

# AZ2511

## 120 AMP MINIATURE HIGHPOWER LATCHING RELAY

### FEATURES

- Latching relay
- 120 Amp switching capability at Res. Load
- Heavy load to 33.24kVA
- 4kV dielectric strength(contact to coil)
- Single and Dual coils

### CONTACTS

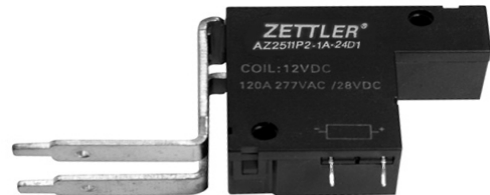
Arrangement	SPST N.O. (1 Form A) SPST NO DM (1 Form U) SPST N.C. (1 Form B) SPST NC DB (1 Form V)
Ratings	Resistive load: Max. switched power: 3360 W or 33240 VA Max. switched current: 120 A Max. switched voltage: 440 VAC  120 A at 277VAC/28VDC Resistive
Material	Silver Tin Oxide
Resistance	1A,1B: 1 milliohm max.(at 1A 24VDC) 1U,1V: 0.7 milliohm max. (at 1A 24VDC)

### ELECTRICAL ENDURANCE

UC Class	Voltage (Uc)	Current (Ic)	Power Factor	Close Open time (s)	Electrical endurance (OPS)	
415 (UC1)	220VAC	80A	COSØ=1	10:20	3000	Total:6000
		10A	COSØ=0.4		3000	
416 (UC2)		80A	COSØ=1		5000	Total:10000
			COSØ=0.5		5000	
417 (UC3)		100A	COSØ=1		5000	Total:10000
			COSØ=0.5		5000	
NIL: (UC3)		120A	COSØ=1		5000	Total:10000
			COSØ=0.5		5000	
Remark:Electrical endurance meet IEC62055-31 test requirement, do the inductive load test after the resistive load test. Only some typical ratings of UC are listed above, if more special ratings required, please contact us.						

### COIL

Power At Pickup Voltage (typical)	1.77 W single coil 3.52 W dual coil
Temperature	105°C (221°F)



### GENERAL DATA

Life Expectancy Mechanical	Minimum operations 1 x 10 <sup>5</sup>
Operate Time (max.)	20 ms at nominal coil voltage
Release Time (max.)	20 ms at nominal coil voltage
Dielectric Strength (at sea level for 1 min.)	2000 Vrms contact to contact 4000 Vrms contact to coil
Insulation Resistance	1000Megaohms at 500 VDC
Creepage Distance	8mm
Ambient Temperature Operating	At nominal coil voltage -40°C (-40°F) to 85°C (185°F)
Vibration	1.5mm DA at 10–55 Hz
Shock Mechanical Functional Destructive	10g 100 g
Enclosure	P.B.T. polyester
Terminals	P.C. (Coil), heavy Tabs(Power)
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	Approx. 85 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 – Single Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC[1]	Coil Resistance $\pm 10\%$	SPST-NO	SPST -NC
6	4.8	7.8	13	AZ2511P1-1A-6D1	AZ2511P1-1B-6D1
12	9.6	15.6	50	AZ2511P1-1A-12D1	AZ2511P1-1B-12D1
24	19.2	31.2	210	AZ2511P1-1A-24D1	AZ2511P1-1B-24D1
48	38.4	62.4	860	AZ2511P1-1A-48D1	AZ2511P1-1B-48D1

COIL SPECIFICATIONS – Dual Coil				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC[1]	Coil Resistance $\pm 10\%$	SPST-NO	SPDT
6	4.8	7.8	6.5+6.5	AZ2511P2-1A-6D1	AZ2511P2-1B-6D1
12	9.6	15.6	25+25	AZ2511P2-1A-12D1	AZ2511P2-1B-12D1
24	19.2	31.2	105+105	AZ2511P2-1A-24D1	AZ2511P2-1B-24D1
48	38.4	62.4	430+430	AZ2511P2-1A-48D1	AZ2511P2-1B-48D1

\*Use U or V in place of A for Form U or Form V. Replace 1 with '2', '3', '4', '5', '6', or '7' for contact terminal type. Add 'S' for 120 micro-ohm shunt.  
Add 'R' for negative polarity. Add '415' for UC1, '416' for UC2, or '417' for UC3 Class Electrical Endurance.

