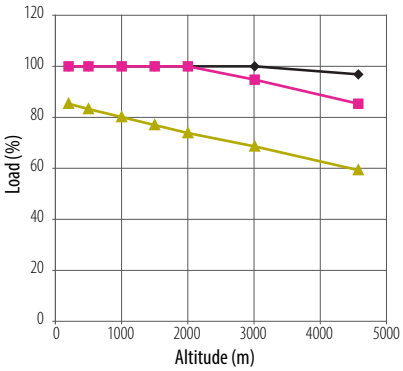
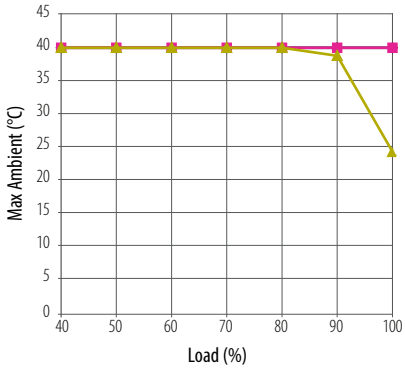
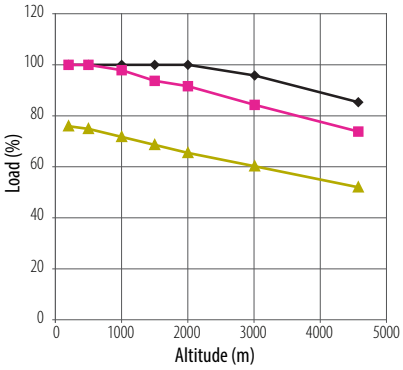
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | | |
| 20G…E077 | 6 | 100 | 99 | 75 | 77 | 60 | 62 |  |  |
| 20G…E099 | 6 | 125 | 125 | 100 | 99 | 75 | 77 |  |  |
| 20G…E125 | 6 | 150 | 144 | 125 | 125 | 100 | 99 |  |  |
| 20G…E144 | 6 | 200 | 192 | 150 | 144 | 125 | 125 |  |  |

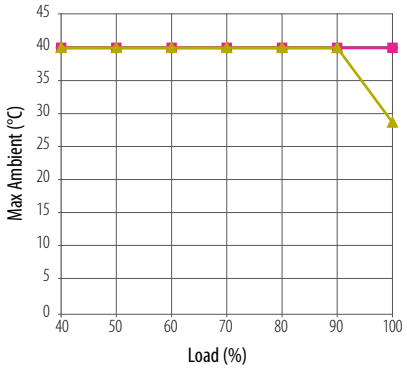
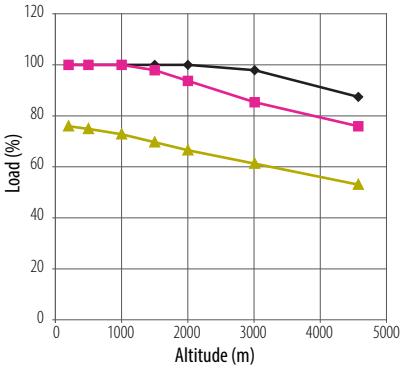
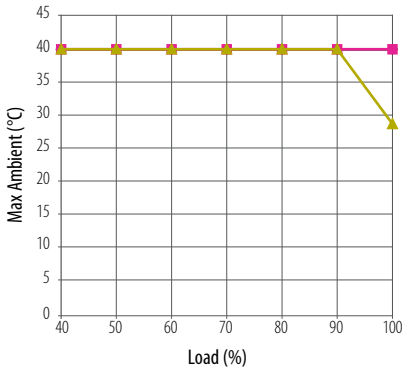
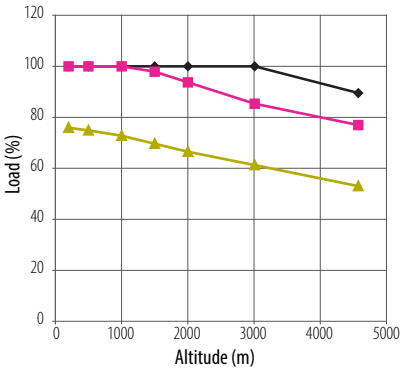
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E192 | 7 | 250 | 242 | 200 | 192 | 150 | 144 |  |  |
| 20G…E242 | 7 | 300 | 295 | 250 | 242 | 200 | 192 |  |  |
| 20G…E295 | 7 | 350 | 355 | 300 | 295 | 250 | 242 |  |  |
| 20G…E355 | 7 | 400 | 395 | 350 | 355 | 300 | 295 |  |  |

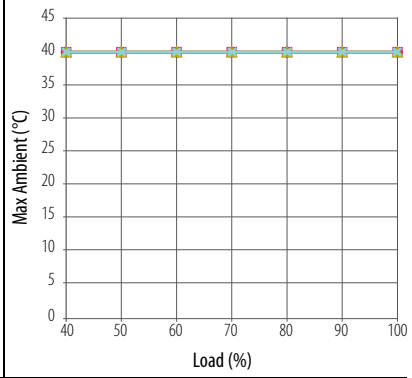
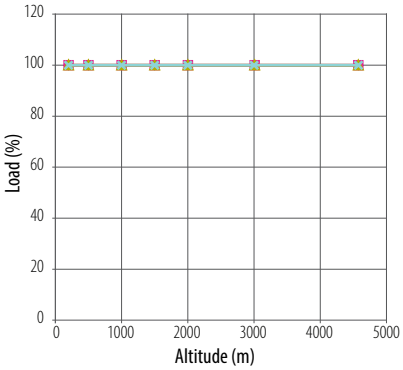
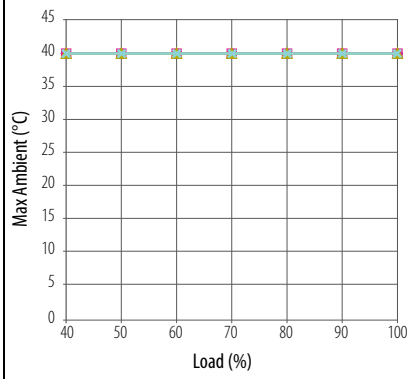
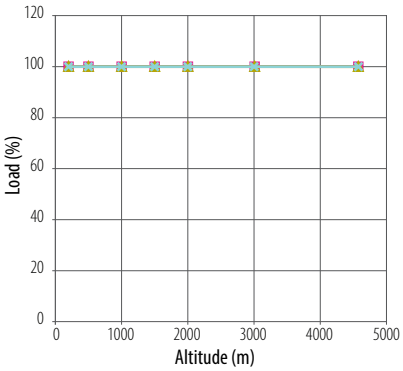
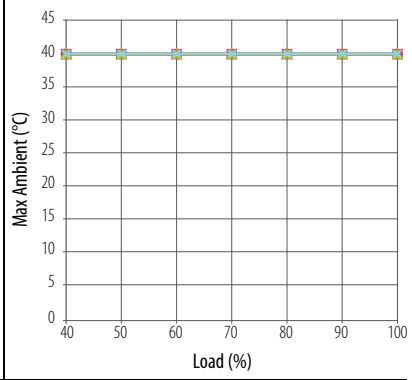
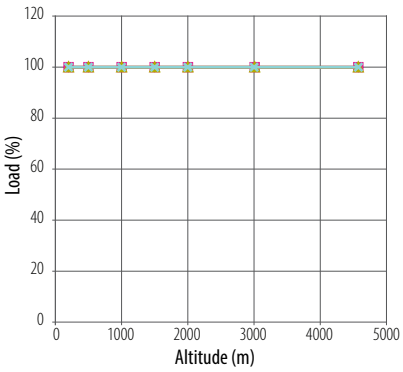
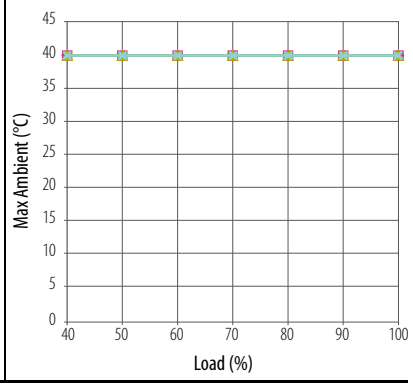
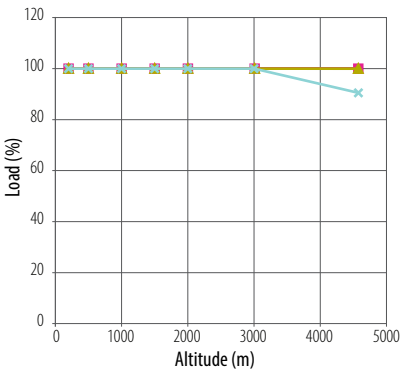
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E395 | 7 | 450 | 435 | 400 | 395 | 350 | 355 |  |  |
| 20G…E242 | 8 | 300 | 295 | 250 | 242 | 200 | 192 |  |  |
| 20G…E295 | 8 | 350 | 355 | 300 | 295 | 250 | 242 |  |  |
| 20G…E355 | 8 | 400 | 395 | 350 | 355 | 300 | 295 |  |  |

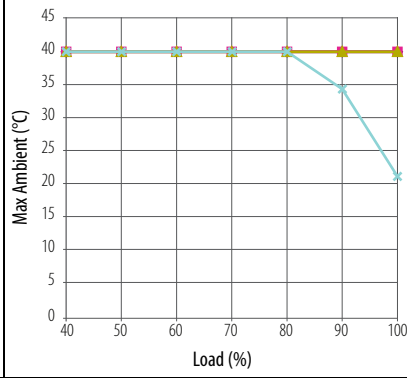
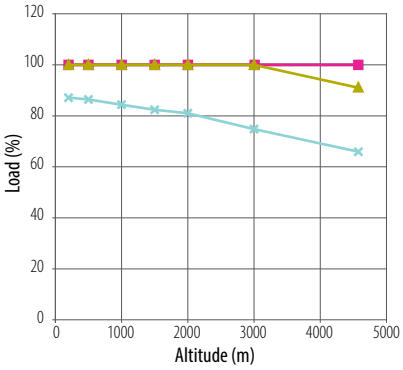
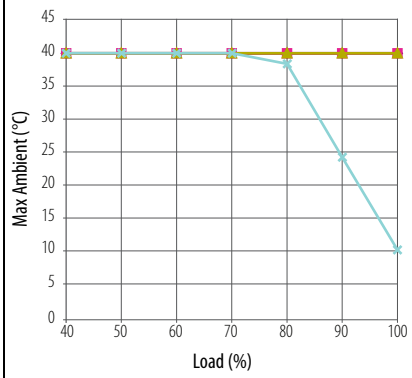
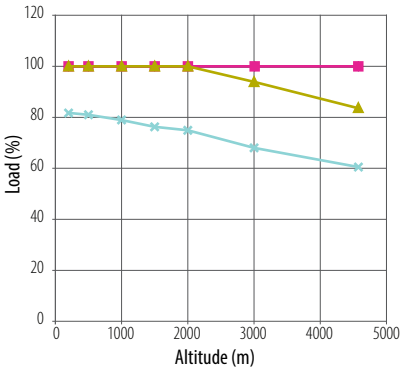
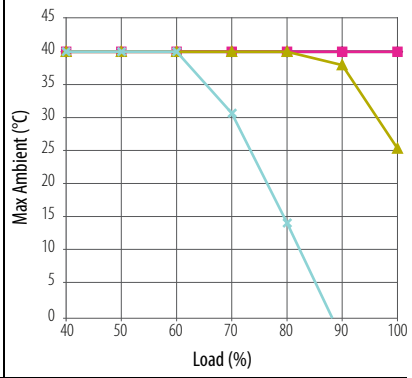
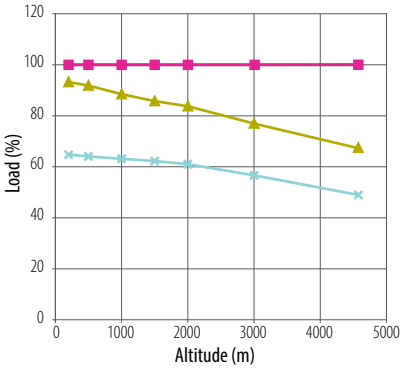
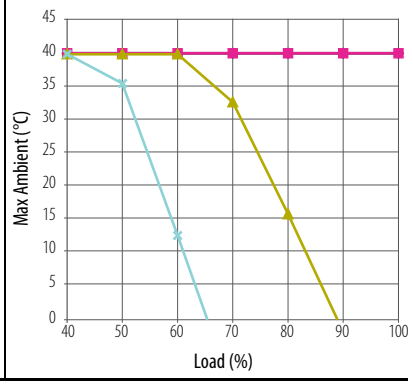
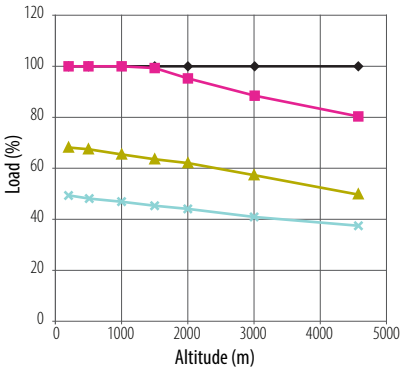
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E395 | 8 | 450 | 435 | 400 | 395 | 350 | 355 |  |  |
| 20G…E435 | 8 | 500 | 510 | 450 | 435 | 400 | 395 |  |  |
| 20G…E545 | 8 | 600 | 580 | 550 | 545 | 450 | 450 |  |  |
| 20G…E595 | 9 | 700 | 690 | 600 | 580 | 550 | 545 |  |  |

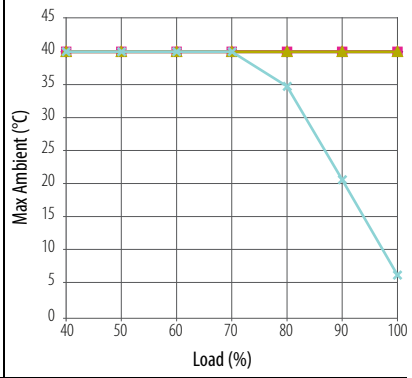
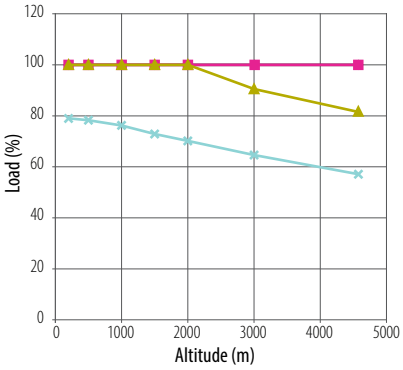
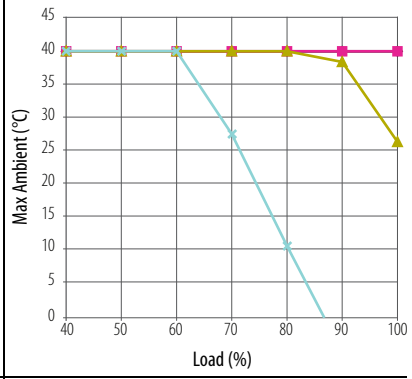
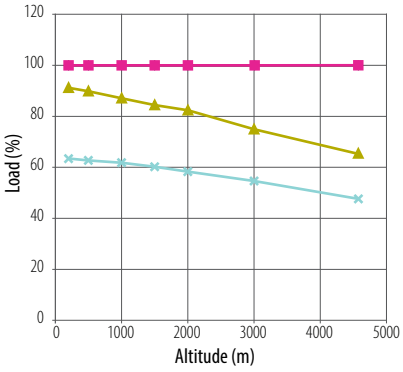
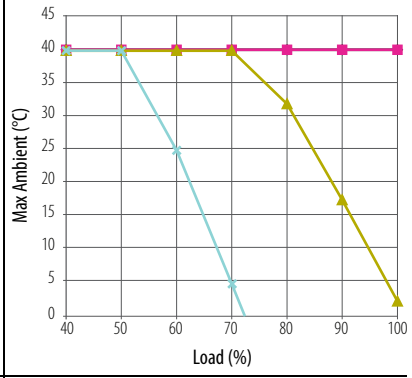
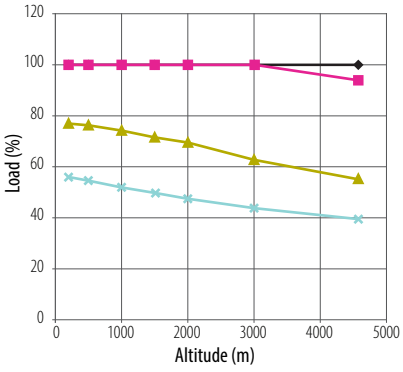
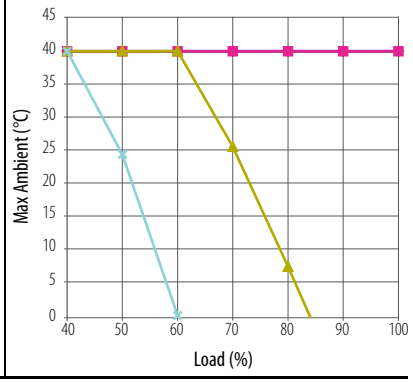
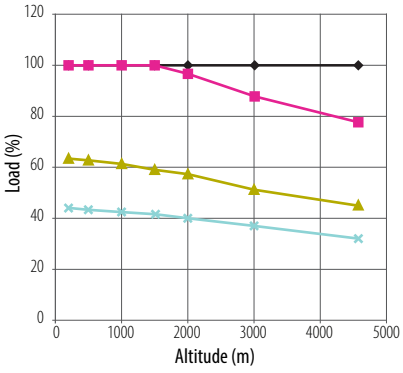
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E690 | 9 | 800 | 760 | 700 | 690 | 600 | 595 |  |  |
| 20G…E760 | 9 | 900 | 825 | 800 | 760 | 700 | 690 |  |  |
| 20G…E825 | 9 | 1000 | 980 | 900 | 825 | 800 | 760 |  |  |
| 20G…E980 | 9 | 1100 | 1102 | 1000 | 980 | 900 | 825 |  |  |

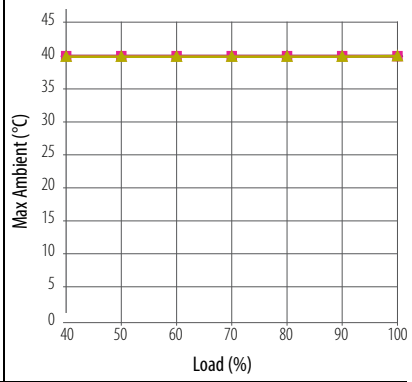
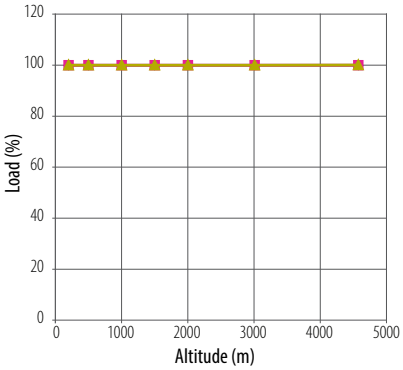
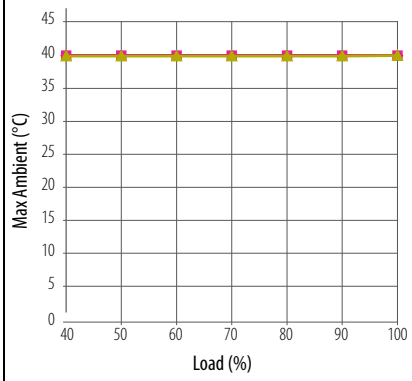
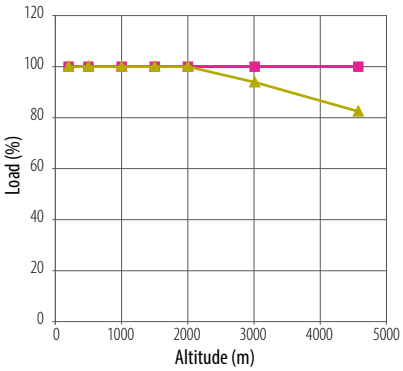
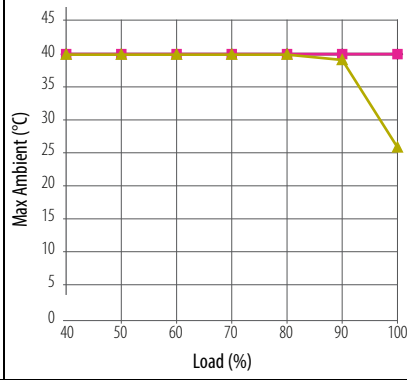
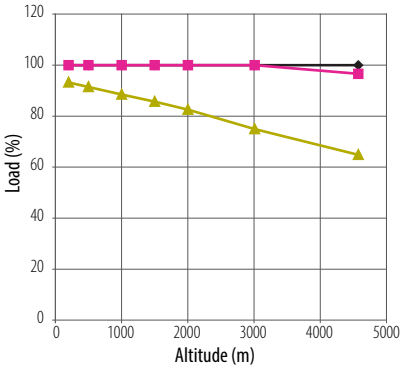
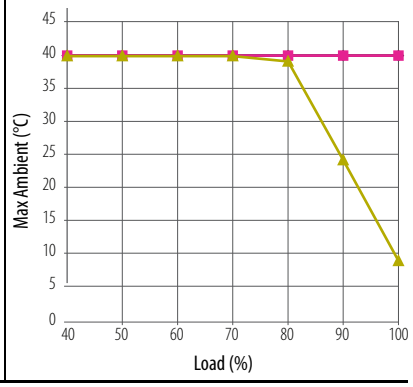
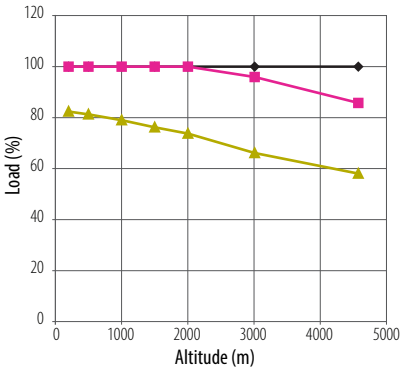
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E1K1 | 10 | 1250 | 1220 | 1100 | 1045 | 1000 | 980 |  |  |
| 20G…E1K2 | 10 | 1500 | 1430 | 1250 | 1220 | 1100 | 1045 |  |  |
| 20G…E1K5<br>20G…E2K9 | 10<br>13 | 1600<br>3300 | 1624<br>3190 | 1500<br>3100 | 1430<br>2998 | 1250<br>2500 | 1220<br>2475 |  |  |

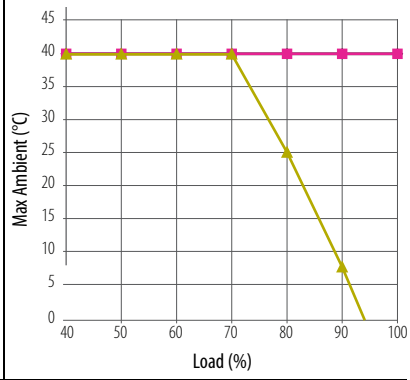
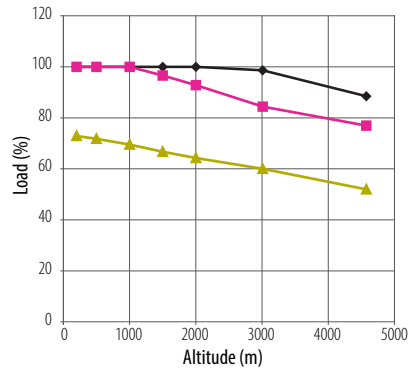
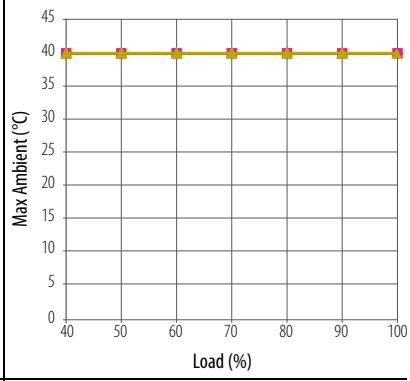
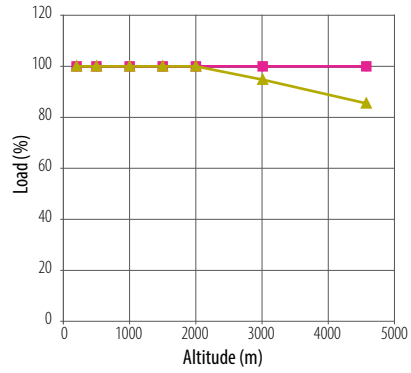
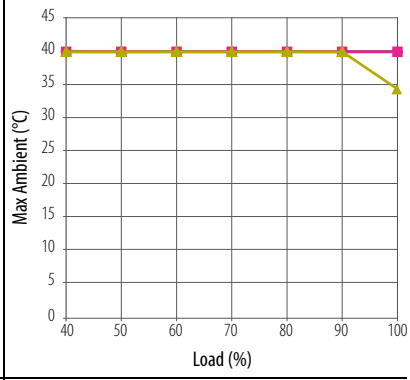
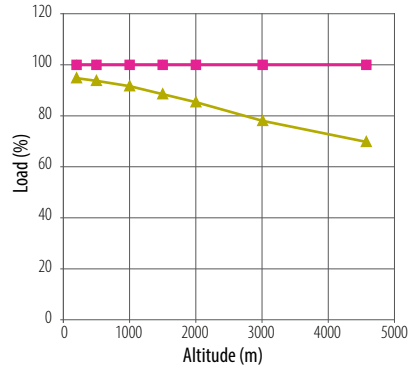
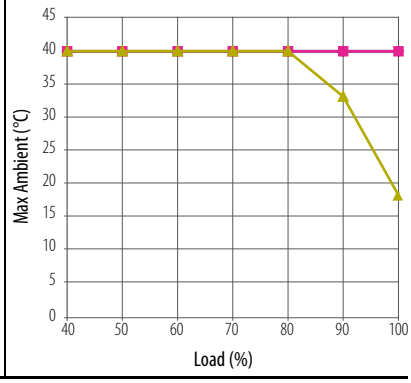
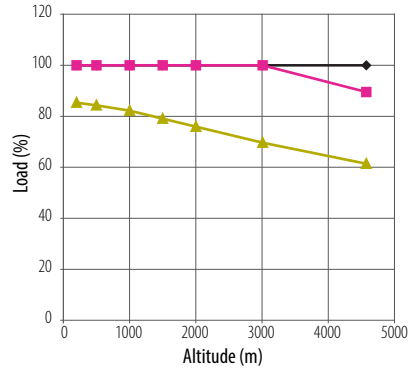
| Catalog Number | Frame | 600V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | Hp | Cont. Amps | Hp | Cont. Amps | Hp | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…E2K0<br>20G…E3K9 | 11<br>14 | 2100<br>4400 | 2146<br>4234 | 2000<br>4100 | 1946<br>3979 | 1800<br>3300 | 1700<br>3285 |  |  |
| 20G…E2K4<br>20G…E4K9 | 12<br>15 | 2600<br>5500 | 2668<br>5278 | 2500<br>5100 | 2420<br>4960 | 2100<br>4100 | 2070<br>4095 |  |  |

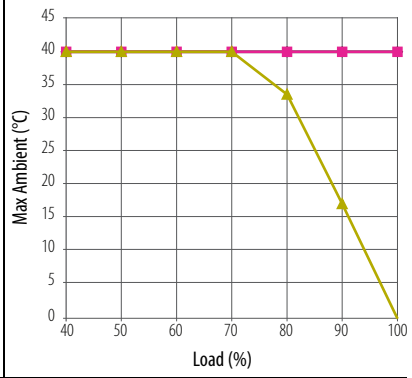
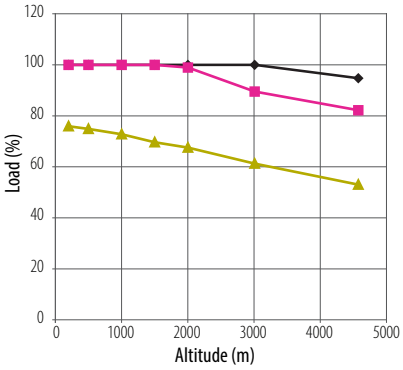
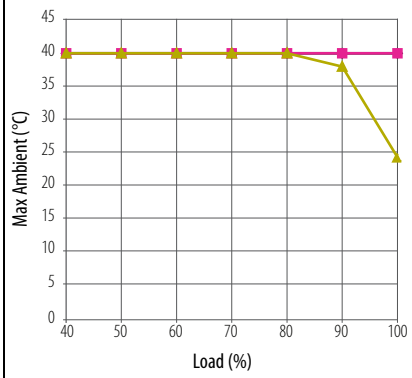
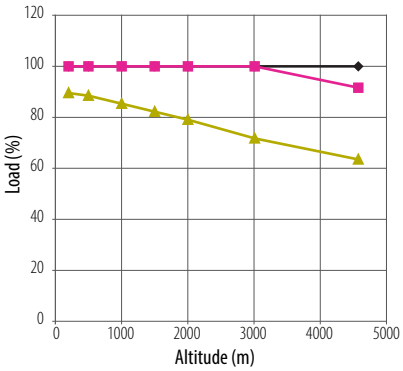
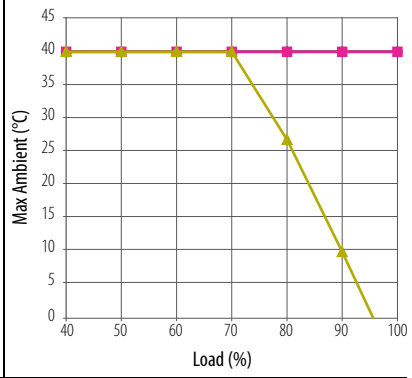
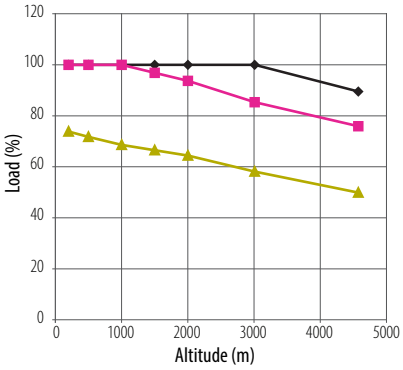
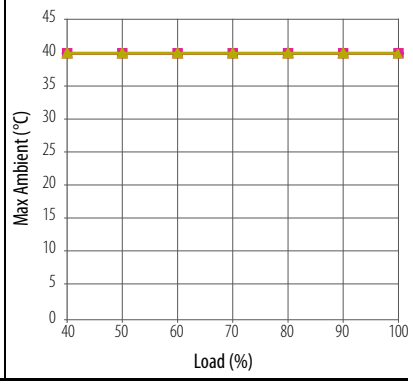
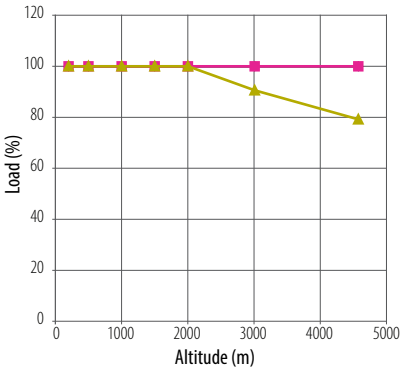
| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 2 kHz, 4 kHz, 8 kHz, 12 kHz | 2 kHz, 4 kHz, 8 kHz, 12 kHz |
| 20G…F015 | 5 | 15 | 20 | 11 | 15 | 7.5 | 12 |  |  |
| 20G…F020 | 5 | 18.5 | 23 | 15 | 20 | 11 | 15 |  |  |
| 20G…F023 | 5 | 22 | 30 | 18.5 | 23 | 15 | 20 |  |  |
| 20G…F030 | 5 | 30 | 34 | 22 | 30 | 18.5 | 23 |  |  |

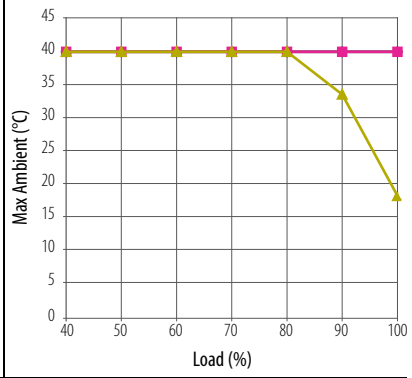
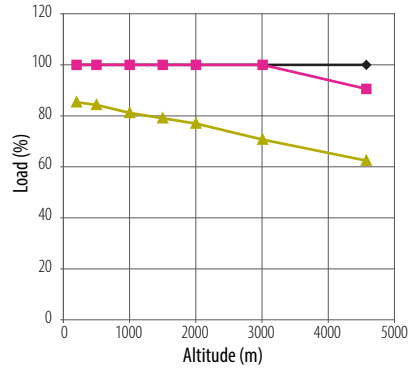
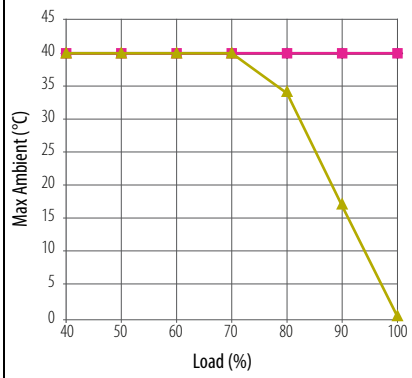
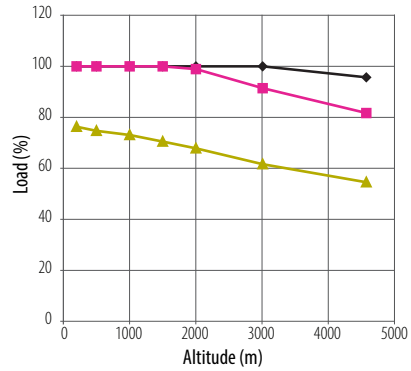
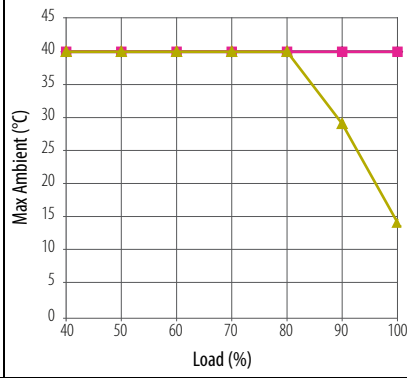
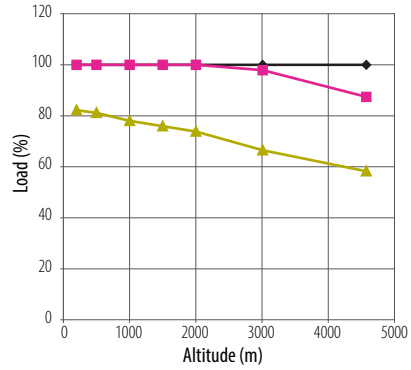
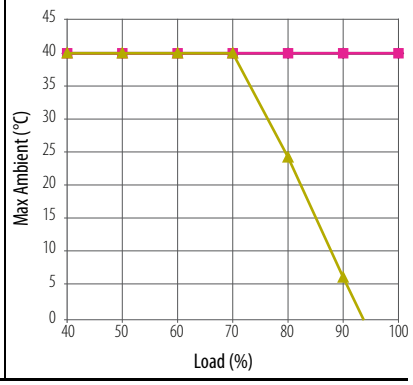
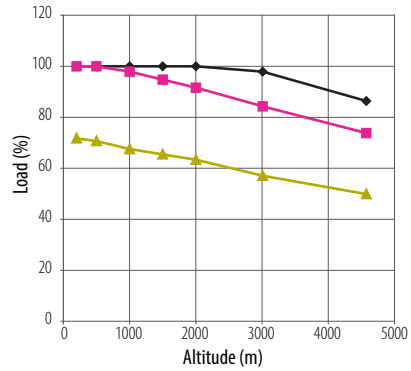
| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | | |
| 20G…F034 | 5 | 37 | 46 | 30 | 34 | 22 | 30 |  |  |
| 20G…F046 | 5 | 45 | 50 | 37 | 46 | 30 | 34 |  |  |
| 20G…F050 | 5 | 55 | 61 | 45 | 50 | 37 | 46 |  |  |
| 20G…F061 | 5 | 75 | 82 | 55 | 61 | 45 | 50 |  |  |

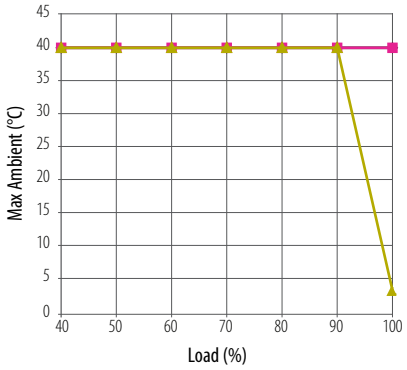
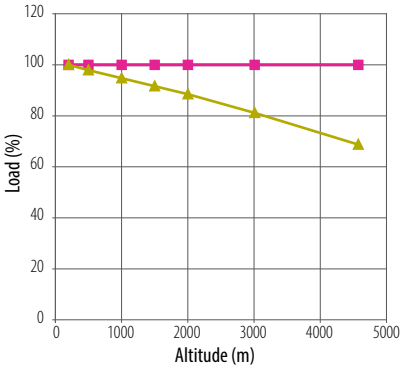
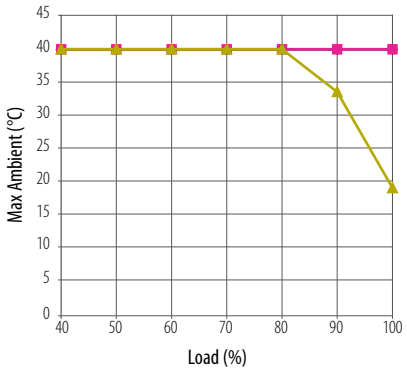
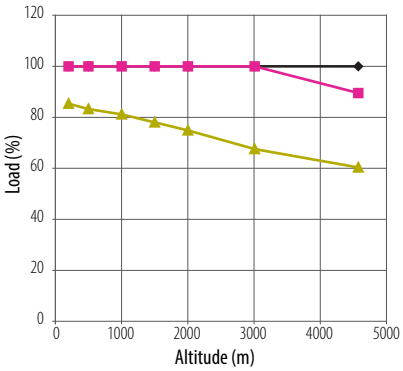
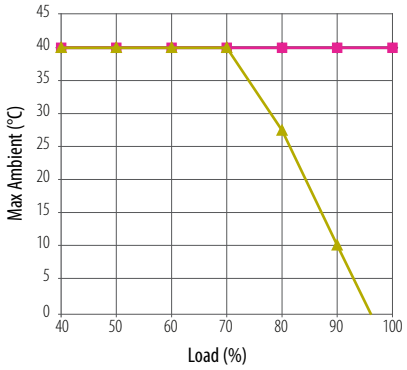
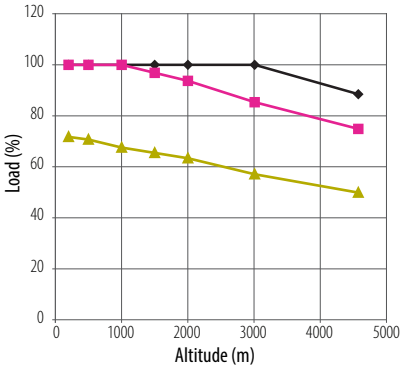
| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP00, UL Open Type | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | | |
| 20G…F082 | 6 | 90 | 98 | 75 | 82 | 55 | 61 |  |  |
| 20G…F098 | 6 | 110 | 119 | 90 | 98 | 75 | 82 |  |  |
| 20G…F119 | 6 | 132 | 142 | 110 | 119 | 90 | 98 |  |  |
| 20G…F142 | 6 | 160 | 171 | 132 | 142 | 110 | 119 |  |  |

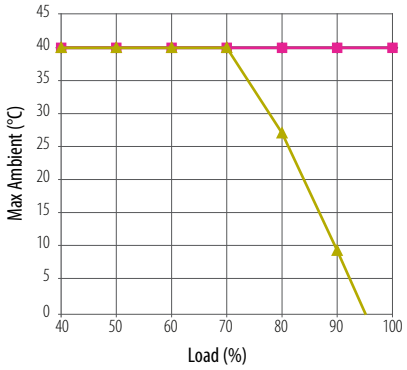
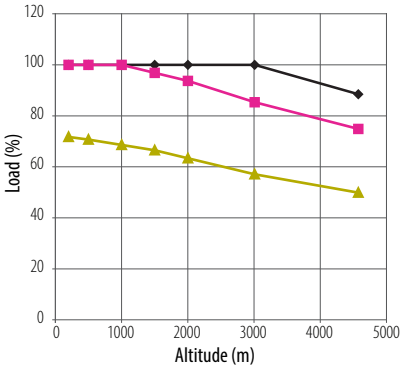
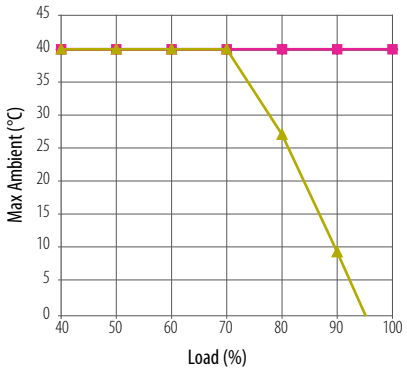
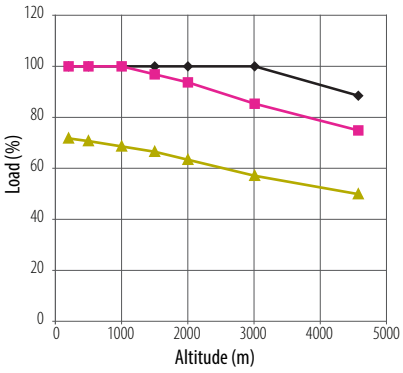
| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F171 | 7 | 200 | 215 | 160 | 171 | 132 | 142 |  |  |
| 20G…F215 | 7 | 250 | 265 | 200 | 215 | 160 | 171 |  |  |
| 20G…F265 | 7 | 315 | 330 | 250 | 265 | 200 | 215 |  |  |
| 20G…F330 | 7 | 355 | 370 | 315 | 330 | 250 | 265 |  |  |

| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F370 | 7 | 400 | 415 | 355 | 370 | 315 | 330 |  |  |
| 20G…F215 | 8 | 250 | 265 | 200 | 215 | 160 | 171 |  |  |
| 20G…F265 | 8 | 315 | 330 | 250 | 265 | 200 | 215 |  |  |
| 20G…F330 | 8 | 355 | 370 | 315 | 330 | 250 | 265 |  |  |

| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F370 | 8 | 400 | 415 | 355 | 370 | 315 | 330 |  |  |
| 20G…F415 | 8 | 450 | 460 | 400 | 415 | 355 | 370 |  |  |
| 20G…F505 | 8 | 560 | 565 | 500 | 505 | 400 | 415 |  |  |
| 20G…F565 | 9 | 630 | 650 | 560 | 565 | 500 | 505 |  |  |

| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F650 | 9 | 710 | 735 | 630 | 650 | 560 | 565 |  |  |
| 20G…F735 | 9 | 800 | 820 | 710 | 735 | 630 | 650 |  |  |
| 20G…F820 | 9 | 900 | 920 | 800 | 820 | 710 | 735 |  |  |
| 20G…F920 | 9 | 1000 | 1074 | 900 | 920 | 800 | 820 |  |  |

| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F1K0 | 10 | 1100 | 1150 | 1000 | 1030 | 900 | 920 |  |  |
| 20G…F1K1 | 10 | 1250 | 1344 | 1100 | 1150 | 1000 | 1030 |  |  |
| 20G…F1K4<br>20G…F2K7 | 10<br>13 | 1500<br>3080 | 1582<br>3108 | 1400<br>2750 | 1419<br>2778 | 1100<br>2200 | 1162<br>2283 |  |  |

| Catalog Number | Frame | 690V AC Power Rating | | | | | | Derating for IP21, UL Type 1 and IP54, UL Type 12 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Light Duty | | Normal Duty | | Heavy Duty | | Ambient Temperature/Load | Altitude/Load |
| | | kW | Cont. Amps | kW | Cont. Amps | kW | Cont. Amps | 1.33 kHz, 2 kHz, 4 kHz | 1.33 kHz, 2 kHz, 4 kHz |
| 20G…F1K8 | 11 | 2000 | 2091 | 1800 | 1865 | 1500 | 1535 |  |  |
| 20G…F1K8 | 14 | 4088 | 4125 | 3650 | 3687 | 2920 | 3030 | | |
| 20G…F2K3 | 12 | 2500 | 2599 | 2300 | 2318 | 2000 | 2020 |  |  |
| 20G…F4K5 | 15 | 5096 | 5142 | 4550 | 4596 | 3640 | 3777 | | |

## Fuses and Circuit Breakers

The tables on the following pages provide recommended AC line input fuse and circuit breaker information. Sizes that are listed are the recommended sizes that are based on 40 °C (104 °F) and the U.S. NEC. Other country, state, or local codes can require different ratings. In addition, floor mount drives and bus supplies (frames 7...15) include AC line and DC bus fuses (with blown fuse indicators) to provide short circuit protection. Panel mount drives and bus supplies (frames 5...6) require the use of external high-speed semiconductor fuses to provide short circuit protection.

### Fusing

The recommended fuse types are listed here. If available current ratings do not match the ratings that are listed in the tables provided, choose the next higher fuse rating.

- IEC – Use type gG or equivalent conforming to EN60269-1, Parts 1 and 2.
- UL – 400, 480, and 600V-class frame 5 and 6 products use high-speed semiconductor FWP series fuses.
- UL – 690V-class frame 5 and 6 products use high-speed semiconductor FWJ series fuses.
- UL – Frames 7...15 products use Class T, RK1, J, or L type conforming to UL 248.

### Circuit Breakers

The 'non-fuse' listings in the following tables include inverse time circuit breakers and instantaneous trip circuit breakers (motor circuit protectors). Both types of circuit breakers are acceptable for IEC installations.

**IMPORTANT** Rockwell Automation recommends the use of external fuses for branch circuit protection. External fusing helps protect the drive in the event of an internal short caused by an industrial accident while the drive is energized. Circuit breakers can be used in series with fuses as means for disconnection.

