




# DPC series

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

 File E75492  
 File LR49598  
 Certificate 811687  


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), 3 Form Y (3PST-NC-DB), 4 Form Y (4PST-NC-DB). Consult factory for mixed forms.

**Maximum Ratings:** See Contact Ratings Table.

**Material:** Silver Cadmium Oxide or Silver Tin 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.

### Environmental Data

**Temperature Range:** Storage and Operating: -40°C – +65°C.

**Flammability:** UL 94V-0 housing.

### Mechanical Data

#### Main Contact Termination:

##### Combo Screws

**Type:** #10-32 Combination Phillips, slotted & 5/16 hex head with #12 washer with dual 0.250" (6.35 mm) quick connects.

**Wire Size:** 16-8 AWG (Stranding must be split for 8 AWG wire.)

**Tightening Torque:** 25 in.-lbs.

##### Sems Screws

**Type:** #10-32 Sems screw with pressure plate and dual 0.250" (6.35 mm) quick connects.

**Wire Size:** 16-8 AWG (Stranding must be split for 8 AWG wire.)

**Tightening Torque:** 25 in.-lbs.

##### Box Lugs

**Type:** Box lug with dual 0.250" (6.35 mm) quick connects.

**Wire Size:** 14-4 Cu/Al AWG

**Tightening Torque:** 40 in.-lbs.

**Coil Termination:** Dual 0.250" (6.35 mm) quick connects, standard.

A 0.250" quick connect and a #6-32 screw, optional.

**Arc Cover:** Standard on all models.

**Weight:** 3-Pole Models: 12.7 oz. (360 g) approximately.

4-Pole Models: 15.1 oz. (430 g) approximately.

### Contact Ratings

Full Load Amps	Number of Poles	Line Voltage	Locked Rotor Amps	Resistive Amps Rating	Maximum Horsepower	
					Single Phase	Three Phase
20	3 or 4	120	120	30	1.5	-
		240	120	30	3	7.5
		480	100	30	-	7.5
		600	80	30	-	7.5
		120	150	35	2	-
25	3 or 4	240	150	35	5	10
		480	125	35	-	15
		600	100	35	-	20
		120	180	40	2	-
		240	180	40	5	10
30	3 or 4	480	150	40	-	15
		600	120	40	-	20
		120	240	50	3	-
		240	240	50	7.5	10
		480	200	50	-	20
40	3 or 4	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**

