

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 |

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.

ZETTLER electronics GmbH - A ZETTLER GROUP Company

Junkersstr. 3, D-82178 Puchheim, Germany

phone: +49 89 800 97-0 office@ZETTLERelectronics.com

fax: +49 89 800 97-200 www.ZETTLERelectronics.com

This product specification to be used only together with the application notes which can be downloaded from <http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf>

2014-06-17

AZ880

Discontinuation Notice

Discontinuation date AZ880:

30.06.2018

Last time buy:

31.03.2018

Recommended replacement:

please contact us

RELAY ORDERING DATA

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 "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 $\pm 10\%$ | 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 "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 $\pm 10\%$ | 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 "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.

ZETTLER electronics GmbH - A ZETTLER GROUP Company

Junkersstr. 3, D-82178 Puchheim, Germany

phone: +49 89 800 97-0 office@ZETTLERelectronics.com

fax: +49 89 800 97-200 www.ZETTLERelectronics.com

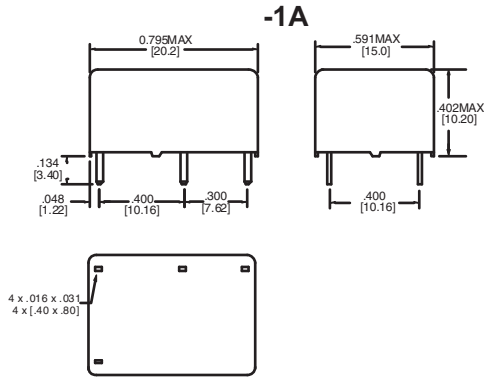
This product specification to be used only together with the application notes which can be downloaded from <http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf>

2014-06-17

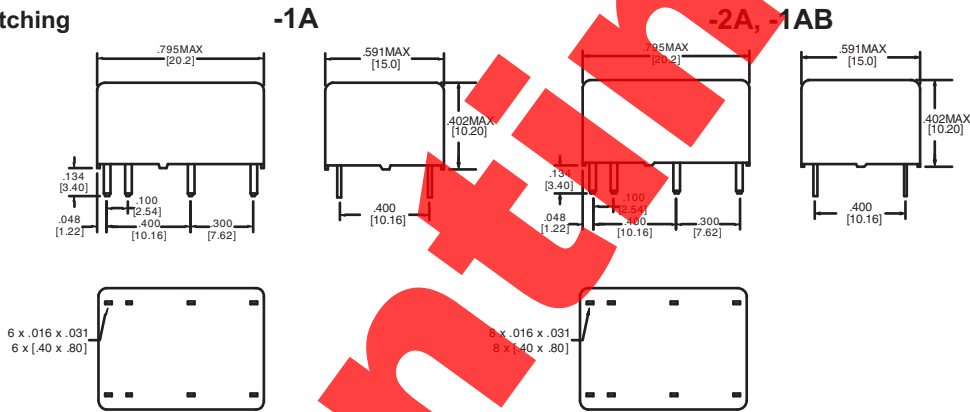
MECHANICAL DATA

Outline Dimensions

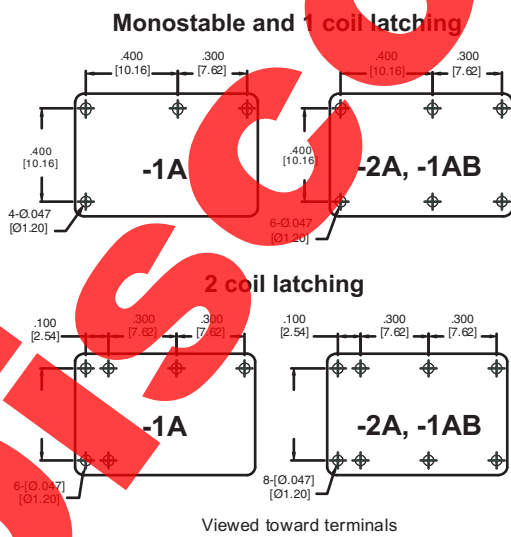
Monostable and 1 coil latching



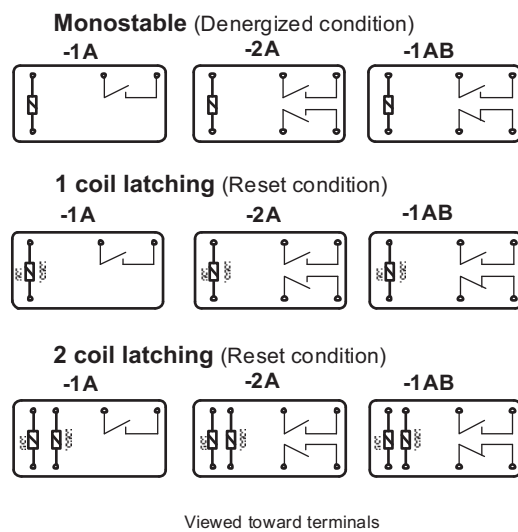
2 coil latching



PC Board Layout



Wiring Diagrams



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