## 30 AMP MINIATURE POWER RELAY

## FEATURES

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


## CONTACTS

| Arrangement | DPST-N.O. DPDT |
| :---: | :---: |
| Ratings | Resistive load: <br> 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* |
| $\begin{aligned} & \text { UL, CUR } \\ & \text { N.O. } \end{aligned}$ | 30 A at 277 VAC General Use, 100k cycles <br> 1 Hp at $120 \mathrm{VAC}, 100 \mathrm{k}$ 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), <br> 30k cycles |
| UL, CUR <br> N.C. <br> VDE | 3 A at 277 VAC General Use, 100k cycles N.O. 20A 250VAC, N.C. 3A 250VAC |
|  | *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory. |
| Material | Silver cadmium oxide, silver tin oxide |
| Resistance | <50 milliohms initially <br> ( $6 \mathrm{~V}, 1 \mathrm{~A}$ voltage drop method) |

## COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage <br> (typical) | DC: 0.925 W |
| Max. Continuous | AC: 2.6 VA |
| Dissipation | DC: 5.0 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ |
| Temperature Rise | AC: 7.0 VA at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ |
|  | DC: $48^{\circ} \mathrm{C}\left(86^{\circ} \mathrm{F}\right)$ 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 | Minimum operations $5 \times 10^{7}$ <br> $1 \times 10^{5}$ at 30 A 120 VAC Res. N.O. |
| :---: | :---: |
| Operate Time | 15 ms typical <br> 25 ms maximum with bounce |
| Release Time | 10 ms typical <br> 25 ms maximum with bounce (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 1500 Vrms contact to contact <br> 4000 Vrms contact to coil <br> 2000 Vrms between contact sets |
| Insulation Resistance | 109 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 <br> DC: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $95^{\circ} \mathrm{C}\left(203^{\circ} \mathrm{F}\right)$ <br> AC: $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $75^{\circ} \mathrm{C}\left(167^{\circ} \mathrm{F}\right)$ <br> $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " 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 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 |

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC Coil |  | ORDER NUMBER* |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC |  | Coil Resistance <br> $\mathbf{\pm 1 0 \%}$ | (10.5 |
| 6 | 9.5 | 20.7 | 82 | AZ2800-2C-6D |
| 12 | 9.0 | 41.8 | 350 | AZ2800-2C-12D |
| 24 | 18.0 | 83.4 | 1390 | AZ2800-2C-24D |
| 48 | 36.0 | 190.5 | 7255 | AZ2800-2C-48D |
| 110 | 82.5 |  | AZ2800-2C-110D |  |


| COIL SPECIFICATIONS - AC Coil 60 Hz [1] |  |  |  |  | ORDER NUMBER* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil VAC | Must Operate VAC | Max. Continuous VAC | Nominal Current $\mathrm{mA} \pm 10 \%$ | Coil Resistance $\pm 10 \%$ |  |
| 12 | 9.6 | 15.6 | 325 | 9.5 | AZ2800-2C-12A |
| 24 | 19.2 | 31.2 | 154 | 35.7 | AZ2800-2C-24A |
| 120 | 96.0 | 156.0 | 33.5 | 830 | AZ2800-2C-120A |
| 208 | 166.4 | 270.4 | 19.3 | 2600 | AZ2800-2C-208A |
| 220 | 176.0 | 286 | 18.1 | 2870 | AZ2800-2C-220A |
| 240 | 192.0 | 312.0 | 17.3 | 3800 | AZ2800-2C-240A |
| 277 | 221.6 | 360.1 | 14.5 | 4700 | AZ2800-2C-277A |

*Add suffix " E " for epoxy sealed version. Add suffix "K" for $0.187 x .020$ or "J" for $0.187 x .032$ QC coil terminals. Substitute '2A" for "2C" to indicate DPST (N.O.) contacts. Add suffix " E " to " 2 A " or " 2 C " to indicate AgSNO 2 contacts.
[1] For 50 Hz coil replace "A" with "A5" (example: "A2280-2C-24A5").

## MECHANICAL DATA



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

