

# AZ755

## 20 AMP MINIATURE POWER RELAY

### FEATURES

- Dielectric strength 5000 Vrms
- Low cost
- Epoxy sealed version available
- 20 Amp switching — single pole contacts
- Isolation spacing greater than 8mm
- UL, CUR file E44211
- TÜV file R9659060



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A, 1 Form B) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 480 W or 5540 VA Max. switched current: 20 A Max. switched voltage: 150 VDC* or 380 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>	20 A at 277 VAC N.O. resistive, 50k cycles 16 A at 240 VAC general use, 100k cycles 12 A at 277 VAC N.O. resistive., 100k cycles 20 A at 24 VDC resistive 1 HP 240 VAC TV-8 120 VAC N.O. (silver tin oxide only)
<b>TÜV</b>	16 A at 30 VDC, 250 VAC resistive, 100k cycles 13 A at 420 VAC res., 100k cycles (1 Form A)
<b>Material</b>	Silver cadmium oxide or silver tin oxide
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 5 x 10 <sup>6</sup> 5 x 10 <sup>4</sup> at 16 A 250 VAC Res. 2 x 10 <sup>4</sup> at 20 A 277 VAC Res.
<b>Operate Time (typical)</b>	8 ms at nominal coil voltage
<b>Release Time (typical)</b>	5 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	5000 Vrms coil to contact 1000 Vrms between open contacts
<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 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" (1.5 mm) 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>	18.5 grams
<b>Packing unit in pcs</b>	50 per plastic tray / 500 per carton box

### COIL

<b>Power At Pickup Voltage (typical)</b>	270 mW
<b>Max. Continuous Dissipation</b>	1.9 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	34°C (61°F) at nominal coil voltage
<b>Temperature</b>	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.

## ZETTLER electronics GmbH

Junkersstrasse 3, D-82178 Puchheim, Germany

Tel. +49 89 800 97 0  
Fax +49 89 800 97 200

office@ZETTLERelectronics.com  
www.ZETTLERelectronics.com

# AZ755

## RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance Ohm	Form A (SPST)	Form C (SPDT)
5	3.6	9.4	47 ±10%	AZ755-1A-5D	AZ755-1C-5D
6	4.3	11.4	69 ±10%	AZ755-1A-6D	AZ755-1C-6D
9	6.5	17.4	155 ±10%	AZ755-1A-9D	AZ755-1C-9D
12	8.6	22.8	275 ±10%	AZ755-1A-12D	AZ755-1C-12D
18	13.0	27.9	620 ±10%	AZ755-1A-18D	AZ755-1C-18D
24	17.3	45.7	1,100 ±15%	AZ755-1A-24D	AZ755-1C-24D
48	34.6	89.0	4,400 ±15%	AZ755-1A-48D	AZ755-1C-48D
60	43.2	115.3	6,880 ±15%	AZ755-1A-60D	AZ755-1C-60D
110 **	73.9	170.5	22,900 ±15%	AZ755-1A-110D	AZ755-1C-110D

\* Substitute "1B" in place of "1A" or "1C" to indicate 1 Form B contact arrangement.

Add suffix "E" at the end of order number for epoxy sealed version. Add suffix "A" for silver tin oxide contacts. Add suffix "F" for Class F.

\*\* 110VDC coil not TÜV approved.

## 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

(Form B & C only)

Viewed toward terminals

### WIRING DIAGRAMS

#### Form A

#### Form B

#### Form C

Viewed toward terminals

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

## ZETTLER electronics GmbH

Junkersstrasse 3, D-82178 Puchheim, Germany

Tel. +49 89 800 97 0

Fax +49 89 800 97 200

office@ZETTLERelectronics.com

www.ZETTLERelectronics.com

2004-08-11