

# AZ2705

## 30 AMP POWER RELAY

### FEATURES

- Low cost
- 30 Amp switching
- Class B insulation system standard, Class F available
- Flange mount
- 4 kV dielectric
- Standard (2.4 mm) and wide contact gap (3.0 mm) available
- UL, CUR file E44211
- TÜV R50031999



### CONTACTS

<b>Arrangement</b>	SPST (1 Form X) DPST (2 Form X)
<b>Ratings</b>	Resistive load: Max. switched power: 840 W or 8310 VA Max. switched current: 30 A Max. switched voltage: 150* VDC 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>	30 A at 277 VAC res. 30k cycles [1] 1.5 HP at 120 VAC [1] 3 HP at 240 VAC [1] TV-10 at 120 VAC [1] 30 A at 277 VAC res. 70k cycles [2] 3 HP at 240 VAC 100k cycles [2] 10 A at 120 VAC tungsten load, 10k cycles [2]
<b>TÜV</b>	27 A at 240 VAC, cos phi = .8, 100k cycles [1]  [1] silver cadmium oxide, [2] silver tin oxide (1 Form X only)
<b>Material</b>	Silver cadmium oxide, 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>	1.08 W (DC) 1.2 VA (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</b> <b>Mechanical</b> <b>Electrical</b>	Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 30 A 120 VAC Res.
<b>Operate Time (typical)</b>	30 ms at nominal coil voltage
<b>Release Time (typical)</b>	30 ms at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1 min.)</b>	4000 Vrms coil to contact 2000 Vrms 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</b> <b>Operating</b> <b>Non-Operating</b>	10 g, 11 ms, 1/2 sine (no false operation) 100 g, 11 ms, 1/2 sine (no damage)
<b>Enclosure</b>	P.B.T. polyester
<b>Terminals</b>	Screw mount
<b>Max. Solder Temp.</b>	270°C (518°F)
<b>Max. Solder Time</b>	5 seconds
<b>Weight</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.
4. Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.



**AMERICAN ZETTLER, INC.**

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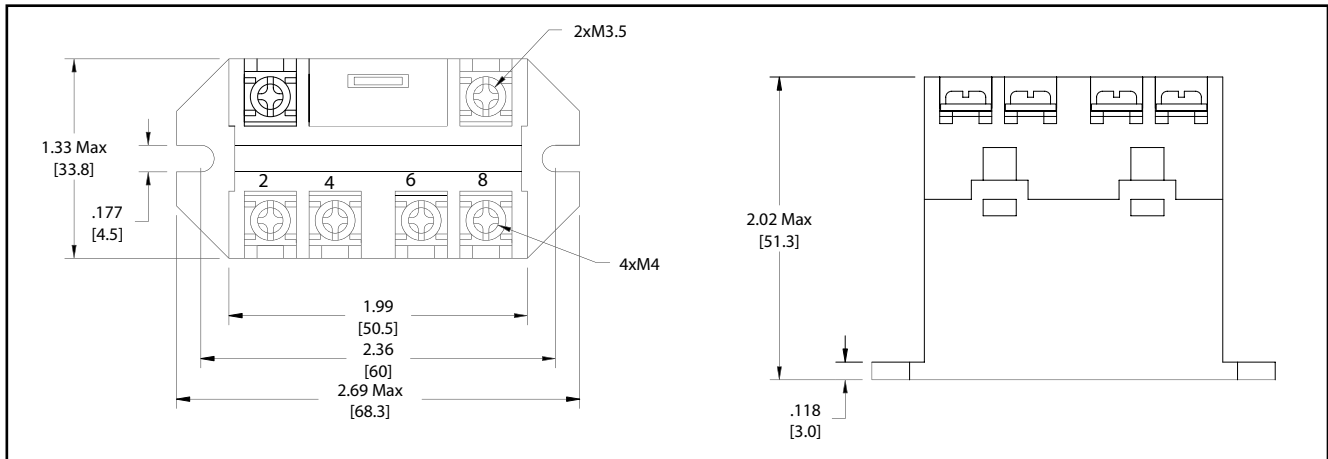
## RELAY ORDERING DATA

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	2.3	4.2	4.7	AZ2705-1A-3D	AZ2705-2A-3D
6	4.5	8.4	18.8	AZ2705-1A-6D	AZ2705-2A-6D
12	9.0	16.8	75	AZ2705-1A-12D	AZ2705-2A-12D
24	18.0	33.7	300	AZ2705-1A-24D	AZ2705-2A-24D
48	36.0	67.5	1200	AZ2705-1A-48D	AZ2705-2A-48D
100	75.0	140.5	5200	AZ2705-1A-100D	AZ2705-2A-100D
110	82.5	154.7	6300	AZ2705-1A-110D	AZ2705-2A-110D
200	150.0	282.4	21000	AZ2705-1A-200D	AZ2705-2A-200D

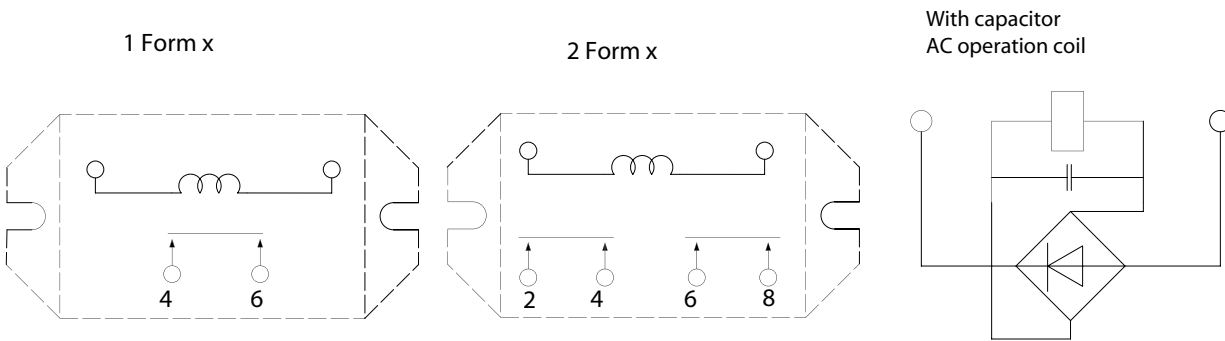
COIL SPECIFICATIONS – AC COIL				ORDER NUMBER*	
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Coil Current mA $\pm 10\%$	1 Form X	2 Form X
6	4.8	6.6	319	AZ2705-1A-6A	AZ2705-2A-6A
12	9.6	13.2	160	AZ2705-1A-12A	AZ2705-2A-12A
24	19.2	26.4	80	AZ2705-1A-24A	AZ2705-2A-24A
48	38.4	52.8	40	AZ2705-1A-48A	AZ2705-2A-48A
120	96.0	132.0	23	AZ2705-1A-120A	AZ2705-2A-120A
220	176.0	242.0	10	AZ2705-1A-220A	AZ2705-2A-220A
240	192.0	264.0	9.2	AZ2705-1A-240A	AZ2705-2A-240A

\*For silver tin oxide add suffix "T" (UL approved for 1 Form X only). For wide contact gap add "W". For Class F add suffix "F".

## MECHANICAL DATA



## Wiring Diagrams



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



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