## MINIATURE <br> POWER RELAY

## FEATURES

- 10 A switching
- DPDT or 3PDT arrangement
- High switching capacity
- AC and DC coils
- Push To Test lever
- UL, CUR file E44211



## CONTACTS

| Arrangement | DPDT (2 Form C) <br> 3PDT (3 Form C) |
| :--- | :--- |
| Ratings | Resistive load: <br> Max. switched power: 300 W or 2500 VA <br> Max. switched current: 10 A <br> Max. switched voltage: 30 VDC* or 250 VAC <br> * Note: If switching voltage is greater than 30 VDC, <br> special precautions must be taken. <br> Please contact the factory. |
| UL, CUR | 10 A at 250 VAC 30VDC <br> $1 / 3 \mathrm{HP}$ at 240 VAC <br> $1 / 3 \mathrm{HP}$ at 120 VAC <br> $1 / 2 \mathrm{HP}$ at 277 VAC |
| Material | Silver tin oxide or silver cadmium oxide, <br> gold plated versions are available |
| Resistance | < 100 milliohms initially |

COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage | DC: 1.0 W |
| (typical) | AC: 2.0 VA |
| Max. Continuous | DC: 2.2 W at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ |
| Dissipation | AC: 3.5 VA at $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ |
| Temperature | $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |

## 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.

GENERAL DATA

| Life Expectancy Mechanical Electrical | Minimum operations $1 \times 10^{7}$ operations $1 \times 10^{5}$ operations |
| :---: | :---: |
| Operate Time | 25 ms max . at nominal coil voltage |
| Release Time | 25 ms max. at nominal coil voltage (without suppression) |
| Dielectric Strength (at sea level for 1 min .) | 2500 Vrms coil to contact 2000 Vrms between contact sets |
| Insulation Resistance | 500 megohms min. at 500 VDC, $20^{\circ} \mathrm{C}, 50 \% \mathrm{RH}$ |
| Insulation (according to DIN VDE 0110, IEC 60664-1) | C250 <br> Overvoltage category: III <br> Pollution degree: 3 <br> Nominal voltage: 250 VAC |
| Dropout DC coils AC coils | Greater than $10 \%$ of nominal coil voltage Greater than $30 \%$ of nominal coil voltage |
| Ambient Temperature Operating <br> Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $70^{\circ} \mathrm{C}\left(158^{\circ} \mathrm{F}\right)$ - DC coils $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $55^{\circ} \mathrm{C}\left(131^{\circ} \mathrm{F}\right)-\mathrm{AC}$ coils $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062" (1.5 mm) DA at $10-55 \mathrm{~Hz}$ |
| Shock | 10 g |
| Enclosure | Polycarbonate |
| Terminals | Octal or Undecal Type Plug |
| Weight | 85 grams |
| Packing unit in pcs | 10 per small carton / 100 per carton box |

## AZ169

RELAY ORDERING DATA

| COIL SPECIFICATIONS: $\mathbf{~ D C ~ C o i l ~}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Nominal Current <br> $\mathbf{m A} \pm \mathbf{1 0 \%}$ | Coil Resistance <br> Ohm $\mathbf{m 1 0 \%}$ | ORDER NUMBER* |
| 6 | 4.8 | 7.2 | 255.3 | 23.5 | AZ169-2C-6D |
| 12 | 9.6 | 14.4 | 126.3 | 95 | AZ169-2C-12D |
| 24 | 19.2 | 28.8 | 55.8 | 430 | AZ169-2C-24D |
| 48 | 38.4 | 57.6 | 36.9 | 1,630 | AZ169-2C-48D |
| 60 | 48.0 | 72.0 | 31.3 | 1,920 | AZ169-2C-60D |
| 100 | 80.0 | 120.0 | 14.7 | 6,800 | AZ169-2C-100D |
| 110 | 88.0 | 132.0 | 15.1 | 7,300 | AZ169-2C-110D |


| COIL SPECIFICATIONS AC Coil (50/60 Hz) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VAC | Must Operate <br> VAC | Max. Continuous <br> VAC | Nominal Current <br> $\mathbf{m A} \mathbf{\pm 1 0 \%}$ | Coil Resistance <br> Ohm $\mathbf{\pm 1 0 \%}$ | ORDER NUMBER* |  |  |  |
| 6 | 4.8 | 7.2 | 450.0 | 3.9 | AZ169-2C-6A |  |  |  |
| 12 | 9.6 | 14.4 | 225.0 | 16.3 | AZ169-2C-12A |  |  |  |
| 24 | 19.2 | 28.8 | 112.5 | 70 | AZ169-2C-24A |  |  |  |
| 48 | 38.4 | 57.6 | 56.3 | 315 | AZ169-2C-48A |  |  |  |
| 120 | 88.0 | 132.0 | 22.5 | 1,600 | AZ169-2C-120A |  |  |  |
| 230 | 176.0 | 264.0 | 11.7 | 6,800 | AZ169-2C-230A |  |  |  |

* For 3PDT substitute "-3C" for "-2C". Add suffix "E" to "-2C" or "-3C" to indicate silver tin oxide contacts.

Add suffix " 1 " for LED at the end of part number.
Add suffix "P" for "Push to Test" lever at the end of part number.
Add sufffix "A" for gold plated contacts at the end of part number.

MECHANICAL DATA

| 2 Form C | 3 Form C | 2 Form C <br> 3 Form C | AMS <br> 2 Form C (with LED) <br> 3 Form C (with LED) |
| :---: | :---: | :---: | :---: |

Dimensions in mm .

## ZETTLER electronics GmbH