## 400 Volt AC and 540 Volt DC Input Protection Devices—Frames 5…6

| 400 Volt AC Input | | | | | | | | | | | 540 Volt DC Input | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | AC Input Protection Devices | | | DC Ouput Protection Devices [2] | |
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | Minimum FWP Series Fuse | High Speed Semiconductor Fuse | | Continuous DC Output | DC Output Protection Devices |
| | | | | | 1 min | 3 s | Amps | Amps | Amps | Bussmann Part No. | Amps | Bussmann Part No. [3] |
| 7.5 kW | 5 | 22 | Light | 20x…C015 | 24 | — | 21 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| | | 15.4 | Normal | | 17 | 23 | 14 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| | | 11.5 | Heavy | | 17 | 21 | 11 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| 11 kW | 5 | 30 | Light | 20x…C022 | 33 | — | 28 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| | | 22 | Normal | | 24 | 33 | 21 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| | | 15.4 | Heavy | | 23 | 28 | 14 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| 15 kW | 5 | 37 | Light | 20x…C030 | 41 | — | 35 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| | | 30 | Normal | | 33 | 45 | 28 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| | | 22 | Heavy | | 33 | 40 | 21 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| 18.5 kW | 5 | 43 | Light | 20x…C037 | 47 | — | 40 | FWP-80B | 100 | FWP-100B | 100 | FWP-100B |
| | | 37 | Normal | | 41 | 56 | 35 | FWP-80B | 100 | FWP-100B | 100 | FWP-100B |
| | | 30 | Heavy | | 45 | 54 | 28 | FWP-80B | 100 | FWP-100B | 100 | FWP-100B |
| 22 kW | 5 | 60 | Light | 20x…C043 | 66 | — | 56 | FWP-100B | 100 | FWP-100B | 100 | FWP-100B |
| | | 43 | Normal | | 47 | 65 | 40 | FWP-100B | 100 | FWP-100B | 100 | FWP-100B |
| | | 37 | Heavy | | 56 | 67 | 35 | FWP-100B | 100 | FWP-100B | 100 | FWP-100B |
| 30 kW | 5 | 72 | Light | 20x…C060 | 79 | — | 67 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| | | 60 | Normal | | 66 | 90 | 56 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| | | 43 | Heavy | | 65 | 77 | 40 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| 37 kW | 5 | 85 | Light | 20x…C072 | 94 | — | 79 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| | | 72 | Normal | | 79 | 108 | 67 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| | | 60 | Heavy | | 90 | 108 | 56 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| 45 kW | 5 | 104 | Light | 20x…C085 | 114 | — | 97 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 85 | Normal | | 94 | 128 | 79 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 72 | Heavy | | 108 | 130 | 67 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| 55 kW | 5 | 104 | Light | 20x…C104 | 114 | — | 97 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 104 | Normal | | 114 | 156 | 97 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 85 | Heavy | | 128 | 153 | 79 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| 75 kW | 6 | 170 | Light | 20x…C140 | 187 | — | 159 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| | | 140 | Normal | | 154 | 210 | 131 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| | | 104 | Heavy | | 156 | 187 | 97 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| 90 kW | 6 | 205 | Light | 20x…C176 | 226 | — | 192 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| | | 170 | Normal | | 187 | 255 | 159 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| | | 140 | Heavy | | 210 | 252 | 131 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| 110 kW | 6 | 260 | Light | 20x…C205 | 286 | — | 243 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| | | 205 | Normal | | 226 | 308 | 192 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| | | 170 | Heavy | | 255 | 306 | 159 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| 132 kW | 6 | 302 | Light | 20x…C260 | 332 | — | 282 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |
| | | 260 | Normal | | 286 | 390 | 243 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |
| | | 205 | Heavy | | 308 | 369 | 192 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C043' drive can be used in Normal Duty mode on a 30 kW motor, in Heavy Duty mode on a 22 kW motor or in Light Duty mode on a 37 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(3) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

## 480 Volt AC and 650 Volt DC Input Protection Devices—Frames 5…6

| 480 Volt AC Input | | | | | | | | | | | 650 Volt DC Input | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | AC Input Protection Devices | | | DC Ouput Protection Devices (2) | |
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | Minimum FWP Series Fuse | High Speed Semiconductor Fuse | | Continuous DC Output | DC Output Protection Devices |
| | | | | | 1 min | 3 s | Amps | Amps | Amps | Bussmann Part No. | Amps | Bussmann Part No. (3) |
| 10 Hp | 5 | 22 | Light | 20x…D014 | 24 | — | 20 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| | | 14 | Normal | | 15 | 21 | 13 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| | | 11 | Heavy | | 17 | 20 | 10 | FWP-40B | 100 | FWP-100B | 100 | FWP-100B |
| 15 Hp | 5 | 27 | Light | 20x…D022 | 30 | — | 24 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| | | 22 | Normal | | 24 | 33 | 20 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| | | 14 | Heavy | | 21 | 25 | 13 | FWP-50B | 100 | FWP-100B | 100 | FWP-100B |
| 20 Hp | 5 | 34 | Light | 20x…D027 | 37 | — | 30 | FWP-60B | 100 | FWP-100B | 100 | FWP-100B |
| | | 27 | Normal | | 30 | 41 | 24 | FWP-60B | 100 | FWP-100B | 100 | FWP-100B |
| | | 22 | Heavy | | 33 | 40 | 20 | FWP-60B | 100 | FWP-100B | 100 | FWP-100B |
| 25 Hp | 5 | 40 | Light | 20x…D034 | 44 | — | 36 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| | | 34 | Normal | | 37 | 51 | 30 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| | | 27 | Heavy | | 41 | 49 | 24 | FWP-70B | 100 | FWP-100B | 100 | FWP-100B |
| 30 Hp | 5 | 52 | Light | 20x…D040 | 57 | — | 47 | FWP-90B | 100 | FWP-100B | 100 | FWP-100B |
| | | 40 | Normal | | 44 | 60 | 36 | FWP-90B | 100 | FWP-100B | 100 | FWP-100B |
| | | 34 | Heavy | | 51 | 61 | 30 | FWP-90B | 100 | FWP-100B | 100 | FWP-100B |
| 40 Hp | 5 | 65 | Light | 20x…D052 | 72 | — | 58 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| | | 52 | Normal | | 57 | 78 | 47 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| | | 40 | Heavy | | 60 | 72 | 36 | FWP-125B | 200 | FWP-200A | 175 | FWP-175A |
| 50 Hp | 5 | 77 | Light | 20x…D065 | 85 | — | 69 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| | | 65 | Normal | | 72 | 98 | 58 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| | | 52 | Heavy | | 78 | 94 | 47 | FWP-150B | 200 | FWP-200A | 175 | FWP-175A |
| 60 Hp | 5 | 96 | Light | 20x…D077 | 106 | — | 86 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 77 | Normal | | 85 | 116 | 69 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 65 | Heavy | | 98 | 117 | 58 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| 75 Hp | 5 | 96 | Light | 20x…D096 | 106 | — | 86 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 96 | Normal | | 106 | 144 | 86 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| | | 77 | Heavy | | 116 | 139 | 69 | FWP-175B | 200 | FWP-200A | 175 | FWP-175A |
| 100 Hp | 6 | 156 | Light | 20x…D125 | 172 | — | 140 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| | | 125 | Normal | | 138 | 188 | 112 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| | | 96 | Heavy | | 144 | 173 | 86 | FWP-300B | 350 | FWP-350A | 350 | FWP-350A |
| 125 Hp | 6 | 186 | Light | 20x…D156 | 205 | — | 167 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| | | 156 | Normal | | 172 | 234 | 140 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| | | 125 | Heavy | | 188 | 225 | 112 | FWP-350B | 350 | FWP-350A | 350 | FWP-350A |
| 150 Hp | 6 | 248 | Light | 20x…D186 | 273 | — | 222 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| | | 186 | Normal | | 205 | 279 | 167 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| | | 156 | Heavy | | 234 | 281 | 140 | FWP-450B | 600 | FWP-600A | 500 | FWP-500A |
| 200 Hp | 6 | 302 | Light | 20x…D248 | 332 | — | 271 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |
| | | 248 | Normal | | 273 | 372 | 222 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |
| | | 186 | Heavy | | 279 | 335 | 167 | FWP-600B | 600 | FWP-600A | 500 | FWP-500A |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'D040' drive can be used in Normal Duty mode on a 30 Hp motor, in Heavy Duty mode on a 25 Hp motor or in Light Duty mode on a 40 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(3) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

## 600 Volt AC and 810 Volt DC Input Protection Devices—Frames 5…6

| 600 Volt AC Input | | | | | | | | | | | 810 Volt DC Input | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | AC Input Protection Devices | | | DC Ouput Protection Devices (2) | |
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | Minimum FWP Series Fuse | High Speed Semiconductor Fuse | | Continuous DC Output | DC Output Protection Devices |
| | | | | | 1 min | 3 s | Amps | Amps | Amps | Bussmann Part No. | Amps | Bussmann Part No. (3) |
| 10 Hp | 5 | 17 | Light | 20x…E011 | 19 | — | 15 | FWP-30B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 11 | Normal | | 12 | 17 | 10 | FWP-30B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 9 | Heavy | | 14 | 16 | 8 | FWP-30B | 150 | FWP-150A | 125 | FWJ-125A |
| 15 Hp | 5 | 22 | Light | 20x…E017 | 24 | — | 20 | FWP-40B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 17 | Normal | | 19 | 26 | 15 | FWP-40B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 11 | Heavy | | 17 | 20 | 10 | FWP-40B | 150 | FWP-150A | 125 | FWJ-125A |
| 20 Hp | 5 | 27 | Light | 20x…E022 | 30 | — | 24 | FWP-50B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 22 | Normal | | 24 | 33 | 20 | FWP-50B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 17 | Heavy | | 26 | 31 | 15 | FWP-50B | 150 | FWP-150A | 125 | FWJ-125A |
| 25 Hp | 5 | 32 | Light | 20x…E027 | 35 | — | 29 | FWP-60B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 27 | Normal | | 30 | 41 | 24 | FWP-60B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 22 | Heavy | | 33 | 40 | 20 | FWP-60B | 150 | FWP-150A | 125 | FWJ-125A |
| 30 Hp | 5 | 41 | Light | 20x…E032 | 45 | — | 37 | FWP-70B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 32 | Normal | | 35 | 48 | 29 | FWP-70B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 27 | Heavy | | 41 | 49 | 24 | FWP-70B | 150 | FWP-150A | 125 | FWJ-125A |
| 40 Hp | 5 | 52 | Light | 20x…E041 | 57 | — | 47 | FWP-90B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 41 | Normal | | 45 | 62 | 37 | FWP-90B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 32 | Heavy | | 48 | 58 | 29 | FWP-90B | 150 | FWP-150A | 125 | FWJ-125A |
| 50 Hp | 5 | 62 | Light | 20x…E052 | 68 | — | 56 | FWP-125B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 52 | Normal | | 57 | 78 | 47 | FWP-125B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 41 | Heavy | | 62 | 74 | 37 | FWP-125B | 150 | FWP-150A | 125 | FWJ-125A |
| 60 Hp | 5 | 77 | Light | 20x…E062 | 85 | — | 69 | FWP-150B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 62 | Normal | | 68 | 93 | 56 | FWP-150B | 150 | FWP-150A | 125 | FWJ-125A |
| | | 52 | Heavy | | 78 | 94 | 47 | FWP-150B | 150 | FWP-150A | 125 | FWJ-125A |
| 75 Hp | 6 | 99 | Light | 20x…E077 | 109 | — | 89 | FWP-175B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 77 | Normal | | 85 | 116 | 69 | FWP-175B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 62 | Heavy | | 93 | 112 | 56 | FWP-175B | 350 | FWP-350A | 300 | FWJ-300A |
| 100 Hp | 6 | 125 | Light | 20x…E099 | 138 | — | 112 | FWP-225B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 99 | Normal | | 109 | 149 | 89 | FWP-225B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 77 | Heavy | | 116 | 139 | 69 | FWP-225B | 350 | FWP-350A | 300 | FWJ-300A |
| 125 Hp | 6 | 144 | Light | 20x…E125 | 158 | — | 129 | FWP-250B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 125 | Normal | | 138 | 188 | 112 | FWP-250B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 99 | Heavy | | 149 | 178 | 89 | FWP-250B | 350 | FWP-350A | 300 | FWJ-300A |
| 150 Hp | 6 | 192 | Light | 20x…E144 | 211 | — | 172 | FWP-350B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 144 | Normal | | 158 | 216 | 129 | FWP-350B | 350 | FWP-350A | 300 | FWJ-300A |
| | | 125 | Heavy | | 188 | 225 | 112 | FWP-350B | 350 | FWP-350A | 300 | FWJ-300A |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'E041' drive can be used in Normal Duty mode on a 40 Hp motor, in Heavy Duty mode on a 30 Hp motor or in Light Duty mode on a 50 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(3) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

## 690 Volt AC and 932 Volt DC Input Protection Devices—Frames 5…6

| 690 Volt AC Input | | | | | | | | | | | 932 Volt DC Input | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | AC Input Protection Devices | | | DC Ouput Protection Devices [4] | |
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | Minimum FWJ Series Fuse | Dual Element Time Delay Fuse | | Continuous DC Output | DC Output Protection Devices |
| | | | | | 1 min | 3 s | Amps | Amps | 1/Phase Min [2] | Max [3] | Amps | Bussmann Part No. [5] |
| 11 kW | 5 | 20 | Light | 20x…F015 | 22 | — | 18 | FWJ-35A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 15 | Normal | | 17 | 23 | 13 | FWJ-35A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 12 | Heavy | | 18 | 22 | 11 | FWJ-35A | 125 | FWJ-125A | 125 | FWJ-125A |
| 15 kW | 5 | 23 | Light | 20x…F020 | 25 | — | 21 | FWJ-40A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 20 | Normal | | 22 | 30 | 18 | FWJ-40A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 15 | Heavy | | 23 | 27 | 13 | FWJ-40A | 125 | FWJ-125A | 125 | FWJ-125A |
| 18.5 kW | 5 | 30 | Light | 20x…F023 | 33 | — | 27 | FWJ-50A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 23 | Normal | | 25 | 35 | 21 | FWJ-50A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 20 | Heavy | | 30 | 36 | 18 | FWJ-50A | 125 | FWJ-125A | 125 | FWJ-125A |
| 22 kW | 5 | 34 | Light | 20x…F030 | 37 | — | 30 | FWJ-60A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 30 | Normal | | 33 | 45 | 27 | FWJ-60A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 23 | Heavy | | 35 | 41 | 21 | FWJ-60A | 125 | FWJ-125A | 125 | FWJ-125A |
| 30 kW | 5 | 46 | Light | 20x…F034 | 51 | — | 41 | FWJ-80A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 34 | Normal | | 37 | 51 | 30 | FWJ-80A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 30 | Heavy | | 45 | 54 | 27 | FWJ-80A | 125 | FWJ-125A | 125 | FWJ-125A |
| 37 kW | 5 | 50 | Light | 20x…F046 | 55 | — | 45 | FWJ-90A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 46 | Normal | | 51 | 69 | 41 | FWJ-90A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 34 | Heavy | | 51 | 61 | 30 | FWJ-90A | 125 | FWJ-125A | 125 | FWJ-125A |
| 45 kW | 5 | 61 | Light | 20x…F050 | 67 | — | 55 | FWJ-125A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 50 | Normal | | 55 | 75 | 45 | FWJ-125A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 46 | Heavy | | 69 | 83 | 41 | FWJ-125A | 125 | FWJ-125A | 125 | FWJ-125A |
| 55 kW | 5 | 82 | Light | 20x…F061 | 90 | — | 73 | FWJ-150A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 61 | Normal | | 67 | 92 | 55 | FWJ-150A | 125 | FWJ-125A | 125 | FWJ-125A |
| | | 50 | Heavy | | 75 | 90 | 45 | FWJ-150A | 125 | FWJ-125A | 125 | FWJ-125A |
| 75 kW | 6 | 98 | Light | 20x…F082 | 108 | — | 88 | FWJ-175A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 82 | Normal | | 90 | 123 | 73 | FWJ-175A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 61 | Heavy | | 92 | 110 | 55 | FWJ-175A | 300 | FWJ-300A | 300 | FWJ-300A |
| 90 kW | 6 | 119 | Light | 20x…F098 | 131 | — | 106 | FWJ-200A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 98 | Normal | | 108 | 147 | 88 | FWJ-200A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 82 | Heavy | | 123 | 148 | 73 | FWJ-200A | 300 | FWJ-300A | 300 | FWJ-300A |
| 110 kW | 6 | 142 | Light | 20x…F119 | 156 | — | 127 | FWJ-250A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 119 | Normal | | 131 | 179 | 106 | FWJ-250A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 98 | Heavy | | 147 | 176 | 88 | FWJ-250A | 300 | FWJ-300A | 300 | FWJ-300A |
| 132 kW | 6 | 171 | Light | 20x…F142 | 188 | — | 153 | FWJ-300A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 142 | Normal | | 156 | 213 | 127 | FWJ-300A | 300 | FWJ-300A | 300 | FWJ-300A |
| | | 119 | Heavy | | 179 | 214 | 106 | FWJ-300A | 300 | FWJ-300A | 300 | FWJ-300A |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'F046' drive can be used in Normal Duty mode on a 37 kW motor, in Heavy Duty mode on a 30 kW motor or in Light Duty mode on a 45 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(3) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(4) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(5) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

## 400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7…12

| 400 Volt AC Input | | | | | | | | | | | | | | | | | | | 540 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 160 kW | 7 | 367 | Light | 20x…C302 | 404 | — | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 394 | 1400 | 2 |
| | | 302 | Normal | | 332 | 453 | 282 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 324 | 1400 | 2 |
| | | 260 | Heavy | | 390 | 468 | 243 | — | — | 900 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 279 | 1400 | 2 |
| 200 kW | 7 | 460 | Light | 20x…C367 | 506 | — | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 494 | 1400 | 2 |
| | | 367 | Normal | | 404 | 551 | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 394 | 1400 | 2 |
| | | 302 | Heavy | | 453 | 544 | 282 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 324 | 1400 | 2 |
| 250 kW | 7 | 540 | Light | 20x…C460 | 594 | — | 505 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 579 | 1400 | 2 |
| | | 460 | Normal | | 506 | 690 | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 494 | 1400 | 2 |
| | | 367 | Heavy | | 551 | 661 | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 394 | 1400 | 2 |
| 315 kW | 7 | 585 | Light | 20x…C540 | 644 | — | 547 | — | — | 900 | 1 | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 628 | 1400 | 2 |
| | | 540 | Normal | | 594 | 810 | 505 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 579 | 1400 | 2 |
| | | 460 | Heavy | | 690 | 828 | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 494 | 1400 | 2 |
| 315 kW | 7 | 617 | Light | 20x…C585 | 679 | — | 577 | — | — | 900 | 1 | 800 | 1000 | 800 | 1900 | 800 | 1600 | 800 | 662 | 1400 | 2 |
| | | 600 | Normal | | 660 | 900 | 561 | — | — | 900 | 1 | 750 | 900 | 750 | 1800 | 750 | 1400 | 750 | 644 | 1400 | 2 |
| | | 500 | Heavy | | 750 | 900 | 467 | — | — | 900 | 1 | 650 | 800 | 650 | 1400 | 650 | 1200 | 650 | 537 | 1400 | 2 |
| 160 kW | 8 | 367 | Light | 20x…C302 | 404 | — | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 423 | 1400 | 2 |
| | | 302 | Normal | | 332 | 453 | 282 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 348 | 1400 | 2 |
| | | 260 | Heavy | | 390 | 468 | 243 | — | — | 900 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 300 | 1400 | 2 |
| 200 kW | 8 | 460 | Light | 20x…C367 | 506 | — | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 530 | 1400 | 2 |
| | | 367 | Normal | | 404 | 551 | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 423 | 1400 | 2 |
| | | 302 | Heavy | | 453 | 544 | 282 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 348 | 1400 | 2 |
| 250 kW | 8 | 540 | Light | 20x…C460 | 594 | — | 505 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 622 | 1400 | 2 |
| | | 460 | Normal | | 506 | 690 | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 530 | 1400 | 2 |
| | | 367 | Heavy | | 551 | 661 | 343 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 423 | 1400 | 2 |
| 315 kW | 8 | 585 | Light | 20x…C540 | 644 | — | 547 | — | — | 900 | 1 | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 674 | 1400 | 2 |
| | | 540 | Normal | | 594 | 810 | 505 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 622 | 1400 | 2 |
| | | 460 | Heavy | | 690 | 828 | 430 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 530 | 1400 | 2 |
| 315 kW | 8 | 650 | Light | 20x…C585 | 715 | — | 582 | — | — | 1250 | 1 | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 749 | 1400 | 2 |
| | | 585 | Normal | | 644 | 878 | 547 | — | — | 1250 | 1 | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 674 | 1400 | 2 |
| | | 472 | Heavy | | 708 | 850 | 430 | — | — | 1250 | 1 | 600 | 800 | 600 | 1400 | 600 | 1200 | 600 | 544 | 1400 | 2 |

See page 195 for notes.

## 400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 400 Volt AC Input | | | | | | | | | | | | | | | | | | | 540 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 355 kW | 8 | 750 | Light | 20x…C650 | 825 | — | 701 | — | — | 1250 | 1 | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 864 | 1400 | 2 |
| | | 650 | Normal | | 715 | 975 | 608 | — | — | 1250 | 1 | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 749 | 1400 | 2 |
| | | 540 | Heavy | | 810 | 972 | 505 | — | — | 1250 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 622 | 1400 | 2 |
| 400 kW | 8 | 796 | Light | 20x…C750 | 876 | — | 720 | — | — | 1250 | 1 | 1000 | 1400 | 1000 | 2400 | 1000 | 1900 | 1000 | 917 | 1400 | 2 |
| | | 750 | Normal | | 825 | 1125 | 701 | — | — | 1250 | 1 | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 864 | 1400 | 2 |
| | | 585 | Heavy | | 878 | 1053 | 547 | — | — | 1250 | 1 | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 674 | 1400 | 2 |
| 400 kW | 8 | 832 | Light | 20x…C770 | 915 | — | 778 | — | — | 1250 | 1 | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1000 | 959 | 1400 | 2 |
| | | 770 | Normal | | 847 | 1155 | 720 | — | — | 1250 | 1 | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 887 | 1400 | 2 |
| | | 650 | Heavy | | 975 | 1170 | 600 | — | — | 1250 | 1 | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 749 | 1400 | 2 |
| 500 kW | 9 | 1040 | Light | 20x…C920 | 1144 | — | 972 | 1800 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1198 | 1400 | 4 |
| | | 920 | Normal | | 1012 | 1380 | 860 | 1800 | 1 | — | — | 1200 | 1600 | 1200 | 2500 | 1200 | 2400 | 1200 | 1060 | 1400 | 4 |
| | | 770 | Heavy | | 1155 | 1386 | 720 | 1800 | 1 | — | — | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 887 | 1400 | 4 |
| 560 kW | 9 | 1090 | Light | 20x…C1K0 | 1199 | — | 1019 | 1800 | 1 | — | — | 1400 | 1900 | 1400 | 3000 | 1400 | 3000 | 1400 | 1256 | 1400 | 4 |
| | | 1040 | Normal | | 1144 | 1560 | 972 | 1800 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1198 | 1400 | 4 |
| | | 920 | Heavy | | 1380 | 1656 | 860 | 1800 | 1 | — | — | 1200 | 1600 | 1200 | 2500 | 1200 | 2400 | 1200 | 1060 | 1400 | 4 |
| 630 kW | 9 | 1182 | Light | 20x…C1K1 | 1300 | — | 1105 | 2000 | 1 | — | — | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1362 | 1400 | 4 |
| | | 1112 | Normal | | 1223 | 1667 | 1039 | 2000 | 1 | — | — | 1400 | 1900 | 1400 | 3500 | 1400 | 3000 | 1400 | 1281 | 1400 | 4 |
| | | 1040 | Heavy | | 1560 | 1872 | 972 | 2000 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1198 | 1400 | 4 |
| 710 kW | 9 | 1465 | Light | 20x…C1K2 | 1612 | — | 1370 | 2000 | 1 | — | — | 1900 | 2500 | 1900 | 4000 | 1900 | 3500 | 1800 | 1688 | 1400 | 4 |
| | | 1175 | Normal | | 1293 | 1763 | 1099 | 2000 | 1 | — | — | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1354 | 1400 | 4 |
| | | 1090 | Heavy | | 1635 | 1962 | 1019 | 2000 | 1 | — | — | 1400 | 1900 | 1400 | 3000 | 1400 | 3000 | 1400 | 1256 | 1400 | 4 |
| 800 kW | 9 | 1581 | Light | 20x…C1K4 | 1739 | — | 1478 | 2000 | 1 | — | — | 2000 | 3000 | 2000 | 4500 | 2000 | 4000 | 1900 | 1821 | 1400 | 4 |
| | | 1463 | Normal | | 1612 | 2198 | 1368 | 2000 | 1 | — | — | 1900 | 2500 | 1900 | 4000 | 1900 | 3500 | 1900 | 1688 | 1400 | 4 |
| | | 1175 | Heavy | | 1763 | 2115 | 1099 | 2000 | 1 | — | — | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1354 | 1400 | 4 |
| 850 kW | 10 | 1715 | Light | 20x…C1K6 | 1887 | — | 1603 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4500 | 2400 | 1976 | 1400 | 6 |
| | | 1590 | Normal | | 1749 | 2385 | 1478 | 2000 | 1 | 1250 | 1 | 2000 | 3000 | 2000 | 4500 | 2000 | 4000 | 2000 | 1832 | 1400 | 6 |
| | | 1465 | Heavy | | 2198 | 2637 | 1370 | 2000 | 1 | 1250 | 1 | 1900 | 2500 | 1900 | 4000 | 1900 | 3500 | 1900 | 1688 | 1400 | 6 |
| 1000 kW | 10 | 2150 | Light | 20x…C1K7 | 2365 | — | 2010 | 2000 | 1 | 1250 | 1 | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 2477 | 1400 | 6 |
| | | 1715 | Normal | | 1887 | 2573 | 1603 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4500 | 2400 | 1976 | 1400 | 6 |
| | | 1480 | Heavy | | 2220 | 2664 | 1384 | 2000 | 1 | 1250 | 1 | 1900 | 2500 | 1900 | 4500 | 1900 | 3800 | 1900 | 1705 | 1400 | 6 |

See page 195 for notes.

## 400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 400 Volt AC Input | | | | | | | | | | | | | | | | | | | 540 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 1250 kW | 10 | 2330 | Light | 20x…C2K1 | 2563 | — | 2178 | 2000 | 1 | 1250 | 1 | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 2684 | 1400 | 6 |
| | | 2156 | Normal | | 2372 | 3234 | 2016 | 2000 | 1 | 1250 | 1 | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 2484 | 1400 | 6 |
| | | 1715 | Heavy | | 2573 | 3087 | 1603 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4500 | 2400 | 1976 | 1400 | 6 |
| 1650 kW | 11 | 3078 | Light | 20x…C2K8 | 3386 | — | 2878 | 2000 | 2 | — | — | 4000 | 5000 | 4000 | 6000 | 4000 | 6000 | 3800 | 3546 | 1400 | 8 |
| | | 2849 | Normal | | 3134 | 4274 | 2664 | 2000 | 2 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 3282 | 1400 | 8 |
| | | 2330 | Heavy | | 3495 | 4194 | 2179 | 2000 | 2 | — | — | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 2684 | 1400 | 8 |
| 2000 kW | 12 | 3846 | Light | 20x…C3K5 | 4231 | — | 3578 | 2000 | 2 | 1250 | 1 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 4431 | 1400 | 10 |
| | | 3542 | Normal | | 3896 | 5313 | 3312 | 2000 | 2 | 1250 | 1 | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 4081 | 1400 | 10 |
| | | 3032 | Heavy | | 4548 | 5458 | 2835 | 2000 | 2 | 1250 | 1 | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 3493 | 1400 | 10 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating]. Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 480 Volt AC and 650 Volt DC Input Protection Devices - Frames 7…12

| 480 Volt AC Input | | | | | | | | | | | | | | | | | | 650 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 250 Hp | 7 | 361 | Light | 20x…D302 | 397 | — | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 371 | 1400 | 2 |
| | | 302 | Normal | | 332 | 453 | 271 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 311 | 1400 | 2 |
| | | 248 | Heavy | | 372 | 446 | 222 | — | — | 900 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 255 | 1400 | 2 |
| 300 Hp | 7 | 430 | Light | 20x…D361 | 473 | — | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 442 | 1400 | 2 |
| | | 361 | Normal | | 397 | 542 | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 371 | 1400 | 2 |
| | | 302 | Heavy | | 453 | 544 | 271 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 311 | 1400 | 2 |
| 350 Hp | 7 | 485 | Light | 20x…D430 | 534 | — | 435 | — | — | 900 | 1 | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 499 | 1400 | 2 |
| | | 430 | Normal | | 473 | 645 | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 442 | 1400 | 2 |
| | | 361 | Heavy | | 542 | 650 | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 371 | 1400 | 2 |
| 400 Hp | 7 | 545 | Light | 20x…D505 | 600 | — | 488 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 560 | 1400 | 2 |
| | | 505 | Normal | | 556 | 758 | 452 | — | — | 900 | 1 | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 519 | 1400 | 2 |
| | | 430 | Heavy | | 645 | 774 | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 442 | 1400 | 2 |
| 500 Hp | 7 | 617 | Light | 20x…D617 | 679 | — | 553 | — | — | 900 | 1 | 800 | 1000 | 800 | 1800 | 800 | 1600 | 800 | 635 | 1400 | 2 |
| | | 600 | Normal | | 660 | 900 | 538 | — | — | 900 | 1 | 750 | 900 | 750 | 1600 | 750 | 1400 | 750 | 617 | 1400 | 2 |
| | | 500 | Heavy | | 750 | 900 | 448 | — | — | 900 | 1 | 650 | 800 | 650 | 1400 | 650 | 120 | 650 | 514 | 1400 | 2 |
| 250 Hp | 8 | 361 | Light | 20x…D302 | 397 | — | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 399 | 1400 | 2 |
| | | 302 | Normal | | 332 | 453 | 271 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 333 | 1400 | 2 |
| | | 248 | Heavy | | 372 | 446 | 222 | — | — | 900 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 274 | 1400 | 2 |
| 300 Hp | 8 | 430 | Light | 20x…D361 | 473 | — | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 475 | 1400 | 2 |
| | | 361 | Normal | | 397 | 542 | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 399 | 1400 | 2 |
| | | 302 | Heavy | | 453 | 544 | 271 | — | — | 900 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 333 | 1400 | 2 |
| 350 Hp | 8 | 485 | Light | 20x…D430 | 534 | — | 435 | — | — | 900 | 1 | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 535 | 1400 | 2 |
| | | 430 | Normal | | 473 | 645 | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 475 | 1400 | 2 |
| | | 361 | Heavy | | 542 | 650 | 323 | — | — | 900 | 1 | 500 | 650 | 500 | 1000 | 500 | 900 | 500 | 399 | 1400 | 2 |
| 400 Hp | 8 | 545 | Light | 20x…D505 | 600 | — | 488 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 602 | 1400 | 2 |
| | | 505 | Normal | | 556 | 758 | 452 | — | — | 900 | 1 | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 558 | 1400 | 2 |
| | | 430 | Heavy | | 645 | 774 | 385 | — | — | 900 | 1 | 600 | 750 | 600 | 1200 | 600 | 1000 | 600 | 475 | 1400 | 2 |
| 450 Hp | 8 | 617 | Light | 20x…D545 | 679 | — | 529 | — | — | 1250 | 1 | 800 | 1000 | 800 | 1800 | 800 | 1500 | 800 | 681 | 1400 | 2 |
| | | 545 | Normal | | 600 | 818 | 488 | — | — | 1250 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 602 | 1400 | 2 |
| | | 454 | Heavy | | 681 | 817 | 385 | — | — | 1250 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 501 | 1400 | 2 |

See page 198 for notes.

## 480 Volt AC and 650 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 480 Volt AC Input | | | | | | | | | | | | | | | | | | | 650 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 500 Hp | 8 | 710 | Light | 20x…D617 | 781 | — | 636 | — | — | 1250 | 1 | 900 | 1200 | 900 | 2000 | 900 | 1800 | 900 | 784 | 1400 | 2 |
| | | 617 | Normal | | 679 | 926 | 553 | — | — | 1250 | 1 | 800 | 1000 | 800 | 1800 | 800 | 1500 | 800 | 681 | 1400 | 2 |
| | | 485 | Heavy | | 728 | 873 | 435 | — | — | 1250 | 1 | 700 | 800 | 700 | 1400 | 700 | 1200 | 700 | 535 | 1400 | 2 |
| 600 Hp | 8 | 765 | Light | 20x…D710 | 842 | — | 663 | — | — | 1250 | 1 | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 845 | 1400 | 2 |
| | | 710 | Normal | | 781 | 1065 | 636 | — | — | 1250 | 1 | 900 | 1200 | 900 | 2000 | 900 | 1800 | 900 | 784 | 1400 | 2 |
| | | 545 | Heavy | | 818 | 981 | 488 | — | — | 1250 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 602 | 1400 | 2 |
| 650 Hp | 8 | 800 | Light | 20x…D740 | 880 | — | 717 | — | — | 1250 | 1 | 1000 | 1400 | 1000 | 2400 | 1000 | 2000 | 1000 | 883 | 1400 | 2 |
| | | 740 | Normal | | 814 | 1110 | 663 | — | — | 1250 | 1 | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 817 | 1400 | 2 |
| | | 617 | Heavy | | 926 | 1111 | 553 | — | — | 1250 | 1 | 800 | 1000 | 800 | 1800 | 800 | 1500 | 800 | 681 | 1400 | 2 |
| 700 Hp | 9 | 960 | Light | 20x…D800 | 1056 | — | 860 | 1800 | 1 | — | — | 1200 | 1600 | 1200 | 3000 | 1200 | 2400 | 1200 | 1060 | 1400 | 4 |
| | | 800 | Normal | | 880 | 1200 | 717 | 1800 | 1 | — | — | 1000 | 1400 | 1000 | 2400 | 1000 | 2000 | 1000 | 883 | 1400 | 4 |
| | | 740 | Heavy | | 1110 | 1332 | 663 | 1800 | 1 | — | — | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 817 | 1400 | 4 |
| 800 Hp | 9 | 1045 | Light | 20x…D960 | 1150 | — | 936 | 1800 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1154 | 1400 | 4 |
| | | 960 | Normal | | 1056 | 1440 | 860 | 1800 | 1 | — | — | 1200 | 1600 | 1200 | 3000 | 1200 | 2400 | 1200 | 1060 | 1400 | 4 |
| | | 800 | Heavy | | 1200 | 1440 | 717 | 1800 | 1 | — | — | 1000 | 1400 | 1000 | 2400 | 1000 | 2000 | 1000 | 883 | 1400 | 4 |
| 900 Hp | 9 | 1135 | Light | 20x…D1K0 | 1249 | — | 1004 | 2000 | 1 | — | — | 1500 | 1900 | 1500 | 3500 | 1500 | 3000 | 1500 | 1253 | 1400 | 4 |
| | | 1045 | Normal | | 1150 | 1568 | 936 | 2000 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1154 | 1400 | 4 |
| | | 960 | Heavy | | 1440 | 1728 | 860 | 2000 | 1 | — | — | 1200 | 1600 | 1200 | 3000 | 1200 | 2400 | 1200 | 1060 | 1400 | 4 |
| 1000 Hp | 9 | 1365 | Light | 20x…D1K1 | 1502 | — | 1223 | 2000 | 1 | — | — | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1507 | 1400 | 4 |
| | | 1135 | Normal | | 1249 | 1703 | 1017 | 2000 | 1 | — | — | 1500 | 1900 | 1500 | 3500 | 1500 | 3000 | 1500 | 1253 | 1400 | 4 |
| | | 1045 | Heavy | | 1568 | 1881 | 936 | 2000 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1154 | 1400 | 4 |
| 1100 Hp | 9 | 1520 | Light | 20x…D1K3 | 1672 | — | 1362 | 2000 | 1 | — | — | 1900 | 2500 | 1900 | 4500 | 1900 | 3800 | 1900 | 1678 | 1400 | 4 |
| | | 1365 | Normal | | 1502 | 2048 | 1223 | 2000 | 1 | — | — | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1507 | 1400 | 4 |
| | | 1135 | Heavy | | 1703 | 2043 | 1017 | 2000 | 1 | — | — | 1500 | 1900 | 1500 | 3500 | 1500 | 3000 | 1500 | 1253 | 1400 | 4 |
| 1250 Hp | 10 | 1655 | Light | 20x…D1K4 | 1821 | — | 1483 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 1827 | 1400 | 6 |
| | | 1420 | Normal | | 1562 | 2130 | 1272 | 2000 | 1 | 1250 | 1 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1568 | 1400 | 6 |
| | | 1365 | Heavy | | 2048 | 2457 | 1223 | 2000 | 1 | 1250 | 1 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1507 | 1400 | 6 |
| 1500 Hp | 10 | 2070 | Light | 20x…D1K6 | 2277 | — | 1855 | 2000 | 1 | 1250 | 1 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 2285 | 1400 | 6 |
| | | 1655 | Normal | | 1821 | 2483 | 1483 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 1827 | 1400 | 6 |
| | | 1420 | Heavy | | 2130 | 2556 | 1272 | 2000 | 1 | 1250 | 1 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1568 | 1400 | 6 |

See page 198 for notes.

## 480 Volt AC and 650 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 480 Volt AC Input | | | | | | | | | | | | | | | | | | | 650 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 1800 Hp | 10 | 2240 | Light | 20x…D2K0 | 2464 | — | 2007 | 2000 | 1 | 1250 | 1 | 3000 | 4000 | 3000 | 6000 | 3000 | 5000 | 3000 | 2473 | 1400 | 6 |
| | | 2072 | Normal | | 2279 | 3108 | 1857 | 2000 | 1 | 1250 | 1 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 2288 | 1400 | 6 |
| | | 1655 | Heavy | | 2483 | 2979 | 1483 | 2000 | 1 | 1250 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 1827 | 1400 | 6 |
| 2400 Hp | 11 | 2960 | Light | 20x…D2K6 | 3256 | — | 2652 | 2000 | 2 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 3268 | 1400 | 8 |
| | | 2738 | Normal | | 3012 | 4107 | 2453 | 2000 | 2 | — | — | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 3023 | 1400 | 8 |
| | | 2240 | Heavy | | 3360 | 4032 | 2007 | 2000 | 2 | — | — | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 2473 | 1400 | 8 |
| 3000 Hp | 12 | 3696 | Light | 20x…D3K4 | 4066 | — | 33297 | 2000 | 2 | 1250 | 1 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 4081 | 1400 | 10 |
| | | 3404 | Normal | | 3744 | 5106 | 3050 | 2000 | 2 | 1250 | 1 | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 3758 | 1400 | 10 |
| | | 2980 | Heavy | | 4470 | 5364 | 2670 | 2000 | 2 | 1250 | 1 | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 3290 | 1400 | 10 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'D430' drive can be used in Normal Duty mode on a 350 Hp motor, in Heavy Duty mode on a 300 Hp motor or in Light Duty mode on a 400 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating]. Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 600 Volt AC and 810 Volt DC Input Protection Devices - Frames 7…12

| 600 Volt AC Input | | | | | | | | | | | | | | | | | | 810 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 200 Hp | 7 | 242 | Light | 20x…E192 | 266 | — | 217 | — | — | 700 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 249 | 1100 | 2 |
| | | 192 | Normal | | 211 | 288 | 172 | — | — | 700 | 1 | 250 | 350 | 250 | 600 | 250 | 500 | 250 | 197 | 1100 | 2 |
| | | 144 | Heavy | | 216 | 259.2 | 129 | — | — | 700 | 1 | 175 | 400 | 200 | 400 | 200 | 350 | 200 | 148 | 1100 | 2 |
| 250 Hp | 7 | 295 | Light | 20x…E242 | 325 | — | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 303 | 1100 | 2 |
| | | 242 | Normal | | 266 | 363 | 217 | — | — | 700 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 249 | 1100 | 2 |
| | | 192 | Heavy | | 288 | 345.6 | 172 | — | — | 700 | 1 | 250 | 350 | 250 | 600 | 250 | 500 | 250 | 197 | 1100 | 2 |
| 300 Hp | 7 | 355 | Light | 20x…E295 | 391 | — | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 365 | 1100 | 2 |
| | | 295 | Normal | | 325 | 442.5 | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 303 | 1100 | 2 |
| | | 242 | Heavy | | 363 | 435.6 | 217 | — | — | 700 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 249 | 1100 | 2 |
| 350 Hp | 7 | 395 | Light | 20x…E355 | 435 | — | 354 | — | — | 700 | 1 | 500 | 700 | 500 | 1100 | 500 | 1000 | 500 | 406 | 1100 | 2 |
| | | 355 | Normal | | 391 | 532.5 | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 365 | 1100 | 2 |
| | | 295 | Heavy | | 443 | 531 | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 303 | 1100 | 2 |
| 400 Hp | 7 | 435 | Light | 20x…E395 | 479 | — | 390 | — | — | 700 | 1 | 600 | 750 | 600 | 1350 | 600 | 1100 | 600 | 447 | 1100 | 2 |
| | | 395 | Normal | | 435 | 592.5 | 354 | — | — | 700 | 1 | 500 | 700 | 500 | 1100 | 500 | 1000 | 500 | 406 | 1100 | 2 |
| | | 355 | Heavy | | 533 | 639 | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 365 | 1100 | 2 |
| 250 Hp | 8 | 295 | Light | 20x…E242 | 325 | — | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 326 | 1100 | 2 |
| | | 242 | Normal | | 266 | 363 | 217 | — | — | 700 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 267 | 1100 | 2 |
| | | 192 | Heavy | | 288 | 346 | 172 | — | — | 700 | 1 | 250 | 350 | 250 | 600 | 250 | 500 | 250 | 212 | 1100 | 2 |
| 300 Hp | 8 | 355 | Light | 20x…E295 | 391 | — | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 392 | 1100 | 2 |
| | | 295 | Normal | | 325 | 443 | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 326 | 1100 | 2 |
| | | 242 | Heavy | | 363 | 436 | 217 | — | — | 700 | 1 | 350 | 400 | 350 | 750 | 350 | 600 | 350 | 267 | 1100 | 2 |
| 350 Hp | 8 | 395 | Light | 20x…E355 | 435 | — | 354 | — | — | 700 | 1 | 500 | 700 | 500 | 1100 | 500 | 1000 | 500 | 436 | 1100 | 2 |
| | | 355 | Normal | | 391 | 533 | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 392 | 1100 | 2 |
| | | 295 | Heavy | | 443 | 531 | 264 | — | — | 700 | 1 | 400 | 500 | 400 | 900 | 400 | 750 | 400 | 326 | 1100 | 2 |
| 400 Hp | 8 | 435 | Light | 20x…E395 | 479 | — | 390 | — | — | 700 | 1 | 600 | 750 | 600 | 1350 | 600 | 1100 | 600 | 480 | 1100 | 2 |
| | | 395 | Normal | | 435 | 593 | 354 | — | — | 700 | 1 | 500 | 700 | 500 | 1100 | 500 | 1000 | 500 | 436 | 1100 | 2 |
| | | 355 | Heavy | | 533 | 639 | 318 | — | — | 700 | 1 | 450 | 600 | 450 | 1000 | 450 | 900 | 450 | 392 | 1100 | 2 |
| 450 Hp | 8 | 510 | Light | 20x…E435 | 561 | — | 457 | — | — | 900 | 1 | 650 | 900 | 650 | 1500 | 650 | 1200 | 650 | 563 | 1100 | 2 |
| | | 435 | Normal | | 479 | 653 | 390 | — | — | 900 | 1 | 600 | 750 | 600 | 1350 | 600 | 1100 | 600 | 480 | 1100 | 2 |
| | | 395 | Heavy | | 593 | 711 | 354 | — | — | 900 | 1 | 500 | 700 | 500 | 1100 | 500 | 1000 | 500 | 436 | 1100 | 2 |

See page 201 for notes.

