



## SECTION 4

# STANDARD & ENERGY EFFICIENT DRIVE ISOLATION TRANSFORMERS

### Aluminum and Copper Wound Three Phase

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## THREE PHASE, DRIVE ISOLATION TRANSFORMERS

With today's technological advances in solid-state power control devices, the use of AC and DC variable speed drives has proliferated in many industrial markets. General purpose distribution transformers are not adequate for this type of application.

**HPS Drive Isolation Transformers** are designed to meet the rugged demands of both AC and DC variable speed drives and also to provide the required voltage change. The separate primary and secondary windings provide electrical isolation between the incoming line and the SCR load. The windings are designed to withstand overcurrent of 150% of the rated load for 60 seconds or 200% of the rated load for 30 seconds. (A duty cycle of one start for every two hours is permitted.)

**Drive Isolation Transformers** are sized to match standard motor horsepower and voltage ratings. Standard sizes range from 5 to 600 HP in six standard voltages. Non-standard sizes and voltages are available upon request.



### SELECTION INSTRUCTIONS

Select the Drive Isolation Transformer according to the recommendations from the motor drive system manufacturer or supplier. If this information is unavailable, use the table below as a guide for selecting the transformer kVA for a required motor horsepower.

| Motor H.P. | Transformer kVA |
|------------|-----------------|
| 5          | 7.5             |
| 7.5        | 11              |
| 10         | 14              |
| 15         | 20              |
| 20         | 27              |
| 25         | 34              |
| 30         | 40              |
| 40         | 51              |
| 50         | 63              |
| 60         | 75              |

| Motor H.P. | Transformer kVA |
|------------|-----------------|
| 75         | 93              |
| 100        | 118             |
| 125        | 145             |
| 150        | 175             |
| 200        | 220             |
| 250        | 275             |
| 300        | 330             |
| 400        | 440             |
| 500        | 550             |
| 600        | 660             |

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274

Data subject to change without notice.



## ALUMINUM AND COPPER WOUND FEATURES

### THREE PHASE STANDARD SPECIFICATIONS



|                                | 7.5 to 175 kVA  | 220 to 660 kVA  |
|--------------------------------|---|---|
| <b>UL Listed</b>               | File: E112313   | File: E112313   |
| <b>CSA Certified</b>           | File: LR3902  | File: LR3902  |
| <b>Frequency</b>               | 60 Hz   | 60 Hz   |
| <b>Insulation System</b>       | 220°C (150°C rise)<br>200°C (130°C rise) on some Copper units up to 40kVA   | 220°C (150°C rise)<br>(Optional 115°C and 80°C rise available)  |
| <b>Enclosure Type</b>          | Heavy Duty Ventilated NEMA Type 3R<br>Optional NEMA 4, 4X(stainless steel) and 12   | Heavy Duty Ventilated NEMA Type 3R<br>Optional NEMA 4, 4X(stainless steel) and 12   |
| <b>Enclosure Finish</b>        | ANSI 61 Grey, UL50  | ANSI 61 Grey, UL50  |
| <b>Neutral</b>                 | Neutral terminal for field connection (on applicable units).  | Neutral terminal for field connection (on applicable units).  |
| <b>Standard Primary Taps</b>   | Refer to wiring diagrams for details.   | Refer to wiring diagrams for details.   |
| <b>Termination</b>             | Front accessible separate high and low voltage terminations; suitable for copper and aluminum are provided for easy cable installation.   | Front accessible separate high and low voltage terminations, suitable for copper and aluminum are provided for easy cable installation.   |
| <b>Thermostat</b>              | Standard on all units.  | Standard on all units.  |
| <b>Conduit Knock-Outs</b>      | Standard on all units.  | None  |
| <b>Impedance</b>               | Typically 3 to 6%   | Typically 3 to 6%   |
| <b>Mounting</b>                | Floor mounting available on all units. Wall & ceiling mount available on units up to 750 lbs. Refer to selection tables for details.  | Floor mounting only.  |
| <b>Seismic</b>                 | Meets Occupancy Category III $I_p=1.25$ for $S_s=1.0g$ per IBC 2006; section 1613, earthquake loads and NBCC 2005 for ground level installations only for all locations in North America. | Meets Occupancy Category III $I_p=1.25$ for $S_s=1.0g$ per IBC 2006; section 1613, earthquake loads and NBCC 2005 for ground level installations only for all locations in North America. |
| <b>Short Circuit Withstand</b> | Meets UL and CSA short circuit withstand requirements.  | Meets UL and CSA short circuit withstand requirements.  |

