

# AZ974

## 40 AMP MINI-ISO AUTOMOTIVE RELAY

### FEATURES

- PCB terminals
- 40 Amp contact rating
- High carry current (60A)
- High momentary surge current (120A)
- High operating temperature (125°C)
- Resistor or diode parallel to coil available
- Epoxy sealed versions available
- SPST (1 Form A), SPDT (1 Form C)
- ISO/TS 16949, ISO9001, ISO14000



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	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: 75 VDC
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 100 milliohms initially (6V, 1 A voltage drop method)

### COIL

<b>Power</b>	
At Pickup Voltage (typical)	0.68 W
Max. Continuous Dissipation	4.8 W at 20°C (68°F)
Temperature Rise	75°C (113°F) at nominal coil voltage
<b>Temperature</b>	Max. 200°C (392°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.

### GENERAL DATA

<b>Life Expectancy</b> Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 40 A 14 VDC Res.
<b>Operate Time (max.)</b>	10 ms at nominal coil voltage
<b>Release Time (max.)</b>	10 ms at nominal coil voltage
<b>Dielectric Strength (at sea level for 1 min.)</b>	500 Vrms coil to contact 500 Vrms contact to contact
<b>Insulation Resistance</b>	100 megohms min. at 500 VDC, 20°C 50% RH
<b>Dropout</b>	Greater than 10% of nominal coil voltage
<b>Ambient Temperature</b> Operating Storage	-55°C (-67°F) to 125°C (257°F) -55°C (-67°F) to 200°C (392°F)
<b>Vibration</b>	0.062" DA at 10-40 Hz
<b>Shock</b>	10 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Max Solvent Temp.</b>	80°C (176°F)
<b>Max Immersion Time</b>	30 seconds
<b>Weight</b>	31 grams

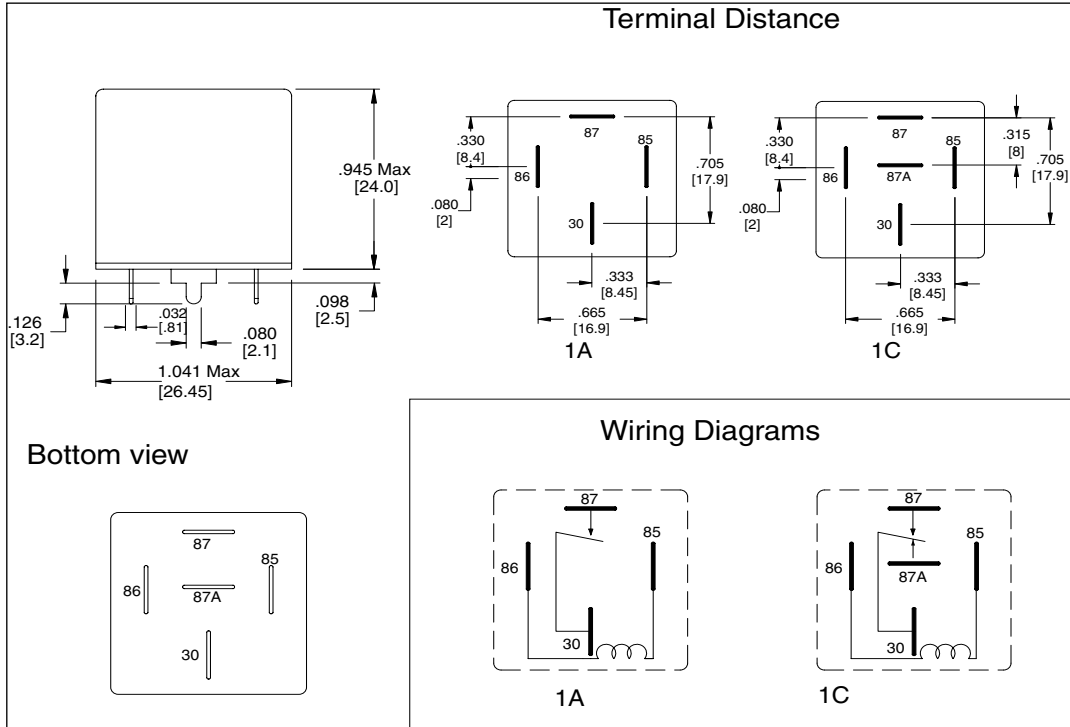
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## RELAY ORDERING DATA

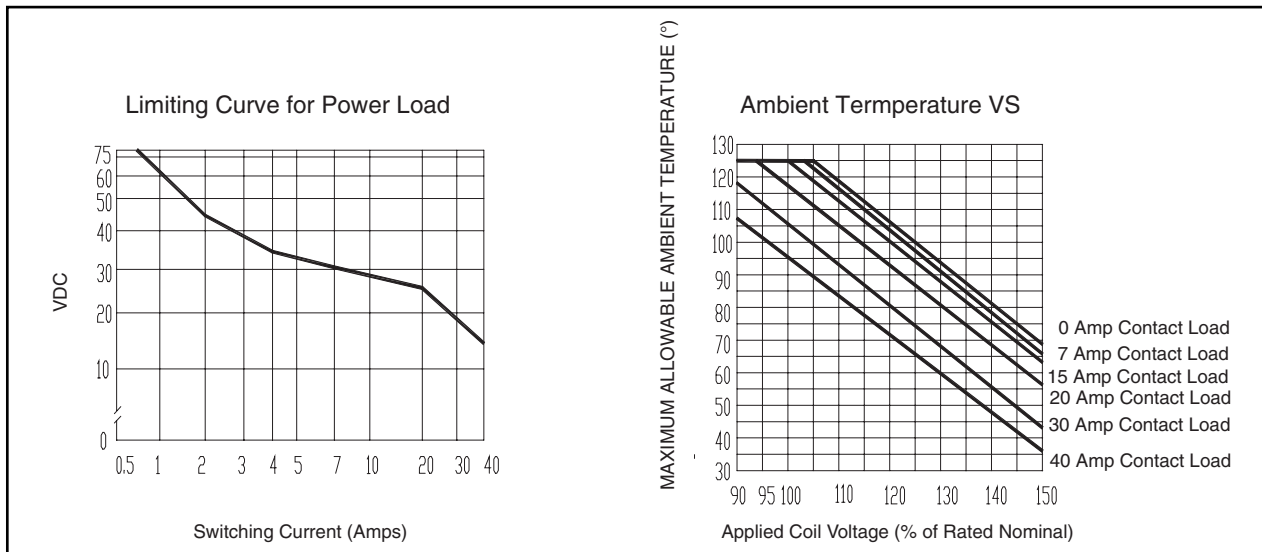
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	SPST	SPDT
6	3.9	10.1	22	AZ974-1A-6D	AZ974-1C-6D
12	7.8	20.2	85	AZ974-1A-12D	AZ974-1C-12D
24	15.6	40.5	350	AZ974-1A-24D	AZ974-1C-24D

\*Add suffix "E" for epoxy sealed version. Add suffix "R" for resistor across coil (6V=180 ohms, 12V=680 ohms, 24V=2700 ohms). Add suffix D1 for diode across coil (anode on #86) or suffix D2 for diode across coil (anode on #85).

## MECHANICAL DATA



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



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