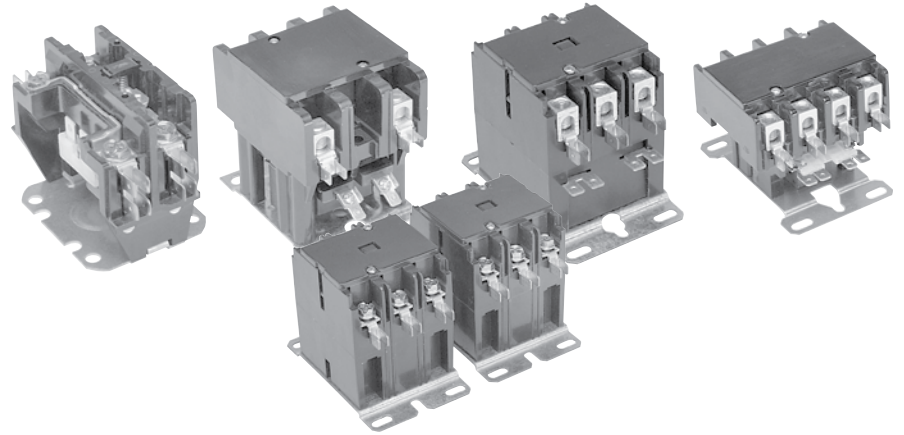




# Definite purpose Contactors



### Applications

Type DP contactors provide high performance with flexibility and reliability, designed to match numerous applications including:

- Motors
- Power supplies
- Food service equipment
- Compressors
- Business machines
- Resistive heating
- Air conditioning
- Refrigeration equipment
- Welding

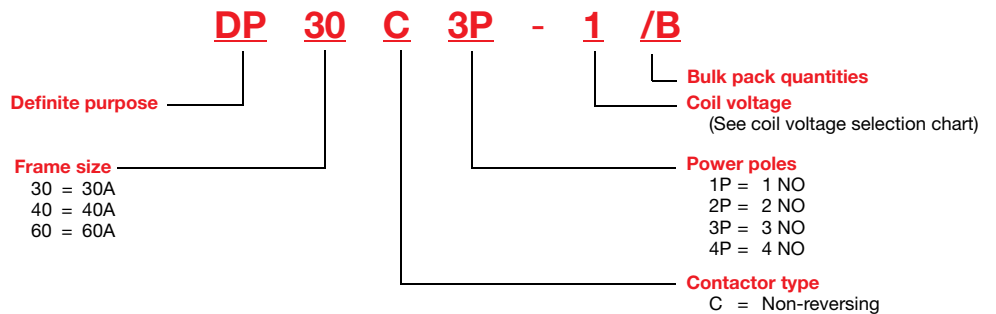
### Agency approvals

- UL 508 Guide No. NLDX2, File # E224401
- CE/Semko Certified
- EN60947-4-1:1991
- IEC 947-4-1

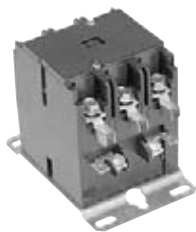
### Features

- Available as:
  - 30A, 1, 2, 3 or 4 pole
  - 40A, 1, 2, 3 or 4 pole
  - 60A, 3 pole
- Industry standard mounting plate provides easily accessible mounting holes
- Coil terminals are provided with #6-32 screws and (1) .250 quick connect or dual .250 quick connect terminals
- Exclusive hex, slotted, phillips #10-32 terminal screws for main terminals
- Coil is Class B (130° C) Insulation system with wide range of voltages and 50/60 Hz ratings
- Double E Magnet Assembly provides optimal performance with reduced power consumption
- Snap-in auxiliary switch with 1 SPDT or 2 SPDT contacts available as an option
- 1 NO & 1 NC auxiliary contact block with 600 VAC rating available as an option
- Base assembly is made from high arc-resistant plastic