## 600 Volt AC and 810 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 600 Volt AC Input | | | | | | | | | | | | | | | | | | | 810 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 550 Hp | 8 | 580 | Light | 20x…E545 | 638 | — | 520 | — | — | 900 | 1 | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 640 | 1100 | 2 |
| | | 545 | Normal | | 600 | 818 | 488 | — | — | 900 | 1 | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 602 | 1100 | 2 |
| | | 450 | Heavy | | 675 | 810 | 403 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 497 | 1100 | 2 |
| 600 Hp | 9 | 690 | Light | 20x…E595 | 759 | — | 618 | 1250 | 1 | — | — | 900 | 1200 | 900 | 2000 | 900 | 1800 | 900 | 762 | 1100 | 4 |
| | | 580 | Normal | | 638 | 870 | 520 | 1250 | 1 | — | — | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 640 | 1100 | 4 |
| | | 545 | Heavy | | 818 | 981 | 488 | 1250 | 1 | — | — | 700 | 900 | 700 | 1600 | 700 | 1350 | 700 | 602 | 1100 | 4 |
| 700 Hp | 9 | 760 | Light | 20x…E690 | 836 | — | 681 | 1250 | 1 | — | — | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 839 | 1100 | 4 |
| | | 690 | Normal | | 759 | 1035 | 618 | 1250 | 1 | — | — | 900 | 1200 | 900 | 2000 | 900 | 1800 | 900 | 762 | 1100 | 4 |
| | | 595 | Heavy | | 893 | 1071 | 520 | 1250 | 1 | — | — | 750 | 1000 | 750 | 1800 | 750 | 1400 | 750 | 657 | 1100 | 4 |
| 800 Hp | 9 | 825 | Light | 20x…E760 | 908 | — | 739 | 1250 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 911 | 1100 | 4 |
| | | 760 | Normal | | 836 | 1140 | 681 | 1250 | 1 | — | — | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 839 | 1100 | 4 |
| | | 690 | Heavy | | 1035 | 1242 | 618 | 1250 | 1 | — | — | 900 | 1200 | 900 | 2000 | 900 | 1800 | 900 | 762 | 1100 | 4 |
| 900 Hp | 9 | 980 | Light | 20x…E825 | 1078 | — | 878 | 1600 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2400 | 1350 | 1082 | 1100 | 4 |
| | | 825 | Normal | | 908 | 1238 | 739 | 1600 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 911 | 1100 | 4 |
| | | 760 | Heavy | | 1140 | 1368 | 681 | 1600 | 1 | — | — | 1000 | 1350 | 1000 | 2400 | 1000 | 1900 | 1000 | 839 | 1100 | 4 |
| 1000 Hp | 9 | 1102 | Light | 20x…E980 | 1212 | — | 987 | 1600 | 1 | — | — | 1400 | 1900 | 1400 | 3500 | 1400 | 2500 | 1400 | 1217 | 1100 | 4 |
| | | 980 | Normal | | 1078 | 1470 | 878 | 1600 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2400 | 1350 | 1082 | 1100 | 4 |
| | | 825 | Heavy | | 1238 | 1485 | 739 | 1600 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 911 | 1100 | 4 |
| 1100 Hp | 10 | 1220 | Light | 20x…E1K1 | 1342 | — | 1093 | 1600 | 1 | 900 | 1 | 1600 | 2000 | 1600 | 3500 | 1600 | 3000 | 1600 | 1347 | 1100 | 6 |
| | | 1045 | Normal | | 1150 | 1568 | 936 | 1600 | 1 | 900 | 1 | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1154 | 1100 | 6 |
| | | 980 | Heavy | | 1470 | 1764 | 878 | 1600 | 1 | 900 | 1 | 1350 | 1800 | 1350 | 3000 | 1350 | 2400 | 1350 | 1082 | 1100 | 6 |
| 1250 Hp | 10 | 1430 | Light | 20x…E1K2 | 1573 | — | 1281 | 1600 | 1 | 900 | 1 | 1800 | 2500 | 1800 | 4500 | 1800 | 3500 | 1800 | 1579 | 1100 | 6 |
| | | 1220 | Normal | | 1342 | 1830 | 1093 | 1600 | 1 | 900 | 1 | 1600 | 2000 | 1600 | 3500 | 1600 | 3000 | 1600 | 1347 | 1100 | 6 |
| | | 1045 | Heavy | | 1568 | 1881 | 936 | 1600 | 1 | 900 | 1 | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1154 | 1100 | 6 |
| 1500 Hp | 10 | 1624 | Light | 20x…E1K5 | 1786 | — | 1455 | 1600 | 1 | 900 | 1 | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 1793 | 1100 | 6 |
| | | 1430 | Normal | | 1573 | 2145 | 1281 | 1600 | 1 | 900 | 1 | 1800 | 2500 | 1800 | 4500 | 1800 | 3500 | 1800 | 1579 | 1100 | 6 |
| | | 1220 | Heavy | | 1830 | 2196 | 1093 | 1600 | 1 | 900 | 1 | 1600 | 2000 | 1600 | 3500 | 1600 | 3000 | 1600 | 1347 | 1100 | 6 |
| 2000 Hp | 11 | 2146 | Light | 20x…E2K0 | 2361 | — | 1923 | 1600 | 2 | — | — | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 2369 | 1100 | 8 |
| | | 1946 | Normal | | 2141 | 2919 | 1744 | 1600 | 2 | — | — | 2500 | 3500 | 2500 | 6000 | 2500 | 5000 | 2500 | 2148 | 1100 | 8 |
| | | 1700 | Heavy | | 2550 | 3060 | 1523 | 1600 | 2 | — | — | 2400 | 3000 | 2400 | 5000 | 2400 | 4500 | 2400 | 1877 | 1100 | 8 |

See page 201 for notes.

## 600 Volt AC and 810 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 600 Volt AC Input | | | | | | | | | | | | | | | | | | 810 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 2500 Hp | 12 | 2668 | Light | 20x…E2K4 | 2935 | — | 2391 | 1600 | 2 | 900 | 1 | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 2946 | 1100 | 10 |
| | | 2420 | Normal | | 2662 | 3630 | 2168 | 1600 | 2 | 900 | 1 | 3500 | 4000 | 3500 | 6000 | 3500 | 6000 | 3500 | 2672 | 1100 | 10 |
| | | 2070 | Heavy | | 3105 | 3726 | 1855 | 1600 | 2 | 900 | 1 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 2285 | 1100 | 10 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'E355' drive can be used in Normal Duty mode on a 350 Hp motor, in Heavy Duty mode on a 300 Hp motor or in Light Duty mode on a 400 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating]. Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 690 Volt AC and 932 Volt DC Input Protection Devices - Frames 7…12

| 690 Volt AC Input | | | | | | | | | | | | | | | | | | 932 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating [1] | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) [2] | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit [7] | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker [5] | | Motor Circuit Protector [6] | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min [3] | Max [4] | 1/Phase Min [3] | Max [4] | Min | Max | | Amps | Amps | Qty. |
| 160 kW | 7 | 215 | Light | 20x…F171 | 237 | — | 192 | — | — | 700 | 1 | 300 | 400 | 300 | 650 | 300 | 500 | 300 | 221 | 1100 | 2 |
| | | 171 | Normal | | 188 | 257 | 153 | — | — | 700 | 1 | 250 | 300 | 250 | 500 | 250 | 450 | 250 | 176 | 1100 | 2 |
| | | 142 | Heavy | | 213 | 256 | 127 | — | — | 700 | 1 | 175 | 250 | 200 | 400 | 200 | 350 | 200 | 146 | 1100 | 2 |
| 200 kW | 7 | 265 | Light | 20x…F215 | 292 | — | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 272 | 1100 | 2 |
| | | 215 | Normal | | 237 | 323 | 192 | — | — | 700 | 1 | 300 | 400 | 300 | 650 | 300 | 500 | 300 | 221 | 1100 | 2 |
| | | 171 | Heavy | | 257 | 308 | 153 | — | — | 700 | 1 | 250 | 300 | 250 | 500 | 250 | 450 | 250 | 176 | 1100 | 2 |
| 250 kW | 7 | 330 | Light | 20x…F265 | 363 | — | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 339 | 1100 | 2 |
| | | 265 | Normal | | 292 | 398 | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 272 | 1100 | 2 |
| | | 215 | Heavy | | 323 | 387 | 192 | — | — | 700 | 1 | 300 | 400 | 300 | 650 | 300 | 500 | 300 | 221 | 1100 | 2 |
| 315 kW | 7 | 370 | Light | 20x…F330 | 407 | — | 331 | — | — | 700 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 380 | 1100 | 2 |
| | | 330 | Normal | | 363 | 495 | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 339 | 1100 | 2 |
| | | 265 | Heavy | | 398 | 477 | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 272 | 1100 | 2 |
| 355 kW | 7 | 415 | Light | 20x…F370 | 457 | — | 371 | — | — | 700 | 1 | 600 | 700 | 600 | 1200 | 600 | 1000 | 600 | 426 | 1100 | 2 |
| | | 370 | Normal | | 407 | 555 | 331 | — | — | 700 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 380 | 1100 | 2 |
| | | 330 | Heavy | | 495 | 594 | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 339 | 1100 | 2 |
| 200 kW | 8 | 265 | Light | 20x…F215 | 292 | — | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 292 | 1100 | 2 |
| | | 215 | Normal | | 237 | 323 | 192 | — | — | 700 | 1 | 300 | 400 | 300 | 650 | 300 | 500 | 300 | 237 | 1100 | 2 |
| | | 171 | Heavy | | 257 | 308 | 153 | — | — | 700 | 1 | 250 | 300 | 250 | 500 | 250 | 450 | 250 | 188 | 1100 | 2 |
| 250 kW | 8 | 330 | Light | 20x…F265 | 363 | — | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 364 | 1100 | 2 |
| | | 265 | Normal | | 292 | 398 | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 292 | 1100 | 2 |
| | | 215 | Heavy | | 323 | 387 | 192 | — | — | 700 | 1 | 300 | 400 | 300 | 650 | 300 | 500 | 300 | 237 | 1100 | 2 |
| 315 kW | 8 | 370 | Light | 20x…F330 | 407 | — | 331 | — | — | 700 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 408 | 1100 | 2 |
| | | 330 | Normal | | 363 | 495 | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 364 | 1100 | 2 |
| | | 265 | Heavy | | 398 | 477 | 237 | — | — | 700 | 1 | 350 | 450 | 350 | 800 | 350 | 650 | 350 | 292 | 1100 | 2 |
| 355 kW | 8 | 415 | Light | 20x…F370 | 457 | — | 371 | — | — | 700 | 1 | 600 | 700 | 600 | 1200 | 600 | 1000 | 600 | 457 | 1100 | 2 |
| | | 370 | Normal | | 407 | 555 | 331 | — | — | 700 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 408 | 1100 | 2 |
| | | 330 | Heavy | | 495 | 594 | 295 | — | — | 700 | 1 | 450 | 600 | 450 | 900 | 450 | 800 | 450 | 364 | 1100 | 2 |
| 400 kW | 8 | 460 | Light | 20x…F415 | 506 | — | 411 | — | — | 900 | 1 | 600 | 800 | 600 | 1350 | 600 | 1100 | 600 | 507 | 1100 | 2 |
| | | 415 | Normal | | 457 | 623 | 371 | — | — | 900 | 1 | 600 | 700 | 600 | 1200 | 600 | 1000 | 600 | 457 | 1100 | 2 |
| | | 370 | Heavy | | 555 | 666 | 331 | — | — | 900 | 1 | 500 | 650 | 500 | 1100 | 500 | 900 | 500 | 408 | 1100 | 2 |

See page 204 for notes.

## 690 Volt AC and 932 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 690 Volt AC Input | | | | | | | | | | | | | | | | | | | 932 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 500 kW | 8 | 565 | Light | 20x…F505 | 622 | — | 505 | — | — | 900 | 1 | 750 | 1000 | 750 | 1600 | 750 | 1400 | 750 | 623 | 1100 | 2 |
| | | 505 | Normal | | 556 | 758 | 452 | — | — | 900 | 1 | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 556 | 1100 | 2 |
| | | 415 | Heavy | | 623 | 747 | 371 | — | — | 900 | 1 | 600 | 700 | 600 | 1200 | 600 | 1000 | 600 | 457 | 1100 | 2 |
| 560 kW | 9 | 650 | Light | 20x…F565 | 715 | — | 581 | 1250 | 1 | — | — | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 716 | 1100 | 4 |
| | | 565 | Normal | | 622 | 848 | 505 | 1250 | 1 | — | — | 750 | 1000 | 750 | 1600 | 750 | 1400 | 750 | 623 | 1100 | 4 |
| | | 505 | Heavy | | 758 | 909 | 452 | 1250 | 1 | — | — | 650 | 800 | 650 | 1500 | 650 | 1200 | 650 | 556 | 1100 | 4 |
| 630 kW | 9 | 735 | Light | 20x…F650 | 809 | — | 657 | 1250 | 1 | — | — | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 810 | 1100 | 4 |
| | | 650 | Normal | | 715 | 975 | 581 | 1250 | 1 | — | — | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 716 | 1100 | 4 |
| | | 565 | Heavy | | 848 | 1017 | 505 | 1250 | 1 | — | — | 750 | 1000 | 750 | 1600 | 750 | 1400 | 750 | 623 | 1100 | 4 |
| 710 kW | 9 | 820 | Light | 20x…F735 | 902 | — | 733 | 1250 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 904 | 1100 | 4 |
| | | 735 | Normal | | 809 | 1103 | 657 | 1250 | 1 | — | — | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 810 | 1100 | 4 |
| | | 650 | Heavy | | 975 | 1170 | 581 | 1250 | 1 | — | — | 900 | 1100 | 900 | 1900 | 900 | 1600 | 900 | 716 | 1100 | 4 |
| 800 kW | 9 | 920 | Light | 20x…F820 | 1012 | — | 823 | 1600 | 1 | — | — | 1200 | 1600 | 1200 | 2500 | 1200 | 2400 | 1200 | 1014 | 1100 | 4 |
| | | 820 | Normal | | 902 | 1230 | 733 | 1600 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 904 | 1100 | 4 |
| | | 735 | Heavy | | 1103 | 1323 | 657 | 1600 | 1 | — | — | 1000 | 1200 | 1000 | 2000 | 1000 | 1800 | 1000 | 810 | 1100 | 4 |
| 900 kW | 9 | 1074 | Light | 20x…F920 | 1181 | — | 960 | 1600 | 1 | — | — | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1183 | 1100 | 4 |
| | | 920 | Normal | | 1012 | 1380 | 823 | 1600 | 1 | — | — | 1200 | 1600 | 1200 | 2500 | 1200 | 2400 | 1200 | 1014 | 1100 | 4 |
| | | 820 | Heavy | | 1230 | 1476 | 733 | 1600 | 1 | — | — | 1100 | 1400 | 1100 | 2400 | 1100 | 2000 | 1100 | 904 | 1100 | 4 |
| 1000 kW | 10 | 1150 | Light | 20x…F1K0 | 1265 | — | 1028 | 1250 | 1 | 900 | 1 | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1267 | 1100 | 6 |
| | | 1030 | Normal | | 1133 | 1545 | 921 | 1250 | 1 | 900 | 1 | 1350 | 1800 | 1350 | 3000 | 1350 | 2500 | 1350 | 1135 | 1100 | 6 |
| | | 920 | Heavy | | 1380 | 1656 | 823 | 1250 | 1 | 900 | 1 | 1200 | 1600 | 1200 | 2500 | 1200 | 2400 | 1200 | 1014 | 1100 | 6 |
| 1100 kW | 10 | 1344 | Light | 20x…F1K1 | 1478 | — | 1202 | 1250 | 1 | 900 | 1 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1481 | 1100 | 6 |
| | | 1150 | Normal | | 1265 | 1725 | 1028 | 1250 | 1 | 900 | 1 | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1267 | 1100 | 6 |
| | | 1030 | Heavy | | 1545 | 1854 | 921 | 1250 | 1 | 900 | 1 | 1350 | 1800 | 1350 | 3500 | 1350 | 2500 | 1350 | 1135 | 1100 | 6 |
| 1400 kW | 10 | 1582 | Light | 20x…F1K4 | 1740 | — | 1365 | 1250 | 1 | 900 | 1 | 2000 | 3000 | 2000 | 4500 | 2000 | 4000 | 2000 | 1743 | 1100 | 6 |
| | | 1419 | Normal | | 1561 | 2129 | 1269 | 1250 | 1 | 900 | 1 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 1564 | 1100 | 6 |
| | | 1162 | Heavy | | 1743 | 2092 | 1039 | 1250 | 1 | 900 | 1 | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 1280 | 1100 | 6 |
| 1800 kW | 11 | 2091 | Light | 20x…F1K8 | 2300 | — | 1803 | 1600 | 2 | — | — | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 2304 | 1100 | 8 |
| | | 1865 | Normal | | 2052 | 2798 | 1668 | 1600 | 2 | — | — | 2400 | 3500 | 2400 | 5000 | 2400 | 4500 | 2400 | 2055 | 1100 | 8 |
| | | 1535 | Heavy | | 2303 | 2763 | 1373 | 1600 | 2 | — | — | 2000 | 2500 | 2000 | 4500 | 2000 | 3800 | 2000 | 1692 | 1100 | 8 |

See page 204 for notes.

## 690 Volt AC and 932 Volt DC Input Protection Devices - Frames 7…12 (continued)

| 690 Volt AC Input | | | | | | | | | | | | | | | | | | | 932 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | Dual Element Time Delay Fuse | | Non-Time Delay Fuse | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | (x = G or J) | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | 1/Phase Min (3) | Max (4) | 1/Phase Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| 2300 kW | 12 | 2599 | Light | 20x…F2K3 | 2859 | — | 2242 | 1600 | 2 | 900 | 1 | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 2864 | 1100 | 10 |
| | | 2318 | Normal | | 2550 | 3477 | 2073 | 1600 | 2 | 900 | 1 | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 2554 | 1100 | 10 |
| | | 2020 | Heavy | | 3030 | 3636 | 1807 | 1600 | 2 | 900 | 1 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 2226 | 1100 | 10 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'F330' drive can be used in Normal Duty mode on a 315 kW motor, in Heavy Duty mode on a 250 kW motor or in Light Duty mode on a 355 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating]. Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

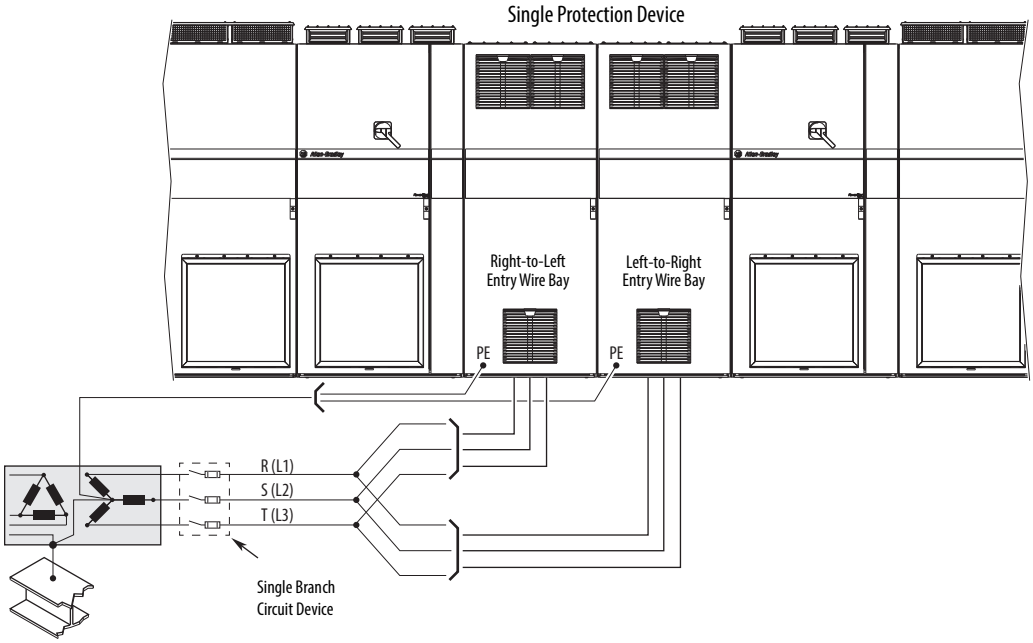
(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

### Dual Input Drives Fuse and Circuit Breakers

Frame 13…15 products require dual AC line inputs. Dependent on the output current rating, a single protection device can be used or dual protection devices are required.
The following Input Protection Device tables, the top table lists single protection device ratings and the bottom table lists dual protection device ratings.

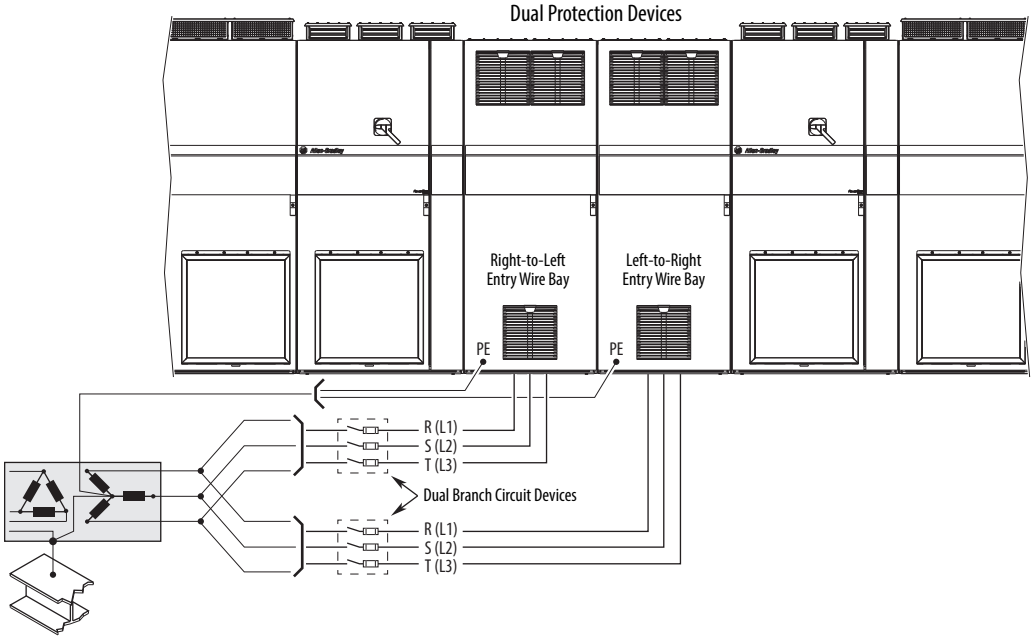
### Single Protection Device Scheme

A single branch circuit protection device can be used with PowerFlex 755T products that are rated less than 5400 A.




### Dual Protection Device Scheme

Use dual branch circuit protection devices in a dual-input configuration for PowerFlex 755T products that are rated over 5400 A.
**Important:** Do not wire dual branch circuit protection devices in parallel.



## 400 Volt AC and 540 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13…15

| | 400 Volt AC Input – Single Branch Circuit Device (See page 205) | | | | | | | | | | | | | | | | | | | 540 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Single Branch Circuit Device | 2200 kW | 13 | 4576 | Light | 20x…C4K2 | 5034 | — | 4279 | 2000 | 2 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 5275 | 1400 | 12 |
| | | | 4235 | Normal | | 4659 | 6353 | 3960 | 2000 | 2 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 4879 | 1400 | 12 |
| | | | 3575 | Heavy | | 5363 | 6435 | 3300 | 2000 | 2 | 1250 | 2 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 4070 | 1400 | 12 |
| | 2920 kW | 14 | 6074 | Light | 20x…C5K6 | 6681 | — | 5679 | 2000 | 4 | — | — | — | — | — | — | — | — | — | 7001 | 1400 | 16 |
| | | | 5621 | Normal | | 6183 | 8432 | 5256 | 2000 | 4 | — | — | — | — | — | — | — | — | — | 6475 | 1400 | 16 |
| | | | 4745 | Heavy | | 7118 | 8541 | 4380 | 2000 | 4 | — | — | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 5402 | 1400 | 16 |
| | 3640 kW | 15 | 7571 | Light | 20x…C7K0 | 8328 | — | 7080 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 8727 | 1400 | 20 |
| | | | 7007 | Normal | | 7708 | 10,511 | 6552 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 8072 | 1400 | 20 |
| | | | 5915 | Heavy | | 8873 | 10,647 | 5460 | 2000 | 4 | 1250 | 2 | — | 6000 | — | 6000 | — | 6000 | — | 6734 | 1400 | 20 |

## 400 Volt AC and 540 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13…15

| | 400 Volt AC Input – Dual Branch Circuit Devices (See page 205) | | | | | | | | | | | | | | | | | | | 540 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Dual Branch Circuit Devices | 2200 kW | 13 | 4576 | Light | 20x…C4K2 | 5034 | — | 4279 | 2000 | 2 | 1250 | 2 | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 5275 | 1400 | 12 |
| | | | 4235 | Normal | | 4659 | 6353 | 3960 | 2000 | 2 | 1250 | 2 | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 4879 | 1400 | 12 |
| | | | 3575 | Heavy | | 5363 | 6435 | 3300 | 2000 | 2 | 1250 | 2 | 2400 | 3000 | 2400 | 5000 | 2400 | 4500 | 2400 | 4070 | 1400 | 12 |
| | 2920 kW | 14 | 6074 | Light | 20x…C5K6 | 6681 | — | 5679 | 2000 | 4 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 7001 | 1400 | 16 |
| | | | 5621 | Normal | | 6183 | 8432 | 5256 | 2000 | 4 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 6475 | 1400 | 16 |
| | | | 4745 | Heavy | | 7118 | 8541 | 4380 | 2000 | 4 | — | — | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 5402 | 1400 | 16 |
| | 3640 kW | 15 | 7571 | Light | 20x…C7K0 | 8328 | — | 7080 | 2000 | 4 | 1250 | 2 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 8727 | 1400 | 20 |
| | | | 7007 | Normal | | 7708 | 10,511 | 6552 | 2000 | 4 | 1250 | 2 | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 8072 | 1400 | 20 |
| | | | 5915 | Heavy | | 8873 | 10,647 | 5460 | 2000 | 4 | 1250 | 2 | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 6734 | 1400 | 20 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating].
Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 480 Volt AC and 650 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13…15

| | 480 Volt AC Input – Single Branch Circuit Device (See page 205) | | | | | | | | | | | | | | | | | | | 650 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Single Branch Circuit Device | 3600 Hp | 13 | 4400 | Light | 20x…D4K0 | 4840 | — | 3944 | 2000 | 2 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 3944 | 1400 | 12 |
| | | | 4070 | Normal | | 4477 | 6105 | 3647 | 2000 | 2 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 3647 | 1400 | 12 |
| | | | 3394 | Heavy | | 5091 | 6109 | 3042 | 2000 | 2 | 1250 | 2 | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 3042 | 1400 | 12 |
| | 4800 Hp | 14 | 5840 | Light | 20x…D5K4 | 6424 | — | 5234 | 2000 | 4 | — | — | — | — | — | — | — | — | — | 5234 | 1400 | 16 |
| | | | 5402 | Normal | | 5942 | 8103 | 4840 | 2000 | 4 | — | — | — | — | — | — | — | — | — | 4840 | 1400 | 16 |
| | | | 4504 | Heavy | | 6756 | 8107 | 4037 | 2000 | 4 | — | — | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 4037 | 1400 | 16 |
| | 6000 Hp | 15 | 7280 | Light | 20x…D6K7 | 8008 | — | 6525 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 6525 | 1400 | 20 |
| | | | 6734 | Normal | | 7407 | 10,101 | 6033 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 6033 | 1400 | 20 |
| | | | 5615 | Heavy | | 8423 | 10,107 | 5032 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 5032 | 1400 | 20 |

## 480 Volt AC and 650 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13…15

| | 480 Volt AC Input – Dual Branch Circuit Devices (See page 205) | | | | | | | | | | | | | | | | | | 650 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Dual Branch Circuit Devices | 3600 Hp | 13 | 4400 | Light | 20x…D4K0 | 4840 | — | 3944 | 2000 | 2 | 1250 | 2 | 3000 | 4000 | 3000 | 6000 | 3000 | 5000 | 3000 | 3944 | 1400 | 12 |
| | | | 4070 | Normal | | 4477 | 6105 | 3647 | 2000 | 2 | 1250 | 2 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 3647 | 1400 | 12 |
| | | | 3394 | Heavy | | 5091 | 6109 | 3042 | 2000 | 2 | 1250 | 2 | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 3042 | 1400 | 12 |
| | 4800 Hp | 14 | 5840 | Light | 20x…D5K4 | 6424 | — | 5234 | 2000 | 4 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 5234 | 1400 | 16 |
| | | | 5402 | Normal | | 5942 | 8103 | 4840 | 2000 | 4 | — | — | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 4840 | 1400 | 16 |
| | | | 4504 | Heavy | | 6756 | 8107 | 4037 | 2000 | 4 | — | — | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 4037 | 1400 | 16 |
| | 6000 Hp | 15 | 7280 | Light | 20x…D6K7 | 8008 | — | 6525 | 2000 | 4 | 1250 | 2 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 6525 | 1400 | 20 |
| | | | 6734 | Normal | | 7407 | 10,101 | 6033 | 2000 | 4 | 1250 | 2 | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 6033 | 1400 | 20 |
| | | | 5615 | Heavy | | 8423 | 10,107 | 5032 | 2000 | 4 | 1250 | 2 | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 5032 | 1400 | 20 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating].
Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 600 Volt AC and 810 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13…15

| | 600 Volt AC Input – Single Branch Circuit Device (See page 205) | | | | | | | | | | | | | | | | | | | 810 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Single Branch Circuit Device | 3100 Hp | 13 | 3190 | Light | 20x…E2K9 | 3509 | — | 2860 | 2000 | 2 | 1250 | 2 | 4000 | 6000 | 4000 | 6000 | 4000 | 6000 | 4000 | 2860 | 1100 | 12 |
| | | | 2998 | Normal | | 3298 | 4497 | 2684 | 2000 | 2 | 1250 | 2 | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 2684 | 1100 | 12 |
| | | | 2475 | Heavy | | 3713 | 4455 | 2217 | 2000 | 2 | 1250 | 2 | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 2217 | 1100 | 12 |
| | 4100 Hp | 14 | 4234 | Light | 20x…E3K9 | 4657 | — | 3796 | 2000 | 4 | — | — | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 3796 | 1100 | 16 |
| | | | 3979 | Normal | | 4377 | 5969 | 3562 | 2000 | 4 | — | — | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 3562 | 1100 | 16 |
| | | | 3285 | Heavy | | 4928 | 5913 | 2942 | 2000 | 4 | — | — | 4500 | 6000 | 4500 | 6000 | 4500 | 6000 | 4500 | 2942 | 1100 | 16 |
| | 5100 Hp | 15 | 5278 | Light | 20x…E4K9 | 5806 | — | 4732 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 4732 | 1100 | 20 |
| | | | 4960 | Normal | | 5456 | 7440 | 4441 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 4441 | 1100 | 20 |
| | | | 4095 | Heavy | | 6143 | 7371 | 3667 | 2000 | 4 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 3667 | 1100 | 20 |

## 600 Volt AC and 810 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13…15

| | 600 Volt AC Input – Dual Branch Circuit Devices (See page 205) | | | | | | | | | | | | | | | | | | | 810 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Dual Branch Circuit Devices | 3100 Hp | 13 | 3190 | Light | 20x…E2K9 | 3509 | — | 2860 | 2000 | 2 | 1250 | 2 | 2000 | 3000 | 2000 | 5000 | 2000 | 4000 | 2000 | 2860 | 1100 | 12 |
| | | | 2998 | Normal | | 3298 | 4497 | 2684 | 2000 | 2 | 1250 | 2 | 1900 | 2500 | 1900 | 4500 | 1900 | 3500 | 1900 | 2684 | 1100 | 12 |
| | | | 2475 | Heavy | | 3713 | 4455 | 2217 | 2000 | 2 | 1250 | 2 | 1600 | 2000 | 1600 | 3500 | 1600 | 3000 | 1600 | 2217 | 1100 | 12 |
| | 4100 Hp | 14 | 4234 | Light | 20x…E3K9 | 4657 | — | 3796 | 2000 | 4 | — | — | 3000 | 3800 | 3000 | 6000 | 3000 | 5000 | 3000 | 3796 | 1100 | 16 |
| | | | 3979 | Normal | | 4377 | 5969 | 3562 | 2000 | 4 | — | — | 2500 | 3500 | 2500 | 6000 | 2500 | 5000 | 2500 | 3562 | 1100 | 16 |
| | | | 3285 | Heavy | | 4928 | 5913 | 2942 | 2000 | 4 | — | — | 2400 | 3000 | 2400 | 5000 | 2400 | 4000 | 2400 | 2942 | 1100 | 16 |
| | 5100 Hp | 15 | 5278 | Light | 20x…E4K9 | 5806 | — | 4732 | 2000 | 4 | 1250 | 2 | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 4732 | 1100 | 20 |
| | | | 4960 | Normal | | 5456 | 7440 | 4441 | 2000 | 4 | 1250 | 2 | 3500 | 4000 | 3500 | 6000 | 3500 | 6000 | 3500 | 4441 | 1100 | 20 |
| | | | 4095 | Heavy | | 6143 | 7371 | 3667 | 2000 | 4 | 1250 | 2 | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 3667 | 1100 | 20 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating].
Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

## 690 Volt AC and 932 Volt DC Input Protection Devices for Single Branch Circuit Devices - Frames 13…15

| | 690 Volt AC Input – Single Branch Circuit Device (See page 205) | | | | | | | | | | | | | | | | | | | 932 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Single Branch Circuit Device | 2750 kW | 13 | 3108 | Light | 20x…F2K7 | 3419 | — | 2778 | 2000 | 2 | 1250 | 2 | 4000 | 5000 | 4000 | 6000 | 4000 | 6000 | 4000 | 2778 | 1100 | 12 |
| | | | 2778 | Normal | | 3056 | 4167 | 2486 | 2000 | 2 | 1250 | 2 | 3500 | 5000 | 3500 | 6000 | 3500 | 6000 | 3500 | 2486 | 1100 | 12 |
| | | | 2283 | Heavy | | 3425 | 4109 | 2041 | 2000 | 2 | 1250 | 2 | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 2041 | 1100 | 12 |
| | 3650 kW | 14 | 4125 | Light | 20x…F3K6 | 4538 | — | 3687 | 2000 | 4 | — | — | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 3687 | 1100 | 16 |
| | | | 3687 | Normal | | 4056 | 5531 | 3300 | 2000 | 4 | — | — | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 3300 | 1100 | 16 |
| | | | 3030 | Heavy | | 4545 | 5454 | 2708 | 2000 | 4 | — | — | 3800 | 5000 | 3800 | 6000 | 3800 | 6000 | 3800 | 2708 | 1100 | 16 |
| | 4550 kW | 15 | 5142 | Light | 20x…F4K5 | 5656 | — | 4596 | 2000 | 4 | 1250 | 2 | — | — | — | — | — | — | — | 4596 | 1100 | 20 |
| | | | 4596 | Normal | | 5056 | 6894 | 4113 | 2000 | 4 | 1250 | 2 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 | 4113 | 1100 | 20 |
| | | | 3777 | Heavy | | 5666 | 6799 | 3376 | 2000 | 4 | 1250 | 2 | 5000 | 6000 | 5000 | 6000 | 5000 | 6000 | 5000 | 3376 | 1100 | 20 |

## 690 Volt AC and 932 Volt DC Input Protection Devices for Dual Branch Circuit Devices - Frames 13…15

| | 690 Volt AC Input – Dual Branch Circuit Devices (See page 205) | | | | | | | | | | | | | | | | | | 932 Volt DC Input | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Applied Rating (1) | Frame | Cont. Output Amps | Duty | Catalog Number | Output Overload Amps | | Continuous AC Input | AC Input Integral Semiconductor Fuse Size (170M Type) (2) | | | | AC Input Protection Devices | | | | | | Input Quantities | DC Input Integral Semiconductor Fuse Kit (7) | |
| | | | | | | | | | | | | | Dual Element Time Delay Fuse – 1/Phase | | Non-Time Delay Fuse – 1/Phase | | Circuit Breaker (5) | | Motor Circuit Protector (6) | Continuous DC Input | | |
| | | | | | | 1 min | 3 s | Amps | 2xLCL Amps | Qty. | 1xLCL Amps | Qty. | Min (3) | Max (4) | Min (3) | Max (4) | Min | Max | | Amps | Amps | Qty. |
| Dual Branch Circuit Devices | 2750 kW | 13 | 3108 | Light | 20x…F2K7 | 3419 | — | 2778 | 2000 | 2 | 1250 | 2 | 2000 | 3000 | 2000 | 4500 | 2000 | 4000 | 2000 | 2778 | 1100 | 12 |
| | | | 2778 | Normal | | 3056 | 4167 | 2486 | 2000 | 2 | 1250 | 2 | 1800 | 2400 | 1800 | 4000 | 1800 | 3500 | 1800 | 2486 | 1100 | 12 |
| | | | 2283 | Heavy | | 3425 | 4109 | 2041 | 2000 | 2 | 1250 | 2 | 1500 | 2000 | 1500 | 3500 | 1500 | 3000 | 1500 | 2041 | 1100 | 12 |
| | 3650 kW | 14 | 4125 | Light | 20x…F3K6 | 4538 | — | 3687 | 2000 | 4 | — | — | 3000 | 3500 | 3000 | 6000 | 3000 | 5000 | 3000 | 3687 | 1100 | 16 |
| | | | 3687 | Normal | | 4056 | 5531 | 3300 | 2000 | 4 | — | — | 2400 | 3500 | 2400 | 5000 | 2400 | 4500 | 2400 | 3300 | 1100 | 16 |
| | | | 3030 | Heavy | | 4545 | 5454 | 2708 | 2000 | 4 | — | — | 1900 | 2500 | 1900 | 4500 | 1900 | 3800 | 1900 | 2708 | 1100 | 16 |
| | 4550 kW | 15 | 5142 | Light | 20x…F4K5 | 5656 | — | 4596 | 2000 | 4 | 1250 | 2 | 3500 | 4500 | 3500 | 6000 | 3500 | 6000 | 3500 | 4596 | 1100 | 20 |
| | | | 4596 | Normal | | 5056 | 6894 | 4113 | 2000 | 4 | 1250 | 2 | 3000 | 4000 | 3000 | 6000 | 3000 | 6000 | 3000 | 4113 | 1100 | 20 |
| | | | 3777 | Heavy | | 5666 | 6799 | 3376 | 2000 | 4 | 1250 | 2 | 2500 | 3500 | 2500 | 6000 | 2500 | 5000 | 2500 | 3376 | 1100 | 20 |

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 306 [Duty Rating].
Refer to Intermittent overload on page 47 for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

# Cable Considerations

## Power Cable Types Acceptable for 400…690 Volt Installations

A variety of cable types are acceptable for drive installations. For an in-depth discussion of cable types, including a table of maximum motor cable lengths, refer to the PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication 750-IN100 or Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-IN001.

## Selection Considerations

| Type | | Cable Type(s) | Description | Min. Insulation Rating |
|---|---|---|---|---|
| **Input Power** (1) (2) | Standard | – | • Three tinned copper conductors with XLPE insulation.<br>• Maximum 500 MCM conductors.<br>• Copper braid/aluminum foil combination shield and tinned copper drain wire, three drain wires per cable assembly.<br>• PVC jacket. | 600V, 75 °C (167 °F) (5) |
| **Motor** | Standard | – | • Three tinned copper conductors with XLPE insulation.<br>• Maximum 500 MCM conductors.<br>• Copper braid/aluminum foil combination shield and tinned copper drain wire, three drain wires per cable assembly.<br>• PVC jacket. | 400…600V systems: 600V, 75 °C (167 °F)<br>690V systems: 2000V, 90 °C (194 °F) |
| **Signal** (1) (3) (4) | Standard Analog I/O | – | 0.750 $mm^2$ (18 AWG), twisted pair, 100% shield w/drain. | 300V, 75…90 °C (167…194 °F) |
| | Remote Pot | – | 0.750 $mm^2$ (18 AWG), 3 conductor, shielded. | |
| | Encoder/ Pulse I/O <30 m (100 ft) | Combined | 0.196 $mm^2$ (24 AWG) individually shielded pairs. | |
| | Encoder/ Pulse I/O 30…152 m (100…500 ft) | Signal | 0.196 $mm^2$ (24 AWG) individually shielded pairs. | |
| | | Power | 0.750 $mm^2$ (18 AWG) in.dividually shielded pairs | |
| | | Combined | 0.330 $mm^2$ (22 AWG), power is 0.500 $mm^2$ (20 AWG) individually shielded pairs. | |
| | Encoder/ Pulse I/O 152…259 m (500…850 ft.) | Signal | 0.196 $mm^2$ (24 AWG) individually shielded pairs. | |
| | | Power | 0.750 $mm^2$ (18 AWG) individually shielded pairs. | |
| | | Combined | 0.750 $mm^2$ (18 AWG) individually shielded pairs. | |
| **Control Power** | Un-shielded | – | Per US NEC or applicable national or local code. | 300V, 60 °C (140 °F) |
| **Digital I/O**<br>**Safety Inputs**<br>**Homing Inputs** (1) (3) (4) | Un-shielded | – | Per US NEC or applicable national or local code. | 300V, 60 °C (140 °F) |
| | Shielded | Multi-conductor shielded cable | 0.750 $mm^2$ (18 AWG), 3 conductor, shielded. | |

(1) Signal wires should be separated from power wires by at least 0.3 meters (1 foot).

(2) The use of shielded wire for AC input power may not be necessary but is always recommended.

(3) If the wires are short and contained within a cabinet which has no sensitive circuits, the use of shielded wire may not be necessary, but is always recommended.

(4) I/O terminals labeled '(–)' or 'Common' are not referenced to earth ground and are designed to greatly reduce common mode interference. Grounding these terminals can cause signal noise. For CE installations, 115V I/O must use shielded cable or have a cable length less than 30 m (98 ft).

(5) The minimum insulation rating for input power wire must be at least equal to the nominal system voltage rating.

## Power Wiring

The following section describes the cabling requirements for three-phase power and motor connections.
Follow applicable local codes to determine power and motor cable conductor size and quantity.

For detailed installation instructions, including cable entry and exit and customer connections options, refer to the PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication 750-IN100.

### Input Power Cables

- Frame 5 and 6 drives provide for input power cable connections at the bottom of the chassis.
- Frame 7 drives and bus supplies provide for power cable entry through either the top or the bottom of the cabinet.
- Frame 8...12 drives and bus supplies provide for power cable entry through the bottom of the input bay.
- Frame 8 and 9 drives and bus supplies that are equipped with the P17 power option provide for power cable entry through the top conduit plate of the input bay.
- Optional entry wiring bays are available to accommodate power cable top entry for frame 10...12 drives and bus supplies.
- Frame 13...15 drives and bus supplies include entry wiring bays.

### Motor Cables

- Frame 5 and 6 drives provide for motor cable connections at the bottom of the chassis.
- Frame 7 drives provide for motor cable exit through the bottom of the cabinet.
- Frame 8...12 drives and common bus inverters provide for motor cable exit through the bottom of the power bay (inverter).
- Optional exit wiring bays are available to accommodate motor cable top exit for all drives and common bus inverters, frames 8...12.
- Frame 13...15 in-line drive configurations and common bus converters include exit wiring bays.
- Frame 13...15 back-to-back drive configurations include a voltage balance bay.

## Motor Considerations

Due to the operational characteristics of AC variable frequency drives, motors with inverter grade insulation systems designed to meet or exceed NEMA MG1 Part 31.40.4.2 standards for resistance to spikes of 1600 volts are recommended.

Guidelines must be followed when using non-inverter grade motors to avoid premature motor failures. Refer to Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-IN001 for recommendations.

