AZ980

80 AMP AUTOMOTIVE RELAY

FEATURES

- 80 Amp contact rating
- High momentary carry current
- High operating temperature (85°C)
- SPST N.O. (1 Form A), SPDT (1 Form C), SPST N.C. (1 Form B)
- Quick connect terminals
- ISO/TS 16949, ISO14001
- Tested in accordance with SAEJ2544

CONTACTS

Arrangement	SPST (1 Form A) SPST (1 Form B) SPDT (1 Form C)
Ratings	Resistive load:
1 Form A	Max. switched power: 1120 W Max. switched current: 80 A Max. switched voltage: 28 VDC
1 Form B	Max. switched power: 840 W Max. switched current: 60 A Max. switched voltage: 28 VDC
1 Form C	Max. switched power: 840 W Max. switched current: 60 A Max. switched voltage: 28 VDC
Rated Load	Resistive load:
1 Form A	80 A at 14 VDC Resistive, 20°C 40 A at 28 VDC Resistive, 20°C 40 A at 14 VDC Resistive, 85°C 20 A at 28 VDC Resistive, 85°C 120 A at 28 VDC Resistive, 85°C (inrush for 3 seconds with make/break ratio 1:10)
1 Form B	60 A at 14 VDC Resistive, 20°C 30 A at 28 VDC Resistive, 20°C 30 A at 14 VDC Resistive, 85°C 15 A at 28 VDC Resistive, 85°C
1 Form C	60 A at 14 VDC Resistive, 20°C, (N.O.) 40 A at 28 VDC Resistive, 20°C, (N.O.) 40 A at 14 VDC Resistive, 85°C, (N.O.) 20 A at 28 VDC Resistive, 85°C, (N.O.) 60 A at 14 VDC Resistive, 20°C, (N.C.) 30 A at 28 VDC Resistive, 20°C, (N.C.) 30 A at 14 VDC Resistive, 85°C, (N.C.) 15 A at 28 VDC Resistive, 85°C, (N.C.)
Material	Silver tin oxide
Resistance	< 50 milliohms initially (at 24 V, 1 A, voltage drop method)

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^7 1 x 10^5 at 80 A 14 VDC Res.
Operate Time (typical)	7 ms at nominal coil voltage
Release Time (typical)	5 ms 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	100 megohms min. at 500 VDC, 20°C 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature **Operating** **Storage**	 -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10-55 Hz
Shock	10 g
Enclosure	PA 66
Terminals	Copper alloy Quick Connect Note: Allow suitable slack on leads when wiring and do not subject the terminals to excessive force.
Weight	46 grams

COIL

Power	
At Pickup Voltage (typical)	0.76 W
Max. Continuous Dissipation	3.0 W at 20°C (68°F)
Temperature Rise	56°C (101°F) at nominal coil voltage
Temperature	Max.155°C (311°F)

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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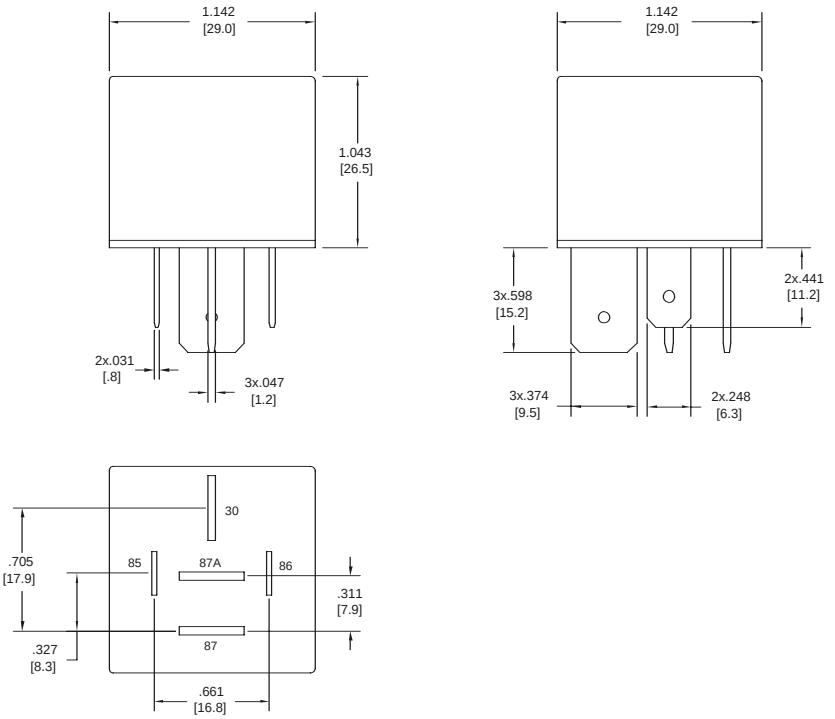
RELAY ORDERING DATA

COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 10%	SPST	SPDT
6	3.9	7.8	20	AZ980–1A–6D	AZ980–1C–6D
12	7.8	15.6	90	AZ980–1A–12D	AZ980–1C–12D
24	15.6	31.2	360	AZ980–1A–24D	AZ980–1C–24D

* For SPST (N.C.) (1 Form B) relay, substitue “1B” for “1A”.
Add suffix “R” for resistor in parallel with coil. Resistor values: 6V: 180 Ω, 12V: 680 Ω, 24V: 2700 Ω.
Add suffix “D” for diode across coil option (+ pole of power supply at terminal #86).
Add suffix “E” for epoxy sealed version.

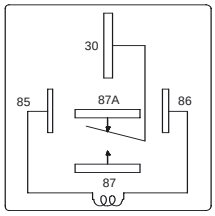
MECHANICAL DATA

Outline Dimensions

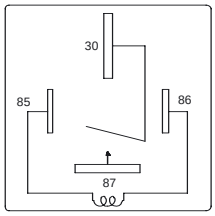


Wiring Diagrams

SPDT



SPST (N.O.)



VIEWED TOWARD TERMINALS

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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