

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

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

9/3/98W

AZ9721

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

AMERICAN ZETTLER, INC.

www.azettler.com

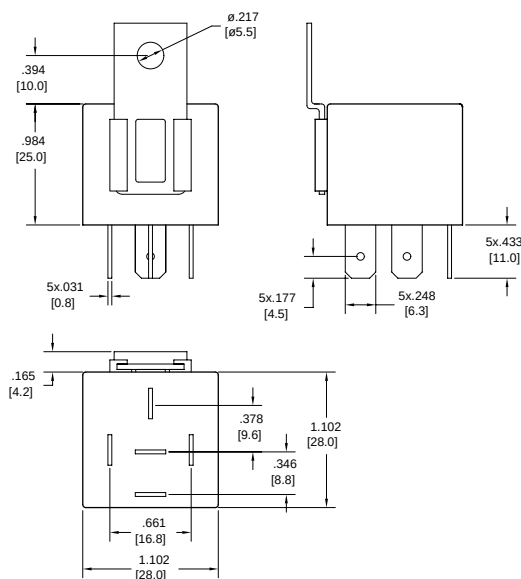
75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

9/3/98W

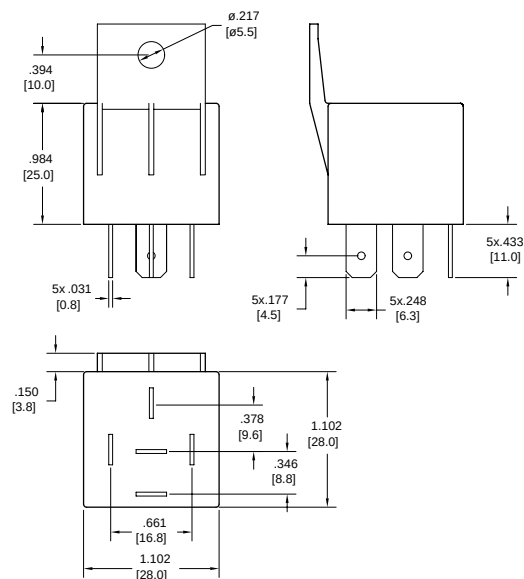
