

# AZ944

## 16 AMP LOW PROFILE POWER RELAY

### FEATURES

- High power switching (2000 VA)
- High sensitivity, 128 mW pickup
- Low profile (less than .5" height)
- SPST (1 Form A), SPDT (1 Form C)
- DC coils up to 100 VDC
- Class B (130°C) and Class F (155°C) insulation systems available
- UL, CUR file E44211



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	<b>Resistive load:</b> Max. switched power: 300 W, 2000 VA (SPST) 150 W, 1250 VA (SPDT) Max. switched current: 16 A (SPST), 10 A (SPDT) Max. switched voltage: 250 VAC/125 VDC*  *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load UL, CUR SPST</b>	16 A at 125 VAC, resistive 8 A at 250 VAC, resistive  10 A at 30 VDC, resistive 1/4 HP 125 VAC 1/10 HP 277 VAC
<b>SPDT</b>	10 A at 125 VAC, resistive 5 A at 277 VAC, 30 VDC, resistive 1/10 HP 277 VAC
<b>Material</b>	Silver cadmium oxide
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

<b>Power At Pickup Voltage (typical)</b>	Form A: 128 mW Form C: 256 mW
<b>Max. Continuous Dissipation</b>	1.5 W at 20°C (68°F)
<b>Temperature Rise</b>	Form A: 16°C (29°F) at nominal coil voltage Form C: 28°C (50°F) at nominal coil voltage
<b>Temperature</b>	Max. 115°C (239°F)

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 10 A 120 VAC Res.
<b>Operate Time (typical)</b>	10 ms at 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>	1500 Vrms coil to contact 1000 Vrms contact to contact
<b>Insulation Resistance</b>	100 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature Operating</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F), Form C -40°C (-40°F) to 95°C (203°F), Form A
<b>Storage</b>	-40°C (-40°F) to 115°C (239°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>	8 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.**

[www.azettler.com](http://www.azettler.com)

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9/19/02W

# AZ944

## RELAY ORDERING DATA

COIL SPECIFICATIONS SPST-NO (1 Form A)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Unsealed	Sealed
5	4.0	13.7	125	AZ944-1AH-5D	AZ944-1AH-5DE
6	4.8	16.4	180	AZ944-1AH-6D	AZ944-1AH-6DE
9	7.2	24.6	405	AZ944-1AH-9D	AZ944-1AH-9DE
12	9.6	32.8	720	AZ944-1AH-12D	AZ944-1AH-12DE
18	14.4	49.3	1620	AZ944-1AH-18D	AZ944-1AH-18DE
24	19.2	65.7	2,880	AZ944-1AH-24D	AZ944-1AH-24DE
48	38.4	131.4	11,520	AZ944-1AH-48D	AZ944-1AH-48DE
100	80.0	157.8	16,600	AZ944-1AH-100D	AZ944-1AH-100DE

  

COIL SPECIFICATIONS SPDT-NO (1 Form C)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Unsealed	Sealed
5	4.0	9.7	62.5	AZ944-1C-5D	AZ944-1C-5DE
6	4.8	11.6	90	AZ944-1C-6D	AZ944-1C-6DE
9	7.2	17.4	202	AZ944-1C-9D	AZ944-1C-9DE
12	9.6	23.2	360	AZ944-1C-12D	AZ944-1C-12DE
18	14.4	34.8	810	AZ944-1C-18D	AZ944-1C-18DE
24	19.2	46.4	1,440	AZ944-1C-24D	AZ944-1C-24DE
48	38.4	92.9	5,760	AZ944-1C-48D	AZ944-1C-48DE
100	80.0	157.7	16,600	AZ944-1C-100D	AZ944-1C-100DE

\*Add suffix "B" for Class B insulation system or "F" for Class F insulation system.

## MECHANICAL DATA

### PC BOARD LAYOUT

Hole 5 not needed for SPST-NO model

### WIRING DIAGRAM

**1 Form A**

**1 Form C**

Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm 0.010$ "



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