

# AZ2800

## 40 AMP MINIATURE POWER RELAY

### FEATURES

- DPST-NO and DPDT configuration
- Meets 8mm creepage, 4kV dielectric
- Epoxy sealed versions available
- UL Class F (155°C) standard
- UL, CUR file E44211
- VDE certificate 40023442



### CONTACTS

<b>Arrangement</b>	DPST (2 Form A) DPDT (2 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 1200 W or 11080 VA Max. switched current: 40A (N.O.), 3A (N.C.) Max. switched voltage: 30VDC* or 600VAC  *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load UL</b>	Normally open contacts (N.O.) 40A at 277VAC, Resistive, 30k cycles [1][2] 30A at 277VAC, General Use, 100k cycles [1][2] 10A at 600VAC, General Use, 6k cycles [1] 1HP at 120VAC, 100k cycles [1][2] 2.5HP at 240VAC, 100k cycles [1][2] 8FLA / 26LRA at 277/480/600VAC, 30k cycles [1]  Normally open contacts (N.O.), DC Coils only 25.3FLA / 110LRA at 240VAC, 30k cycles [1][2]  Normally closed contacts (N.C.) 3A at 277VAC, General Use, 100k cycles [1][2] 2A at 480VAC, General Use, 6k cycles [1] 1A at 600VAC, General Use, 6k cycles [1] 3FLA / 3LRA at 240VAC, 30k cycles [1] 2FLA / 2LRA at 277/480VAC, 30k cycles [1] 1FLA / 1LRA at 600VAC, 30k cycles [1]
<b>VDE</b>	Normally open contacts (N.O.) 20A at 250VAC, Resistive, 50k cycles [2]  Normally closed contacts (N.C.) 3A at 250VAC, Resistive, 50k cycles [2]
<b>Material</b>	Silver cadmium [1], silver tin oxide [2]
<b>Resistance</b>	<50 milliohms initially (24V, 1A voltage drop method)

### COIL

<b>Power At Pickup Voltage (typical)</b>	925mW, DC coil 2.6VA, AC coil
<b>Max. Continuous Dissipation</b>	5.0W at 20°C (68°F) ambient, DC coil 7.0VA at 20°C (68°F) ambient, AC coil
<b>Temperature Rise</b>	48°C (86°F) at nominal coil voltage, DC coil 68°C (122°F) at nominal coil voltage, AC coil
<b>Temperature</b>	Max. 155°C (311°F)

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 5 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 30A, 277VAC Res. (N.O.)
<b>Operate Time</b>	15ms typical 25ms maximum with bounce
<b>Release Time</b>	10ms typical 25ms maximum with bounce (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	1500Vrms contact to contact 4000Vrms contact to coil 2000Vrms between contact sets
<b>Insulation Resistance</b>	10 <sup>9</sup> ohms minimum at 500VDC
<b>Dropout</b>	DC: Greater than 10% of nominal coil voltage AC: Greater than 20% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage DC: -40°C (-40°F) to 85°C (185°F) AC: -40°C (-40°F) to 65°C (149°F) -40°C (-40°F) to 105°C (221°F)
<b>Vibration</b>	0.062" (1.65mm) DA at 10–55Hz
<b>Shock</b>	Operational, 10g for 11ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100g for 11ms 1/2 sine pulse
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
<b>Max. Solvent Temp.</b>	80°C (176°F)
<b>Max. Immersion Time</b>	30 seconds
<b>Weight</b>	86 grams
<b>Packing unit in pcs</b>	20 per plastic tray / 100 per carton box

