

# AZ2250

## 30 AMP MINIATURE POWER RELAY

### FEATURES

- 1 Form A, B and C contacts available
- AC and DC coils available
- High dielectric strength version available
- Epoxy sealed versions available
- UL Class F (155°C) standard
- UL, CUR file E44211



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A, or B) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 560 W or 8310 VA Max. switched current: 30 A (Form A) 15 A (Form B) Max. switched voltage: 277 VAC, 28 VDC
<b>UL, CUR</b>	1 Form A 30 A at 277 VAC, General Use [1] [2] 2 Hp at 250 VAC [1] [2] 1 HP at 125 VAC [1] [2] 30 A at 28 VDC [1] 20/60 A (FLA/LRA) at 277 VAC 30k cycles [1]  1 Form B 15 A at 277 VAC, General Use [1] 10 A at 28 VDC [1] 0.5 HP at 250 VAC [1] .25 HP at 125 VAC [1] 10/33 (FLA/LRA) at 277 VAC 30k cycles [1]  1 Form C 30/20 A (N.O./N.C.) at 277 VAC, General Use [1] [2] 20/10 A (N.O./N.C.) at 28 VDC [1] 2/0.5 HP (N.O./N.C.) at 250 VAC [1] [2] 1/.25 HP (N.O./N.C.) at 125 VAC [1] [2] 20/60 (FLA/LRA) at 277 VAC 30k cycles, N.O. [1] 10/33 (FLA/LRA) at 277 VAC 30k cycles, N.C [1]
<b>Material</b>	Silver cadmium oxide [1] or silver tin oxide [2]
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### GENERAL DATA

<b>Life Expectancy</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 30 A 120 VAC Res.
<b>Operate Time</b>	15 msec max. at nominal coil voltage
<b>Release Time</b>	10 msec max. at nominal coil voltage (without suppression)
<b>Dielectric Strength</b> (at sea level for 1 min.)	1500 Vrms contact to contact 2500 Vrms contact to coil 4000 Vrms contact to coil "T" version
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC 50% RH
<b>Dropout</b>	DC: > 10% of nominal coil voltage AC: > 20% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b>  <b>Storage</b>	-40°C (-40°F) to 85°C (185°F) - DC coils -40°C (-40°F) to 70°C (158°F) - AC coils -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>	36 grams
<b>Packing unit in pcs</b>	40 per plastic tray / 280 per carton box

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	500 mW (DC coil) 1.4 VA (AC coil)
<b>Max. Continuous Dissipation</b>	1.7 W at 20°C (68°F) ambient 2.7 VA at 20°C (68°F) ambient
<b>Temperature Rise</b>	43°C (77°F) at nominal coil voltage
<b>Max. Temperature</b>	155°C (311°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.

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## RELAY ORDERING DATA

COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA $\pm 10\%$	Coil Resistance Ohm $\pm 10\%$	
5	3.75	6.4	185	27	AZ2250-1A-5DF
6	4.50	7.8	150	40	AZ2250-1A-6DF
9	6.75	12.2	93	97	AZ2250-1A-9DF
12	9.0	15.4	77	155	AZ2250-1A-12DF
15	11.3	19.8	59	256	AZ2250-1A-15DF
18	13.5	24.1	47	380	AZ2250-1A-18DF
24	18.0	32.0	36	660	AZ2250-1A-24DF
48	36.0	62.6	19	2,560	AZ2250-1A-48DF
110	82.5	163.2	8	13,450	AZ2250-1A-110DF

  

COIL SPECIFICATIONS – AC Coil 50/60 Hz					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Coil Power VA	Coil Resistance Ohm $\pm 10\%$	
12	9.6	13.8	2.3	25	AZ2250-1A-12AF
24	19.2	27.6	2.1	100	AZ2250-1A-24AF
120	96.0	138.0	2.3	2,500	AZ2250-1A-120AF
208	166.4	239.2	2.2	11,000	AZ2250-1A-208AF
220/240	176.0	276.0	2.2/2.6	13,490	AZ2250-1A-240AF
277	221.6	318.5	2.2	15,000	AZ2250-1A-277AF

\* Substitute "1B" or "1C" in place of "1A" for 1 Form B or 1 Form C. Add suffix "E" to "1A" or "1B" or "1C" for silver tin oxide contacts.  
 Substitute "DEF" or "AEF" in place of "DF" or "AF" for epoxy sealed version. Substitute "TF" in place of "F" for 4000 Vrms dielectric strength version.

## MECHANICAL DATA

### PC BOARD LAYOUT

Viewed toward terminals

### WIRING DIAGRAMS

**Form A**

**Form B**

**Form C**

Viewed toward terminals

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

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