## Rating/Frame Cross-Reference

#### 400/480V AC 755TL Drives

| Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 400 Volt | | | | 480 Volt | | | | | | |
| 20G…C015 | 11 | 7.5 | 5.5 | 20G…D014 | 15 | 10 | 7.5 | 5 | — | — |
| 20G…C022 | 15 | 11 | 7.5 | 20G…D022 | 20 | 15 | 10 | | | |
| 20G…C030 | 18.5 | 15 | 11 | 20G…D027 | 25 | 20 | 15 | | | |
| 20G…C037 | 22 | 18.5 | 15 | 20G…D034 | 30 | 25 | 20 | | | |
| 20G…C043 | 30 | 22 | 18.5 | 20G…D040 | 40 | 30 | 25 | | | |
| 20G…C060 | 37 | 30 | 22 | 20G…D052 | 50 | 40 | 30 | | | |
| 20G…C072 | 45 | 37 | 30 | 20G…D065 | 60 | 50 | 40 | | | |
| 20G…C085 | 55 | 45 | 37 | 20G…D077 | 75 | 60 | 50 | | | |
| 20G…C104 | 55 | 55 | 45 | 20G…D096 | 75 | 75 | 60 | | | |
| 20G…C140 | 90 | 75 | 55 | 20G…D125 | 125 | 100 | 75 | 6 | | |
| 20G…C176 | 110 | 90 | 75 | 20G…D156 | 150 | 125 | 100 | | | |
| 20G…C205 | 132 | 110 | 90 | 20G…D186 | 200 | 150 | 125 | | | |
| 20G…C260 | 160 | 132 | 110 | 20G…D248 | 250 | 200 | 150 | | | |
| 20G…C302 | 200 | 160 | 132 | 20G…D302 | 300 | 250 | 200 | 7 | | |
| 20G…C367 | 250 | 200 | 160 | 20G…D361 | 350 | 300 | 250 | | | |
| 20G…C460 | 315 | 250 | 200 | 20G…D430 | 400 | 350 | 300 | | | |
| 20G…C540 | 315 | 315 | 250 | 20G…D505 | 450 | 400 | 350 | | | |
| 20G…C585 | 315 | 315 | 250 | 20G…D617 | 500 | 500 | 400 | | | |
| 20G…C302 | 200 | 160 | 132 | 20G…D302 | 300 | 250 | 200 | — | 8 | 8 |
| 20G…C367 | 250 | 200 | 160 | 20G…D361 | 350 | 300 | 250 | | | |
| 20G…C460 | 315 | 250 | 200 | 20G…D430 | 400 | 350 | 300 | | | |
| 20G…C540 | 315 | 315 | 250 | 20G…D505 | 450 | 400 | 350 | | | |
| 20G…C585 | 355 | 315 | 250 | 20G…D545 | 500 | 450 | 350 | | | |
| 20G…C650 | 400 | 355 | 315 | 20G…D617 | 600 | 500 | 400 | | | |
| 20G…C750 | 450 | 400 | 315 | 20G…D710 | 650 | 600 | 450 | | | |
| 20G…C770 | 450 | 400 | 355 | 20G…D740 | 700 | 650 | 500 | | | |
| 20G…C920 | 560 | 500 | 400 | 20G…D800 | 800 | 700 | 600 | | 9 | 9 |
| 20G…C1K0 | 630 | 560 | 500 | 20G…D960 | 900 | 800 | 700 | | | |
| 20G…C1K1 | 710 | 630 | 500 | 20G…D1K0 | 1000 | 900 | 750 | | | |
| 20G…C1K2 | 800 | 710 | 560 | 20G…D1K1 | 1100 | 1000 | 800 | | | |
| 20G…C1K4 | 850 | 800 | 630 | 20G…D1K3 | 1250 | 1100 | 900 | | | |
| 20G…C1K6 | 1000 | 850 | 710 | 20G…D1K4 | 1500 | 1250 | 1000 | | 10 | 10 |
| 20G…C1K7 | 1250 | 1000 | 800 | 20G…D1K6 | 1800 | 1500 | 1100 | | | |
| 20G…C2K1 | 1400 | 1250 | 1000 | 20G…D2K0 | 2000 | 1800 | 1500 | | | |

## 600/690V AC 755TL Drives

| Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 600 Volt | | | | 690 Volt | | | | | | |
| 20G…E011 | 15 | 10 | 7.5 | 20G…F015 | 15 | 11 | 7.5 | 5 | — | — |
| 20G…E017 | 20 | 15 | 10 | 20G…F020 | 18.5 | 15 | 11 | | | |
| 20G…E022 | 25 | 20 | 15 | 20G…F023 | 22 | 18.5 | 15 | | | |
| 20G…E027 | 30 | 25 | 20 | 20G…F030 | 30 | 22 | 18.5 | | | |
| 20G…E032 | 40 | 30 | 25 | 20G…F034 | 37 | 30 | 22 | | | |
| 20G…E041 | 50 | 40 | 30 | 20G…F046 | 45 | 37 | 30 | | | |
| 20G…E052 | 60 | 50 | 40 | 20G…F050 | 55 | 45 | 37 | | | |
| 20G…E062 | 75 | 60 | 50 | 20G…F061 | 75 | 55 | 45 | | | |
| 20G…E077 | 100 | 75 | 60 | 20G…F082 | 90 | 75 | 55 | 6 | | |
| 20G…E099 | 125 | 100 | 75 | 20G…F098 | 110 | 90 | 75 | | | |
| 20G…E125 | 150 | 125 | 100 | 20G…F119 | 132 | 110 | 90 | | | |
| 20G…E144 | 200 | 150 | 125 | 20G…F142 | 160 | 132 | 110 | | | |
| 20G…E192 | 250 | 200 | 150 | 20G…F171 | 200 | 160 | 132 | — | 7 | 7 |
| 20G…E242 | 300 | 250 | 200 | 20G…F215 | 250 | 200 | 160 | | | |
| 20G…E295 | 350 | 300 | 250 | 20G…F265 | 315 | 250 | 200 | | | |
| 20G…E355 | 400 | 350 | 300 | 20G…F330 | 355 | 315 | 250 | | | |
| 20G…E395 | 450 | 400 | 350 | 20G…F370 | 400 | 355 | 315 | | | |
| 20G…E242 | 300 | 250 | 200 | 20G…F215 | 250 | 200 | 160 | | 8 | 8 |
| 20G…E295 | 350 | 300 | 250 | 20G…F265 | 315 | 250 | 200 | | | |
| 20G…E355 | 400 | 350 | 300 | 20G…F330 | 355 | 315 | 250 | | | |
| 20G…E395 | 450 | 400 | 350 | 20G…F370 | 400 | 355 | 315 | | | |
| 20G…E435 | 500 | 450 | 400 | 20G…F415 | 450 | 400 | 355 | | | |
| 20G…E545 | 600 | 550 | 450 | 20G…F505 | 560 | 500 | 400 | | | |
| 20G…E595 | 700 | 600 | 550 | 20G…F565 | 630 | 560 | 500 | | 9 | 9 |
| 20G…E690 | 800 | 700 | 600 | 20G…F650 | 710 | 630 | 560 | | | |
| 20G…E760 | 900 | 800 | 700 | 20G…F735 | 800 | 710 | 630 | | | |
| 20G…E825 | 1000 | 900 | 800 | 20G…F820 | 900 | 800 | 710 | | | |
| 20G…E980 | 1100 | 1000 | 900 | 20G…F920 | 1000 | 900 | 800 | | | |
| 20G…E1K1 | 1250 | 1100 | 1000 | 20G…F1K0 | 1100 | 1000 | 900 | | 10 | 10 |
| 20G…E1K2 | 1500 | 1250 | 1100 | 20G…F1K1 | 1250 | 1100 | 1000 | | | |
| 20G…E1K5 | 1600 | 1500 | 1250 | 20G…F1K4 | 1500 | 1400 | 1100 | | | |

### 400/480V AC 755TR Drives

| Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 400 Volt | | | | 480 Volt | | | | | | |
| 20G…C015 | 11 | 7.5 | 5.5 | 20G…D014 | 15 | 10 | 7.5 | 5 | — | — |
| 20G…C022 | 15 | 11 | 7.5 | 20G…D022 | 20 | 15 | 10 | | | |
| 20G…C030 | 18.5 | 15 | 11 | 20G…D027 | 25 | 20 | 15 | | | |
| 20G…C037 | 22 | 18.5 | 15 | 20G…D034 | 30 | 25 | 20 | | | |
| 20G…C043 | 30 | 22 | 18.5 | 20G…D040 | 40 | 30 | 25 | | | |
| 20G…C060 | 37 | 30 | 22 | 20G…D052 | 50 | 40 | 30 | | | |
| 20G…C072 | 45 | 37 | 30 | 20G…D065 | 60 | 50 | 40 | | | |
| 20G…C085 | 55 | 45 | 37 | 20G…D077 | 75 | 60 | 50 | | | |
| 20G…C104 | 55 | 55 | 45 | 20G…D096 | 75 | 75 | 60 | | | |
| 20G…C140 | 90 | 75 | 55 | 20G…D125 | 125 | 100 | 75 | 6 | | |
| 20G…C176 | 110 | 90 | 75 | 20G…D156 | 150 | 125 | 100 | | | |
| 20G…C205 | 132 | 110 | 90 | 20G…D186 | 200 | 150 | 125 | | | |
| 20G…C260 | 160 | 132 | 110 | 20G…D248 | 250 | 200 | 150 | | | |
| 20G…C302 | 200 | 160 | 132 | 20G…D302 | 300 | 250 | 200 | — | 7 | 7 |
| 20G…C367 | 250 | 200 | 160 | 20G…D361 | 350 | 300 | 250 | | | |
| 20G…C460 | 315 | 250 | 200 | 20G…D430 | 400 | 350 | 300 | | | |
| 20G…C540 | 315 | 315 | 250 | 20G…D505 | 450 | 400 | 350 | | | |
| 20G…C585 | 315 | 315 | 250 | 20G…D617 | 500 | 500 | 400 | | | |
| 20G…C302 | 200 | 160 | 132 | 20G…D302 | 300 | 250 | 200 | | 8 | 8 |
| 20G…C367 | 250 | 200 | 160 | 20G…D361 | 350 | 300 | 250 | | | |
| 20G…C460 | 315 | 250 | 200 | 20G…D430 | 400 | 350 | 300 | | | |
| 20G…C540 | 315 | 315 | 250 | 20G…D505 | 450 | 400 | 350 | | | |
| 20G…C585 | 355 | 315 | 250 | 20G…D545 | 500 | 450 | 350 | | | |
| 20G…C650 | 400 | 355 | 315 | 20G…D617 | 600 | 500 | 400 | | | |
| 20G…C750 | 450 | 400 | 315 | 20G…D710 | 650 | 600 | 450 | | | |
| 20G…C770 | 450 | 400 | 355 | 20G…D740 | 700 | 650 | 500 | | | |
| 20G…C920 | 560 | 500 | 400 | 20G…D800 | 800 | 700 | 600 | | 9 | 9 |
| 20G…C1K0 | 630 | 560 | 500 | 20G…D960 | 900 | 800 | 700 | | | |
| 20G…C1K1 | 710 | 630 | 500 | 20G…D1K0 | 1000 | 900 | 750 | | | |
| 20G…C1K2 | 800 | 710 | 560 | 20G…D1K1 | 1100 | 1000 | 800 | | | |
| 20G…C1K4 | 850 | 800 | 630 | 20G…D1K3 | 1250 | 1100 | 900 | | | |
| 20G…C1K6 | 1000 | 850 | 710 | 20G…D1K4 | 1500 | 1250 | 1000 | | 10 | 10 |
| 20G…C1K7 | 1250 | 1000 | 800 | 20G…D1K6 | 1800 | 1500 | 1100 | | | |
| 20G…C2K1 | 1400 | 1250 | 1000 | 20G…D2K0 | 2000 | 1800 | 1500 | | | |
| 20G…C2K8 | 1800 | 1650 | 1400 | 20G…D2K6 | 2600 | 2400 | 2000 | | 11 | 11 |
| 20G…C3K5 | 2200 | 2000 | 1650 | 20G…D3K4 | 3300 | 3000 | 2400 | | 12 | 12 |
| 20G…C4K2 | 2475 | 2200 | 1953 | 20G…D4K0 | 3900 | 3600 | 2800 | | 13 | 13 |
| 20G…C5K6 | 3285 | 2920 | 2592 | 20G…D5K4 | 5200 | 4800 | 3700 | | 14 | 14 |
| 20G…C7K0 | 4095 | 3640 | 3231 | 20G…D6K7 | 6400 | 6000 | 4600 | | 15 | 15 |

### 600/690V AC 755TR Drives

| Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 600 Volt | | | | 690 Volt | | | | | | |
| 20G…E011 | 15 | 10 | 7.5 | 20G…F015 | 15 | 11 | 7.5 | 5 | — | — |
| 20G…E017 | 20 | 15 | 10 | 20G…F020 | 18.5 | 15 | 11 | | | |
| 20G…E022 | 25 | 20 | 15 | 20G…F023 | 22 | 18.5 | 15 | | | |
| 20G…E027 | 30 | 25 | 20 | 20G…F030 | 30 | 22 | 18.5 | | | |
| 20G…E032 | 40 | 30 | 25 | 20G…F034 | 37 | 30 | 22 | | | |
| 20G…E041 | 50 | 40 | 30 | 20G…F046 | 45 | 37 | 30 | | | |
| 20G…E052 | 60 | 50 | 40 | 20G…F050 | 55 | 45 | 37 | | | |
| 20G…E062 | 75 | 60 | 50 | 20G…F061 | 75 | 55 | 45 | | | |
| 20G…E077 | 100 | 75 | 60 | 20G…F082 | 90 | 75 | 55 | 6 | | |
| 20G…E099 | 125 | 100 | 75 | 20G…F098 | 110 | 90 | 75 | | | |
| 20G…E125 | 150 | 125 | 100 | 20G…F119 | 132 | 110 | 90 | | | |
| 20G…E144 | 200 | 150 | 125 | 20G…F142 | 160 | 132 | 110 | | | |
| 20G…E192 | 250 | 200 | 150 | 20G…F171 | 200 | 160 | 132 | — | 7 | 7 |
| 20G…E242 | 300 | 250 | 200 | 20G…F215 | 250 | 200 | 160 | | | |
| 20G…E295 | 350 | 300 | 250 | 20G…F265 | 315 | 250 | 200 | | | |
| 20G…E355 | 400 | 350 | 300 | 20G…F330 | 355 | 315 | 250 | | | |
| 20G…E395 | 450 | 400 | 350 | 20G…F370 | 400 | 355 | 315 | | | |
| 20G…E242 | 300 | 250 | 200 | 20G…F215 | 250 | 200 | 160 | | 8 | 8 |
| 20G…E295 | 350 | 300 | 250 | 20G…F265 | 315 | 250 | 200 | | | |
| 20G…E355 | 400 | 350 | 300 | 20G…F330 | 355 | 315 | 250 | | | |
| 20G…E395 | 450 | 400 | 350 | 20G…F370 | 400 | 355 | 315 | | | |
| 20G…E435 | 500 | 450 | 400 | 20G…F415 | 450 | 400 | 355 | | | |
| 20G…E545 | 600 | 550 | 450 | 20G…F505 | 560 | 500 | 400 | | | |
| 20G…E595 | 700 | 600 | 550 | 20G…F565 | 630 | 560 | 500 | | 9 | 9 |
| 20G…E690 | 800 | 700 | 600 | 20G…F650 | 710 | 630 | 560 | | | |
| 20G…E760 | 900 | 800 | 700 | 20G…F735 | 800 | 710 | 630 | | | |
| 20G…E825 | 1000 | 900 | 800 | 20G…F820 | 900 | 800 | 710 | | | |
| 20G…E980 | 1100 | 1000 | 900 | 20G…F920 | 1000 | 900 | 800 | | | |
| 20G…E1K1 | 1250 | 1100 | 1000 | 20G…F1K0 | 1100 | 1000 | 900 | | 10 | 10 |
| 20G…E1K2 | 1500 | 1250 | 1100 | 20G…F1K1 | 1250 | 1100 | 1000 | | | |
| 20G…E1K5 | 1600 | 1500 | 1250 | 20G…F1K4 | 1500 | 1400 | 1100 | | | |
| 20G…E2K0 | 2100 | 2000 | 1800 | 20G…F1K8 | 2000 | 1800 | 1500 | | 11 | 11 |
| 20G…E2K4 | 2600 | 2500 | 2100 | 20G…F2K3 | 2500 | 2300 | 2000 | | 12 | 12 |
| 20G…E2K9 | 3300 | 3100 | 2500 | 20G…F2K7 | 3080 | 2750 | 2200 | | 13 | 13 |
| 20G…E3K9 | 4400 | 4100 | 3300 | 20G…F3K6 | 4088 | 3650 | 2920 | | 14 | 14 |
| 20G…E4K9 | 5500 | 5100 | 4100 | 20G…F4K5 | 5096 | 4550 | 3640 | | 15 | 15 |

### 400/480V AC 755TM Bus Supplies

| Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 400 Volt | | | | 480 Volt | | | | | | |
| 20J…C140 | 106 | 87 | 65 | 20J…D125 | 111 | 90 | 69 | 6 | — | — |
| 20J…C176 | 128 | 106 | 87 | 20J…D156 | 133 | 111 | 90 | | | |
| 20J…C205 | 162 | 128 | 106 | 20J…D186 | 177 | 133 | 111 | | | |
| 20J…C260 | 188 | 162 | 128 | 20J…D248 | 216 | 177 | 133 | | | |
| 20J…C302 | 228 | 188 | 162 | 20J…D302 | 258 | 216 | 177 | — | 7 | 7 |
| 20J…C367 | 286 | 228 | 188 | 20J…D361 | 307 | 258 | 216 | | | |
| 20J…C460 | 336 | 286 | 228 | 20J…D430 | 347 | 307 | 258 | | | |
| 20J…C540 | 364 | 336 | 286 | 20J…D505 | 390 | 361 | 307 | | | |
| 20J…C585 | 384 | 373 | 311 | 20J…D617 | 438 | 426 | 355 | | | |
| 20J…C302 | 228 | 188 | 162 | 20J…D302 | 258 | 216 | 177 | | 8 | 8 |
| 20J…C367 | 286 | 228 | 188 | 20J…D361 | 307 | 258 | 216 | | | |
| 20J…C460 | 336 | 286 | 228 | 20J…D430 | 347 | 307 | 258 | | | |
| 20J…C540 | 364 | 336 | 286 | 20J…D505 | 390 | 361 | 307 | | | |
| 20J…C585 | 387 | 364 | 286 | 20J…D545 | 422 | 390 | 307 | | | |
| 20J…C650 | 467 | 405 | 336 | 20J…D617 | 508 | 442 | 347 | | | |
| 20J…C750 | 479 | 467 | 364 | 20J…D710 | 529 | 508 | 390 | | | |
| 20J…C770 | 518 | 479 | 405 | 20J…D740 | 573 | 529 | 442 | | | |
| 20J…C920 | 647 | 572 | 479 | 20J…D800 | 687 | 573 | 529 | | 9 | 9 |
| 20J…C1K0 | 678 | 647 | 572 | 20J…D960 | 748 | 687 | 573 | | | |
| 20J…C1K1 | 735 | 692 | 647 | 20J…D1K0 | 802 | 748 | 687 | | | |
| 20J…C1K2 | 911 | 731 | 678 | 20J…D1K1 | 977 | 812 | 748 | | | |
| 20J…C1K4 | 983 | 910 | 731 | 20J…D1K3 | 1087 | 977 | 812 | | | |
| 20J…C1K6 | 1067 | 984 | 911 | 20J…D1K4 | 1184 | 1016 | 977 | | 10 | 10 |
| 20J…C1K7 | 1337 | 1067 | 921 | 20J…D1K6 | 1481 | 1184 | 1016 | | | |
| 20J…C2K1 | 1449 | 1342 | 1067 | 20J…D2K0 | 1603 | 1483 | 1184 | | | |
| 20J…C2K8 | 1915 | 1772 | 1449 | 20J…D2K6 | 2118 | 1959 | 1603 | | 11 | 11 |
| 20J…C3K5 | 2393 | 2204 | 1886 | 20J…D3K4 | 2632 | 2436 | 2132 | | 12 | 12 |
| 20J…C4K2 | 2847 | 2634 | 2226 | 20J…D4K0 | 3149 | 2912 | 2430 | | 13 | 13 |
| 20J…C5K6 | 3779 | 3496 | 2954 | 20J…D5K4 | 4180 | 3865 | 3225 | | 14 | 14 |
| 20J…C7K0 | 4711 | 4358 | 3684 | 20J…D6K7 | 5210 | 4818 | 4020 | | 15 | 15 |

## 600/690V AC 755TM Bus Supplies

| Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Enclosure Code/Frame Size | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | N (IP00, UL Open Type) | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 600 Volt | | | | 690 Volt | | | | | | |
| 20J…E077 | 89 | 69 | 56 | 20J…F082 | 101 | 84 | 63 | 6 | — | — |
| 20J…E099 | 112 | 89 | 69 | 20J…F098 | 122 | 101 | 84 | | | |
| 20J…E125 | 129 | 112 | 89 | 20J…F119 | 146 | 122 | 101 | | | |
| 20J…E144 | 171 | 129 | 112 | 20J…F142 | 176 | 146 | 122 | | | |
| 20J…E192 | 216 | 171 | 129 | 20J…F171 | 221 | 176 | 146 | — | 7 | 7 |
| 20J…E242 | 263 | 217 | 171 | 20J…F215 | 272 | 221 | 176 | | | |
| 20J…E295 | 317 | 263 | 217 | 20J…F265 | 339 | 272 | 221 | | | |
| 20J…E355 | 353 | 317 | 263 | 20J…F330 | 380 | 339 | 272 | | | |
| 20J…E395 | 389 | 353 | 317 | 20J…F370 | 426 | 380 | 339 | | | |
| 20J…E242 | 263 | 217 | 171 | 20J…F215 | 272 | 221 | 176 | | 8 | 8 |
| 20J…E295 | 317 | 263 | 217 | 20J…F265 | 339 | 272 | 221 | | | |
| 20J…E355 | 353 | 317 | 263 | 20J…F330 | 380 | 339 | 272 | | | |
| 20J…E395 | 389 | 353 | 317 | 20J…F370 | 426 | 380 | 339 | | | |
| 20J…E435 | 456 | 389 | 353 | 20J…F415 | 472 | 426 | 380 | | | |
| 20J…E545 | 518 | 487 | 403 | 20J…F505 | 580 | 518 | 426 | | | |
| 20J…E595 | 617 | 518 | 487 | 20J…F565 | 580 | 580 | 518 | | 9 | 9 |
| 20J…E690 | 680 | 617 | 532 | 20J…F650 | 754 | 667 | 580 | | | |
| 20J…E760 | 737 | 680 | 617 | 20J…F735 | 842 | 754 | 667 | | | |
| 20J…E825 | 877 | 737 | 680 | 20J…F820 | 944 | 842 | 754 | | | |
| 20J…E980 | 985 | 877 | 737 | 20J…F920 | 1102 | 944 | 842 | | | |
| 20J…E1K1 | 1091 | 935 | 877 | 20J…F1K0 | 1180 | 1057 | 944 | | 10 | 10 |
| 20J…E1K2 | 1279 | 1091 | 935 | 20J…F1K1 | 1380 | 1180 | 1057 | | | |
| 20J…E1K5 | 1452 | 1279 | 1091 | 20J…F1K4 | 1624 | 1456 | 1193 | | | |
| 20J…E2K0 | 1919 | 1740 | 1520 | 20J…F1K8 | 2146 | 1914 | 1576 | | 11 | 11 |
| 20J…E2K4 | 2386 | 2164 | 1851 | 20J…F2K3 | 2668 | 2379 | 2073 | | 12 | 12 |
| 20J…E2K9 | 2851 | 2678 | 2215 | 20J…F2K7 | 3190 | 2849 | 2343 | | 13 | 13 |
| 20J…E3K9 | 3784 | 3555 | 2939 | 20J…F3K6 | 4234 | 3781 | 3110 | | 14 | 14 |
| 20J…E4K9 | 4717 | 4432 | 3664 | 20J…F4K5 | 5278 | 4714 | 3877 | | 15 | 15 |

### 400/480V AC 755TM Common Bus Inverters

| Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Enclosure Code/Frame Size | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 400 Volt | | | | 480 Volt | | | | | |
| 20G…C302 | 200 | 160 | 132 | 20G…D302 | 300 | 250 | 200 | 8 | 8 |
| 20G…C367 | 250 | 200 | 160 | 20G…D361 | 350 | 300 | 250 | | |
| 20G…C460 | 315 | 250 | 200 | 20G…D430 | 400 | 350 | 300 | | |
| 20G…C540 | 315 | 315 | 250 | 20G…D505 | 450 | 400 | 350 | | |
| 20G…C585 | 355 | 315 | 250 | 20G…D545 | 500 | 450 | 350 | | |
| 20G…C650 | 400 | 355 | 315 | 20G…D617 | 600 | 500 | 400 | | |
| 20G…C750 | 450 | 400 | 315 | 20G…D710 | 650 | 600 | 450 | | |
| 20G…C770 | 450 | 400 | 355 | 20G…D740 | 700 | 650 | 500 | | |
| 20G…C920 | 560 | 500 | 400 | 20G…D800 | 800 | 700 | 600 | 9 | 9 |
| 20G…C1K0 | 630 | 560 | 500 | 20G…D960 | 900 | 800 | 700 | | |
| 20G…C1K1 | 710 | 630 | 500 | 20G…D1K0 | 1000 | 900 | 750 | | |
| 20G…C1K2 | 800 | 710 | 560 | 20G…D1K1 | 1100 | 1000 | 800 | | |
| 20G…C1K4 | 850 | 800 | 630 | 20G…D1K3 | 1250 | 1100 | 900 | | |
| 20G…C1K6 | 1000 | 850 | 710 | 20G…D1K4 | 1500 | 1250 | 1000 | 10 | 10 |
| 20G…C1K7 | 1250 | 1000 | 800 | 20G…D1K6 | 1800 | 1500 | 1100 | | |
| 20G…C2K1 | 1400 | 1250 | 1000 | 20G…D2K0 | 2000 | 1800 | 1500 | | |
| 20G…C2K8 | 1800 | 1650 | 1400 | 20G…D2K6 | 2600 | 2400 | 2000 | 11 | 11 |
| 20G…C3K5 | 2200 | 2000 | 1650 | 20G…D3K4 | 3300 | 3000 | 2400 | 12 | 12 |
| 20G…C4K2 | 2475 | 2200 | 1953 | 20G…D4K0 | 3900 | 3600 | 2800 | 13 | 13 |
| 20G…C5K6 | 3285 | 2920 | 2592 | 20G…D5K4 | 5200 | 4800 | 3700 | 14 | 14 |
| 20G…C7K0 | 4095 | 3640 | 3231 | 20G…D6K7 | 6400 | 6000 | 4600 | 15 | 15 |

### 600/690V AC 755TM Common Bus Inverters

| Catalog Number | Light Duty Hp Output | Normal Duty Hp Output | Heavy Duty Hp Output | Catalog Number | Light Duty kW Output | Normal Duty kW Output | Heavy Duty kW Output | Enclosure Code/Frame Size | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 3 (IP21, UL Type 1) | 4 (IP54, UL Type 12) |
| 600 Volt | | | | 690 Volt | | | | | |
| 20G…E242 | 300 | 250 | 200 | 20G…F215 | 250 | 200 | 160 | 8 | 8 |
| 20G…E295 | 350 | 300 | 250 | 20G…F265 | 315 | 250 | 200 | | |
| 20G…E355 | 400 | 350 | 300 | 20G…F330 | 355 | 315 | 250 | | |
| 20G…E395 | 450 | 400 | 350 | 20G…F370 | 400 | 355 | 315 | | |
| 20G…E435 | 500 | 450 | 400 | 20G…F415 | 450 | 400 | 355 | | |
| 20G…E545 | 600 | 550 | 450 | 20G…F505 | 560 | 500 | 400 | | |
| 20G…E595 | 700 | 600 | 550 | 20G…F565 | 630 | 560 | 500 | 9 | 9 |
| 20G…E690 | 800 | 700 | 600 | 20G…F650 | 710 | 630 | 560 | | |
| 20G…E760 | 900 | 800 | 700 | 20G…F735 | 800 | 710 | 630 | | |
| 20G…E825 | 1000 | 900 | 800 | 20G…F820 | 900 | 800 | 710 | | |
| 20G…E980 | 1100 | 1000 | 900 | 20G…F920 | 1000 | 900 | 800 | | |
| 20G…E1K1 | 1250 | 1100 | 1000 | 20G…F1K0 | 1100 | 1000 | 900 | 10 | 10 |
| 20G…E1K2 | 1500 | 1250 | 1100 | 20G…F1K1 | 1250 | 1100 | 1000 | | |
| 20G…E1K5 | 1600 | 1500 | 1250 | 20G…F1K4 | 1500 | 1400 | 1100 | | |
| 20G…E2K0 | 2100 | 2000 | 1800 | 20G…F1K8 | 2000 | 1800 | 1500 | 11 | 11 |
| 20G…E2K4 | 2600 | 2500 | 2100 | 20G…F2K3 | 2500 | 2300 | 2000 | 12 | 12 |
| 20G…E2K9 | 3300 | 3100 | 2500 | 20G…F2K7 | 3080 | 2750 | 2200 | 13 | 13 |
| 20G…E3K9 | 4400 | 4100 | 3300 | 20G…F3K6 | 4088 | 3650 | 2920 | 14 | 14 |
| 20G…E4K9 | 5500 | 5100 | 4100 | 20G…F4K5 | 5096 | 4550 | 3640 | 15 | 15 |

## Enclosure Options

**IMPORTANT** IP21, UL Type 1 PowerFlex 750-Series drives must be installed in a clean, dry location. Contaminants such as oils, corrosive vapors and abrasive debris must be kept out of the enclosure. These enclosures are intended for indoor use primarily to provide a degree of protection against contact with enclosed equipment. These enclosures offer no protection against airborne contaminants. Refer to the following tables for an explanation of enclosure options and the environmental specifications found on page 42. See Industry Installation Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-AT003 for additional information.

## Pollution Degree Ratings According to EN 61800-5-1

| Pollution Degree | Description |
|---|---|
| 1 | No pollution or only dry, non-conductive pollution occurs. The pollution has no influence. |
| 2 | Normally, only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation is to be expected, when the drive is out of operation. |
| 3 | Conductive pollution or dry non-conductive pollution occurs, which becomes conductive due to condensation, which is to be expected. |
| 4 | The pollution generates persistent conductivity caused, for example by conductive dust or rain or snow. |

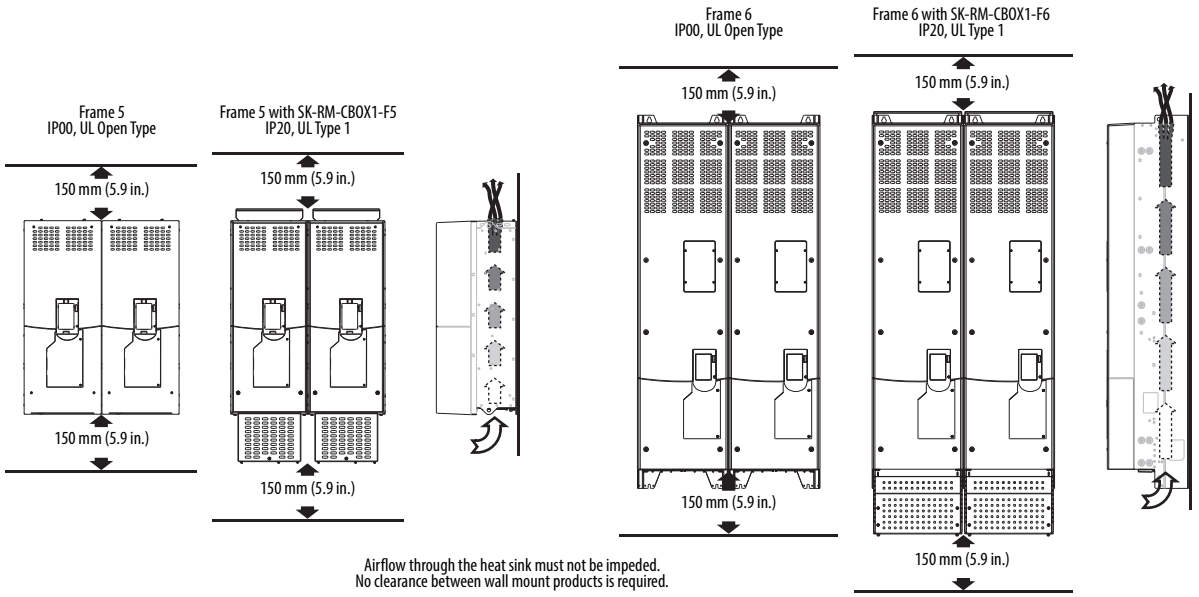
## Product Enclosure Ratings

| Frames | Enclosure Type (Cat. No. Position 6) | Enclosure Type | Pollution Degree |
|---|---|---|---|
| 5 and 6 | N | IP00, UL Open Type | 1, 2 |
| 7…15 | 3 | IP21, UL Type 1 | 1, 2 |
| | 4 | IP54, UL Type 12 | 1, 2, 3, 4 |

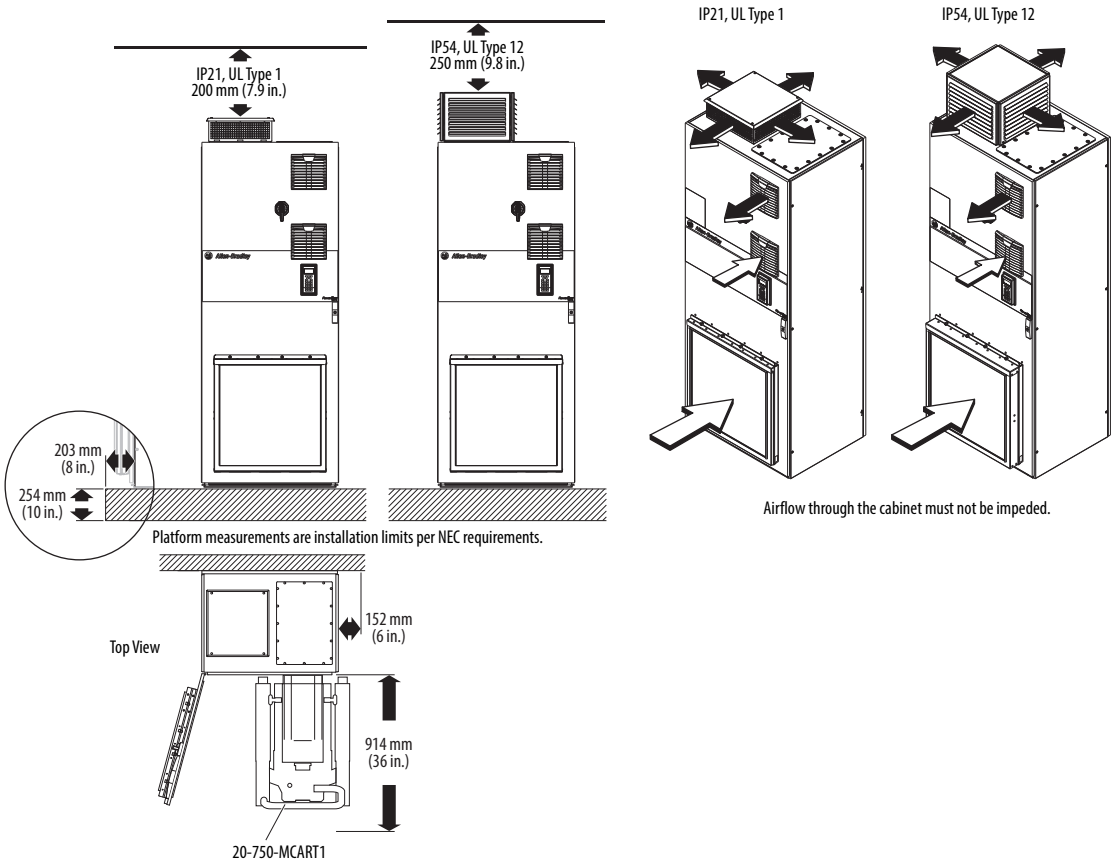
## Minimum Mounting Clearances

Specified vertical clearance requirements are intended to be from the PowerFlex 755T product to the closest object that can restrict airflow through the cabinet. The product must be mounted in a vertical orientation as shown and must make full contact with the mounting surface. In addition, inlet air temperature must not exceed the product specification.

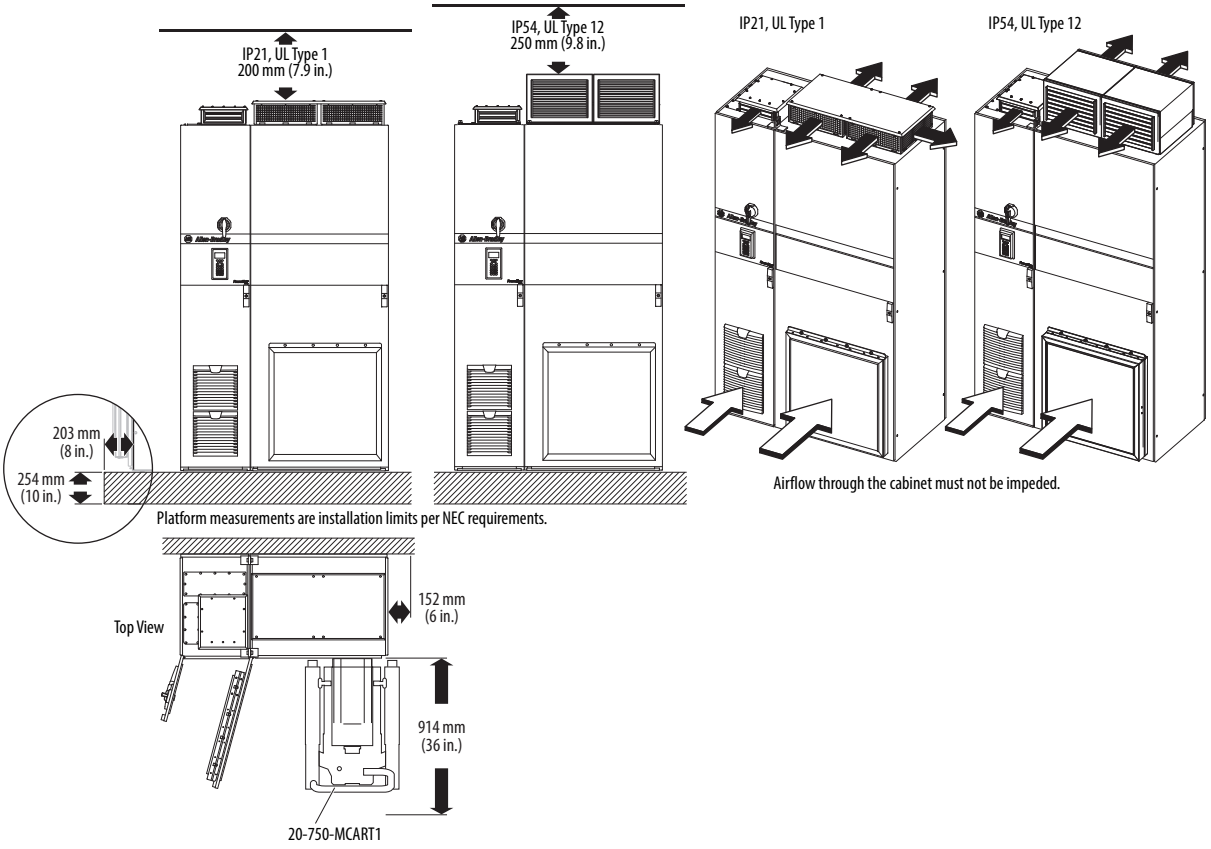
**Wall Mount Frames 5…6**




**Floor Mount Frame 7**



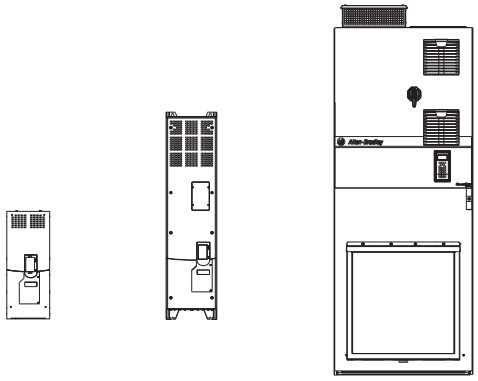
**Floor Mount Frames 8…15**



## Approximate Weights

Some products are divided for shipment. The weight of each section and the total weight are listed in the tables in this section.

**Frame 5…7 Drives and Bus Supplies**
Frame 5…7 drives and bus supplies ship as complete units.



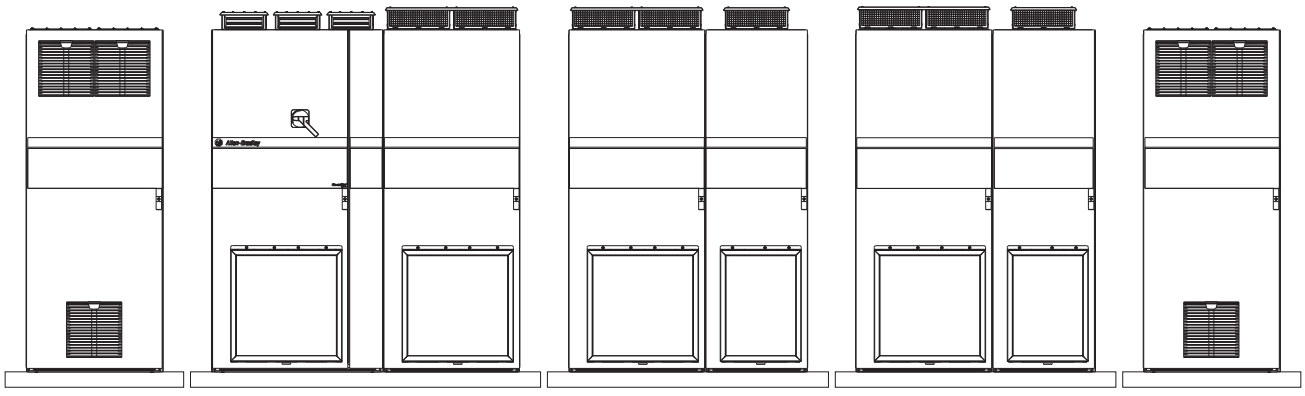
Frame 5 Frame 6 Frame 7

**Approximate Maximum Weights - Frames 5…7 Drives and Bus Supplies**

| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | Approximate Maximum Weight with Packaging, *kg (lb)* |
|---|---|---|---|
| 755TL drives | 5 | 73 (160) | 85 (187) |
| | 6 | 145 (320) | 158 (349) |
| | 7 | 567 (1250) | 596 (1315) |
| 755TR drives | 5 | 73 (160) | 85 (187) |
| | 6 | 145 (320) | 158 (349) |
| | 7 | 567 (1250) | 596 (1315) |
| 755TM bus supplies | 6 | 145 (320) | 158 (349) |
| | 7 | 454 (1000) | 533 (1175) |

### Shipment Sections

This diagram illustrates how products are divided for shipment.



Wire Bay (Optional) Left Section Center Section Right Section Wire Bay (Optional)

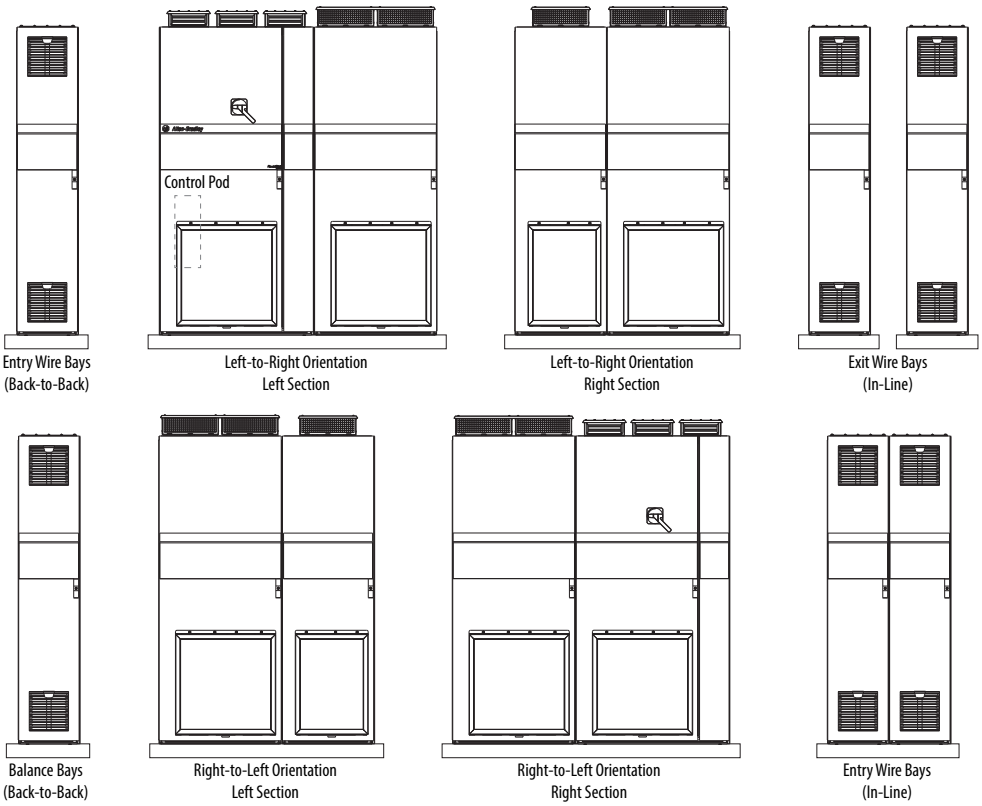
## Approximate Maximum Drive and Bus Supply Weights – Frames 8…12

| Device | Frame Size | **Approximate Maximum Unit Weight,** *kg (lb)* | | | | **Approximate Maximum Weight with Packaging,** *kg (lb)* | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *Input and Power Bay* | *with Entry Wire Bay* | *with Exit Wire Bay* | *with Entry and Exit Wire Bay* | *Input and Power Bay* | *with Entry Wire Bay* | *with Exit Wire Bay* | *with Entry and Exit Wire Bay* |
| 755TL Drives | 8 | **Total: 900 (1984)** | — | **Total: 987 (2176)** | — | **Total: 993 (2189)** | — | **Total: 1113 (2454)** | — |
| | 9 | **Total: 1683 (3710)** | — | **Total: 1770 (3902)** | — | **Total: 1817 (4006)** | — | **Total: 1928 (4251)** | — |
| | 10 | Left section: 1553 (3423)<br>Right section: 1370 (3021)<br>**Total: 2923 (6444)** | Left section: 1630 (3593)<br>Right section: 1370 (3021)<br>**Total: 3000 (6614)** | Left section: 1553 (3423)<br>Right section: 1457 (3213)<br>**Total: 3010 (6636)** | Left section: 1640 (3616)<br>Right section: 1457 (3213)<br>**Total: 3097 (6829)** | Left section: 1683 (3710)<br>Right section: 1467 (3234)<br>**Total: 3150 (6944)** | Left section: 1782 (3929)<br>Right section: 1467 (3234)<br>**Total: 3249 (7163)** | Left section: 1697 (3741)<br>Right section: 1601 (3530)<br>**Total: 3298 (7271)** | Left section: 1753 (3865)<br>Right section: 1601 (3530)<br>**Total: 3354 (7395)** |
| 755TR Drives | 8 | **Total: 900 (1984)** | — | **Total: 987 (2176)** | — | **Total: 993 (2189)** | — | **Total: 1113 (2454)** | — |
| | 9 | **Total: 1683 (3710)** | — | **Total: 1770 (3902)** | — | **Total: 1817 (4006)** | — | **Total: 1928 (4251)** | — |
| | 10 | Left section: 1553 (3423)<br>Right section: 1370 (3021)<br>**Total: 2923 (6444)** | Left section: 1630 (3593)<br>Right section: 1370 (3021)<br>**Total: 3000 (6614)** | Left section: 1553 (3423)<br>Right section: 1457 (3213)<br>**Total: 3010 (6636)** | Left section: 1640 (3616)<br>Right section: 1457 (3213)<br>**Total: 3097 (6829)** | Left section: 1683 (3710)<br>Right section: 1467 (3234)<br>**Total: 3150 (6944)** | Left section: 1782 (3929)<br>Right section: 1467 (3234)<br>**Total: 3249 (7163)** | Left section: 1697 (3741)<br>Right section: 1601 (3530)<br>**Total: 3298 (7271)** | Left section: 1753 (3865)<br>Right section: 1601 (3530)<br>**Total: 3354 (7395)** |
| | 11 | Left section: 1642 (3620)<br>Right section: 2018 (4449)<br>**Total: 3660 (8069)** | Entry wire bay: 242 (533)<br>Left section: 1642 (3620)<br>Right section: 2018 (4449)<br>**Total: 3902 (8622)** | Left section: 1642 (3620)<br>Right section: 2018 (4449)<br>Exit wire bay: 242 (553)<br>**Total: 3902 (8622)** | Entry wire bay: 242 (553)<br>Left section: 1642 (3620)<br>Right section: 2018 (4449)<br>Exit wire bay: 242 (553)<br>**Total: 4144 (9175)** | Left section: 1786 (3937)<br>Right section: 2166 (4775)<br>**Total: 3952 (8712)** | Entry wire bay: 309 (681)<br>Left section: 1786 (3937)<br>Right section: 2166 (4775)<br>**Total: 4261 (9393)** | Left section: 1786 (3937)<br>Right section: 2166 (4775)<br>Exit wire bay: 309 (681)<br>**Total: 4261 (9393)** | Entry wire bay: 309 (681)<br>Left section: 1786 (3937)<br>Right section: 2166 (4775)<br>Exit wire bay: 309 (681)<br>**Total: 4570 (10074)** |
| | 12 | Left section: 1642 (3621)<br>Center section: 1419 (3128)<br>Right section: 1363 (3004)<br>**Total: 4424 (9753)** | Entry wire bay: 242 (533)<br>Left section: 1642 (3621)<br>Center section: 1419 (3128)<br>Right section: 1363 (3004)<br>**Total: 4666 (10286)** | Left section: 1642 (3621)<br>Center section: 1419 (3128)<br>Right section: 1363 (3004)<br>Exit wire bay: 242 (533)<br>**Total: 4666 (10286)** | Entry wire bay: 242 (533)<br>Left section: 1642 (3621)<br>Center section 1419 (3128)<br>Right section: 1363 (3004)<br>Exit wire bay: 242 (533)<br>**Total: 4908 (10819)** | Left section: 1786 (3937)<br>Center section: 1541 (3397)<br>Right section: 1485 (3274)<br>**Total: 4812 (10608)** | Entry wire bay: 309 (681)<br>Left section: 1786 (3937)<br>Center section: 1541 (3397)<br>Right section: 1485 (3274)<br>**Total: 5121 (11289)** | Left section: 1786 (3937)<br>Center section: 1541 (3397)<br>Right section: 1485 (3274)<br>Exit wire bay: 309 (681)<br>**Total: 5121 (11289)** | Entry wire bay: 309 (681)<br>Left section: 1786 (3937)<br>Center section: 1541 (3397)<br>Right section: 1485 (3274)<br>Exit wire bay: 309 (681)<br>**Total: 5430 (11970)** |
| 755TM Bus Supplies | 8 | **Total: 709 (1563)** | — | — | — | **Total: 782 (1724)** | — | — | — |
| | 9 | **Total: 1180 (2601)** | — | — | — | **Total: 1277 (2815)** | — | — | — |
| | 10 | **Total: 2106 (4643)** | Entry wire bay: 126 (278)<br>Right section: 2106 (4643)<br>**Total: 2232 (4921)** | — | — | **Total: 2264 (4991)** | Entry wire bay: 185 (408)<br>Right section: 2264 (4991)<br>**Total: 2449 (5399)** | — | — |
| | 11 | Left section: 1642 (3621)<br>Right section: 889 (1959)<br>**Total: 2531 (5580)** | Entry wire bay: 242 (533)<br>Left section: 1642 (3621)<br>Right section: 889 (1959)<br>**Total: 2773 (6113)** | — | — | Left section: 1772 (3907)<br>Right section: 956 (2108)<br>**Total: 2531 (5580)** | Entry wire bay: 309 (681)<br>Left section: 1772 (3907)<br>Right section: 956 (2108)<br>**Total: 3037 (6696)** | — | — |
| | 12 | Left section: 1642 (3621)<br>Right section: 1443 (3182)<br>**Total: 3085 (6803)** | Entry wire bay: 242 (533)<br>Left section: 1642 (3621)<br>Right section: 1443 (3182)<br>**Total: 3327 (7336)** | — | — | Left section: 1772 (3907)<br>Right section: 1540 (3395)<br>**Total: 3312 (7302)** | Entry wire bay: 309 (681)<br>Left section: 1772 (3907)<br>Right section: 1540 (3395)<br>**Total: 3621 (7983)** | — | — |

