



DPC series

Definite Purpose Contactor 3- or 4-pole, 20-40 FLA AC Coil

- File E75492
- File LR49598
- EN 60947-1:2007, EN 60947-4-1:2010
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Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to confirm the product meets the requirements for a given application.

Features

- 3- or 4-pole contactors.
- Industry-standard mounting base or space-saving base (3-pole only).
- Optional interlock/auxiliary switches available.
- Manual test button is standard.
- Coil dust cover helps keep dust and dirt away from magnet and coil area.
- Double E magnet system provides optimal performance.

Contact Data @ 25°C

Arrangements: 3 Form X (3PST-NO-DM), 4 Form X (4PST-NO-DM).
Consult factory for mixed forms.
Maximum Ratings: See Contact Ratings Table.
Material: Silver Cadmium Oxide.

Coil Data @ 25°C

Voltage: 24 - 480 VAC, 50/60 Hz. See Coil Data Table below.
Insulation Class: UL Class B (130°C).
Duty Cycle: Continuous.

SEMKO

U_i = 600V, U_{imp} = 6kV
Material Group IIIa, Pollution Degree 3
Short Circuit: 3kA
Short-Circuit Protection, max. fuse: 50A gG, U ≤ 690V.

Contact Ratings

| Full Load Amps & AC3 | Number of Poles | Line Voltage | Locked Rotor Amps | Resistive Amps Rating & AC1 | Maximum Horsepower | | UL Short Circuit Ratings | UL AC Electrical Discharge Lamps (Standard Ballast) and AC Incandescent Lamps (Tungsten) |
|----------------------|-----------------|--------------|-------------------|-----------------------------|--------------------|-------------|---|--|
| | | | | | Single Phase | Three Phase | | |
| 20 | 3 or 4 | 120 | 120 | 30 | 1.5 | – | Standard fault: 5kA @ 600VAC 80A max. fuse. High fault: 100kA @ 600VAC 60A max. Class J fuse | 28A, 480V per pole 1 or 3 poles |
| | | 240 | 120 | 30 | 3 | 7.5 | | |
| | | 480 | 100 | 30 | – | 7.5 | | |
| | | 600 | 80 | 30 | – | 7.5 | | |
| 25 | 3 or 4 | 120 | 150 | 35 | 2 | – | Standard fault: 5kA @ 600VAC 90A max. fuse. High fault: 100kA @ 600VAC 60A max. Class J fuse | 28A, 480V per pole 1 or 3 poles |
| | | 240 | 150 | 35 | 5 | 10 | | |
| | | 480 | 125 | 35 | – | 15 | | |
| | | 600 | 100 | 35 | – | 20 | | |
| 30 | 3 or 4 | 120 | 180 | 40 | 2 | – | Standard fault: 5kA @ 600VAC 90A max. fuse. High fault: 100kA @ 600VAC 60A max. Class J fuse | 35A, 480V per pole 1 or 3 poles |
| | | 240 | 180 | 40 | 5 | 10 | | |
| | | 480 | 150 | 40 | – | 15 | | |
| | | 600 | 120 | 40 | – | 20 | | |
| 40 | 3 or 4 | 120 | 240 | 50 | 3 | – | Standard fault: 5kA @ 600VAC 125A max. fuse. High fault: 100kA @ 600VAC 100A max. Class J fuse | 35A, 480V per pole 1 or 3 poles |
| | | 240 | 240 | 50 | 7.5 | 10 | | |
| | | 480 | 200 | 50 | – | 20 | | |
| | | 600 | 160 | 50 | – | 25 | | |

