# 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**

Arrangement	SPST (1 Form A, 1 Form B) SPDT (1 Form C)		
Ratings	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.		
Rated Load UL, CUR	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)		
ΤÜV	16 A at 30 VDC, 250 VAC resistive, 100k cycles 13 A at 420 VAC res., 100k cycles (1 Form A)		
Material	Silver cadmium oxide or silver tin oxide		
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)		

## COIL

Power				
At Pickup Voltage (typical)	270 mW			
Max. Continuous Dissipation	1.9 W at 20°C (68°F) ambient			
Temperature Rise	34°C (61°F) at nominal coil voltage			
Temperature	Max. 130°C (266°F)			

## **GENERAL DATA**

Life Expectancy Mechanical Electrical	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.		
Operate Time (typical)	8 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.)	5000 Vrms coil to contact 1000 Vrms between open contacts		
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 85°C (185°F) -40°C (-40°F) to 105°C (221°F)		
Vibration	0.062" (1.5 mm) 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	18.5 grams		
Packing unit in pcs	50 per plastic tray / 500 per carton box		

### **NOTES**

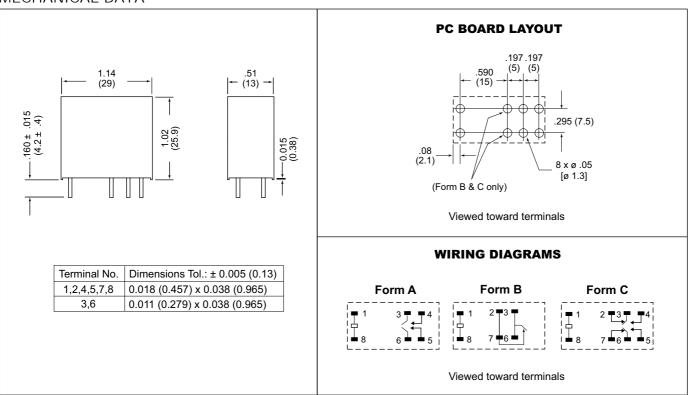
- 1. All values at 20°C (68°F).
- 2. Relay may pull in with less than "Must Operate" value.
- 3. Specifications subject to change without notice.

### **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

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

#### MECHANICAL DATA



Tel. +49 89 800 97 0

Fax +49 89 800 97 200

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

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.

<sup>\*\* 110</sup>VDC coil not TÜV approved.