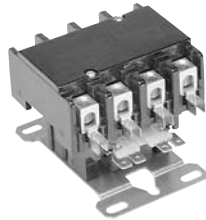
### Catalog number explanation



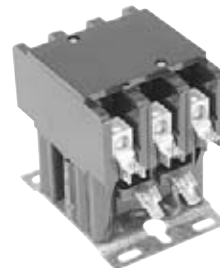
## 30A, 40A & 60A 1, 2, 3, & 4 Pole



DP30C3P-F



DP40C4P-F



DP60C3P-F

### 30A, 40A & 60A

| Full load amps | No. of poles | Locked motor amps |      |      | Resistive amps | Maximum HP 1 phase |      | Maximum HP 3 phase |          |      |      | Individual pack |            | Bulk pack   |                |            |
|----------------|--------------|-------------------|------|------|----------------|--------------------|------|--------------------|----------|------|------|-----------------|------------|-------------|----------------|------------|
|                |              | 240/277V          | 480V | 600V |                | 120V               | 240V | 200/208V           | 240/277V | 480V | 600V | Catalog number  | List price | Bulk pack ① | Catalog number | List price |
| 30             | 1            | 150               | 75   | 50   | 40             | 1                  | 2    | —                  | —        | —    | —    | DP30C1P-F       | \$ 30      | 50          | DP30C1P-F/B    | \$ 27      |
| 30             | 2            | 150               | 125  | 100  | 40             | 2                  | 3    | —                  | —        | —    | —    | DP30C2P-F       | 38         | 50          | DP30C2P-F/B    | 34         |
| 30             | 3            | 180               | 150  | 120  | 40             | 2                  | 5    | 10                 | 10       | 15   | 20   | DP30C3P-F       | 55         | 25          | DP30C3P-F/B    | 50         |
| 30             | 4            | 180               | 150  | 120  | 40             | 2                  | 5    | 10                 | 10       | 10   | —    | DP30C4P-F       | 75         | 25          | DP30C4P-F/B    | 68         |
| 40             | 2            | 240               | 200  | 160  | 50             | 2                  | 3    | —                  | —        | —    | —    | DP40C2P-F       | 46         | 50          | DP40C2P-F/B    | 42         |
| 40             | 3            | 240               | 200  | 160  | 50             | 3                  | 7.5  | 10                 | 10       | 20   | 25   | DP40C3P-F       | 60         | 25          | DP40C3P-F/B    | 54         |
| 40             | 4            | 240               | 200  | 160  | 50             | 3                  | 7.5  | 10                 | 10       | 10   | —    | DP40C4P-F       | 100        | 25          | DP40C4P-F/B    | 90         |
| 60             | 3            | 360               | 300  | 240  | 75             | 2                  | 10   | 25                 | 25       | 30   | 30   | DP60C3P-F       | 147        | —           | —              | —          |

### Coil voltage selection chart

| Voltage  | 24VAC | 120VAC | 208/240VAC | 277VAC | 480VAC | 575VAC |
|----------|-------|--------|------------|--------|--------|--------|
| Suffix # | F     | 1      | 2          | C      | 4      | 5      |

### Coil voltage selection

All catalog numbers include a 24VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the first digit after the dash in the catalog number.

### Auxiliary contact blocks (3 pole only)

| Description                  | Catalog number 30A - 40A | Catalog number 60A | List price |
|------------------------------|--------------------------|--------------------|------------|
| NO or NC SPDT<br>1 NO & 1 NC | CADP40-10<br>CADP40-11   | CADP60-10<br>—     | \$ 10      |

### Contact rating of 1 NO & 1 NC

|            |   | 120V | 240V | 480V | 600V |
|------------|---|------|------|------|------|
| Break      | A | 3.0  | 1.5  | .75  | .6   |
| Make       | A | 30   | 15   | 7.5  | 6    |
| Continuous | A | 10   | 10   | 10   | 10   |

Quick connect terminals on all auxiliary switches are .250 wide.

