

# Model 93 - 3100 series

## Definite Purpose Contactor 4-pole, 25-40 FLA AC Coil

**UL** File E75492  
**CE** File EN60947-4-1:1991  
IEC 947-4-1

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 ensure the product meets the requirements for a given application.

### Features

- 4-pole contactors.
- Convenient "universal" mounting plate.
- Optional interlock/auxiliary switches available.

### Contact Data @ 25°C

**Arrangements:** 4 Form X (4PST-NO-DM).  
**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.

### Environmental Data

**Temperature Range:** Storage and Operating: -40°C – +65°C.  
**Flammability:** UL 94-HB housing.

### Mechanical Data

#### Contact Termination:

##### 25, 30 FLA Models

**Type:** #10-32 Screw with quad 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.

##### 40 FLA Models

**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:

Optional on 25-30 FLA models, standard on 40 FLA models.

**Weight:** 24 oz. (683 g) approximately

### Contact Ratings

Full Load Amps	Number of Poles	Line Voltage	Locked Rotor Amps	Resistive Amps Rating	Maximum Horsepower		
					Voltage	Single Phase	Three Phase
25	3	240/277	150	35	110/120	2	-
		480	125	35	200/208	-	7.5
		600	100	35	240/277	5	10
					480	-	15
30	3	240/277	180	40	110/120	2	-
		480	150	40	200/208	-	10
		600	120	40	240/277	5	10
					480	-	15
40	3	240/277	240	50	110/120	3	-
		480	200	50	200/208	-	10
		600	160	50	240/277	7.5	10
					480	-	20

### Coil Data

Nominal Coil Voltage	24	120	208/240	277	480
Maximum Pickup Volts	19.2	93	177	220	384
Drop-Out Volts Range	6 -15	20 - 70	40 - 140	50-185	150 - 270
Nominal Inrush VA @ 50 Hz	68	68	68	58	48
Nominal Inrush VA @ 60 Hz	60	60	60	52	52
Nominal Sealed VA @ 50 Hz	14	14	14	11	11
Nominal Sealed VA @ 60 Hz	9	9	9.5	9.5	9
Nominal DC Resistance - Ohms	5	148	520	750	2700

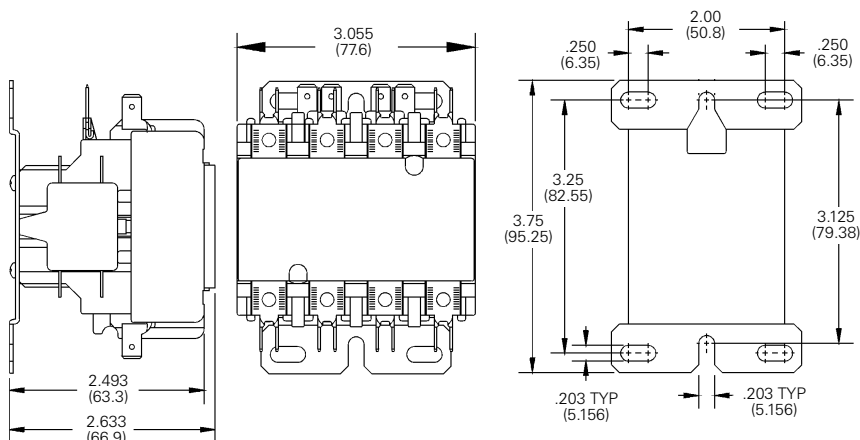
Ordering Information

Typical Part No. ▶	<b>3100</b>	-	<b>40</b>	<b>Q</b>	<b>9</b>	<b>999</b>
<b>1. Series:</b> 3100 = 4-pole, 25-40 FLA contactor						
<b>2. Packaging:</b> Y = Individual Pack - = Bulk Pack A-ZZZ = Customer specific information (assigned by factory)						
<b>3. Pole Configuration:</b> 40 = 4 Form X (4PST-NO-DM)						
<b>4. Coil Voltage (50/60 Hz.):</b> Q = 24VAC    U = 208/240VAC    H = 480VAC    J = 120VAC, molded    M = 277VAC, molded T = 120VAC    V = 277VAC    I = 24VAC, molded    K = 208/240VAC, molded    W = 480VAC, molded						
<b>5. Contact Ratings (Inductive):</b> 8 = 25 FLA    9 = 30 FLA    10 = 40 FLA						
<b>6. Customer ID Suffix:</b> 999 = Standard Model    000-998 = Factory assigned customer ID						
<b>7. Option Code:</b> Leave Blank = No customer-specific options    A - ZZ = Factory assigned customer-specific options.						

