

AZ6963

10 AMP SUBMINIATURE POWER RELAY

FEATURES

- High sensitivity, 120 mW pickup
- Dielectric strength 5000 Vrms
- Isolation spacing greater than 10 mm
- Proof tracking index (PTI/CTI) 250
- 10 Amp switching capability
- Epoxy sealed version available
- Reinforced insulation, EN 60730-1 (VDE 0631, part 1)
EN 60335-1 (VDE 0700, part 1)
- UL, CUR file E43203
- VDE certificate 40021878



CONTACTS

Arrangement	SPDT (1 Form C), DPDT (2 Form C) SPST (1 Form A)
Ratings	Resistive load: Max. switched power: 240 W or 2500 VA (2 Form C: 150 W or 1250 VA) Max. switched current: 10 A (2 Form C: 5 A) Max. switched voltage: 240 VDC* or 440 VAC * Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	10 A at 250 VAC resistive 10 A at 30 VDC resistive 2 Form C: 5 A at 250 VAC resistive
VDE	8 A at 250 VAC resistive (1 Form C) 10 A at 250 VAC resistive (1 Form A)
Material	Silver tin oxide or silver nickel, gold plating available.
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	120 mW (up to 24 VDC coil) 140 mW (48 VDC and 60 VDC coil)
Max. Continuous Dissipation	1.2 W at 20°C (68°F) ambient
Temperature Rise	20°C (36°F) at nominal coil voltage
Temperature	Max. 130°C (266°F)

NOTES

1. All values at 20°C (68°F).
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 x 10 ⁷ 1 x 10 ⁵ at 8 A 250 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 2500 Vrms between contact sets 1000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Insulation (according to DIN VDE 0110, IEC 60664-1)	C250 Overvoltage category: III Pollution degree: 3 Nominal voltage: 250 VAC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration	Break: 0.031" (0.8 mm) DA at 10–55 Hz Make: 0.059" (1.5 mm) DA at 10–55 Hz
Shock	Break Contact: 5 g Make Contact: 10 g
Enclosure	P.B.T. polyester, UL94 V-O
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	8 grams
Packing unit in pcs	20 per plastic tube / 1000 per carton box

