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 certifcate R50164753



CONTACTS			
Arrangement	SPST (1 Form X) DPST (2 Form X)		
Ratings	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.		
Rated Load UL, CUR	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 [1] 2HP at 277 VAC, 75k cycles [2] 1HP at 125 VAC, 30k cycles [2]		
τϋν	27A at 240VAC, cos phi 0.8, 50k cycles [1][2] 25A at 240VAC, cos phi 0.4, 50k cycles [1][2]		
Material	[1] Silver cadmium oxide, [2] silver tin oxide		
Resistance	< 100 milliohms initially (24V, 1A voltage drop method)		

COIL

Power	
At Pickup Voltage (typical)	1.08W (DC) 1.7VA (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 Mechanical Electrical Ninimum operations 1 x 106 1 x 105 at rated load Operate Time (max) Release Time (max) Operate Time (max) Soms at nominal coil voltage (with no coil suppression) Dielectric Strength (at sea level for 1 min.) Insulation Resistance 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 130°C (2266°F) - Class B -40°C (-40°F) to 130°C (2266°F) - Class B -40°C (-40°F) to 155°C (311°F) - Class F Vibration Operating Non-Operating Non-Operating Non-Operating Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force. Weight (Approx) 120 grams					
Release Time (max) 30ms at nominal coil voltage (with no coil suppression) Dielectric Strength (at sea level for 1 min.) Insulation Resistance 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 130°C (221°F) - Class B -40°C (-40°F) to 155°C (311°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 10g, 11ms, 1/2 sine (no false operation) 100g, 11ms, 1/2 sine (no damage) Enclosure P.B.T. polyester Terminals Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.	Mechanical	1 x 10 ⁶			
(with no coil suppression) Dielectric Strength (at sea level for 1 min.) Insulation Resistance 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 B -40°C (-40°F) to 155°C (311°F) - Class F Vibration Operating Non-Operating 10g, 11ms, 1/2 sine (no false operation) 100g, 11ms, 1/2 sine (no damage) Enclosure P.B.T. polyester Terminals Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.	Operate Time (max)	30ms at nominal coil voltage			
(at sea level for 1 min.) Insulation Resistance 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 B -40°C (-40°F) to 155°C (311°F) - Class B -40°C (-40°F) to 155°C (311°F) - Class F Vibration Onerating Non-Operating Non-Operating Non-Operating Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.	Release Time (max)	S S			
Shock Operating Non-Operating Non-Oper	_				
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Terminals Tinned copper alloy, Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.	Operating				
Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.	Enclosure	P.B.T. polyester			
Weight (Approx) 120 grams	Terminals	Note: Allow suitable slack on leads when wiring, and do			
	Weight (Approx)	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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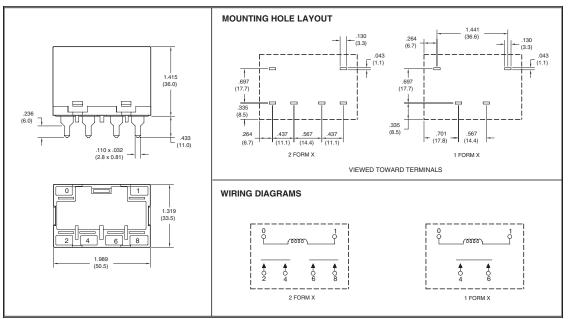
RELAY ORDERING DATA

COIL SPECIFICATIONS – DC COIL				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ± 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

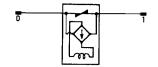
COIL SPECIFICATIONS – AC COIL				ORDER NUMBER*		
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Coil Current mA ± 10%	1 Form X	2 Form X	
6	4.80	6.6	319	AZ2704-1A-6A	AZ2704-2A-6A	
12	9.60	13.2	160	AZ2704-1A-12A	AZ2704-2A-12A	
24	19.2	26.4	80	AZ2704-1A-24A	AZ2704-2A-24A	
48	38.4	52.8	40	AZ2704-1A-48A	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



AC operating coil



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