SECTION 4

## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

208 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007BK        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011BK        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014BK        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020BK        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027BK        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034BK        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040BK        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051BK        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063BK        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075BK        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093BK        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118BK        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145BK        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175BK        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220BK        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275BK        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330BK        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440BK        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550BK        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660BK        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075BKS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

230 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007CC        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011CC        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014CC        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020CC        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027CC        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034CC        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040CC        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051CC        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063CC        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075CC        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093CC        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118CC        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145CC        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175CC        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220CC        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275CC        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330CC        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440CC        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550CC        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660CC        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075CCS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4

## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

460 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007JC        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011JC        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014JC        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020JC        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027JC        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034JC        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040JC        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051JC        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063JC        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075JC        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093JC        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118JC        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145JC        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175JC        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220JC        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275JC        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330JC        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440JC        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550JC        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660JC        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075JCS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

400Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007JH        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011JH        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014JH        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020JH        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027JH        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034JH        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040JH        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051JH        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063JH        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075JH        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093JH        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118JH        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145JH        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175JH        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220JH        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275JH        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330JH        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440JH        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550JH        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660JH        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075JHS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

460 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight<br>(Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                          |                                   |                                     |
| 7.5 | DM007JJ        | NH5                             | 19.40      | 20.20 | 21.50  | 150                      | F or W *                          | SCD 8                               |
| 11  | DM011JJ        | NH5                             | 19.40      | 20.20 | 21.50  | 160                      | F or W *                          | SCD 8                               |
| 14  | DM014JJ        | NH5                             | 19.40      | 20.20 | 21.50  | 170                      | F or W *                          | SCD 8                               |
| 20  | DM020JJ        | NH6                             | 23.90      | 25.00 | 28.75  | 240                      | F or W *                          | SCD 7                               |
| 27  | DM027JJ        | NH6                             | 23.90      | 25.00 | 28.75  | 300                      | F or W *                          | SCD 7                               |
| 34  | DM034JJ        | NH6                             | 23.90      | 25.00 | 28.75  | 330                      | F or W *                          | SCD 7                               |
| 40  | DM040JJ        | NH6                             | 23.90      | 25.00 | 28.75  | 350                      | F or W *                          | SCD 7                               |
| 51  | DM051JJ        | NH6                             | 23.90      | 25.00 | 28.75  | 430                      | F or W *                          | SCD 7                               |
| 63  | DM063JJ        | NH3                             | 26.00      | 25.00 | 38.00  | 530                      | F or W *                          | SCD 7                               |
| 75  | DM075JJ        | NH3                             | 26.00      | 25.00 | 38.00  | 580                      | F or W *                          | SCD 7                               |
| 93  | DM093JJ        | NH3                             | 26.00      | 25.00 | 38.00  | 630                      | F or W *                          | SCD 7                               |
| 118 | DM118JJ        | NH3                             | 26.00      | 25.00 | 38.00  | 730                      | F or W *                          | SCD 7                               |
| 145 | DM145JJ        | NH4                             | 32.00      | 29.50 | 41.00  | 830                      | F                                 | SCD 7                               |
| 175 | DM175JJ        | NH4                             | 32.00      | 29.50 | 41.00  | 930                      | F                                 | SCD 7                               |
| 220 | DM220JJ        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                     | F                                 | SCD 9                               |
| 275 | DM275JJ        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                     | F                                 | SCD 9                               |
| 330 | DM330JJ        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                     | F                                 | SCD 9                               |
| 440 | DM440JJ        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                     | F                                 | SCD 10                              |
| 550 | DM550JJ        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                     | F                                 | SCD 10                              |
| 660 | DM660JJ        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                     | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075JJS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