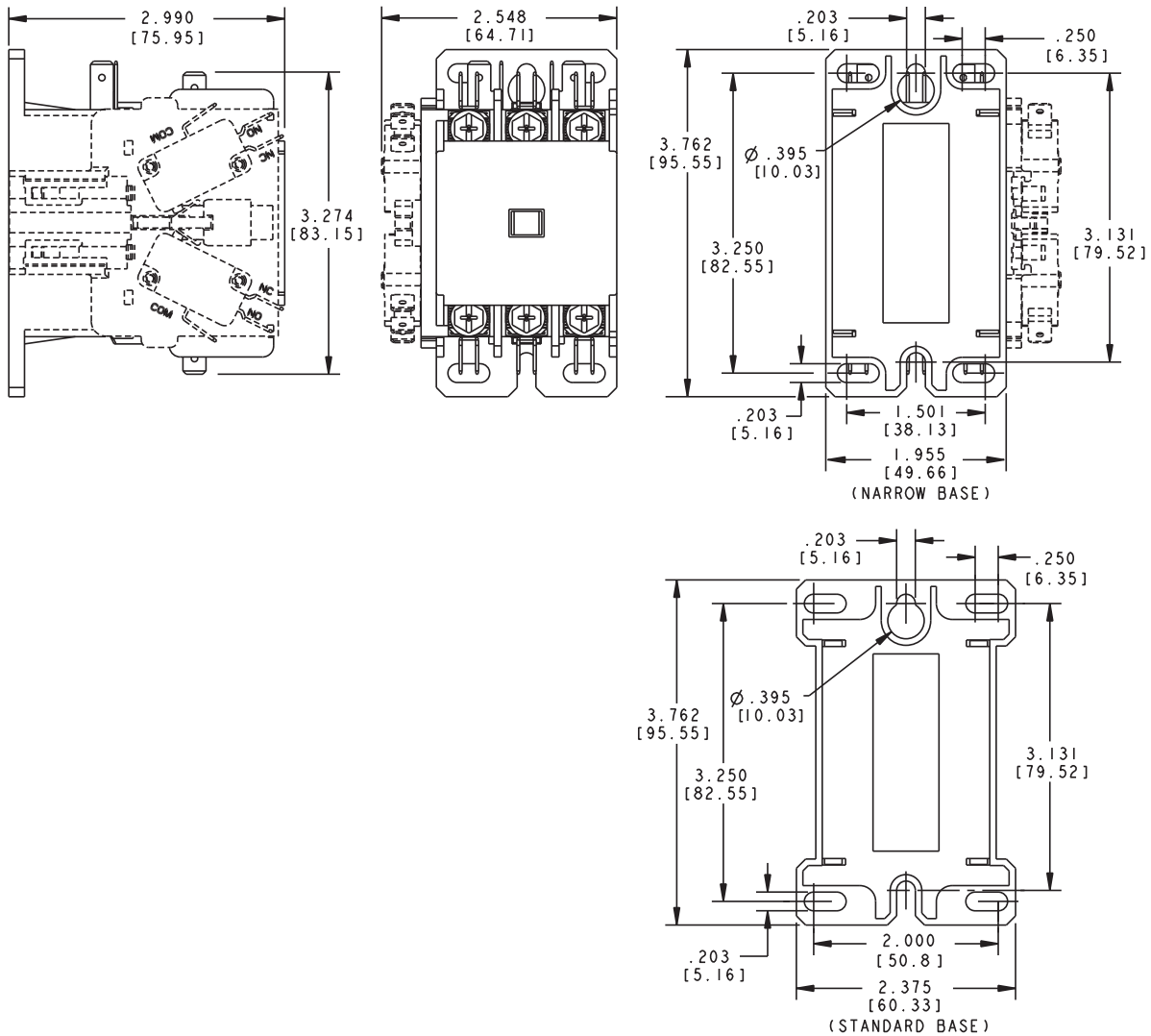
Typical Part No. >	<b>DPC</b>	-	<b>3</b>	<b>Q</b>	<b>25</b>	<b>CS</b>	<b>1</b>	<b>X</b>	
<p><b>1. Series:</b> DPC = Definite Purpose Contactor</p> <p><b>2. Packaging:</b> Y = Individual Pack      - = Bulk Pack</p> <p><b>3. Number of Poles:</b> 3 = 3 Pole      4 = 4 Pole</p> <p><b>4. Coil Voltage (50/60 Hz.):</b> Q = 24VAC    U = 208/240VAC    H = 480VAC T = 120VAC    V = 277VAC Other AC coil voltages to 575V available, consult factory for details</p> <p><b>5. Contact Ratings (FLA):</b> 20 = 20 Amps    25 = 25 Amps    30 = 30 Amps    40 = 40 Amps</p> <p><b>6. Main Contact Termination Type:</b> CS = Combo Screws      SS = Sems Screws      BL = Box Lugs Various terminal types may be mixed on a unit, consult factory for details.</p> <p><b>7. Coil Termination Type:</b> 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><b>8. Contact Form and Material:</b> X = Form X (ST-NO-DM), Silver Cadmium Oxide      R = Form X (ST-NO-DM), Silver Tin Oxide Y = Form Y (ST-NC-DB), Silver Cadmium Oxide      H = Form Y (ST-NC-DB), Silver Tin Oxide S = Contact forms may be mixed on a unit, consult factory for details.</p> <p><b>9. Customer and Option Codes:</b> 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.**

