

AZ986

40 AMP 280-ISO AUTOMOTIVE RELAY

FEATURES

- 40 Amp contact rating
- Coils to 24VDC
- High operating temperature (125°C)
- SPST (1 Form A), SPDT (1 Form C)
- Available with shrouded weatherproof cover
- Coil suppression available
- ISO/TS 16949, ISO9001, ISO 14000
- Tested in accordance with SAE J2544



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 560 W (SPST) 560 W (N.O.) 420 W (N.C.) Max. switched current: 40 A (SPST) 40 A (N.O.) 30 A (N.C.) Max. switched voltage: 100 VDC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Material	Silver tin oxide
Resistance	< 100 milliohms initially (6 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	0.58 W
Max. Continuous Dissipation	3.7 W at 20°C (68°F)
Temperature Rise	52°C (94°F) at nominal coil voltage
Temperature	Max. 180°C (356°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 40 A 14 VDC Res.
Operate Time (max.)	7 ms at nominal coil voltage
Release Time (max.)	4 ms at nominal coil voltage
Dielectric Strength (at sea level for 1 min.)	500 Vrms coil to contact 500 Vrms contact to contact
Insulation Resistance	600 megohms min. at 500 VDC, 20°C 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	-55°C (-67°F) to 125°C (257°F) -55°C (-67°F) to 155°C (311°F)
Vibration	1.27mm DA 10-40 Hz 5 g 40-70 Hz 0.5mm DA 70-100 Hz 10 g 100-500 Hz
Shock	200 m/s ²
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy 0.110 Quick Connect Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
Weight	22 grams (37 grams shrouded version)

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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1/17/07W

AZ986

RELAY ORDERING DATA

COIL SPECIFICATIONS			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$
6	3.6	10	27
12	7.2	20.2	109
24	14.4	39.3	436

RELAY ORDERING DATA

AZ986-1C-12DC2R1

- Blank - Standard no diode, no resistor
- R1 - 180 Ohm, $\frac{1}{2}$ w resistor in parallel with 6 V coil
680 Ohm, $\frac{1}{2}$ w resistor in parallel with 12 V coil
2700 Ohm $\frac{1}{2}$ w resistor in parallel with 24 V coil
- R2 - 220 Ohm, $\frac{1}{2}$ w resistor in parallel with 6 V coil
820 Ohm, $\frac{1}{2}$ w resistor in parallel with 12 V coil
3200 Ohm $\frac{1}{2}$ w resistor in parallel with 24 V coil
- D1 - 1A7 diode in parallel with coil, anode on #86 terminal
- D2 - 1A7 diode in parallel with coil, cathode on #86 terminal
- D3 - 1A4 diode in parallel with coil, anode on #86 terminal
- D4 - 1A4 diode in parallel with coil, cathode on #86 terminal
- C1 - Plastic dust cover unsealed
- C2 - Plastic dust cover sealed
- C3 - Plastic dust cover, shrouded, steel mounting bracket, unsealed
- C4 - Plastic dust cover, shrouded, steel mounting bracket, sealed
- 24D - 24 volt coil
- 12D - 12 volt coil
- 6D - 6 volt coil
- 1A - SPNO Single pole normally open
- 1C - SPDT Single pole double throw
- Basic series designation - AZ986



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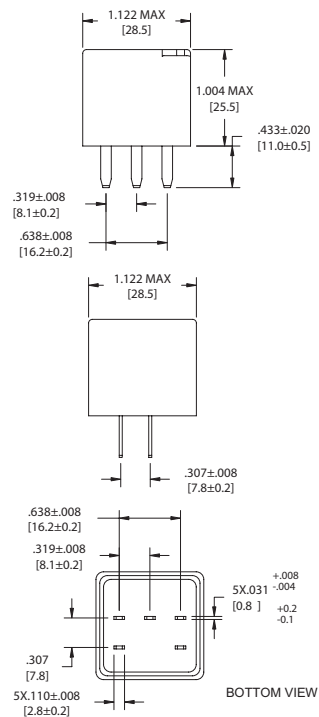
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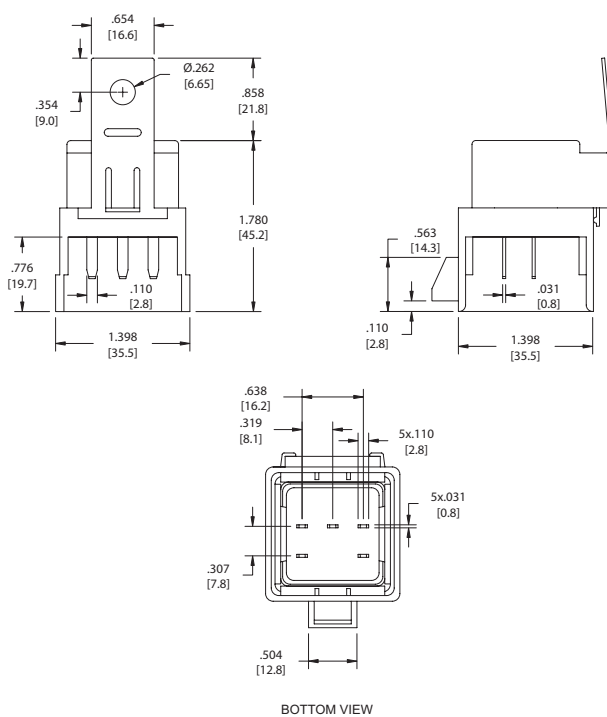
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MECHANICAL DATA

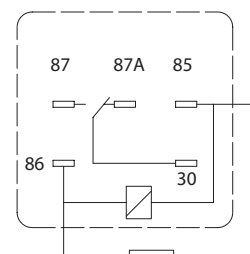
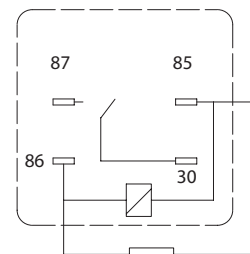
Outline Dimensions
Versions C1 & C2



Outline Dimensions
Versions C3 & C4



Wiring Diagram



VIEWED TOWARD TERMINALS

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



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