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

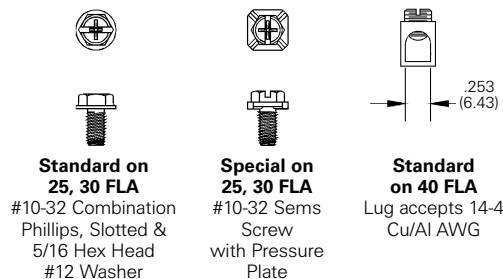
None at present.

Outline Dimensions



Shown with Optional Auxiliary Switch

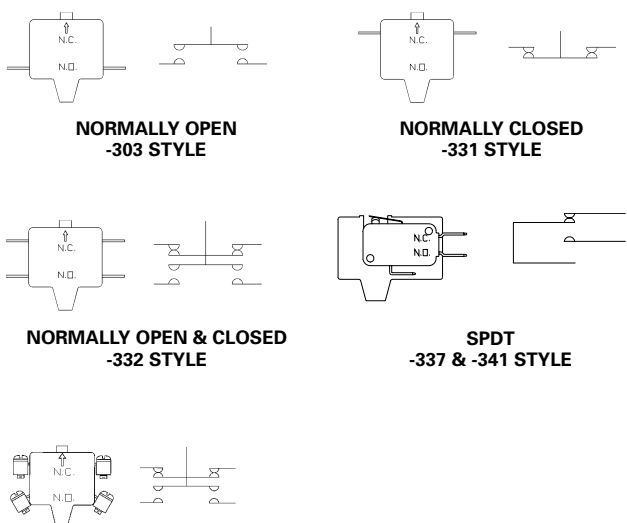
Termination Options



**ORDERING NOTE:** "Standard" terminals need not be specified in the "Ordering Information" chart above. "Special" terminals are offered on a special order basis. Special order items may be subject to extended leadtimes and significant minimum order quantities. Your Tyco Electronics sales engineer must consult with the factory before providing price and availability information regarding items with these options.

Auxiliary Switches

Various interlock / auxiliary switches are available for the Model 93 contactor.



W/ #6-32 SCREW & SADDLE CLAMP -344 STYLE

Equipped with 0.250" (6.35) Quick Connect Terminals

Description	Factory Modifications		Field Added Kits	
	Contact Config. NO	NC	Kit Catalog Number	Number of Kits Required
Single unit interlock configurations listed. Maximum of two. Must be same polarity. See footnote (1) for ratings.	1	0	34220-303N	1
	0	1	34220-331N	1
	1	1	34220-332N	1
	2	0	34220-303N	2
	0	2	34220-331N	2
SPDT Circuit See footnote (2) for ratings.	1	1	34220-337N	1
	2	2	34220-337N	2
SPDT Dry Circuit, 0.1 amp max. Gold Flashed Contacts	1	1	34220-341N	1
	2	2	34220-340N	1

Equipped with #6-32 Screw Terminals & Saddle Clamps

Description	Factory Modifications		Field Added Kits	
	Contact Config. NO	NC	Kit Catalog Number	Number of Kits Required
Single unit interlock configurations listed. Maximum of two. Must be same polarity. (note 1)	1	0	34220-342N	1
	0	1	34220-343N	1
	1	1	34220-344N	1

Footnotes: Ratings of Auxiliary Interlocks / Switches

(1) Contact Rating Single Circuit NO or NC and two circuit NO/NC:	(2) Contact Rating SPDT (337):
120V    240V    480V    600V	10A, 1/3 HP, 125 or 250 VAC
Break    3.0A    1.5A    0.75A    0.6A	1/2A, 125 VDC; 1/4A, 250 VDC.
Make    30A    15A    7.5A    6A	4A 120 VAC on Lamp Load
Continuous    10A    10A    10A    10A	