AZ9371

SENSITIVE SUBMINIATURE RELAY

FEATURES

- Thin vertical profile, only 7 mm wide
- High sensitivity, 113 mW pickup
- Dielectric strength 4000 Vrms
- > 5,5 mm clearance and creepage
- 5 Amp switching capability (version “T” 10 Amp)
- Two different footprints available
- Reinforced insulation (VDE 0700, 0631)
- UL, CUR file E44211
- VDE certificate 40030746

CONTACTS

Arrangement	SPST (1 Form A)
Ratings	Resistive load: Max. switched power: 150 W or 1385 VA (Version “T”: 300 W or 2770 VA) Max. switched current: 5 A (Version “T”: 10 A) Max. switched voltage: 30 VDC* or 277 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load **UL**	Standard version 5 A at 277 VAC, resistive, 85°C, 50k cycles [1][2] 5 A at 30 VDC, resistive, 85°C, 50k cycles [1][2] 3 A at 277 VAC, resistive, 85°C, 120k cycles [1][2] 3 A at 30 VDC, resistive, 85°C, 120k cycles [1][2] B300 [2] R300 [2] High capacity version “T” 10 A at 277 VAC, resistive, 85°C, 10k cycles [1][2] 10 A at 30 VDC, resistive, 85°C, 10k cycles [1][2] 7 A at 277 VAC, resistive, 85°C, 60k cycles [2] 7 A at 277 VAC, resistive, 105°C, 50k cycles [1] 7 A at 30 VDC, resistive, 85°C, 60k cycles [2] 7 A at 30 VDC, resistive, 105°C, 50k cycles [1]
VDE	Standard version 5 A at 250 VAC, resistive, 85°C, 50k cycles [1][2] 5 A at 30 VDC, resistive, 85°C, 30k cycles [1][2] 4 A at 250 VAC. cos phi 0.4, 70°C, 100k cycles [1] 3A (51A) at 250VAC, capacitive, 85°C, 10k cycles [2]* High capacity version “T” 10 A at 250 VAC, resistive, 85°C, 10k cycles [1][2] 10 A at 30 VDC, resistive, 85°C, 10k cycles [1][2] 7 A at 250 VAC, resistive, 105°C, 50k cycles [1] 7 A at 250 VAC, resistive, 85°C, 50k cycles [2] 7 A at 30 VDC, resistive, 105°C, 50k cycles [1] 7 A at 30 VDC, resistive, 85°C, 50k cycles [2] * duty factor: 2 seconds on / 15 seconds off
Material	Silver nickel [1], silver tin oxide [2], gold plating available
Resistance	< 100 milliohms initially (at 6 V, 1 A, voltage drop method)

GENERAL DATA

Life Expectancy **Mechanical**	Minimum operations 5 million operations
Standard version **Electrical**	1 x 10^5 at 5 A, 250 VAC res. [1] 5 x 10^4 at 5 A, 250 VAC res. [2]
High capacity version “T” **Electrical**	1 x 10^5 at 7 A, 250 VAC res. [1] 1 x 10^4 at 10 A, 250 VAC res. [1][2] 3 x 10^4 at 7 A, 250 VAC res. [2]
Operate Time (typical)	6 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.)**	4000 Vrms coil to contact 1000 Vrms between open contacts
Surge Voltage **Coil to contact**	10,000 V (at 1.2x50 µs)
Insulation **Resistance**	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 5% of nominal coil voltage
Ambient Temperature **Operating**	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	3 grams

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This product specification to be used only together with the application notes which can be downloaded from http://www.ZETTLERelectronics.com/pdfs/relais/ApplicationNotes.pdf

2014-09-25

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COIL

Power	
At Pickup Voltage (typical)	113 mW
Max. Continuous Dissipation	750 mW at 20°C (68°F) ambient
Temperature Rise	26°C (47°F) at nominal coil voltage
Temperature	Max. 105°C (221°F)

NOTES

1. All values at 20°C (68°F)
2. Relay may pull in with less than “Must Operate” value.
3. Mounting position “terminals upside” is not recommended, if an electrical or mechanical life of > 100,000 operations is required.
4. Specifications subject to change without notice.

