# AZ21501

### 50 AMP MINIATURE POWER RELAY

#### FEATURES

- 1 Form A, B and C contacts available
- AC and DC coils available
- Class F high temperature available
- Lower cost 30A contact available
- Epoxy sealed versions available
- UL, CUR file E44211
- TÜV Pending

#### CONTACTS

Arrangement	SPST (1 Form A, or B) SPDT (1 Form C)					
Ratings	Resistive load:					
	Max. switched power: 1200W or 7200VA					
	Max. switched current: 50A (Form A) Max. switched voltage: 300VAC, 110VDC					
UL, CUR	NO: 50A at 240VAC, Resistive [2] 40A at 240VAC, Resistive 30A at 277VAC, General Purpose 25A at 277VAC, Resistive, 100k cycles 20A at 240VAC, Resistive, 250k cycles 2HP at 250VAC 5A at 280VAC. Ballast					
	NC: 35Aat240VAC,Resistive[2] 30A at 240VAC / 30VDC, Resistive 20A at 277VAC, General Purpose 1.5 HP at 250VAC					
	5A at 280VAC, Ballast					
ΤÜV	NO: 40A at 240VAC, 14VDC 30A at 277VAC					
	NC: 30A at 240VAC,14VDC 30A at 277VAC					
Material	Silver cadmium oxide [1], silver tin oxide [2]					
Resistance	< 50 milliohms initially (24V, 1A voltage drop method)					

#### COIL

Power					
At Pickup Voltage	DC: 506mW (30/40A), 844mW (50A)				
(typical)	AC: 1.4VA				
Max. Continuous	DC: 1.7W at 20°C				
Dissipation	AC: 2.7VA at 20°C				
Max. Temperature	Max. 130°C (266°F) Class B Max. 155°C (311°F) Class F				



#### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 <sup>7</sup> 1 x 10 <sup>5</sup> at 30A 120VAC Res.			
Operate Time	15 msec max. at nominal coil voltage			
Release Time	10 msec max. at nominal coil voltage (without suppression)			
Dielectric Strength (at sea level for 1 min.)	1500Vrms contact to contact 2500Vrms contact to coil 4000Vrms contact to coil-Contact Factory			
Insulation Resistance	1000 megohms min. at 20°C, 500VDC 50% RH			
Dropout	DC: > 10% of nominal coil voltage AC: > 30% of nominal coil voltage			
Ambient Temperature Operating Storage	-55°C (-67°F) to 100°C (212°F) Class B -55°C (-67°F) to 130°C (266°F) Class B -55°C (-67°F) to 125°C (257°F) Class F -55°C (-67°F) to 155°C (311°F) Class F			
Vibration	0.06" DA at 10–55Hz			
Shock	20g			
Enclosure	P.B.T. polyester			
Terminals	Tinned copper alloy, P.C.,			
Max. Solder Temp.	270°C (518°F)			
Max. Solder Time	5 seconds			
Max. Solvent Temp.	80°C (176°F)			
Max. Immersion Time	30 seconds			
Weight	30 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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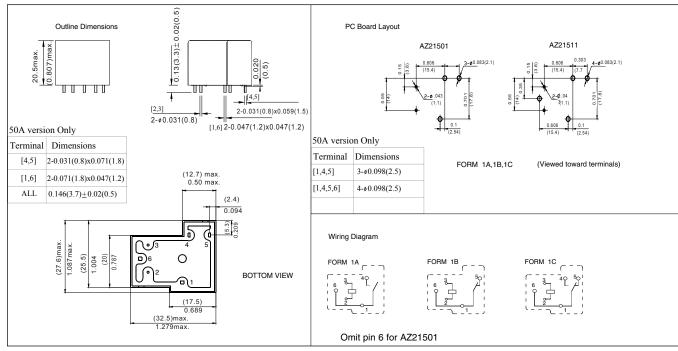
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#### **RELAY ORDERING DATA**

	COIL SPECIFICATIONS – DC Coil						
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance ±10% (30/40A) (50A)		ORDER NUMBER*	
3	2.25	3.9	300	10	6	AZ21501–1A–3D	
5	3.75	6.5	179	28	16.7	AZ21501–1A–5D	
6	4.50	7.8	150	40	24	AZ21501-1A-6D	
9	6.75	11.7	100	90	54	AZ21501-1A-9D	
12	9.00	15.6	75	160	96	AZ21501-1A-12D	
15	10.25	19.5	60	250	150	AZ21501-1A-15D	
18	13.5	23.4	50	360	216	AZ21501-1A-18D	
24	18.0	31.2	38	640	384	AZ21501-1A-24D	
48	36.0	62.4	19	2,560	1536	AZ21501-1A-48D	
110	82.50	143	8	13,445	8067	AZ21501-1A-110D	
	COIL SPECIFICATIO	NS – AC Coil 50/60 H	z				
Nominal Coil VAC	Must Operate VAC	Max. Continuous VAC	Nominal Coil Power VA	Coil Resistance ±10% (30/40A only)		ORDER NUMBER*	
12	9	15.6	2.0	27		AZ21501–1A–12A	
24	18	31.2	2.0	120		AZ21501-1A-24A	
11110	82.5	143	2.0	2,360		AZ21501-1A-110A	
120	90	156	2.0	3,040		AZ21501-1A-120A	
220	165	286	2.0	13,490		AZ21501-1A-220A	
240	180	312	2.0	15,740		AZ21501-1A-240A	
277	207.75	360.1	2.0	20,300		AZ21501–1A–277A	

\*Substitute "-1B" or "-1C" in place of "-1A" for 1 Form B or 1 Form C respectively. For silver tin oxide contacts substitute "-1AE", or "1BE" or "-1CE" in place of "-1A" or "1B", or "1B", or "1C". For 30A version - add "H" after "-1A","-1AE","-1B","-1C","-1CE" or for 50A version - add "T" after "-1AE", or "-1CE." To indicate class F version - add suffix "F". Substitute "DE" or "AE" in place of "D" or "A" for epoxy sealed version. Use AZ21511 for Pin 6 style.



MECHANICAL DATA

Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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