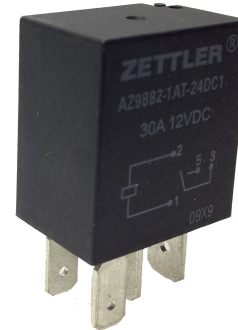


AZ9882

40 AMP MICRO-ISO AUTOMOTIVE RELAY

FEATURES

- Quick Connect or PCB terminals
- Up to 40 Amp switching capability in a compact size
- Coils up to 12 and 24VDC
- Small footprint
- SPST (1 Form A), SPDT (1 Form C)
- Vibration and shock resistant
- Coil suppression available
- 90A Inrush N.O. Terminal



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
	Resistive load: Max. switched power: 560W Max. switched current: 40A Max. switched voltage: 28VDC
Ratings	12V coil: 40A at 14VDC resistive 1 Form A 35A at 14VDC resistive 1 Form A 35A at 14VDC resistive 1 Form C (N.O.) 20A at 14VDC resistive 1 Form C (N.C.) 24V coil: 15A at 28VDC resistive 1 Form A 20A at 28VDC resistive 1 Form A 15A at 28VDC resistive 1 Form C (N.O.) 8A at 28VDC resistive 1 Form C (N.C.)
Material	Silver tin oxide (silver nickel available - contact factory)
Resistance	< 50 milliohms initially (6VDC, 1A voltage drop method)
Contact Voltage drop	100mV typical, 250mV max. at rated load

COIL

Power	
At Pickup Voltage (typical)	540mW (Standard)
Max. Continuous Dissipation	3.6W 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 35A, 14VDC Res.
Operate Time (max.)	10ms at nominal coil voltage
Release Time (max.)	10ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	500Vrms coil to contact 500Vrms between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500VDC 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	DA 1.5mm 10-50Hz
Shock	100m/s ² , 11ms
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 (Approx.)	18 ngrams

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	96
24	14.4	36	320

RELAY ORDERING DATA

AZ9882-1C-12DER

- R - 680 Ohm parallel with 12 V standard coil
2700 Ohm parallel with 24 V standard coil
- D1 - 1N4005 diode in parallel with coil, anode on terminal #86
- Blank - Unsealed
- E - Sealed
- 12D - 12 VDC coil
- 24D - 24 VDC coil
- 1A - Single pole normally open
- 1C - Single pole double throw
- Basic Series Designation - AZ9882

MECHANICAL DATA

Outline Dimensions

Front View Dimensions:
 Total width: 20.5 ± 0.3 (0.807 ± 0.012)
 Terminal spacing: 14 ± 0.3 (0.551 ± 0.012)
 Terminal width: 8 ± 0.3 (0.315 ± 0.012)
 Terminal height: 4.8 (0.188)
 Mounting hole diameter: 3.25 (0.128)

Side View Dimensions:
 Total height: 22.1 ± 0.3 (0.870 ± 0.012)
 Coil height: 15.4 ± 0.3 (0.606 ± 0.012)
 Terminal height: 11 ± 0.3 (0.433 ± 0.012)
 Terminal offset: 6.3 (0.248)
 Mounting hole offset: 4.25 (0.167)
 Mounting hole diameter: 9 ± 0.3 (0.354 ± 0.012)

BOTTOM VIEW

Terminal Dimensions:
 Terminal 85 offset: 0.161 (0.0178)
 Terminal 86 offset: 0.354 ± 0.012 (0.0178)
 Terminal 87 offset: 0.178 (0.0178)
 Terminal 87a offset: 0.178 (0.0178)
 Terminal 30 offset: 0.315 (0.0178)
 Terminal 85 width: 14 (0.315)
 Terminal 86 width: 8 (0.315)
 Terminal 87 width: 4.1 (0.161)
 Terminal 87a width: 4.5 (0.178)
 Terminal 86 width: 9 ± 0.3 (0.354 ± 0.012)

Wiring Diagram

1 form C

1 form A

R1

D1

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

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This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.