### Contact rating of SPDT

| Voltage | Current rating  |
|---------|-----------------|
| 125VAC  | 10A, 1/3 HP     |
| 120VAC  | 4A on lamp load |
| 250VAC  | 10A, 1/3 HP     |
| 125VDC  | .5A             |
| 250VDC  | .25A            |

### Ordering bulk quantities

To order bulk package quantities add "/B" to the end of the catalog number.

Example: For quantities of 25 of a 30A 3 pole contactor with 24VAC coil, the catalog number would be: DP30C3P-F/B

### Mechanical interlock

| Frame size   | Catalog number | List price |
|--------------|----------------|------------|
| DP30<br>DP40 | VMDP-1         | \$ 7       |

① Must be ordered in standard pack quantities as shown. Add suffix "/B" to the catalog number.

# Technical data

## 30A – 60A

### 1, 2, 3, & 4 Pole

Definite purpose  
contactors

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#### 30A – 40A – 1 & 2 pole

| Coil technical data                   |       | DP30C1P           |         |          |          | DP30, DP40C2P    |         |          |          |
|---------------------------------------|-------|-------------------|---------|----------|----------|------------------|---------|----------|----------|
| Nominal coil voltage                  |       | 24                | 120     | 208/240  | 277      | 24               | 120     | 208/240  | 277      |
| Maximum pickup volts                  |       | 18                | 88      | 177      | 221      | 18               | 88      | 177      | 221      |
| Drop-out volts range                  |       | 6 – 15            | 20 – 70 | 40 – 170 | 50 – 165 | 6 – 15           | 20 – 70 | 40 – 140 | 50 – 165 |
| Nominal inrush VA                     | 50 Hz | 31                | 31      | 35       | 31       | 22               | 22      | 22       | 22       |
| Nominal inrush VA                     | 60 Hz | 28                | 28      | 32       | 28       | 20               | 20      | 20       | 20       |
| Nominal sealed VA                     | 50 Hz | 6                 | 6       | 7        | 6        | 5.5              | 5.5     | 5.5      | 5.5      |
| Nominal sealed VA                     | 60 Hz | 5                 | 5       | 6        | 5        | 4.5              | 4.5     | 4.5      | 4.5      |
| Nominal DC resistance                 | Ohms  | 17.5              | 450     | 1800     | 2252     | 13               | 275     | 1056     | 1772     |
| Other specifications                  |       | DP30C1P           |         |          |          | DP30, DP40C2P    |         |          |          |
| Line and load terminals               |       | # 10 – 32 screw ① |         |          |          | Box lug ①        |         |          |          |
| Wire size AWG min – max               |       | 16 – 8 ②          |         |          |          | 14 – 4 Cu/Al     |         |          |          |
| Tightening torque (recommended)       |       | 22 in. lbs.       |         |          |          | 40 in. lbs       |         |          |          |
| Coil termination                      |       | Dual .250 QC (2)  |         |          |          | Dual .250 QC (2) |         |          |          |
| Quick connects .250 std. 1 – 1.5 pole |       | Quad              |         |          |          | Quad             |         |          |          |
| Quick connects .250 std. 2 pole       |       | Dual or quad      |         |          |          | Dual or quad     |         |          |          |
| Covers                                |       | Standard          |         |          |          | Standard         |         |          |          |
| Insulation system                     |       | 130° C Class B    |         |          |          | 130° C Class B   |         |          |          |

