

Model 98 - 3100 series

Definite Purpose Contactor
3-pole, 20-40 FLA
AC Coil

c UL us 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.
- Industry-standard mounting plate.
- Optional interlock/auxiliary switches available.
- Manual test button is standard.
- Coil dust cover helps keep dust and dirt away from magnet and coil area.
- Double E magnet system provides optimal performance.

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:
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, standard.
A 0.250" quick connect and a #6-32 screw, optional.
Arc Cover: Optional on 20-30 FLA models, standard on 40 FLA models.
Weight: 16 oz. (455 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
20	3	240/277 480 600	120 100 80	30 30 30	110/120 200/240 480/600	1.5 3 -	- 7.5 7.5
25	3	240/277 480 600	150 125 100	35 35 35	110/120 200/208 240/277 480 600	2 - 5 - -	- 7.5 10 15 20
30	3	240/277 480 600	180 150 120	40 40 40	110/120 200/208 240/277 480 600	2 - 5 - -	- 10 10 15 20
40	3	240/277 480 600	240 200 160	50 50 50	110/120 200/208 240/277 480 600	3 - 7.5 - -	- 10 10 20 25

Coil Data

Nominal Coil Voltage	24	120	208/240	277	480
Maximum Pickup Volts	18	88	177	220	384
Drop-Out Volts Range	6 -15	20 - 70	40 - 140	65 - 185	150 - 270
Nominal Inrush VA @ 50 Hz	60	60	60	60	65
Nominal Inrush VA @ 60 Hz	53	53	53	53	53
Nominal Sealed VA @ 50 Hz	6.0	6.0	6.0	6.0	6.0
Nominal Sealed VA @ 60 Hz	5	5	5	5	5
Nominal DC Resistance - Ohms	7	180	720	950	3100

Dimensions are shown for reference purposes only.
Dimensions are in inches over (millimeters) unless otherwise specified.
Specifications and availability subject to change.

Ordering Information

Typical Part No. ►	3100	-	30	Q	9	999

1. Series:
3100 = 3-pole, 20-40 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 J = 120VAC, molded M = 277VAC, molded
T = 120VAC V = 277VAC I = 24VAC, molded K = 208/240VAC, molded W = 480VAC, molded

5. Contact Ratings (Inductive):
7 = 20 FLA 8 = 25 FLA 9 = 30 FLA 10 = 40 FLA

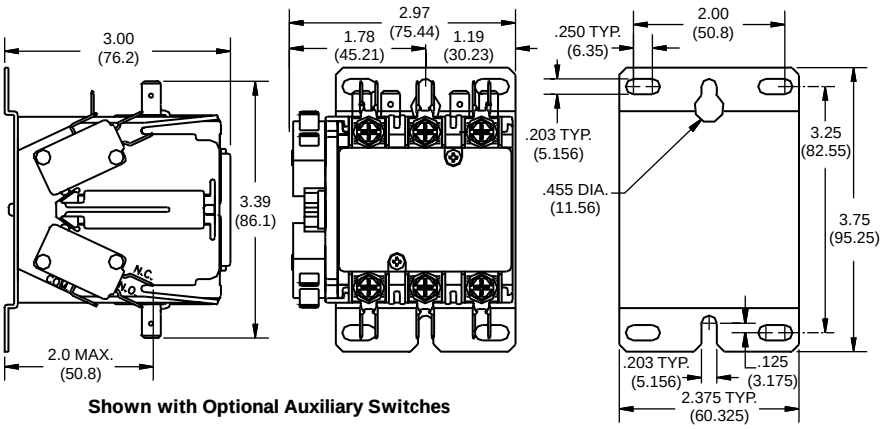
6. Customer ID Suffix:
999 = Standard Model 000-998 = Factory assigned customer ID

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.

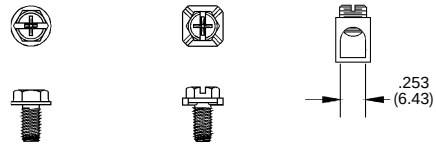
3100-30Q9999CY	3100-30U9999CY	3100-30T10999CG
3100-30T9999CY	3100-30Q10999CG	3100-30U10999CG

Outline Dimensions



Shown with Optional Auxiliary Switches

Termination Options



Standard on 20, 25, 30, 35 FLA
#10-32 Combination Phillips, Slotted & 5/16 Hex Head #12 Washer

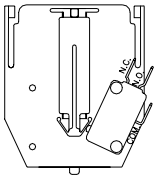
Special on 20, 25, 30, 35 FLA
#10-32 Sems Screw with Pressure Plate

Standard on 40 FLA
Lug accepts 14-4 Cu/Al AWG

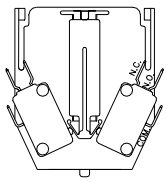
ORDERING NOTE: "Standard" terminals need not be specified in the "Ordering Information" chart above. "Special" terminals are offered on a special order basis. Special order items may be subject to extended leadtimes and significant minimum order quantities. Your Tyco Electronics sales engineer must consult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

Auxiliary Switches

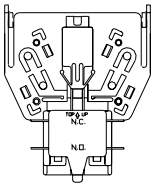
Various interlock / auxiliary switches are available for the Model 98 contactor. All auxiliary switches for the Model 98 are snap-on design, no tools required.



ONE SPDT SWITCH PER SIDE



TWO SPDT SWITCHES PER SIDE



1 N/O / 1 N/C

Equipped with 0.250" (6.35) Quick Connect Terminals

Description	Factory Modifications Contact Config. NO	NC	Field Added Kits Kit Catalog Number	Number of Kits Required
Single unit interlock	1	0	98220-303	1
configurations listed.	0	1	98220-331	1
Maximum of two.	1	1	98220-332	1
(One on each side.)	2	0	98220-303	2
	0	2	98220-331	2
See footnote (1) for ratings.	2	2	98220-332	2
SPDT Circuit	1	1	98220-337	1
(Either one or two	2	2	98220-338	1
switches per side.)	2	2	98220-337	2
See footnote (2) for ratings.	4	4	98220-338	2
SPDT Dry Circuit	1	1	98220-341	1
0.1 amp max.	2	2	98220-340	1
Gold Flashed Contacts	4	4	98220-340	2

Equipped with #6-32 Screw Terminals & Saddle Clamps

Description	Factory Modifications Contact Config. NO	NC	Field Added Kits Kit Catalog Number	Number of Kits Required
Single unit interlock	1	0	98220-303	1
configurations listed.	0	1	98220-331	1
Maximum of two.	1	1	98220-332	1
(One on each side.)	2	0	98220-303	2
	0	2	98220-331	2
See footnote (1) for ratings.	2	2	98220-332	2

Footnotes: Ratings of Auxiliary Interlocks / Switches

(1) Contact Rating Single Circuit NO or NC and two circuit NO/NC:

	120V	240V	480V	600V
Amperes - Break	3.0	1.5	0.75	0.6
Amperes - Make	30	15	7.5	6
Amperes - Continuous	10	10	10	10

(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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:
3100-20U6777C