

# AZ9721

## 40 AMP AUTOMOTIVE RELAY

### FEATURES

- 40 Amp contact rating
- High momentary carry current (60A)
- SPST (1 Form A), SPDT (1 Form C)
- Quick connect terminals
- Metal or plastic mounting bracket available
- Resistor or diode parallel to coil available



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	Resistive load: Max. switched power: 480 W (SPST) 480 W (N.O.) 360 W (N.C.) Max. switched current: 40 A (SPST) 40 A (N.O.) 30 A (N.C.) Max. switched voltage: 75 VDC
<b>Minimum Load</b>	5 VDC, 0.1 A
<b>Material</b>	Silver alloy
<b>Resistance</b>	< 50 milliohms initially (24 V, 1 A voltage drop method)

### COIL

<b>Power</b>	
At Pickup Voltage (typical)	0.76 W
Max. Continuous Dissipation	4.0 W at 20°C (68°F)
Temperature Rise	63°C (113°F) at nominal coil voltage
<b>Temperature</b>	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.

### GENERAL DATA

<b>Life Expectancy</b> Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at rated load
<b>Operate Time (typical)</b>	10 ms at nominal coil voltage
<b>Release Time (typical)</b>	10 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	750 Vrms coil to contact 750 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 70°C (158°F) -55°C (-67°F) to 155°C (311°F)
<b>Vibration</b>	0.062" DA at 20-200 Hz
<b>Shock</b>	20 g
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Copper alloy 0.25 Quick Connect
<b>Weight</b>	40 grams



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## COIL SPECIFICATIONS

Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$
12	7.8	17.8	80
24	17.0	36.0	320

## RELAY ORDERING DATA

### AZ9721-1C-12DC2R1

- Blank - Standard no diode, no resistor
- R1 - 680 Ohm,  $\frac{1}{2}$  w resistor in parallel with 12 V coil  
2700 Ohm  $\frac{1}{2}$  w resistor in parallel with 24 V coil
- R2 - 820 Ohm,  $\frac{1}{2}$  w resistor in parallel with 12 V coil  
3200 Ohm  $\frac{1}{2}$  w resistor in parallel with 24 V coil
- D1 - 1N4007 diode in parallel with coil, anode on #85 terminal
- D2 - 1N4007 diode in parallel with coil, cathode on #85 terminal
- D3 - 1N4004 diode in parallel with coil, anode on #85 terminal
- D4 - 1N4004 diode in parallel with coil, cathode on #85 terminal
- C1 - Plastic dust cover with steel mounting bracket
- C2 - Plastic dust cover with plastic mounting bracket
- C3 - Plastic dust cover
- 24D - 24 volt coil
- 12D - 12 volt coil
- 1A - SPNO Single pole normally open
- 1C - SPDT Single pole double throw
- Basic series designation - AZ9721



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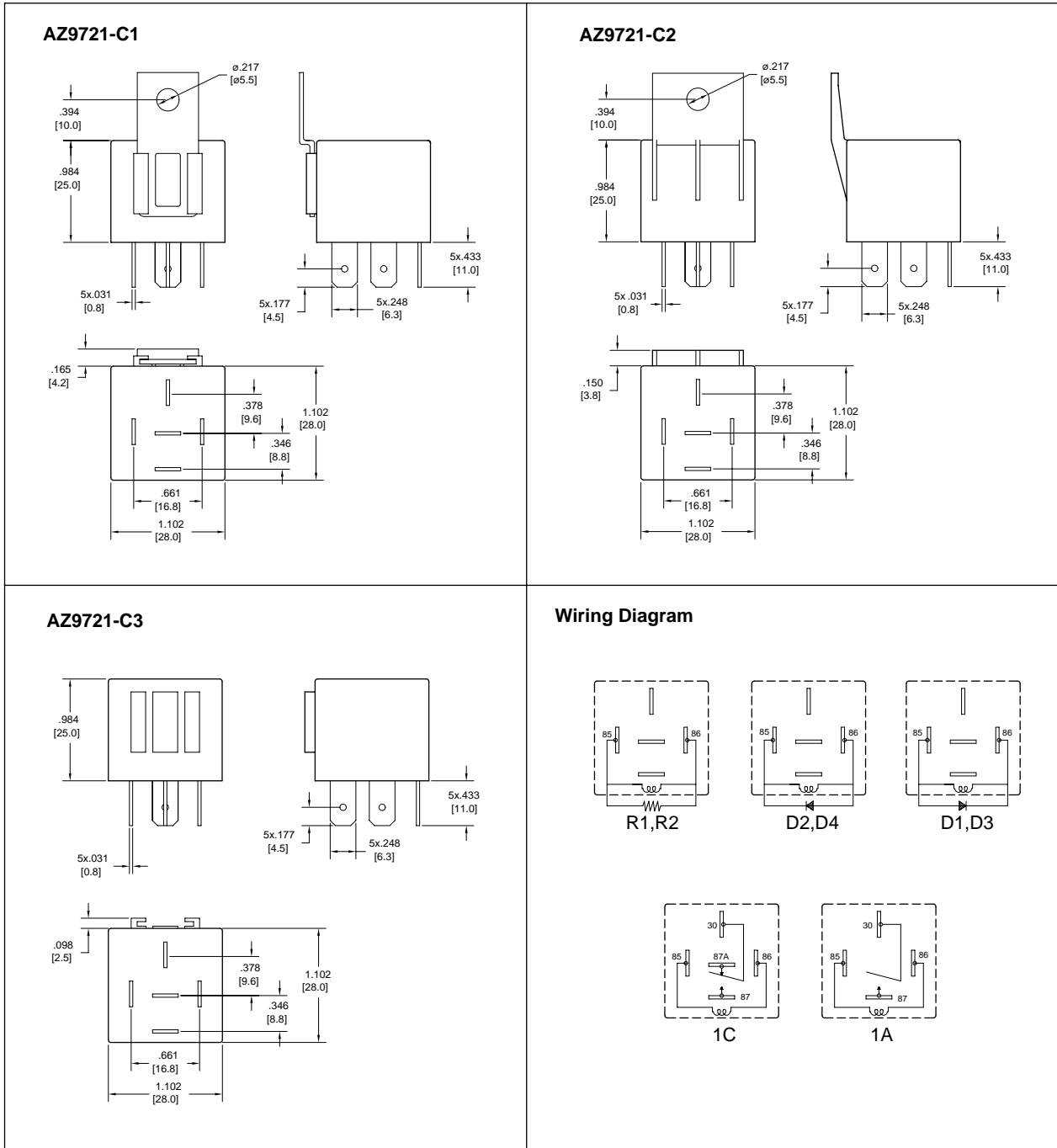
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## MECHANICAL DATA



