## AZ9371

## SENSITIVE

## SUBMINIATURE RELAY

## FEATURES

- Extremely small footprint
- Thin vertical profile only 0.275 " ( 7 mm ) wide
- High sensitivity, 113 mW pickup
- Dielectric strength 4000 Vrms
- 5 Amp switching capability (version "T" 10 Amp)
- Two different footprints available
- Class B insulation $\left(130^{\circ} \mathrm{C}\right)$ standard, Class $\mathrm{F}\left(155^{\circ} \mathrm{C}\right)$ available

- UL, CUR file E44211
- VDE 40030746


## CONTACTS

| Arrangement | SPST (1 Form A) |
| :---: | :---: |
| Ratings | Resistive load: <br> Max. switched power: 150 W or 1385 VA <br> (Version "T": 300 W or 2770 VA) <br> Max. switched current: 5 A <br> (Version "T": 10 A) <br> Max. switched voltage: 30 VDC* or 277 VAC <br> * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. |
| Rated Load UL/CSA <br> VDE | 5 A at $277 / 250 / 125$ VAC General Use 50 k cycles $85^{\circ} \mathrm{C}$ [1][2] 5 A at 30 VDC General Use 50 k cycles $85^{\circ} \mathrm{C}$ [1][2] <br> 3 A at 277/250/125 VAC General Use 120k cycles $85^{\circ} \mathrm{C}$ [1][2] 3 A at 30 VDC General Use 120 k cycles $85^{\circ} \mathrm{C}$ [1][2] B300 Pilot Duty 120/240 VAC 25k cycles [2] R300 Pilot Duty 125/250 VAC 25 k cycles [2] <br> "T" Version <br> 10 A at 277/250/125 VAC General Use 10 k cycles $85^{\circ} \mathrm{C}$ [1][2] 10 A at 30 VDC General Use10k cycles $85^{\circ} \mathrm{C}$ [1][2] <br> 7 A at 277/250/125 VAC General Use 60 k cycles $85^{\circ} \mathrm{C}$ [2] <br> 7 A at $277 / 250 / 125$ VAC General Use 50 k cycles $105^{\circ} \mathrm{C}$ [1] <br> 7 A at 30 VDC General Use, 50 k cycles $105^{\circ} \mathrm{C}$ [1] <br> 7 A at 30 VDC General Use, 60 k cycles $85^{\circ} \mathrm{C}$ [2] <br> TV-3, 25k cycles <br> 5 A at 250 VAC / 30 VDC [1][2] <br> 10 A at $250 \mathrm{VAC} / 30 \mathrm{VDC}$ (T version) |
| Material | Silver nickel [1], silver tin oxide [2], gold plating available |
| Resistance | < 100 milliohms initially (at $6 \mathrm{~V}, 1 \mathrm{~A}$, voltage drop method) |

## COIL

| Power |  |
| :--- | :--- |
| At Pickup Voltage <br> (typical) | 113 mW |
| Max. Continuous <br> Dissipation | 750 mW 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 $)$ |
| Temperature | $\mathrm{Max} .130^{\circ} \mathrm{C}\left(266^{\circ} \mathrm{F}\right)$ Class B <br> $\mathrm{Max} .155^{\circ} \mathrm{C}\left(311^{\circ} \mathrm{F}\right)$ Class F |

GENERAL DATA

| Life Expectancy Mechanical | Minimum operations |
| :---: | :---: |
|  | 5 million operations |
| Standard version |  |
| Electrical | $1 \times 10^{5}$ at $5 \mathrm{~A}, 250 \mathrm{VAC}$ res. [1] |
|  | $5 \times 10^{4}$ at $5 \mathrm{~A}, 250 \mathrm{VAC}$ res. [2] |
| High capacity version "T" Electrical | $1 \times 10^{5}$ at $7 \mathrm{~A}, 250 \mathrm{VAC}$ res. [1] |
|  | $1 \times 104$ at $10 \mathrm{~A}, 250 \mathrm{VAC}$ res. [1][2] |
|  | $3 \times 10^{4}$ at $7 \mathrm{~A}, 250 \mathrm{VAC}$ res. [2] |
| Operate Time (typical) | 10 ms at nominal coil voltage |
| Release Time (typical) | 10 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min .) | 4000 Vrms coil to contact <br> 1000 Vrms between open contacts |
| Insulation Resistance | 1000 megohms min. at $20^{\circ} \mathrm{C}, 500 \mathrm{VDC}$, $50 \%$ RH |
| Dropout | Greater than 5\% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $85^{\circ} \mathrm{C}\left(185^{\circ} \mathrm{F}\right)$ $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ to $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$ |
| Vibration | 0.062 " (1.5 mm) 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 | 3 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 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Coil <br> VDC | Must Operate <br> VDC | Max. Continuous <br> VDC | Coil Resistance <br> Ohm $\pm 10 \%$ | ORDER NUMBER |  |  |
| 3 | 2.25 | 3.9 | 45 | AZ9371-1A-3D |  |  |
| 5 | 3.75 | 6.5 | 125 | AZ9371-1A-5D |  |  |
| 6 | 4.50 | 7.8 | 180 | AZ9371-1A-6D |  |  |
| 9 | 6.75 | 11.7 | 405 | AZ9371-1A-9D |  |  |
| 12 | 9.00 | 13.6 | 720 | AZ9371-1A-12D |  |  |
| 18 | 18.00 | 23.4 | 1620 | AZ9371-1A-18D |  |  |
| 24 | 31.2 | 2880 | AZ9371-1A-24D |  |  |  |

*Add "T" after "AZ9371" for high capacity version. Add "E" after "1A" to indicate silver tin oxide contacts. Add suffix "E" for sealed version. Add suffix "K" for K version footprint. Add suffix "F" for Class F version. Add suffix "G" at the end of order number for gold plated contacts.

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MECHANICAL DATA


Attention! Grid is not $0.1^{\prime \prime}(2.54 \mathrm{~mm})!$ !

## AMEFICAN ZETTLER, INC.

