

# 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>	
<b>At Pickup Voltage (typical)</b>	0.68 W
<b>Max. Continuous Dissipation</b>	4.8 W at 20°C (68°F)
<b>Temperature Rise</b>	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> <b>Mechanical</b> <b>Electrical</b>	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> <b>Operating</b> <b>Storage</b>	-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

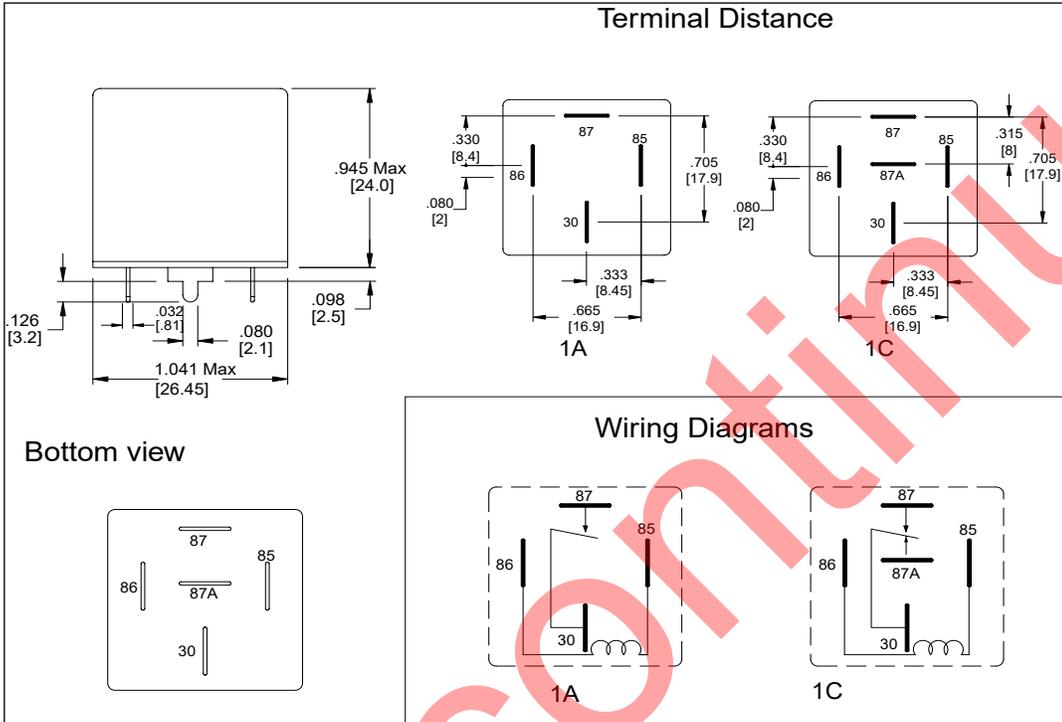
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## RELAY ORDERING DATA

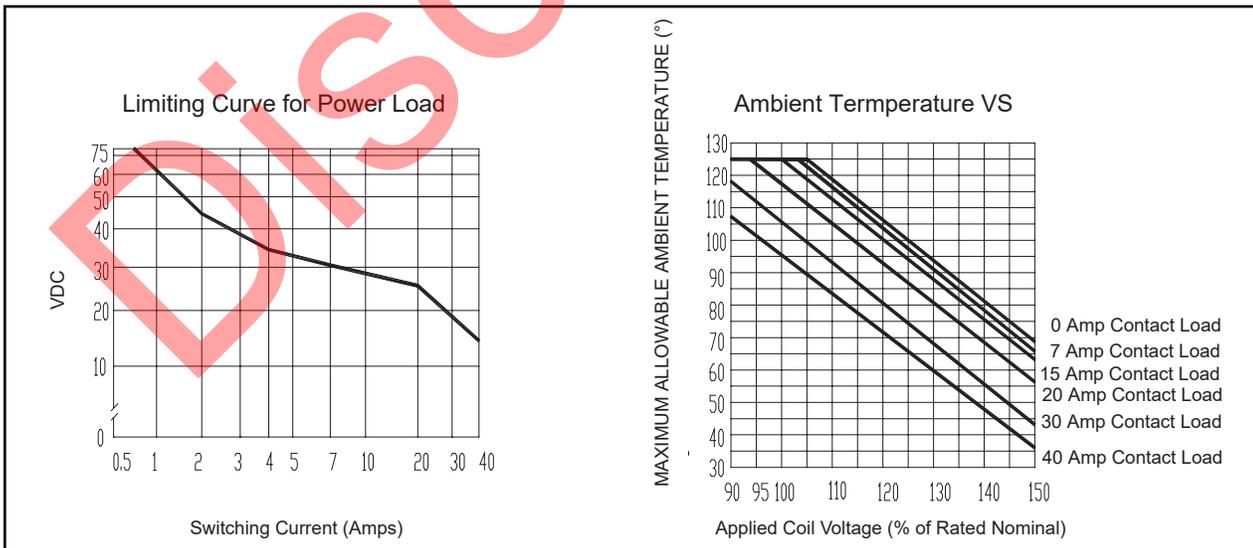
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	SPST	SPDT
6	3.9	10.1	22	AZ974-1A-6D	AZ974-1C-6D
12	7.8	20.2	85	AZ974-1A-12D	AZ974-1C-12D
24	15.6	40.5	350	AZ974-1A-24D	AZ974-1C-24D

\*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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12/12/12

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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.