

AZ2501L

60 AMP LATCHING POWER RELAY

FEATURES

- 60 Amp switching
- Heavy loads to 15000 VA
- Inrush current 500A/2ms max.
- 4 kV dielectric
- Manual switch standard
- UL, CUR file E44211



CONTACTS

Arrangement	SPST (1 Form A) (1 Form B)
Ratings	Resistive load: Max. switched power: 15000 VA Max. switched current: 60 A Max. switched voltage: 440 VAC Max. continuous current: 20 A
UL/CUR	20 A at 277 VAC, Resistive, 85°C, 100k cycles 20 A at 30 VDC, Resistive, 85°C, 100k cycles 60 A at 250 VAC, General use, 85°C 30k cycles 5000 W at 250 VAC, Tungsten, 30k cycles 20 A at 277 VAC, Standard Ballast, 30k cycles 16 A at 277 VAC, Electronic Ballast, 30k cycles
Material	Silver tin oxide
Resistance	< 50 milliohms initially (24 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	.92 W single coil 1.8 W dual coil
Temperature	

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.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁶ 3 x 10 ⁴ at rated load
Set and Reset	
Pulse Duration	50 ms minimum
Set Time (typical)	15 ms at nominal coil voltage
Reset Time (typical)	15 ms at nominal coil voltage
Dielectric Strength (at sea level for 1 min.)	4000 Vrms coil to contact 1500 Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC, 50% RH
Creepage Distance	8 mm
Ambient Temperature Operating	At nominal coil voltage -40°C (-40°F) to 85°C (158°F)
Vibration	0.059" DA at 10–55 Hz
Shock Operating Non-Operating	10 g 100 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Weight	32 grams

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RELAY ORDERING DATA

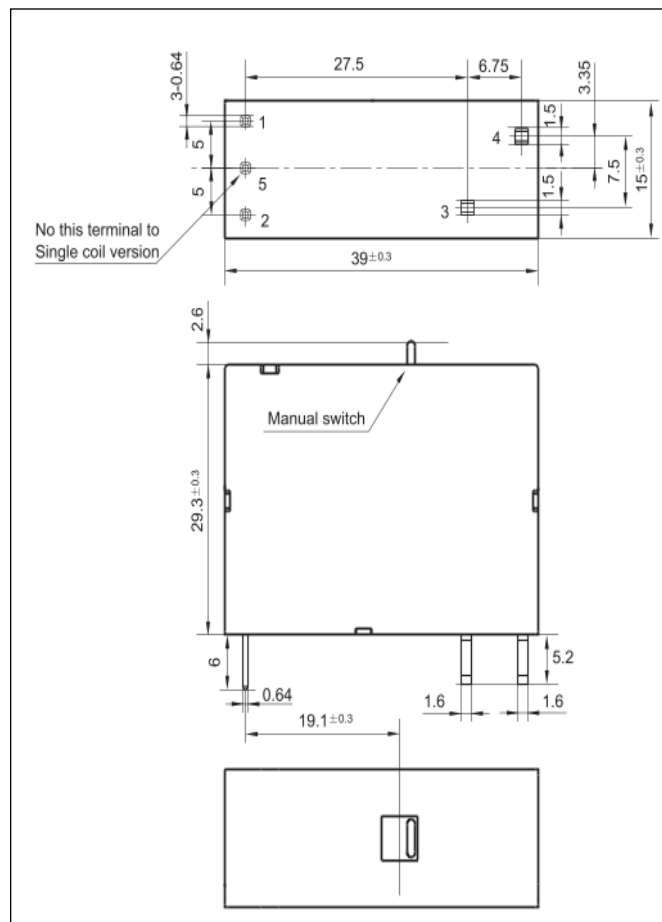
COIL SPECIFICATIONS -Standard Single Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC [1]	Coil Resistance $\pm 10\%$	1 Form A	1 Form B
6	4.8	7.8	22	AZ2501LP1-1A-6D	AZ2501LP1--1B-6D
12	9.6	15.6	100	AZ2501LP1-1A-12D	AZ2501LP1--1B-12D
24	19.2	31.2	360	AZ2501LP1-1A-24D	AZ2501LP1--1B-24D
48	38.4	62.4	1600	AZ2501LP1-1A-48D	AZ2501LP1--1B-48D

COIL SPECIFICATIONS -Standard Dual Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC [1]	Coil Resistance $\pm 10\%$	1 Form A	1 Form B
6	4.8	7.8	11 + 11	AZ2501LP2-1A-6D	AZ2501LP2--1B-6D
12	9.6	15.6	50 + 50	AZ2501LP2-1A-12D	AZ2501LP2--1B-12D
24	19.2	31.2	180 + 180	AZ2501LP2-1A-24D	AZ2501LP2--1B-24D
48	38.4	62.4	800 + 800	AZ2501LP2-1A-48D	AZ2501LP2--1B-48D

* For reverse polarity coil add suffix "R". **NOTE:** [1] Max. continuous voltage should not be applied for more than 30 seconds

(Bottom View)

MECHANICAL DATA



If no tolerance is shown: outline dimension ≤ 1 mm, tolerance is ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance is ± 0.3 mm; outline dimension > 5 mm, tolerance is ± 0.4 mm.

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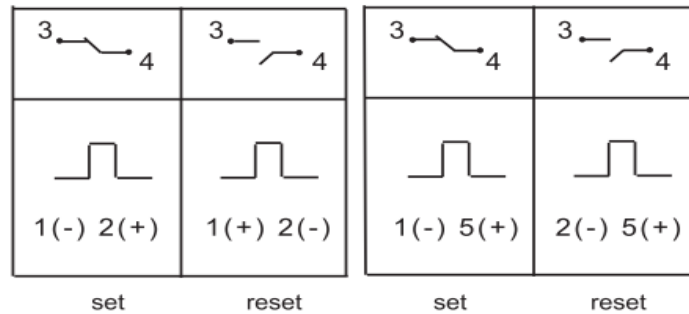
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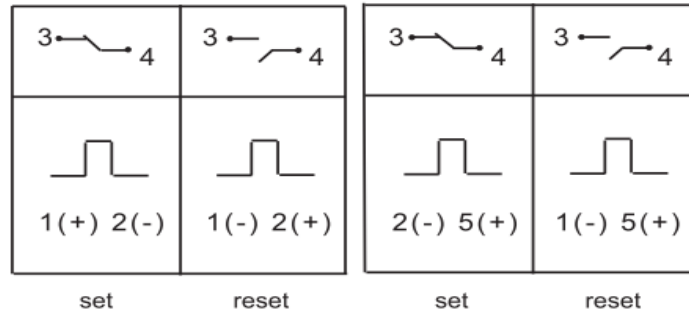
Positive polarity

Single coil latching, 1 Form A Double coils latching, 1 Form A



Negative polarity

Single coil latching, 1 Form A Double coils latching, 1 Form A



NOTE:

Regarding Standard Polarity type:

1. "Single Coil Latching Version"

- (1) After energizing 1 (-) and 2 (+), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 2 (-) and 1 (+), 50ms pulse, terminal 3 and 4 is disconnected.

2. "Double Coil Latching Version"

- (1) After energizing 5 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 5 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is disconnected.

Regarding Reverse Polarity type:

1. "Single Coil Latching Version"

- (1) After energizing 1 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 2 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is disconnected.

2. "Double Coil Latching Version"

- (1) After energizing 5 (+) and 2 (-), 50ms pulse, terminal 3 and 4 is connected.
- (2) After energizing 5 (+) and 1 (-), 50ms pulse, terminal 3 and 4 is disconnected.

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