480 Delta Primary Volts

240Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight<br>(Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                          |                                   |                                     |
| 7.5 | DM007KD        | NH5                             | 19.40      | 20.20 | 21.50  | 150                      | F or W *                          | SCD 8                               |
| 11  | DM011KD        | NH5                             | 19.40      | 20.20 | 21.50  | 160                      | F or W *                          | SCD 8                               |
| 14  | DM014KD        | NH5                             | 19.40      | 20.20 | 21.50  | 170                      | F or W *                          | SCD 8                               |
| 20  | DM020KD        | NH6                             | 23.90      | 25.00 | 28.75  | 240                      | F or W *                          | SCD 7                               |
| 27  | DM027KD        | NH6                             | 23.90      | 25.00 | 28.75  | 300                      | F or W *                          | SCD 7                               |
| 34  | DM034KD        | NH6                             | 23.90      | 25.00 | 28.75  | 330                      | F or W *                          | SCD 7                               |
| 40  | DM040KD        | NH6                             | 23.90      | 25.00 | 28.75  | 350                      | F or W *                          | SCD 7                               |
| 51  | DM051KD        | NH6                             | 23.90      | 25.00 | 28.75  | 430                      | F or W *                          | SCD 7                               |
| 63  | DM063KD        | NH3                             | 26.00      | 25.00 | 38.00  | 530                      | F or W *                          | SCD 7                               |
| 75  | DM075KD        | NH3                             | 26.00      | 25.00 | 38.00  | 580                      | F or W *                          | SCD 7                               |
| 93  | DM093KD        | NH3                             | 26.00      | 25.00 | 38.00  | 630                      | F or W *                          | SCD 7                               |
| 118 | DM118KD        | NH3                             | 26.00      | 25.00 | 38.00  | 730                      | F or W *                          | SCD 7                               |
| 145 | DM145KD        | NH4                             | 32.00      | 29.50 | 41.00  | 830                      | F                                 | SCD 7                               |
| 175 | DM175KD        | NH4                             | 32.00      | 29.50 | 41.00  | 930                      | F                                 | SCD 7                               |
| 220 | DM220KD        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                     | F                                 | SCD 9                               |
| 275 | DM275KD        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                     | F                                 | SCD 9                               |
| 330 | DM330KD        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                     | F                                 | SCD 9                               |
| 440 | DM440KD        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                     | F                                 | SCD 10                              |
| 550 | DM550KD        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                     | F                                 | SCD 10                              |
| 660 | DM660KD        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                     | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075KDS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4

## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

480 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007KK        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011KK        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014KK        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020KK        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027KK        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034KK        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040KK        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051KK        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063KK        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075KK        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093KK        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118KK        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145KK        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175KK        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220KK        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275KK        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330KK        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440KK        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550KK        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660KK        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075KKS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

575 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007NJ        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011NJ        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014NJ        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020NJ        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027NJ        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034NJ        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040NJ        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051NJ        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063NJ        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075NJ        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093NJ        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118NJ        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145NJ        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175NJ        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220NJ        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275NJ        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330NJ        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440NJ        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550NJ        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660NJ        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075NJS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

575 Delta Primary Volts

575Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007NN        | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011NN        | NH5                             | 19.40      | 20.20 | 21.50  | 160                   | F or W *                          | SCD 8                               |
| 14  | DM014NN        | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 20  | DM020NN        | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DM027NN        | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DM034NN        | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DM040NN        | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DM051NN        | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DM063NN        | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DM075NN        | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DM093NN        | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118NN        | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DM145NN        | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DM175NN        | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DM220NN        | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DM275NN        | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DM330NN        | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DM440NN        | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DM550NN        | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DM660NN        | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DM075NNS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

### COPPER WOUND, THREE PHASE

208 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007BKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011BKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014BKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020BKC       | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027BKC       | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034BKC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040BKC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051BKC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063BKC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075BKC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093BKC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118BKC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145BKC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175BKC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220BKC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275BKC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330BKC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440BKC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550BKC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660BKC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075BKCK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

230 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007CCC       | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011CCC       | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014CCC       | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020CCC       | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027CCC       | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034CCC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040CCC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051CCC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063CCC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075CCC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093CCC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118CCC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145CCC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175CCC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220CCC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275CCC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330CCC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440CCC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550CCC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660CCC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075CCK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007JCCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011JCCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014JCCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020JCCN      | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027JCCN      | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034JCC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040JCC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051JCC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063JCC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075JCC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093JCC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118JCC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145JCC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175JCC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220JCC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275JCC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330JCC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440JCC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550JCC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660JCC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075JCK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