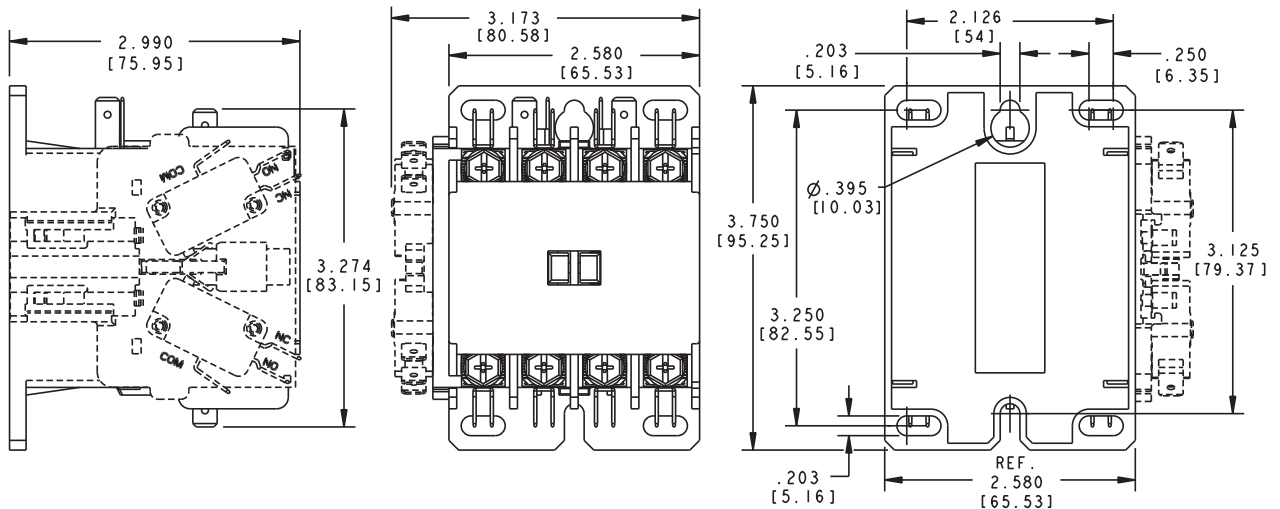
DPC-3Q20CS1X	2-1672328-4	DPC-3U30BL1X	3-1672328-6	DPC-4U25BL3X	2-1672414-9
DPC-3T20CS1X	2-1672328-5	DPC-3U30SS1X	3-1672328-9	DPC-4Q30BL3X	1672329-5
DPC-3U20CS1X	2-1672328-9	DPC-3V30CS1X	3-1672328-2	DPC-4U30CS3X	2-1672414-8
DPC-3Q25CS1X	1672328-4	DPC-3H30CS1X	3-1672328-3	DPC-4U40BL1X	1672329-4
DPC-3T25CS1X	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**



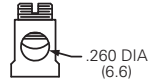
**Main Contact Termination Options**



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



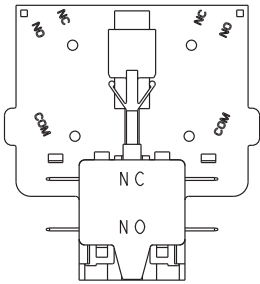
**Sems Screws**  
#10-32 Sems Screw  
with Pressure Plate



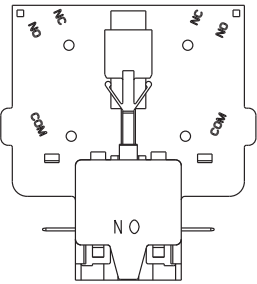
**Box Lugs**  
Lug accepts 14-4  
Cu/Al AWG

**Auxiliary Switches**

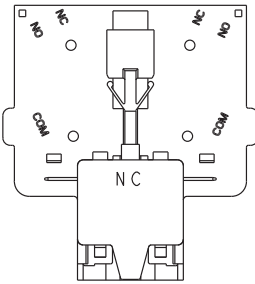
Various interlock / auxiliary switches are available for the DPC series contactor. All auxiliary switches for the DPC are snap-on design, no tools required.



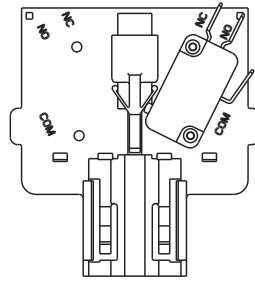
**1 NO / 1 NC**  
(1672419-1)



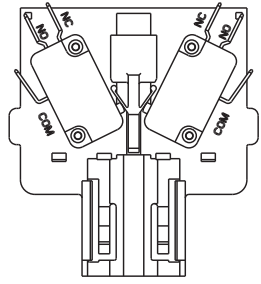
**1 NO**  
(1672419-2)



**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	
	Contact Config. NO	Contact Config. NC	Kit Catalog Number	Number of Kits Required
Single unit interlock configurations listed. Maximum of two. (One on each side.)	1	1	1672419-1	1
	1	0	1672419-2	1
	0	1	1672419-3	1
	2	2	1672419-1	2
See footnote (1) for ratings.	2	0	1672419-2	2
	0	2	1672419-3	2
SPDT Circuit (Either one or two switches per side.) See footnote (2) for ratings.	1	1	1672418-1	1
	2	2	1672418-2	1
	2	2	1672418-1	2
SPDT Dry Circuit 0.1 amp max. Gold Flashed Contacts	4	4	1672418-2	2
	1	1	1672418-3	1
	2	2	1672418-4	1
	4	4	1672418-4	2

**Footnotes: Ratings of Auxiliary Interlocks / Switches**

(1) Contact Rating Single Circuit NO or NC and two circuit NO/NC:

	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