Coil Data

| | 3 Pole Models | | | | | 4 Pole Models | | | | |
|------------------------------|---------------|---------|----------|----------|-----------|---------------|---------|----------|----------|-----------|
| | 24 | 120 | 208/240 | 277 | 480 | 24 | 120 | 208/240 | 277 | 480 |
| Nominal Coil Voltage | 24 | 120 | 208/240 | 277 | 480 | 24 | 120 | 208/240 | 277 | 480 |
| Maximum Pickup Volts | 18 | 88 | 177 | 220 | 384 | 18 | 88 | 177 | 220 | 384 |
| Drop-Out Volts Range | 6 - 15 | 20 - 70 | 40 - 140 | 65 - 185 | 150 - 270 | 6 - 15 | 20 - 70 | 40 - 140 | 65 - 185 | 150 - 270 |
| Nominal Inrush VA @ 50 Hz | 72 | 72 | 72 | 72 | 72 | 82 | 82 | 82 | 82 | 82 |
| Nominal Inrush VA @ 60 Hz | 64 | 64 | 64 | 64 | 64 | 73 | 73 | 73 | 73 | 73 |
| Nominal Sealed VA @ 50 Hz | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 |
| Nominal Sealed VA @ 60 Hz | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |
| Nominal DC Resistance - Ohms | 5.8 | 147 | 597 | 837 | 2425 | 5.25 | 140 | 540 | 760 | 2195 |

