

Model 96 - 3100 series

Definite Purpose Contactor 1- or 2-pole, 20-40 FLA AC Coil

Nus File E75492 **CE** S 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.

Environmental Data

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

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.

Contact Ratings

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/AI 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

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

Coil Data

| | 1-Pole Models | | | | | | | |
|------------------------------|---------------|---------|----------|----------|--------|---------|----------|----------|
| 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 |

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

Specifications and availability subject to change

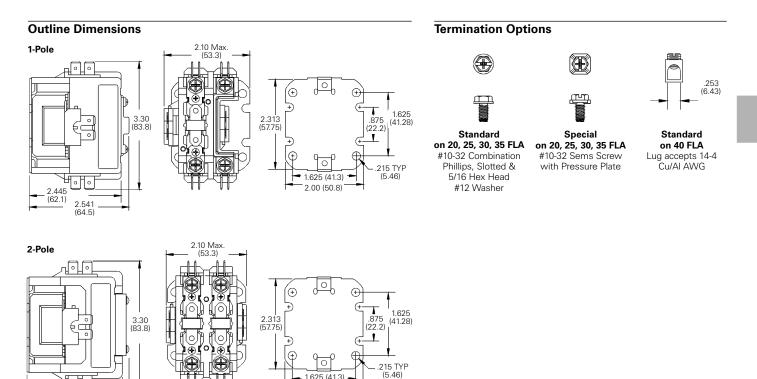
www.tycoelectronics.com Technical support: Refer to inside back cover

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| 1. Series: | | _ | | | |
|--|--|------------------|--|--|--|
| 3100 = 1- or 2-pole, 20-40 FLA contactor | | | | | |
| 2. Packaging: Y = Individual Pack - = Bulk Pack A-ZZZ = Customer specific information (a: | ssigned by factory) | | | | |
| 3.Pole Configuration: 10 = 1 Form X (SPST-NO-DM) 15 = 1 Form X (SPST-NO-DM) with Shunt 20 = 2 Form X (DPST-NO-DM) | | | | | |
| | = 208/240VAC = 277VAC | | | | |
| $\begin{array}{ll} 2 = 30 \ \text{FLA on 1-pole models} & 5 \\ 14 = 35 \ \text{FLA on 1-pole models} & 6 \end{array}$ | = 20 FLA on 2-pole n = 26 FLA on 2-pole n = 30 FLA on 2-pole n 8 = 40 FLA on 2-pole | nodels nodels | | | |
| 6. Customer ID Suffix: 999 = Standard Model 000-998 = F | actory assigned custo | omer ID | | | |

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 |



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.

1.625 (41.3) .

2.00 (50.8)

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2.610 (66.3)

2.445 (62.1)

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