AZ880

10 A SPST / 8 A DPST POLARIZED SUBMINIATURE POWER RELAY MONOSTABLE OR LATCHING

FEATURES

- Dielectric strength 4000 Vrms
- Single and dual coil latching versions available
- Epoxy sealed version available
- 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.
Material	Silver nickel [1], silver tin oxide [2], Gold plating available
Resistance	< 50 miliohms initially

COIL

Power	
At Pickup Voltage (typical)	137 mW (2 coil latching or 2A monostable) 98 mW (1 coil latching or 1A or 1AB monost.)
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)

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.
7. DPST (1Form A and 1Form B): Both contacts may be closed simultaneously during transfer at set / reset process.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 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 Recommended coil pulse: 20 ms
Reset Time (typical)	4 ms at nominal coil voltage Recommended coil pulse: 20 ms
Dielectric Strength (at sea level)	4000 Vrms contact to coil (-1A, -1AB) 3000 Vrms coil to contact (-2A) 1000 Vrms between open 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**	At nominal coil voltage -40°C (-40°F) to 70°C (158°F)
Vibration	0.078” (2.0 mm) DA at 10 to 55 Hz
Shock	20 g functional 100 g destructive
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
Packing unit in pcs	20 per plastic tube / 1000 per carton box

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CONTACTS

Rated Load **UL, CUR**	1 Form A 10 A at 250 VAC, General use, 100k cycles [2] 10 A at 250 VAC, General use, 30k cycles [1] 10 A at 30 VDC, Resistive, 100k cycles [2] 8 A at 30 VDC, Resistive, 30k cycles [1] 1/3 HP at 250 VAC, 100k cycles [2] 1/3 HP at 250 VAC, 30k cycles [1] 1/4 HP at 125 VAC, 30k cycles [1] 1/4 HP at 125 VAC, 6k cycles [2] B300 [2] R300 [2] 2 Form A 8 A at 250 VAC, General use, 100k cycles [2] 8 A at 250 VAC, General use, 30k cycles [2] 8 A at 30 VDC, Resistive, 100k cycles [2] 8 A at 30 VDC, Resistive, 30k cycles [1] 600 W 125 VAC, Tungsten, 30k cycles [2] 1/3 HP at 250 VAC, 100k cycles [2] 1/3 HP at 250 VAC, 30k cycles [1] 1/4 HP at 125 VAC, 30k cycles [1][2] B300 [2] R300 [2] 1 Form A and 1 Form B 8 A at 250 VAC, General use, 30k cycles [1][2] 8 A at 30 VDC, Resistive, 30k cycles [1][2] 1/3 HP at 250 VAC, 30k cycles [1][2] 1/4 HP at 125 VAC, 30k cycles [1] 1/4 HP at 125 VAC, 6k cycles [2] B300 [2] R300 [2] All values at 70°C ambient

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 ± 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 “E” after “1A” or “1AB” for silver tin oxide contacts. 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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RELAY ORDERING DATA

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COIL SPECIFICATIONS - 2 FORM A				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 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 “E” after “2A” for silver tin oxide contacts. Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts. Add suffix “R” for reversed polarity coil.