RELAY ORDERING DATA

COIL SPECIFICATIONS				
Nominal Coil VDC	**Must Operate VDC**	**Max. Continuous VDC**	**Coil Resistance Ohm ± 10%**	**ORDER NUMBER**
3	2.25	5.8	45	AZ9371-1A-3D
5	3.75	9.7	125	AZ9371-1A-5D
6	4.50	11.6	180	AZ9371-1A-6D
9	6.75	17.4	405	AZ9371-1A-9D
12	9.00	23.2	720	AZ9371-1A-12D
18	13.50	34.8	1,620	AZ9371-1A-18D
24	18.00	46.5	2,880	AZ9371-1A-24D

* “1A” denote silver nickel contacts.
Add suffix “E” to “1A” for silver tin oxide contacts.
Add suffix “T” after “AZ9371” for high capacity version.
Add suffix “E” for sealed version.
Add suffix “K” for different footprint
Add suffix “G” at the end of order number for gold plated contacts.

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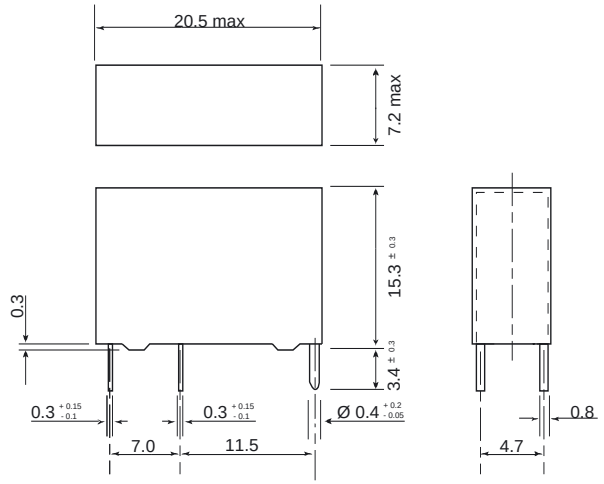
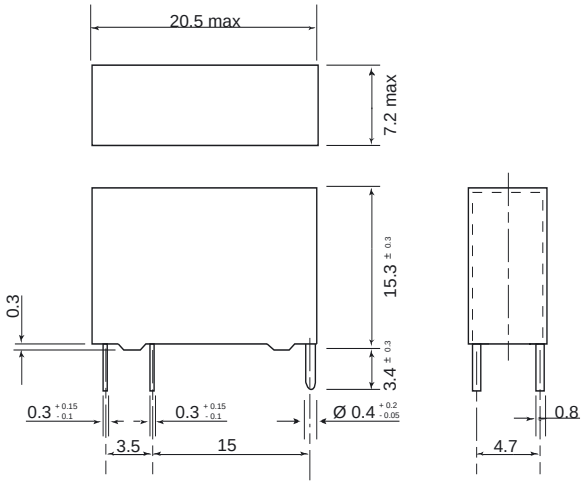
MECHANICAL DATA

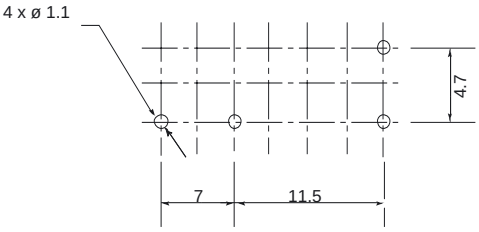
Standard Pinning Outline Dimensions



Version"K" Pinning Outline Dimensions

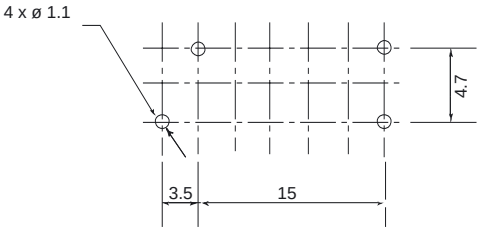


PC BOARD LAYOUT



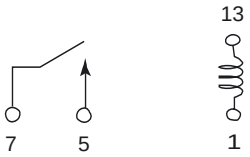
Viewed toward terminals

PC BOARD LAYOUT



Viewed toward terminals

WIRING DIAGRAM



Viewed toward terminals

WIRING DIAGRAM

Viewed toward terminals

Attention! Grid is not 0.1” (2.54 mm)!!

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