Ordering Information

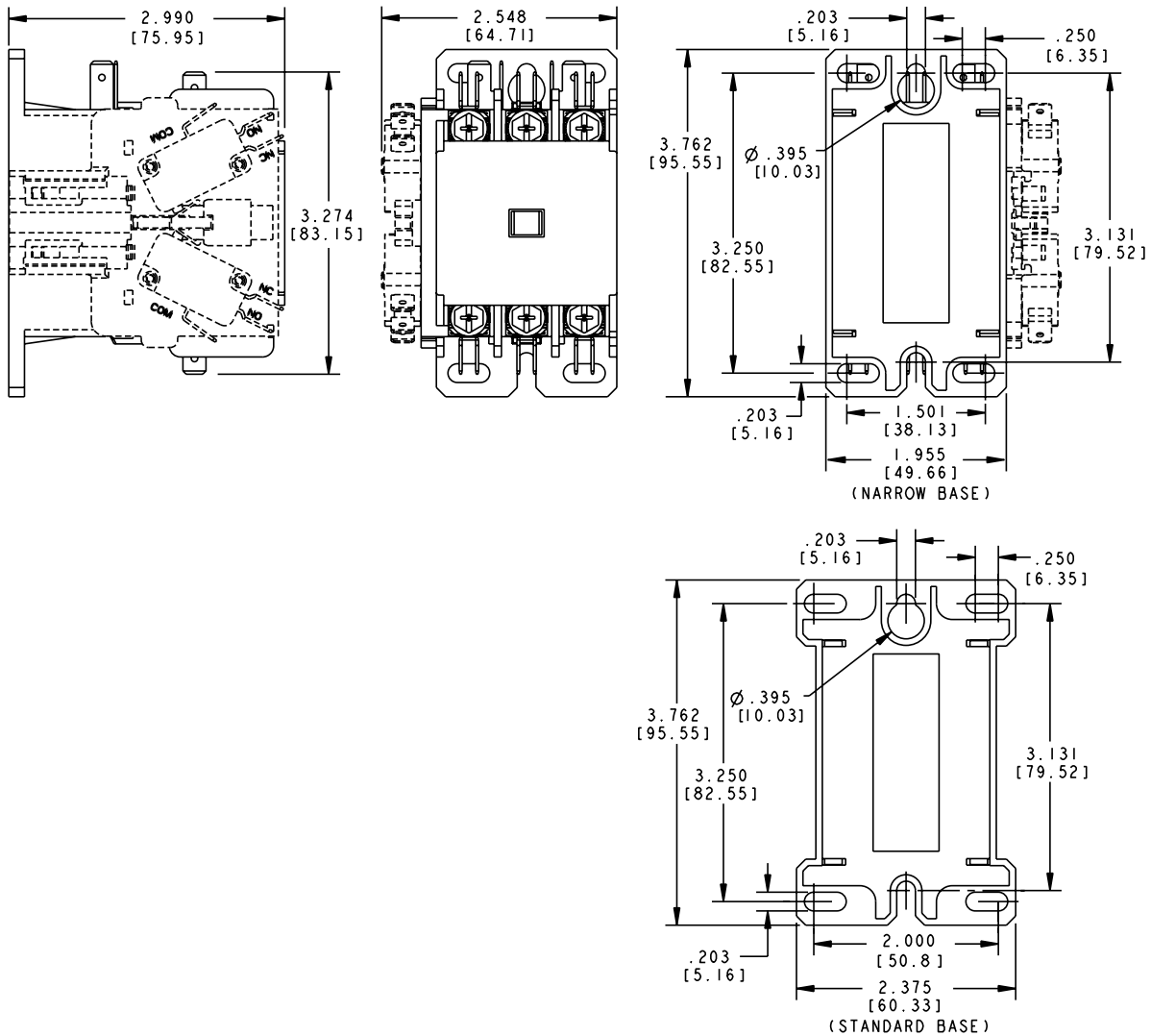
| | | | | | | | | | |
|--|------------|---|----------|----------|-----------|-----------|----------|----------|--|
| Typical Part No. > | DPC | - | 3 | Q | 25 | CS | 1 | X | |
| <p>1. Series: DPC = Definite Purpose Contactor</p> <p>2. Packaging: Y = Individual Pack - = Bulk Pack</p> <p>3. Number of Poles: 3 = 3 Pole 4 = 4 Pole</p> <p>4. Coil Voltage (50/60 Hz.): Q = 24VAC U = 208/240VAC H = 480VAC T = 120VAC V = 277VAC Other AC coil voltages to 575V available, consult factory for details</p> <p>5. Contact Ratings (FLA): 20 = 20 Amps 25 = 25 Amps 30 = 30 Amps 40 = 40 Amps</p> <p>6. Main Contact Termination Type: CS = Combo Screws SS = Sems Screws BL = Box Lugs Various terminal types may be mixed on a unit, consult factory for details.</p> <p>7. Coil Termination Type: 1 = Coil terminals up (toward keyhole on base) 3 = Coil terminals up (toward keyhole on base) with #6-32 screw 2 = Coil terminals down (toward slot on base) 4 = Coil terminals down (toward slot on base) with #6-32 screw</p> <p>8. Contact Form and Material: X = Form X (ST-NO-DM), Silver Cadmium Oxide</p> <p>9. Customer and Option Codes: Leave Blank = Standard part, no customer-specific options 3B = Two pole unit in a three pole base with the center pole open (must specify "3" in step 3 above) QQC = Quad quick connects for main contact terminals (available on non-coil terminal side only) NQC = No quick connects for main contact terminals NB = Narrow Base (available on three pole model only) DR = DIN rail mounting adapter NCR = Normally closed auxiliary switch on right side NCL = Normally closed auxiliary switch on left side SAR = SPDT auxiliary switch on right side SAL = SPDT auxiliary switch on left side NONCR = Normally open/normally closed auxiliary switch on right side NONCL = Normally open/normally closed auxiliary switch on left side SNCR = SPDT aux. switch on left side, normally closed auxiliary switch on the right SNCL = SPDT aux. switch on right side, normally closed auxiliary switch on the left ### (3-digit numeric) = Factory-assigned customer number Consult factory for other special requirements.</p> | | | | | | | | | |

Standard part numbers listed below are more likely to be available from stock.