#### 30A – 60A – 3 pole

| Coil technical data             |       | DP30, DP40C3P     |         |          |          | DP60C3P          |        |         |          |                             |           |
|---------------------------------|-------|-------------------|---------|----------|----------|------------------|--------|---------|----------|-----------------------------|-----------|
| Nominal coil voltage            |       | 24                | 120     | 208/240  | 277      | 480              | 24     | 120     | 208/240  | 277                         | 480       |
| Maximum pickup volts            |       | 18                | 88      | 177      | 220      | 384              | 18     | 93      | 177      | 235                         | 374       |
| Drop-out volts range            |       | 6 – 15            | 20 – 70 | 40 – 140 | 65 – 185 | 150 – 270        | 6 – 15 | 20 – 70 | 40 – 135 | 50 – 180                    | 150 – 286 |
| Nominal inrush VA               | 50 Hz | 65                | 65      | 65       | 65       | 65               | 140    | 140     | 140      | 140                         | 140       |
| Nominal inrush VA               | 60 Hz | 60                | 60      | 60       | 60       | 60               | 132    | 132     | 132      | 132                         | 132       |
| Nominal sealed VA               | 50 Hz | 7.5               | 7.5     | 7.5      | 7.5      | 7.5              | 20     | 20      | 20       | 20                          | 20        |
| Nominal sealed VA               | 60 Hz | 6                 | 6       | 6        | 6        | 6                | 14     | 14      | 14       | 14                          | 14        |
| Nominal DC resistance           | Ohms  | 6.6               | 165     | 660      | 880      | 1320             | 2.4    | 45      | 180      | 280                         | 852       |
| Other specifications            |       | DP30C3P           |         |          |          | DP40C3P          |        |         |          | DP60C3P                     |           |
| Line and load terminals         |       | # 10 – 32 Screw ① |         |          |          | Box lug ①        |        |         |          | Box lug ①                   |           |
| Wire size AWG min – max         |       | 16 – 8 ②          |         |          |          | 14 – 7 Cu/Al     |        |         |          | 14 – 2 Cu/Al                |           |
| Tightening torque (recommended) |       | 22 in. lbs        |         |          |          | 40 in.lbs        |        |         |          | 50 in. lbs                  |           |
| Quick connects: power terminals |       | Dual.250 QC       |         |          |          | Dual.250 QC      |        |         |          | Dual.250 QC                 |           |
| Coil terminals                  |       | Dual .250 QC (2)  |         |          |          | Dual .250 QC (2) |        |         |          | #6 – 35 screw & .250 QC (2) |           |
| Covers                          |       | Standard          |         |          |          | Standard         |        |         |          | Standard                    |           |
| Insulation system               |       | 130° C Class B    |         |          |          | 130° C Class B   |        |         |          | 130° C Class B              |           |

#### 30A – 40A – 4 Pole

| Coil technical data             |       | DP30, DP40C4P     |         |          |          |                  |  |
|---------------------------------|-------|-------------------|---------|----------|----------|------------------|--|
| Nominal coil voltage            |       | 24                | 120     | 208/240  | 277      | 480              |  |
| Maximum pickup volts            |       | 19.2              | 88      | 177      | 220      | 384              |  |
| Drop-out volts range            |       | 6 – 15            | 20 – 70 | 40 – 140 | 65 – 185 | 150 – 270        |  |
| Nominal inrush VA               | 50 Hz | 68                | 68      | 58       | 58       | 48               |  |
| Nominal inrush VA               | 60 Hz | 60                | 60      | 55       | 52       | 52               |  |
| Nominal sealed VA               | 50 Hz | 14                | 14      | 11       | 11       | 11               |  |
| Nominal sealed VA               | 60 Hz | 9                 | 9       | 9.5      | 9.5      | 9                |  |
| Nominal DC resistance           | Ohms  | 5                 | 148     | 550      | 750      | 2100             |  |
| Other specifications            |       | DP30C4P           |         |          |          | DP40C4P          |  |
| Line and load terminals         |       | # 10 – 32 screw ① |         |          |          | Box Lug          |  |
| Wire size AWG Min – Max         |       | 16 – 8 ②          |         |          |          | 14 – 4 Cu/AL     |  |
| Tightening torque (recommended) |       | 22 in. lbs        |         |          |          | 40 in. lbs       |  |
| Quick connects: power terminals |       | Dual .250 QC      |         |          |          | Dual .250 QC     |  |
| Coil terminals                  |       | Dual .250 QC (2)  |         |          |          | Dual .250 QC (2) |  |
| Covers                          |       | Optional          |         |          |          | Standard         |  |
| Insulation system               |       | 130° C Class B    |         |          |          | 130° C Class B   |  |

① See page 1.82 to 1.85 for description and approximate dimensions.  
 ② Stranding must be split for #8 wire.

