

# Model 96 - 3100 series

## Definite Purpose Contactor 1- or 2-pole, 20-40 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

- Robust 1- and 2-pole contactors.
- Shunt available on 1-pole models.
- Convenient mounting plate.

### Contact Data @ 25°C

**Arrangements:** 1 Form X (SPST-NO-DM) with or without shunt and 2 Form X (DPST-NO-DM).

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

**Material:** Silver Cadmium Oxide.

### Coil Data @ 25°C

**Voltage:** 24 - 277 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:**

**20, 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.

**Arc Cover:** Optional on 20-30 FLA models, standard on 40 FLA models.

**Weight:** One Pole Types: 8 oz. (227 g) approximately.

Two Pole Types: 9.6 oz. (273 g) approximately

### Contact Ratings

Full Load Amps	Number of Poles	Line Voltage	Locked Rotor Amps	Resistive Amps Rating	Maximum Horsepower	
					Voltage	Single Phase
20	2	240/277	120	30	120	2
		480	100	30	240	3
		600	80	30		
25	1	240/277	150	30	120	1
		480	50	30	240	2
		600	40	30		
25	2	240/277	150	35	120	2
		480	125	35	240	3
		600	100	35		
30	1	240/277	150	40	120	1
		480	75	40	240	2
		600	50	40		
30	2	240/277	150	40	120	2
		480	125	40	240	3
		600	100	40		
40	1	240/277	240	50	120	2
		480	200	50	240	3
		600	160	50		
40	2	240/277	240	50	120	2
		480	200	50	240	3
		600	160	50		

### Coil Data

	1-Pole Models				2-Pole Models			
	24	120	208/240	277	24	120	208/240	277
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 - 140	50 - 165	6 - 15	20 - 70	40 - 140	50 - 165
Nominal Inrush VA @ 50 Hz	22.5	22.5	22.5	22.5	37	37	37	37
Nominal Inrush VA @ 60 Hz	20	20	20	20	35	35	35	35
Nominal Sealed VA @ 50 Hz	7	7	7	7	8	8	8	8
Nominal Sealed VA @ 60 Hz	5.25	5.25	5.25	5.25	7	7	7	7
Nominal DC Resistance - Ohms	16.5	420	1850	2650	11	250	1000	1600

**Ordering Information**

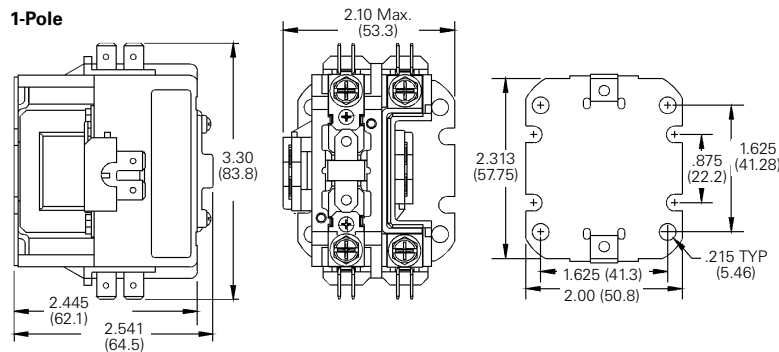
<b>Typical Part No. ▶</b>	<b>3100</b>	-	<b>20</b>	<b>Q</b>	<b>6</b>	<b>999</b>									
<p><b>1. Series:</b> 3100 = 1- or 2-pole, 20-40 FLA contactor</p> <p><b>2. Packaging:</b> Y = Individual Pack - = Bulk Pack A-ZZZ = Customer specific information (assigned by factory)</p> <p><b>3. Pole Configuration:</b> 10 = 1 Form X (SPST-NO-DM) 15 = 1 Form X (SPST-NO-DM) with Shunt 20 = 2 Form X (DPST-NO-DM)</p> <p><b>4. Coil Voltage (50/60 Hz.):</b> Q = 24VAC      T = 120VAC      U = 208/240VAC P = 100VAC     S = 200VAC      V = 277VAC</p> <p><b>5. Contact Ratings (Inductive):</b></p> <table border="0"> <tr> <td>1 = 25 FLA on 1-pole models</td> <td>3 = 20 FLA on 2-pole models</td> </tr> <tr> <td>2 = 30 FLA on 1-pole models</td> <td>5 = 26 FLA on 2-pole models</td> </tr> <tr> <td>14 = 35 FLA on 1-pole models</td> <td>6 = 30 FLA on 2-pole models</td> </tr> <tr> <td>19 = 40 FLA on 1-pole models</td> <td>18 = 40 FLA on 2-pole models</td> </tr> </table> <p><b>6. Customer ID Suffix:</b> 999 = Standard Model      000-998 = Factory assigned customer ID</p> <p><b>7. Option Code:</b> Leave Blank = No customer-specific options      A - ZZ = Factory assigned customer-specific options.</p>								1 = 25 FLA on 1-pole models	3 = 20 FLA on 2-pole models	2 = 30 FLA on 1-pole models	5 = 26 FLA on 2-pole models	14 = 35 FLA on 1-pole models	6 = 30 FLA on 2-pole models	19 = 40 FLA on 1-pole models	18 = 40 FLA on 2-pole models
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**Standard part numbers listed below are more likely to be available from stock.**

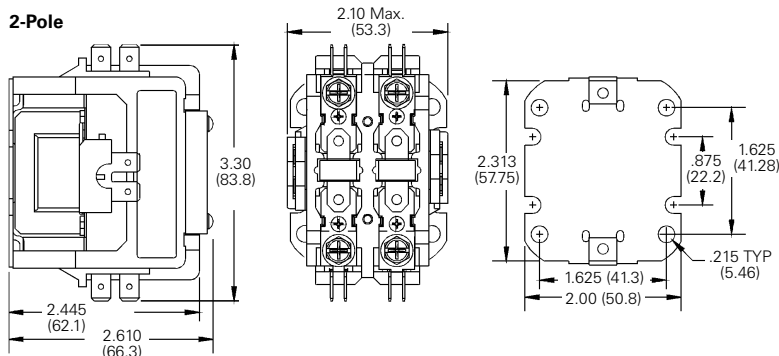
3100-15Q2999	3100-20Q6999	3100-20Q18999CL
3100-15T2999	3100-20T6999	3100-20T18999CL
3100-15U2999	3100-20U6999	3100-20U18999CL

**Outline Dimensions**

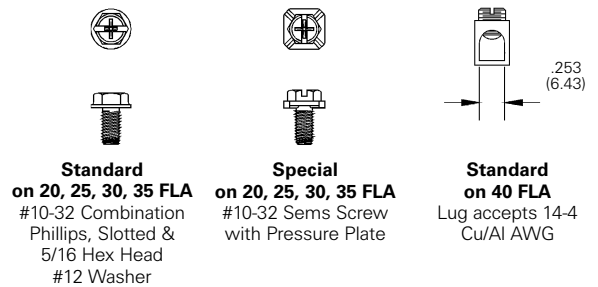
**1-Pole**



**2-Pole**



**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.