

# AZ2280

## 30 AMP MINIATURE POWER RELAY

### FEATURES

- Quick-connect leads for contacts and coil
- 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, 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</b>	
<b>At Pickup Voltage (typical)</b>	DC: 500 mW AC: 1.4 VA
<b>Max. Continuous Dissipation</b>	DC: 1.7 W at 20°C (68°F) AC: 2.7 VA at 20°C (68°F)
<b>Temperature Rise</b>	38°C (68°F)
<b>Temperature</b>	Max. 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 ms at nominal coil voltage
<b>Release Time</b>	10 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	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 500 VDC, 20°C 50% RH
<b>Dropout</b>	DC: Greater than 10% of nominal coil voltage AC: Greater than 20% of nominal coil voltage
<b>Ambient Temperature</b> <b>Operating</b> <b>Storage</b>	At nominal coil voltage -55°C (-67°F) to 85°C (185°F) -55°C (-67°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, 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.

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## RELAY ORDERING DATA

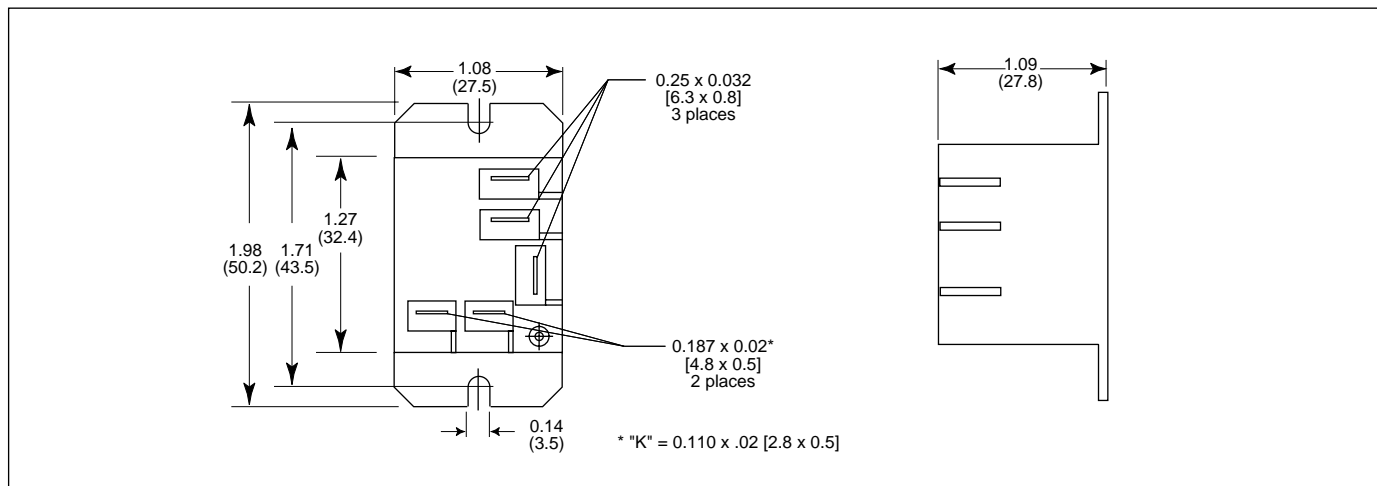
COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA $\pm 10\%$	Coil Resistance Ohm $\pm 10\%$	
5	3.75	6.4	185	27	AZ2280-1A-5DF
6	4.50	7.8	150	40	AZ2280-1A-6DF
9	6.75	12.2	93	97	AZ2280-1A-9DF
12	9.00	15.4	77	155	AZ2280-1A-12DF
15	11.25	19.8	59	256	AZ2280-1A-15DF
18	13.50	24.1	47	380	AZ2280-1A-18DF
24	18.00	32.0	36	660	AZ2280-1A-24DF
48	36.00	62.6	19	2,560	AZ2280-1A-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 Ohm $\pm 10\%$	
12	10.2	13.8	2.3	25	AZ2280-1A-12AF
24	20.4	27.6	2.1	100	AZ2280-1A-24AF
120	102.0	138.0	2.3	2,500	AZ2280-1A-120AF
208	176.8	276.0	2.2	11,000	AZ2280-1A-208AF
240	187.0	276.0	2.6	13,490	AZ2280-1A-240AF
277	235.4	318.5	2.2	15,000	AZ2280-1A-277AF

\* Substitute "1B" or "1C" for 1 form B or 1 form C.

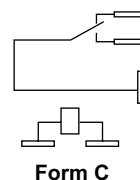
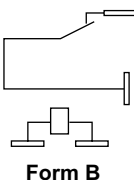
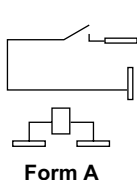
Add suffix "E" at the end of part number for epoxy sealed version. Add suffix "K" for 0.11 x 0.02 [2.8 x 0.5] coil terminals.

Add suffix "T" for 4000 Vrms dielectric strength.

## MECHANICAL DATA



## WIRING DIAGRAM (Top View)



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

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