### 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)

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# AZ2800

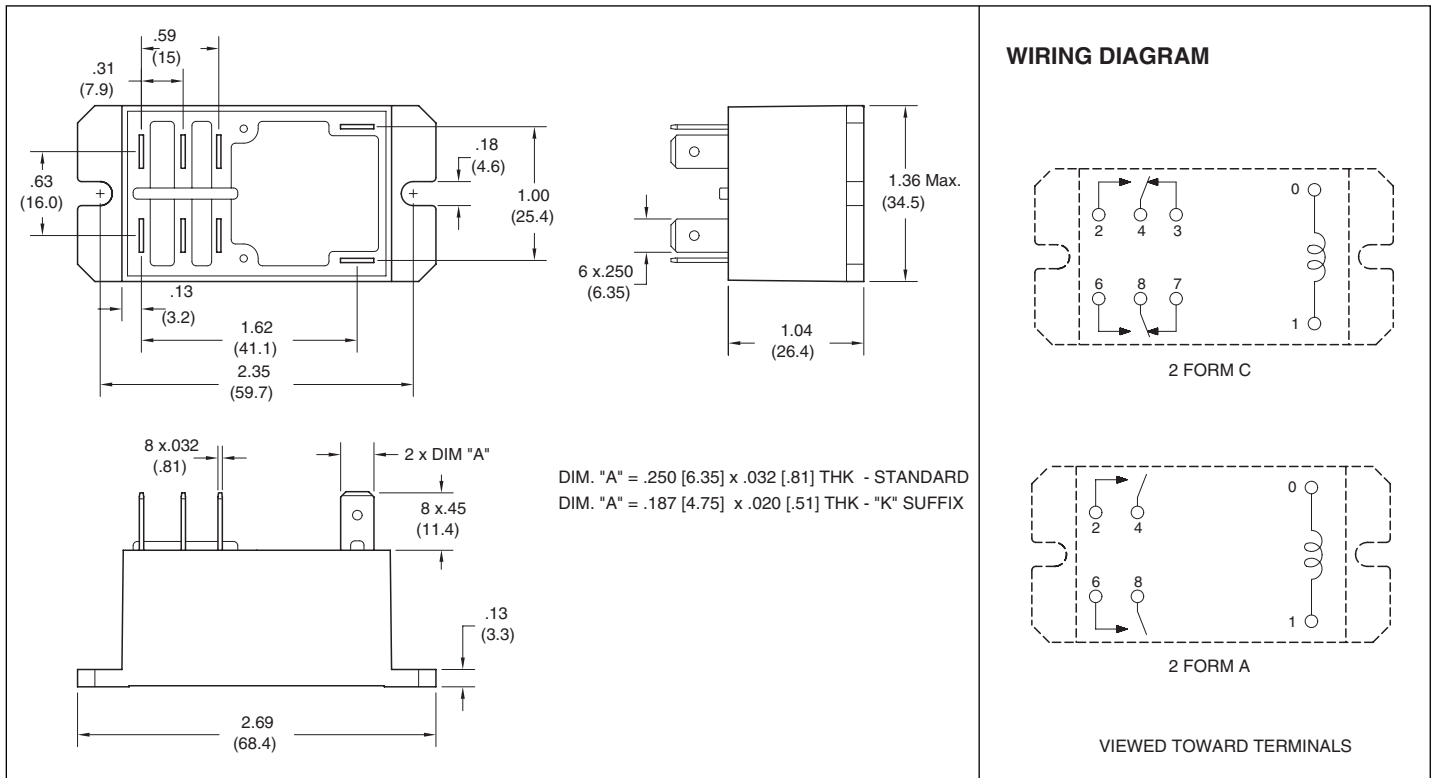
## RELAY ORDERING DATA

COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance Ohm ± 10%	
5	3.8	8.0	326.7	15.3	AZ2800-2C-5D
6	4.5	10.5	272.0	22	AZ2800-2C-6D
12	9.0	20.7	140.0	86	AZ2800-2C-12D
24	18.0	41.8	68.5	350	AZ2800-2C-24D
48	36.0	83.4	34.5	1390	AZ2800-2C-48D
110	82.5	190.5	15.2	7255	AZ2800-2C-110D

COIL SPECIFICATIONS – AC Coil						ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA ± 10%	50Hz Coil Resistance Ohm ± 10%	60Hz Coil Resistance Ohm ± 10%	
12	9.6	15.6	340.0	9.5	8	AZ2800-2C-12A
24	19.2	31.2	166.0	45	35.7	AZ2800-2C-24A
120	96.0	156.0	33.3	1125	830	AZ2800-2C-120A
220	176.0	286.0	18.2	3800	2870	AZ2800-2C-220A
240	192.0	312.0	16.7	4500	3800	AZ2800-2C-240A
277	221.6	360.1	14.4	5960	4700	AZ2800-2C-277A

\* Substitute "2A" in place of "2C" to indicate 2 Form A contacts.  
 "2A" or "2C" denotes silver cadmium contacts.  
 Add suffix "E" to "2A" or "2C" for silver tin oxide contacts.  
 Add suffix "5" for 50Hz coil, AC coils only. (Example: AZ2800-2C-24A5).  
 Add suffix "6" for 50/60Hz coil, AC coils only. (Example: AZ2800-2C-24A6).  
 Add suffix "E" at the end of order number for sealed version.  
 Add suffix "K" for 0.187" x 0.020" (4.8mm x 0.5mm) coil terminals.

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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