

## 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

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	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
<b>Material</b>	Silver tin oxide (silver nickel available - contact factory)
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)
<b>Contact Voltage drop</b>	100 mV typical, 250 mV max. at rated load

### COIL

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

### GENERAL DATA

<b>Life Expectancy</b>	Minimum operations
<b>Mechanical</b>	1 x 10 <sup>7</sup>
<b>Electrical</b>	1 x 10 <sup>5</sup> at 20 A 12 VDC Res.
<b>Operate Time (max.)</b>	10 ms max. at nominal coil voltage
<b>Release Time (max.)</b>	10 ms max. at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	500 VRMS coil to contact 500 VRMS between open contacts
<b>Insulation Resistance</b>	1 megohms min. at 20°C, 500 VDC 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b>	At nominal coil voltage
<b>Operating</b>	-40°C (-40°F) to 125°C (257°F)
<b>Storage</b>	-40°C (-40°F) to 155°C (320°F)
<b>Vibration</b>	5g 10-500 Hz
<b>Shock</b>	20 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Quick connects or PCB Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
<b>Max Solder Temp.</b>	270°C (518°F)
<b>Max Solder Time</b>	5 seconds
<b>Max Solvent Temp</b>	80°C (176°F)
<b>Max Immersion Time</b>	30 seconds
<b>Weight</b>	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.



# 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 - AgSnO<sub>2</sub> contact material
- 1A - Single pole normally open
- 1C - Single pole double throw
- Basic Series Designation - AZ988



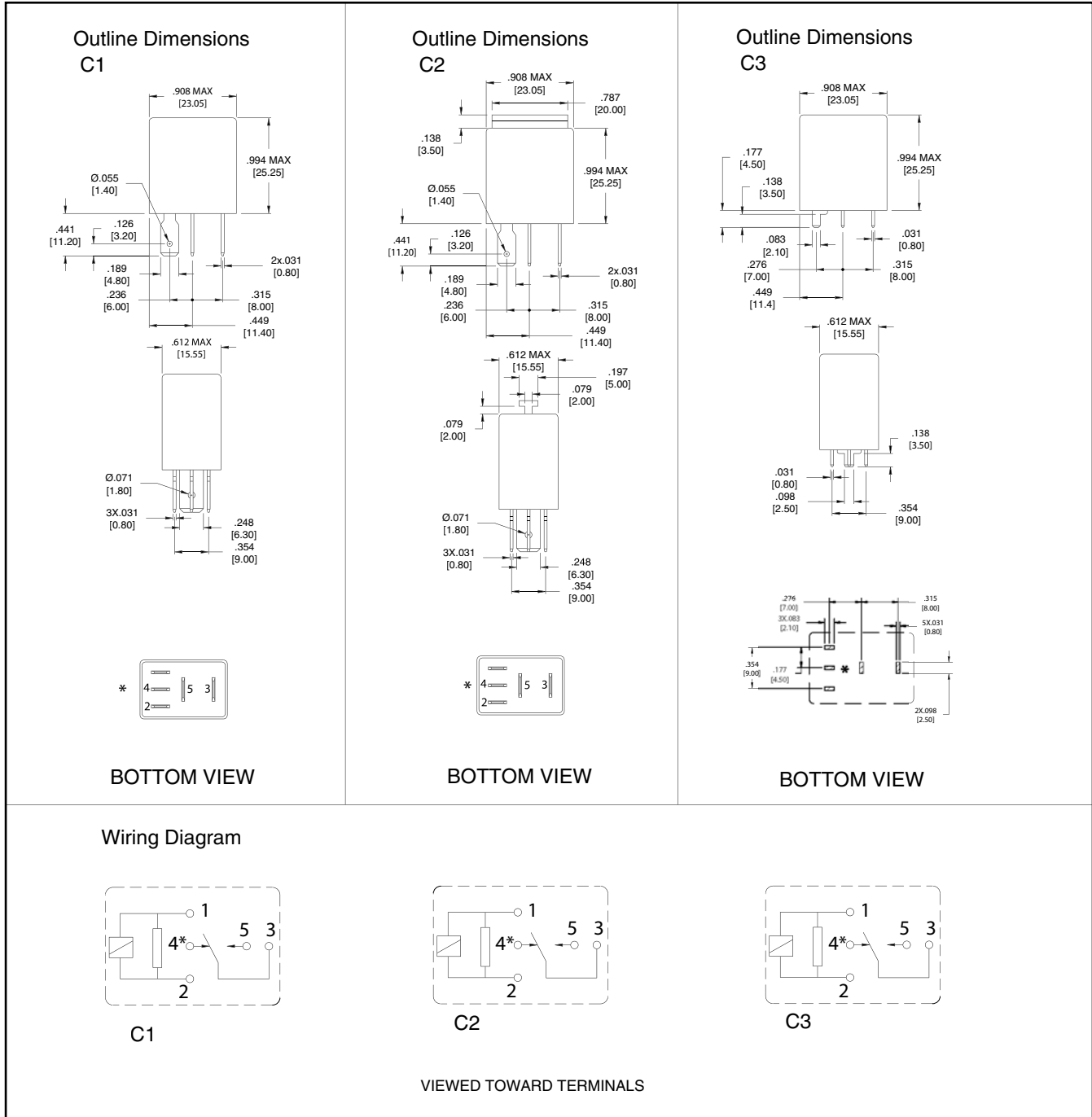
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6/27/06W

## MECHANICAL DATA



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

\* On Form A relay, terminal 4 is removed.

