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)

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.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1×10^7 1×10^5 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

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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 ±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 ±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

.866 (22.0) .015 (0.4) .413 (10.5) .157 (4.0) .630 (16.0) .500 (12.7) .400 (10.16)

2 1
COM 3 4 NO

PC BOARD LAYOUT

.700 (17.78) .035 (.9) 2 places
2 1
.500 (12.7)
3 4
.051 (1.3) 2 places .400 (10.16)

Viewed toward terminals

WIRING DIAGRAM

1 Form A

2 1

COM 3 4 NO

Viewed toward terminals

Dimensions in inches with metric equivalents in parentheses. Tolerance: ±0.010"

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