

# Model 93 - 3100 series

## Definite Purpose Contactor 3-pole, 50-60 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

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

### Contact Data @ 25°C

**Arrangements:** 3 Form X (3PST-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:

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

**Wire Size:** 14-2 Cu/Al AWG

**Tightening Torque:** 50 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.

**Weight:** 32 oz. (910 g) approximately

### Contact Ratings

Full Load Amps	Number of Poles	Line Voltage	Locked Rotor Amps	Resistive Amps	Tungsten/Ballast Amps	Maximum Horsepower		
						Voltage	Single Phase	Three Phase
50	3	240	300	65	-	110/120	3	-
		480	250	65	53	200/208	7.5	15
		600	200	65	-	240/277	10	15
						480	-	25
						600	-	25
60	3	240	360	75	-	110/120	5	-
		480	300	75	53	200/208	7.5	25
		600	240	75	-	240/277	10	25
						480	-	30
						600	-	30

### Coil Data

Nominal Coil Voltage	24	120	208/240	277	480
Maximum Pickup Volts	182	93	177	235	374
Drop-Out Volts Range	6 -15	20 - 70	40 - 135	50-180	120 - 286
Nominal Inrush VA @ 50 Hz	140	140	140	140	140
Nominal Inrush VA @ 60 Hz	132	132	132	132	132
Nominal Sealed VA @ 50 Hz	20	20	20	20	20
Nominal Sealed VA @ 60 Hz	14	14	14	14	14
Nominal DC Resistance - Ohms	2.4	45	180	280	852

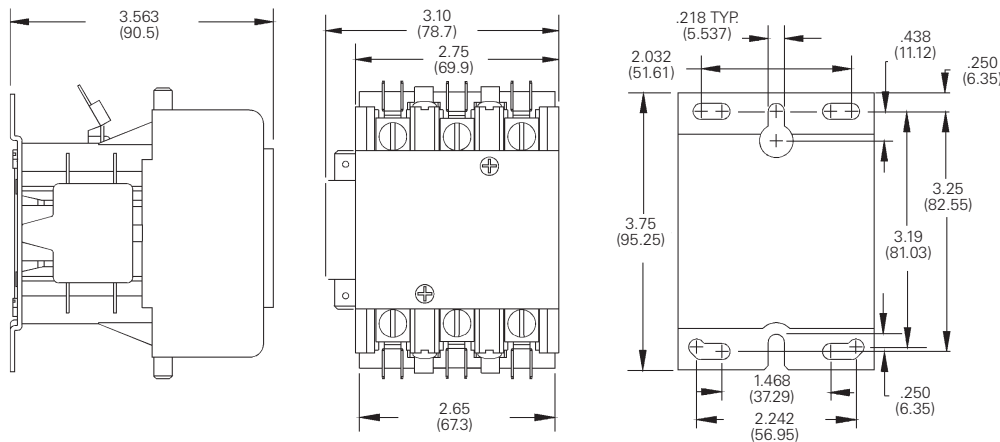
**Ordering Information**

<b>Typical Part No. ▶</b>	<b>3100</b>	-	<b>30</b>	<b>I</b>	<b>16</b>	<b>999</b>	
<b>1. Series:</b> 3100 = 3-pole, 50-60 FLA contactor							
<b>2. Packaging:</b> Y = Individual Pack - = Bulk Pack A-ZZZ = Customer specific information (assigned by factory)							
<b>3. Pole Configuration:</b> 30 = 3 Form X (3PST-NO-DM)							
<b>4. Coil Voltage (50/60 Hz.):</b> I = 24VAC, molded      K = 208/240VAC, molded J = 120VAC, molded      M = 277VAC, molded      W = 480VAC, molded							
<b>5. Contact Ratings (Inductive):</b> 16 = 50 FLA      17 = 60 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.**

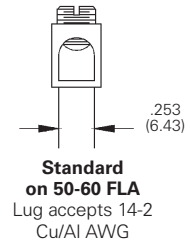
None at present.

**Outline Dimensions**

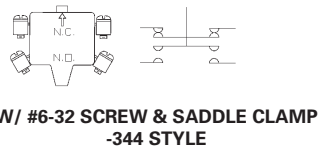
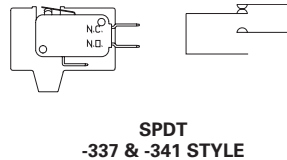
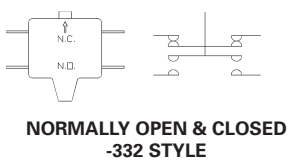
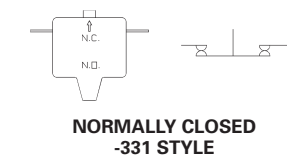
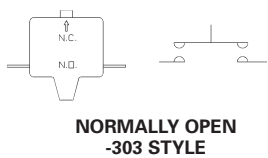


Shown with Optional Auxiliary Switch

**Termination**



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



Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

**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.	1	0	34300-303	1
	0	1	34300-331	1
Maximum of two. Must be same polarity.	1	1	34300-332	1
	2	0	34300-303	2
See footnote (1) for ratings.	0	2	34300-331	2
	2	2	34300-332	2
SPDT Circuit	1	1	34300-337	1
See footnote (2) for ratings.	2	2	34300-337	2
SPDT Dry Circuit, 0.1 amp max.	1	1	34300-341	1
Gold Flashed Contacts	2	2	34300-340	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.	1	0	34300-342	1
	0	1	34300-343	1
Maximum of two. Must be same polarity. (note 1)	1	1	34300-344	1

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

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

(2) Contact Rating SPDT (337):  
 10A, 1/3 HP, 125 or 250 VAC  
 1/2A, 125 VDC; 1/4A, 250 VDC;  
 4A 120 VAC on Lamp Load

Specifications and availability subject to change.

www.tycoelectronics.com  
 Technical support:  
 Refer to inside back cover.