AZ2800

40 AMP MINIATURE POWER RELAY

FEATURES

- DPST-NO and DPDT configuration
- Meets 8mm creepage, 4kV dielectric
- Epoxy sealed versions available
- UL Class F (155°C) standard
- UL, CUR file E44211
- VDE certificate 40023442

CONTACTS

| Arrangement | DPST (2 Form A) DPDT (2 Form C) | | | | |
|------------------|--|--|--|--|--|
| Ratings | Resistive load: | | | | |
| | Max. switched power: 560W or 8310VA Max. switched current: 40A (N.O), 3A (N.C.) Max.switchedvoltage:30VDC*or600VAC | | | | |
| | *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory. | | | | |
| Rated Load UL | Normally open contacts (N.O.) 40A at 277VAC, Resistive, 6k cycles [1][2] 30A at 277VAC, General Use, 100k cycles [1][2] 10A at 600VAC, General Use, 6k cycles [1] 1HP at 120VAC, 100k cycles [1][2] 2.5HP at 240VAC, 100k cycles [1][2] 8FLA / 26LRA at 277/480/600VAC, 30k cycles [1] | | | | |
| | Normally open contacts (N.O.), DC Coils only 25.3FLA / 110LRA at 240VAC, 30k cycles [1][2] | | | | |
| | Normally closed contacts (N.C.) 3A at 277VAC, General Use, 100k cycles [1][2] 2A at 480VAC, General Use, 6k cycles [1] 1A at 600VAC, General Use, 6k cycles [1] 3FLA / 3LRA at 240VAC, 30k cycles [1] 2FLA / 2LRA at 277/480VAC, 30k cycles [1] 1FLA / 1LRA at 600VAC, 30k cycles [1] | | | | |
| VDE | Normally open contacts (N.O.) 20A at 250VAC, Resistive, 50k cycles [2] | | | | |
| | Normally closed contacts (N.C.) 3A at 250VAC, Resistive, 50k cycles [2] | | | | |
| Material | Silver cadmium [1], silver tin oxide [2] | | | | |
| Resistance | <50 milliohms initially (24V, 1A voltage drop method) | | | | |

COIL

| Power | |
|--------------------------------|---|
| At Pickup Voltage (typical) | 925mW, DC coil 2.6VA, AC coil |
| Max. Continuous Dissipation | 5.0W at 20°C (68°F) ambient, DC coil 7.0VA at 20°C (68°F) ambient, AC coil |
| Temperature Rise | 48°C (86°F) at nominal coil voltage, DC coil 68° C (122°F) at nominal coil voltage, AC coil |
| Temperature | Max. 155°C (311°F) |



GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations 5 x 10 ⁶ 1 x 10 ⁵ at 30A, 277VAC Res. (N.O.) | | | |
|---|--|--|--|--|
| Operate Time | 15ms typical 25ms maximum with bounce | | | |
| Release Time | 10ms typical 25ms maximum with bounce (with no coil suppression) | | | |
| Dielectric Strength (at sea level for 1 min.) | 1500Vrms contact to contact 4000Vrms contact to coil 2000Vrms between contact sets | | | |
| Insulation Resistance | 109 ohms minimum at 500VDC | | | |
| Dropout | DC: Greater than 10% of nominal coil voltage AC: Greater than 20% of nominal coil voltage | | | |
| Ambient Temperature Operating Storage | At nominal coil voltage DC: -40°C (-40°F) to 85°C (185°F) AC: -40°C (-40°F) to 65°C (149°F) -40°C (-40°F) to 105°C (221°F) | | | |
| Vibration | 0.062" (1.65mm) DA at 10-55Hz | | | |
| Shock | Operational, 10g for 11ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100g for 11ms 1/2 sine pulse | | | |
| Enclosure | P.B.T. polyester | | | |
| Terminals | Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force. | | | |
| Max. Solvent Temp. | 80°C (176°F) | | | |
| Max. Immersion Time | 30 seconds | | | |
| Weight | 86 grams | | | |
| Packing unit in pcs | 20 per plastic tray / 100 per carton box | | | |

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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RELAY ORDERING DATA

| COIL SPECIFICA | | | | | |
|---------------------|---------------------|---------------------|--------------------------|------------------------------|----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Nominal Current mA ± 10% | Coil Resistance Ohm ± 10% | ORDER NUMBER* |
| 5 | 3.8 | 8.0 | 326.7 | 15.3 | AZ2800-2C-5D |
| 6 | 4.5 | 10.5 | 272.0 | 22 | AZ2800-2C-6D |
| 12 | 9.0 | 20.7 | 140.0 | 86 | AZ2800-2C-12D |
| 24 | 18.0 | 41.8 | 68.5 | 350 | AZ2800-2C-24D |
| 48 | 36.0 | 83.4 | 34.5 | 1390 | AZ2800-2C-48D |
| 110 | 82.5 | 190.5 | 15.2 | 7255 | AZ2800-2C-110D |

| COIL SPECIFICATIONS – AC Coil | | | | | | |
|-------------------------------|------------------|------------------------|--------------------------|-----------------------------------|-----------------------------------|----------------|
| Nominal Coil VAC | Must Operate VAC | Max. Continuous VAC | Nominal Current mA ± 10% | 50Hz Coil Resistance Ohm ± 10% | 60Hz Coil Resistance Ohm ± 10% | ORDER NUMBER* |
| 12 | 9.6 | 15.6 | 340.0 | 9.5 | 8 | AZ2800-2C-12A |
| 24 | 19.2 | 31.2 | 166.0 | 45 | 35.7 | AZ2800-2C-24A |
| 120 | 96.0 | 156.0 | 33.3 | 1125 | 830 | AZ2800-2C-120A |
| 220 | 176.0 | 286.0 | 18.2 | 3800 | 2870 | AZ2800-2C-220A |
| 240 | 192.0 | 312.0 | 16.7 | 4500 | 3800 | AZ2800-2C-240A |
| 277 | 221.6 | 360.1 | 14.4 | 5960 | 4700 | AZ2800-2C-277A |

^{*} Substitute "2A" in place of "2C" to indicate 2 Form A contacts. "2A" or "2C" denotes silver cadmium contacts.

Add suffix "E" to "2A" or "2C" for silver tin oxide contacts.

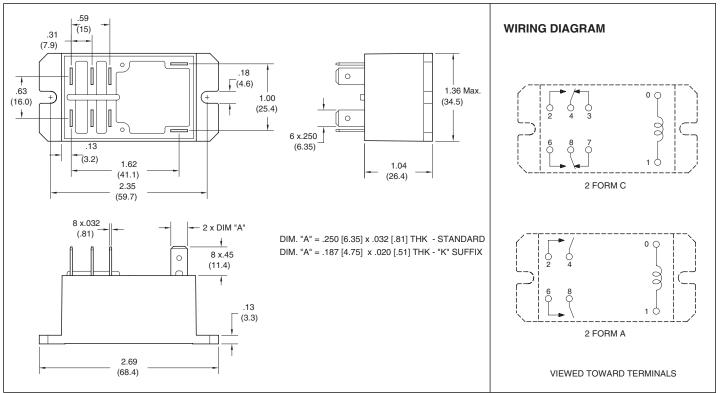
Add suffix "5" for 50Hz coil, AC coils only. (Example: AZ2800-2C-24A5).

Add suffix "6" for 50/60Hz coil, AC coils only. (Example: AZ2800-2C-24A6).

Add suffix "E" at the end of order number for sealed version.

Add suffix "K" for 0.187" x 0.020" (4.8mm x 0.5mm) coil terminals.

MECHANICAL DATA



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

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