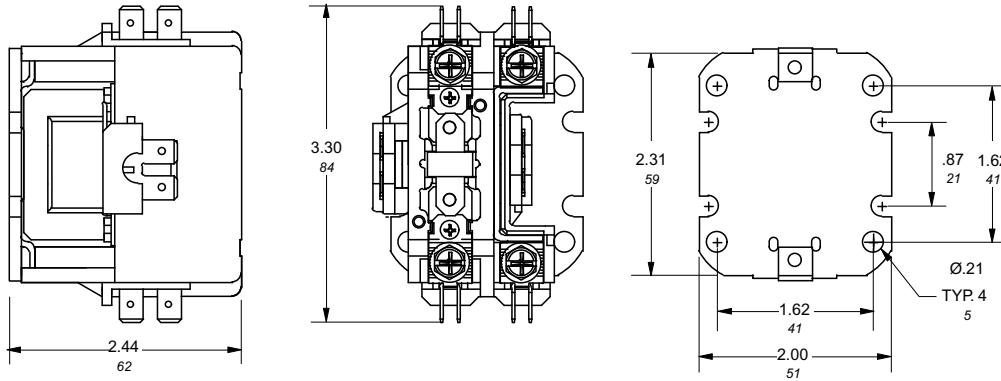
# Approximate dimensions

## 30A

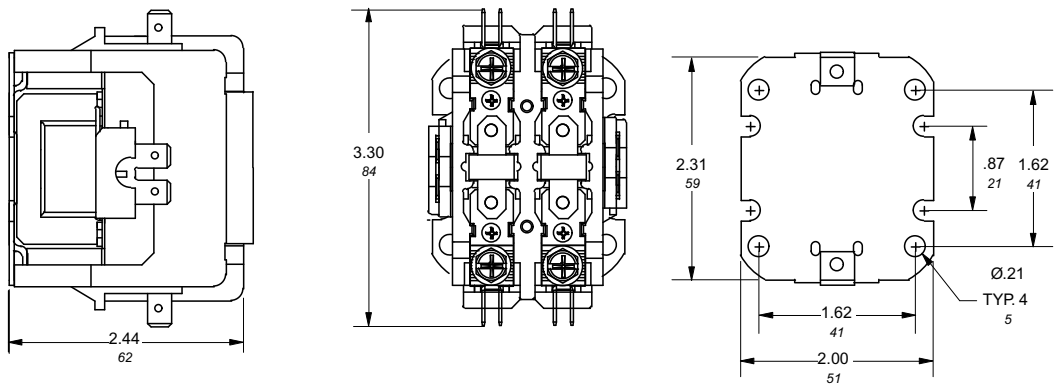
### 1, 2 & 3 Pole

← 00.00 → Inches  
00.00 → [Millimeters]

