## 16 A SPDT MINIATURE POWER RELAY

## FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed versions available
- AC and DC coils
- 16 Amp switching
- High inrush version available (80 A)
- Class B $\left(130^{\circ} \mathrm{C}\right)$ standard
- Class F $\left(155^{\circ} \mathrm{C}\right)$ versions available
- Isolation spacing greater than 10 mm
- UL, CUR file E44211, VDE 40006031


## CONTACTS

| Arrangement | ```SPDT (1 Form C) SPST (1 Form A, 1 Form B)``` |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 480 W or 4432 VA <br> Max. switched current: 16 A <br> Max. switched voltage: 150* VDC or 440 VAC <br> *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory. |
| Rated Load UL, CUR <br> VDE | 16 A at 277 VAC resistive, 50k cycles [1] 16 A at 277 VAC resistive, 100 k cycles [3] 1 HP at 250 VAC [1] <br> 1 HP at 277 VAC, $40^{\circ} \mathrm{C}$ ( 1 Form A) [1] $1 / 2 \mathrm{HP}$ at 125 VAC [1] TV-5 at 125 VAC [1] 16 A at 277 VAC resistive, 75 k cycles [2] B300 Pilot Duty [2] R300 Pilot Duty [2] <br> 16 A at 250 VAC resistive [1] and [2] <br> Contact factory for additonal VDE ratings <br> [1] Silver cadmium oxide, [2] Silver tin oxide <br> [3] Silver nickel |
| Material | Silver cadmium oxide or silver tin oxide or silver nickel. Gold plating available |
| Resistance | < 50 milliohms initially (using 6 V 1 A method) |

## COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage | $196 \mathrm{~mW}(\mathrm{DC})$ |
| (typical) | $0.43 \mathrm{VA}(\mathrm{AC})$ |
| Max. Continuous |  |
| Dissipation | 1.7 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ ambient |
| Temperature Rise | $26^{\circ} \mathrm{C}\left(47^{\circ} \mathrm{F}\right)$ at nominal coil voltage |
| Max. Temperature | $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |



## GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $1 \times 10^{7}$ <br> $1 \times 10^{5}$ at 16 A 240 VAC Res. |
| :---: | :---: |
| Operate Time (typical) | 7 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 5000 Vrms coil to contact <br> 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}$ <br> 500 VDC $50 \%$ RH |
| Dropout | Greater than $10 \%$ of nominal coil voltage (DC) Greater then $15 \%$ of nominal coil voltage (AC) |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $100^{\circ} \mathrm{C}\left(212^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ |
| Vibration | $0.062^{\prime \prime}$ DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g |
| 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 | 14 grams |

## 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.

RELAY ORDERING DATA

| COIL SPECIFICATIONS - DC COIL | ORDER NUMBER* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil <br> Resistance $\pm 10 \%$ | Unsealed | Sealed |
| 5 | 3.5 | 10.2 | 62 | AZ762-1C-5D | AZ762-1C-5DE |
| 6 | 4.2 | 12.3 | 90 | AZ762-1C-6D | AZ762-1C-6DE |
| 12 | 8.4 | 24.7 | 360 | AZ762-1C-12D | AZ762-1C-12DE |
| 18 | 12.6 | 37.0 | 810 | AZ762-1C-18D | AZ762-1C-18DE |
| 24 | 16.8 | 49.4 | 1,440 | AZ762-1C-24D | AZ762-1C-24DE |
| 48 | 33.6 | 98.0 | 5760 | AZ762-1C-48D | AZ762-1C-48DE |
| 60 | 42.0 | 112.9 | 7,500 | AZ762-1C-60D | AZ762-1C-60DE |
| 110 | 77.0 | 206.9 | 25,200 | AZ762-1C-110D | AZ762-1C-110DE |


| COIL SPECIFICATIONS - AC COIL |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VAC | Must Operate <br> VAC | Max. Continuous <br> VAC | Coil Current (mA) | Coil Resistance | Unsealed |  |
| 24 | 18.0 | 31.2 | 31.6 | $350 \pm 10 \%$ | AZ762-1C-24AF | AZ762-1C-24AEF |
| 115 | 86.3 | 149.5 | 6.6 | $8,100 \pm 15 \%$ | AZ762-1C-115AF | AZ762-1C-115AEF |
| 230 | 172.5 | 299.0 | 3.2 | $32,500 \pm 15 \%$ | AZ762-1C-230AF | AZ762-1C-230AEF |

Substitute " 1 A " or " 1 B " in place of " 1 C " for Form A or B respectively. Add suffix " E " to " 1 A " or " 1 B " or " 1 C " for silver tin oxide contacts. Add suffix " B " to " 1 A " or "1B" or "1C" for silver nickel contacts. Add suffix "A" for gold plated contacts. Add suffix "F" for Class F version (DC coils only). Add suffix "l" at the end of part number for high inrush version 80A (contact form 1AE only, DC coils only, no gold plating).

HARDWARE ORDERING DATA

| DESCRIPTION | ORDER NUMBER | DESCRIPTION | ORDER NUMBER |
| :---: | :---: | :---: | :---: |
| Socket | ST484-U1 | Retainer | ST482-3 |

## MECHANICAL DATA



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

