

AZ880

10 A SPST / 8 A DPST POLARIZED SUBMINIATURE POWER RELAY SINGLE SIDE STABLE (NON-LATCHING) AND BISTABLE (LATCHING)



FEATURES

- Dielectric strength 4000 Vrms
- Single and dual coil latching versions available
- Epoxy sealed version available
- 10 Amp switching
- UL, CUR file E44211

CONTACTS

Arrangement	SPST (1 Form A), DPST (2 Form A) DPST (1 Form A and 1 Form B)
Ratings	Resistive load: Max. switched power: 300 W or 2500 VA (SPST) 240 W or 2000 VA (DPST) Max. switched current: 10 A (SPST) 8 A (DPST) Max. switched voltage: 150 VDC or 380 VAC* *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	SPST 10 A at 250 VAC general use, 30k cycles 10 A at 30 VDC resistive, 30k cycles 1/3 HP at 250 VAC B300 Pilot Duty DPST 8 A at 250 VAC general use, 30k cycles 8 A at 30 VDC resistive, 30k cycles 1/3 HP at 250 VAC 1/4 HP at 125 VAC
Material	Silver nickel, gold plating optional
Resistance	< 50 milliohms initially (6 V 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	137 mW (2A single side stable, 2 coil latching) 98 mW (1 coil latching or 1A or 1AB single side stable)
Max. Continuous Dissipation	0.75 W at 20°C (68°F) ambient
Temperature Rise	30°C (54°F) at nominal coil voltage
Max. Temperature	105°C (221°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁶ at 10 A 250 VAC resistive (SPST)
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)
Set Time (typical)	5 ms at nominal coil voltage
Reset Time (typical)	4 ms at nominal coil voltage
Dielectric Strength (at sea level)	4000 Vrms coil to contact (-1A, -1AB) 3000 Vrms coil to contact (-2A) 1000 Vrms between contacts 2000 Vrms between contact sets
Insulation Resistance	1000 megohms min. at 20°C 500 Vdc 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" DA at 10 to 55 Hz
Shock	10 g functional
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	6 grams

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Relay has fixed coil polarity.
4. For complete isolation between the relay's magnetic fields, it is recommended that a .197" (5.0 mm) space be provided between adjacent relays.
5. Relay adjustment may be affected if undue pressure is exerted on relay case.
6. Specifications subject to change without notice.



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RELAY ORDERING DATA

AZ880

COIL SPECIFICATIONS - 1 FORM A AND 1 FORM A/1 FORM B				ORDER NUMBER*	
Nominal Coil VDC	Must. Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form A	1 Form A 1 Form B
3	2.1	5.8	45	AZ880-1A-3D	AZ880-1AB-3D
5	3.5	9.7	125	AZ880-1A-5D	AZ880-1AB-5D
6	4.2	11.6	180	AZ880-1A-6D	AZ880-1AB-6D
9	6.3	17.4	405	AZ880-1A-9D	AZ880-1AB-9D
12	8.4	23.2	720	AZ880-1A-12D	AZ880-1AB-12D
24	16.8	46.5	2880	AZ880-1A-24D	AZ880-1AB-24D

*Add suffix "E" for epoxy sealed version. Add suffix "A" for gold plated contacts. Add suffix "R" for reversed polarity coil.

AZ880

COIL SPECIFICATIONS - 2 FORM A				ORDER NUMBER*
Nominal Coil VDC	Must. Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	2 Form A
3	2.1	4.9	32.1	AZ880-2A-3D
5	3.5	8.2	89.3	AZ880-2A-5D
6	4.2	9.8	129	AZ880-2A-6D
9	6.3	14.7	289	AZ880-2A-9D
12	8.4	19.6	514	AZ880-2A-12D
24	16.8	39.3	2056	AZ880-2A-24D

*Add suffix "E" for epoxy sealed version. Add suffix "A" for gold plated contacts. Add suffix "R" for reversed polarity coil.

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COIL SPECIFICATIONS - SINGLE COIL LATCHING				ORDER NUMBER*		
Nominal Coil VDC	Must. Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form A	2 Form A	1 Form A 1 Form B
3	2.1	5.8	45	AZ880P1-1A-3D	AZ880P1-2A-3D	AZ880P1-1AB-3D
5	3.5	9.7	125	AZ880P1-1A-5D	AZ880P1-2A-5D	AZ880P1-1AB-5D
6	4.2	11.6	180	AZ880P1-1A-6D	AZ880P1-2A-6D	AZ880P1-1AB-6D
9	6.3	17.4	405	AZ880P1-1A-9D	AZ880P1-2A-9D	AZ880P1-1AB-9D
12	8.4	23.2	720	AZ880P1-1A-12D	AZ880P1-2A-12D	AZ880P1-1AB-12D
24	16.8	46.5	2880	AZ880P1-1A-24D	AZ880P1-2A-24D	AZ880P1-1AB-24D

*Add suffix "E" for epoxy sealed version. Add suffix "A" for gold plated contacts. Add suffix "R" for reversed polarity coil.