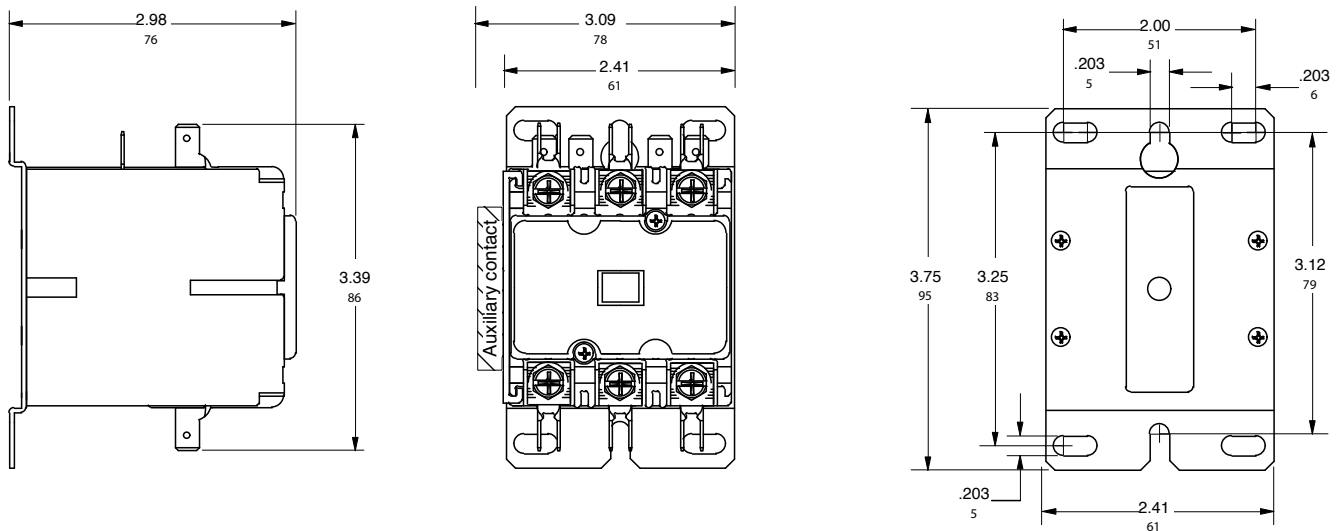
#### DP30C1P



#### DP30C2P



#### DP30C3P

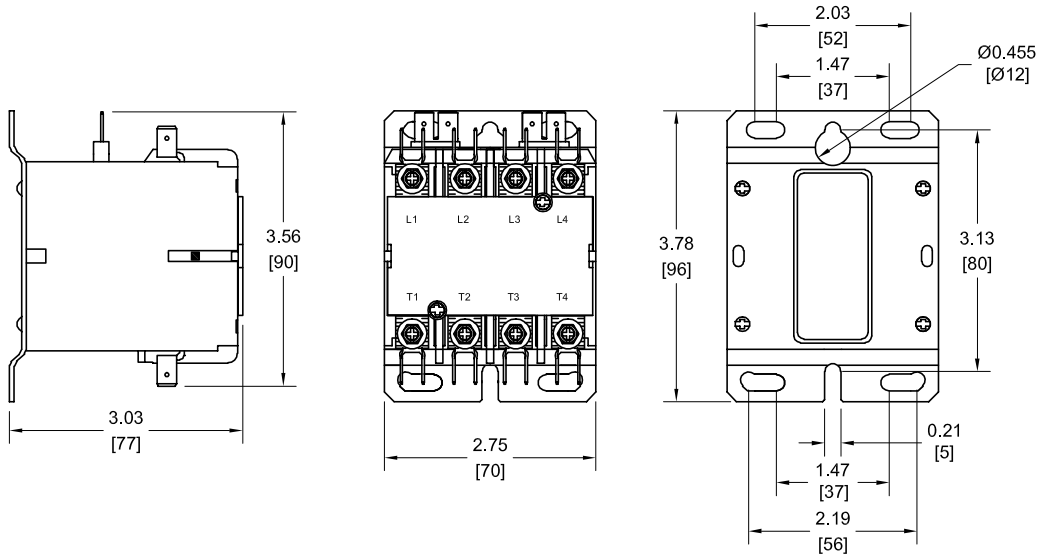


## Approximate dimensions

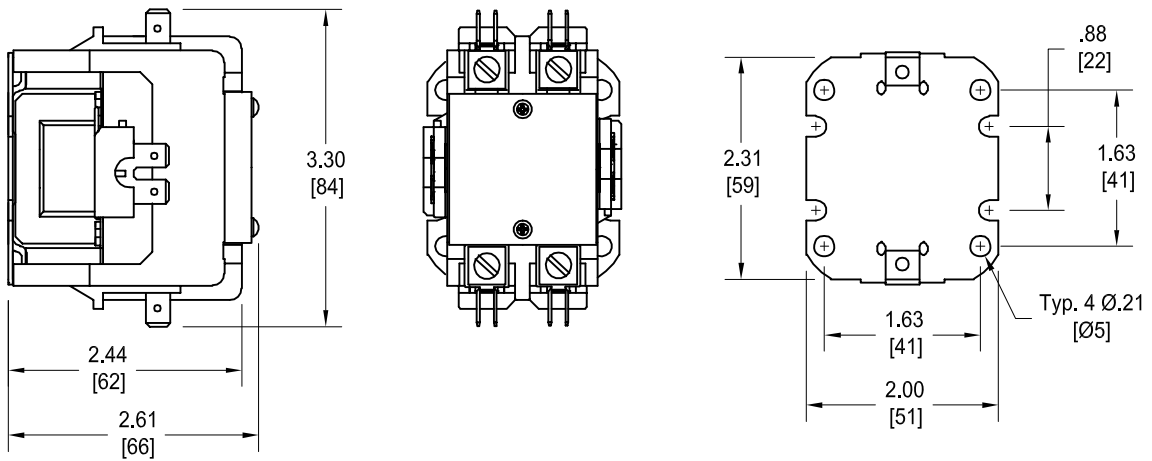
30A 4 Pole  
40A 2 & 3 Pole

00.00 Inches  
00.00 [Millimeters]

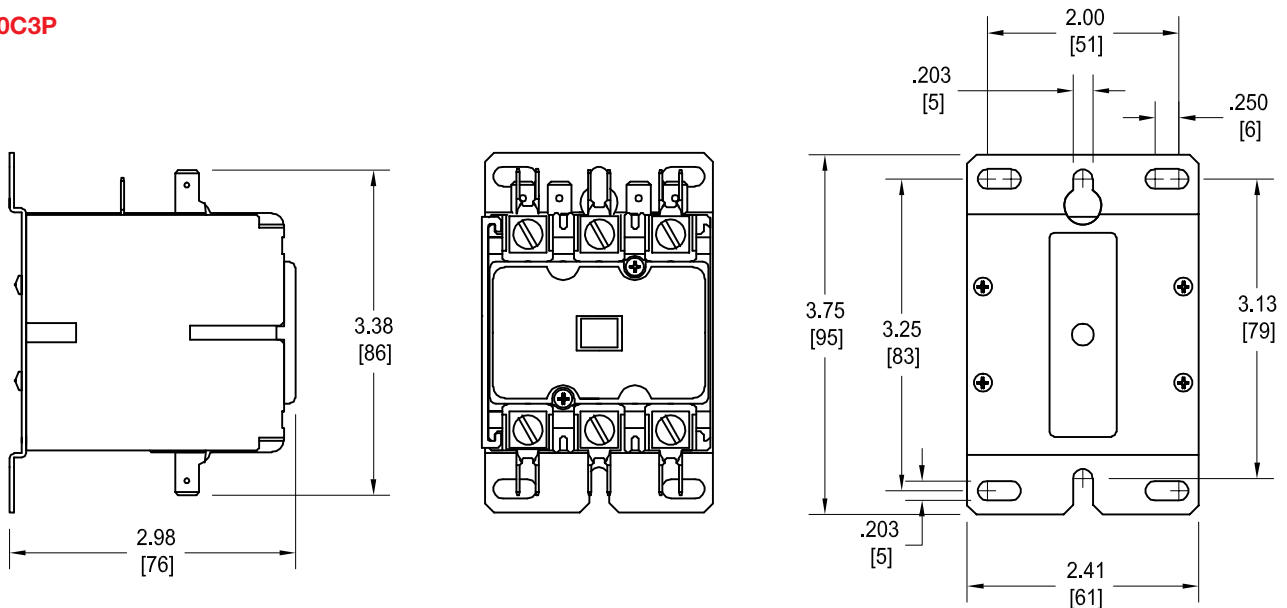
