

AZ9701/AZ9711

45 AMP AUTOMOTIVE RELAY

FEATURES

- Up to 45 Amp switching capability in a compact size
- Epoxy sealed versions available
- Coils to 24 VDC
- Small footprint
- 1 Form A and C contacts available
- Vibration and shock resistant
- ISO/TS 16949, ISO9001, ISO14000
- Tested in accordance with SAE J2544
- Cost effective
- Designed for high in-rush applications



CONTACTS

| | |
|--------------------|--|
| Arrangement | SPST (1 Form A) SPDT (1 Form C) |
| Ratings | Resistive load: Max. switched power: Form A: 630 W Form C: 630 W/420W N.O./N.C. Max. switched current: Form A: 45 A Form C: 45 A/30A N.O./N.C. Max. switched voltage: 150* VDC Max. carry current: 60 A * If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory. |
| Material | Silver nickel |
| Resistance | < 100 milliohms initially (24 V, 1 A voltage drop method) |

COIL

| | |
|------------------------------------|---|
| Power | |
| At Pickup Voltage (typical) | 484-573 mW standard coil 675 mW sensitive coil |
| Max. Continuous Dissipation | 4.2W 20°C (68°F) ambient |
| Temperature Rise | 50°C (90°F) nominal coil VDC |
| Max. Temperature | 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 5 x 10 ⁶ operations 1 x 10 ⁵ 40 A 14 VDC Res. |
| Operate Time (typical) | 5 ms at nominal coil voltage |
| Release Time (typical) | 3 ms at nominal coil voltage (with no coil suppression) |
| Dielectric Strength (at sea level for 1 min.) | 500 VDC coil to contact 500 VDC between open contacts |
| Insulation Resistance | 100 megohms min. at 20°C (68°F), 500 VDC, 50% RH |
| Dropout | Greater than 6% of nominal coil voltage |
| Ambient Temperature Operating Storage | At nominal coil voltage -40°C (-40°F) to 135°C (275°F) -40°C (-40°F) to 155°C (311°F) |
| Vibration | 10-40 Hz – 1.27 mm DA 40-70 Hz – 50 m/s ² 70-100 Hz – 0.5 mm DA 100-500 Hz – 100 m/s ² |
| Shock | 20 g |
| Enclosure | P.B.T. polyester |
| Terminals | Tinned copper alloy, P.C. |
| Max. Solder Temp. | 270°C (518°F) |
| Max. Solder Time | 5 seconds |
| Max. Solvent Temp. | 80°C (176°F) |
| Max. Immersion Time | 30 seconds |
| Weight | 20 grams |



AMERICAN ZETTLER, INC.

