

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

| | |
|---------------------|---|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | 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 |
| Minimum Load | 5 VDC, 0.1 A |
| Material | Silver alloy |
| Resistance | < 50 milliohms initially (24 V, 1 A voltage drop method) |

COIL

| | |
|-----------------------------|--------------------------------------|
| Power | |
| 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 |
| 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.

GENERAL DATA

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



AMERICAN ZETTLER, INC.

www.azettler.com

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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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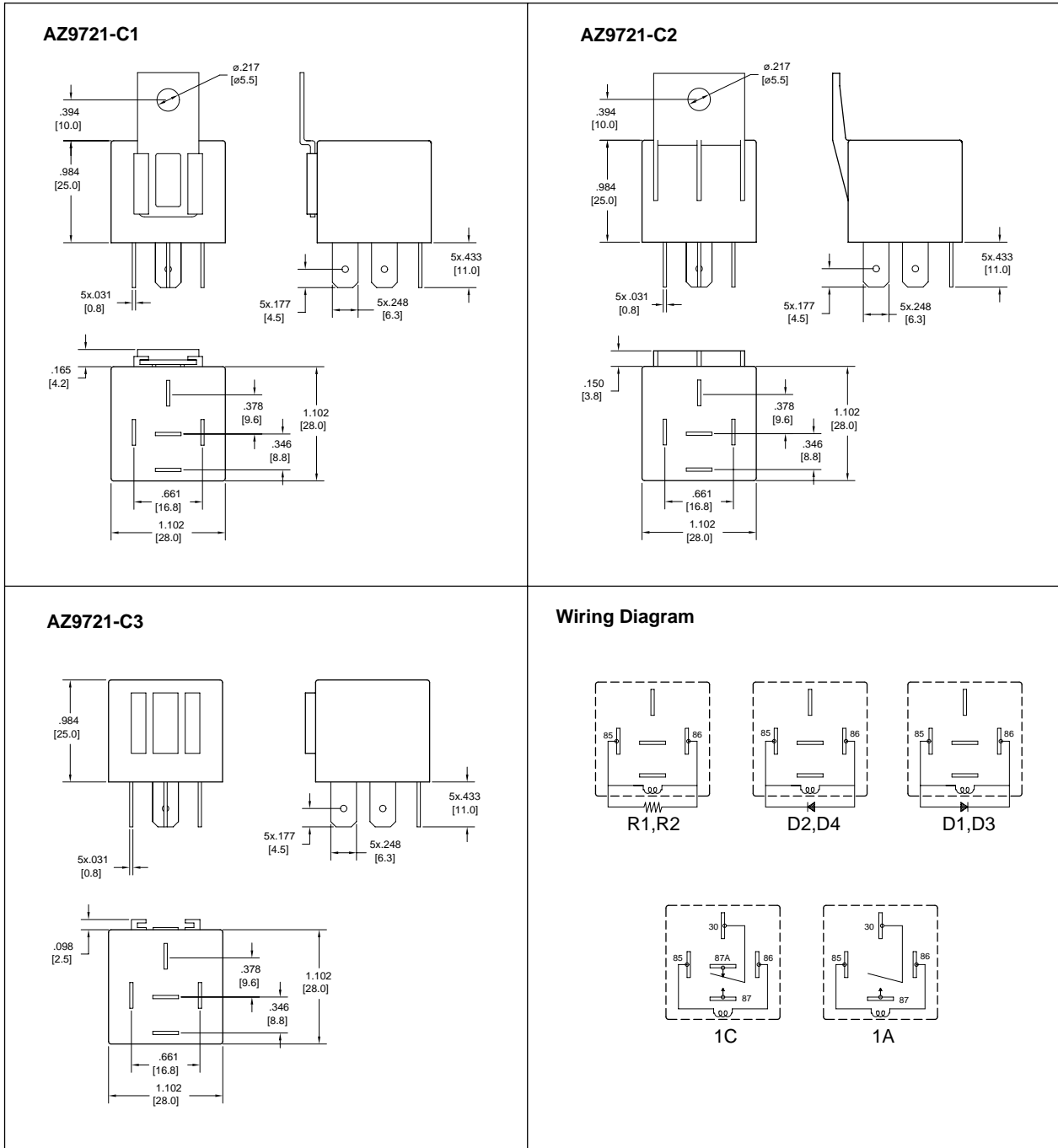
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MECHANICAL DATA



