

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
- 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 | Minimum operations |
| Mechanical | 1 x 10 ⁷ |
| Electrical | 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 | 500 megohms min. at 20°C, 500 VDC 50% RH |
| Dropout | Greater than 10% of nominal coil voltage |
| Ambient Temperature | At nominal coil voltage |
| Operating | -40°C (-40°F) to 125°C (257°F) |
| Storage | -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.



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RELAY ORDERING DATA

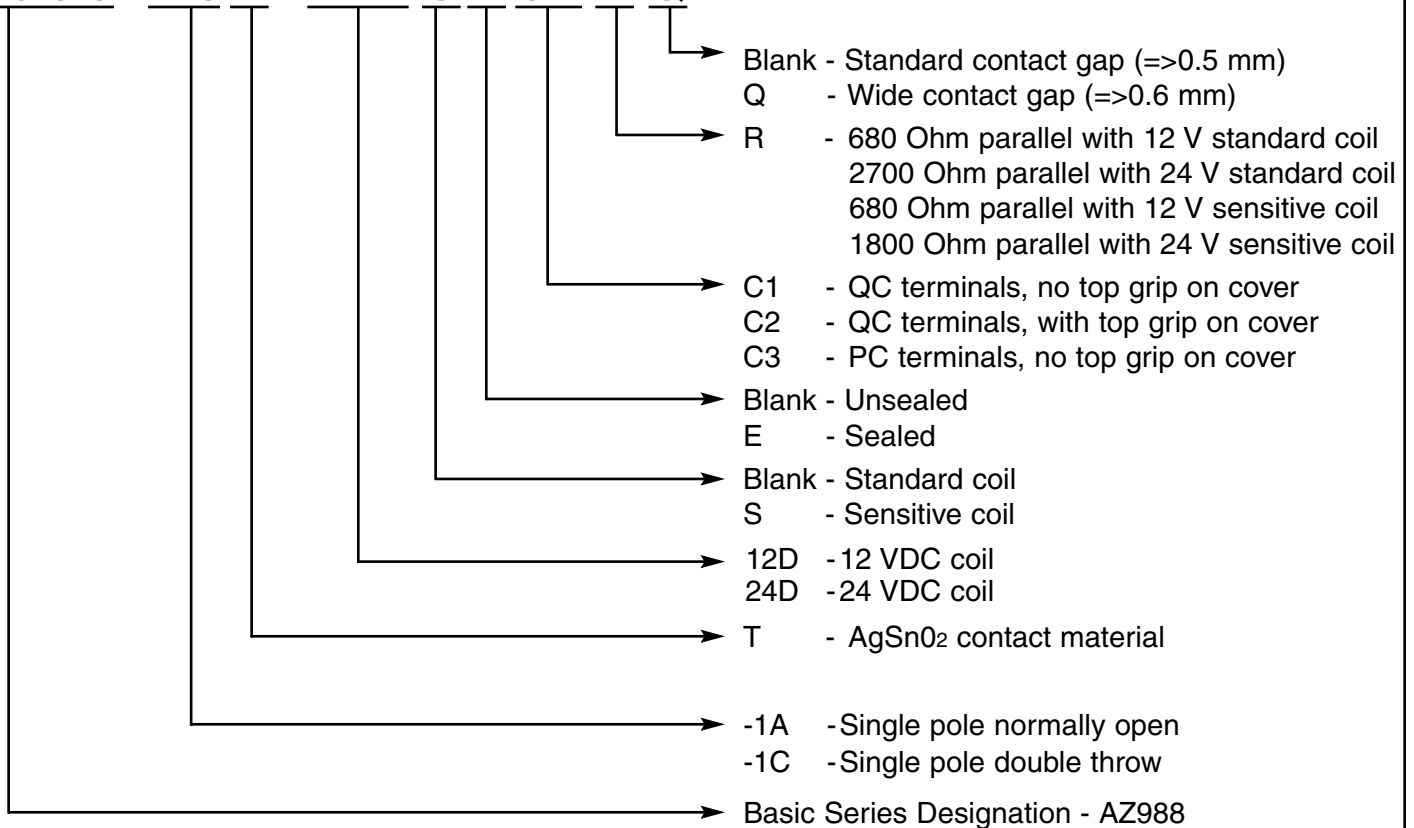
| COIL SPECIFICATIONS - STANDARD | | | |
|---------------------------------|------------------|---------------------|----------------------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ |
| 12 | 7.2 | 18 | 90 |
| 24 | 14.4 | 36 | 360 |
| COIL SPECIFICATIONS - SENSITIVE | | | |
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ |
| 12 | 7.2 | 21 | 124 |
| 24 | 14.4 | 40 | 441 |

