

AZ977

20 AMP MICRO-ISO AUTOMOTIVE RELAY

FEATURES

- Up to 20 Amp switching capability in a compact size
- Coils to 24 VDC
- Small footprint
- 1 Form A 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



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 280 W Max. switched current: 20 A Max. switched voltage: 150 VDC* Rated load: 20 A at 14 VDC * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
Material	Silver tin oxide
Resistance	< 50 milliohms initially (6 V, 1 A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	534 mW (Standard) 421 mW (Sensitive)
Max. Continuous Dissipation	2.6 W at 20°C (68°F) ambient
Temperature Rise	60°C (108°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. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁶ 1 x 10 ⁵ at 20 A 14 VDC Res.
Operate Time (max.)	10 ms max. at nominal coil voltage
Release Time (max.)	7 ms max. at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1000 VDC coil to contact 500 VDC between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500 VDC 50% RH
Dropout	Greater than 8.3% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 115°C (239°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	Quick connects Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
Weight	18.5 grams



AMERICAN ZETTLER, INC.

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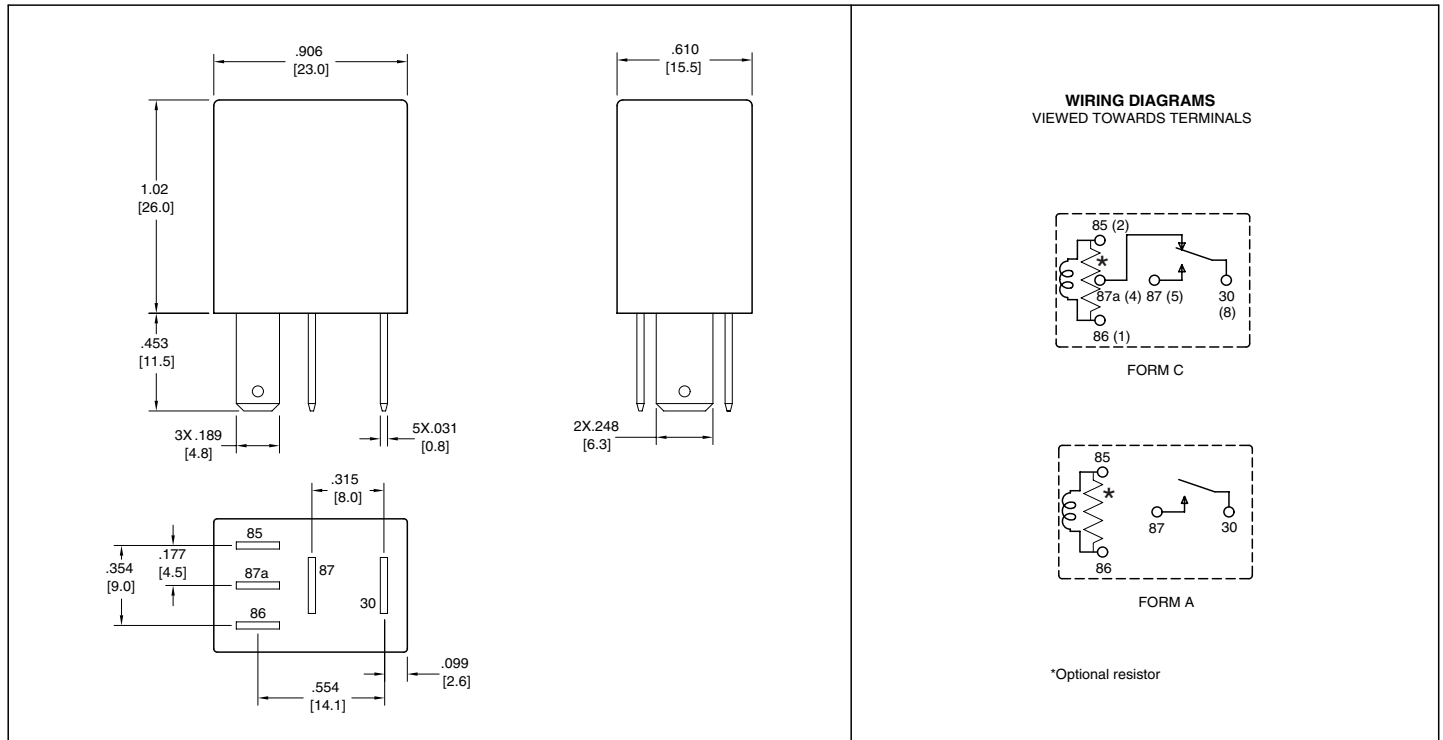
RELAY ORDERING DATA

STANDARD RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	25	AZ977-1A-6D	AZ977-1C-6D
12	7.2	15.6	97	AZ977-1A-12D	AZ977-1C-12D
24	14.4	31.2	384	AZ977-1A-24D	AZ977-1C-24D

SENSITIVE RELAYS					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Form A (SPST)	Form C (SPDT)
6	3.6	7.8	32	AZ977-1A-6DS	AZ977-1C-6DS
12	7.2	15.6	123	AZ977-1A-12DS	AZ977-1C-12DS
24	14.4	31.2	483	AZ977-1A-24DS	AZ977-1C-24DS

*Add suffix "R" for resistor in parallel with coil. Resistor values: 6V: 180 Ω , 12V:680 Ω , 24V:2700 Ω

MECHANICAL DATA



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



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