# SECTION 4

# STANDARD DRIVE ISOLATION TRANSFORMERS

## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

460 Delta Primary Volts

400Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight<br>(Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                          |                                   |                                     |
| 7.5 | DM007JHCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                      | F or W *                          | SCD 8                               |
| 11  | DM011JHCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                      | F or W *                          | SCD 8                               |
| 14  | DM014JHCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                      | F or W *                          | SCD 8                               |
| 20  | DM020JHCN      | NH6                             | 23.90      | 25.00 | 28.75  | 270                      | F or W *                          | SCD 7                               |
| 27  | DM027JHCN      | NH6                             | 23.90      | 25.00 | 28.75  | 330                      | F or W *                          | SCD 7                               |
| 34  | DM034JHC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                      | F or W *                          | SCD 7                               |
| 40  | DM040JHC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                      | F or W *                          | SCD 7                               |
| 51  | DM051JHC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                      | F or W *                          | SCD 7                               |
| 63  | DM063JHC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                      | F or W *                          | SCD 7                               |
| 75  | DM075JHC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                      | F or W *                          | SCD 7                               |
| 93  | DM093JHC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                      | F or W *                          | SCD 7                               |
| 118 | DM118JHC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                      | F                                 | SCD 7                               |
| 145 | DM145JHC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                      | F                                 | SCD 7                               |
| 175 | DM175JHC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                     | F                                 | SCD 7                               |
| 220 | DM220JHC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                     | F                                 | SCD 9                               |
| 275 | DM275JHC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                     | F                                 | SCD 9                               |
| 330 | DM330JHC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                     | F                                 | SCD 9                               |
| 440 | DM440JHC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                     | F                                 | SCD 10                              |
| 550 | DM550JHC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                     | F                                 | SCD 10                              |
| 660 | DM660JHC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                     | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075JHK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight<br>(Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                          |                                   |                                     |
| 7.5 | DM007JJCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                      | F or W *                          | SCD 8                               |
| 11  | DM011JJCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                      | F or W *                          | SCD 8                               |
| 14  | DM014JJCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                      | F or W *                          | SCD 8                               |
| 20  | DM020JJCN      | NH6                             | 23.90      | 25.00 | 28.75  | 270                      | F or W *                          | SCD 7                               |
| 27  | DM027JJCN      | NH6                             | 23.90      | 25.00 | 28.75  | 330                      | F or W *                          | SCD 7                               |
| 34  | DM034JJC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                      | F or W *                          | SCD 7                               |
| 40  | DM040JJC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                      | F or W *                          | SCD 7                               |
| 51  | DM051JJC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                      | F or W *                          | SCD 7                               |
| 63  | DM063JJC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                      | F or W *                          | SCD 7                               |
| 75  | DM075JJC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                      | F or W *                          | SCD 7                               |
| 93  | DM093JJC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                      | F or W *                          | SCD 7                               |
| 118 | DM118JJC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                      | F                                 | SCD 7                               |
| 145 | DM145JJC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                      | F                                 | SCD 7                               |
| 175 | DM175JJC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                     | F                                 | SCD 7                               |
| 220 | DM220JJC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                     | F                                 | SCD 9                               |
| 275 | DM275JJC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                     | F                                 | SCD 9                               |
| 330 | DM330JJC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                     | F                                 | SCD 9                               |
| 440 | DM440JJC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                     | F                                 | SCD 10                              |
| 550 | DM550JJC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                     | F                                 | SCD 10                              |
| 660 | DM660JJC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                     | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075JJK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4

## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

480 Delta Primary Volts

240Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007KDCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011KDCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014KDCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020KDCN      | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027KDCN      | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034KDCN      | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040KDC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051KDC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063KDC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075KDC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093KDC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118KDC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145KDC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175KDC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220KDC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275KDC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330KDC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440KDC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550KDC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660KDC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075KDK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

480 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007KKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011KKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014KKCN      | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020KKCN      | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027KKCN      | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034KKCN      | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040KKC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051KKC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063KKC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075KKC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093KKC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118KKC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145KKC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175KKC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220KKC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275KKC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330KKC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440KKC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550KKC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660KKC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075KKK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

SECTION 4



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

575 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007NJC       | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011NJC       | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014NJC       | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020NJC       | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027NJC       | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034NJC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040NJC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051NJC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063NJC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075NJC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093NJC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118NJC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145NJC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175NJC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220NJC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275NJC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330NJC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440NJC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550NJC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660NJC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075NJK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

575 Delta Primary Volts

575Y Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|----------------|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |                |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | DM007NNC       | NH5                             | 19.40      | 20.20 | 21.50  | 150                   | F or W *                          | SCD 8                               |
| 11  | DM011NNC       | NH5                             | 19.40      | 20.20 | 21.50  | 170                   | F or W *                          | SCD 8                               |
| 14  | DM014NNC       | NH5                             | 19.40      | 20.20 | 21.50  | 210                   | F or W *                          | SCD 8                               |
| 20  | DM020NNC       | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DM027NNC       | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DM034NNC       | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DM040NNC       | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DM051NNC       | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DM063NNC       | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DM075NNC       | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DM093NNC       | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DM118NNC       | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DM145NNC       | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DM175NNC       | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DM220NNC       | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DM275NNC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DM330NNC       | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DM440NNC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DM550NNC       | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DM660NNC       | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DM075NNK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 131

