

# AZ2850

## 30 AMP MINIATURE POWER RELAY

### FEATURES

- 30 Amp switching capability
- DPST-NO and DPDT configuration
- Meets 8 mm creepage, 4 kV dielectric
- Class F construction
- PCB terminals
- Epoxy sealed versions available
- UL, CUR file E44211, VDE 40023442



### CONTACTS

<b>Arrangement</b>	DPST-N.O. DPDT
<b>Ratings</b>	Resistive load: Max. switched power: 560 W or 8310 VA Max. switched current: 30 A N.O., 3 A N.C. Max. switched voltage: 600 VAC or 30 VDC*
<b>UL, CUR N.O.</b>	30 A at 277 VAC General Use, 100k cycles 1 Hp at 120 VAC, 100k cycles 2.5 Hp at 240 VAC, 100k cycles 110 LRA/25.3 FLA at 240 VAC (DC coils only), 30k cycles
<b>UL, CUR N.C.</b>	3 A at 277 VAC General Use, 100k cycles
<b>VDE</b>	N.O. 30A 250 VAC, N.C. 3A 250 VAC  *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
<b>Material</b>	Silver cadmium oxide, silver tin oxide
<b>Resistance</b>	<50 milliohms initially (6 V, 1 A voltage drop method)

### COIL

<b>Power At Pickup Voltage (typical)</b>	DC: 0.925 W AC: 2.6 VA
<b>Max. Continuous Dissipation</b>	DC: 5.0 W at 20°C (68°F) AC: 7.0 VA at 20°C (68°F)
<b>Temperature Rise</b>	DC: 48°C (86°F) at nominal coil voltage AC: 68°C (122°F) at nominal coil voltage
<b>Temperature</b>	Max. 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.

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 5 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 typical 25 ms maximum with bounce
<b>Release Time</b>	10 ms typical 25 ms maximum with bounce (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	1500 Vrms contact to contact 4000 Vrms contact to coil 2000 Vrms between contact sets
<b>Insulation Resistance</b>	10 <sup>9</sup> ohms minimum at 500 VDC
<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 95°C (203°F) AC: -40°C (-40°F) to 75°C (167°F) -40°C (-40°F) to 155°C (311°F)
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock</b>	Operational, 10 g for 11 ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100 g for 11 ms 1/2 sine pulse
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<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>	86 grams



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3/3/08W

# AZ2850

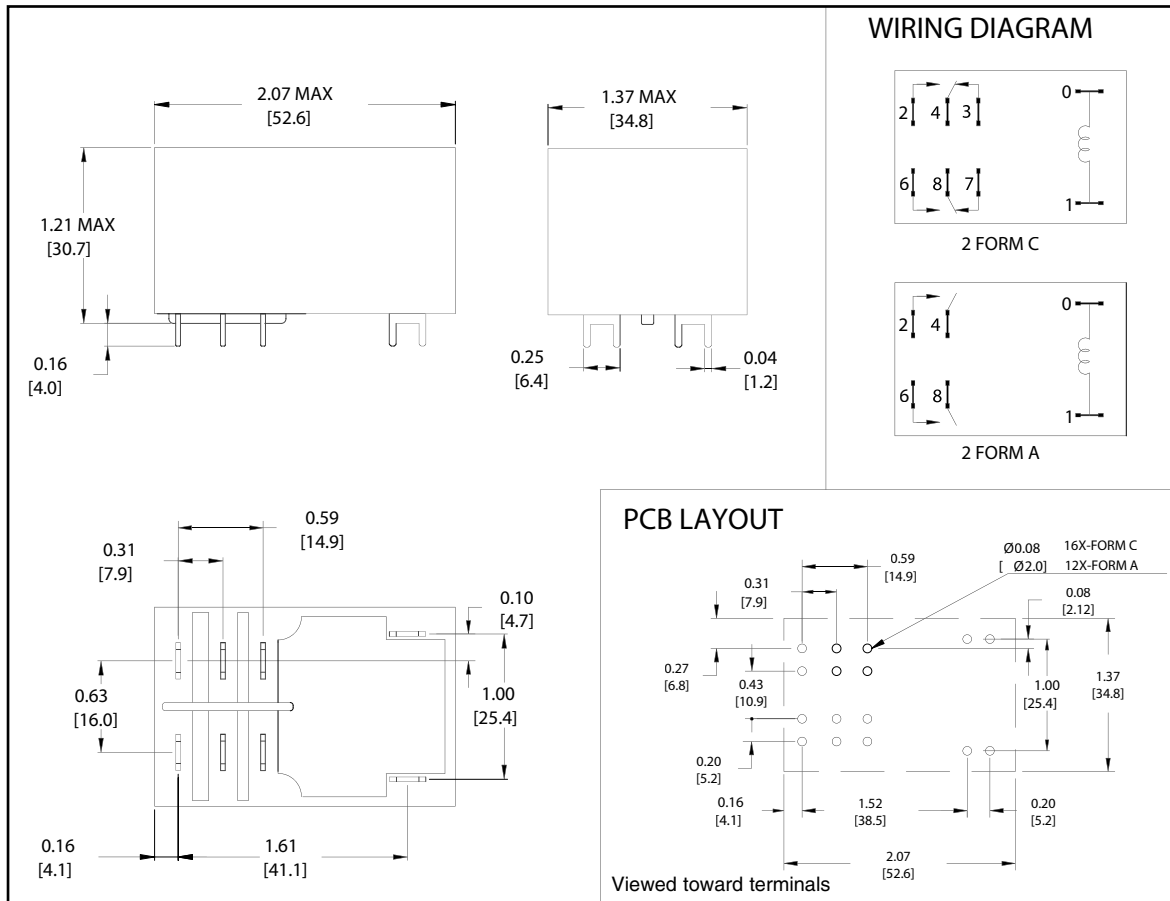
## RELAY ORDERING DATA

COIL SPECIFICATIONS – DC Coil				ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	
6	4.5	10.5	22	AZ2850-2C-6D
12	9.0	20.7	86	AZ2850-2C-12D
24	18.0	41.8	350	AZ2850-2C-24D
48	36.0	83.4	1390	AZ2850-2C-48D
110	82.5	190.5	7255	AZ2850-2C-110D

COIL SPECIFICATIONS – AC Coil 60 Hz [1]					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA $\pm 10\%$	Coil Resistance $\pm 10\%$	
12	9.6	15.6	325	9.5	AZ2850-2C-12A
24	19.2	31.2	154	35.7	AZ2850-2C-24A
120	96.0	156.0	33.5	830	AZ2850-2C-120A
208	166.4	270.4	19.3	2600	AZ2850-2C-208A
220	176.0	286	18.1	2870	AZ2850-2C-220A
240	192.0	312.0	17.3	3800	AZ2850-2C-240A
277	221.6	360.1	14.5	4700	AZ2850-2C-277A

\*Add suffix "E" for epoxy sealed version. Substitute "2A" for "2C" to indicate DPST (N.O.) contacts. Add suffix "E" to "2A" or "2C" to indicate AgSNO<sub>2</sub> contacts [1] For 50 Hz coil replace "A" with "A5" (example: "A2280-2C-24A5").

## MECHANICAL DATA



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



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