

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
- Epoxy sealed version available



CONTACTS

Arrangement	SPST (N.O.) (1 Form A) SPDT (1 Form C), SPST (N.C.) (1 Form B)
Ratings	Resistive load: Max. switched power: 1120 W (SPST) Form A 840 W (N.O.) Form C 840 W (N.C.) Form C, Form B Max. switched current: 80 A (SPST) Form A 60 A (N.O.) Form C 60 A (N.C.) Form C, Form B Max. switched voltage: 30 VDC
Material	Silver tin oxide
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

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)

GENERAL DATA

Life Expectancy	Minimum operations 1 x 10 ⁷
Mechanical	1 x 10 ⁵ at 80 A 14 VDC Res.
Electrical	
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 contact to contact
Insulation Resistance	100 megohms min. at 500 VDC, 20°C 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature	
Operating	-40°C (-40°F) to 85°C (185°F)
Storage	-40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10-55 Hz
Shock	10 g
Enclosure	P.B.T. polyester
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

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 $\pm 10\%$	SPST	SPDT
6	3.9	7.8	20	AZ980-1A-6D	AZ980-1C-6D
12	7.8	15.6	80	AZ980-1A-12D	AZ980-1C-12D
24	15.6	31.2	320	AZ980-1A-24D	AZ980-1C-24D

* For SPST (N.C.) (1 Form B) relay, substitute "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 at terminal #86).
Add suffix "E" for epoxy sealed version.

MECHANICAL DATA

Outline Dimensions

1.142 [29.0]

1.043 [26.5]

2x.031 [.8]

3x.047 [1.2]

3x.598 [15.2]

2x.441 [11.2]

3x.374 [9.5]

2x.248 [6.3]

.705 [17.9]

.331 [8.4]

.661 [16.8]

.315 [8.0]

Wiring Diagrams

SPDT

SPST (N.O.)

VIEWED TOWARD TERMINALS

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