### DP30C4P



### DP40C2P



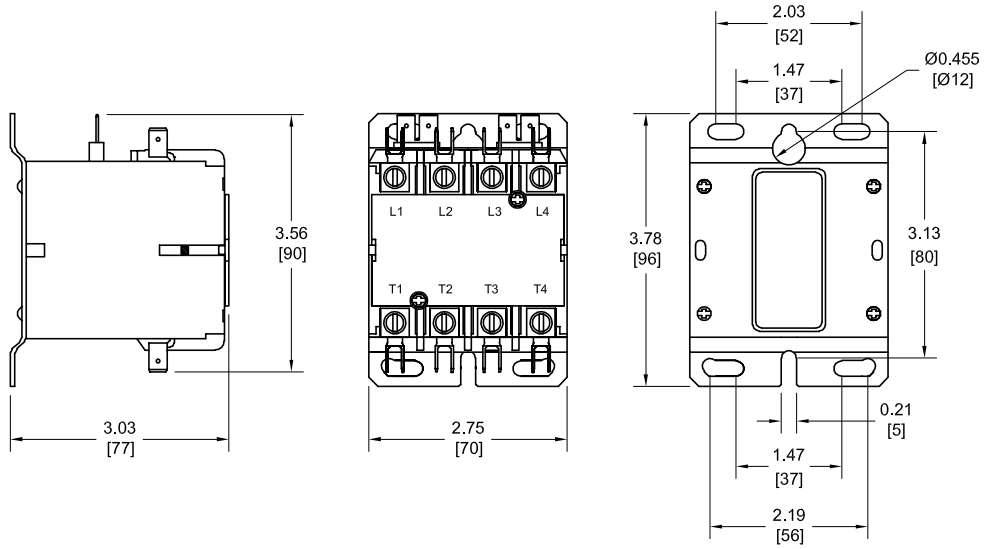
### DP40C3P



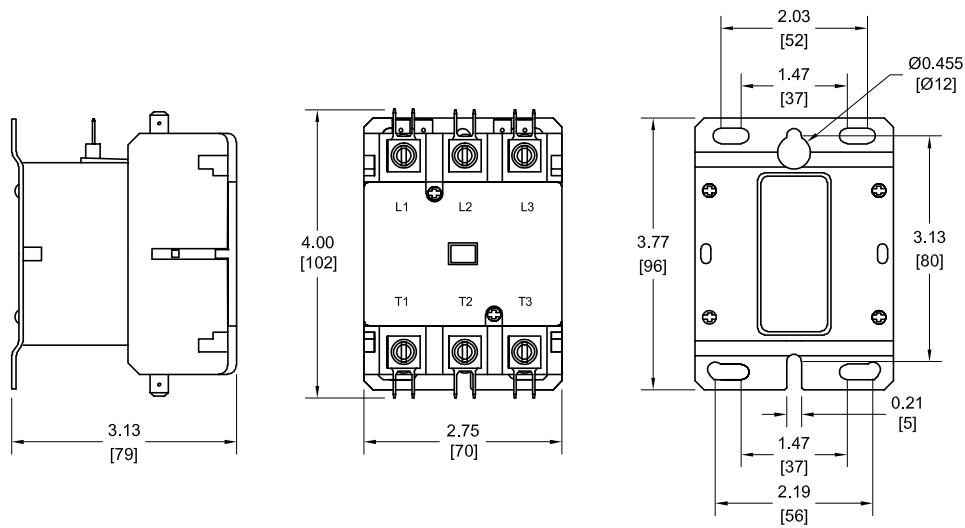
## Approximate dimensions

40A 4 Pole  
60A 3 Pole

### DP40C4P



### DP60C3P

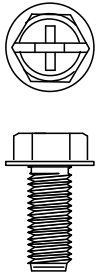


# Approximate dimensions Terminations

Definite purpose  
contactors

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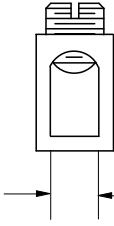
## Screw



Standard on  
DP30

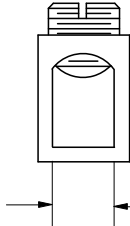
# 10-32 Combination  
Phillips, slotted &  
5/16 Hex Head

## Lugs



Standard on  
DP40

14 - 4 AWG, Cu / Al



Standard on  
DP60

14 - 2 AWG, Cu / Al

