

10 AMP SUBMINIATURE POWER RELAY

FEATURES

- High sensitivity, 110 mW pickup
- Dielectric strength 4000 Vrms
- Isolation spacing greater than 8 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 file 40012571



CONTACTS

Arrangement	SPST (1 Form C) SPST (1 Form A and 1 Form B)
Ratings	Resistive load: Max. switched power: 300 W or 2500 VA Max. switched current: 10 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	10 A at 30 VDC, resistive 10 A at 250 VAC, general use 1/4 HP at 250 VAC 1/2 HP at 250 VAC B300
VDE	1 Form A / 1 Form B (unsealed) 10 A at 250VAC, resistive, 85°C, 50k cycles [2] 8 A at 250VAC, resistive, 40°C, 100k cycles [1] 5 A at 250VAC, cos phi 0.9, 70°C, 50k cycles [1] 1 Form C (unsealed) 10 A at 250VAC, resistive, 85°C, 50k cycles [2] 8 A at 250VAC, resistive, 40°C, 50k cycles [1] 4 A at 250VAC, cos phi 0.9, 70°C, 50k cycles [1] 1 Form A / 1 Form B / 1 Form C (sealed) 10 A at 250VAC, resistive, 85°C, 10k cycles [2]
Material	Silver cadmium oxide [1]*, silver tin oxide [2] * Note: Silver cadmium oxide will be discontinued on 31.12.2017.
Resistance	< 30 milliohms initially (at 6 V, 1 A, voltage drop method)

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.
4. It's recommended to remove vent nipple on sealed versions to expand life expectancy when switching higher loads.

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)	10 ms at nominal coil voltage
Release Time (typical)	5 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
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	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	20 g
Enclosure	P.B.T. polyester, UL94 V-0
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	11 grams
Packing unit in pcs	50 per plastic tray / 1500 per carton box

COIL

Power	
At Pickup Voltage (typical)	110 mW 140 mW (48 VDC coil)
Max. Continuous Dissipation	1.5 W at 20°C (68°F) ambient
Temperature Rise	20°C (36°F) at nominal coil voltage
Temperature	Max. 110°C (230°F)

RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm $\pm 10\%$	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	12.0	110	AZ696-1A-5D	AZ696-1C-5D
6	4.2	14.5	160	AZ696-1A-6D	AZ696-1C-6D
9	6.3	22.0	360	AZ696-1A-9D	AZ696-1C-9D
12	8.4	29.5	660	AZ696-1A-12D	AZ696-1C-12D
18	12.6	44.0	1,500	AZ696-1A-18D	AZ696-1C-18D
24	16.8	54.0	2,200	AZ696-1A-24D	AZ696-1C-24D
48	33.6	102.0	8,000	AZ696-1A-48D	AZ696-1C-48D

* Substitute "1B" in place of "1A" for 1 Form B contact. Add suffix "E" to "1A" or "1B" or "1C" for silver tin oxide contacts. Add suffix "E" at the end of order number for sealed version.

Note: Silver cadmium oxide will be discontinued on 31.12.2017.

MECHANICAL DATA

<p>1 FORM C</p>	<p>1 FORM A and 1 FORM B</p>	<p>Coil Temperature Rise</p>
<p>PC BOARD LAYOUT</p> <p>1 FORM C</p> <p>1 FORM A and 1 FORM B</p> <p>Viewed toward terminals</p>	<p>WIRING DIAGRAMS</p> <p>1 FORM C</p> <p>1 FORM A</p> <p>1 FORM B</p> <p>Viewed toward terminals</p>	<p>Maximum Switching Capacity</p>

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "