

AZ2800

30 AMP MINIATURE POWER RELAY

FEATURES

- 30 Amp switching capability
- DPST-NO and DPDT configuration
- Meets 8 mm creepage, 4 kV dielectric
- Class F construction
- Epoxy sealed version available
- UL, CUR file E44211,
- VDE file 40023442



CONTACTS

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

COIL

| | |
|------------------------------------|---|
| Power | |
| At Pickup Voltage (typical) | DC: 0.925 W AC: 2.6 VA |
| Max. Continuous Dissipation | DC: 5.0 W at 20°C (68°F) AC: 7.0 VA at 20°C (68°F) |
| Temperature Rise | DC: 48°C (86°F) at nominal coil voltage AC: 68°C (122°F) at nominal coil voltage |
| Temperature | Max. 155°C (311°F) |

GENERAL DATA

| | |
|--|---|
| Life Expectancy Mechanical Electrical | Minimum operations 5 x 10 ⁷ 1 x 10 ⁵ at 30 A 277 VAC Res. N.O. |
| Operate Time | 15 ms typical 25 ms maximum with bounce |
| Release Time | 10 ms typical 25 ms maximum with bounce (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1500 Vrms contact to contact 4000 Vrms contact to coil 2000 Vrms between contact sets |
| Insulation Resistance | 10 ⁹ ohms minimum at 500 VDC |
| 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" (1.5 mm) DA at 10–55 Hz |
| Shock | Operational, 10 g for 11 ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100 g for 11 ms 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.

ZETTLER electronics GmbH

Junkersstrasse 3, D-82178 Puchheim, Germany

Tel. +49 89 800 97 0
Fax +49 89 800 97 200

office@ZETTLERelectronics.com
www.ZETTLERelectronics.com

AZ2800

RELAY ORDERING DATA

| COIL SPECIFICATIONS – DC Coil | | | | | ORDER NUMBER* |
|-------------------------------|------------------|---------------------|-------------------------------|--------------------------------|----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Nominal Current mA $\pm 10\%$ | Coil Resistance Ohm $\pm 10\%$ | |
| 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 | 1,390 | AZ2800-2C-48D |
| 110 | 82.5 | 190.5 | 15.2 | 7,255 | AZ2800-2C-110D |

| COIL SPECIFICATIONS – AC Coil 50 Hz | | | | | ORDER NUMBER* |
|-------------------------------------|------------------|---------------------|-------------------------------|--------------------------------|-----------------|
| Nominal Coil VAC | Must Operate VAC | Max. Continuous VAC | Nominal Current mA $\pm 10\%$ | Coil Resistance Ohm $\pm 10\%$ | |
| 12 | 9.6 | 15.6 | 340.0 | 8 | AZ2800-2C-12A5 |
| 24 | 19.2 | 31.2 | 166.0 | 45 | AZ2800-2C-24A5 |
| 120 | 96.0 | 156.0 | 33.3 | 1,125 | AZ2800-2C-120A5 |
| 220 | 176.0 | 286.0 | 18.2 | 3,800 | AZ2800-2C-220A5 |
| 240 | 192.0 | 312.0 | 16.7 | 4,500 | AZ2800-2C-240A5 |
| 277 | 221.6 | 360.1 | 14.4 | 6,000 | AZ2800-2C-277A5 |

* Substitute "2A" in place of "2C" to indicate 2 Form A contacts. Add suffix "E" to "2A" or "2C" to indicate silver tin oxide contacts. Add suffix "E" at the end of part number for sealed version. Add suffix "K" for 0.187 x 0.020 [4.8 x 0.5] coil terminals.

MECHANICAL DATA

DIM. "A" = .250 x .032 [6.3 x 0.8] - STANDARD
 DIM. "A" = .187 x .020 [4.8 x 0.5] - SUFFIX "K"

WIRING DIAGRAMS

2 Form C

2 Form A

Viewed toward terminals

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

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