

9100 series

Power Relay 1- and 2-pole, 3-12 FLA AC or DC 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

- Single- or double-pole relay used extensively in HVAC applications.
- Multi-positional mounting without affecting operation.
- Convenient 0.250" (6.35 mm) quick connect terminals.

Contact Data @ 25°C

Arrangements: 1 Form A (SPST-NO), 1 Form B (SPST-NC), 1 Form C (SPDT), 2 Form A (DPST-NO), 2 Form B (DPST-NC), 2 Form C (DPDT) or 1 Form A + 1 Form B (SPST-NO+SPST-NC).

Materials: Silver, Fine Silver and Gold Alloy.

Maximum Ratings:

Silver (Power) Contacts

All Forms: 3/4 HP @ 125/250VAC;
12 FLA, 60 LRA, 15A resistive @ 125VAC;
6 FLA, 35 LRA, 15A resistive @ 250/277VAC;
3 FLA, 18 LRA, 12.5A resistive @ 480VAC;
3 FLA, 14 LRA @ 600VAC;

Form A only: 25A @ 277VAC, resistive.

Fine Silver and Gold Alloy (Pilot) Contacts

All Forms: 1/10 HP @ 125/250VAC;
3A @ 277VAC;
125VA @ 125VAC.

Expected Life: 1 million ops., mechanical.
250,000 ops., at rated resistive loads.
100,000 ops., at rated inductive loads.

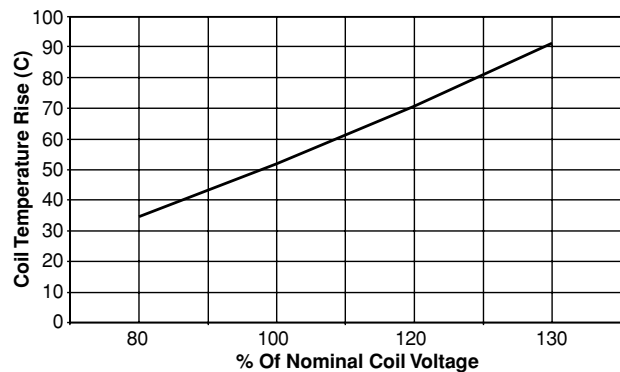
Initial Dielectric Strength

Initial Breakdown Voltage: 2,200 VAC @ 60 Hz. between live parts and exposed non-current carrying metal parts.

Coil Data @ 25°C

Voltage: 12 & 24 VDC; 24-277 VAC, 50/60 Hz.
Max. Sealed Power: 9.5 VA (AC coils.); 5.75 W (DC coils).
Nominal Inrush Power: 21.5 VA (AC coils.); 5.75 W (DC coils).
Insulation Class: UL Class B (130°C).
Duty Cycle: Continuous.

Coil Temperature Rise Above Ambient



Operate Data @ 25°C

Must Operate Voltage: Approximately 85% of AC nominal coil voltage.
Approximately 75% of DC nominal coil voltage.

Environmental Data

Temperature Range: Storage and Operating: -40°C – +65°C.

Mechanical Data

Termination: 0.250" (6.35 mm) quick connects. Dual terminals on the coil are standard.
Weight: 6.08 oz. (173 g) approximately

Ordering Information

Typical Part No. ▶	9100	-2	3	3	Q	999												
<p>1. Series: 9100 = 1- or 2-pole, 3-12 FLA relay</p>																		
<p>2. Pole Configuration: 1 = Two-pole 3 = Single-pole (1,2,3 omitted) 4 = Single-pole (4,5,6 omitted)</p>																		
<p>3. Contact Configuration – Poles 4, 5, 6:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1 = 1 Form A (SPST-NO), Silver Contacts.</td> <td style="width: 50%;">7 = 1 Form A (SPST-NO), Gold Alloy Contacts.</td> </tr> <tr> <td>2 = 1 Form B (SPST-NC), Silver Contacts.</td> <td>8 = 1 Form B (SPST-NC), Gold Alloy Contacts.</td> </tr> <tr> <td>3 = 1 Form C (SPDT), Silver Contacts</td> <td>9 = 1 Form C (SPDT), Gold Alloy Contacts</td> </tr> <tr> <td>4 = 1 Form A (SPST-NO), Fine Silver Contacts.</td> <td>0 = 4, 5, 6 Omitted</td> </tr> <tr> <td>5 = 1 Form B (SPST-NC), Fine Silver Contacts.</td> <td></td> </tr> <tr> <td>6 = 1 Form C (SPDT), Fine Silver Contacts</td> <td></td> </tr> </table>							1 = 1 Form A (SPST-NO), Silver Contacts.	7 = 1 Form A (SPST-NO), Gold Alloy Contacts.	2 = 1 Form B (SPST-NC), Silver Contacts.	8 = 1 Form B (SPST-NC), Gold Alloy Contacts.	3 = 1 Form C (SPDT), Silver Contacts	9 = 1 Form C (SPDT), Gold Alloy Contacts	4 = 1 Form A (SPST-NO), Fine Silver Contacts.	0 = 4, 5, 6 Omitted	5 = 1 Form B (SPST-NC), Fine Silver Contacts.		6 = 1 Form C (SPDT), Fine Silver Contacts	
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<p>5. Coil Voltage (50/60 Hz.):</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 16.6%;">B = 12VDC</td> <td style="width: 16.6%;">Q = 24VAC</td> <td style="width: 16.6%;">T = 120VAC</td> <td style="width: 16.6%;">U = 208/240VAC</td> <td style="width: 16.6%;">V = 277VAC</td> </tr> <tr> <td>C = 24VDC</td> <td>P = 100VAC</td> <td>S = 200VAC</td> <td>N = 240VAC</td> <td>QS = 24VAC, low VA</td> </tr> </table>							B = 12VDC	Q = 24VAC	T = 120VAC	U = 208/240VAC	V = 277VAC	C = 24VDC	P = 100VAC	S = 200VAC	N = 240VAC	QS = 24VAC, low VA		
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<p>6. Customer ID Suffix: 999 = Standard Model 000-998 = Factory assigned customer ID</p>																		

Standard part numbers listed below are more likely to be available from stock.

9100-233Q999 9100-233T999 9100-233U999

Outline Dimensions

