

AZ9733

40 AMP MINI-ISO AUTOMOTIVE RELAY

FEATURES

- AZ9733 Quick connect terminals
- AZ9734 PCB terminals available
- 40 Amp contact rating
- High momentary carry current (60A)
- High operating temperature (125°C)
- Epoxy sealed versions available
- Metal or plastic mounting bracket available
- Resistor or diode parallel to coil available
- ISO/TS 16949, ISO140001



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Max. Ratings	Continuous current: 45A at 23°C (N.C.) 60A at 23°C (N.O.) Switched power: 560W (SPST) 560W (N.O.) 420W (N.C.) Switching Voltage: 75VDC
Contact Ratings	
1 form A	40A at 13.5Vdc, Res. 20A at 27Vdc, Res. 150A make peak inrush, 30A break at 13.5Vdc, Lamp. 80/33A make/break at 13.5Vdc, Ind.
1 form C N.O.	40A at 13.5Vdc, Res. 20A at 27Vdc, Res. 150A make peak inrush, 30A break at 13.5Vdc, Lamp. 80/33A make/break at 13.5Vdc, Ind.
1 form C N.C.	30A at 13.5Vdc, Res. 10A at 27Vdc, Res. 40A/20A make/break at 13.5Vdc, Ind.
Material	Silver tin oxide
Resistance	< 100 milliohms initially (6V, 1A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	0.57W
Max. Continuous Dissipation	4.5W at 20°C (68°F)
Temperature Rise	52°C (94°F) at nominal coil voltage
Temperature	Max. 130°C (266°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁶ 1 x 10 ⁵
Operate Time (max.)	10ms at nominal coil voltage
Release Time (max.)	10ms at nominal coil voltage
Dielectric Strength (at sea level for 1 min.)	500Vrms coil to contact 500Vrms contact to contact
Insulation Resistance	100 megohms min. at 500VDC, 20°C 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	-40°C (-67°F) to 130°C (266°F) -40°C (-67°F) to 130°C (266°F)
Vibration	0.393" DA at 5-22.3 Hz
Shock	294 m/s ²
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy PCB, and 0.25 Quick Connect Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
Weight	Approx. 35 grams

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.

AMERICAN ZETTLER, INC.

AZ9733

RELAY ORDERING DATA

COIL SPECIFICATIONS			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$
12	7.2	20.2	90
24	16	40.5	320

RELAY ORDERING DATA

AZ973X-1C-12DC2ER1

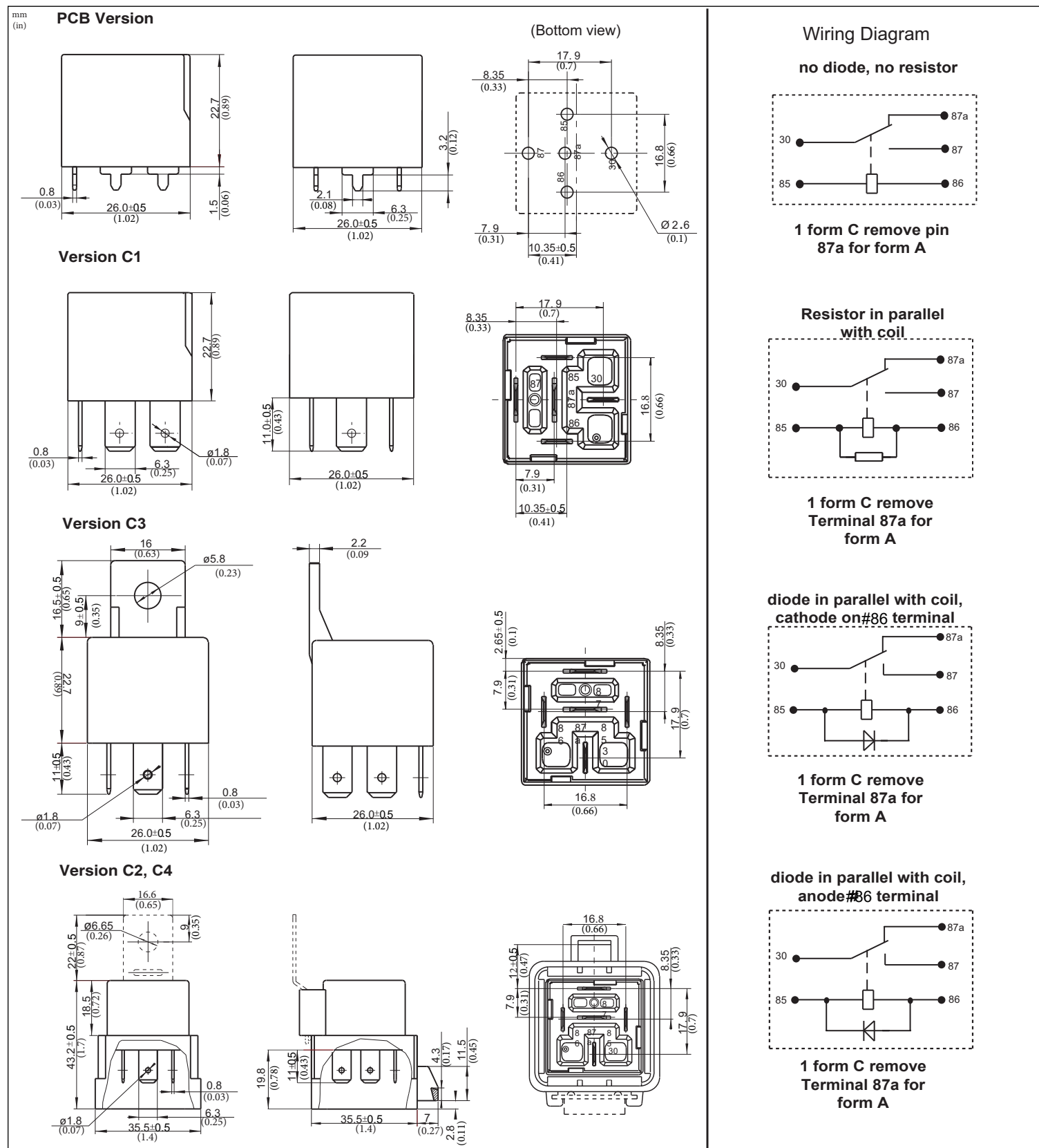
- Blank - Standard no diode, no resistor
- R1 - 680 Ohm, resistor in parallel with 12 V coil
2700 Ohm resistor in parallel with 24 V coil
- R2 - 560 Ohm, resistor in parallel with 12 V coil
1200 Ohm, resistor in parallel with 24 V coil
- D1 - 1N4007 diode in parallel with coil, anode on #86 terminal
- D2 - 1N4007 diode in parallel with coil, cathode on #86 terminal
- Blank - Plastic dust cover
- E - sealed
- C1 - QC Plastic dust cover
- C2 - QC Plastic dust cover, shrouded
- C3 - QC Plastic dust cover, with plastic bracket
- C4 - QC Plastic dust cover, shrouded, with metal bracket
- 24D - 24 volt coil
- 12D - 12 volt coil
- 1A - SPNO Single pole normally open
- 1C - SPDT Single pole double throw
- Basic series designation QC- AZ9733
- Basic series designation PCB- AZ9734

