

# 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
- UL, CUR file E43203



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A) SPDT (1 Form C)
<b>Ratings</b>	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.
<b>UL, CUR</b>	45A at 14VDC res. 10k cycles (1Form A)
<b>Material</b>	Silver tin oxide
<b>Resistance</b>	< 100 milliohms initially (24 V, 1 A voltage drop method)

### COIL

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



**AMERICAN ZETTLER, INC.**

[www.azettler.com](http://www.azettler.com)

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## RELAY ORDERING DATA – STANDARD COIL

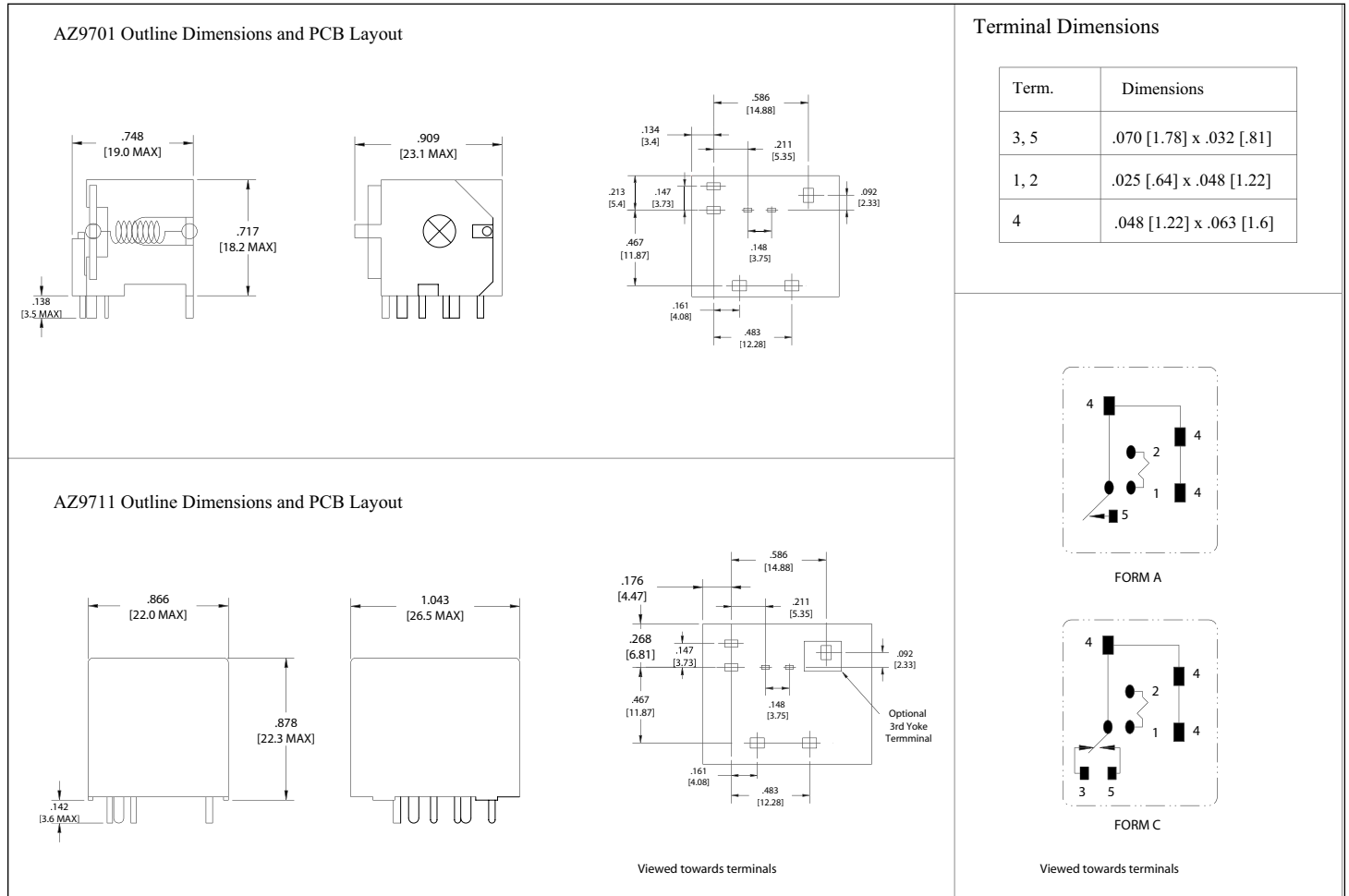
COIL SPECIFICATIONS				ORDER NUMBER			
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Open		Sealed*	
6	3.3	9.0	19.0	AZ9701-1A-6DT	AZ9701-1C-6DT	AZ9711-1A-6DET	AZ9711-1C-6DET
9	5.1	14.7	51.0	AZ9701-1A-9DT	AZ9701-1C-9DT	AZ9711-1A-9DET	AZ9711-1C-9DET
12	6.8	19.6	90.0	AZ9701-1A-12DT	AZ9701-1C-12DT	AZ9711-1A-12DET	AZ9711-1C-12DET
24	13.9	39.3	362.0	AZ9701-1A-24DT	AZ9701-1C-24DT	AZ9711-1A-24DET	AZ9711-1C-24DET

## 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-6DST	AZ9701-1C-6DST	AZ9711-1A-6DSET	AZ9711-1C-6DSET
9	6.8	17.0	68.0	AZ9701-1A-9DST	AZ9701-1C-9DST	AZ9711-1A-9DSET	AZ9711-1C-9DSET
12	9.0	22.6	120.0	AZ9701-1A-12DST	AZ9701-1C-12DST	AZ9711-1A-12DSET	AZ9711-1C-12DSET
24	19.2	45.2	480.0	AZ9701-1A-24DST	AZ9701-1C-24DST	AZ9711-1A-24DSET	AZ9711-1C-24DSET

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

## MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance:  $\pm 0.010$ "



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