

30 AMP MICRO-ISO AUTOMOTIVE RELAY

FEATURES

- Quick Connect or PCB terminals
- Up to 30 Amp switching capability in a compact size
- Coils up to 24VDC
- Small footprint
- SPST (1 Form A), SPDT (1 Form C)
- Vibration and shock resistant
- Coil suppression available
- ISO/TS 16949, ISO9001 and ISO 14000
- Tested in accordance with SAE J2544
- Cost effective solution
- Designed for high in-rush applications

CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 540 W Max. switched current: 30 A Max. switched voltage: 27 VDC 1 Form A (N.O.) 30 A / 30 A (make/break) at 12 VDC resistive 40 A / 20 A (make/break) at 12 VDC motor 120 A / 20 A (make/break) at 12 VDC lamp 1 Form C (N.O.) 20 A / 20 A (make/break) at 12 VDC resistive 40 A / 20 A (make/break) at 12 VDC motor 120 A / 20 A (make/break) at 12 VDC lamp 1 Form C (N.C.) 10 A / 10 A (make/break) at 12 VDC resistive 20 A / 10 A (make/break) at 12 VDC motor 40 A / 10 A (make/break) at 12 VDC lamp
Material	Silver tin oxide (silver nickel available - contact factory)
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)
Contact Voltage drop	100 mV typical, 250 mV max. at rated load

COIL

Power	
At Pickup Voltage (typical)	576 mW (Standard) 418 mW (Sensitive)
Max. Continuous Dissipation	3.6 W at 20°C (68°F) ambient
Temperature Rise	60°C (108°F) at nominal coil voltage
Max Temperature	180°C (356°F)



GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 20 A 12 VDC Res.
Operate Time (max.)	10 ms max. at nominal coil voltage
Release Time (max.)	10 ms max. at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	500 VRMS coil to contact 500 VRMS between open contacts
Insulation Resistance	1 megohms min. at 20°C, 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 125°C (257°F) -40°C (-40°F) to 155°C (320°F)
Vibration	5g 10-500 Hz
Shock	20 g
Enclosure	P.B.T. polyester
Terminals	Quick connects or PCB Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
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	22 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.



AMERICAN ZETTLER, INC.

www.azettler.com

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6/27/06W

AZ988

RELAY ORDERING DATA

COIL SPECIFICATIONS - STANDARD			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$
12	7.2	18	90
24	14.4	36	360

COIL SPECIFICATIONS - SENSITIVE			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$
12	7.2	21	124
24	14.4	40	441

RELAY ORDERING DATA

AZ988-1CT-12DSEC1RQ

- Blank - Standard contact gap ($\Rightarrow 0.5$ mm)
- Q - Wide contact gap ($\Rightarrow 0.6$ mm)
- R - 680 Ohm parallel with 12 V standard coil
2700 Ohm parallel with 24 V standard coil
680 Ohm parallel with 12 V sensitive coil
1800 Ohm parallel with 24 V sensitive coil
- C1 - QC terminals, no top grip on cover
- C2 - QC terminals, with top grip on cover
- C3 - PC terminals, no top grip on cover
- Blank - Unsealed
- E - Sealed
- Blank - Standard coil
- S - Sensitive coil
- 12D - 12 VDC coil
- 24D - 24 VDC coil
- T - AgSnO₂ contact material
- 1A - Single pole normally open
- 1C - Single pole double throw
- Basic Series Designation - AZ988



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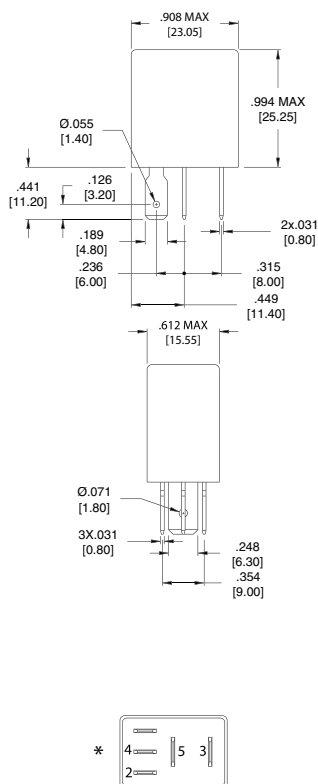
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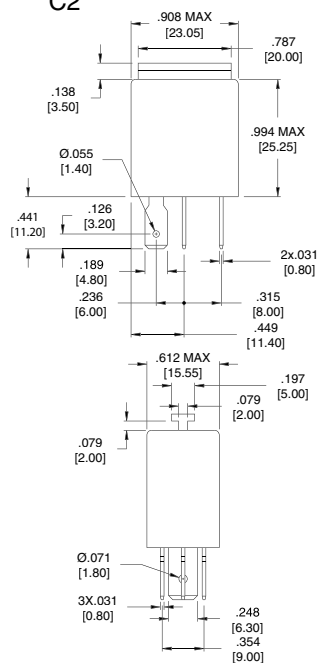
MECHANICAL DATA

Outline Dimensions
C1



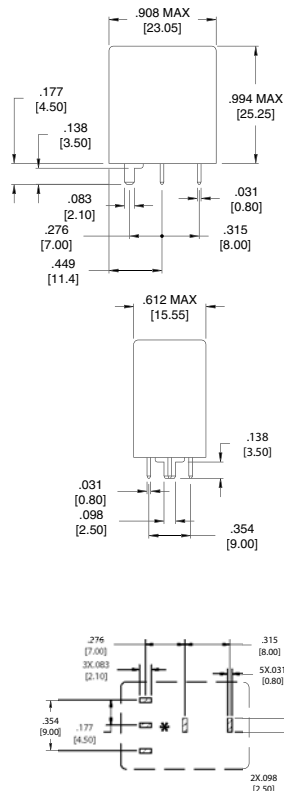
BOTTOM VIEW

Outline Dimensions
C2



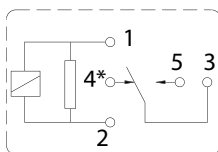
BOTTOM VIEW

Outline Dimensions
C3

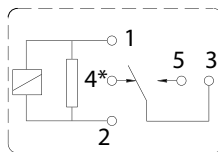


BOTTOM VIEW

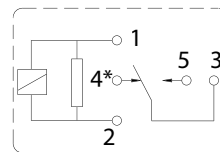
Wiring Diagram



C1



C2



C3

VIEWED TOWARD TERMINALS

Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010"$ (.25mm)

* On Form A relay, terminal 4 is removed.



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