

# AZ2280

## 40 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
- Epoxy sealed IP67 approved versions available
- UL Class F (155°C) standard
- UL, CUR file E44211
- VDE 40049064 ( DC coil only )



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A, or B) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 840W or 11,080VA Max. switched current: 40A (Form A), 15A (Form B), 20A (Form C) Max. switched voltage: 277VAC, 28VDC
<b>UL, CUR</b>	1 Form A 40A at 277VAC, General Use [1][2] 28A at 277VAC, General Use, 100k cycles [1] 2Hp at 250VAC [1][2] 1HP at 125VAC [1][2] 30A at 28VDC [1] 20/60 (FLA/LRA) at 277VAC 30k cycles [1]  1 Form B 15A at 277VAC, General Use [1] 10A at 28VDC [1] 0.5HP at 250VAC [1] 0.25HP at 125VAC [1] 10/33 (FLA/LRA) at 277VAC 30k cycles [1]  1 Form C 30/20A (N.O./N.C.) at 277VAC, General Use [1][2] 20/10A (N.O./N.C.) at 28VDC [1] 2/0.5HP (N.O./N.C.) at 250VAC [1][2] 1/0.25HP (N.O./N.C.) at 125VAC [1][2] 20/60 (FLA/LRA) at 277VAC 30k cycles N.O. [1] 10/33 (FLA/LRA) at 277VAC 30k cycles N.C. [1]
<b>VDE</b>	Contact factory for ratings
<b>Material</b>	Silver cadmium oxide [1], silver tin oxide [2]
<b>Resistance</b>	< 50 milliohms initially (24V, 1A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	DC: 500mW AC: 1.4VA
<b>Max. Continuous Dissipation</b>	DC: 1.7W at 20°C (68°F) AC: 2.7VA 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 28A, 277VAC Res. [N.O.]
<b>Operate Time (max.)</b>	15ms at nominal coil voltage
<b>Release Time (max.)</b>	10ms 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
<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), [DC] -55°C (-67°F) to 60°C (140°F), [AC] -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, 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 (approx.)</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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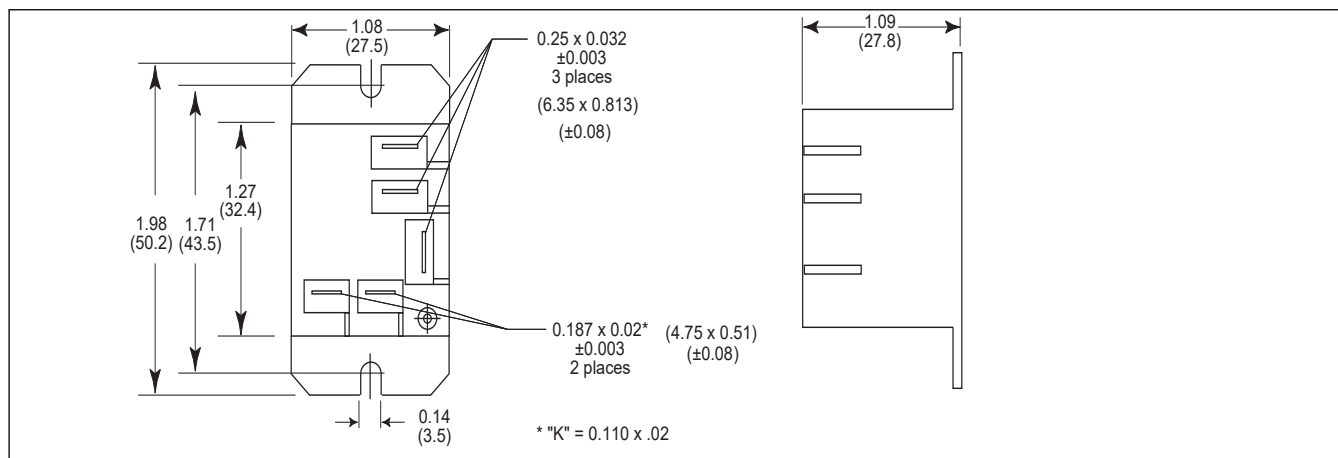
# AZ2280

## RELAY ORDERING DATA

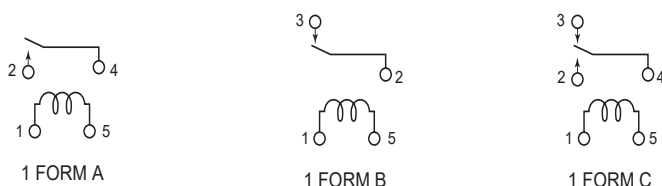
COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA $\pm 10\%$	Coil Resistance $\pm 10\%$	
5	3.75	6.4	185	27	AZ2280-1A-5DF
6	4.50	7.8	150	40	AZ2280-1A-6DF
9	6.75	12.2	93	97	AZ2280-1A-9DF
12	9.00	15.4	77	155	AZ2280-1A-12DF
15	11.25	19.8	59	256	AZ2280-1A-15DF
18	13.5	24.1	47	380	AZ2280-1A-18DF
24	18.00	32.0	36	660	AZ2280-1A-24DF
48	36.00	62.6	19	2560	AZ2280-1A-48DF
110	82.5	146.6	8.2	13450	AZ2280-1A-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 $\pm 10\%$	
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	239.0	2.2	11,000	AZ2280-1A-208AF
220/240	187.0	276.0	2.2/2.6	13,490	AZ2280-1A-240AF
277	235.4	318.5	2.2	15,000	AZ2280-1A-277AF

\*Substitute "-1B" or "-1C" in place of "-1A" for 1 Form B or 1 Form C respectively. For silver tin oxide contacts substitute "-1AE" or "-1CE" in place of "-1A" or "-1C." Add "T" to "-1A", "-1AE", "-1B", "-1C" or "-1CE" for extended life contacts. Substitute "DEF" or "AEF" in place of "DF" or "AF" for epoxy sealed version IP67 approved. For 0.110 coil terminals change "F" to "KF."

## MECHANICAL DATA



## WIRING DIAGRAM (Top View)



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

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