

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

Arrangement	SPST (1 Form A, or B) SPDT (1 Form C)
Ratings	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
UL, CUR	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]
Material	Silver cadmium oxide [1] or silver tin oxide [2]
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

GENERAL DATA

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

COIL

Power	
At Pickup Voltage (typical)	500 mW (DC coil) 1.4 VA (AC coil)
Max. Continuous Dissipation	1.7 W at 20°C (68°F) ambient 2.7 VA at 20°C (68°F) ambient
Temperature Rise	43°C (77°F) at nominal coil voltage
Max. Temperature	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: $\pm .010$ "