

# 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

<b>Arrangement</b>	DPDT (2 Form C)
<b>Ratings</b>	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.
<b>Rated Load UL, CUR</b>	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]
<b>TÜV</b>	10 A at 30 VDC, 250 VAC resistive, AC/30K cycles, DC/20K cycles [1], [2]
<b>Material</b>	Silver cadmium oxide [1]; Silver Tin oxide [2]; Gold Plate optional
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

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

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 5 x 10 <sup>5</sup> 1 x 10 <sup>5</sup> at 10 A 240 VAC Res.
<b>Operate Time (typical)</b>	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
<b>Release Time (typical)</b>	4 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	5000 Vrms contact to coil 2500 Vrms between open contacts 3000 Vrms between contact sets
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	at nominal coil voltage -40°C (-40°F) to 70°C (158°F) -40°C (-40°F) to 130°C (266°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	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.**

8/30/17

# AZ733WC

## 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"