

Model A - 3100 series

Definite Purpose Contactor 3-pole, 120 FLA AC Coil

File E75492

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: 2 – 4-0 Cu/Al AWG
Tightening Torque: 100 in.-lbs.
Coil Termination: 0.250" quick connect and a #6-32 screw.
Arc Cover: Standard.
Weight: 128 oz. (3640 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 |
| 120 | 3 | 240 | 720 | 150 | 110/120 | 10 | - |
| | | 480 | 600 | 150 | 200/208 | 20 | 30 |
| | | 600 | 480 | 150 | 240 | 25 | 40 |
| | | | | | 480 | - | 75 |
| | | | | | 600 | - | 75 |

Coil Data

| | 24 | 120 | 208/240 | 277 | 480 |
|------------------------------|--------|-------|---------|--------|---------|
| Nominal Coil Voltage | 24 | 120 | 208/240 | 277 | 480 |
| Maximum Pickup Volts | 20.4 | 93 | 176 | 235 | 374 |
| Drop-Out Volts Range | 6-15.6 | 20-70 | 40-135 | 65-180 | 150-270 |
| Nominal Inrush VA @ 50 Hz | 470 | 600 | 600 | 600 | - |
| Nominal Inrush VA @ 60 Hz | 400 | 510 | 510 | 510 | 510 |
| Nominal Sealed VA @ 50 Hz | 43 | 50 | 50 | 50 | - |
| Nominal Sealed VA @ 60 Hz | 40 | 48 | 48 | 40 | 48 |
| Nominal DC Resistance - Ohms | .264 | 4.73 | 18.6 | 30.25 | 78 |

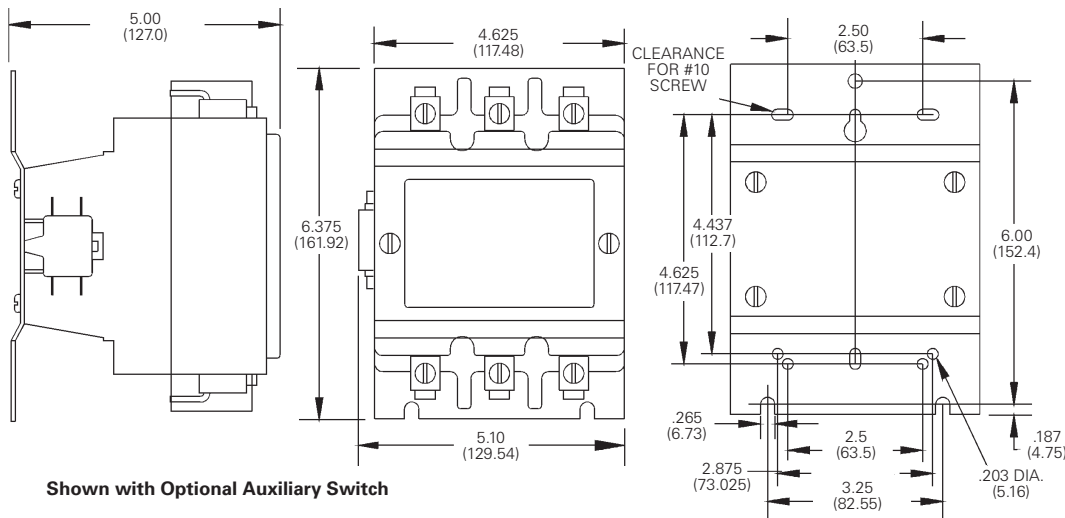
Ordering Information

| | | | | | | | |
|--|-------------|---|-----------|----------|-----------|------------|--|
| Typical Part No. ▶ | 3100 | - | 30 | Q | 12 | 999 | |
| 1. Series: 3100 = 3-pole, 120 FLA contactor | | | | | | | |
| 2. Packaging: Y = Individual Pack - = Bulk Pack A-ZZZ = Customer specific information (assigned by factory) | | | | | | | |
| 3. Pole Configuration: 30 = 3 Form X (3PST-NO-DM) | | | | | | | |
| 4. Coil Voltage (50/60 Hz.): Q = 24VAC U = 208/240VAC H = 480VAC T = 120VAC V = 277VAC | | | | | | | |
| 5. Contact Ratings (Inductive): 12 = 120 FLA | | | | | | | |
| 6. Customer ID Suffix: 999 = Standard Model 000-998 = Factory assigned customer ID | | | | | | | |
| 7. Option Code: 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.

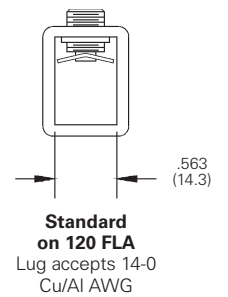
3100Y30Q12999CJ 3100Y30T12999CJ 3100Y30U12999CJ

Outline Dimensions



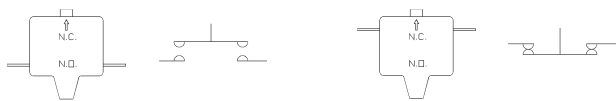
Shown with Optional Auxiliary Switch

Termination



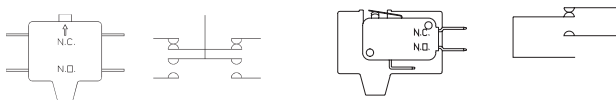
Auxiliary Switches

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



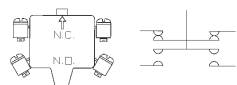
**NORMALLY OPEN
-303 STYLE**

**NORMALLY CLOSED
-331 STYLE**



**NORMALLY OPEN & CLOSED
-332 STYLE**

**SPDT
-337 & -341 STYLE**



**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. | 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: | (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 | |

Engineering Notes

