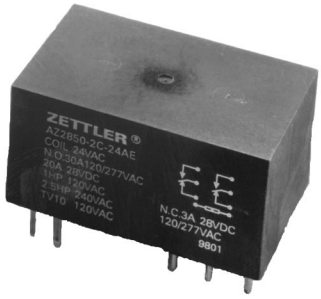
AZ2850

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 version available
- UL, CUR file E44211, VDE pending



CONTACTS

Arrangement	DPST (2 Form A) DPDT (2 Form C)
Ratings	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* * Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load	
UL, CUR N.O.	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
UL, CUR N.C.	3 A at 277 VAC General Use, 100k cycles
Material	Silver cadmium oxide or silver tin oxide
Resistance	<50 milliohms initially (6 V, 1 A voltage drop method)

COIL

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

Life Expectancy **Mechanical** **Electrical**	Minimum operations 5×10^7 1×10^5 at 30 A 120 VAC Res. N.O.
Operate Time	15 ms typical 25 ms maximum with bounce
Release Time	10 ms typical 25 ms maximum with bounce (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500 Vrms contact to contact 4000 Vrms contact to coil 2000 Vrms between contact sets
Insulation Resistance	10^9 ohms minimum at 500 VDC
Dropout	DC: Greater than 10% of nominal coil voltage AC: Greater than 20% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	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)
Vibration	0.062" (1.5 mm) DA at 10–55 Hz
Shock	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
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	86 grams
Packing unit in pcs	20 per plastic tray / 100 per carton box

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2004-07-20

AZ2850

RELAY ORDERING DATA

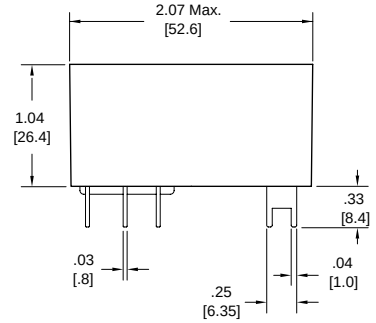
COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance Ohm ± 10%	
6	4.5	10.5	272.0	22	AZ2850–2C–6D
12	9.0	20.7	140.0	86	AZ2850–2C–12D
24	18.0	41.8	68.5	350	AZ2850–2C–24D
48	36.0	83.4	34.5	1,390	AZ2850–2C–48D
110	82.5	190.5	15.2	7,255	AZ2850–2C–110D

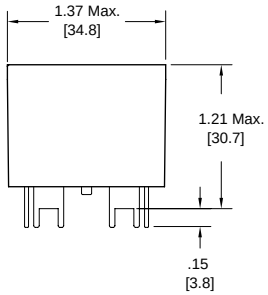
COIL SPECIFICATIONS – AC Coil 50 Hz					ORDER NUMBER*
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Current mA ± 10%	Coil Resistance Ohm ± 10%	
12	9.6	15.6	340.0	8	AZ2850–2C–12A5
24	19.2	31.2	166.0	45	AZ2850–2C–24A5
120	96.0	156.0	33.3	1,125	AZ2850–2C–120A5
220	176.0	286.0	18.2	3,800	AZ2850–2C–220A5
240	192.0	312.0	16.7	4,500	AZ2850–2C–240A5
277	221.6	360.1	14.4	6,000	AZ2850–2C–277A5

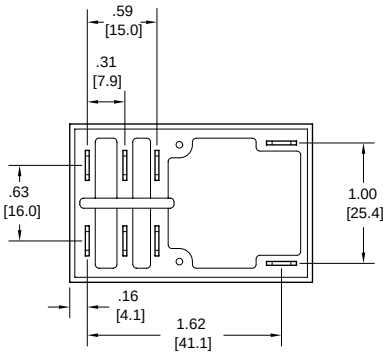
* Substitute “2A” in place of “2C” to indicate 2 Form A contacts. Add suffix “E” to “2A” or “2C” to indicate silver tin oxide contacts.
Add suffix “E” at the end of part number for sealed version.

MECHANICAL DATA

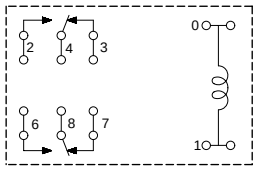
MECHANICAL DATA



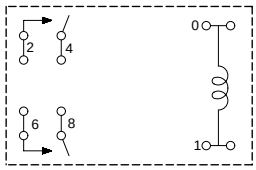




WIRING DIAGRAM



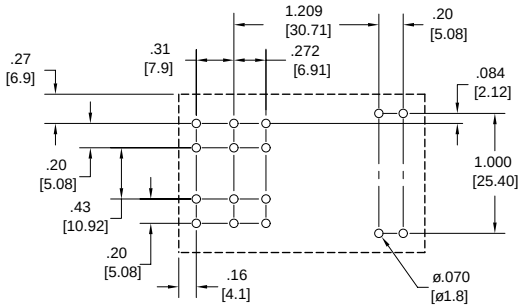
2 FORM C



2 FORM A

VIEWED TOWARD TERMINALS

PC BOARD L AYOUT



FORM C SHOWN
VIEWED TOWARD TERMINALS

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

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2004-07-20