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4

## TERMINATION DETAILS



### THREE PHASE, ALUMINUM AND COPPER TERMINATION - LUGS OR PADS

| kVA | VOLTAGE    |            |            |            |            |            |            |            |
|-----|------------|------------|------------|------------|------------|------------|------------|------------|
|     | 208        | 230        | 240        | 380        | 460        | 480        | 575        | 600        |
| 7.5 | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 11  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 14  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 20  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 27  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 34  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 40  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 51  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 63  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 75  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 93  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 118 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 145 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 175 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 220 | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       |
| 275 | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       |
| 330 | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A |
| 440 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A |
| 550 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A |
| 660 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 2  |

SECTION 4

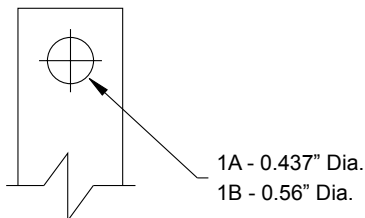


DIAGRAM 1

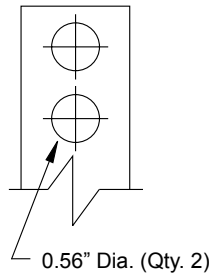


DIAGRAM 2

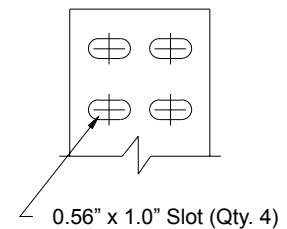


DIAGRAM 3

## HPS TRIBUNE Energy Efficient (TP1/C802.2) Drive Isolation Transformers ALUMINUM AND COPPER WOUND FEATURES

### THREE PHASE SPECIFICATIONS



|                                | 7.5 to 175 kVA  | 220 to 660 kVA  |
|--------------------------------|---|---|
| <b>Efficiency</b>              | Meets TP1/C802.2 efficiencies at 35% of rated load. Efficiencies are calculated under a linear load profile.<br>Note: Energy efficient drive isolation transformers are not required by law in the U.S. Please refer to the standard drive isolation transformers on pages 121-130. |   |
| <b>UL Listed</b>               | File: E112313   | File: E112313   |
| <b>CSA Certified</b>           | File: LR3902  | File: LR3902  |
| <b>Frequency</b>               | 60 Hz   | 60 Hz   |
| <b>Insulation System</b>       | 220°C (150°C rise)<br>200°C (130°C rise) on some Copper units up to 40kVA   | 220°C (150°C rise)<br>(Optional 115°C and 80°C rise available)  |
| <b>Enclosure Type</b>          | Heavy Duty Ventilated NEMA Type 3R<br>Optional NEMA 4, 4X(stainless steel) and 12   | Heavy Duty Ventilated NEMA Type 3R<br>Optional NEMA 4, 4X(stainless steel) and 12   |
| <b>Enclosure Finish</b>        | ANSI 61 Grey, UL50  | ANSI 61 Grey, UL50  |
| <b>Neutral</b>                 | Neutral terminal for field connection (on applicable units).  | Neutral terminal for field connection (on applicable units).  |
| <b>Standard Primary Taps</b>   | Refer to wiring diagrams for details.   | Refer to wiring diagrams for details.   |
| <b>Termination</b>             | Front accessible separate high and low voltage terminations, suitable for copper and aluminum are provided for easy cable installation.   | Front accessible separate high and low voltage terminations, suitable for copper and aluminum are provided for easy cable installation.   |
| <b>Thermostat</b>              | Standard on all units.  | Standard on all units.  |
| <b>Conduit Knock-Outs</b>      | Standard on all units.  | None  |
| <b>Impedance</b>               | Typically 3 to 6%   | Typically 3 to 6%   |
| <b>Mounting</b>                | Floor mounting available on all units. Wall & ceiling mount available on units up to 750 lbs. Refer to selection tables for details.  | Floor mounting only.  |
| <b>Seismic</b>                 | Meets Occupancy Category III Ip=1.25 for Ss=1.0g per IBC 2006; section 1613, earthquake loads and NBCC 2005 for ground level installations only for all locations in North America.   | Meets Occupancy Category III Ip=1.25 for Ss=1.0g per IBC 2006; section 1613, earthquake loads and NBCC 2005 for ground level installations only for all locations in North America. |
| <b>Short Circuit Withstand</b> | Meets UL and CSA short circuit withstand requirements.  | Meets UL and CSA short circuit withstand requirements.  |