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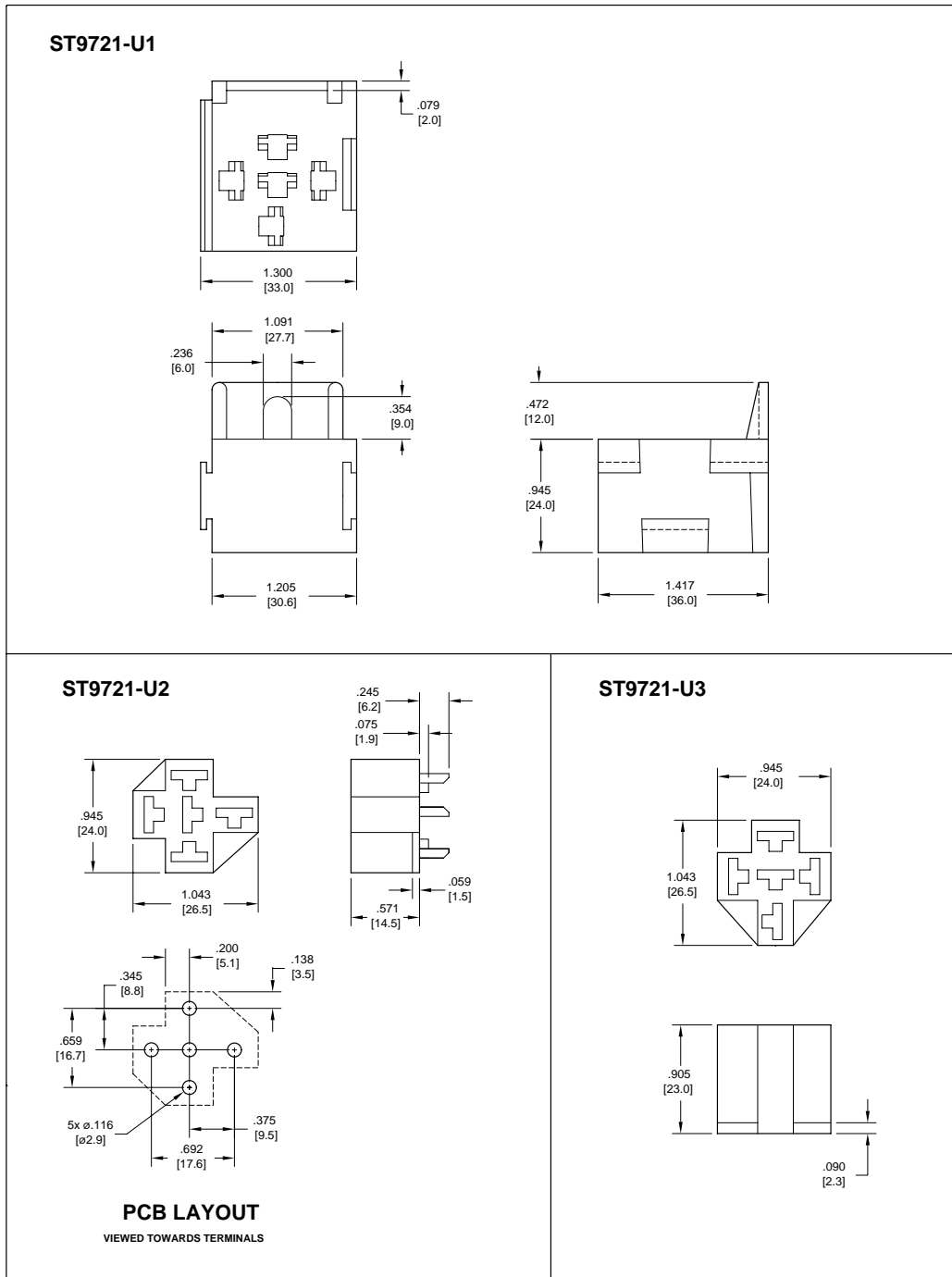
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Sockets & Hardware for AZ9721



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



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