

AZ948

16 AMP LOW PROFILE POWER RELAY

FEATURES

- High power switching (4000 VA)
- High sensitivity, 128 mW pickup
- Low profile (less than .5" height)
- SPST (1 Form A)
- Epoxy sealed version available
- DC coils up to 100 VDC
- UL file E44211; CSA file LR 702514



CONTACTS

Arrangement	SPST (1 Form A)
Ratings Standard	Resistive load: Max. switched power: 300 W, 2500 VA Max. switched current: 10 A Max. switched voltage: 250 VAC/125 VDC
Heavy Duty	Max. switched power: 480 W, 4000 VA Max. switched current: 16 A Max. switched voltage: 250 VAC/125 VDC* *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	Standard: 10 A at 30 VDC/250 VAC Heavy Duty: 10 A at 30 VDC 16 A at 250 VAC
Min. Load	5 VDC, 0.1 A
Material	Silver alloy
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at rated load
Operate Time (typical)	10 ms at nominal coil voltage
Release Time (typical)	4 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500 Vrms coil to contact 1000 Vrms contact to contact
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage 100 V coil ≥ 6 VDC
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 70°C (158°F) 3-48 V coils -40°C (-48°F) to 60°C (140°F) 100 V coil -40°C (-40°F) to 115°C (239°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g
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	8 grams

COIL

Power At Pickup Voltage (typical)	200 mW
Max. Continuous Dissipation	1.8 W at 20°C (68°F) 1.3 W at 40°C (104°F)
Temperature Rise	16°C (29°F) at nominal coil voltage
Temperature	Max. 115°C (239°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.

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RELAY ORDERING DATA

COIL SPECIFICATIONS SPST-NO (1 Form A) Standard Contact: 10A				ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Unsealed	Sealed
5	4.0	15.0	125	AZ948-1A-5D	AZ948-1A-5DE
6	4.8	18.0	180	AZ948-1A-6D	AZ948-1A-6DE
9	7.2	27.0	405	AZ948-1A-9D	AZ948-1A-9DE
12	9.6	36.0	720	AZ948-1A-12D	AZ948-1A-12DE
24	19.2	72.0	2,880	AZ948-1A-24D	AZ948-1A-24DE
48	38.4	144.0	11,520	AZ948-1A-48D	AZ948-1A-48DE
100	48.0	110.0	18,000	AZ948-1A-100D	AZ948-1A-100DE

COIL SPECIFICATIONS SPST-NO (1 Form A) Heavy Duty Contact: 16A				ORDER NUMBER	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Unsealed	Sealed
5	4.0	15.0	125	AZ948-1AT-5D	AZ948-1AT-5DE
6	4.8	18.0	180	AZ948-1AT-6D	AZ948-1AT-6DE
9	7.2	27.0	405	AZ948-1AT-9D	AZ948-1AT-9DE
12	9.6	36.0	720	AZ948-1AT-12D	AZ948-1AT-12DE
24	19.2	72.0	2,880	AZ948-1AT-24D	AZ948-1AT-24DE
48	38.4	144.0	11,520	AZ948-1AT-48D	AZ948-1AT-48DE
100	48.0	110.0	18,000	AZ948-1AT-100D	AZ948-1AT-100DE

MECHANICAL DATA

Top view dimensions: .866 (22.0) width, .630 (16.0) width, .015 (0.4) height, .413 (10.5) height, .157 (4.0) height.

Side view dimensions: .500 (12.7) height, .400 (10.16) width.

Terminal view labels: 2, 1, COM, 3, 4, NO.

PC BOARD LAYOUT

Dimensions: .700 (17.78) width, .035 (.9) height, .500 (12.7) height, .400 (10.16) width, .051 (1.3) height.

Notes: 2 places, 2 places.

WIRING DIAGRAM

1 Form A

Viewed toward terminals

Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm 0.010''$