## Approximate Maximum Common Bus Inverter Weights

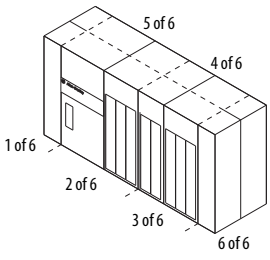
| Device | Frame Size | **Approximate Maximum Unit Weight,** *kg (lb)* | | | | **Approximate Maximum Weight with Packaging,** *kg (lb)* | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *Power Bay* | *with Control Bay* | *with Exit Wire Bay* | *with Control and Exit Wire Bay* | *Power Bay* | *with Control Bay* | *with Exit Wire Bay* | *with Control and Exit Wire Bay* |
| 755TM Common Bus Inverter | 8 | 374 (825) | 455 (1004) | 477 (1052) | 588 (1231) | 433 (955) | 520 (1146) | 544 (1199) | 679 (1497) |
| | 9 | 611 (1348) | 692 (1527) | 714 (1575) | 796 (1754) | 674 (1486) | 761 (1678) | 803 (1770) | 891 (1964) |
| | 10 | 873 (1924) | 954 (2103) | 954 (2103) | 1057 (2331) | 940 (2072) | 1045 (2304) | 1047 (2308) | 1156 (2549) |
| | 11 | 1284 (2830) | 1365 (3009) | 1503 (3313) | 1584 (3492) | 1377 (3036) | 1464 (3228) | 1637 (3609) | 1738 (3832) |
| | 12 | 1580 (3483) | 1661 (3662) | 1799 (3966) | 1880 (4145) | 1677 (3697) | 1789 (3944) | 1951 (4301) | 2040 (4497) |

**Shipment Sections Frame 13 Drives**
This diagram illustrates how products are divided for shipment.

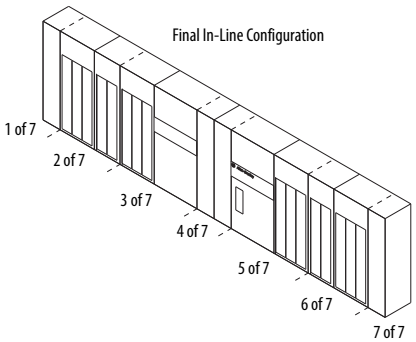



**Approximate Maximum Weights - Frame 13 Drives**

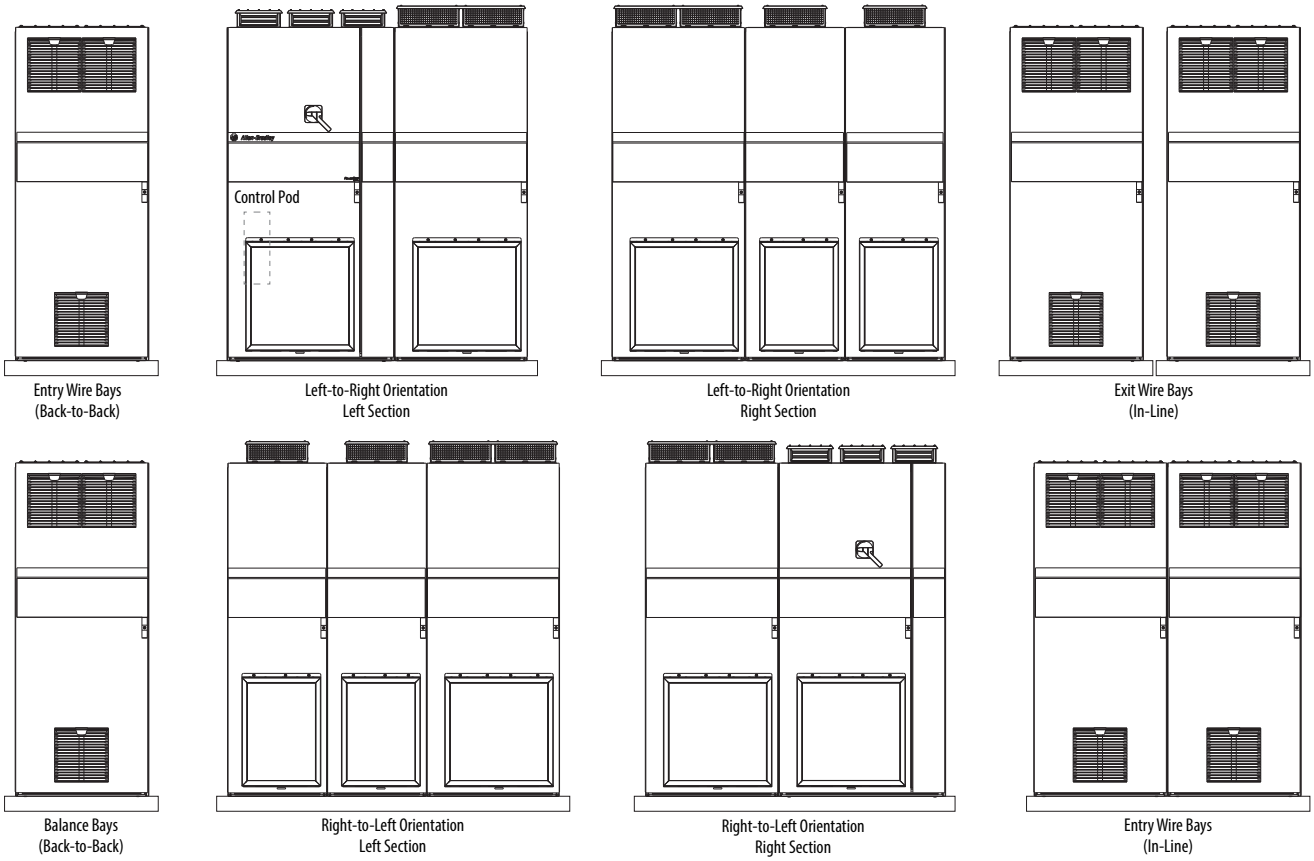
| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Section No.* |
| 755TR drives | 13 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Left section: | 1553 (3423) | 1683 (3710) | 2 of 6 | Left section: | 1553 (3423) | 1683 (3710) | 5 of 7 |
| | | Right section: | 1370 (3021) | 1467 (3234) | 3 of 6 | Right section: | 1370 (3021) | 1467 (3234) | 6 of 7 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Left section: | 1370 (3021) | 1467 (3234) | 4 of 6 | Left section: | 1370 (3021) | 1467 (3234) | 2 of 7 |
| | | Right section: | 1553(3423) | 1683 (3710) | 5 of 6 | Right section: | 1553 (3423) | 1683 (3710) | 3 of 7 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 291 (642) | 365 (805) | 1 of 6 | Entry wire bays: | 252 (556) | 314 (692) | 4 of 7 |
| | | DC voltage balance and exit wire bays: | 291 (642) | 365 (805) | 6 of 6 | Left exit wire bay: | 126 (278) | 185 (408) | 1 of 7 |
| | | Total: | 6428 (14,172) | 7030 (15,498) | | Right exit wire bay: | 126 (278) | 185 (408) | 7 of 7 |
| | | | | | | Total: | 6350 (14,000) | 6984 (15,397) | |



Final Back-to-Back Configuration

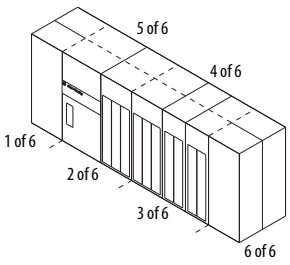


**Shipment Sections Frame 14 Drives**
This diagram illustrates how products are divided for shipment.

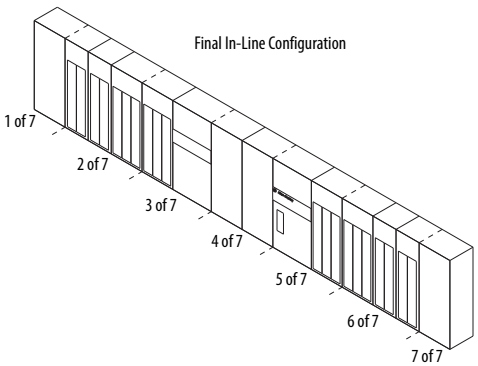



**Approximate Maximum Weights - Frame 14 Drives**

| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Section No.* |
| 755TR drives | 14 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Left section: | 1642 (3621) | 1786 (3937) | 2 of 6 | Left section: | 1642 (3621) | 1786 (3937) | 5 of 7 |
| | | Right section: | 2018 (4449) | 2166 (4775) | 3 of 6 | Right section: | 2018 (4449) | 2166 (4775) | 6 of 7 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Left section: | 2018 (4449) | 2166 (4775) | 4 of 6 | Left section: | 2018 (4449) | 2166 (4775) | 2 of 7 |
| | | Right section: | 1642(3621) | 1786 (3937) | 5 of 6 | Right section: | 1642 (3621) | 1786 (3937) | 3 of 7 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 523 (1154) | 597 (1316) | 1 of 6 | Entry wire bays: | 484 (1066) | 600 (1323) | 4 of 7 |
| | | DC voltage balance and exit wire bays: | 523 (1154) | 597 (1316) | 6 of 6 | Left exit wire bay: | 242 (533) | 309 (681) | 1 of 7 |
| | | Total: | 8366 (18,448) | 9098 (20,058) | | Right exit wire bay: | 242 (533) | 309 (681) | 7 of 7 |
| | | | | | | Total: | 8288 (18,272) | 9122 (20,111) | |

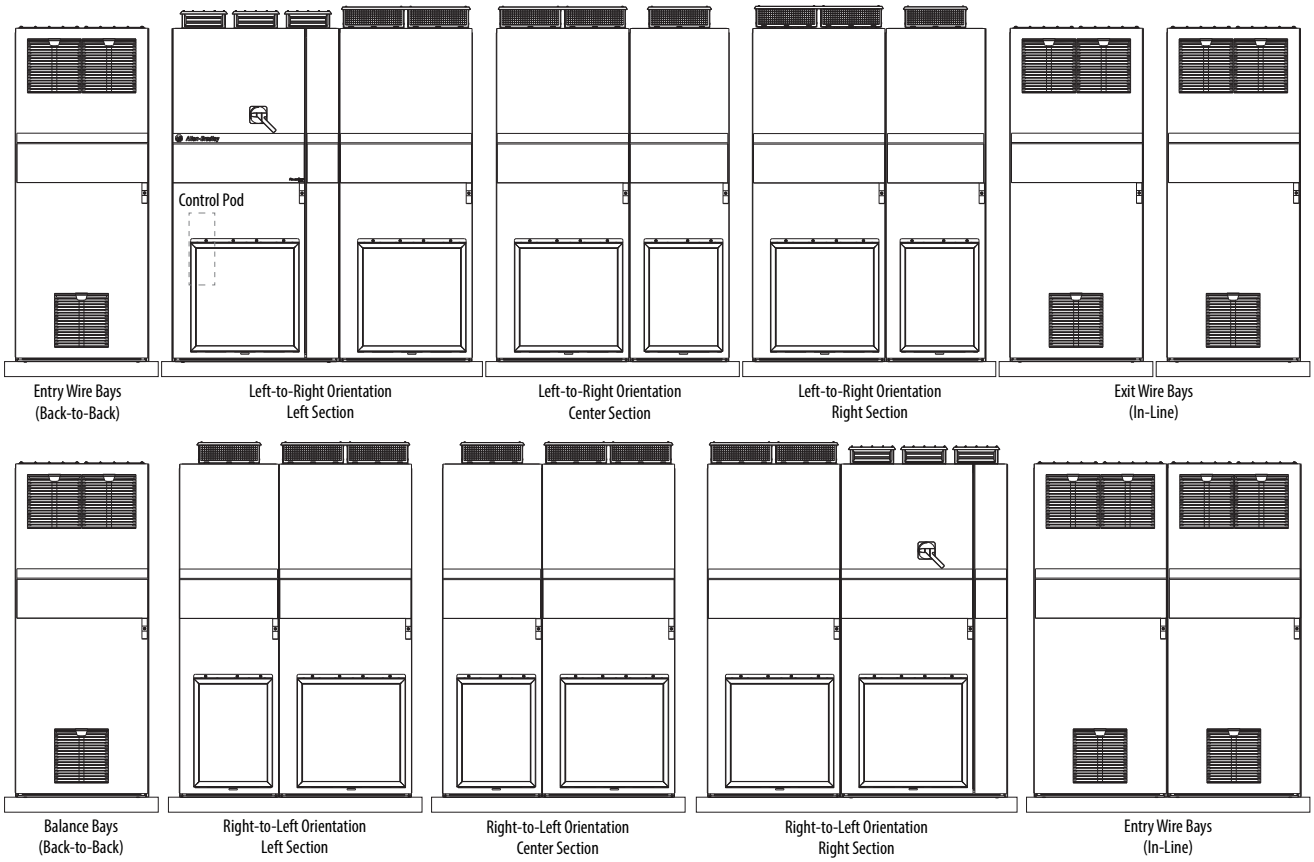


Final Back-to-Back Configuration



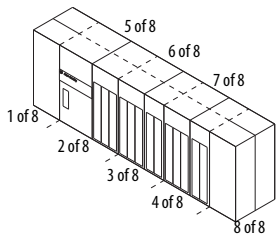
**Shipment Sections Frame 15 Drives**

This diagram illustrates how products are divided for shipment.

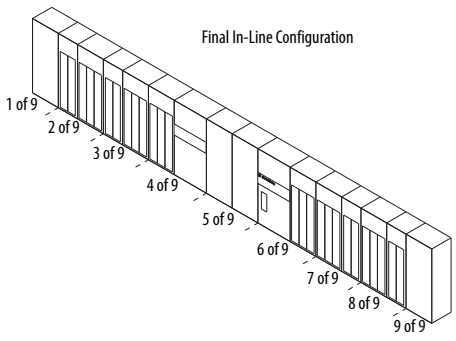



**Approximate Maximum Weights - Frame 15 Drives**

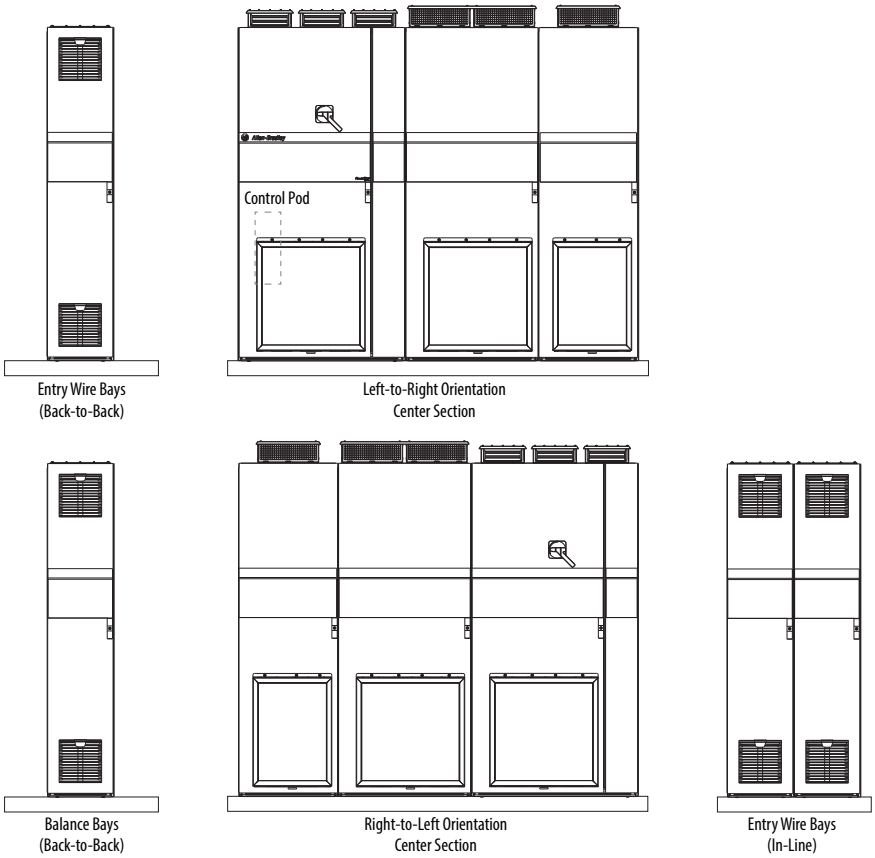
| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Section No.* |
| 755TR drives | 15 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Left section: | 1642 (3621) | 1786 (3937) | 2 of 8 | Left section: | 1642 (3621) | 1786 (3937) | 6 of 9 |
| | | Center section: | 1419 (3128) | 1541 (3397) | 3 of 8 | Center section: | 1419 (3128) | 1541 (3397) | 7 of 9 |
| | | Right section: | 1363 (3004) | 1485 (3274) | 4 of 8 | Right section: | 1363 (3004) | 1485 (3274) | 8 of 9 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Left section: | 1363 (3004) | 1485 (3274) | 5 of 8 | Left section: | 1363 (3004) | 1485 (3274) | 2 of 9 |
| | | Center section: | 1419 (3128) | 1541 (3397) | 6 of 8 | Center section: | 1419 (3128) | 1541 (3397) | 3 of 9 |
| | | Right section: | 1642 (3621) | 1786 (3937) | 7 of 8 | Right section: | 1642 (3621) | 1786 (3937) | 4 of 9 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 523 (1154) | 597 (1316) | 1 of 8 | Entry wire bays: | 484 (1066) | 600 (1323) | 5 of 9 |
| | | DC voltage balance and exit wire bays: | 523 (1154) | 597 (1316) | 8 of 8 | Left exit wire bay: | 242 (533) | 309 (681) | 1 of 9 |
| | | Total: | 9894 (21,814) | 10,818 (23,850) | | Right exit wire bay: | 242 (533) | 309 (681) | 9 of 9 |
| | | | | | | Total: | 9816 (21,638) | 10,842 (23,902) | |




Final Back-to-Back Configuration

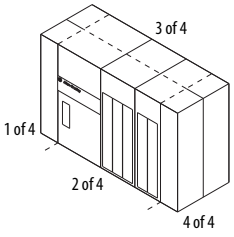


**Shipment Sections Frame 13 Bus Supplies**
This diagram illustrates how products are divided for shipment.

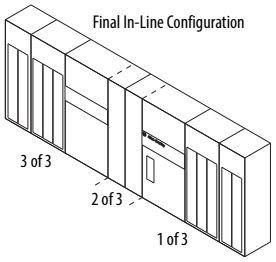



**Approximate Maximum Weights - Frame 13 Bus Supplies**

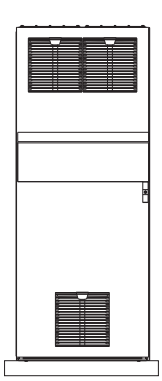
| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Section No.* |
| 755TM bus supplies | 13 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Center section: | 2106 (4643) | 2264 (4991) | 2 of 4 | Center section: | 2106 (4643) | 2264 (4991) | 1 of 3 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Center section: | 2106 (4643) | 2264 (4991) | 3 of 4 | Center section: | 2106 (4643) | 2264 (4991) | 3 of 3 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 252 (556) | 365 (805) | 1 of 4 | Entry wire bays: | 252 (556) | 370 (816) | 2 of 3 |
| | | DC voltage balance bays: | 252 (556) | 365 (805) | 4 of 4 | Total: | 4464 (9842) | 4898 (10,798) | |
| | | Total: | 4716 (10,398) | 5258 (11,592) | | | | | |

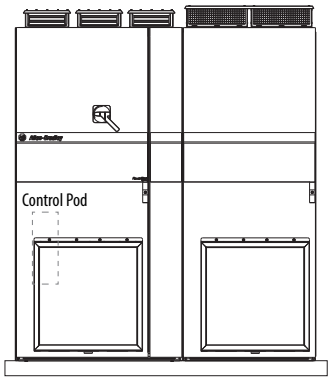


Final Back-to-Back Configuration

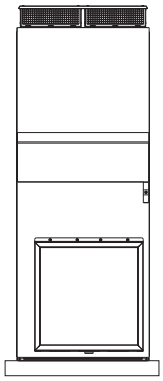


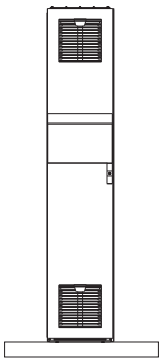
**Shipment Sections Frame 14 Bus Supplies**
This diagram illustrates how products are divided for shipment.

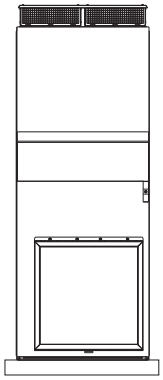

Entry Wire Bays
(Back-to-Back)

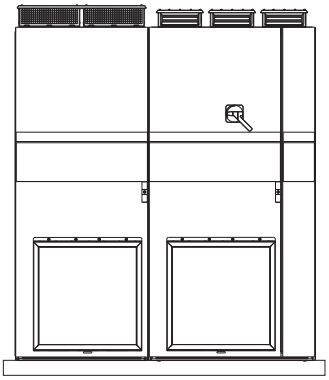


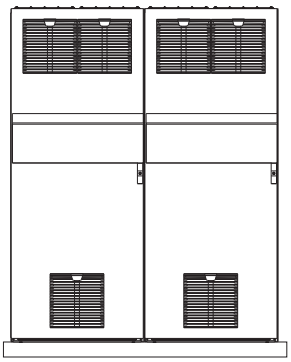
Left-to-Right Orientation
Left Section


Left-to-Right Orientation
Right Section


DC Voltage Balance Bays
(Back-to-Back)

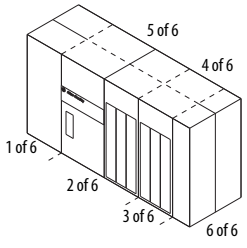

Right-to-Left Orientation
Left Section


Right-to-Left Orientation
Right Section

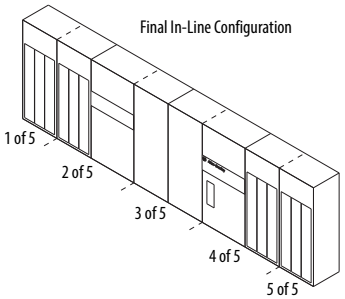

Entry Wire Bays
(In-Line)

**Approximate Maximum Weights - Frame 14 Bus Supplies**

| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Qty.* |
| 755TM bus supplies | 14 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Left section: | 1642 (3621) | 1772 (3907) | 2 of 6 | Left section: | 1642 (3621) | 1772 (3907) | 4 of 5 |
| | | Right Section: | 889 (1959) | 956 (2108) | 3 of 6 | Right section: | 889 (1959) | 956 (2108) | 5 of 5 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Left section: | 889 (1959) | 956 (2108) | 4 of 6 | Left section: | 889 (1959) | 956 (2108) | 1 of 5 |
| | | Right section: | 1642 (3621) | 1772 (3907) | 5 of 6 | Right section: | 1642 (3621) | 1772 (3907) | 2 of 5 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 484 (1066) | 597 (1316) | 1 of 6 | Entry wire bays: | 484 (1066) | 600 (1323) | 3 of 5 |
| | | DC voltage balance bays: | 252 (556) | 365 (805) | 6 of 6 | Total: | 5546 (12,226) | 6056 (13,353) | |
| | | Total: | 5798 (12,782) | 6418 (14,149) | | | | | |



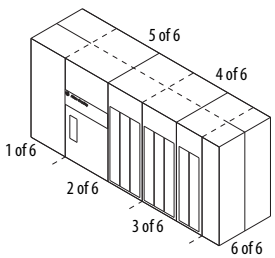
Final Back-to-Back Configuration



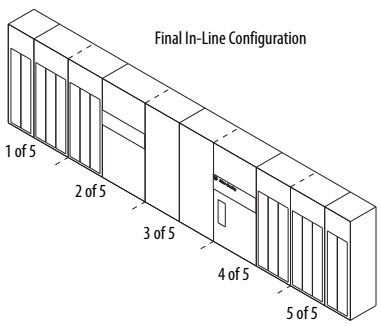
**Shipment Sections Frame 15 Bus Supplies**
This diagram illustrates how products are divided for shipment.

**Approximate Maximum Weights - Frame 15 Bus Supplies**

| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | | **In-Line Configuration** | | | |
| | | *Description* | *Weight* | *with Packaging* | *Section No.* | *Description* | *Weight* | *with Packaging* | *Section No.* |
| 755TM bus supplies | 15 | Left-to-right orientation | | | | Left-to-right orientation | | | |
| | | Left section: | 1642 (3621) | 1772 (3907) | 2 of 6 | Left section: | 1642 (3621) | 1772 (3907) | 4 of 5 |
| | | Right Section: | 1443 (3182) | 1540 (3395) | 3 of 6 | Right section: | 1443 (3182) | 1540 (3395) | 5 of 5 |
| | | Right-to-left orientation | | | | Right-to-left orientation | | | |
| | | Left section: | 1443 (3182) | 1540 (3395) | 4 of 6 | Left section: | 1443 (3182) | 1540 (3395) | 1 of 5 |
| | | Right section: | 1642 (3621) | 1772 (3907) | 5 of 6 | Right section: | 1642 (3621) | 1772 (3907) | 2 of 5 |
| | | Wire bays | | | | Wire bays | | | |
| | | Fiber routing and entry wire bays: | 484 (1066) | 597 (1316) | 1 of 6 | Entry wire bays: | 484 (1066) | 600 (1323) | 3 of 5 |
| | | DC voltage balance bays: | 252 (556) | 365 (805) | 6 of 6 | Total: | 6654 (14,672) | 7224 (15,927) | |
| | | Total: | 6906 (15,228) | 7586 (16,724) | | | | | |

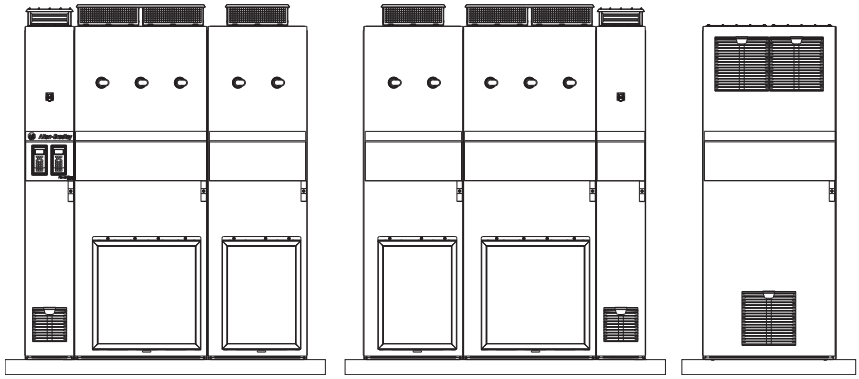


Final Back-to-Back Configuration



**Shipment Sections Frame 8…15 Common Bus Inverters**

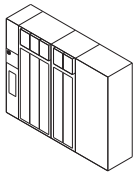
This diagram illustrates how products are divided for shipment. Frame 15 is shown.
Frame 8…12 common bus inverters ship as one in-line section.



Left-to-Right Orientation Section | Right-to-Left Orientation Section | Exit Wire Bays (Back-to-Back)

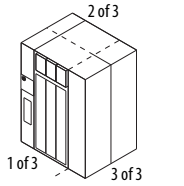
**Approximate Maximum Unit Weights - Frame 8…12 Common Bus Inverters**

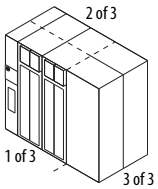
| Device | Frame Size | Approximate Maximum Weight *kg (lb)* | | | | Approximate Maximum Weight with Packaging *kg (lb)* | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *Power Bay* | *with Control Bay* | *with Exit Wire Bay* | *with Control and Exit Wire Bay* | *Power Bay* | *with Control Bay* | *with Exit Wire Bay* | *with Control and Exit Wire Bay* |
| 755TM common bus inverters | 8 | 374 (825) | 455 (1004) | 477 (1052) | 588 (1231) | 433 (955) | 520 (1146) | 544 (1199) | 679 (1497) |
| | 9 | 611 (1348) | 692 (1527) | 714 (1575) | 796 (1754) | 674 (1486) | 761 (1678) | 803 (1770) | 891 (1964) |
| | 10 | 873 (1924) | 954 (2103) | 954 (2103) | 1057 (2331) | 940 (2072) | 1045 (2304) | 1047 (2308) | 1156 (2549) |
| | 11 | 1284 (2830) | 1365 (3009) | 1503 (3313) | 1584 (3492) | 1377 (3036) | 1464 (3228) | 1637 (3609) | 1738 (3832) |
| | 12 | 1580 (3483) | 1661 (3662) | 1799 (3966) | 1880 (4145) | 1677 (3697) | 1789 (3944) | 1951 (4301) | 2040 (4497) |

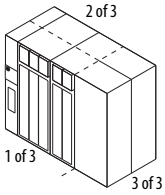


**Approximate Maximum Weights - Frame 13…15 Common Bus Inverters**

| Device | Frame Size | Approximate Maximum Weight, *kg (lb)* | | | |
|---|---|---|---|---|---|
| | | **Back-to-Back Configuration** | | | |
| | | *Description* | *Max Weight* | *with Packaging* | *Section No.* |
| 755TM common bus inverters | 13 | Left-to-right orientation<br>Section:<br>Right-to-left orientation<br>Section:<br>Wire bays<br>Fiber routing, DC voltage balance, and exit wire bays:<br>Total: | 954 (2103)<br>954 (2103)<br>291 (642)<br>2199 (4848) | 1045 (2304)<br>1045 (2304)<br>365 (805)<br>2455 (5412) | 1 of 3<br>2 of 3<br>3 of 3 |
| | 14 | Left-to-right orientation<br>Section:<br>Right-to-left orientation<br>Section:<br>Wire bays<br>Fiber routing, DC voltage balance, and exit wire bays:<br>Total: | 1365 (3009)<br>1365 (3009)<br>523 (1154)<br>3253 (7172) | 1464 (3228)<br>1464 (3228)<br>597 (1316)<br>3525 (7771) | 1 of 3<br>2 of 3<br>3 of 3 |
| | 15 | Left-to-right orientation<br>Section:<br>Right-to-left orientation<br>Section:<br>Wire bays<br>Fiber routing, DC voltage balance, and exit wire bays:<br>Total: | 1542 (3400)<br>1542 (3400)<br>523 (1154)<br>3607 (7954) | 1789 (3944)<br>1789 (3944)<br>597 (1316)<br>4175 (9204) | 1 of 3<br>2 of 3<br>3 of 3 |



### Approximate Maximum Entry and Exit Wiring Bay Weights

| **Bay Width** *mm (in.)* | **Maximum Weight** *kg (lb)* | **Maximum Weight with Packaging** *kg (lb)* |
|---|---|---|
| 400 (15.7) | 102 (225) | 129 (285) |
| 800 (31.5) | 242 (535) | 309 (682) |

### Approximate Maximum Module Weights

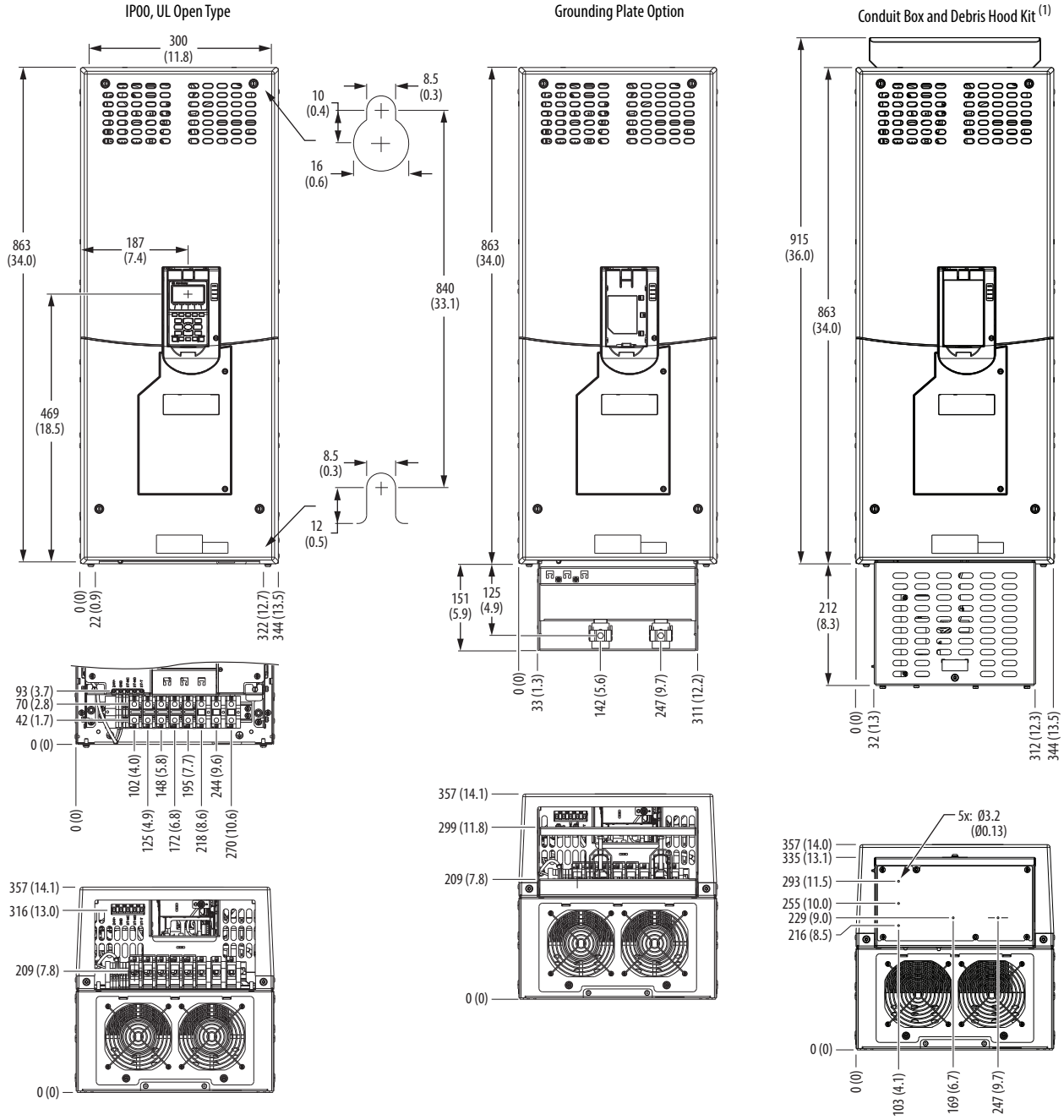
| **Module** | **Maximum Weight** *kg (lb)* | **Maximum Weight with Packaging** *kg (lb)* |
|---|---|---|
| AC Precharge/Circuit Breaker (Frame 8) | 41 (90) | 71 (157) |
| AC Precharge/Circuit Breaker (Frame 9) | 132 (291) | 173 (381) |
| DC Precharge/Disconnect | 41 (90) | 44 (97) |
| Inverter/Converter Power Module (Frame 7) | 113 (250) | 164 (362) |
| Inverter/Converter Power Module (Frames 8…15) | 142 (312) | 192 (424) |
| LCL Filter Module (Frame 7) | 175 (385) | 226 (497) |
| 1xLCL Filter Module | 213 (470) | 264 (582) |
| 2xLCL Filter Module | 322 (710) | 373 (822) |

### Approximate Maximum IP54, UL Type 12 Roof Fan Assembly Weights

| **Bay Width** *mm (in.)* | **Maximum Weight** *kg (lb)* | **Maximum Weight with Packaging** *kg (lb)* |
|---|---|---|
| 400 (15.7) | 25 (55) | 30 (66) |
| 600 (23.6) | 25 (55) | 32 (71) |
| 800 (31.5) | 50 (110) | 57 (126) |

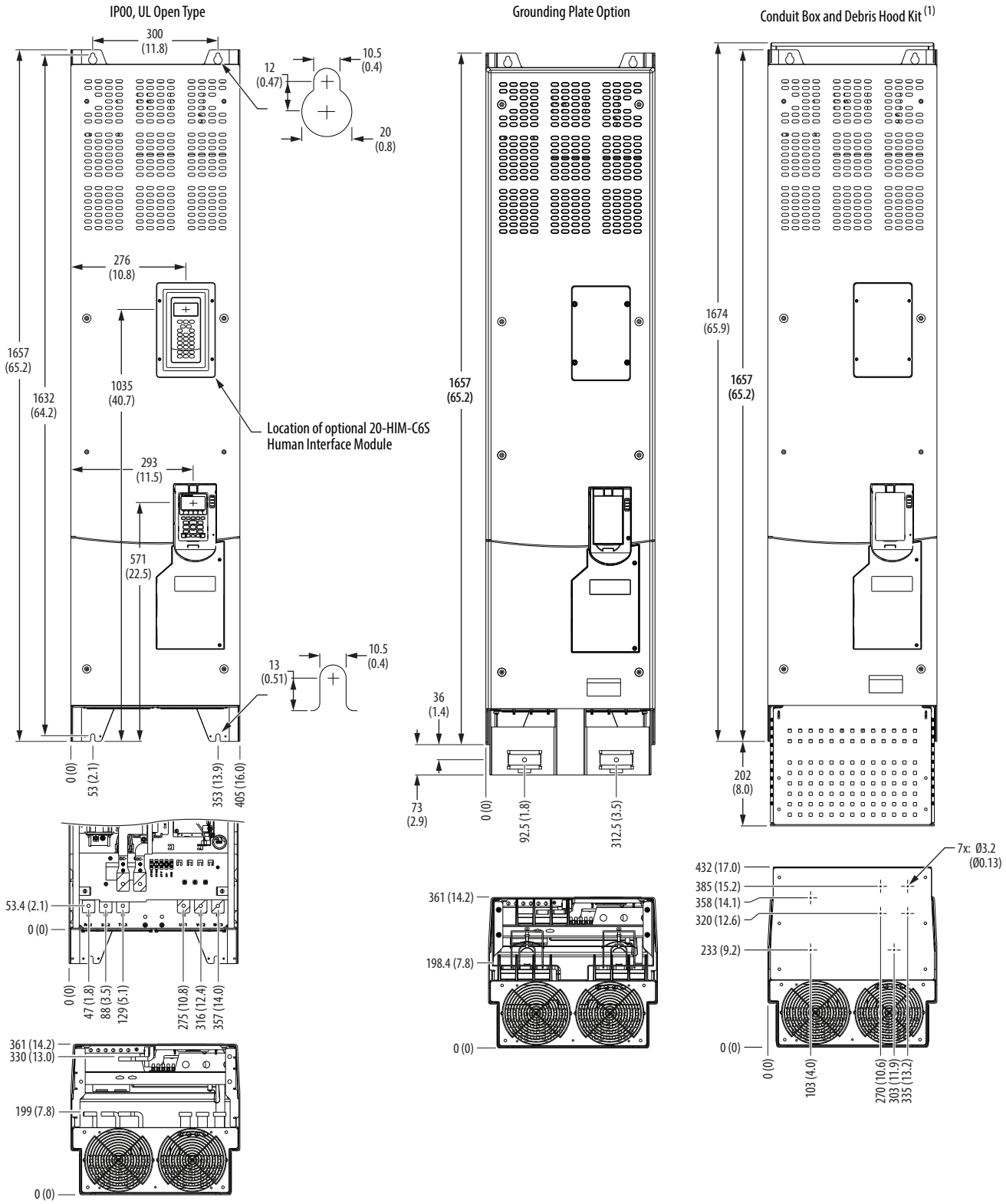
# PowerFlex 755TL and 755TR Drives Approximate Dimensions

**Frame 5 Drives Front and Bottom Views -** *Dimensions are mm (in.)*



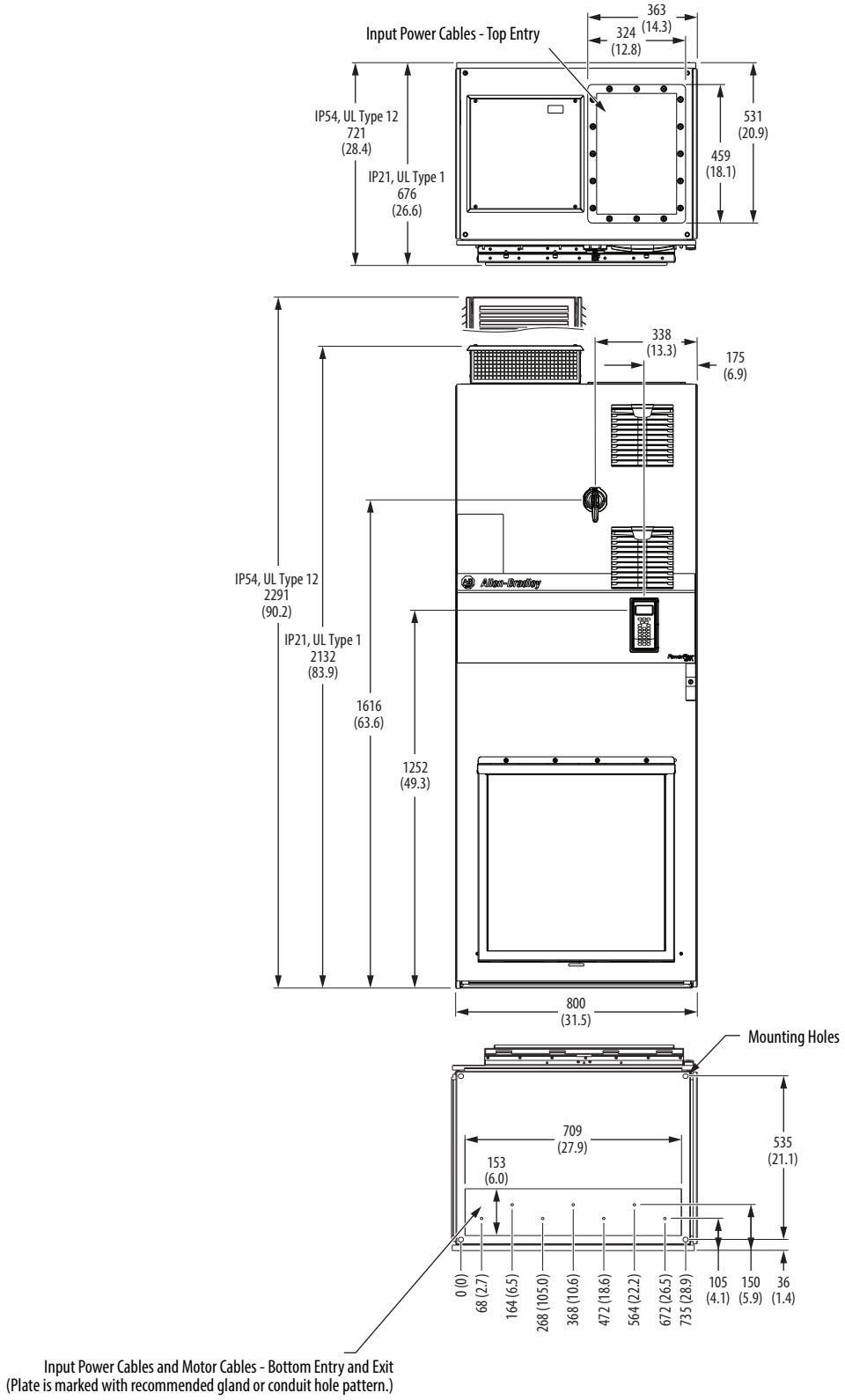

(1) The SK-RM-CBOX1-F2 kit contains a conduit box and debris hood. Install the conduit box to meet the IP20 enclosure rating. Install the conduit box and debris hood to meet the UL Type 1 enclosure rating.

