

AZ9431

15 AMP MINIATURE PC BOARD RELAY

FEATURES

- High performance
- Low seated height
- 6 kV surge version available
- Flux tight and sealed versions available
- Class B insulation (130°C) standard, Class F (155°C) available
- UL, CUR file E43203



CONTACTS

Arrangement	SPST N.O. (1 Form A) SPDT (1 Form C)
Ratings Medium Duty	Max. switched power: 240 W or 1200 VA Max. switched current: 10 A Max. switched voltage: 150* VDC or 300 VAC
Heavy Duty	Max. switched power: 360 W or 2500 VA Max. switched current: 15 A Max. switched voltage: 150* VDC or 300 VAC
UL/CUR Ratings Medium Duty	10 A at 120 VAC, General Use 10 A at 24 VDC, General Use
Heavy Duty	10 A at 250 VAC, General Use 15 A at 120 VAC, General Use 15 A at 24 VDC, General Use
	*Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Material	Medium Duty: Silver cadmium oxide Heavy Duty: Silver tin oxide
Resistance	< 100 milliohms initially (24 V, 1 A method)

GENERAL DATA

Life Expectancy Mechanical Electrical	1 x 10 ⁶ 1 x 10 ⁵ at 10 A 120 VAC res.
Operate Time	10 ms max.
Release Time	5 ms max. (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	3000 Vrms contact to coil (6 kV version) 1500 Vrms contact to coil 1000 Vrms across contacts
Insulation Resistance	100 megohms min. at 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C(-40°F) to 100°C(212°F) -40°C(-40°F) to 155°C(311°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	10 g

COIL

Power At Pickup Voltage Max Continuous Dissipation	203 mW 1.7 W at 20°C (68°F)
Temperature Rise (at nominal coil voltage)	22°C (40°F)
Temperature	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Unsealed relays should not be dip cleaned.
4. Specifications subject to change without notice.



AMERICAN ZETTLER, INC.

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5/26/05W

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RELAY ORDERING DATA

STANDARD RELAYS				ORDER NUMBER*			
COIL SPECIFICATIONS				ORDER NUMBER*			
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	Medium Duty 10 Amp contact)		Heavy duty (15 Amp contact)	
				Unsealed	Sealed	Unsealed	Sealed
5	10.9	70	3.8	AZ9431-1C-5D	AZ9431-1C-5DE	AZ9431-1CH-5D	AZ9431-1CH-5DE
6	13.0	100	4.5	AZ9431-1C-6D	AZ9431-1C-6DE	AZ9431-1CH-6D	AZ9431-1CH-6DE
9	19.5	225	6.8	AZ9431-1C-9D	AZ9431-1C-9DE	AZ9431-1CH-9D	AZ9431-1CH-9DE
12	26.0	400	9.0	AZ9431-1C-12D	AZ9431-1C-12DE	AZ9431-1CH-12D	AZ9431-1CH-12DE
18	39.1	900	13.5	AZ9431-1C-18D	AZ9431-1C-18DE	AZ9431-1CH-18D	AZ9431-1CH-18DE
24	52.1	1,600	18.0	AZ9431-1C-24D	AZ9431-1C-24DE	AZ9431-1CH-24D	AZ9431-1CH-24DE
48	104.3	6,400	36.0	AZ9431-1C-48D	AZ9431-1C-48DE	AZ9431-1CH-48D	AZ9431-1CH-48DE

*Substitute "1A" or "1AH" in place of "1C" or "1CH" to indicate 1 Form A. Add suffix "F" for Class F version. Add "H" to AZ9431 for 6 kV version.

MECHANICAL DATA

Top view dimensions: .762 Max [19.25] width, .602 Max [15.29] height.

Side view dimensions: .612 Max [15.25] width, .185 [4.70] height, .012 [.30] pin diameter.

Terminal pin dimensions: .014 [.36] pin diameter, 4 x .016 [0.4] pin length, 4 x .032 [0.8] pin length, .039 [1.0] pin offset.

PC Board Layout

Dimensions: 5 x $\varnothing 0.051$ [$\varnothing 1.30$], .472 [12.00] height, .134 [3.40] offset, .059 [1.49] offset, .236 [6.0] offset, .480 [12.20] offset, .559 [14.20] offset.

VIEWED TOWARD TERMINALS

Wiring Diagram

FORM C: Terminal 1 to coil, terminal 2 to coil, terminal 3 to common, terminal 4 to normally closed contact, terminal 5 to normally open contact.

FORM A: Terminal 1 to coil, terminal 2 to coil, terminal 3 to common, terminal 4 to normally open contact, terminal 5 to normally closed contact.

VIEWED TOWARD TERMINALS

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "



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