www.azettler.com

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6/11/04W

AZ9701/AZ9711

RELAY ORDERING DATA – STANDARD COIL

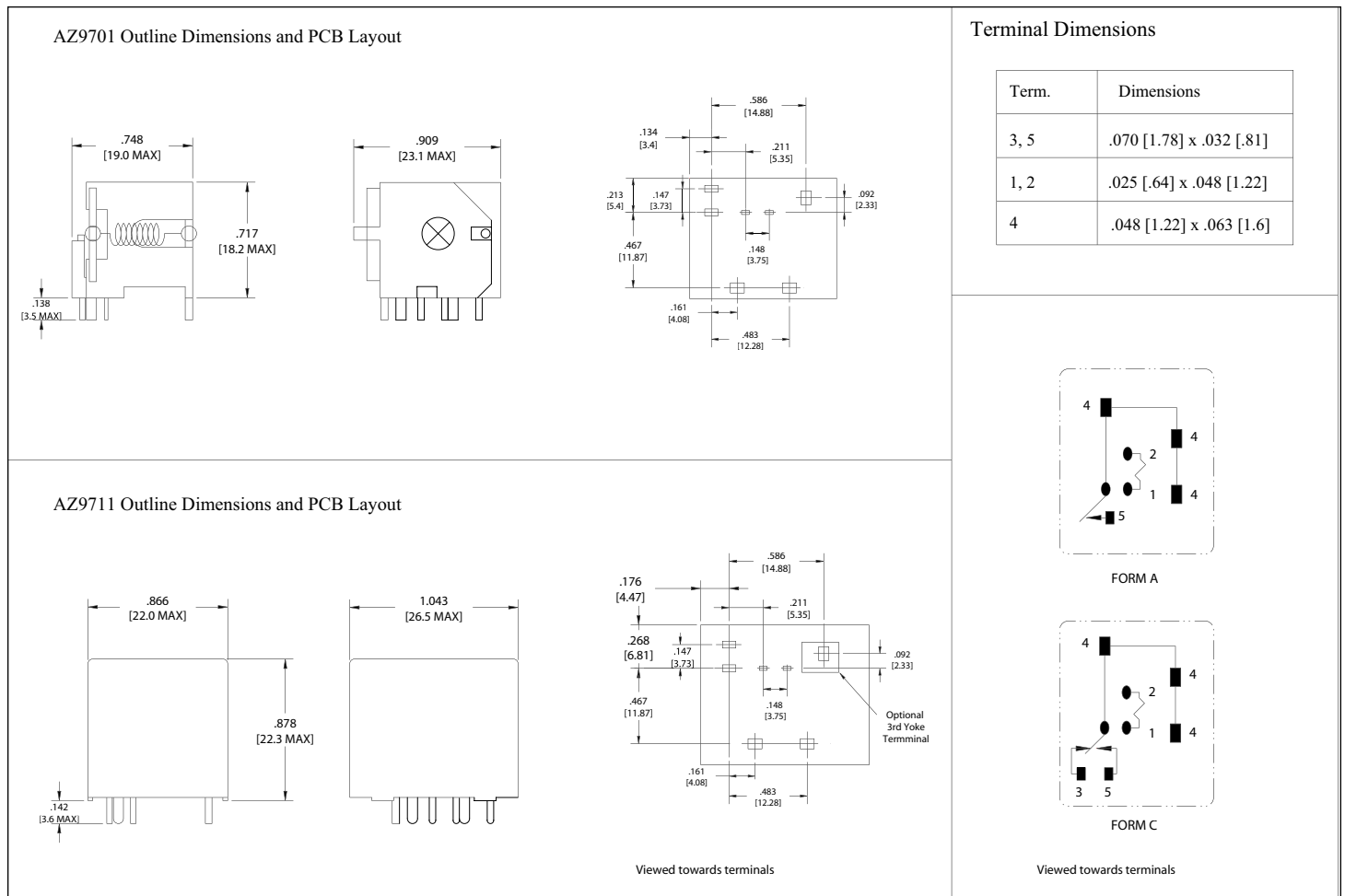
| COIL SPECIFICATIONS | | | | ORDER NUMBER | | | |
|---------------------|------------------|---------------------|----------------------------|---------------|---------------|----------------|----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Open | | Sealed* | |
| 6 | 3.3 | 9.0 | 19.0 | AZ9701-1A-6D | AZ9701-1C-6D | AZ9711-1A-6DE | AZ9711-1C-6DE |
| 12 | 6.8 | 19.6 | 90.0 | AZ9701-1A-12D | AZ9701-1C-12D | AZ9711-1A-12DE | AZ9711-1C-12DE |
| 24 | 13.9 | 39.3 | 362.0 | AZ9701-1A-24D | AZ9701-1C-24D | AZ9711-1A-24DE | AZ9711-1C-24DE |

RELAY ORDERING DATA – SENSITIVE COIL

| COIL SPECIFICATIONS | | | | ORDER NUMBER | | | |
|---------------------|------------------|---------------------|----------------------------|----------------|----------------|-----------------|-----------------|
| Nominal Coil VDC | Must Operate VDC | Max. Continuous VDC | Coil Resistance $\pm 10\%$ | Open | | Sealed* | |
| 6 | 4.5 | 11.3 | 30.0 | AZ9701-1A-6DS | AZ9701-1C-6DS | AZ9711-1A-6DSE | AZ9711-1C-6DSE |
| 12 | 9.0 | 22.6 | 120.0 | AZ9701-1A-12DS | AZ9701-1C-12DS | AZ9711-1A-12DSE | AZ9711-1C-12DSE |
| 24 | 19.2 | 45.2 | 480.0 | AZ9701-1A-24DS | AZ9701-1C-24DS | AZ9711-1A-24DSE | AZ9711-1C-24DSE |

*Add suffix "K" to add third yoke pin.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "



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