

# 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 R50164753



### CONTACTS

Arrangement	SPST (1 Form X) DPST (2 Form X)
Ratings	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 30 VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	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]
TÜV	27 A at 240 VAC, cos phi = .8, 100k cycles [1]  [1] silver cadmium oxide, [2] silver tin oxide (1 Form X only)
Material	Silver cadmium oxide, silver tin oxide
Resistance	< 100 milliohms initially (24 V, 1 A voltage drop method)

### COIL

Power	
At Pickup Voltage (typical)	1.08 W (DC) 1.2 VA (AC)
Max. Continuous Dissipation	3.8 W at 20°C (68°F) ambient
Temperature Rise	50°C (90°F) at nominal coil voltage
Temperature	Max. 130°C (266°F) - Class B Max. 155°C (311°F) - Class F

### GENERAL DATA

Life Expectancy	Minimum operations 1 x 10 <sup>6</sup> 1 x 10 <sup>5</sup> at 30 A 120 VAC Res.
Operate Time (max)	30 ms at nominal coil voltage
Release Time (max)	30 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	4000 Vrms coil to contact 2000 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 5% of nominal coil voltage (DC) Greater than 15% of nominal coil voltage (AC)
Ambient Temperature Operating Storage	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
Vibration	0.062" DA at 10-55 Hz
Shock	Operating Non-Operating
	10 g, 11 ms, 1/2 sine (no false operation) 100 g, 11 ms, 1/2 sine (no damage)
Enclosure	P.B.T. polyester
Terminals	Screw mount
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Weight	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.

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

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

# AZ2705

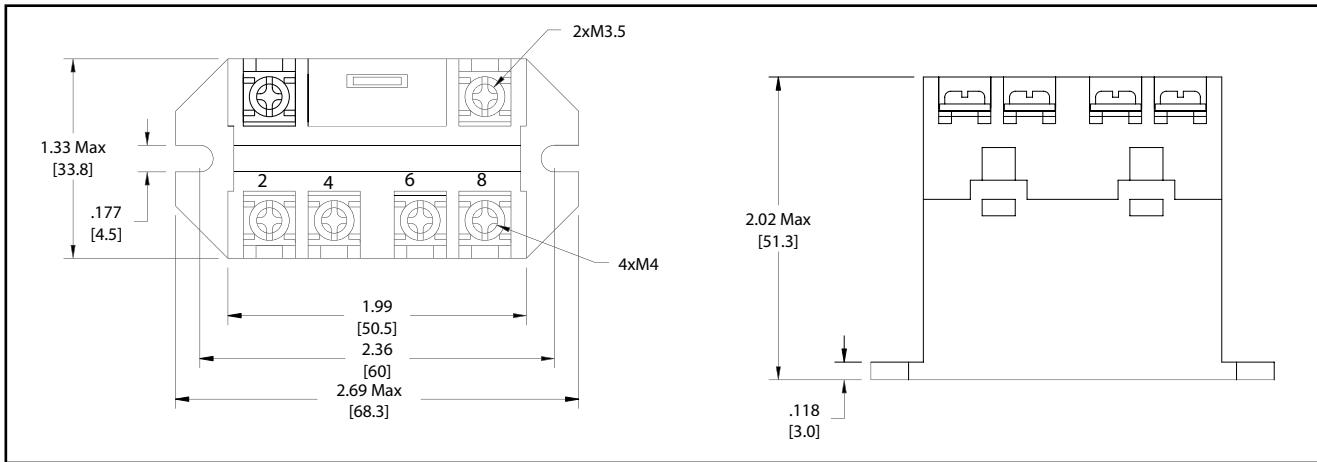
## RELAY ORDERING DATA

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

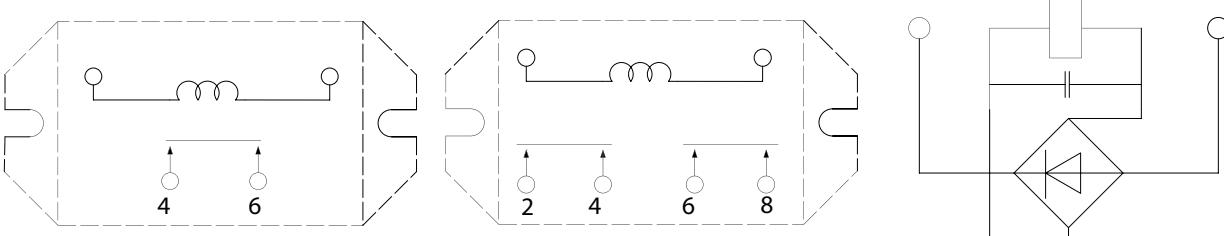


## Wiring Diagrams

1 Form x

2 Form x

With capacitor  
AC operation coil



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



**AMERICAN ZETTLER, INC.**

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

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM