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

Arrangement	DPST (2 Form A) DPDT (2 Form C)
Ratings	Resistive load: Max. switched power: 1200 W or 11080 VA Max. switched current: 40A (N.O), 3A (N.C.) Max.switchedvoltage:30VDC*or600VAC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load **UL**	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]
VDE	Normally open contacts (N.O.) 20A at 250VAC, Resistive, 50k cycles [2] Normally closed contacts (N.C.) 3A at 250VAC, Resistive, 50k cycles [2]
Material	Silver cadmium [1], silver tin oxide [2]
Resistance	<50 milliohms initially (24V, 1A voltage drop method)

COIL

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

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 5 x 10^6 1 x 10^5 at 30A, 277VAC Res. (N.O.)
Operate Time	15ms typical 25ms maximum with bounce
Release Time	10ms typical 25ms maximum with bounce (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500Vrms contact to contact 4000Vrms contact to coil 2000Vrms between contact sets
Insulation Resistance	10^9 ohms minimum at 500VDC
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" (1.65mm) DA at 10–55Hz
Shock	Operational, 10g for 11ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100g for 11ms 1/2 sine pulse
Enclosure	P.B.T. polyester
Terminals	Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
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

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.

Downloaded from Arrow.com.

AZ2800

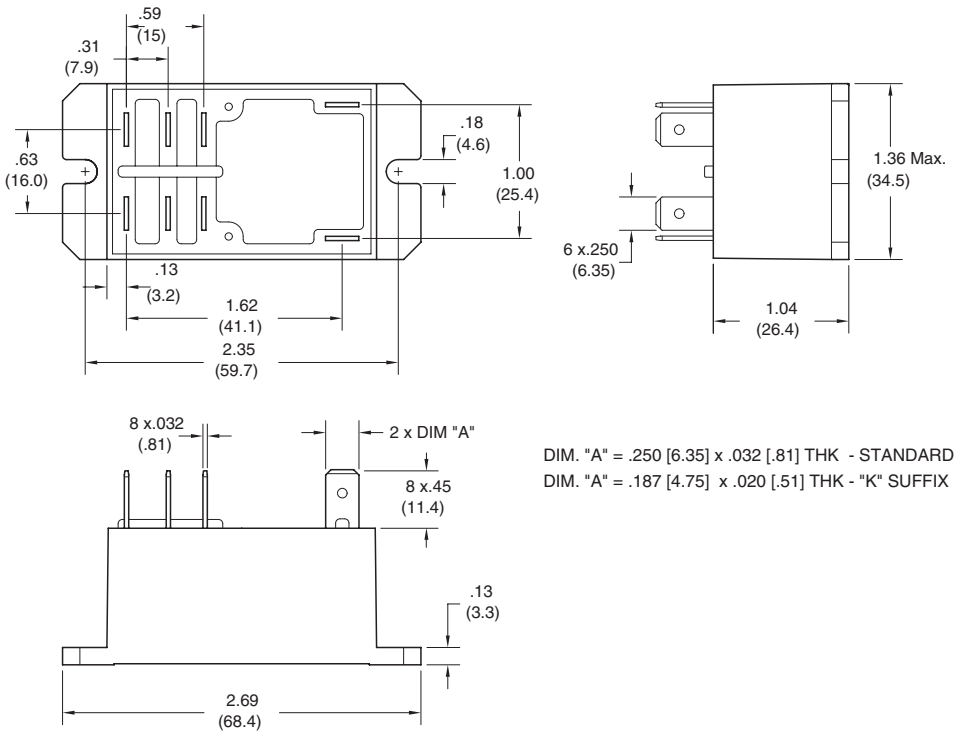
RELAY ORDERING DATA

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

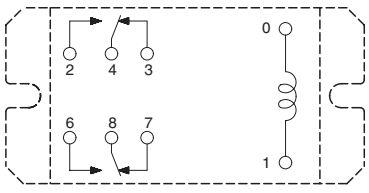
* Substitute “2A” in place of “2C” to indicate 2 Form A contacts.
“2A” or “2C” denotes silver cadmium contacts.
Add suffix “E” to “2A” or “2C” for silver tin oxide contacts.
Add suffix “5” for 50Hz coil, AC coils only. (Example: AZ2800-2C-24A5).
Add suffix "6" for 50/60Hz coil, AC coils only. (Example: 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

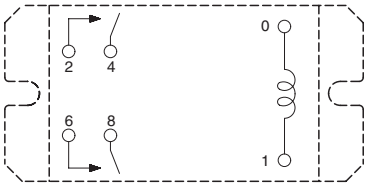


DIM. "A" = .250 [6.35] x .032 [.81] THK - STANDARD
DIM. "A" = .187 [4.75] x .020 [.51] THK - "K" SUFFIX

WIRING DIAGRAM



2 FORM C



2 FORM A

VIEWED TOWARD TERMINALS

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

This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product emains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.
Downloaded from Arrow.com.