AZ2280

30 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 versions available
- UL Class F (155°C) standard
- UL, CUR file E44211
- VDE certificate 40027037

CONTACTS

Arrangement	SPST (1 Form A) SPST (1 Form B) SPDT (1 Form C)
Ratings	Resistive load:
1 Form A	Max. switched power: 840 W or 8310 VA Max. switched current: 30 A Max. switched voltage: 28 VDC or 277 VAC
1 Form B	Max. switched power: 280 W or 4155VA Max. switched current: 15 A Max. switched voltage: 28 VDC or 277 VAC
1 Form C	Max. switched power: 560 W or 8310 VA (N.O.) 280 W or 5540 VA (N.C.) Max. switched current: 30 A (N.O.) 20 A (N.C.) Max. switched voltage: 28 VDC or 277 VAC
Material	Silver cadmium oxide [1], silver tin oxide [2]
Resistance	< 50 milliohm initially (24 V, 1A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	500 mW, DC coil 1.4 VA, AC coil
Max. Continuous Dissipation	1.7 W at 20°C (68°F) ambient, DC coil 2.7 VA at 20°C (68°F) ambient, AC coil
Temperature Rise	38°C (68°F) at nominal coil voltage
Max. Temperature	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. AC coils are not VDE approved
4. 18 VDC coil is not VDE approved.
5. Specification subject to change without notice.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 30 A 120 VAC Res. N.O.
Operate Time	15 ms max. at nominal coil voltage
Release Time	10 ms max. at nominal coil voltage (with no coil suppression)
Dielectric Strength **(at sea level for 1 min.)**	2500 Vrms coil to contact 1500 Vrms between open contacts
Insulation Resistance	1000 megaohms min. at 20°C, 500 VDC 50% RH
Dropout	DC: > 10% of nominal coil voltage AC: > 20% of nominal coil voltage
Ambient Temperature **Operating**	-40°C (-40°F) to 85°C (185°F), DC coils -40°C (-40°F) to 70°C (158°F), AC coils
Vibration	1.5 mm DA at 10-55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, Quick Connects Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
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	36 grams
Packing unit in pcs	40 per plastic tray / 240 per carton

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Rated load UL	1 Form A 30 A at 277 VAC, General Use, 6k cycles [1][2] 30 A at 28 VDC, resistive, 6k cycles [1] 28 A at 277 VAC, General Use, 100k cycles [1] 20 FLA / 60 LRA at 277 VAC, 30k cycles [1] 2 HP at 250 VAC [1][2] 1 HP at 125 VAC [1][2] 1 Form B 15 A at 277 VAC, General Use, 6k cycles [1] 10 A at 28 VDC, resistive, 6k cycles [1] 10 FLA / 33 LRA at 277 VAC, 30k cycles [1] 0.5 HP at 250VAC [1] 0.25 HP at 125 VAC [1] 1 Form C, (N.O.) 30 A at 277 VAC, General Use, 6k cycles [1][2] 20 A at 277 VAC, General Use, 6k cycles [1] 20 A at 28 VDC, resistive, 6k cycles [1] 20 FLA / 60 LRA at 277 VAC, 30k cycles [1] 2 HP at 250 VAC [1][2] 1 HP at 125 VAC [1][2] 1 Form C, (N.C.) 20 A at 277 VAC, General Use, 6k cycles [1][2] 10 A at 28 VDC, resistive, 6k cycles [1] 10 FLA / 33 LRA at 277 VAC, 30k cycles [1] 0.5 HP at 250 VAC [1][2] 0.25 HP at 125 VAC [1][2]

Rated load VDE	1 Form A, DC coils only 30 A at 250 VAC, resistive, 30k cycles [1] 15 A at 250 VAC, cos phi = 0.4, 100k cycles [1][2] 1 Form B, DC coils only 15 A at 250 VAC, resistive, 30k cycles [1] 1 Form C, (N.O.), DC coils only 30 A at 250 VAC, resistive, 30k cycles [1] 20 A at 250 VAC, resistive, 100k cycles [2] 1 Form C, (N.C.), DC coils only 15 A at 250 VAC, resistive, 30k cycles [1] 10 A at 250 VAC, resistive, 100k cycles [2] Note: 18 VDC coil is not VDE approved. AC coils are not VDE approved.

