## 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
- PCB terminals
- Epoxy sealed versions available
- UL, CUR file E44211, VDE pending


## CONTACTS

| Arrangement | DPST-N.O. DPDT |
| :---: | :---: |
| Ratings <br> UL, CUR N.O. <br> UL, CUR N.C. <br> VDE (pending) | 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> 30 A at 277 VAC General Use, 100k cycles <br> 1 Hp at 120 VAC, 100 k cycles <br> 2.5 Hp at 240 VAC, 100k cycles <br> 110 LRA/25.3 FLA at 240 VAC (DC coils only), <br> 30k cycles <br> 3 A at 277 VAC General Use, 100k cycles <br> 35 A at 400 VC, 100 k cycles, N.O. <br> 3 A at 400 VAC, 100 k cycles, N.C. <br> *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 <br> 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 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 <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 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 $155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062" DA at 10-55 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 | Tinned copper alloy, P.C. |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}\left(518^{\circ} \mathrm{F}\right)$ |
| Max. Solder Time | 5 seconds |
| 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 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> $\pm 10 \%$ | ORDER NUMBER* |
| 6 | 4.5 | 10.5 | 22 | AZ2850-2C-6D |
| 12 | 9.0 | 20.7 | 86 | AZ2850-2C-12D |
| 24 | 18.0 | 41.8 | 350 | AZ2850-2C-24D |
| 48 | 36.0 | 83.4 | 1390 | AZ2850-2C-48D |
| 110 | 82.5 | 190.5 | 7255 | AZ2850-2C-110D |

COIL SPECIFICATIONS - AC Coil 60 Hz [1]

| Nominal Coil <br> VAC | Must Operate <br> VAC | Max. Continuous <br> VAC | Nominal Current <br> $\mathbf{m A} \pm \mathbf{1 0 \%}$ | Coil Resistance <br> $\mathbf{\pm 1 0 \%}$ | ORDER NUMBER* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | 9.6 | 15.6 | 340.0 | 9.1 | AZ2850-2C-12A |
| 24 | 19.2 | 31.2 | 166.0 | 39 | AZ2850-2C-24A |
| 120 | 96.0 | 156.0 | 33.3 | 950 | AZ2850-2C-120A |
| 208 | 166.4 | 270.4 | 19.2 | 2841 | AZ2850-2C-208A |
| 240 | 192.0 | 312.0 | 16.7 | 3800 | AZ2850-2C-240A |
| 277 | 221.6 | 360.1 | 14.4 | 5485 | AZ2850-2C-277A |

*Add suffix "E" for epoxy sealed version. Substitute " $2 A$ " for " $2 C$ " to indicate DPST (N.O.) contacts. Add suffix "E" to " $2 A$ " or " $2 C$ " to indicate AgSNO2 contacts [1] For 50 Hz coil replace "A" with "A5" (example: "A2280-2C-24A5").
MECHANICAL DATA


[^0]
[^0]:    Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010^{\prime \prime}$

