## 60 AMP LATCHING POWER RELAY

## FEATURES

- Low cost
- 60 Amp switching
- Heavy loads to 15,000VA
- 4kV dielectric
- Epoxy sealed construction available
- UL, CUR file E43203


## CONTACTS

| Arrangement | SPST (1 Form A), SPST (1 Form B)Not UL |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 15,000VA <br> Max. switched current: 60 A <br> Max. switched voltage: 250VAC |
| Rated Load <br> UL, CUR | 60 A at 250VAC, 6 k cycles, General Use $70^{\circ} \mathrm{C}$ <br> 50 A at $250 \mathrm{VAC}, 10 \mathrm{k}$ cycles, General Use $70^{\circ} \mathrm{C}$ <br> 40 A at $250 \mathrm{VAC}, 100 \mathrm{k}$ cycles, General Use $70^{\circ} \mathrm{C}$ |
| Material | Silver tin oxide |
| Resistance | $<50$ milliohms initially <br> $(24 \mathrm{~V}, 1 \mathrm{~A}$ voltage drop method) |

COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage |  |
| (typical) | 666 mW single coil |
| Temperature | Max. $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |

## 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.
4. Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.

## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations <br> $1 \times 10^{6}$ <br> $1 \times 10^{5}$ at 40A 250VAC Res. |
| :---: | :---: |
| Set and Reset Pulse Duration | 50 ms minimum |
| Set Time (typical) | 20 ms at nominal coil voltage |
| Reset Time (typical) | 20 ms at nominal coil voltage |
| Dielectric Strength (at sea level for 1 min .) | 4000 Vrms coil to contact 1500 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \%$ RH |
| Creepage Distance | 8 mm |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $70^{\circ} \mathrm{C}\left(158^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " DA at $10-55 \mathrm{~Hz}$ |
| Shock <br> Operating Non-Operating | $10 \mathrm{~g}, 98 \mathrm{~m} / \mathrm{s}^{2}, 1 / 2$ sine (no false operation) $100 \mathrm{~g}, 980 \mathrm{~m} / \mathrm{s}^{2}, 1 / 2$ sine (no damage) |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy P.C. (coil), heavy tabs (power) |
| Max. Solder Temp. | $270^{\circ} \mathrm{C}$ ( $518^{\circ} \mathrm{F}$ ) |
| Max. Solder Time | 5 seconds |
| Weight (approx.) | 33 grams |

RELAY ORDERING DATA

| COIL SPECIFICATIONS -Standard Single Coil - Termination Style 1 |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC $[1]$ | Coil Resistance <br> $\pm 10 \%$ | Unsealed | Sealed |
| 5 | 4.0 | 6.5 | 24 | AZ2500P1-1AE-5D | AZ2500P1-1AE-5DE |
| 6 | 4.8 | 7.8 | 35 | AZ2500P1-1AE-6D | AZ2500P1-1AE-6DE |
| 9 | 7.2 | 11.7 | 80 | AZ2500P1-1AE-9D | AZ2500P1-1AE-9DE |
| 12 | 9.6 | 15.6 | 145 | AZ2500P1-1AE-12D | AZ2500P1-1AE-12DE |
| 24 | 19.2 | 31.2 | 575 | AZ2500P1-1AE-24D | AZ2500P1--1AE-24DE |
| 48 | 38.4 | 62.4 | 2270 | AZ2500P1-1AE-48D | AZ2500P1-1AE-48DE |

* Add suffix "K" for Coil Termination Style 2. Replace 1AE with 1BE for Form B(not UL). Add suffix $R$ for negative polarity(not UL).

| COIL SPECIFICATIONS -Standard Dual Coil |  |  |  |  |  |  |  | ORDER NUMBER* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC $[1]$ | Coil Resistance <br> $\pm 10 \%$ | Unsealed | Sealed |  |  |  |  |
| 5 | 4.0 | 6.5 | 12 | AZ2500P2-1AE-5D | AZ2500P2--1AE-5DE |  |  |  |  |
| 6 | 4.8 | 7.8 | 17.5 | AZ2500P2-1AE-6D | AZ2500P2--1AE-6DE |  |  |  |  |
| 9 | 7.2 | 11.7 | 40 | AZ2500P2-1AE-9D | AZ2500P2--1AE-9DE |  |  |  |  |
| 12 | 9.6 | 15.6 | 72 | AZ2500P2-1AE-12D | AZ2500P2--1AE-12DE |  |  |  |  |
| 24 | 19.2 | 31.2 | 285 | AZ2500P2-1AE-24D | AZ2500P2--1AE-24DE |  |  |  |  |
| 48 | 38.4 | 62.4 | 1135 | AZ2500P2-1AE-48D | AZ2500P2--1AE-48DE |  |  |  |  |

NOTE: Relays may be ordered with twisted copper wire terminations (Styles A-K) as shown below. Contact factory for ordering information.
[1] max. continuous voltage should not be applied for more than 30 seconds.

* Replace 1AE with 1BE for Form B(not UL). Add suffix R for negative polarity(not UL)


## MECHANICAL DATA



Weld style of twisted copper wire (A to K)


Notes: Weld figures for AZ2500 with twisted copper wire. Please show welding style ( $A$ to $K$ ) and the length of wires when ordering. Please note the length of each wire from left to right if the length is different.

