

# AZ2704

## 30 AMP POWER RELAY

### FEATURES

- 30 Amp switching
- 30 Amp AC7a approved
- 900 Amp Short circuit current (carrying)
- PC mount and quick connect terminals
- Dielectric strength 4000Vrms
- Standard (2.4mm) and wide contact gap (3.0mm) available
- UL, CUR file E44211
- TÜV certificate R50164753



### CONTACTS

<b>Arrangement</b>	SPST (1 Form X) DPST (2 Form X)
<b>Ratings</b>	Resistive load: Max. switched power: 840W (2X) or 8310VA (1X) Max. switched current: 30A Max. switched voltage: 150VDC* or 400 VAC  *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
<b>Rated Load UL, CUR</b>	30A at 277VAC, resistive 30k cycles [1][2] 25A at 277 VAC, resistive, 100k cycles [2] 25A at 240 VAC, resistive, 100k cycles [1] 3HP at 240 VAC, 6k cycles [1] 1.5HP at 120 VAC, 6k cycles [1] TV-10 at 120 VAC, 6k cycles [1] 105 LRA / 20.5 FLA at 240 VAC, 100k cycles [1]  SPST (1 Form X) 10A at 120 VAC, tungsten, 6k cycles [1][2] 3HP at 240 VAC, 100k cycles [2] 1.5HP at 120 VAC, 100k cycles [2]  DPST (2 Form X) 10A at 277 VAC, tungsten, 6k cycles [2] 10A at 120 VAC, tungsten, 6k cycles [1] 2HP at 277 VAC, 75k cycles [2] 1HP at 125 VAC, 30k cycles [2]
<b>TÜV</b>	27A at 240VAC, cos phi 0.8, 50k cycles [1][2] 25A at 240VAC, cos phi 0.4, 50k cycles [1][2]
<b>Material</b>	[1] Silver cadmium oxide, [2] silver tin oxide
<b>Resistance</b>	< 100 milliohms initially (24V, 1A voltage drop method)

### COIL

<b>Power</b>	
<b>At Pickup Voltage (typical)</b>	1.08W (DC) 1.7VA (AC)
<b>Max. Continuous Dissipation</b>	3.8 W at 20°C (68°F) ambient
<b>Temperature Rise</b>	50°C (90°F) at nominal coil voltage
<b>Temperature</b>	Max. 130°C (266°F) - Class B Max. 155°C (311°F) - Class F

### GENERAL DATA

<b>Life Expectancy Mechanical Electrical</b>	Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at rated load
<b>Operate Time (max)</b>	30ms at nominal coil voltage
<b>Release Time (max)</b>	30ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	4000Vrms coil to contact 2000Vrms between open contacts
<b>Insulation Resistance</b>	1000 megohms min. at 20°C, 500 VDC, 50% RH
<b>Dropout</b>	Greater than 5% of nominal coil voltage (DC) Greater than 15% of nominal coil voltage (AC)
<b>Ambient Temperature Operating Storage</b>	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) - Class B -40°C (-40°F) to 105°C (221°F) - Class F -40°C (-40°F) to 130°C (266°F) - Class B -40°C (-40°F) to 155°C (311°F) - Class F
<b>Vibration</b>	0.062" DA at 10–55 Hz
<b>Shock Operating Non-Operating</b>	10g, 11ms, 1/2 sine (no false operation) 100g, 11ms, 1/2 sine (no damage)
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
<b>Weight (Approx)</b>	120 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.

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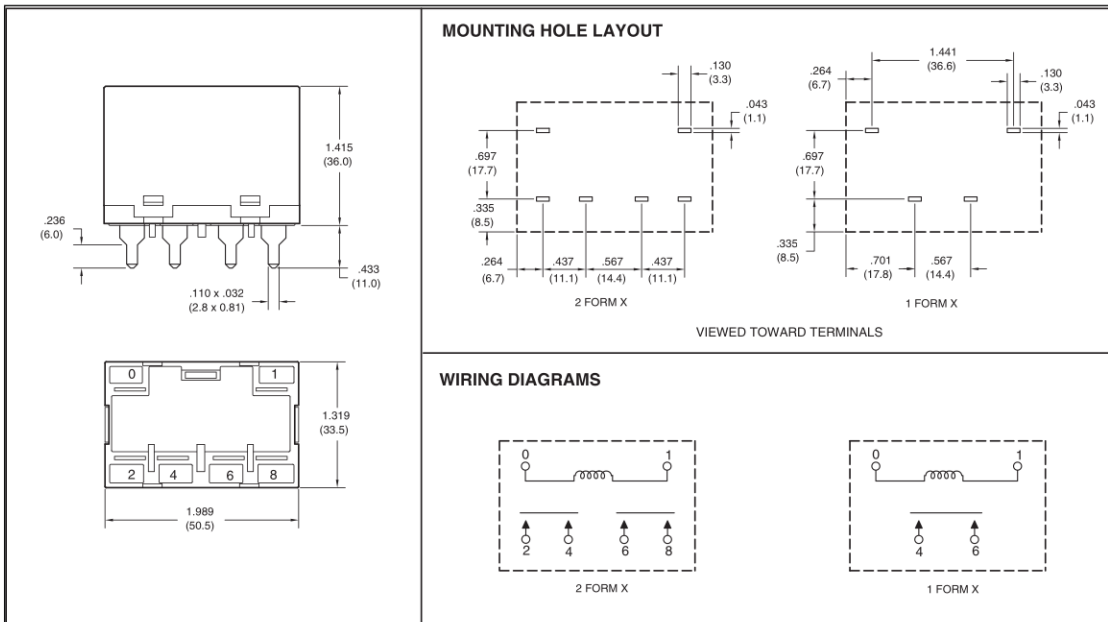
## RELAY ORDERING DATA

COIL SPECIFICATIONS – DC COIL				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	1 Form X	2 Form X
3	2.25	4.2	5	AZ2704-1A-3D	AZ2704-2A-3D
6	4.50	8.4	19	AZ2704-1A-6D	AZ2704-2A-6D
12	9.00	16.8	75	AZ2704-1A-12D	AZ2704-2A-12D
24	18.00	33.7	300	AZ2704-1A-24D	AZ2704-2A-24D
48	36.0	67.5	1200	AZ2704-1A-48D	AZ2704-2A-48D
100	75.0	140.5	5200	AZ2704-1A-100D	AZ2704-2A-100D
110	82.5	154.7	6300	AZ2704-1A-110D	AZ2704-2A-110D
200	150.0	282.4	21000	AZ2704-1A-200D	AZ2704-2A-200D

COIL SPECIFICATIONS – AC COIL				ORDER NUMBER*	
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Coil Current mA $\pm 10\%$	1 Form X	2 Form X
6	4.80	6.6	319	AZ2704-1A-6A	AZ2704-2A-6A
12	9.60	13.2	160	AZ2704-1A-12A	AZ2704-2A-12A
24	19.2	26.4	80	AZ2704-1A-24A	AZ2704-2A-24A
48	38.4	52.8	40	AZ2704-1A-48A	AZ2704-2A-48A
120	96.0	132.0	23	AZ2704-1A-120A	AZ2704-2A-120A
220	176.0	242.0	10	AZ2704-1A-220A	AZ2704-2A-220A
240	192.0	264.0	9	AZ2704-1A-240A	AZ2704-2A-240A

\*For silver tin oxide add suffix "T." For wide contact gap add "W". For Class F add suffix "F".

## MECHANICAL DATA



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

# AMERICAN ZETTLER, INC.

2/09/16

PHONE: (949) 831-5000

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

E-MAIL: SALES@AZETTLER.COM

This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.