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	3.75	6.4	185	27	AZ2280-1AT-5DF
6	4.5	7.8	150	40	AZ2280-1AT-6DF
9	6.75	12.2	93	97	AZ2280-1AT-9DF
12	9.0	15.4	77	155	AZ2280-1AT-12DF
15	11.25	19.8	59	256	AZ2280-1AT-15DF
18	13.5	24.1	47	380	AZ2280-1AT-18DF
24	18.0	32.0	36	660	AZ2280-1AT-24DF
48	36.0	62.6	19	2,560	AZ2280-1AT-48DF

COIL SPECIFICATIONS – AC Coil 50/60 Hz				**ORDER NUMBER***	
Nominal Coil VDC	**Must Operate VDC**	**Max. Continuous VDC**	**Nominal Coil Power VA**	**Coil Resistance Ohm ± 10%**	
12	9.6	13.8	2.3	25	AZ2280-1AT-12AF
24	19.2	27.6	2.1	100	AZ2280-1AT-24AF
120	96.0	138.0	2.3	2,500	AZ2280-1AT-120AF
220	176.0	286.0	2.2	13,490	AZ2280-1AT-220AF
240	192.0	286.0	2.6	13,490	AZ2280-1AT-240AF
277	220.0	318.5	2.2	15,000	AZ2280-1AT-277AF

* "1AT" denote silver cadmium oxide contacts.
Substitute "1BT" in place of "1AT" for 1 Form B relay.
Substitute "1CT" in place of "1AT" for 1 Form C relay.
Substitute "1AET" or "1CET" in place of "1AT" or "1CT" for silver tin oxide contacts.
Substitute "DEF" or "AEF" for epoxy sealed version.
Add suffix "K "at the end of order number for 0.11 x 0.02 [2.8 x 0.5] coil terminals.

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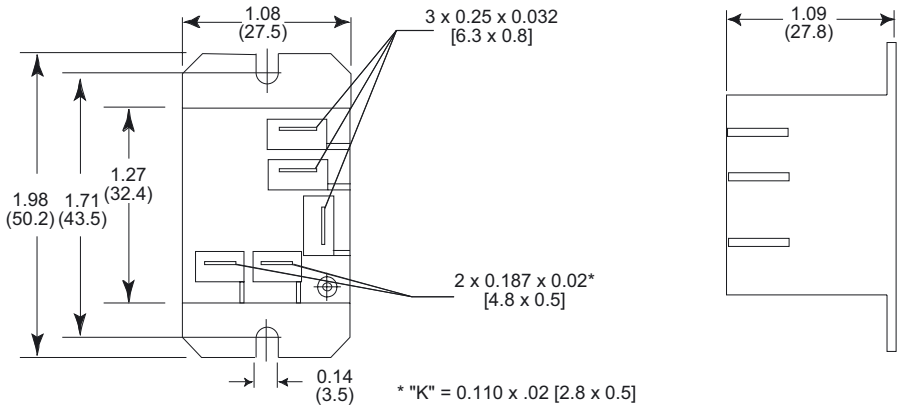
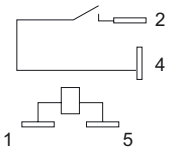
MECHANICAL DATA



WIRING DIAGRAMS (Top View)

Form A



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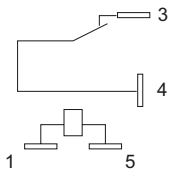

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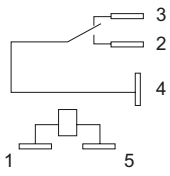

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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