AZ880P2

COIL SPECIFICATIONS - DUAL COIL LATCHING				ORDER NUMBER*		
Nominal Coil VDC	Must. Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form A	2 Form A	1 Form A 1 Form B
3	2.1	4.9	32.1	AZ880P2-1A-3D	AZ880P2-2A-3D	AZ880P2-1AB-3D
5	3.5	8.2	89.3	AZ880P2-1A-5D	AZ880P2-2A-5D	AZ880P2-1AB-5D
6	4.2	9.8	129	AZ880P2-1A-6D	AZ880P2-2A-6D	AZ880P2-1AB-6D
9	6.3	14.7	289	AZ880P2-1A-9D	AZ880P2-2A-9D	AZ880P2-1AB-9D
12	8.4	19.6	514	AZ880P2-1A-12D	AZ880P2-2A-12D	AZ880P2-1AB-12D
24	16.8	39.3	2056	AZ880P2-1A-24D	AZ880P2-2A-24D	AZ880P2-1AB-24D

*Add suffix "E" for epoxy sealed version. Add suffix "A" for gold plated contacts. Add suffix "R" for reversed polarity coil.



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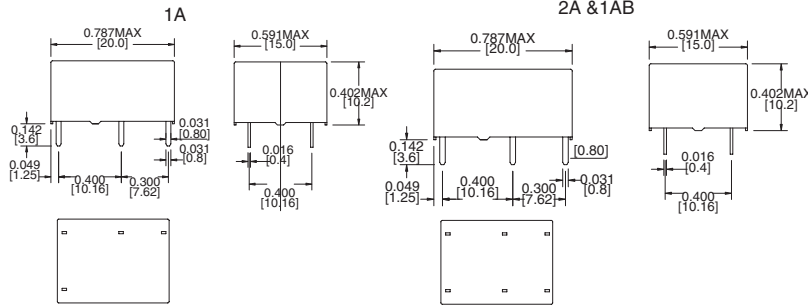
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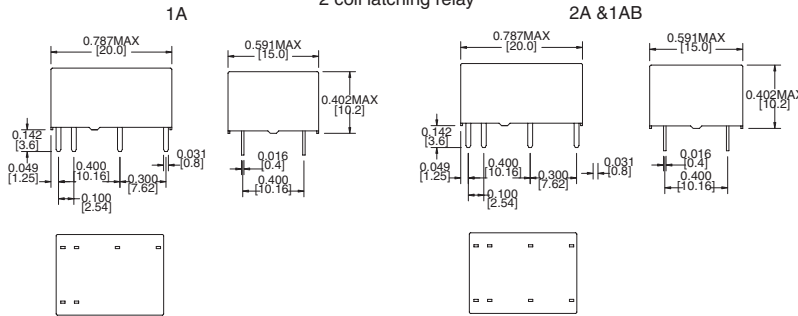
MECHANICAL DATA

Outline Dimensions

Single side stable or 1 coil latching relay

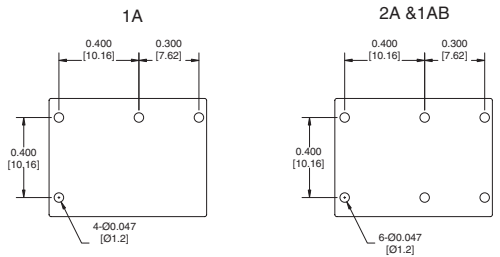


2 coil latching relay

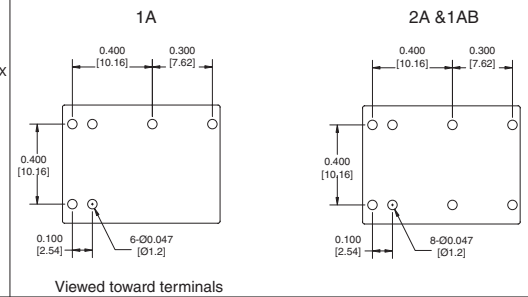


PC Board Layout

Single side stable or 1 coil latching relay



2 coil latching relay



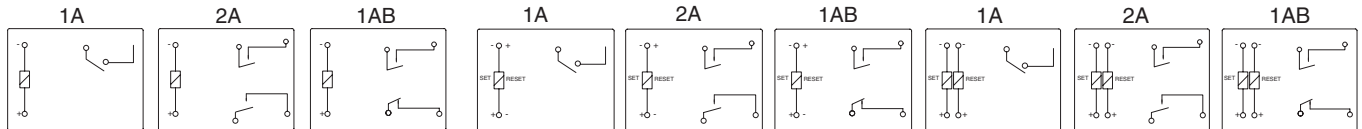
Viewed toward terminals

Wiring Diagram

Single side stable

1 coil latching relay

2 coil latching relay



Viewed toward terminals. Relays shown in de-energized or reset state.

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "



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