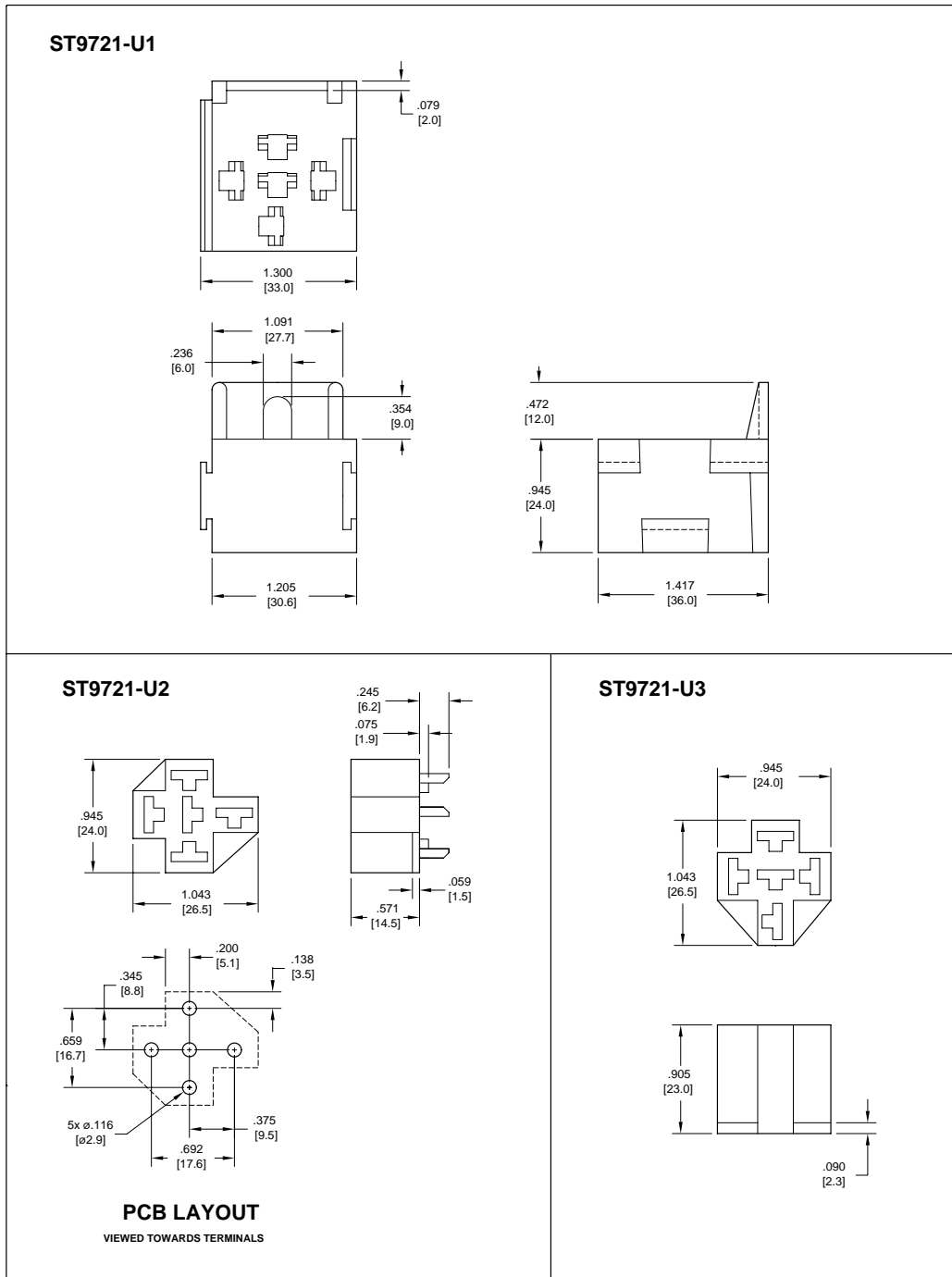
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## Sockets & Hardware for AZ9721



Note: Recommended receptical connector Amp Part numbers are 5-160558-9 or 5-1605-26-9

