

# AZ2290

## 30 AMP MINIATURE POWER RELAY

### FEATURES

- Quick-connect leads for contacts
- 1 Form A, B and C contacts available
- AC and DC coils 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, 30k cycles 2 Hp at 250 VAC 1 HP at 125 VAC 30 A at 28 VDC 20/60 (FLA/LRA) at 277 VAC 30k cycles  1 Form B 15 A at 277 VAC, General Use 10 A at 28 VDC 0.5 HP at 250 VAC .25 HP at 125 VAC 10 FLA at 277 VAC 30k cycles 33 LRA at 277 VAC 30k cycles  1 Form C 30/20 A (N.O./N.C.) at 277 VAC, General Use 20/10 A (N.O./N.C.) at 28 VDC 2/0.5 HP (N.O./N.C.) at 250 VAC 1/.25 HP (N.O./N.C.) at 125 VAC 20/10 FLA (N.O./N.C.) at 277 VAC 30k cycles 60/33 LRA (N.O./N.C.) at 277 VAC 30k cycles
<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>	DC: 500 mW AC: 1.4 VA
<b>Max. Continuous Dissipation</b>	DC: 1.7 W at 20°C AC: 2.7 VA at 20°C
<b>Max. Temperature</b>	155°C (311°F)

### 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. N.O.
<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
<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>	-55°C (-67°F) to 85°C (185°F) -55°C (-67°F) to 155°C (311°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., Quick Connects Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
<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

### 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)

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

# AZ2290

## 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 $\pm 10\%$	
5	3.75	6.4	185	27	AZ2290-1A-5DF
6	4.5	7.8	150	40	AZ2290-1A-6DF
9	6.75	12.2	93	97	AZ2290-1A-9DF
12	9.01	15.4	77	155	AZ2290-1A-12DF
15	11.3	19.8	59	256	AZ2290-1A-15DF
18	13.5	24.1	47	380	AZ2290-1A-18DF
24	18.0	32.0	36	660	AZ2290-1A-24DF
48	36.0	62.6	19	2,560	AZ2290-1A-48DF
COIL SPECIFICATIONS – AC Coil 50/60 Hz					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Coil Power VA	Coil Resistance $\pm 10\%$	
12	10.2	13.8	2.3	25	AZ2290-1A-12AF
24	20.4	27.6	2.1	100	AZ2290-1A-24AF
120	102.0	138.0	2.3	2,500	AZ2290-1A-120AF
208	176.8	276.0	2.2	11,000	AZ2290-1A-208AF
220/240	187.0	276.0	2.2/2.6	13,490	AZ2290-1A-240AF
277	235.4	318.5	2.2	15,000	AZ2290-1A-277AF

\*Add suffix "E" for epoxy sealed version. Substitute "1B" or "1C" for 1 form B or 1 form C. Add "T" to "-1A", "-1B" or "-1C" for extended life contacts.

## MECHANICAL DATA

Top View Dimensions: 1.08 (27.5), 0.03 (0.8), 1.27 (32.4), 0.020 (0.5), 0.110 (2.79), 0.25 (6.4), 1.09 (27.8), 0.13 (3.3)

### PC Board Layout

PC Board Layout Dimensions: 0.08 (2.1) (3 holes), 0.1 (2.54), 0.3 (7.6), 0.7 (17.8), 0.61 (15.4), 0.55 (14), 0.15 (3.8), 0.04 (1.1) (2 holes)

### WIRING DIAGRAM (Top View)

1 FORM A

1 FORM B

1 FORM C

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



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