**Frame 6 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



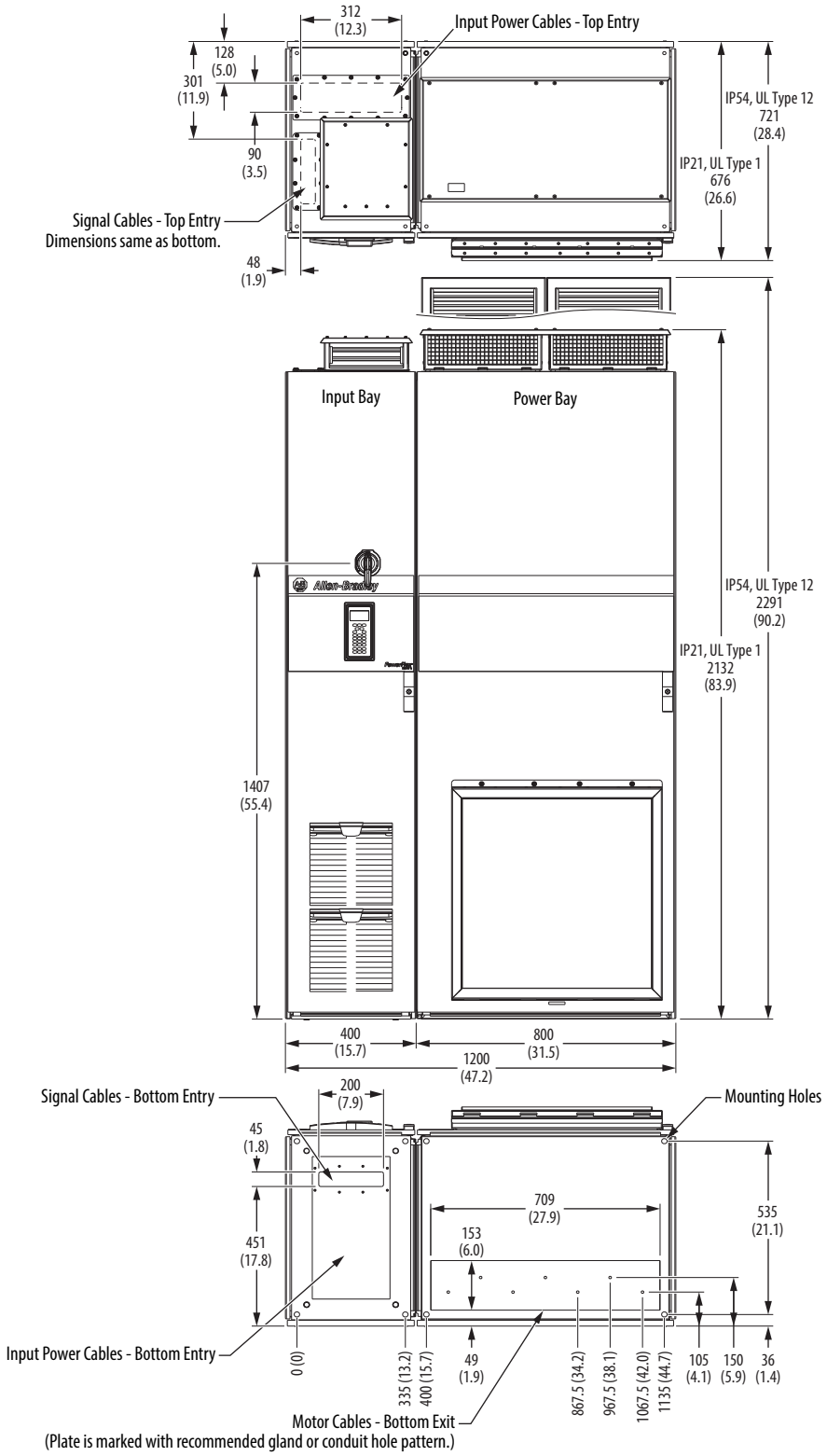

(1) The SK-RM-CBOX1-F6 kit contains a conduit box and debris hood. Install the conduit box to meet the IP20 enclosure rating. Install the conduit box and debris hood to meet the UL Type 1 enclosure rating.

**Frame 7 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



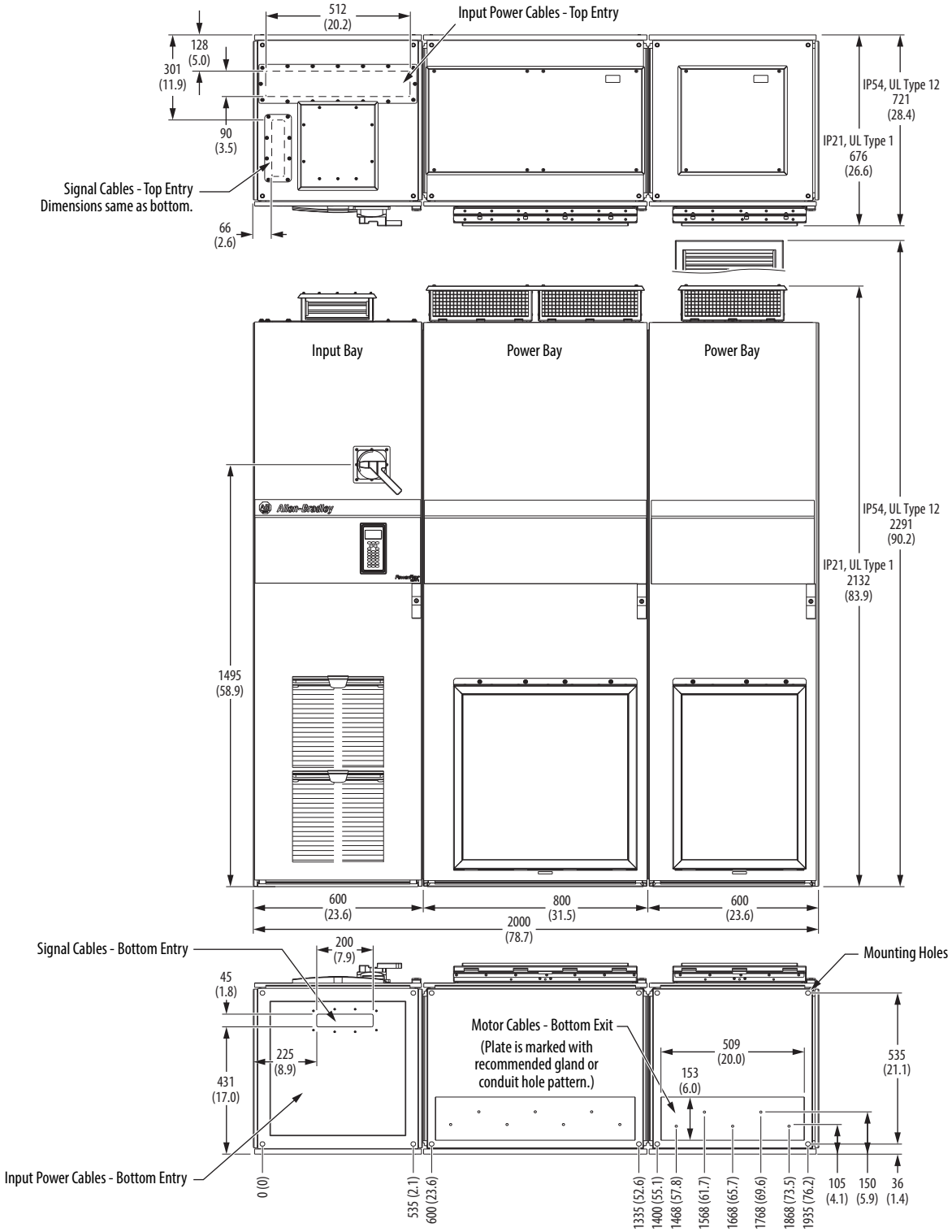
**Frame 8 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 244 for optional exit wire bay dimensions.



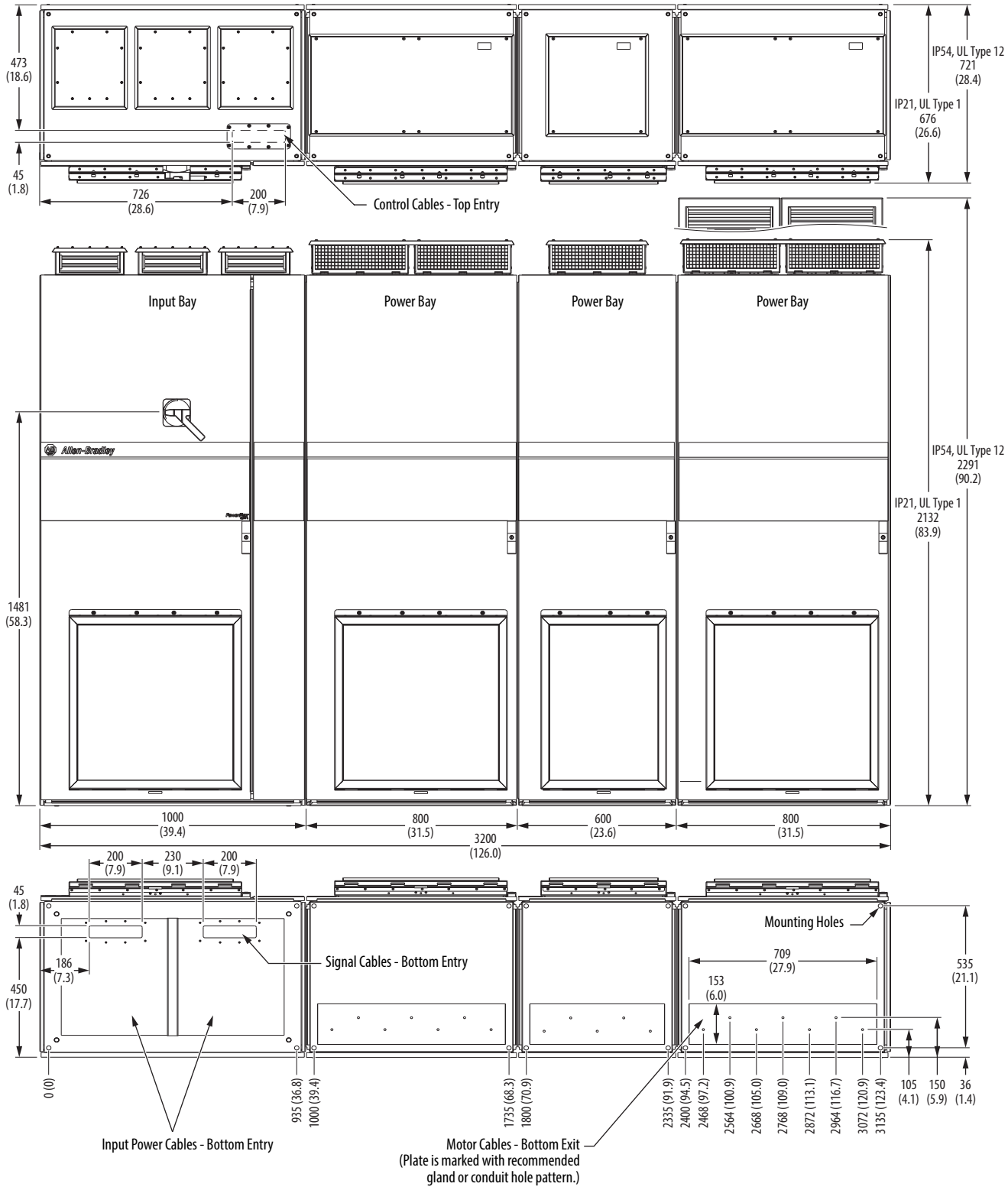
**Frame 9 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 244 for optional exit wire bay dimensions.



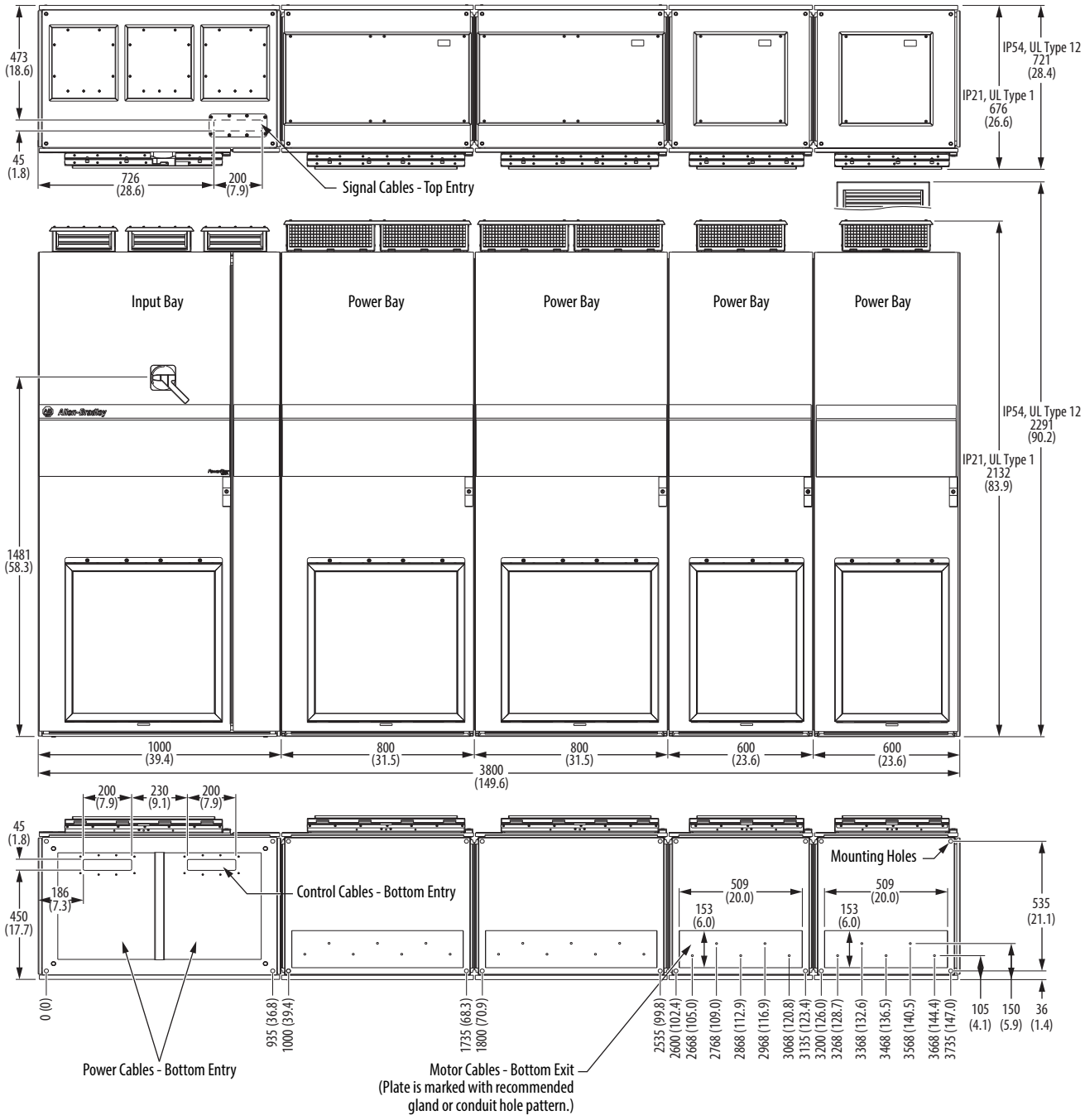
**Frame 10 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 244 for optional entry and exit wire bay dimensions.



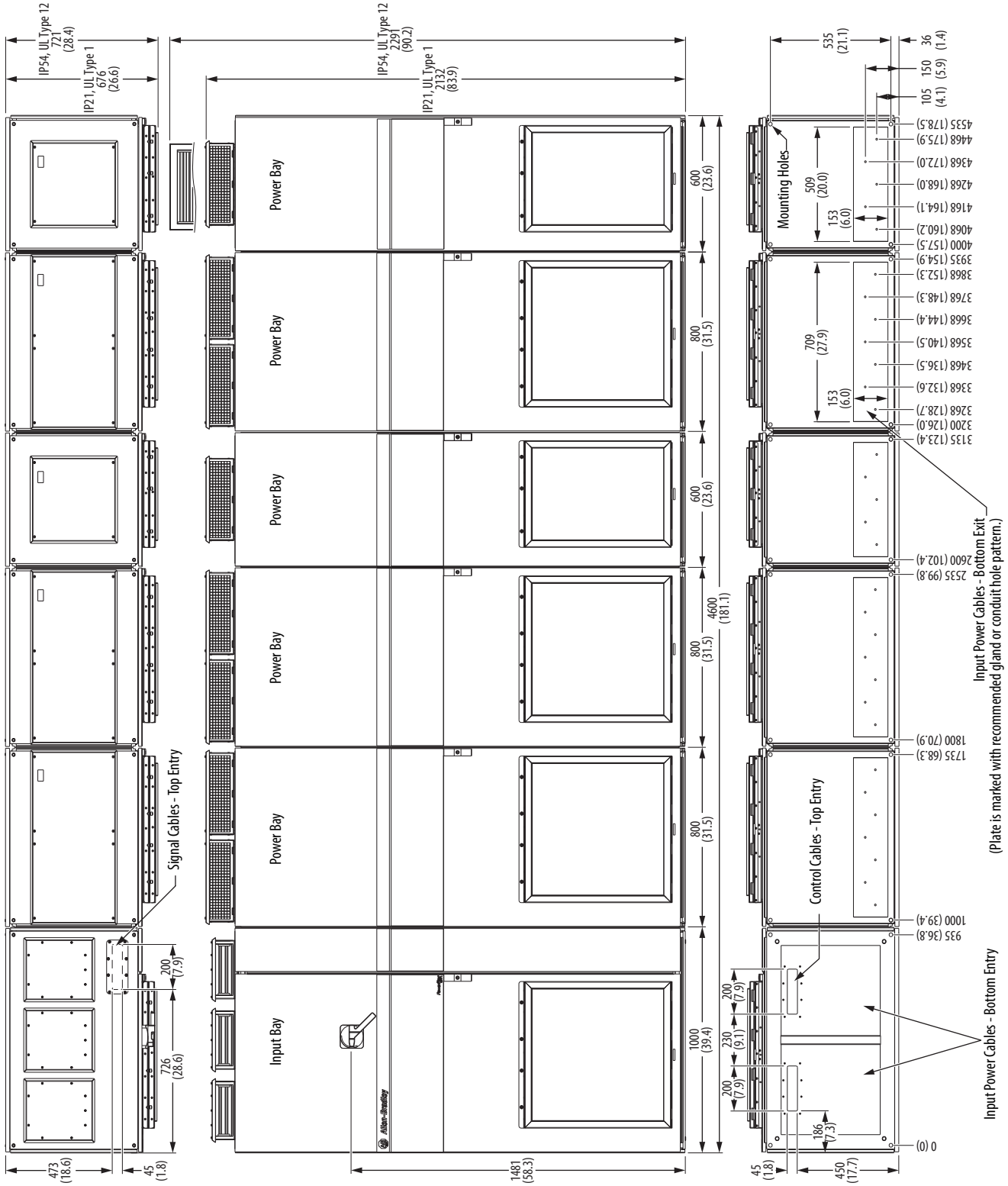
**Frame 11 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 244 for optional exit wire bay dimensions.



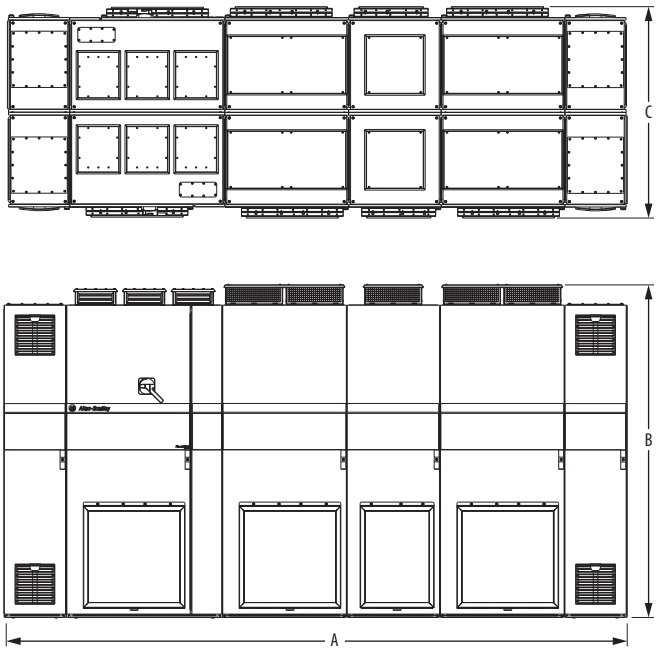
**Frame 12 Drives Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 244 for optional entry and exit wire bay dimensions.

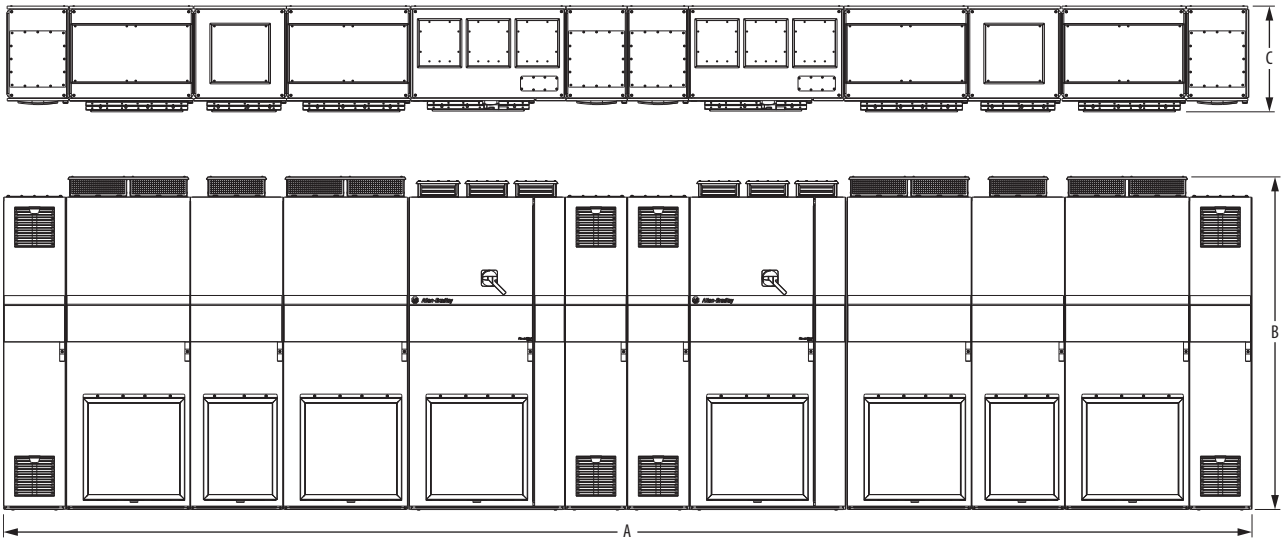


**Frame 13…15 Drives Top and Front Views -** *Dimensions are mm (in.)*

Back-to-back Configuration




In-Line Configuration

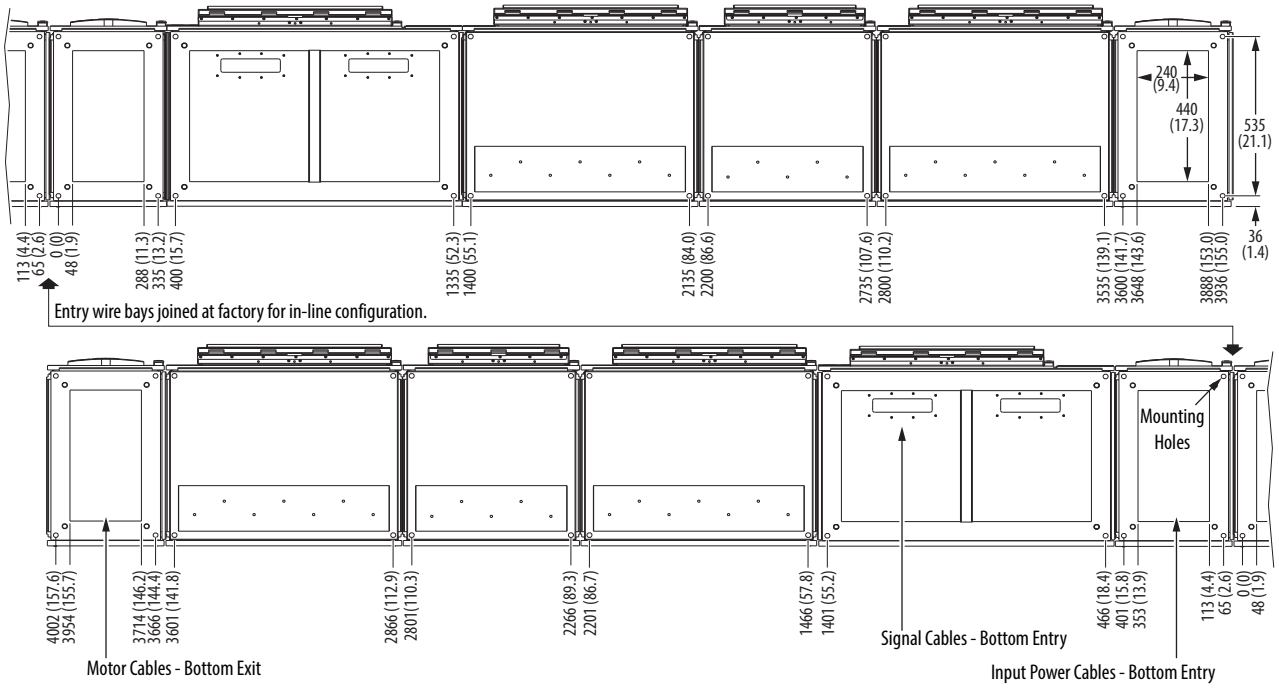



Frame 13 Shown

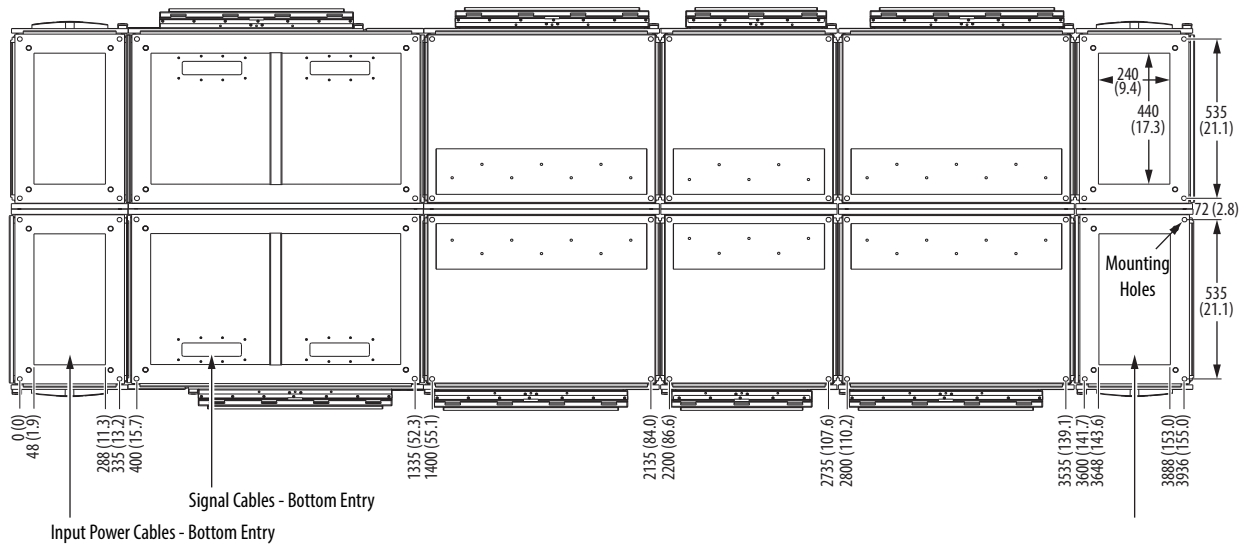
| Frame | Back-to-Back Configuration | | | | | | In-Line Configuration | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IP21, UL Type 1 | | | IP54, UL Type 12 | | | IP21, UL Type 1 | | | IP54, UL Type 12 | | |
| | A | B | C | A | B | C | A | B | C | A | B | C |
| 13 | 4000 (157.4) | 2132 (83.9) | 1352 (53.2) | 4000 (157.4) | 2291 (90.2) | 1442 (56.8) | 8000 (314.8) | 2132 (83.9) | 676 (26.6) | 8000 (314.8) | 2291 (90.2) | 721 (28.4) |
| 14 | 5400 (212.6) | 2132 (83.9) | 1352 (53.2) | 5400 (212.6) | 2291 (90.2) | 1442 (56.8) | 10,800 (425.2) | 2132 (83.9) | 676 (26.6) | 10,800 (425.2) | 2291 (90.2) | 721 (28.4) |
| 15 | 6200 (244.1) | 2132 (83.9) | 1352 (53.2) | 6200 (244.1) | 2291 (90.2) | 1442 (56.8) | 12,400 (488.2) | 2132 (83.9) | 676 (26.6) | 12,400 (488.2) | 2291 (90.2) | 721 (28.4) |

**Frame 13 Drives Bottom Views -** *Dimensions are mm (in.)*

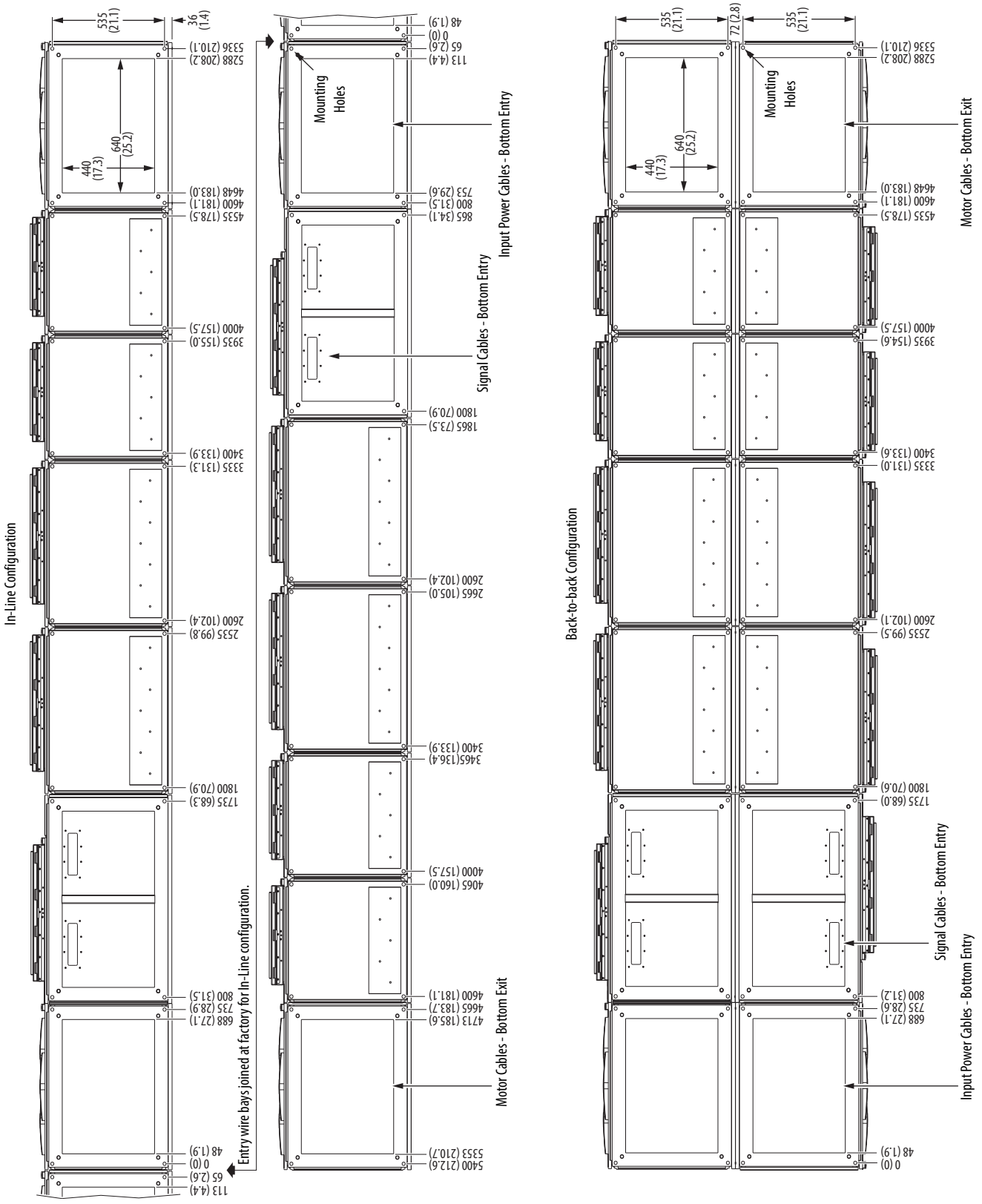
In-Line Configuration



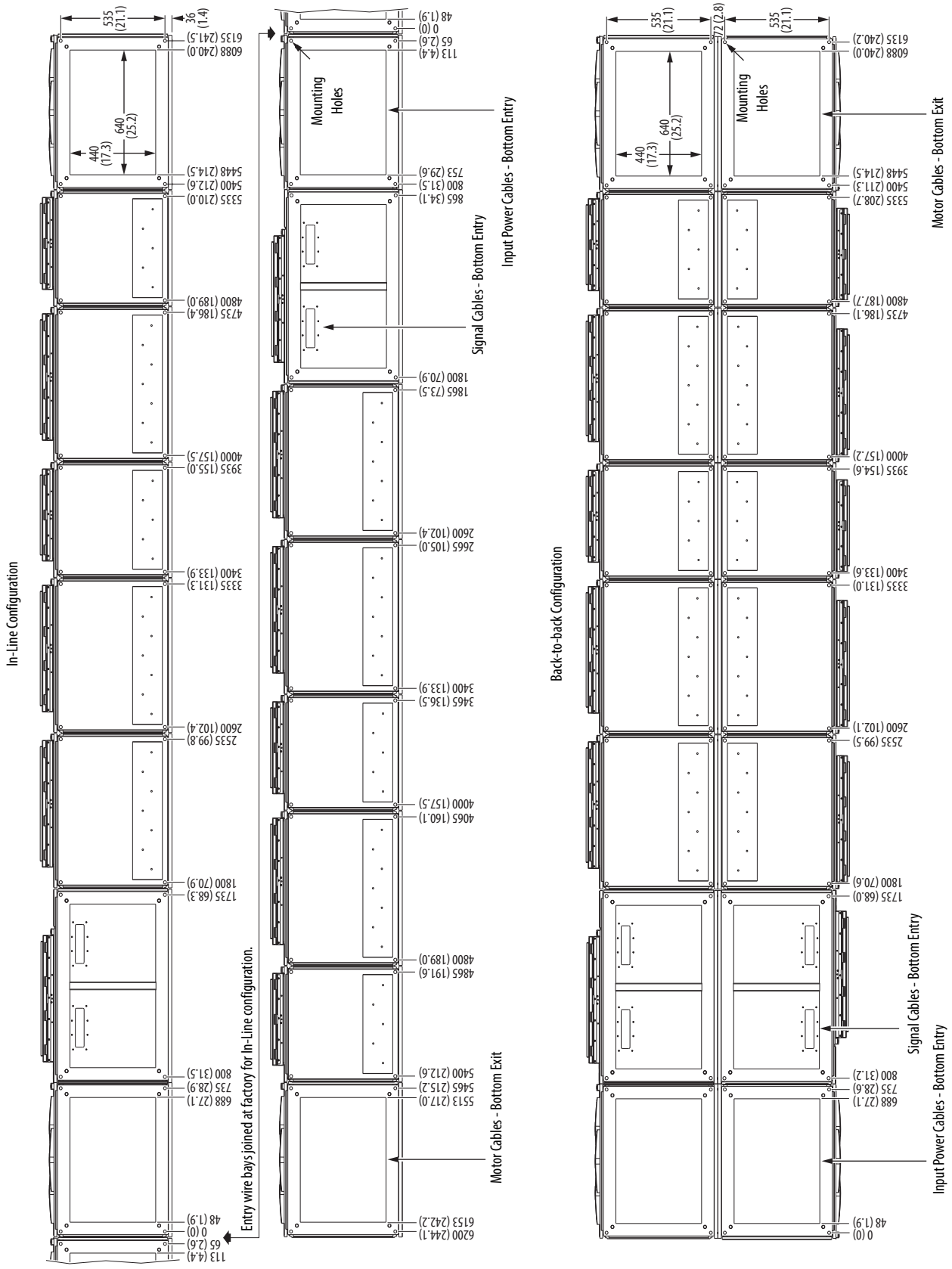

Back-to-back Configuration



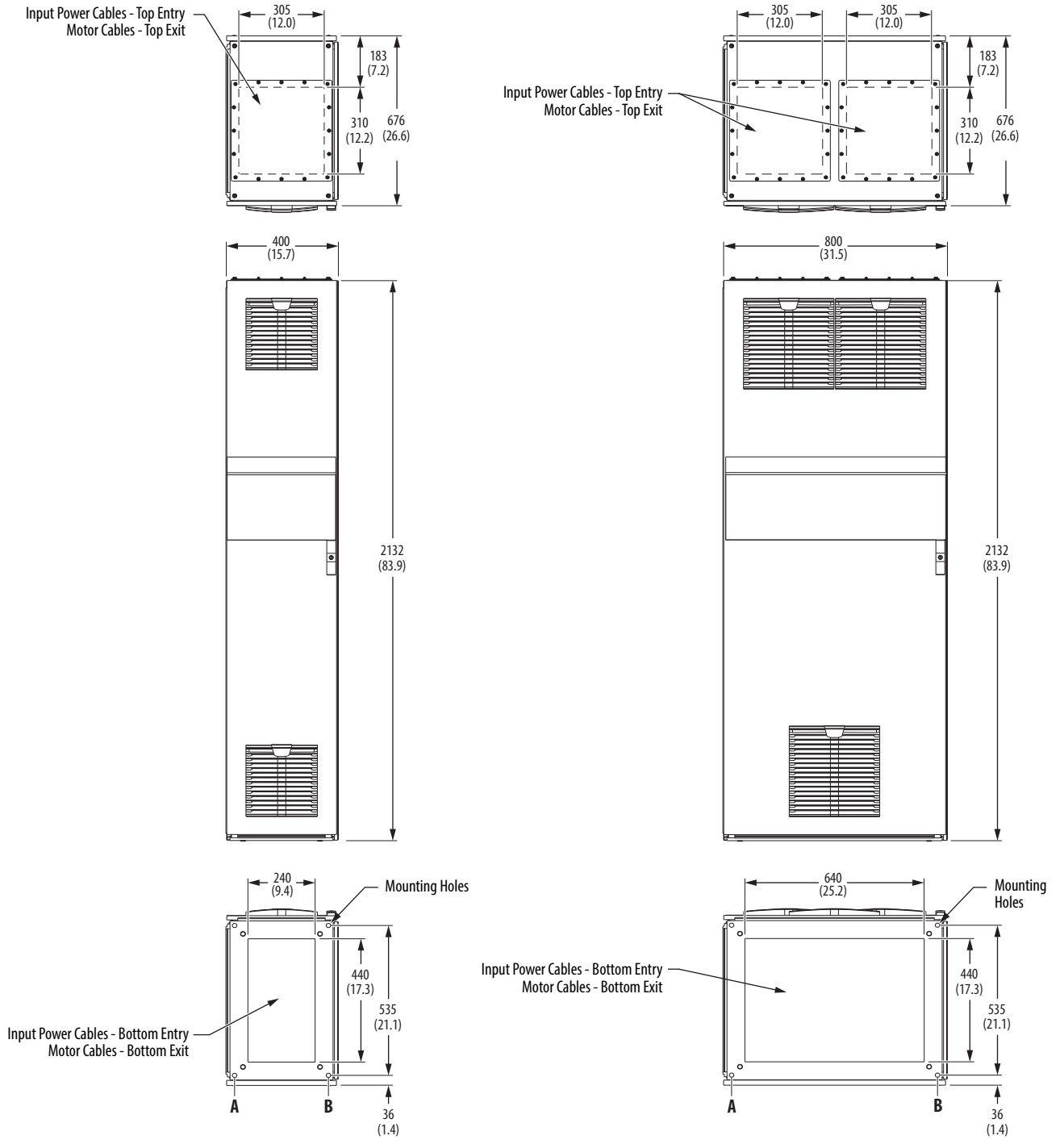
**Frame 14 Drives Bottom Views -** *Dimensions are mm (in.)*



**Frame 15 Drives Bottom Views -** *Dimensions are mm (in.)*



**Drives Optional Entry and Exit Wire Bays Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

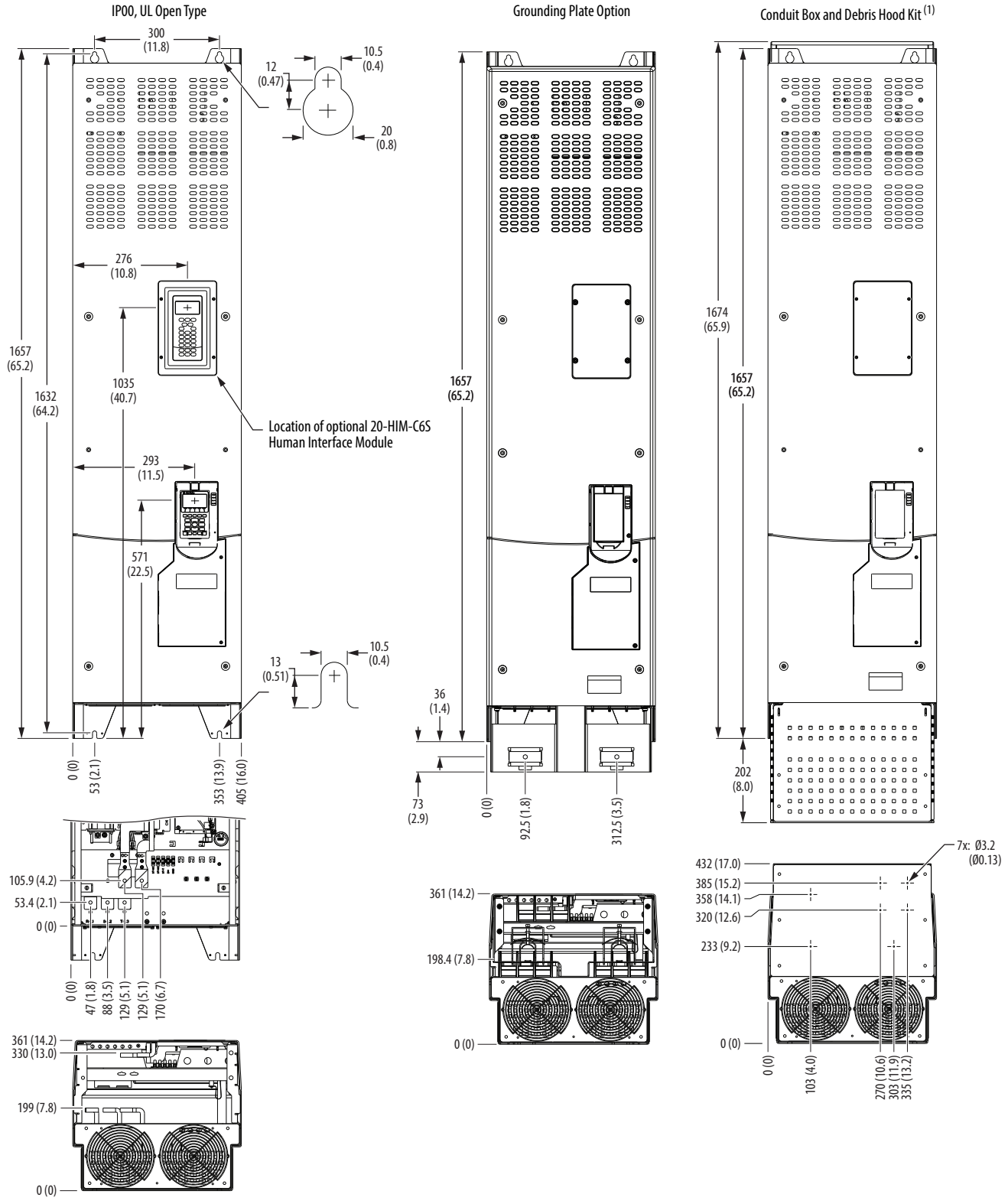



| Frame | Entry Bay – 400 (15.7) Wide | | Exit Bay – 400 (15.7) Wide | | Entry Bay – 800 (31.5) Wide | | Exit Bay – 800 (31.5) Wide | |
|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B |
| 8 | – | – | 1200 (47.2) | 1535 (60.4) | – | – | – | – |
| 9 | – | – | 2000 (78.7) | 2335 (91.9) | – | – | – | – |
| 10 | 400 (15.7) | 65 (2.6) | 3200 (126.0) | 3535 (139.2) | – | – | – | – |
| 11 | – | – | – | – | 465 (18.3) | 65 (2.6) | 3800 (149.6) | 4535 (178.5) |
| 12 | – | – | – | – | 465 (18.3) | 65 (2.6) | 4600 (181.1) | 5335 (210.0) |

# PowerFlex 755TM Bus Supplies Approximate Dimensions

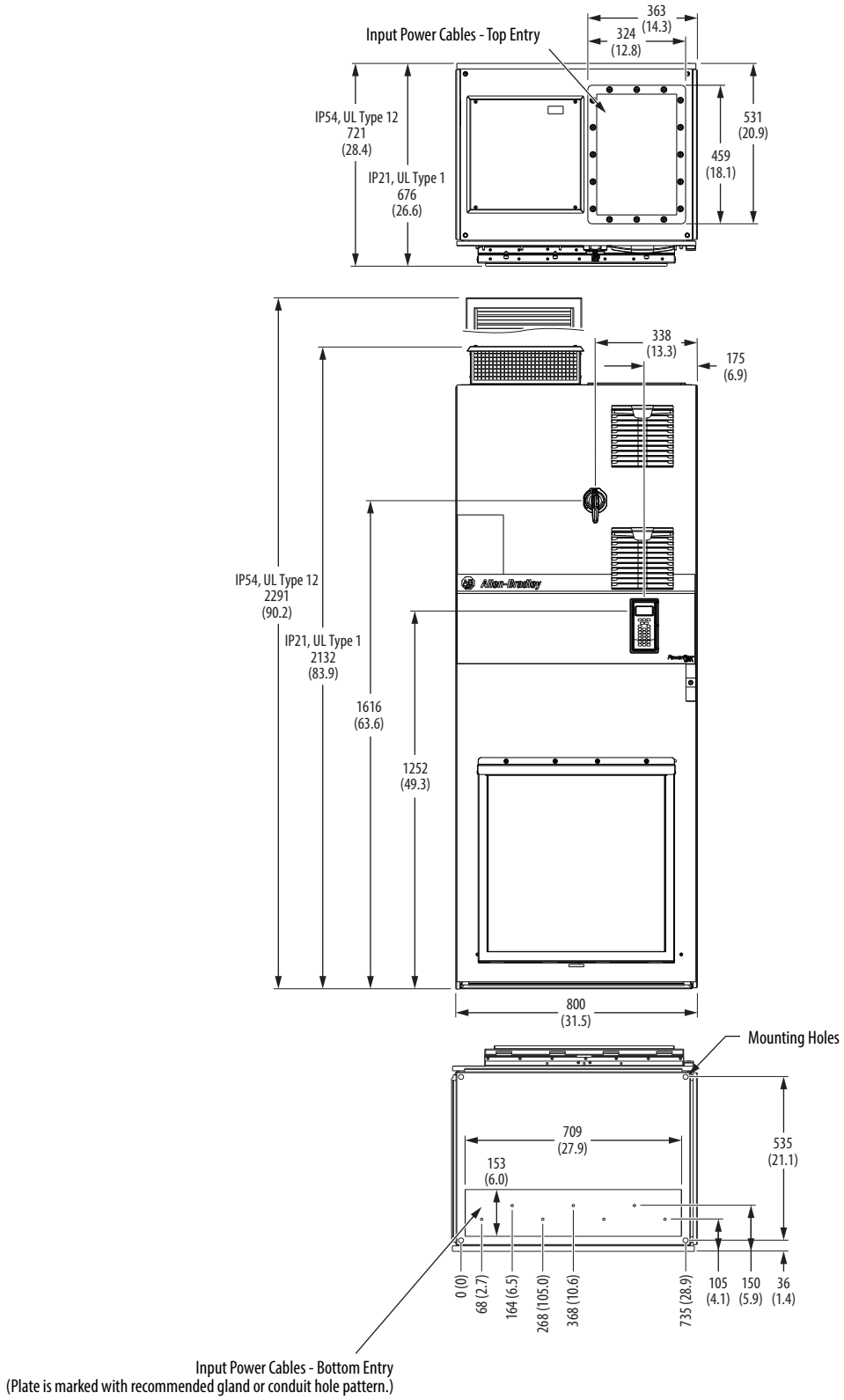
**Frame 6 Bus Supplies Top, Front, Bottom, and Side Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



