## **AZ22801**

# 40 AMP MINIATURE POWER RELAY

#### **FEATURES**

- Panel Mount
- 1 Form A, B and C contacts available
- AC and DC coils available
- Class F high temperature available
- Lower cost 30A contact available
- UL, CUR file E44211
- TÜV Pending



#### **CONTACTS**

| Arrangement | SPST (1 Form A, or B)<br>SPDT (1 Form C)   |  |  |  |
|-------------|--|--|--|--|
| Ratings     | Resistive load:  |  |  |  |
|             | Max. switched power: 1200W or 7200VA Max. switched current: 40A (Form A) Max. switched voltage: 300VAC, 110VDC   |  |  |  |
| UL, CUR     | NO: 40A at 240VAC, Resistive<br>30A at 277VAC, General Purpose<br>25A at 277VAC, Resistive, 100k cycles<br>20A at 240VAC, Resistive, 250k cycles<br>2HP at 250VAC<br>5A at 280VAC, Ballast |  |  |  |
|             | NC: 35A at 240VAC, Resistive [2]<br>30A at 240VAC / 30VDC, Resistive<br>20A at 277VAC, General Purpose<br>1.5HP at 250VAC<br>5A at 280VAC, Ballast   |  |  |  |
| TÜV         | NO: 40A at 240VAC, 14VDC<br>30A at 277VAC<br>NC: 30A at 240VAC, 14VDC<br>30A at 277VAC   |  |  |  |
| Material    | Silver cadmium oxide [1], silver tin oxide [2]   |  |  |  |
| Resistance  | < 50 milliohms initially (24V, 1A voltage drop method)   |  |  |  |

#### COIL

| Power                          |  |  |  |
|--------------------------------|--|--|--|
| At Pickup Voltage (typical)    | DC: 506mW (30/40A), 844mW (50A)<br>AC: 1.4VA             |  |  |
| Max. Continuous<br>Dissipation | DC: 1.7W at 20°C<br>AC: 2.7VA at 20°C                    |  |  |
| Max. Temperature               | Max. 130°C (266°F) Class B<br>Max. 155°C (311°F) Class F |  |  |

#### **GENERAL DATA**

| Life Expectancy<br>Mechanical<br>Electrical   | Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 30A 120 VAC Res.   |  |  |  |
|---|--|--|--|--|
| Operate Time                                  | 15 msec max. at nominal coil voltage   |  |  |  |
| Release Time                                  | 10 msec max. at nominal coil voltage (without suppression)   |  |  |  |
| Dielectric Strength (at sea level for 1 min.) | 1500Vrms contact to contact<br>2500Vrms contact to coil<br>4000Vrms contact to coil-Contact Factory  |  |  |  |
| Insulation Resistance                         | 1000 megohms min. at 20°C, 500VDC<br>50% RH  |  |  |  |
| Dropout                                       | DC: > 10% of nominal coil voltage<br>AC: > 30% of nominal coil voltage   |  |  |  |
| Ambient Temperature<br>Operating<br>Storage   | -55°C (-67°F) to 100°C (212°F) Class B<br>-55°C (-67°F) to 125°C (257°F) Class B<br>-55°C (-67°F) to 130°C (266°F) Class F<br>-55°C (-67°F) to 155°C (311°F) Class F |  |  |  |
| Vibration                                     | 0.06" DA at 10-55Hz  |  |  |  |
| Shock   | 20g  |  |  |  |
| 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  | 35 grams   |  |  |  |

#### **NOTES**

- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Specifications subject to change without notice.

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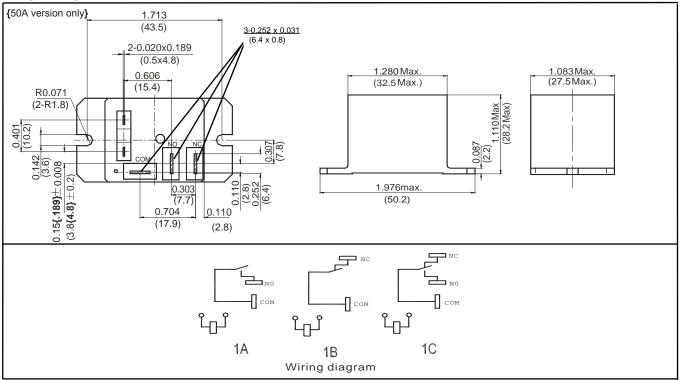
## **AZ22**801

#### **RELAY ORDERING DATA**

|                     | COIL SPECIFICATIONS – DC Coil          |                        |                          |                       |                  |  |
|---------------------|--|------------------------|--------------------------|-----------------------|------------------|--|
| Nominal Coil<br>VDC | Must Operate<br>VDC                    | Max. Continuous<br>VDC | Nominal Current mA ± 10% | Coil Resistance ± 10% | ORDER NUMBER*    |  |
| 3                   | 2.25                                   | 3.9                    | 300                      | 10                    | AZ22801-1A-3DE   |  |
| 5                   | 3.75                                   | 6.5                    | 179                      | 28                    | AZ22801-1A-5DE   |  |
| 6                   | 4.50                                   | 7.8                    | 150                      | 40                    | AZ22801-1A-6DE   |  |
| 9                   | 6.75                                   | 11.7                   | 100                      | 90                    | AZ22801-1A-9DE   |  |
| 12                  | 9.00                                   | 15.6                   | 75                       | 160                   | AZ22801-1A-12DE  |  |
| 15                  | 10.25                                  | 19.5                   | 60                       | 250                   | AZ22801-1A-15DE  |  |
| 18                  | 13.5                                   | 23.4                   | 50                       | 360                   | AZ22801-1A-18DE  |  |
| 24                  | 18.0                                   | 31.2                   | 38                       | 640                   | AZ22801-1A-24DE  |  |
| 48                  | 36.0                                   | 62.4                   | 19                       | 2,560                 | AZ22801-1A-48DE  |  |
| 110                 | 82.50                                  | 143                    | 8                        | 13,445                | AZ22801-1A-110DE |  |
|                     | COIL SPECIFICATIONS – AC Coil 50/60 Hz |                        |                          |                       |                  |  |
| Nominal Coil<br>VAC | Must Operate<br>VAC                    | Max. Continuous<br>VAC | Nominal Coil<br>Power VA | Coil Resistance ±10%  | ORDER NUMBER*    |  |
| 12                  | 9                                      | 15.6                   | 2.0                      | 27                    | AZ22801-1A-12AE  |  |
| 24                  | 18                                     | 31.2                   | 2.0                      | 120                   | AZ22801-1A-24AE  |  |
| 110                 | 82.5                                   | 143                    | 2.0                      | 2,360                 | AZ22801-1A-110AE |  |
| 120                 | 90                                     | 156                    | 2.0                      | 3,040                 | AZ22801-1A-120AE |  |
| 220                 | 165                                    | 286                    | 2.0                      | 13,490                | AZ22801-1A-220AE |  |
| 240                 | 180                                    | 312                    | 2.0                      | 15,740                | AZ22801-1A-240AE |  |
| 277                 | 207.75                                 | 360.1                  | 2.0                      | 20,300                | AZ22801-1A-277AE |  |

Substitute "-1B" or "-1C" in place of "-1A" for 1 Form B or 1 Form C respectively. For silver tin oxide contacts substitute "-1AE", "1BE", or "-1CE" in place of "-1A" or "-1B" or "-1C." For 30A version, add "H" after "-1A", "-1AE", "-1BE", or "-1C", "-1CE.", To indicate class F version, add suffix "F".

#### **MECHANICAL DATA**



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

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