SECTION 4



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

208 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020BK  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027BK  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034BK  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040BK  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051BK  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063BK  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075BK  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093BK  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118BK  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145BK  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175BK  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220BK  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275BK  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330BK  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440BK  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550BK  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660BK  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075BKS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

230 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 122 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020CC  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027CC  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034CC  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040CC  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051CC  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063CC  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075CC  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093CC  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118CC  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145CC  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175CC  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220CC  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275CC  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330CC  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440CC  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550CC  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660CC  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075CCS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

460 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JC  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027JC  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034JC  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040JC  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051JC  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063JC  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075JC  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093JC  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JC  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145JC  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175JC  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220JC  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275JC  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330JC  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440JC  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550JC  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660JC  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075JCS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

400Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 123 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JH  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027JH  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034JH  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040JH  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051JH  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063JH  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075JH  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093JH  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JH  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145JH  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175JH  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220JH  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275JH  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330JH  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440JH  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550JH  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660JH  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075JHS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



SECTION 4



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

460 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JJ  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027JJ  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034JJ  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040JJ  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051JJ  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063JJ  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075JJ  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093JJ  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JJ  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145JJ  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175JJ  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220JJ  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275JJ  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330JJ  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440JJ  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550JJ  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660JJ  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075JJS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

480 Delta Primary Volts

240Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 124 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020KD  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027KD  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034KD  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040KD  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051KD  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063KD  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075KD  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093KD  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118KD  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145KD  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175KD  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220KD  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275KD  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330KD  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440KD  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550KD  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660KD  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075KDS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

480 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020KK  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027KK  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034KK  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040KK  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051KK  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063KK  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075KK  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093KK  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118KK  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145KK  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175KK  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220KK  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275KK  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330KK  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440KK  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550KK  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660KK  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075KKS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

575 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 125 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020NJ  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 27  | DE027NJ  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034NJ  | NH6                             | 23.90      | 25.00 | 28.75  | 360                   | F or W *                          | SCD 7                               |
| 40  | DE040NJ  | NH6                             | 23.90      | 25.00 | 28.75  | 390                   | F or W *                          | SCD 7                               |
| 51  | DE051NJ  | NH6                             | 23.90      | 25.00 | 28.75  | 410                   | F or W *                          | SCD 7                               |
| 63  | DE063NJ  | NH3                             | 26.00      | 25.00 | 38.00  | 560                   | F or W *                          | SCD 7                               |
| 75  | DE075NJ  | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093NJ  | NH3                             | 26.00      | 25.00 | 38.00  | 780                   | F or W *                          | SCD 7                               |
| 118 | DE118NJ  | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F or W *                          | SCD 7                               |
| 145 | DE145NJ  | NH4                             | 32.00      | 29.50 | 41.00  | 1050                  | F                                 | SCD 7                               |
| 175 | DE175NJ  | NH4                             | 32.00      | 29.50 | 41.00  | 1200                  | F                                 | SCD 7                               |
| 220 | DE220NJ  | NJ1                             | 39.50      | 34.00 | 51.50  | 1650                  | F                                 | SCD 9                               |
| 275 | DE275NJ  | NJ1                             | 39.50      | 34.00 | 51.50  | 1900                  | F                                 | SCD 9                               |
| 330 | DE330NJ  | NJ1                             | 39.50      | 34.00 | 51.50  | 2000                  | F                                 | SCD 9                               |
| 440 | DE440NJ  | NJ2                             | 48.50      | 38.40 | 59.00  | 3000                  | F                                 | SCD 10                              |
| 550 | DE550NJ  | NJ2                             | 48.50      | 38.40 | 59.00  | 3000                  | F                                 | SCD 10                              |
| 660 | DE660NJ  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075NJS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### ALUMINUM WOUND, THREE PHASE