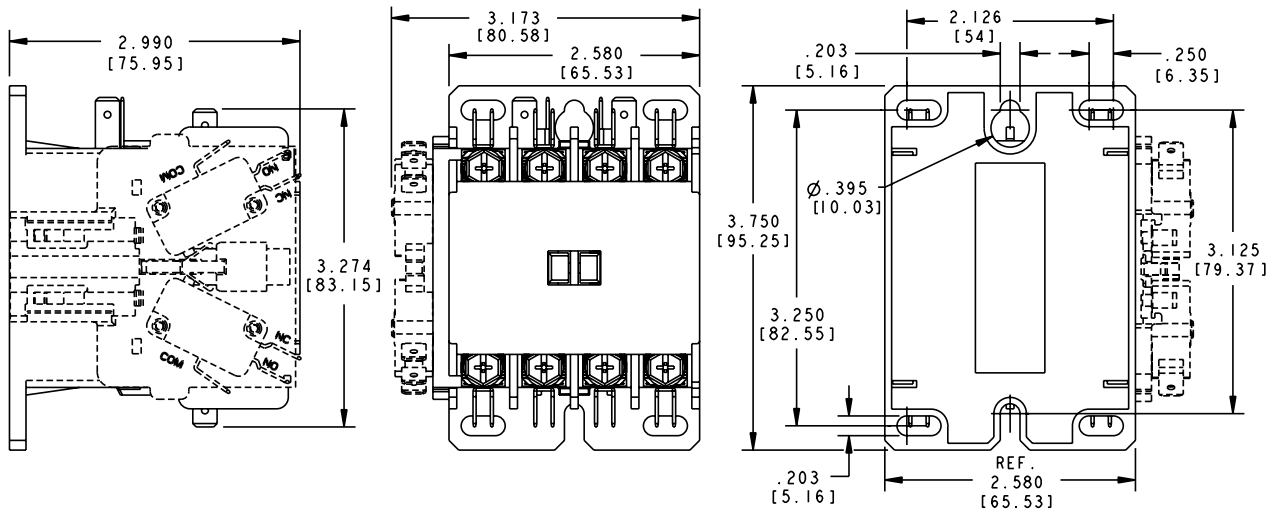
| | | | | | |
|------------------|-------------|------------------|-------------|--------------|-------------|
| DPC-3Q20CS1X | 2-1672328-4 | DPC-3U30BL1X | 3-1672328-6 | DPC-4U25BL3X | 2-1672414-9 |
| DPC-3T20CS1X | 2-1672328-5 | DPC-3U30SS1X | 3-1672328-9 | DPC-4Q30BL3X | 1672329-5 |
| DPC-3U20CS1X | 2-1672328-9 | DPC-3V30CS1X | 3-1672328-2 | DPC-4U30CS3X | 2-1672414-8 |
| DPC-3Q25CS1X | 1672328-4 | DPC-3H30CS1X | 3-1672328-3 | DPC-4U40BL1X | 1672329-4 |
| DPC-3T25CS1X | 2-1672328-6 | DPC-3Q40BL1X | 2-1672328-1 | | |
| DPC-3T25CS1X-NQC | 2-1672328-7 | DPC-3Q40BL2X-NQC | 5-1672328-2 | | |
| DPC-3U25CS1X | 3-1672328-0 | DPC-3Q40BL3X | 5-1672328-1 | | |
| DPC-3Q30BL1X | 1672328-6 | DPC-3Q40CS1X | 1672128-3 | | |
| DPC-3Q30CS1X | 1672328-2 | DPC-3Q40SS1X | 5-1672328-0 | | |
| DPC-3Q30CS1X | 1672328-2 | DPC-3T40BL1X | 1672328-5 | | |
| DPC-3Q30SS1X | 3-1672328-7 | DPC-3T40BL3X | 5-1672328-3 | | |
| DPC-3T30BL1X | 3-1672328-4 | DPC-3T40CS1X | 2-1672328-3 | | |
| DPC-3T30BL2X | 3-1672328-5 | DPC-3U40BL1X | 5-1672328-5 | | |
| DPC-3T30CS1X | 2-1672328-8 | DPC-3U40BL3X | 2-1672328-2 | | |
| DPC-3T30SS1X | 3-1672328-8 | DPC-3U40SS1X | 5-1672328-4 | | |
| DPC-3U30CS1X | 3-1672328-1 | DPC-3H40BL1X | 5-1672328-6 | | |