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RELAY ORDERING DATA

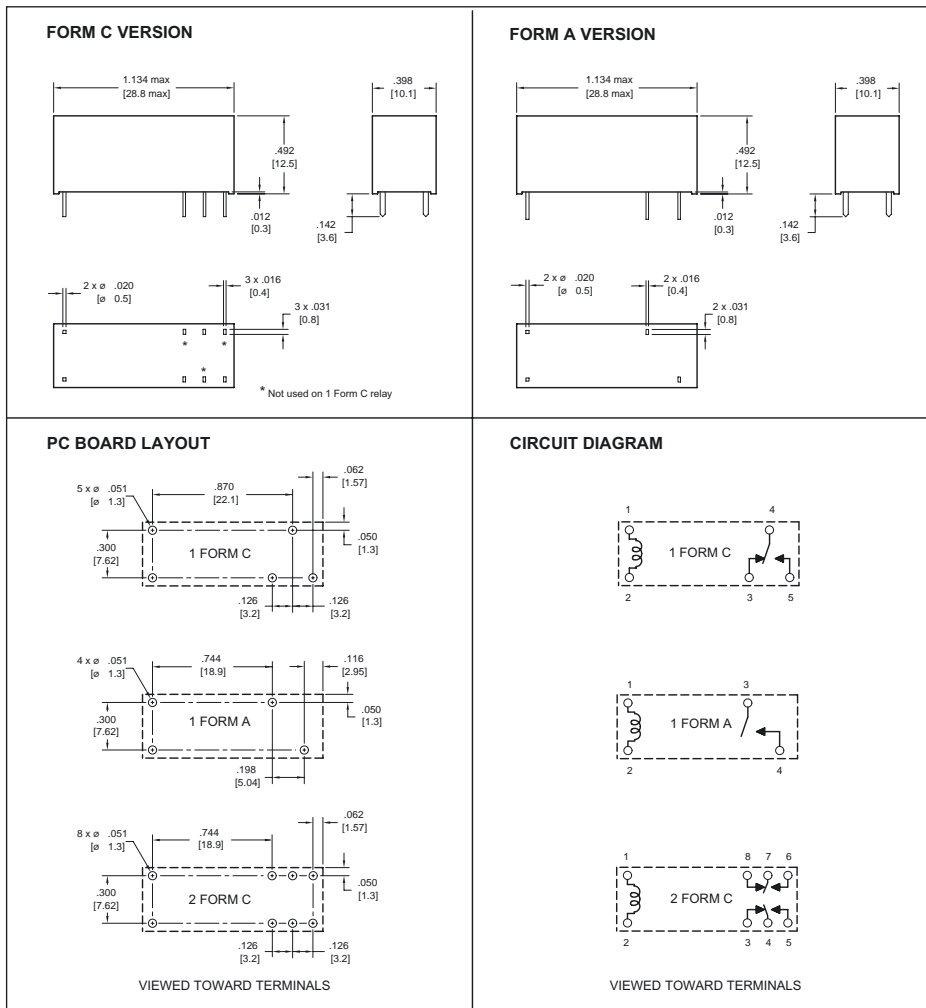
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	11.6	113 ± 10%	AZ6963-1AE-5D	AZ6963-1CE-5D
6	4.2	14.0	164 ± 10%	AZ6963-1AE-6D	AZ6963-1CE-6D
9	6.3	20.8	360 ± 10%	AZ6963-1AE-9D	AZ6963-1CE-9D
12	8.4	27.2	620 ± 10%	AZ6963-1AE-12D	AZ6963-1CE-12D
18	12.6	39.4	1,295 ± 10%	AZ6963-1AE-18D	AZ6963-1CE-18D
24	16.8	53.1	2,350 ± 10%	AZ6963-1AE-24D	AZ6963-1CE-24D
48	33.6	98.0	8,000 ± 15%	AZ6963-1AE-48D	AZ6963-1CE-48D

*Suffix "E" at "1AE" or "1CE" indicates silver tin oxide contacts. Substitute suffix "B" in place of "E" at "1AE" or "1CE" for silver nickel contacts.

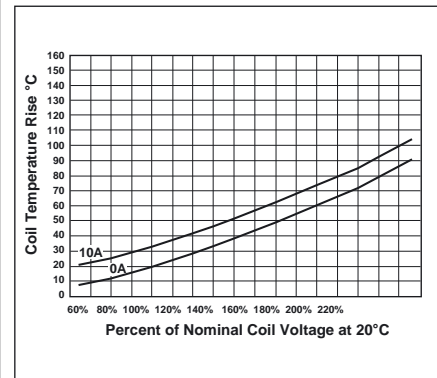
Substitute "2C" in place of "1C" for 2 Form C relay.

Add suffix "E" at the end of order number for sealed version. Add suffix "A" at the end of order number for gold plated contacts.

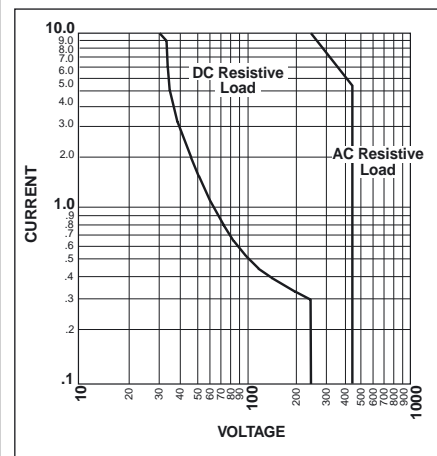
MECHANICAL DATA



Coil Temperature Rise



Maximum Switching Capacity (1 Form A and 1 Form C)



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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