AZ970/AZ971_

40 AMP AUTOMOTIVE RELAY

FEATURES

- Up to 40 Amp switching capability in a compact size
- Open, covered or sealed
- Coils to 24 VDC
- Small footprint
- 1 Form A, B and C contacts available
- Vibration and shock resistant
- ISO/TS 16949, ISO14001
- Tested in accordance with SAE J2544
- Cost effective
- Designed for high in-rush applications



Arrangement	SPST (1 Form A) SPST (1 Form B) SPDT (1 Form C)					
Ratings	Resistive load:					
	Max. switched power: Form A: 560 W Form B: 420 W Form C: 420W					
	Max. switched current: Form A: 40 A Form B: 30 A Form C: 30A					
	Max. switched voltage: 150* VDC					
	* If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.					
Material	Silver tin oxide					
Resistance	< 100 milliohms initially (24 V, 1 A voltage drop method)					

COIL

Power	
At Pickup Voltage (typical)	514 mW (12 and 24 VDC coil) 573 mW (6 VDC coil)
Max. Continuous Dissipation	5.3 W 20°C (68°F) ambient (AZ970) 4.6 W 20°C (68°F) ambient (AZ971)
Temperature Rise	56°C (101°F) nominal coil VDC (AZ970) 59°C (106°F) nominal coil VDC (AZ971)
Max. Temperature	155°C (311°F)





GENERAL DATA

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Life Expectancy Mechanical Electrical	Minimum operations 5 x 10 ⁶ operations 1 x 10 ⁵ 40 A 14 VDC Res.			
Operate Time (typical)	5 ms at nominal coil voltage			
Release Time (typical)	3 ms at nominal coil voltage (with no coil suppression)			
Dielectric Strength (at sea level for 1 min.)	500 VDC coil to contact 500 VDC between open contacts			
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH			
Dropout	Greater than 6% of nominal coil voltage			
Ambient Temperature	At nominal coil voltage			
AZ970 Operating AZ970 Storage	-40°C (-40°F) to 110°C (230°F) -40°C (-40°F) to 155°C (311°F)			
AZ971 Operating AZ971 Storage	-40°C (-40°F) to 105°C (221°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	20 grams			

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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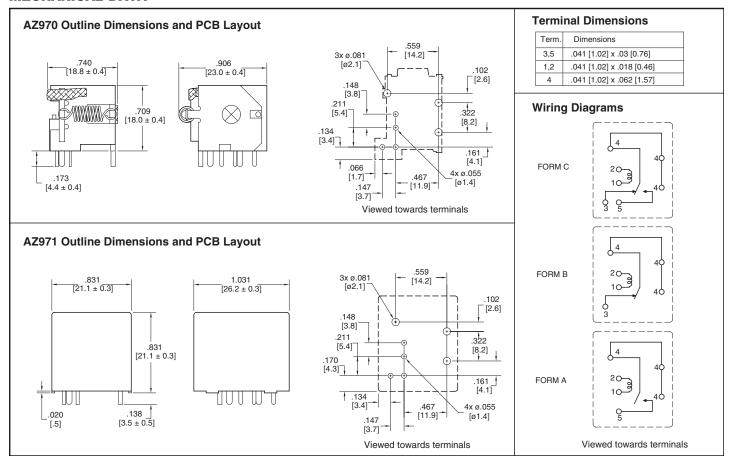
RELAY ORDERING DATA - AZ970 - Open Style

COIL SPECIFICATIONS			ORDER NUMBER			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ±10%	Form A (SPST)	Form B (SPST)	Form C (SPDT)
6	3.3	9.8	19.0	AZ970-1A-6D	AZ970-1B-6D	AZ970-1C-6D
9	5.1	15.9	50.0	AZ970-1A-9D	AZ970-1B-9D	AZ970-1C-9D
12	6.8	21.3	90.0	AZ970-1A-12D	AZ970-1B-12D	AZ970-1C-12D
24	13.9	42.7	362.0	AZ970-1A-24D	AZ970-1B-24D	AZ970-1C-24D

ELAY ORDERING DATA — AZ971 — With Dust Cover							
COIL SPECIFICATIONS			ORDER NUMBER*				
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ±10%	Form A (SPST)	Form B (SPST)	Form C (SPDT)	
6	3.3	9.4	19.0	AZ971-1A-6D	AZ971-1B-6D	AZ971-1C-6D	
9	5.1	15.2	50.0	AZ971-1A-9D	AZ971-1B-9D	AZ971-1C-9D	
12	6.8	20.4	90.0	AZ971-1A-12D	AZ971-1B-12D	AZ971-1C-12D	
24	13.9	41.0	362.0	AZ971-1A-24D	AZ971-1B-24D	AZ971-1C-24D	

^{*}Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



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