AZ9721

MECHANICAL DATA

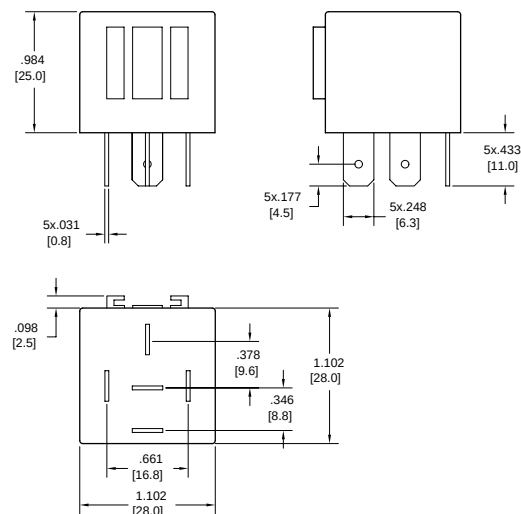
AZ9721-C1



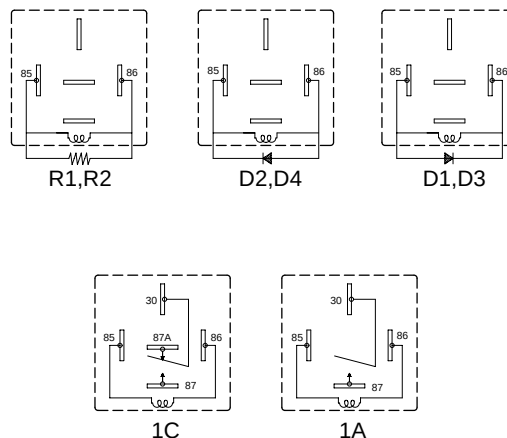
AZ9721-C2



AZ9721-C3



Wiring Diagram



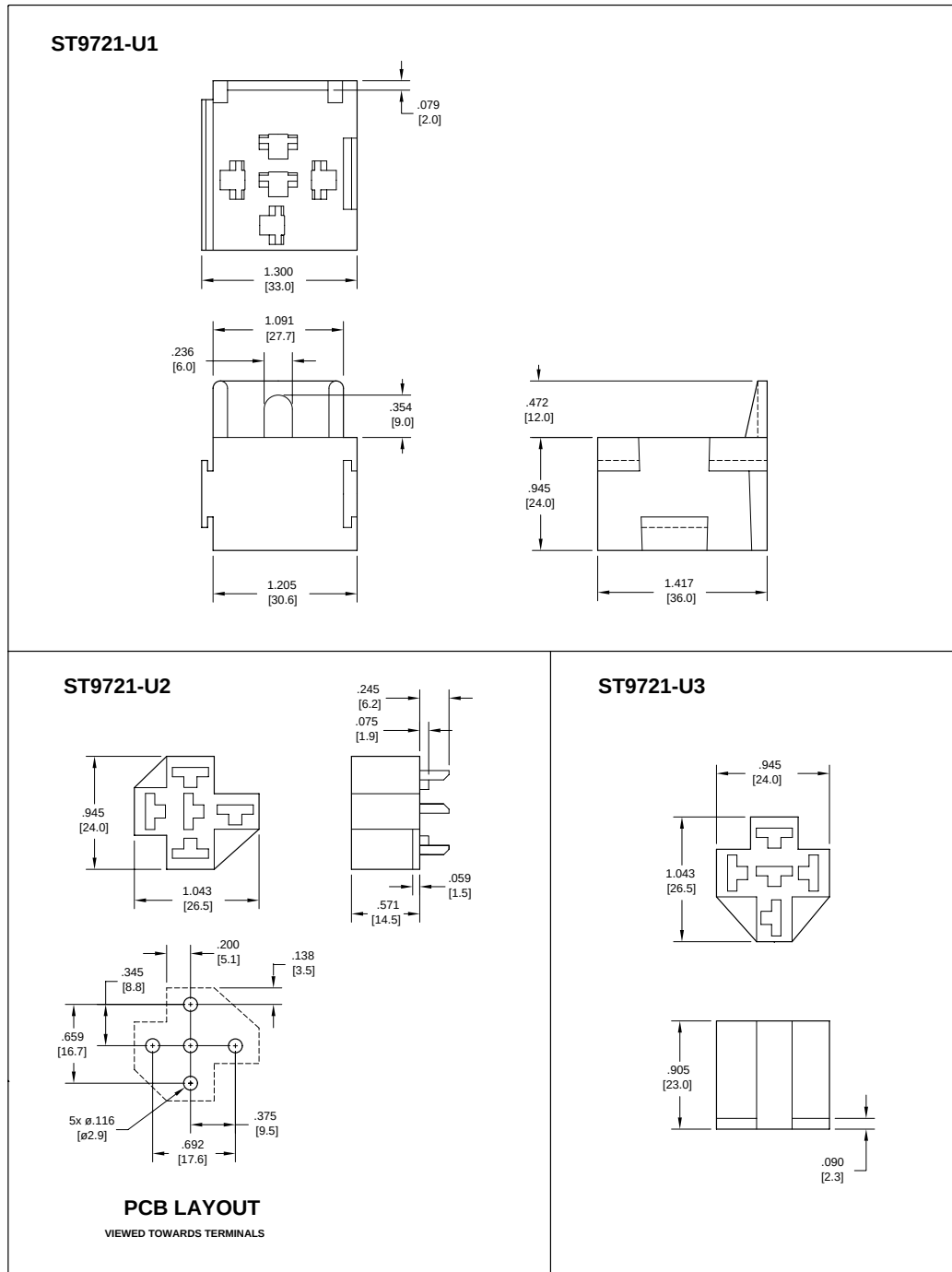
AMERICAN ZETTLER, INC.

www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

9/3/98W

Sockets & Hardware for AZ9721



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