HARDWARE ORDERING DATA

| DESCRIPTION | ORDER NUMBER | DESCRIPTION | ORDER NUMBER |
|-------------|--------------|--------------|--------------|
| PCB SOCKET | ST977-U1 | CRIMP SOCKET | ST977-U2 |

RELAY ORDERING DATA

AZ988-1CT-12DSEC1RQ



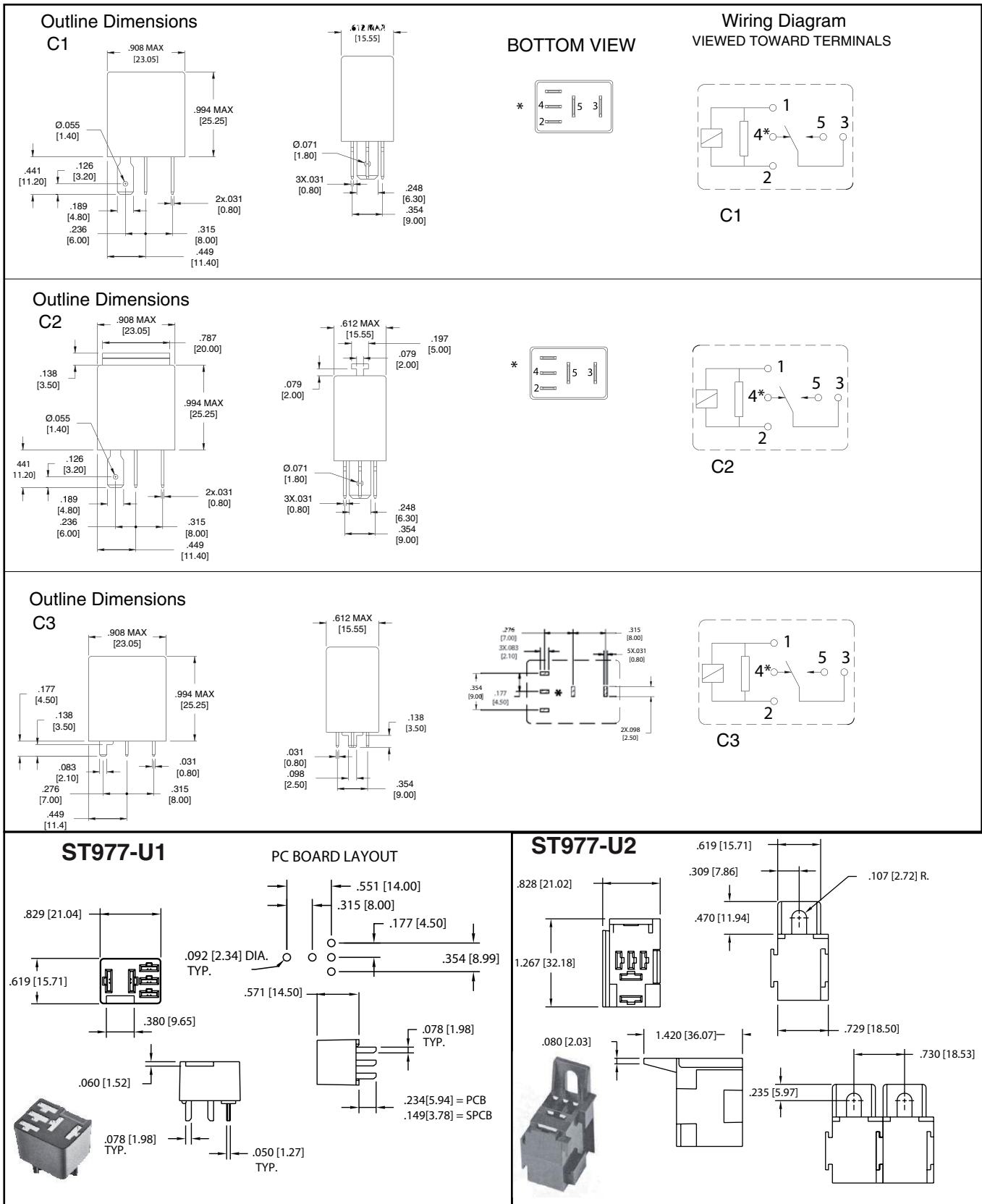
AMERICAN ZETTLER, INC.

www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

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MECHANICAL DATA



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

* On Form A relay, terminal 4 is removed.



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