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)
- PCB terminals
- Epoxy sealed version available



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	-40°C (-40°F) to 85°C (185°F)		
Vibration	0.062" (1.5 mm) DA at 10-55 Hz		
Shock	10 g		
Enclosure	PA 66		
Terminals	Copper alloy PCB		
Weight	40 grams		

COIL

Power			
At Pickup Voltage (typical)	0.76 W		
Max. Continuous Dissipation	3.0 W at 20°C (68°F)		
Temperature Rise	68°C (122°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	AZ983-1A-6D	AZ983-1C-6D
12	7.8	15.6	80	AZ983-1A-12D	AZ983-1C-12D
24	15.6	31.2	320	AZ983-1A-24D	AZ983-1C-24D

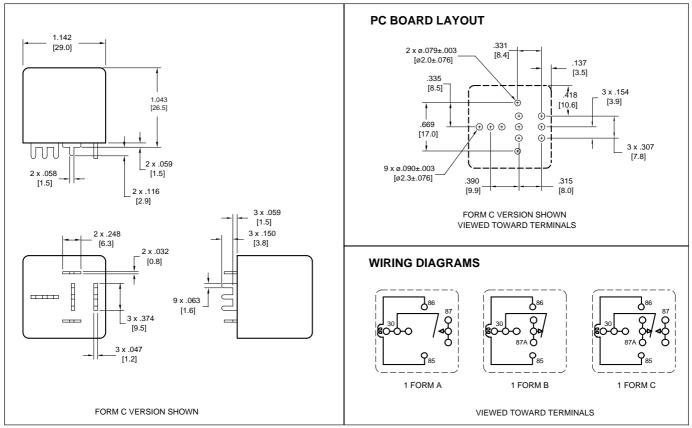
^{*} For SPST (N.C.) (1 Form B) relay, substitue "1B" for "1A".

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



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