## 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 pending



## CONTACTS

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

COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage <br> (typical) | DC: 0.925 W |
| Max. Continuous | AC: 2.6 VA |
| Dissipation | AC: 5.0 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ |
| Temperature Rise | DC: $48^{\circ} \mathrm{C}\left(80^{\circ} \mathrm{C}\right)$ at nominal coil voltage |
|  | AC: $68^{\circ} \mathrm{C}\left(122^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Temperature | Max. $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |

## NOTES

1. All values at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$.
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

GENERAL DATA

| Life Expectancy Mechanical Electrical | $\begin{aligned} & \text { Minimum operations } \\ & 5 \times 10^{7} \\ & 1 \times 10^{5} \text { at } 30 \text { A } 120 \text { VAC Res. N.O. } \end{aligned}$ |
| :---: | :---: |
| 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 <br> Storage | At nominal coil voltage DC: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ AC: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $65^{\circ} \mathrm{C}\left(149^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " (1.5 mm) DA at $10-55 \mathrm{~Hz}$ |
| Shock | Operational, 10 g for $11 \mathrm{~ms} 1 / 2$ sine pulse (no contact opening > 100usec) Non-destructive, 100 g for $11 \mathrm{~ms} 1 / 2$ sine pulse |
| Enclosure | P.B.T. polyester |
| Terminals | Quick connect tabs <br> Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force |
| Max. Solvent Temp. | $80^{\circ} \mathrm{C}\left(176{ }^{\circ} \mathrm{F}\right)$ |
| Max. Immersion Time | 30 seconds |
| Weight | 86 grams |
| Packing unit in pcs | 20 per plastic tray / 100 per carton box |

## AZ2800

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Nominal Current <br> mA $\pm 10 \%$ | Coil Resistance <br> Ohm $\pm 10 \%$ | ORDER NUMBER* |  |  |  |
| 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 $m A \pm 10 \%$ | 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 " $2 A$ " in place of " $2 C$ " to indicate 2 Form A contacts. Add suffix " $E$ " to " $2 A$ " or " $2 C$ " to indicate silver tin oxide contacts.

Add suffix " $E$ " at the end of part number for sealed version. Add suffix "K" for $0.187 \times 0.020[4.8 \times 0.5]$ coil terminals.

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010^{\prime \prime}$