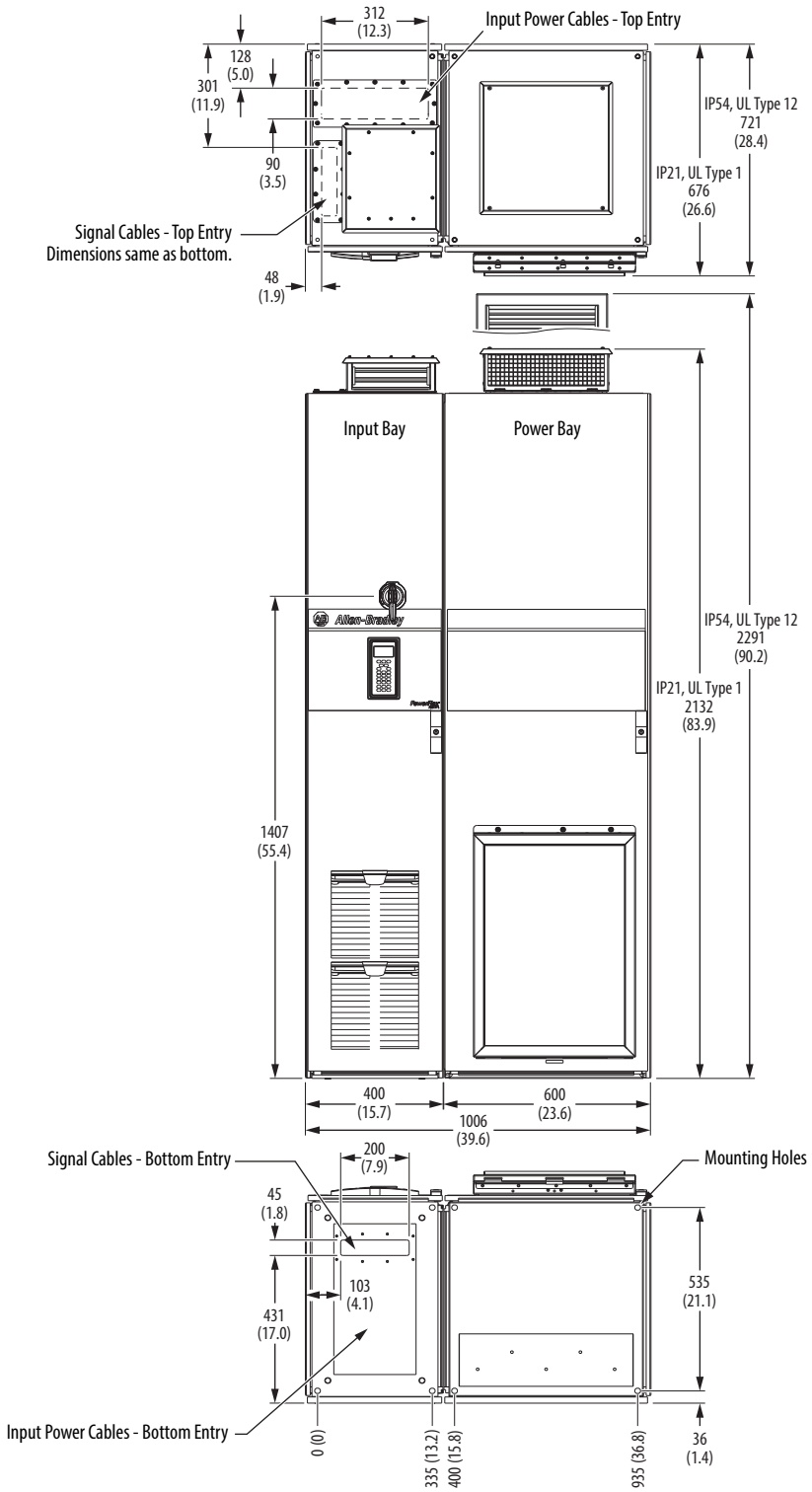
**Frame 7 Bus Supplies Top, Front, Bottom, and Side Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



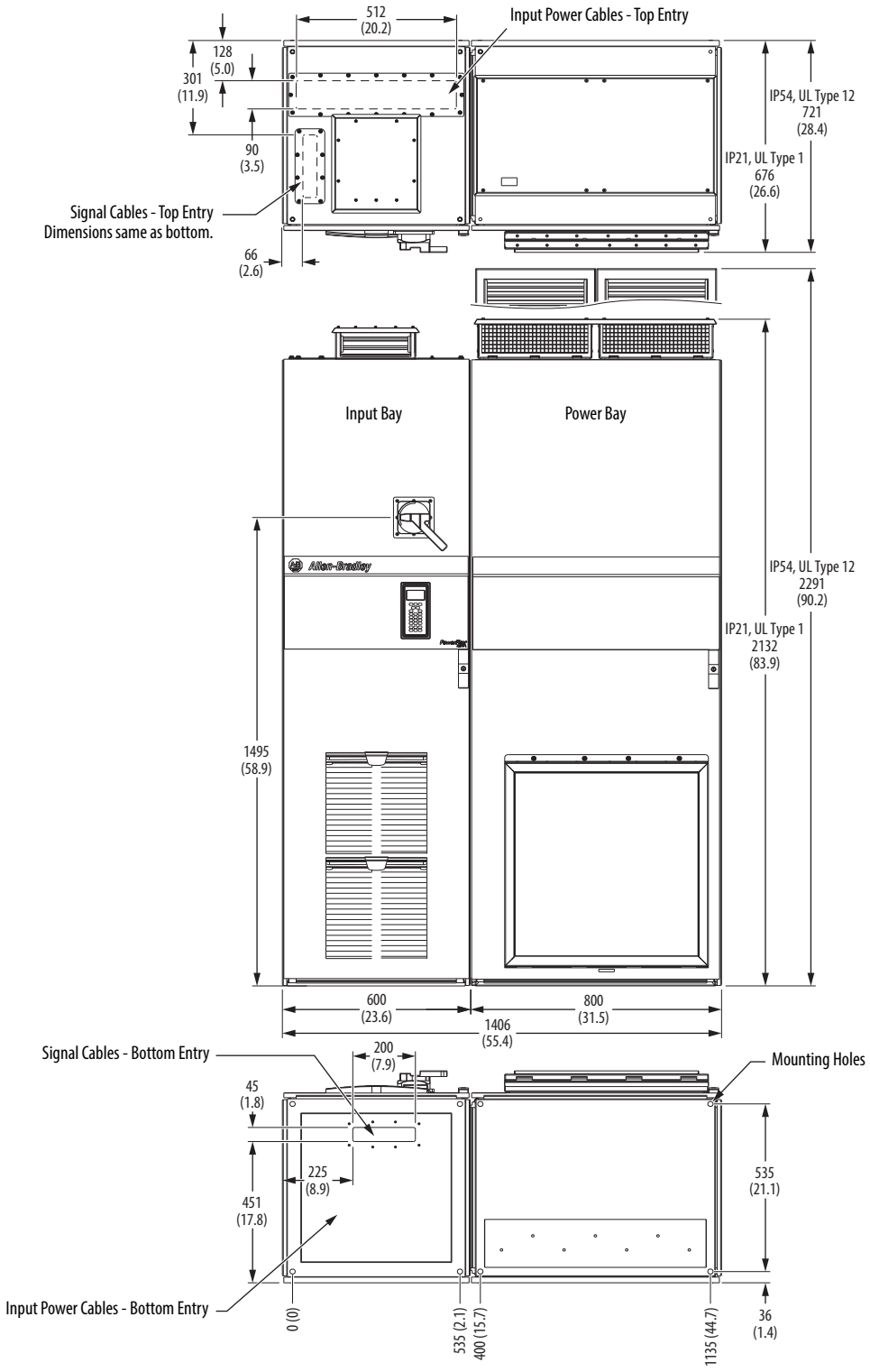
**Frame 8 Bus Supplies Top, Front, Bottom, and Side Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



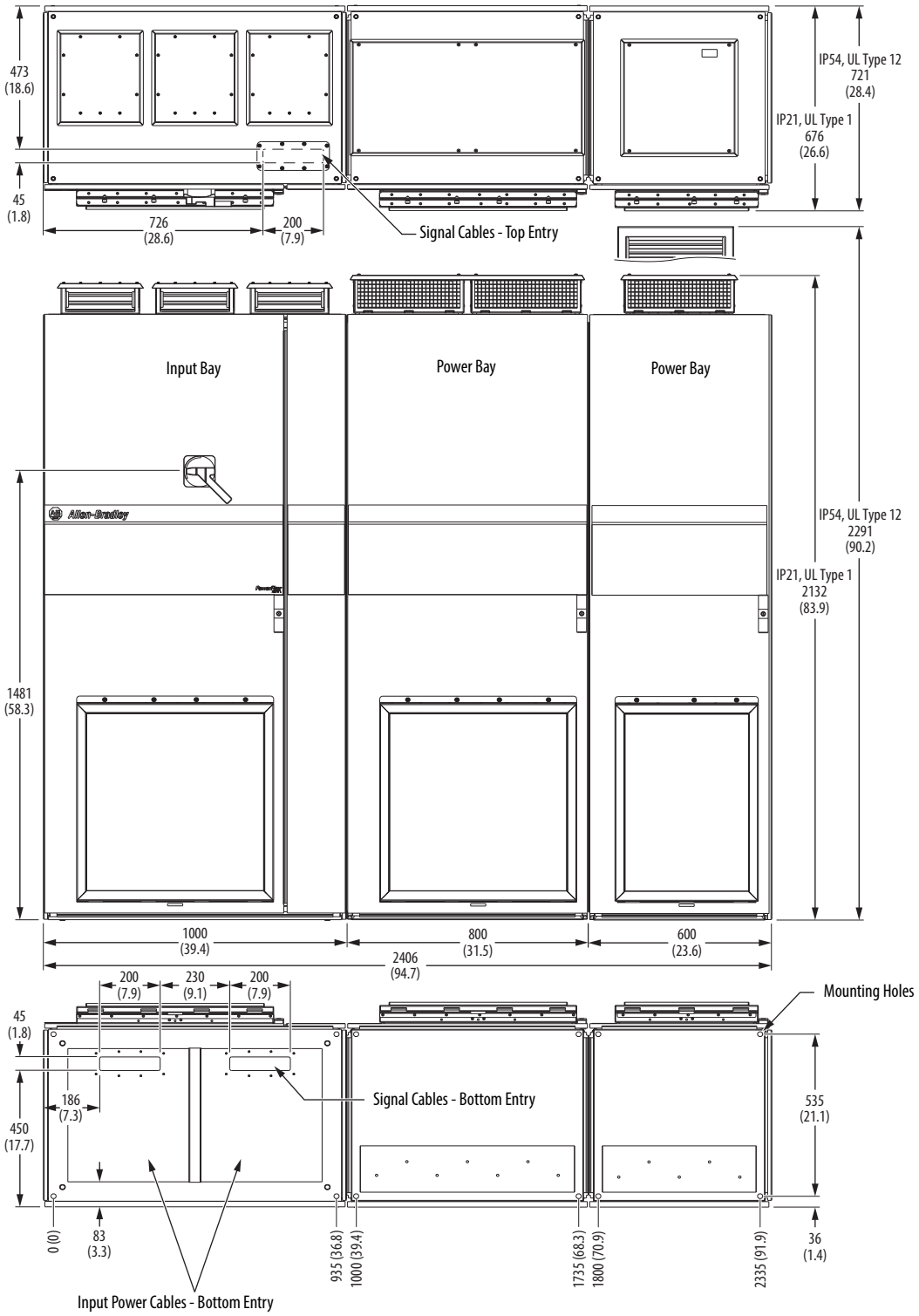
**Frame 9 Bus Supplies Top, Front, Bottom, and Side Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



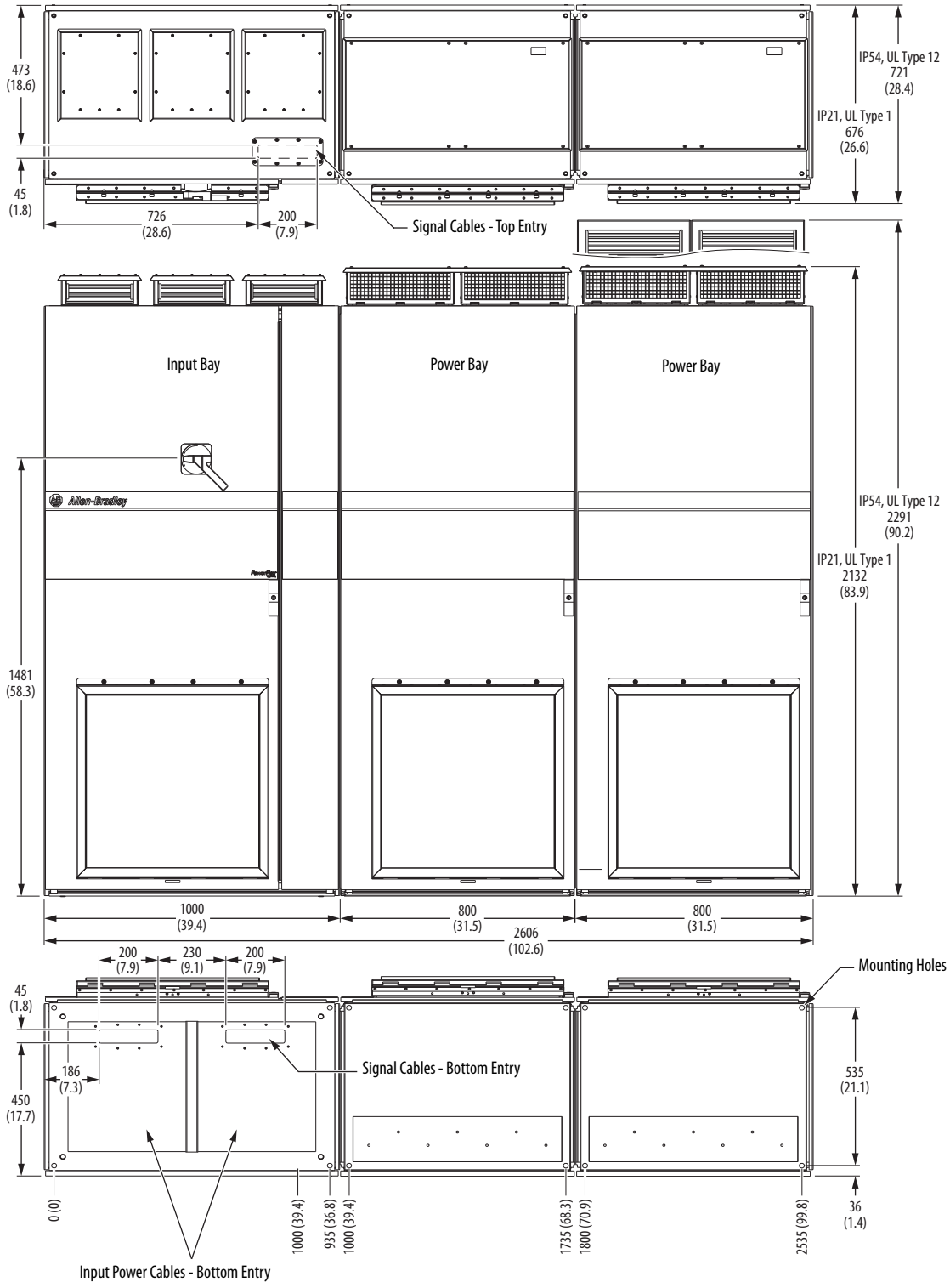
**Frame 10 Bus Supplies Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



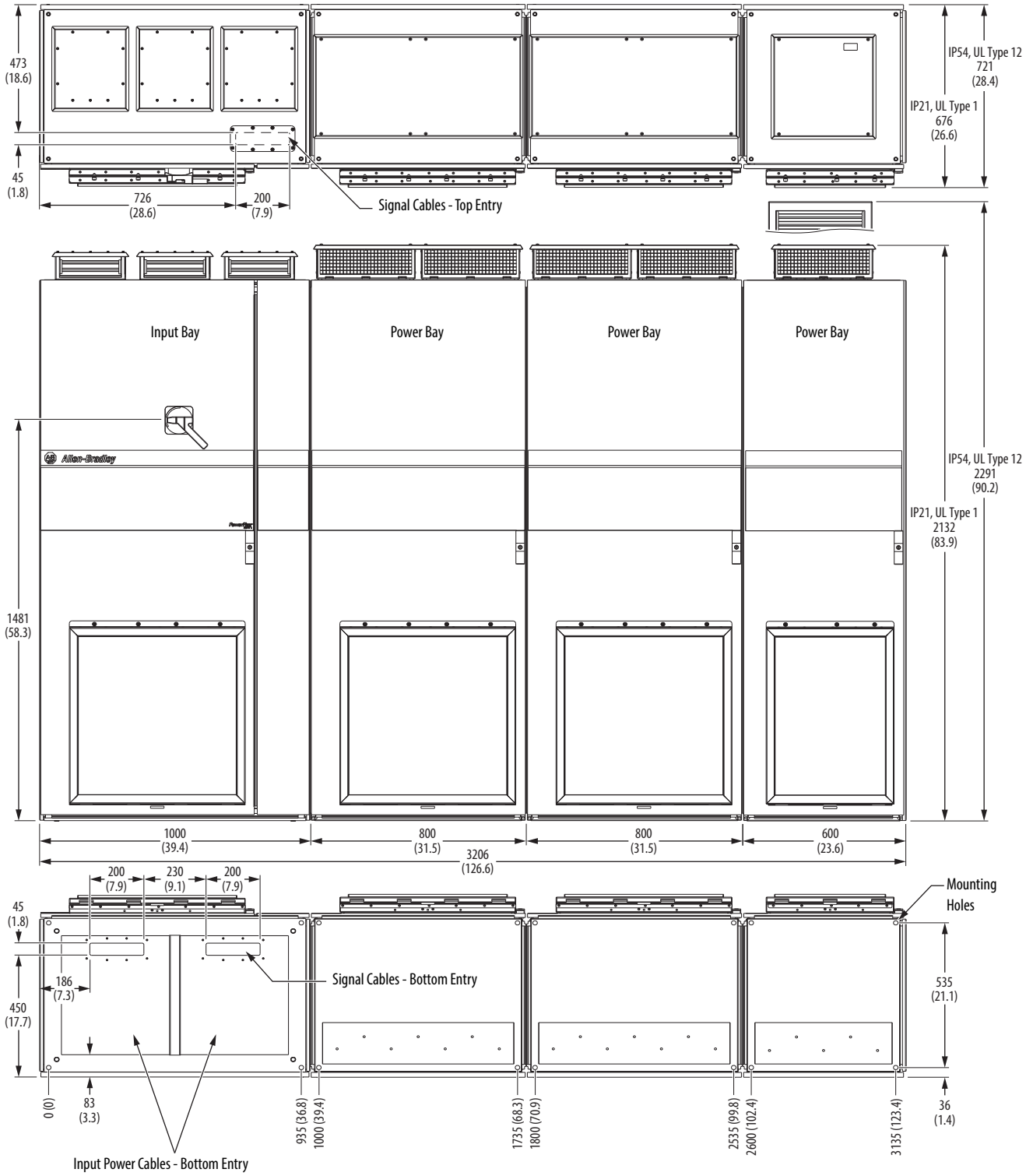
**Frame 11 Bus Supplies Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.



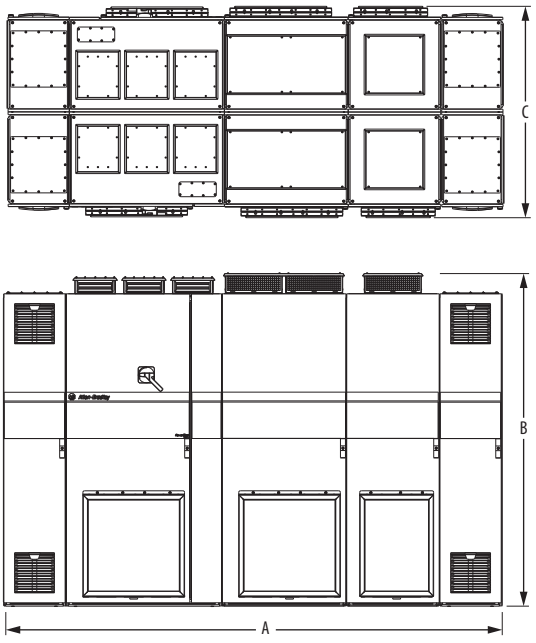
**Frame 12 Bus Supplies Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 253 for optional entry wire bay dimensions.

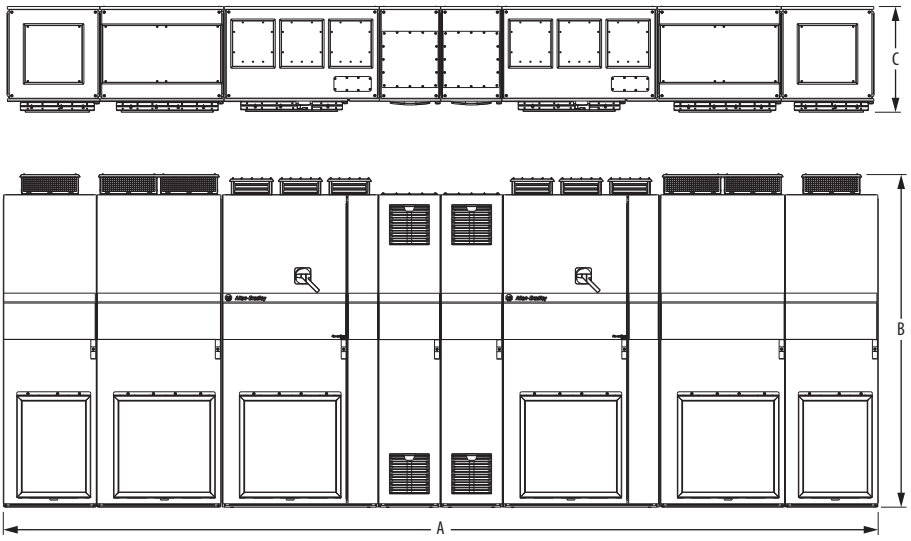


**Frame 13…15 Bus Supplies Top and Front Views -** *Dimensions are mm (in.)*

Back-to-back Configuration



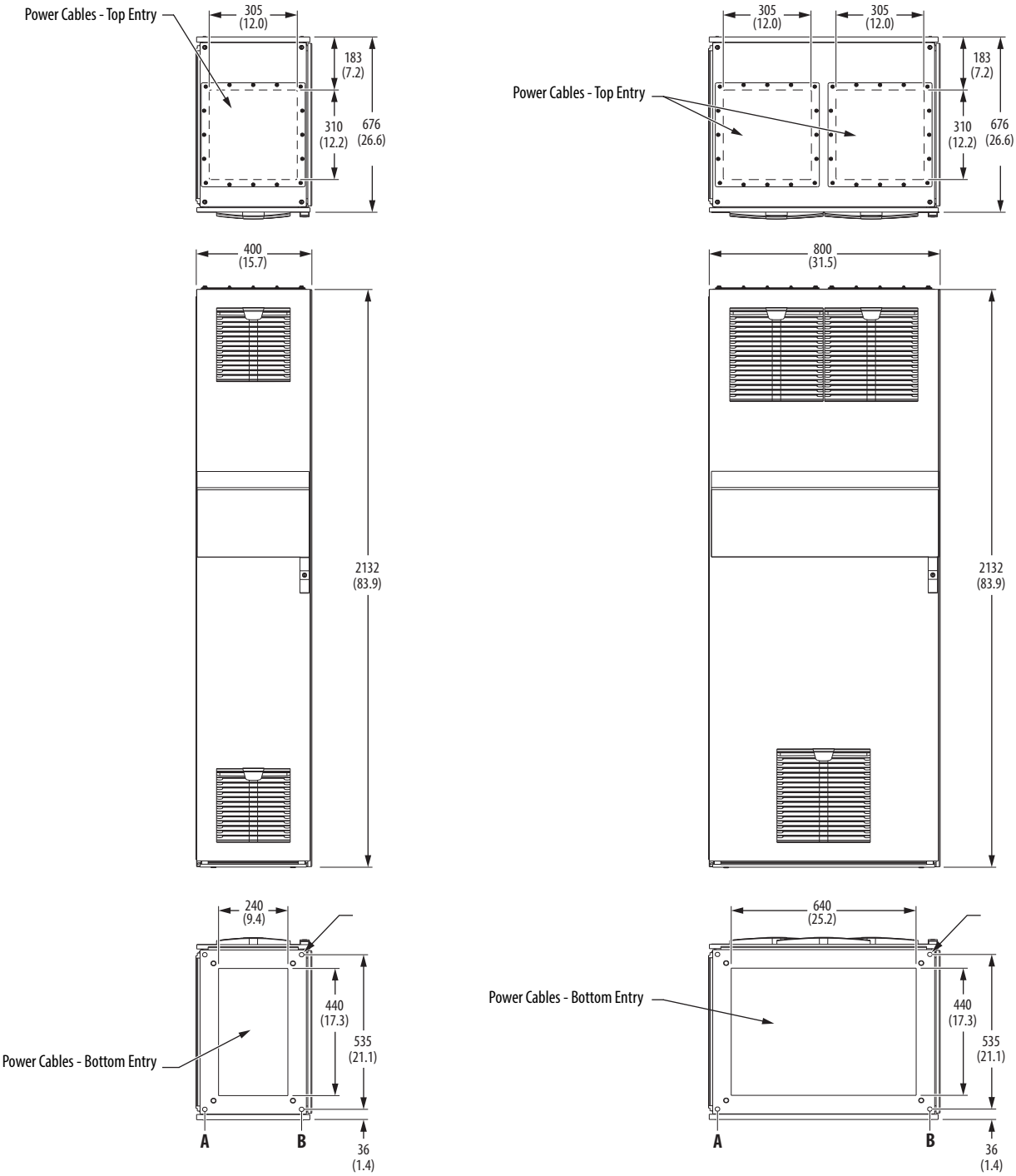

In-Line Configuration




Frame 13 Shown

| Frame | Back-to-Back Configuration | | | | | | In-Line Configuration | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IP21, UL Type 1 | | | IP54, UL Type 12 | | | IP21, UL Type 1 | | | IP54, UL Type 12 | | |
| | A | B | C | A | B | C | A | B | C | A | B | C |
| 13 | 3200 (125.9) | 2132 (83.9) | 1352 (53.2) | 3200 (125.9) | 2291 (90.2) | 1442 (56.8) | 5600 (220.4) | 2132 (83.9) | 676 (26.6) | 5600 (220.4) | 2291 (90.2) | 721 (28.4) |
| 14 | 3800 (149.6) | 2132 (83.9) | 1352 (53.2) | 3800 (149.6) | 2291 (90.2) | 1442 (56.8) | 6,800 (267.8) | 2132 (83.9) | 676 (26.6) | 6,800 (267.8) | 2291 (90.2) | 721 (28.4) |
| 15 | 4400 (173.2) | 2132 (83.9) | 1352 (53.2) | 4400 (173.2) | 2291 (90.2) | 1442 (56.8) | 8000 (315.0) | 2132 (83.9) | 676 (26.6) | 8000 (315.0) | 2291 (90.2) | 721 (28.4) |

**Bus Supplies Optional Entry Wire Bays Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

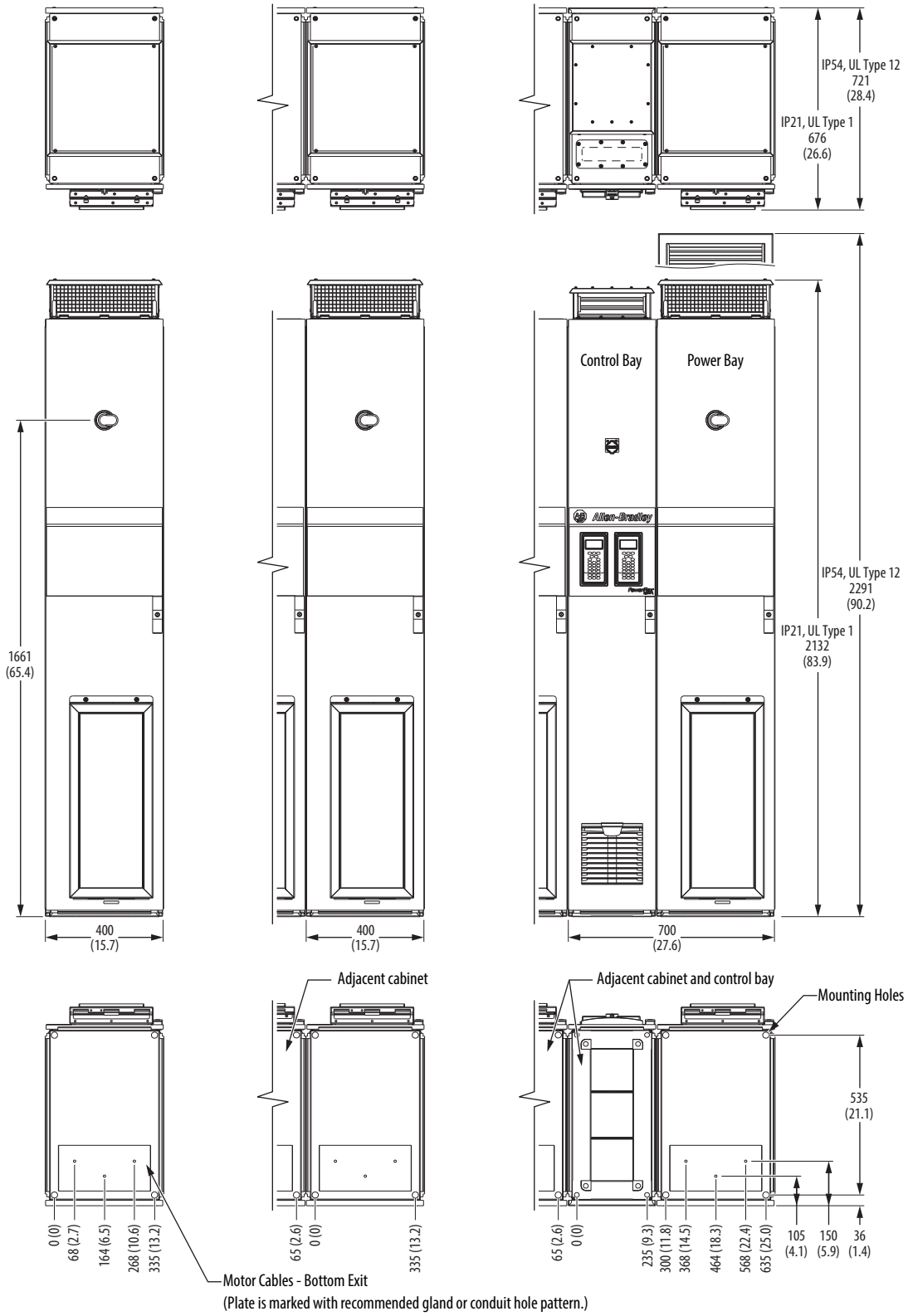



| Frame | Entry Bay – 400 (15.7) Wide | | Entry Bay – 800 (31) Wide | |
|---|---|---|---|---|
| | A | B | A | B |
| 8 | – | – | – | – |
| 9 | – | – | – | – |
| 10 | 400 (15.7) | 65 (2.6) | – | – |
| 11 | – | – | 465 (18.3) | 65 (2.6) |
| 12 | – | – | 465 (18.3) | 65 (2.6) |

# PowerFlex 755TM Common Bus Inverters Approximate Dimensions

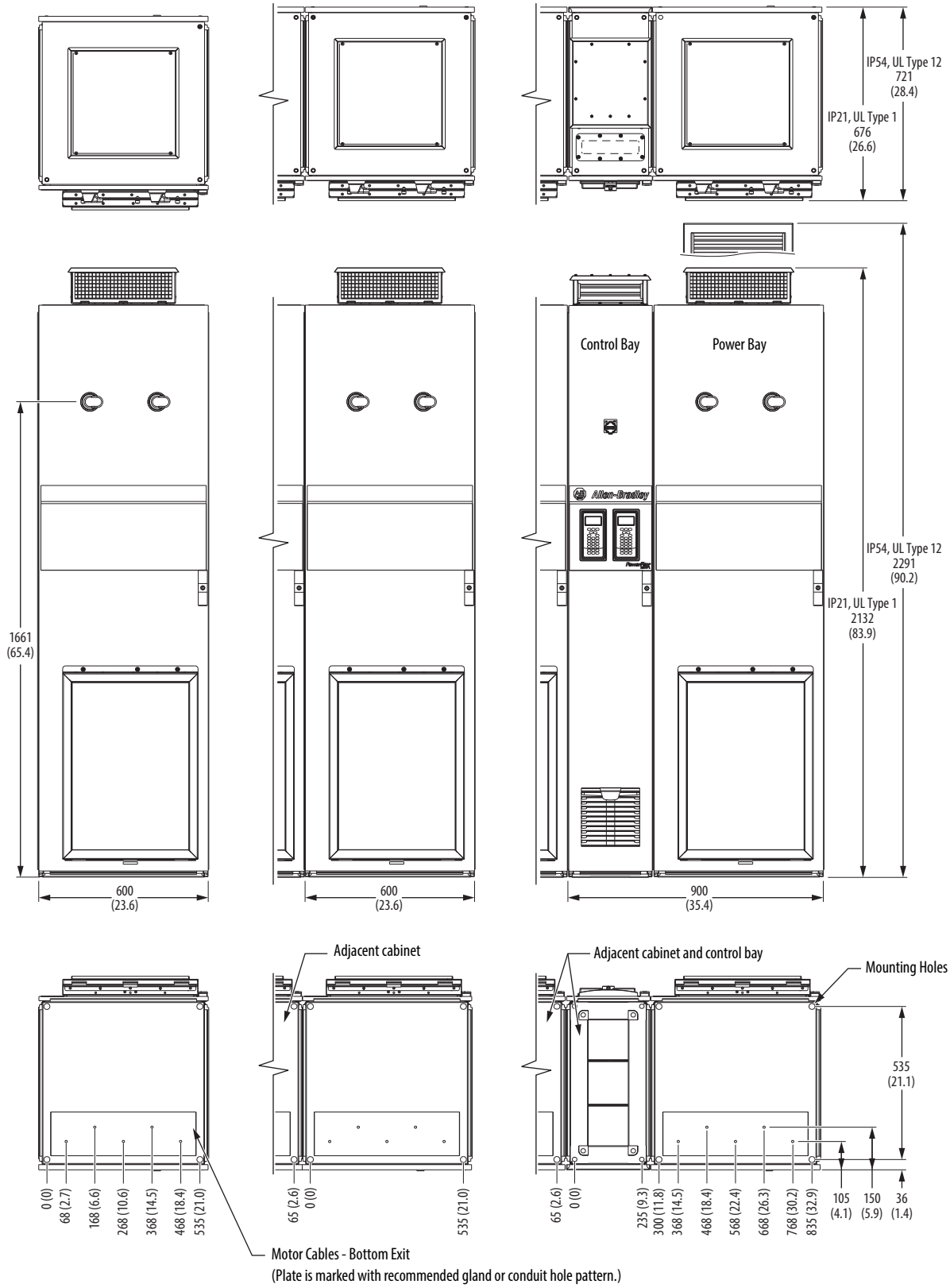
**Frame 8 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 262 for optional exit wire bay dimensions.



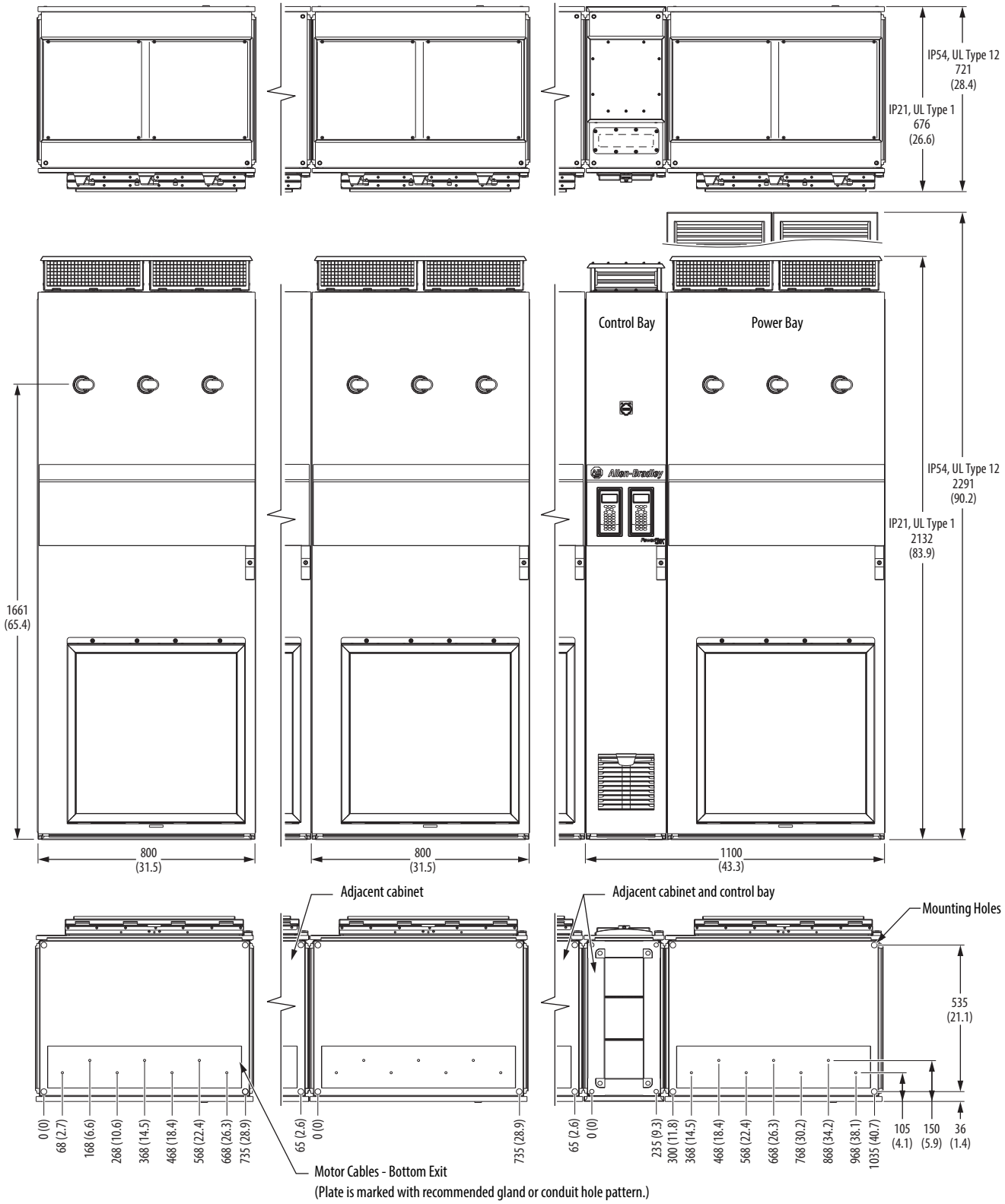
**Frame 9 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 262 for optional exit wire bay dimensions.



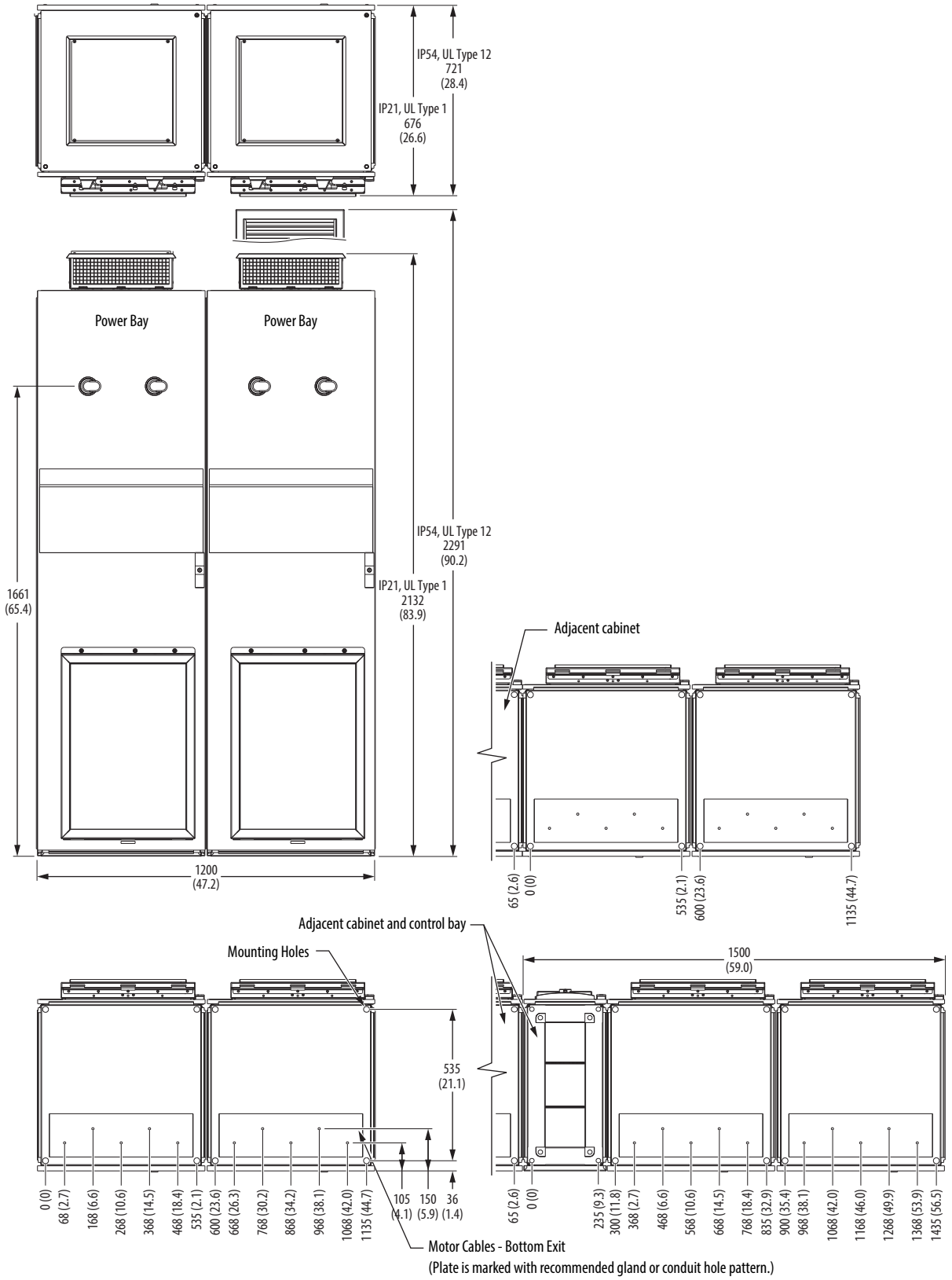
**Frame 10 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 262 for optional exit wire bay dimensions.



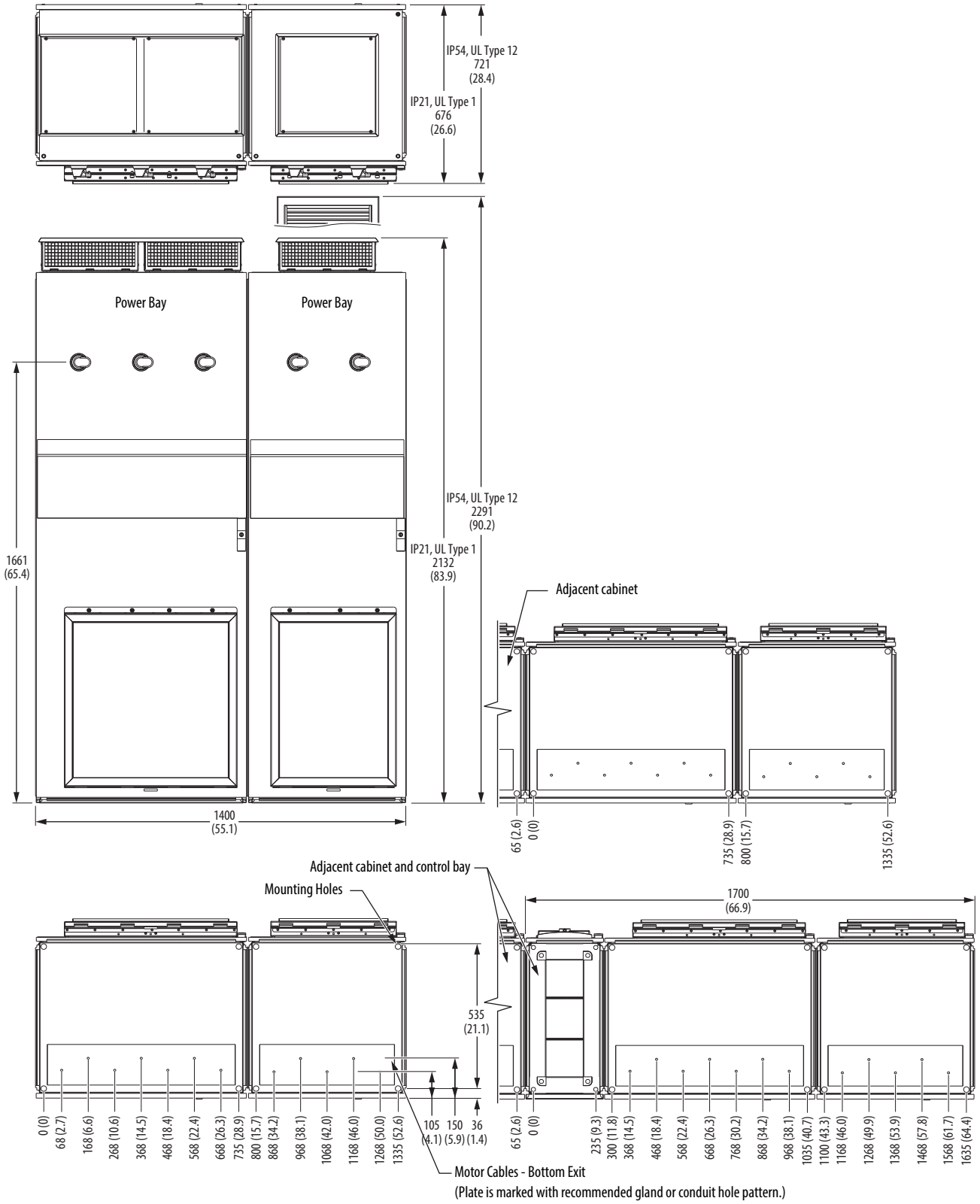
**Frame 11 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

See page 262 for optional exit wire bay dimensions.