575 Delta Primary Volts

575Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020NN  | NH6                             | 23.90      | 25.00 | 28.75  | 240                   | F or W *                          | SCD 7                               |
| 27  | DE027NN  | NH6                             | 23.90      | 25.00 | 28.75  | 300                   | F or W *                          | SCD 7                               |
| 34  | DE034NN  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 40  | DE040NN  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 51  | DE051NN  | NH6                             | 23.90      | 25.00 | 28.75  | 430                   | F or W *                          | SCD 7                               |
| 63  | DE063NN  | NH3                             | 26.00      | 25.00 | 38.00  | 530                   | F or W *                          | SCD 7                               |
| 75  | DE075NN  | NH3                             | 26.00      | 25.00 | 38.00  | 580                   | F or W *                          | SCD 7                               |
| 93  | DE093NN  | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118NN  | NH3                             | 26.00      | 25.00 | 38.00  | 730                   | F or W *                          | SCD 7                               |
| 145 | DE145NN  | NH4                             | 32.00      | 29.50 | 41.00  | 830                   | F                                 | SCD 7                               |
| 175 | DE175NN  | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 220 | DE220NN  | NH4                             | 32.00      | 29.50 | 41.00  | 1350                  | F                                 | SCD 9                               |
| 275 | DE275NN  | NJ1                             | 39.50      | 34.00 | 51.50  | 1500                  | F                                 | SCD 9                               |
| 330 | DE330NN  | NJ1                             | 39.50      | 34.00 | 51.50  | 1700                  | F                                 | SCD 9                               |
| 440 | DE440NN  | NJ2                             | 48.50      | 38.40 | 59.00  | 2100                  | F                                 | SCD 10                              |
| 550 | DE550NN  | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 660 | DE660NN  | NJ3                             | 51.50      | 43.40 | 66.00  | 2900                  | F                                 | SCD 10                              |

For shielded units, please add the suffix "S" to the above part numbers. (i.e. DE075NNS)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

### COPPER WOUND, THREE PHASE

208 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 126 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020BKC   | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027BKC   | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034BKC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040BKC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051BKC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063BKC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075BKC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093BKC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118BKC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145BKC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175BKC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220BKC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275BKC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330BKC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440BKC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550BKC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660BKC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075BKK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

230 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020CCC   | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027CCC   | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034CCC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040CCC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051CCC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063CCC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075CCC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093CCC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118CCC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145CCC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175CCC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220CCC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275CCC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330CCC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440CCC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550CCC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660CCC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075CCK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

230Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 127 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JCCN  | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027JCCN  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034JCC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040JCC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051JCC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063JCC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075JCC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093JCC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JCC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145JCC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175JCC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220JCC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275JCC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330JCC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440JCC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550JCC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660JCC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075JCK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

460 Delta Primary Volts

400Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JHCN  | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027JHCN  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034JHC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040JHC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051JHC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063JHC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075JHC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093JHC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JHC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145JHC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175JHC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220JHC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275JHC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330JHC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440JHC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550JHC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660JHC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075JHK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

460 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 128 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020JJC   | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027JJC   | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034JJC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040JJC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051JJC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063JJC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075JJC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093JJC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118JJC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145JJC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175JJC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220JJC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275JJC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330JJC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440JJC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550JJC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660JJC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075JJK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274

Data subject to change without notice.



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

480 Delta Primary Volts

240Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020KDCN  | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027KDCN  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034KDCN  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040KDC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051KDC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063KDC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075KDC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093KDC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118KDC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145KDC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175KDC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220KDC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275KDC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330KDC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440KDC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550KDC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660KDC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075KDK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

480 Delta Primary Volts

480Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 129 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020KKCN  | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027KKCN  | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034KKCN  | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040KKC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051KKC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063KKC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075KKC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093KKC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118KKC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145KKC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175KKC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220KKC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275KKC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330KKC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440KKC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550KKC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660KKC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075KKK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

SECTION 4



## Selection Tables



Listed below are our standard voltages. Other primary and secondary voltages available are 240, 380 and 600.

### COPPER WOUND, THREE PHASE

575 Delta Primary Volts

460Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020NJC   | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027NJC   | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034NJC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040NJC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051NJC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063NJC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075NJC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093NJC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118NJC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145NJC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175NJC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220NJC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275NJC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330NJC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440NJC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550NJC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660NJC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075NJK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