AMERICAN ZETTLER, INC.

4/30/21

AZ9733

MECHANICAL DATA

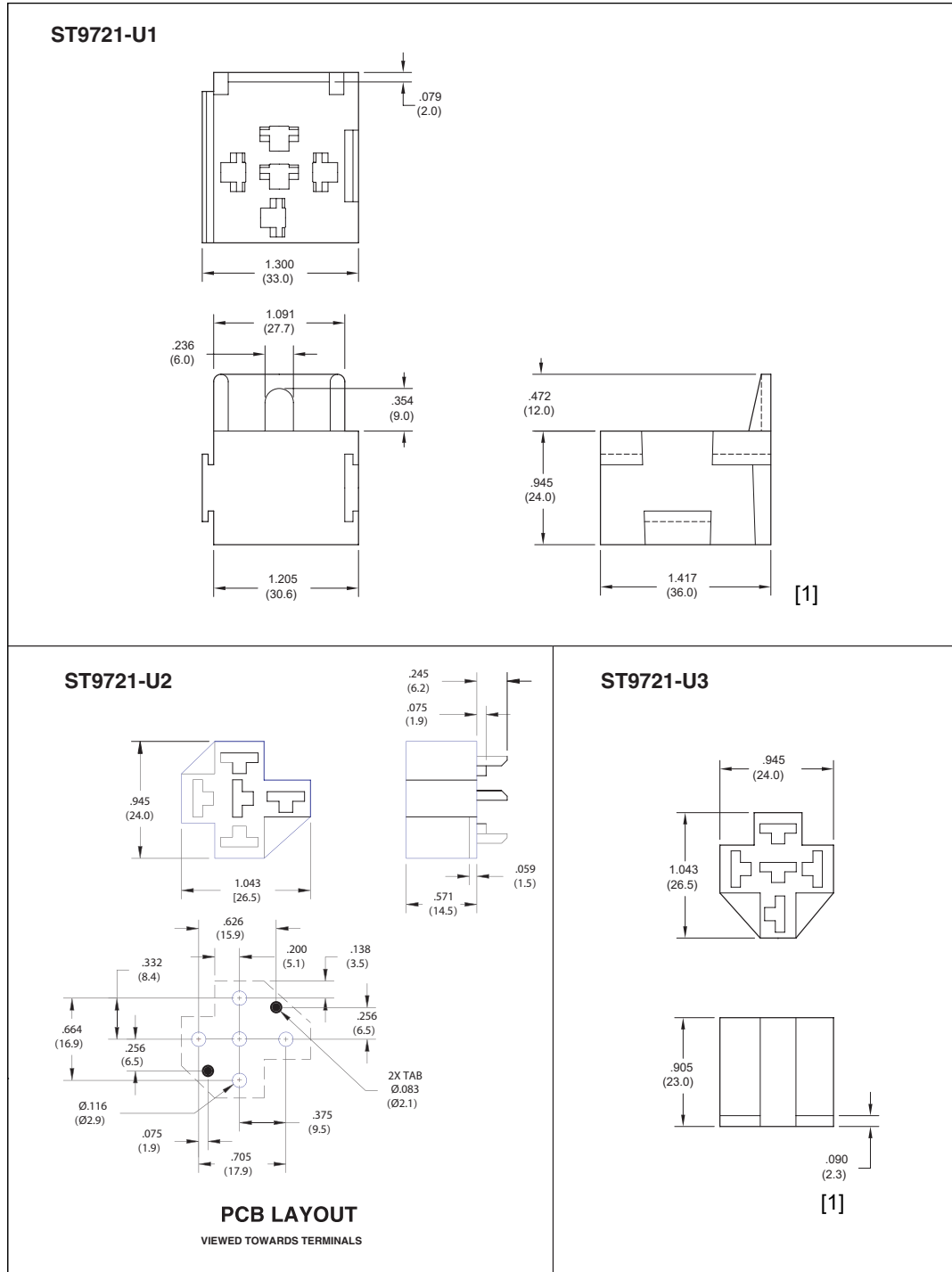


Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ "

AMERICAN ZETTLER, INC.

4/30/21

Sockets & Hardware



[1] Recommended receptical connector Amp Part numbers are 5-160558-9 or 5-1605-26-9