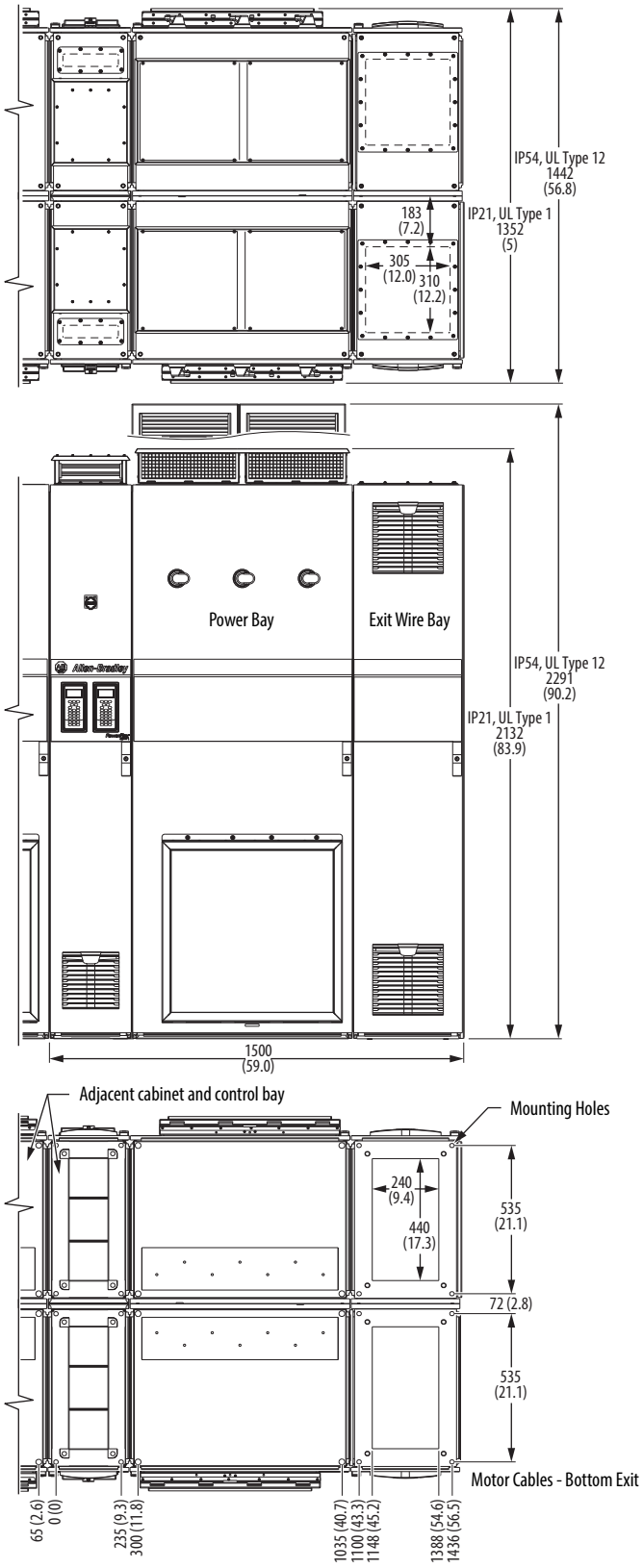


**Frame 12 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*

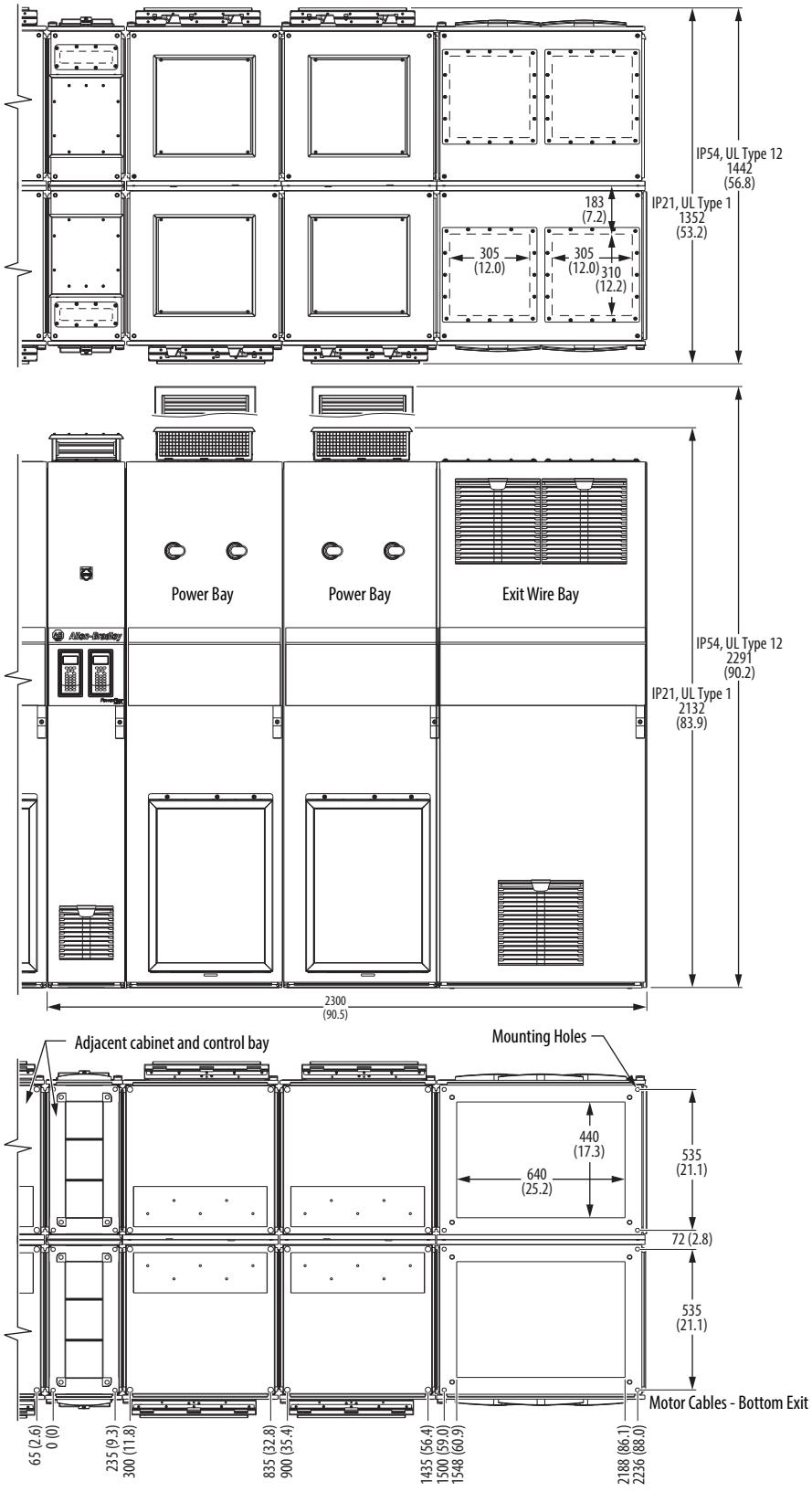
See page 262 for optional exit wire bay dimensions.



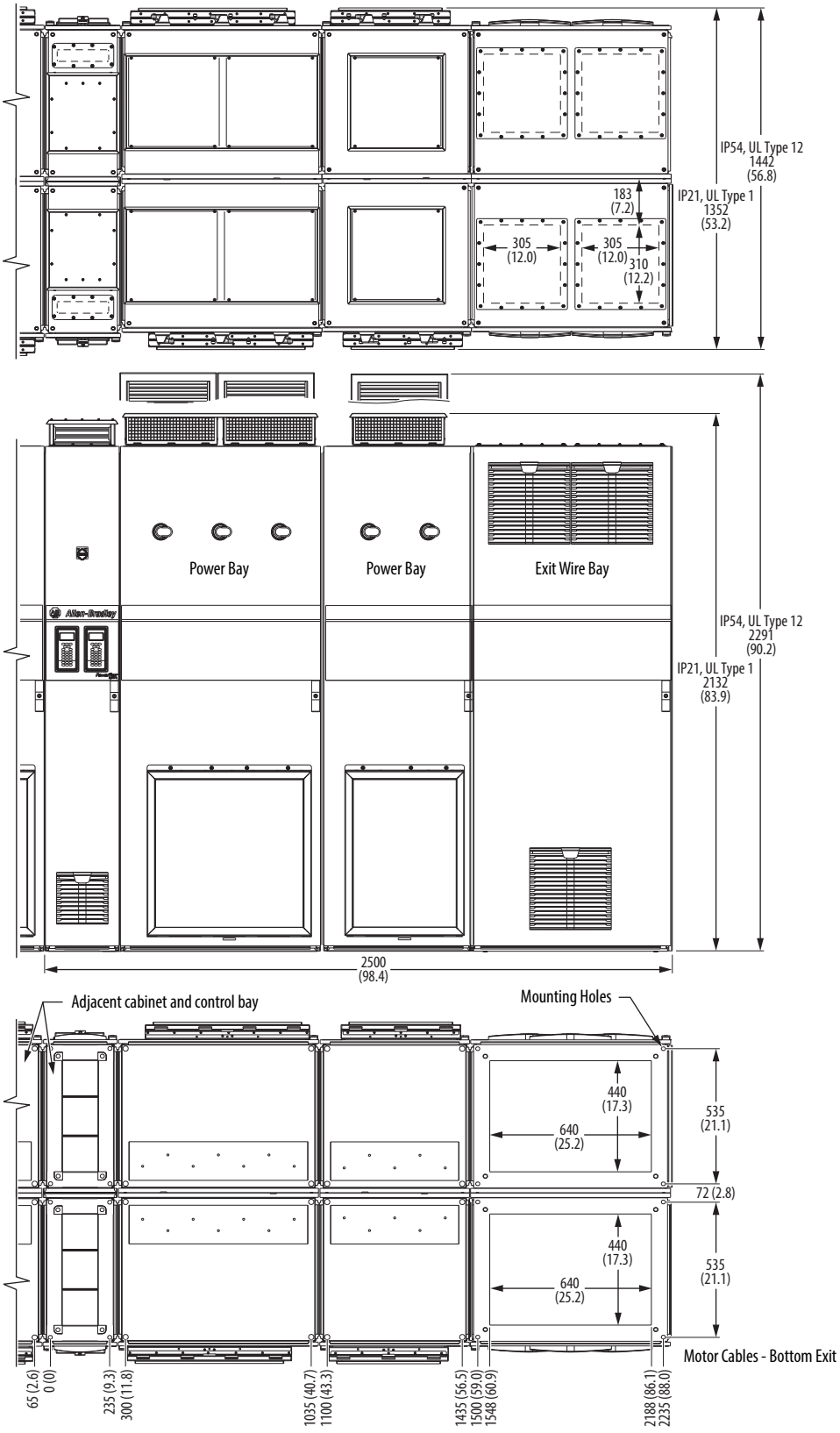
**Frame 13 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



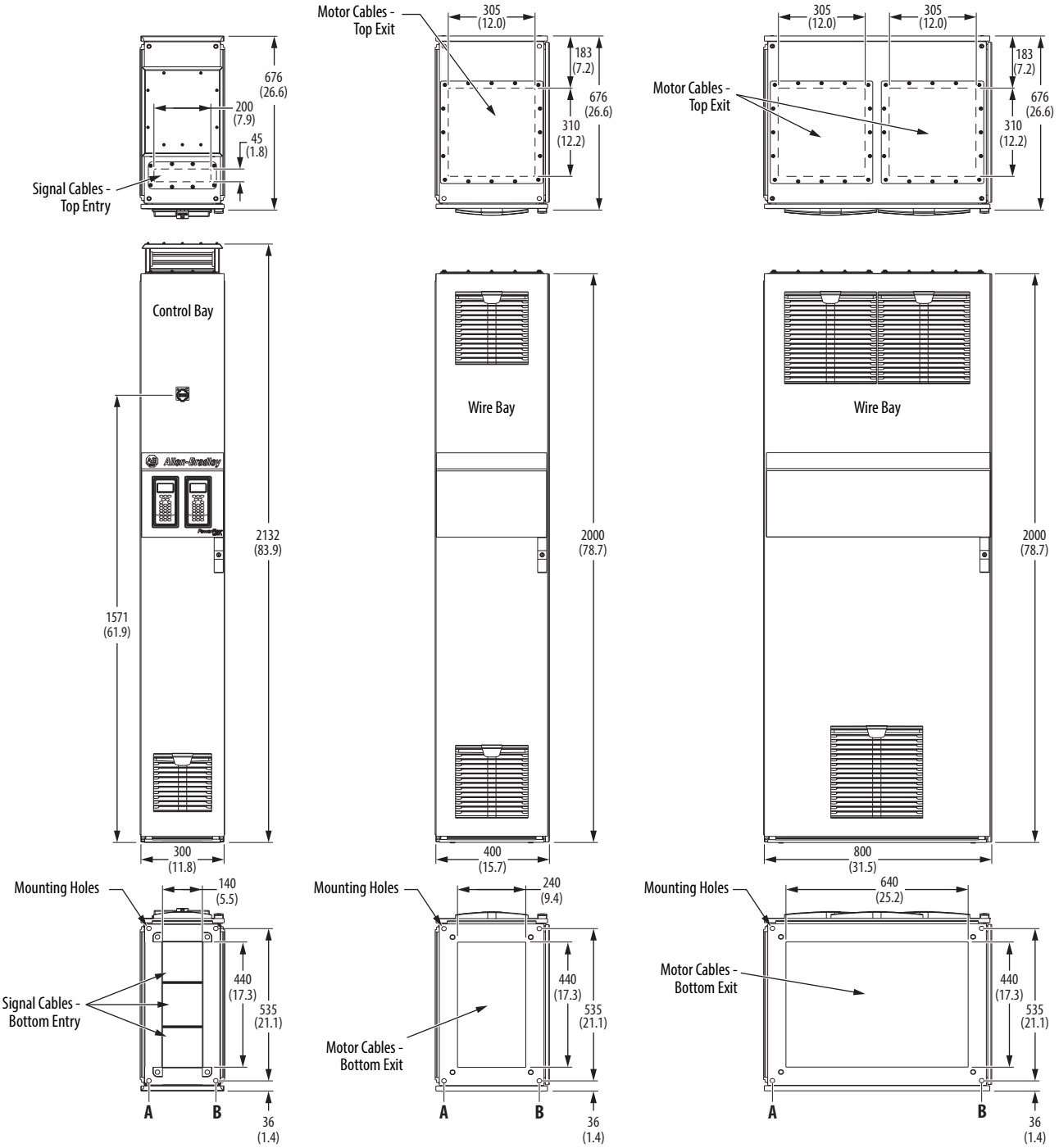
**Frame 14 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



**Frame 15 Common Bus Inverters Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



**Common Bus Inverters Control Bay and Optional Exit Wire Bays Top, Front, and Bottom Views -** *Dimensions are mm (in.)*



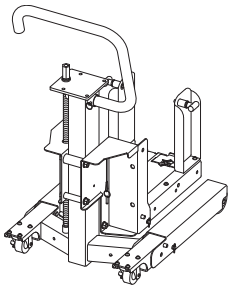

| Frame | Control Bay – 300 (11.8) Wide | | Exit Bay – 400 (15.7) Wide | | Exit Bay – 800 (31.5) Wide | |
|---|---|---|---|---|---|---|
| | A | B | A | B | A | B |
| 8 | 300 (11.8) | 65 (2.6) | 400 (15.7) | 735 (28.9) | – | – |
| 9 | 300 (11.8) | 65 (2.6) | 600 (23.6) | 935 (36.8) | – | – |
| 10 | 300 (11.8) | 65 (2.6) | 800 (31.5) | 1135 (44.7) | – | – |
| 11 | 300 (11.8) | 65 (2.6) | – | – | 1200 (47.2) | 1935 (76.1) |
| 12 | 300 (11.8) | 65 (2.6) | – | – | 1400 (55.1) | 2135 (84.0) |

## Options

This section lists options that are recommended to handle, transport, and store major product components.

### Module Service Cart

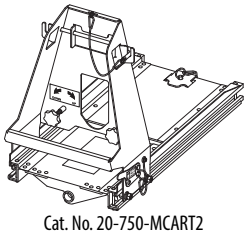
The PowerFlex 750-Series service cart is designed to handle and transport LCL filter modules and power modules. The service cart has an adjustable curb height of 0...254 mm (0...10 in.) and curb offset/reach of 0...203 mm (0...8.0 in.).



Cat. No. 20-750-MCART1

### DC Precharge Module Service Lift

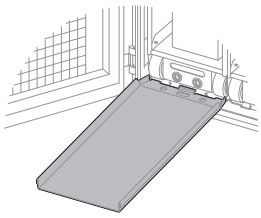
The PowerFlex 755T DC precharge module service lift allows you to remove and install DC precharge modules.



Cat. No. 20-750-MCART2

### Power Module Service Ramp

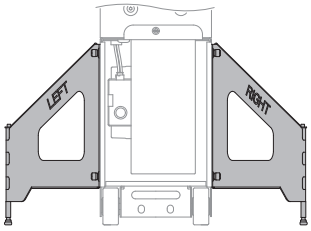
The PowerFlex 755T power module service ramp allows you to remove and install power modules, catalog numbers 20-750-MI1-*xnnxnn*, 20-750-MI2-*xnnxnn*, 20-750-MI3-*xnnxnn*, and 20-750-MI4-*xnnxnn* from the cabinet.



Cat. No. 20-750-MRAMP1

### Power and Filter Module Storage Hardware

Power and LCL filter module storage hardware is designed to help stabilize modules during storage.




Cat. No. 20-750-MINV-ATIP

### Accessory Kits

| Cat. No. | Description | | Frame Size |
|---|---|---|---|
| 20-750-MLBRKT-F8M | L bus bar kit | Includes three L-brackets and mounting hardware. | 8…15 |
| 20-750-RPD1-F8 | Remote control pod mounting kit | Hardware, fiber-optic, and power supply cables to remotely mount the control POD up to 23 m (75 ft) from the drive. | 7…15 |
| 20-750-M0SHPD-F8M | Seismic-qualified installations hardware kits | Optional top bracket sets for installations that are at risk of a seismic event. Each kit includes parts for the largest possible enclosure lineup for the specified frame size. Therefore, in some cases, not all parts in the kit will be installed. | 8 |
| 20-750-M0SHPD-F9M | | | 9 |
| 20-750-M0SHPD-F10M | | | 10 |
| 20-750-M0SHPD-F11M | | | 11 |
| 20-750-M0SHPD-F12M | | | 12 |
| 20-750-EMC2-F5 | EMC C2 Filter | Each kit provides a complete EMC C2 Filter solution for 755T Frame 5 and Frame 6 respectively,. The solution is rated for EMC C2 radiated and conducted emissions compliance for installations up to a motor cable length of 150 m (492 ft). See 750-IN115 for physical dimensions and installation guidance. | 5 |
| 20-750-EMC2-F6 | | | 6 |

## Accessory Kits (continued)

| Cat. No. | Description | | Frame Size |
|---|---|---|---|
| 20-750-MEMCC2-F8910 | EMC C2 Filter | These kits provide EMC C2 radiated emissions compliance for frame 8…10 drive ratings. For a full EMC C2 solution, the EMC C2 Filter kit, EMC Input Bus Bar Kit, EMC Output Bus Bar Kit, and EMC Wiring Bay is required. See PowerFlex 755TM IP00 Open Type Kits Technincal Data, publication 750-TD101 and the PowerFlex 755TM Open Type Kits Installation Instructions, publication 750-IN101 for additional information. | 8…10 |
| 20-750-MEMCC2-IPBB | EMC C2 Filter Input Bus Bars | | 8…10 |
| 20-750-MEMCC2-F8 | EMC C2 Filter Output Bus Bars | | 8 |
| 20-750-MEMCC2-F9 | | | 9 |
| 20-750-MEMCC2-F10 | | | 10 |
| 20-750-MPBAY-800 | 800mm EMC Wiring Bay | | 8…10 |
| 20-750-CMRN-F5 | Marine Discharge Kit | The frame 5 kit provides a conduit box and debris hood with a pre-installed marine discharge board. This kit enables drive installation on a high-resistance ground or ungrounded distribution system in a marine application (for example, ship or marine vessel). See the PowerFlex 755T Products - ABS Certification, publication 755T-CT002 for details. | 5 |
| 20-750-CMRN-F6 | Marine Discharge Kit | The frame 5 kit is a marine discharge board assembly. This kit enables drive installation on a high-resistance ground or ungrounded distribution system in a marine application (for example, ship or marine vessel). See the PowerFlex 755T Products - ABS Certification, publication 755T-CT002 for details. | 6 |
| 20-750-MEMCCLP-250 | EMC Wiring Clamp Kit 250 (54…64 mm) | The electro magnet compatibility (EMC) gland plate and cable clamp kits are used for applications of PowerFlex 755T product installations that require EMC compliance according to IEC 61800-3. Properly installed EMC gland plate kits provide an IP54 rating. | 8…12 |
| 20-750-MEMCCLP-205 | EMC Wiring Clamp Kit 205 (42…52 mm) | | 8…12 |
| 20-750-MEMCCLP-175 | EMC Wiring Clamp Kit 175 (34…44 mm) | | 8…12 |
| 20-750-MEMCCLP-135 | EMC Wiring Clamp Kit 135 (26…36 mm) | | 8…12 |
| 20-750-MEMCCLP-125 | EMC Wiring Clamp Kit 125 (22…27 mm) | | 8…12 |
| 20-750-MEMCPLT-400WB | Gland Plate | EMC gland plate 400 mm wide wiring bay. | 8…10 |
| 20-750-MEMCPLT-800WB | Gland Plate | EMC gland plate 800 mm wide wiring bay. | 11, 12 |
| 20-750-MEMCPLT-PBF8 | Gland Plate | Frame 8 CBI, power bay EMC gland plate . | 8 |
| 20-750-MEMCPLT-PB600 | Gland Plate | PowerFlex 750 Kit, power bay CBI EMC gland plate, 600 mm wide. | 9, 11, 12 |
| 20-750-MEMCPLT-PB800 | Gland Plate | PowerFlex 750 Kit, power bay CBI EMC gland plate, 800 mm wide. | 10, 12 |
| 20-750-MEMCPLT-IBF8 | Gland Plate | PowerFlex 750 Kit, Frame 8 input bay, 400 mm wide EMC gland plate. | 8 |
| 20-750-MEMCPLT-IBF9 | Gland Plate | PowerFlex 750 Kit, Frame 9 input bay, 600 mm wide EMC gland plate. | 9 |
| 20-750-MEMCPLT-IB1000 | Gland Plate | PowerFlex 750 Kit, 1000 mm wide input bay, EMC gland plate. | 10…12 |
| 20-750-MGROMMT-EMC | Grommet | PowerFlex 750 Kit, EMC gland plate, spare grommet (Qty 3) | 8…12 |
| SK-RM-GNDPLT-F5 | Ground plate kit | Provides a shield termination point for power cables. | 5 |
| SK-RM-GNDPLT-F6 | | | 6 |
| SK-RM-CBOX1-F5 | Conduit box and debris hood kit | Conduit box changes enclosure rating to IP20.<br>Conduit box and debris hood changes enclosure rating to UL Type 1. | 5 |
| SK-RM-CBOX1-F6 | | | 6 |

## Human Interface Modules

PowerFlex 750-Series products with TotalFORCE control are compatible only with the enhanced PowerFlex 7-Class human interface modules listed here.

*Blank Plate*

*20-HIM-A6*

*20-HIM-C6S*

| Description | Cat. No. |
|---|---|
| No HIM (Blank Plate) | 20-HIM-A0 |
| Enhanced, LCD, Full Numeric, Handheld/Local | 20-HIM-A6 |
| Enhanced, LCD, Full Numeric, IP66 NEMA Type 4X/12 (for indoor use only) (1) | 20-HIM-C6S |

(1) Includes a 1202-C30 interface cable (3 meters) for connection to drive.

### Specifications - Human Interface Modules

| | 20-HIM-A6 (1) | 20-HIM-C6S (1) |
|---|---|---|
| Drive<br>Protocol:<br>Data Rates: | <br>Drive Peripheral Interface (DPI)<br>125 kbps or 500 kbps | |
| Consumption<br>Drive (DPI): | <br>140 mA at 12V DC supplied by the Host Drive | |
| Dimensions - H x W x D<br>20-HIM-A6:<br>20-HIM-C6S: | <br>116 x 70 x 16 mm (4.57 x 2.75 x 0.63 in.)<br>180 x 93 x 25 mm (7.08 x 3.66 x 0.98 in.) | |
| Weight | 91 g (3.2 oz.) | 173 g (5.7 oz.) |
| Temperature<br>Operating:<br>Storage: | <br>0…50 °C (32…122 °F)<br>-40…+85 °C (-40…+185 °F) | |
| Relative Humidity | 5…95% non-condensing | |
| Atmosphere | **Important**: The module must not be installed in an area where the ambient atmosphere contains volatile or corrosive gas, vapors or dust. If the module is not going to be installed for a period of time, it must be stored in an area where it will not be exposed to a corrosive atmosphere. | |
| UV Radiation | The HIM is not UV rated. | |
| Vibration<br>Operating:<br>Non-Operating: | <br>2.5 G at 5…2000 Hz<br>5 G at 5…2000 Hz | |
| Shock<br>Operating:<br>Non-Operating: | <br>30 G peak acceleration, 11 (±1) ms pulse width<br>50 G peak acceleration, 11 (±1) ms pulse width | |
| UL<br>c-UL<br>CE<br>C-Tick<br>FCC ID<br>IC | UL508C<br>CAN / CSA C22.2 No. 14<br>EN61800-3<br>EN61800-3<br>–<br>– | |

(1) NOTE: This is a product of category C2 according to IEC 61800-3. In a domestic environment this product may cause radio interference in which case supplementary mitigation measures may be required.

### Human Interface Module Kits

| Description | Cat. No. |
|---|---|
| Bezel Kit for LCD HIMs, NEMA Type 1 (1) | 20-HIM-B1 |
| PowerFlex HIM Interface Cable, 1 m (39 in.) (2) | 20-HIM-H10 |
| Comm Option Cable Kit (Male-Male)<br>0.33 m (1.1 ft)<br>1 m (3.3 ft)<br>3 m (9.8 ft)<br>9 m (29.5 ft) | <br>1202-C03<br>1202-C10<br>1202-C30<br>1202-C90 |
| Cable Kit (Male-Female) (3)<br>0.33 m (1.1 ft)<br>1 m (3.3 ft)<br>3 m (9.8 ft)<br>9 m (29.5 ft) | <br>1202-H03<br>1202-H10<br>1202-H30<br>1202-H90 |
| DPI Cable Kit with Connectors, Tools and 100 m (328 ft) Cable | 1202-CBL-KIT-100M |
| DPI Cable Connector Kit | 1202-TB-KIT-SET |
| DPI/SCANport™ One to Two Port Splitter Cable | 1203-S03 |

(1) Includes a 1202-C30 interface cable (3 m) for connection to drive.
(2) Required only when HIM is used as handheld or remote.
(3) Required in addition to 20-HIM-H10 for distances up to a total maximum of 10 m (32.8 ft).

## Communication Option Kits and Accessories

| **Description** (see page 267 for specifications) | **Cat. No.** |
|---|---|
| TLink High-speed Drive-to-drive Communications Option Module<br>(Used only with PowerFlex 755T drives, bus supplies, and common bus inverters.) | 20-750-TLINK-XT |
| Coaxial ControlNet® Option Module | 20-750-CNETC |
| DeviceNet® Option Module | 20-750-DNET |
| Dual-port EtherNet/IP Option Module | 20-750-ENETR |
| PROFIBUS DPV1 Option Module (Series B or later.) | 20-750-PBUS |
| Single-port PROFINET I/O Option Module (Series B or later.) | 20-750-PNET |
| Dual-port PROFINET I/O Option Module (Series B or later.) | 20-750-PNET2P |
| Universal Serial Bus (USB) Converter includes 2 m USB, 20-HIM-H10 & 22-HIM-H10 Cables | 1203-USB |
| ControlNet T-Tap Straight | 1786-TPS |

### *Environmental Specifications – Communication Modules*

| | |
|---|---|
| Temperature<br>Operating:<br>Storage: | <br>-10…+50 °C (14…+122 °F)<br>-40…+85 °C (-40…+185 °F) |
| Relative Humidity | 5…95% non-condensing |
| Atmosphere | **Important**: The module must not be installed in an area where the ambient atmosphere contains volatile or corrosive gas, vapors, or dust. If the module is not going to be installed for a period of time, it must be stored in an area where it will not be exposed to a corrosive atmosphere. |

*Specifications - Communication Options and Accessories*

| | 20-750-TLINK-XT | 20-750-CNETC | 20-750-DNET | 20-750-PBUS | 1203-USB |
|---|---|---|---|---|---|
| Network<br>Protocol:<br>Data Rate: | <br>Internal RA Fiber-optic<br>100 Mbps | <br>ControlNet<br>5 Mbps (fixed) | <br>DeviceNet<br>125, 250, and 500 KBps | <br>PROFIBUS<br>9600 bps…12 Mbps (autobauds) | <br>Universal Serial Bus (USB)<br>115.2 KBps |
| Drive<br>Protocol:<br>Data Rates: | <br>DPI<br>500 KBps | <br>DPI<br>500 KBps | <br>DPI<br>500 KBps | <br>DPI<br>500 KBps | <br>SCANport, DPI, or DSI<br>125, 125/500, 19.2 KBps |
| Consumption<br>Drive (DPI):<br>Network: | <br>180 mA at 12V DC<br>55 mA at 24V DC Ext PS | <br>250 mA at 14V DC<br>None | <br>50 mA at 14V DC<br>60 mA at 24V DC | <br>250 mA at 14V DC<br>None | <br>130 mA at 12V DC<br>170 mA at +5V DC (DSI) |
| Dimensions<br>H x L x W: | <br>87.1 x 130.0 x 15.0 mm<br>(3.31 x 5.12 x 0.59 in.) | <br>68.0 x 150.0 x 26.0 mm<br>(2.70 x 5.90 x 1.00 in.) | <br>68.0 x 150.0 x 26.0 mm<br>(2.70 x 5.90 x 1.00 in.) | <br>15.8 x 130.0 x 83.0 mm<br>(0.62 x 5.12 x 3.27 in.) | <br>103.5 x 73.4 x 23.6 mm<br>(4.08 x 2.89 x 0.93 in.) |
| Weight | 68 g (2.4 oz) | 62 g (2.1 oz) | 62 g (2.1 oz) | 57 g (2 oz) | 71 g (2.5 oz) |
| Compliance<br>UL:<br>c-UL:<br>CE:<br>RCM | <br>UL 61800-5-1<br>CAN/CSA C22.2 No. 274-17<br>EN61800-3<br>EN61800-3 | <br>UL508C<br>CAN/CSA C22.2 No. 14-05<br>EN61800-3<br>EN61800-3 | <br>UL508C<br>CAN/CSA C22.2 No. 14<br>EN61800-3<br>EN61800-3 | <br>UL508C<br>CAN/ CSA C22.2 No.14-M91<br>IEC50178 and IEC61800-3<br>EN61800-3 | <br>UL508C<br>CAN/CSA C22.2 No. 14<br>EN50178 and EN61800-3<br>EN61800-3 |

## Feedback Options

| Description | Cat. No. |
|---|---|
| Incremental Encoder | 20-750-ENC-1 (1) |
| Dual Incremental Encoder | 20-750-DENC-1 (1) |
| Universal Feedback (includes Stegmann, Heidenhain, SSI, Biss, Incremental) | 20-750-UFB-1 |

(1) Homing and registration functions are not supported when using this device with Integrated Motion. To use these functions, the Universal Feedback Board (20-750-UFB-1) must be used.

## I/O Option Kits

| Description (1) | Cat. No. |
|---|---|
| ATEX Option Module with 1 Thermosensor Input Connection (requires 11-Series I/O Module below) | 20-750-ATEX |
| 24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs | 20-750-1132C-2R |
| 24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In, 1 Relay and 2 Transistor Outputs | 20-750-1133C-1R2T |
| 115V AC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs | 20-750-1132D-2R |
| 24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs | 20-750-2262C-2R |
| 115V AC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs | 20-750-2262D-2R |
| 24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In, 3 Digital Out, 1 Relay and 2 Transistor Outputs | 20-750-2263C-1R2T |

(1) I/O option kits are not allowed in CIP motion mode.

## Safety Options

Four safety options are available for PowerFlex 755T products:

- Safe Torque Off
- Safe Speed Monitor
- Integrated Safety - Safe Torque Off
- Integrated Safety Functions

Safe Torque Off is ideal for safety related applications requiring removal of rotational power to the motor without shutting down the drive. Safe Torque Off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up and provides safety ratings up to and including SIL CL3, PLe, and Category 3.

In applications where the speed needs to be controlled and monitored, the Safe-Speed Monitor option combines Safe Torque Off capability with integrated safety relay functionality and the Safe-Speed Control technology in one hardware option to provide safety ratings up to and including SIL CL3, PLe, and Category 4.

With the Safe Speed Monitor option you can safely monitor and control the speed of your application which allows operators to perform process or maintenance work without stopping the machine.

Note that PowerFlex 755T products can accommodate only one option.

| Description | Cat. No. | Publication |
|---|---|---|
| Safe Torque Off (1) | 20-750-S | PowerFlex 750-Series Safe Torque Off Option Module User Manual, publication 750-UM002 |
| Safe Speed Monitor (1)(2) | 20-750-S1 | PowerFlex 750-Series Safe Speed Monitor Option Module Safety Reference Manual, publication 750-RM001 |
| Integrated Safety - Safe Torque Off (1) | 20-750-S3 | PowerFlex 755 Integrated Safety - Safe Torque Off Option Module User Manual, publication 750-UM004 |
| Integrated Safety Functions (1) | 20-750-S4 | PowerFlex 755/755T Integrated Safety Functions Option Module User Manual, publication 750-UM005 |

(1) Drive can accommodate only one option.
(2) Requires the dual incremental encoder or universal feedback option.

### Specifications - PowerFlex 750-Series Safety Options

| Attribute | Safe Torque Off, 20-750-S | Safe Speed Monitor, 20-750-S1 |
|---|---|---|
| Standards | IEC/EN60204-1, ISO13489-1, IEC 61508, IEC 61800-5-2 | IEC/EN60204-1, ISO12100, IEC 61508, IEC 61800-5-2 |
| Safety Category | Cat. 3 and PL(e) per EN ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061 | Cat. 4 and PL(e) per EN ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061 |
| Power Supply (user I/O) | 24V DC ±10%, 0.8…1.1 x rated voltage (3) PELV or SELV | |
| Power Consumption | 4.4 W | 36 W |
| Safety Enable (SE+, SE–) | 24V DC, 22 mA, short-circuit protected | – |
| Safety Power (SP+, SP–) | 24V DC, 35 mA, short-circuit protected | – |
| SLS Outputs (68, 78) | – | 24V DC, 50 mA, short-circuit protected |
| SS Outputs (34, 44) | – | 24V DC, 50 mA, short-circuit protected |
| Door Control Outputs (51, 52) | – | 24V DC, short-circuit protected, 0.75 A bipolar (Power to Release/ Power to Lock) configuration.<br>20 mA, cascading (2Ch Source) configuration. |
| Pulse Outputs (S11, S21) | – | 24V DC, 50 mA, short-circuit protected |
| Pulse Inputs (S12, S22, S32, S42, S52, S62, S72, S82, X32, X42) | – | 5 mA per input, max |
| Input ON Voltage, Minimum | 24V DC ±10%, 21.6…26.4V DC | 15V |

### Specifications - PowerFlex 750-Series Safety Options (continued)

| Attribute | Safe Torque Off, 20-750-S | Safe Speed Monitor, 20-750-S1 |
|---|---|---|
| Input OFF Voltage, Maximum | 5V | 5V |
| Input OFF Current, Maximum | 2.5 mA @ 5V DC | 2 mA |
| Input-to-Output Response Time (SS_In, SLS_In, DM_In, ESM_In, LM_In) | – | 20 ms |
| Overspeed Response Time | – | User-configurable |
| Inputs (S34) | – | 5 mA per input, max |
| Conductor Size (1) | 0.3…0.8 $mm^2$ (28…18 AWG) | 0.25…2.5 $mm^2$ (24…14 AWG) |
| Strip Length | 10 mm (0.39 in.) | 6 mm (0.25 in.) |
| Terminal Screw Torque | – | 0.2…0.25 N•m (1.8…2.2 lb•in) |
| Certification (2) | | |
| c-UL-us | UL Listed, certified for US and Canada. | |
| CE | European Union 2004/108/EC EMC Directive, and EU 2006/42/EC Machinery Directive<br>EN 61800-3; categories C2 and C3<br>EN 62061; EM Immunity<br>EN ISO 13849-1<br>EN ISO 13849-2<br>EN 61800-5-1<br>EN 61800-5-2<br>EN 61508 Parts 1-7 | |
| C-Tick | Australian Radiocommunications Act, compliant with: EN 61800-3; categories C2 and C3 | |
| TÜV | TÜV Certified for Functional Safety: up to SIL CL3, according to EN 61800-5-2, EN 61508, and EN 62061; up to Performance Level PL(e) and Category 3, according to EN ISO 13849-1; when used as described. | TÜV Certified for Functional Safety: up to SIL CL3, according to EN 61800-5-2, EN 61508, and EN 62061; up to Performance Level PL(e) and Category 4, according to EN ISO 13849-1; when used as described. |

(1) See the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.

(2) When product is marked.

(3) Safety outputs need additional fuse for reverse voltage protection of the control circuit. Install a 6 A slow-blow or 10 A fast-acting fuse.

### Specifications - Network Safety Options

| Attribute | Network Safe Torque Off, 20-750-S3 | Network Safe Speed Monitor, 20-750-S4 |
|---|---|---|
| Standards | EN 60204-1, IEC 61508, EN 61800-3, EN 61800-5-1, EN 61800-5-2, EN 62061, EN ISO 13489 | EN 60204-1, IEC 61508, EN 61800-3, EN 61800-5-1, EN 61800-5-2, EN 62061, EN ISO 13849-1 |
| Safety category | Cat. 3 and PLe per ISO 13849-1;<br>SIL CL3 per IEC 61508 and EN 62061 | Cat. 4 and PLe per EN ISO 13849-1;<br>SIL 3 per IEC 61508 and SIL CL3 per EN IEC 62061 |
| Power supply (user I/O) | 24V DC ±10%, 0.8…1.1 x rated voltage(2) PELV or SELV | 24V DC ±10%, 0.8…1.1 x rated voltage(2) PELV or SELV |
| Input type | Current sinking | Current sinking |
| Voltage, on-state input | 11…30V, 3.5 mA DC | 11…30V DC |
| Voltage, off-state input, max | 5V, 3.5 mA DC | -3…5V DC |
| Current, on-state input, min | 3.3 mA | 2 mA |
| Current, off-state, max | 1.3 mA | 1.5 mA |
| IEC 61131-2 (input type) | Type 3 | Type 3 |
| Conductor type | Multi-conductor shielded cable | Multi-conductor shielded cable |
| Conductor size (1) | 0.3…0.8 $mm^2$ (28…18 AWG) | 0.3…0.8 $mm^2$ (28…18 AWG) |
| Strip length | 10 mm (0.39 in.) | 10 mm (0.39 in.) |

(1) See the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.

(2) Safety outputs need additional fuse for reverse voltage protection of the control circuit. Install a 6 A slow-blow or 10 A fast-acting fuse.

## Notes:

# Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

| Resource | Description |
|---|---|
| PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication 750-IN100 | Provides the basic steps to install PowerFlex 755TL low harmonic drives, PowerFlex 755TR regenerative drives, and PowerFlex 755TM drive systems. |
| PowerFlex 755TM IP00 Open Type Kits Technical Data, publication 750-TD101 | Provides detailed information on:<br>• Kit selection<br>• Kit ratings and specifications<br>• Option specifications |
| PowerFlex 755TM IP00 Open Type Kits Installation Instructions, publication 750-IN101 | Provides instructions to install IP00 Open Type kits in user-supplied enclosures. |
| PowerFlex 750-Series I/O, Feedback, and Power Option Modules Installation, publication 750-IN111 | Provides instructions to install and wire 750-Series option modules. |
| PowerFlex 750-Series Products with TotalFORCE Control Reference Manual, publication 750-RM100 | Provides detailed setup and programming instructions for common applications. |
| PowerFlex Drives with TotalFORCE Control Programming Manual (firmware revision 6.*xxx* or earlier), publication 750-PM100 | Provides detailed information on:<br>• I/O, control, and feedback options<br>• Parameters and programming<br>• Faults, alarms, and troubleshooting |
| PowerFlex Drives with TotalFORCE Control Programming Manual (firmware revisions 10.*xxx* and later), publication 750-PM101 | Provides detailed information on:<br>• I/O, control, and feedback options<br>• Parameters and programming<br>• Faults, alarms, and troubleshooting |
| Drives in Common Bus Configurations with PowerFlex 755TM Bus Supplies Application Techniques, publication DRIVES-AT005 | Provides basic information to properly wire and ground the following products in common bus applications:<br>• PowerFlex 755TM drive system for common bus solutions<br>• PowerFlex 750-Series AC and DC input drives<br>• Kinetix® 5700 servo drives |
| PowerFlex 755T Flux Vector Tuning, publication 750-AT006 | Provides guidance on how to tune Flux Vector position and velocity loops, filters, and other features to achieve the level of performance that is required for a given application. This publication is intended for novice drives users and users with advanced skills. |
| PowerFlex Drives with TotalFORCE Control Built-in EtherNet/IP Adapter User Manual, publication 750COM-UM009 | Provides information on how to install, configure, and troubleshoot applications for the PowerFlex drives with the built-in EtherNet/IP™ adapter. |
| PowerFlex 750-Series Products with TotalFORCE Control Hardware Service Manual, publication 750-TG100 | Provides detailed information on:<br>• Preventive maintenance<br>• Component testing<br>• Hardware replacement procedures |
| PowerFlex 750-Series Safe Speed Monitor Option Module Safety Reference Manual, publication 750-RM001 | These publications provide detailed information on installation, set-up, and operation of the 750-Series safety option modules. |
| PowerFlex 750-Series Safe Torque Off Option Module User Manual, publication 750-UM002 | |
| PowerFlex 750-Series ATEX Option Module User Manual, publication 750-UM003 | |
| PowerFlex 755 Integrated Safety - Safe Torque Off Option Module User Manual, publication 750-UM004 | |
| PowerFlex 20-HIM-A6 / -C6S HIM (Human Interface Module) User Manual, 20HIM-UM001 | Provides detailed information on HIM components, operation, and features. |
| PowerFlex 755TM AC Precharge Modules Unpacking and Lifting Instructions, publication 750-IN102 | These publications provide detailed information on:<br>• Component weights<br>• Precautions and recommendations<br>• Hardware attachment points<br>• Lifting the component out of the packaging |
| PowerFlex 755TM DC Precharge Modules Unpacking and Lifting Instructions, publication 750-IN103 | |
| PowerFlex 755TM Power and Filter Modules Unpacking and Lifting Instructions, publication 750-IN104 | |
| PowerFlex 750-Series Service Cart Instructions, publication 750-IN105 | Provides detailed set-up and operating instructions for the module service cart and DC precharge module lift. |
| PowerFlex 755TM Power and Filter Module Storage Hardware Instructions, publication 750-IN106 | Provides detailed installation and usage instructions for this hardware accessory. |
| PowerFlex 755T Module Service Ramp Instructions, publication 750-IN108 | Provides detailed usage instructions for the module service ramp. |
| Industry Installation Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-AT003 | Provides basic information on enclosure systems, considerations to help protect against environmental contaminants, and power and grounding considerations for installing Pulse Width Modulated (PWM) AC drives. |
| Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-IN001 | Provides basic information to properly wire and ground PWM AC drives. |

| Resource | Description |
|---|---|
| EtherNet/IP Network Devices User Manual, ENET-UM006 | Describes how to configure and use EtherNet/IP devices to communicate on the EtherNet/IP network. |
| Ethernet Reference Manual, ENET-RM002 | Describes basic Ethernet concepts, infrastructure components, and infrastructure features. |
| System Security Design Guidelines Reference Manual, SECURE-RM001 | Provides guidance on how to conduct security assessments, implement Rockwell Automation products in a secure system, harden the control system, manage user access, and dispose of equipment. |
| Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication IC-TD002 | Provides a quick reference tool for Allen-Bradley industrial automation controls and assemblies. |
| Safety Guidelines for the Application, Installation, and Maintenance of Solid-State Control, publication SGI-1.1 | Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components. |
| Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1 | Provides general guidelines for installing a Rockwell Automation industrial system. |
| Product Certifications website, rok.auto/certifications. | Provides declarations of conformity, certificates, and other certification details. |

You can view or download publications at rok.auto/literature.

## Rockwell Automation Support

Use these resources to access support information.

| | | |
|---|---|---|
| **Technical Support Center** | Find help with how-to videos, FAQs, chat, user forums, and product notification updates. | rok.auto/support |
| **Knowledgebase** | Access Knowledgebase articles. | rok.auto/knowledgebase |
| **Local Technical Support Phone Numbers** | Locate the telephone number for your country. | rok.auto/phonesupport |
| **Literature Library** | Find installation instructions, manuals, brochures, and technical data publications. | rok.auto/literature |
| **Product Compatibility and Download Center (PCDC)** | Get help determining how products interact, check features and capabilities, and find associated firmware. | rok.auto/pcdc |

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