Outline Dimensions

THREE POLE MODELS



FOUR POLE MODELS



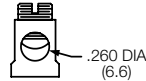
Main Contact Termination Options



Combo Screws
#10-32 Combination
Phillips, Slotted &
5/16 Hex Head
#12 Washer



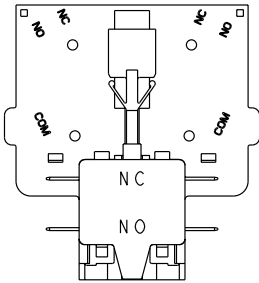
Sems Screws
#10-32 Sems Screw
with Pressure Plate



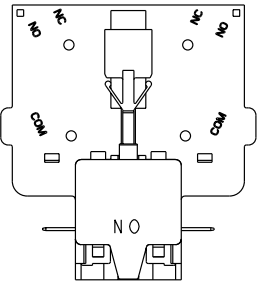
Box Lugs
Lug accepts 14-4
Cu/Al AWG

Auxiliary Switches

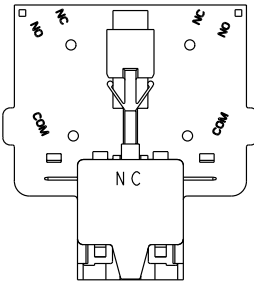
Various interlock / auxiliary switches are available for the DPC series contactor. All auxiliary switches for the DPC are snap-on design, no tools required.



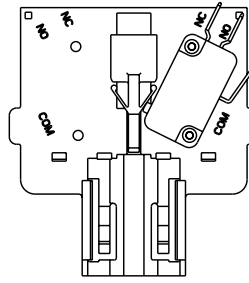
1 NO / 1 NC
(1672419-1)
MUST BE SAME POLARITY



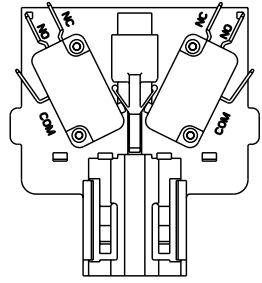
1 NO
(1672419-2)



1 NC
(1672419-3)



**ONE SPDT
SWITCH
PER SIDE**
**(1672418-1
or 1672418-3)**



**TWO SPDT
SWITCHES
PER SIDE**
**(1672418-2
or 1672418-4)**

Auxiliary Switches Equipped with 0.250" (6.35) Quick Connect Terminals

| Description | Factory Modifications | | Field Added Kits | |
|--|-----------------------|----|--------------------|-------------------------|
| | NO | NC | Kit Catalog Number | Number of Kits Required |
| Single unit interlock configurations listed. | 1 | 1 | 1672419-1 | 1 |
| Maximum of two. (One on each side.) | 1 | 0 | 1672419-2 | 1 |
| | 0 | 1 | 1672419-3 | 1 |
| MUST BE SAME POLARITY | 2 | 2 | 1672419-1 | 2 |
| See footnote (1) for ratings. | 2 | 0 | 1672419-2 | 2 |
| | 0 | 2 | 1672419-3 | 2 |
| SPDT Circuit | 1 | 1 | 1672418-1 | 1 |
| (Either one or two switches per side.) | 2 | 2 | 1672418-2 | 1 |
| | 2 | 2 | 1672418-1 | 2 |
| See footnote (2) for ratings. | 4 | 4 | 1672418-2 | 2 |
| SPDT Dry Circuit | 1 | 1 | 1672418-3 | 1 |
| 0.1 amp max. | 2 | 2 | 1672418-4 | 1 |
| Gold Flashed Contacts | 4 | 4 | 1672418-4 | 2 |

Footnotes: Ratings of Auxiliary Interlocks / Switches

(1) Contact Rating Single Circuit NO or NC and two circuit NO/NC:
MUST BE SAME POLARITY 120V 240V 480V 600V
Amperes - Break 3.0 1.5 0.75 0.6
Amperes - Make 30 15 7.5 6
Amperes - Continuous 10 10 10 10

(2) Contact Rating SPDT (1672418-1 or -2):
10A, 1/3 HP, 125 or 250 VAC
1/2A, 125 VDC; 1/4A, 250 VDC
4A 120 VAC on Lamp Load

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