

AZ733WC

DPDT MINIATURE POWER RELAY

FEATURES

Dielectric strength 5000 Vrms
 1.5 mm contact gap
 Epoxy sealed version available
 Isolation spacing greater than 8 mm
 UL Class B insulation system, class F available
 UL, CUR file E44211
 TÜV file R50311225



CONTACTS/CONTACTS

Arrangement	DPDT (2 Form C)
Ratings	Resistive load: Max. switched power: 240 W or 2500 VA Max. switched current: 10 A Max. switched voltage: 150 VDC* or 400 VAC *Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	TV-3, 125 VAC, 25K cycles, NO Side Only [1] 10A, 250 VAC, 100K cycles, General Use [1] 10A, 30 VDC, 50K cycles NO/NC contacts, Res [1] 12 A, 277 VAC / 250 VAC, Res. 70°C, 80K cycles [2] 1/3 HP 125 VAC, 40°C, 1K cycles [2] 3/4 HP 250 VAC, 40°C, 1K cycles [2]
TÜV	10 A at 30 VDC, 250 VAC resistive, AC/30K cycles, DC/20K cycles [1], [2]
Material	Silver cadmium oxide [1]; Silver Tin oxide [2]; Gold Plate optional
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	800 mW
Max. Continuous Dissipation	2.3 W at 20°C (68°F) ambient 1.9 W at 40°C (104°F) ambient
Temperature Rise	51°C (65°F) at nominal coil voltage
Temperature	Max. 130°C (266°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 5 x 10 ⁵ 1 x 10 ⁵ at 10 A 240 VAC Res.
Operate Time (typical)	10 ms at nominal coil voltage 7 ms at 1.5 x nominal coil voltage 4.5 ms at 2.0 x nominal coil voltage
Release Time (typical)	4 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000 Vrms contact to coil 2500 Vrms between open contacts 3000 Vrms between contact sets
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	at nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 130°C (266°F)
Vibration	0.062" 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	18 grams

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.

AMERICAN ZETTLER, INC.

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RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER	
Nominal Coil VDC	Must Operate* VDC	Max. Continuous VDC	Coil Resistance	Unsealed	Sealed
3	3	5.0	11.3 ±10%	AZ733WC-2C-3D	AZ733WC-2C-3DE
5	5	8.4	31 ±10%	AZ733WC-2C-5D	AZ733WC-2C-5DE
6	6	10.1	45 ±10%	AZ733WC-2C-6D	AZ733WC-2C-6DE
9	9	15.5	101 ±10%	AZ733WC-2C-9D	AZ733WC-2C-9DE
12	12	20.3	180 ±10%	AZ733WC-2C-12D	AZ733WC-2C-12DE
18	18	31.2	405 ±10%	AZ733WC-2C-18D	AZ733WC-2C-18DE
24	24	40.6	720 ±15%	AZ733WC-2C-24D	AZ733WC-2C-24DE
48	48	79.1	2,880 ±15%	AZ733WC-2C-48D	AZ733WC-2C-48DE
60	60	102.0	4,500 ±15%	AZ733WC-2C-60D	AZ733WC-2C-60DE

*Due to the special construction of this relay, the "Must Operate" voltage is the same as the "Nominal Coil" voltage. It is recommended that the relay be energized with at least 1.5 X coil nominal and then return the operating voltage to coil nominal; Add 'E' after 2C for Silver Tin Oxide contacts; add 'A' suffix for gold plate; add 'F' suffix for class F.

MECHANICAL DATA

Terminal No.	Dimensions Tol.: ± 0.005 (0.13)
1,2,4,5,7,8	0.018 (0.457) x 0.038 (0.965)
3,6	0.011 (0.279) x 0.038 (0.965)

PC BOARD LAYOUT

WIRING DIAGRAM

Form C

Viewed toward terminals

Viewed toward terminals

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