AZ880P1

COIL SPECIFICATIONS - SINGLE COIL LATCHING				ORDER NUMBER*		
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 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 “E” after “1A” or “1AB” or “2A” for silver tin oxide contacts. 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 ± 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 “E” after “1A” or “1AB” or “2A” for silver tin oxide contacts. 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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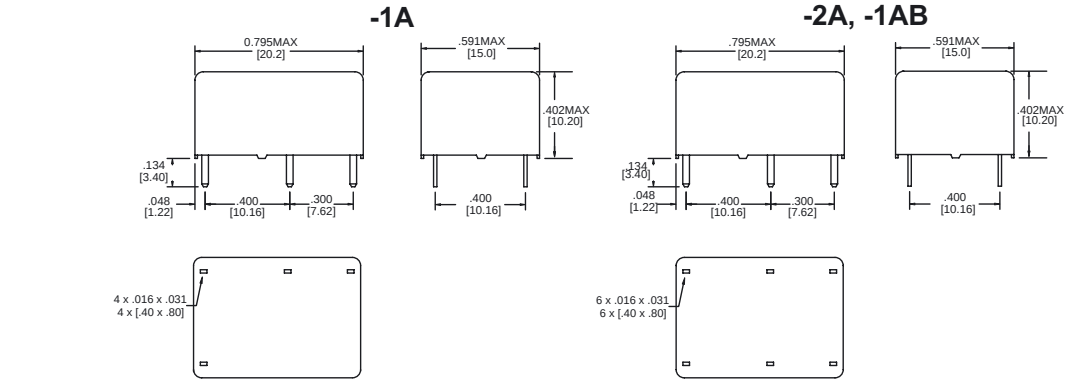
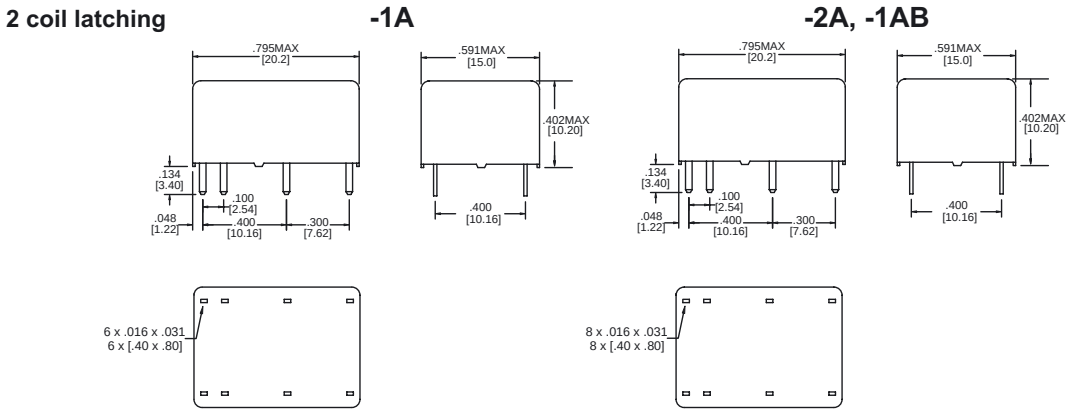
MECHANICAL DATA

Outline Dimensions

Monostable and 1 coil latching

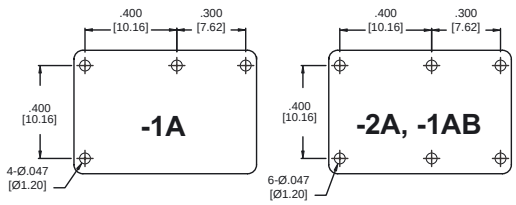


2 coil latching

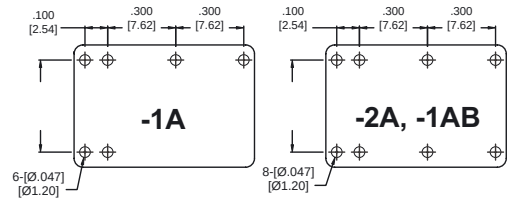


PC Board Layout

Monostable and 1 coil latching



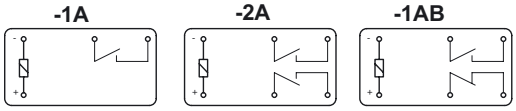
2 coil latching



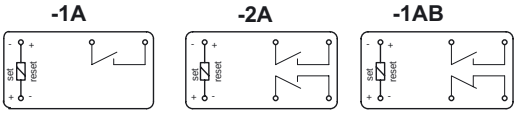
Viewed toward terminals

Wiring Diagrams

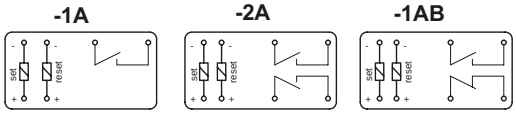
Monostable (Denergized condition)



1 coil latching (Reset condition)



2 coil latching (Reset condition)



Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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