575 Delta Primary Volts

575Y Secondary Volts

60 Hz

| kVA | Catalog Number   | Case Style<br>(Pages 260 - 267) | Dimensions |       |        | Approx. Weight (Lbs.) | Mtg Type<br>W - Wall<br>F - Floor | Wiring Diagram<br>(Pages 276 - 288) |
|-----|--|---------------------------------|------------|-------|--------|-----------------------|-----------------------------------|-------------------------------------|
|     |  |                                 | Width      | Depth | Height |                       |                                   |                                     |
| 7.5 | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 11  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 14  | Outside of C802.2/TP1 guidelines, refer to Non-Energy Efficient Drive Isolation Transformers on page 130 |                                 |            |       |        |                       |                                   |                                     |
| 20  | DE020NNC   | NH6                             | 23.90      | 25.00 | 28.75  | 270                   | F or W *                          | SCD 7                               |
| 27  | DE027NNC   | NH6                             | 23.90      | 25.00 | 28.75  | 330                   | F or W *                          | SCD 7                               |
| 34  | DE034NNC   | NH6                             | 23.90      | 25.00 | 28.75  | 350                   | F or W *                          | SCD 7                               |
| 40  | DE040NNC   | NH6                             | 23.90      | 25.00 | 28.75  | 380                   | F or W *                          | SCD 7                               |
| 51  | DE051NNC   | NH6                             | 23.90      | 25.00 | 28.75  | 450                   | F or W *                          | SCD 7                               |
| 63  | DE063NNC   | NH3                             | 26.00      | 25.00 | 38.00  | 550                   | F or W *                          | SCD 7                               |
| 75  | DE075NNC   | NH3                             | 26.00      | 25.00 | 38.00  | 600                   | F or W *                          | SCD 7                               |
| 93  | DE093NNC   | NH3                             | 26.00      | 25.00 | 38.00  | 630                   | F or W *                          | SCD 7                               |
| 118 | DE118NNC   | NH3                             | 26.00      | 25.00 | 38.00  | 880                   | F                                 | SCD 7                               |
| 145 | DE145NNC   | NH4                             | 32.00      | 29.50 | 41.00  | 930                   | F                                 | SCD 7                               |
| 175 | DE175NNC   | NH4                             | 32.00      | 29.50 | 41.00  | 1100                  | F                                 | SCD 7                               |
| 220 | DE220NNC   | NH4                             | 32.00      | 29.50 | 41.00  | 1450                  | F                                 | SCD 9                               |
| 275 | DE275NNC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1680                  | F                                 | SCD 9                               |
| 330 | DE330NNC   | NJ1                             | 39.50      | 34.00 | 51.50  | 1850                  | F                                 | SCD 9                               |
| 440 | DE440NNC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2350                  | F                                 | SCD 10                              |
| 550 | DE550NNC   | NJ2                             | 48.50      | 38.40 | 59.00  | 2800                  | F                                 | SCD 10                              |
| 660 | DE660NNC   | NJ3                             | 51.50      | 43.40 | 66.00  | 3250                  | F                                 | SCD 10                              |

For shielded units, please replace the suffix "C" with a 'K' on the above part numbers. (i.e. DE075NNK)

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 142

FOR ACCESSORIES SEE PAGES 271 TO 274

Data subject to change without notice.





## TERMINATION DETAILS

### THREE PHASE, ALUMINUM AND COPPER TERMINATION - LUGS OR PADS

| kVA | VOLTAGE    |            |            |            |            |            |            |            |
|-----|------------|------------|------------|------------|------------|------------|------------|------------|
|     | 208        | 230        | 240        | 380        | 460        | 480        | 575        | 600        |
| 7.5 | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 11  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 14  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 20  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 27  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 34  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 40  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 51  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 63  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 75  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 93  | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 118 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 145 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 175 | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       | Lugs       | Lugs       |
| 220 | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       | Lugs       | Lugs       |
| 275 | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Lugs       |
| 330 | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A |
| 440 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 1A | Diagram 1A | Diagram 1A | Diagram 1A |
| 550 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 1A | Diagram 1A |
| 660 | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 3  | Diagram 2  | Diagram 2  | Diagram 2  | Diagram 2  |

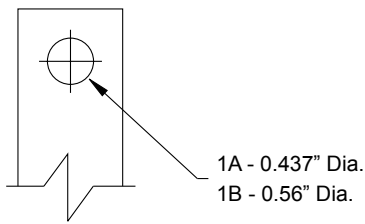


DIAGRAM 1

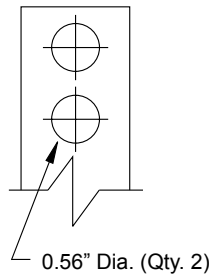


DIAGRAM 2

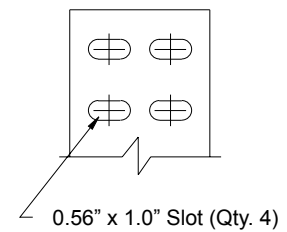


DIAGRAM 3

SECTION 4