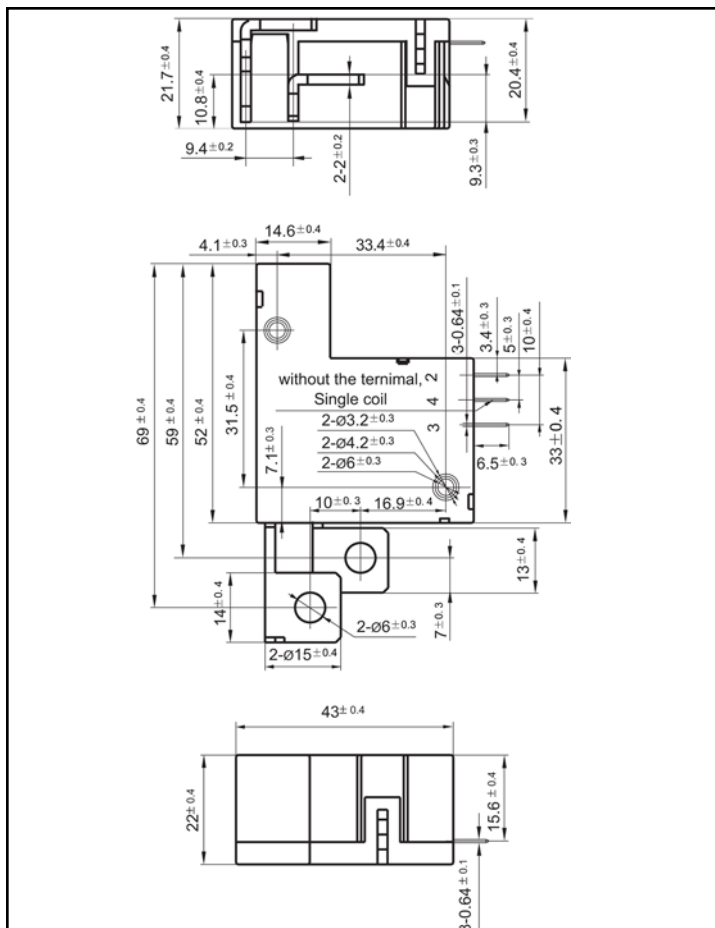
[1] Max. continuous voltage should not be applied for more than 30 seconds.

UC1: meets the UC1 requirements on IEC62055-31: Carrying test 2400A peak current for 10ms

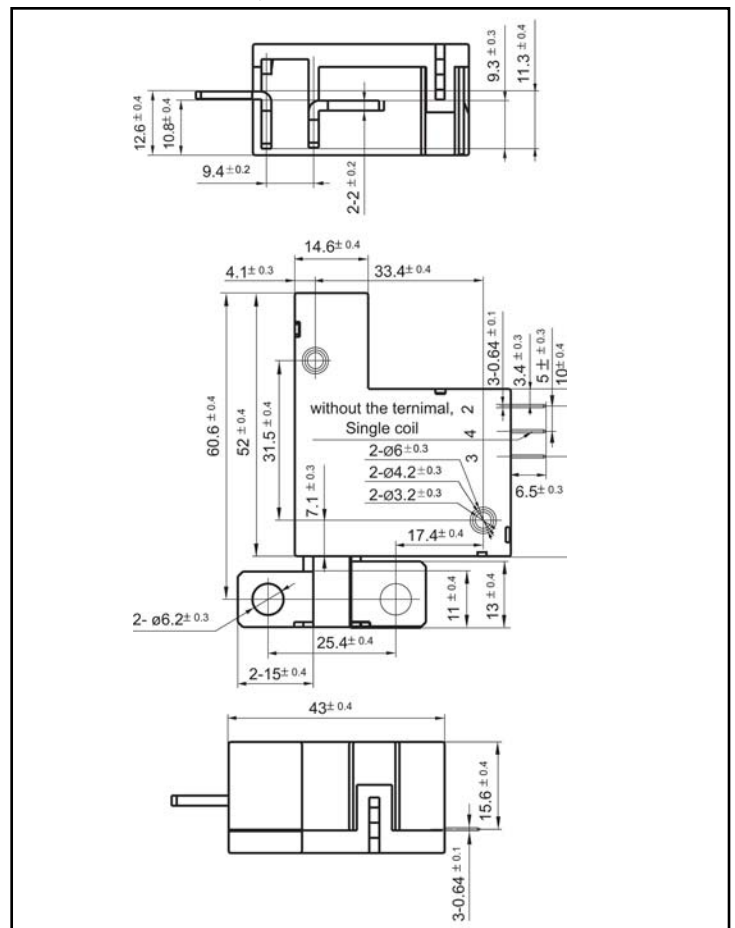
UC2: meets the UC2 requirements on IEC62055-31: Making test:3.5kA/10ms; Carrying test 4.5kA/10ms

UC3: meets the UC3 requirements on IEC62055-31: Making test:3kA/10ms; Carrying test 6kA/10ms

Type 1 Contact Terminal



Type 2 Contact Terminal



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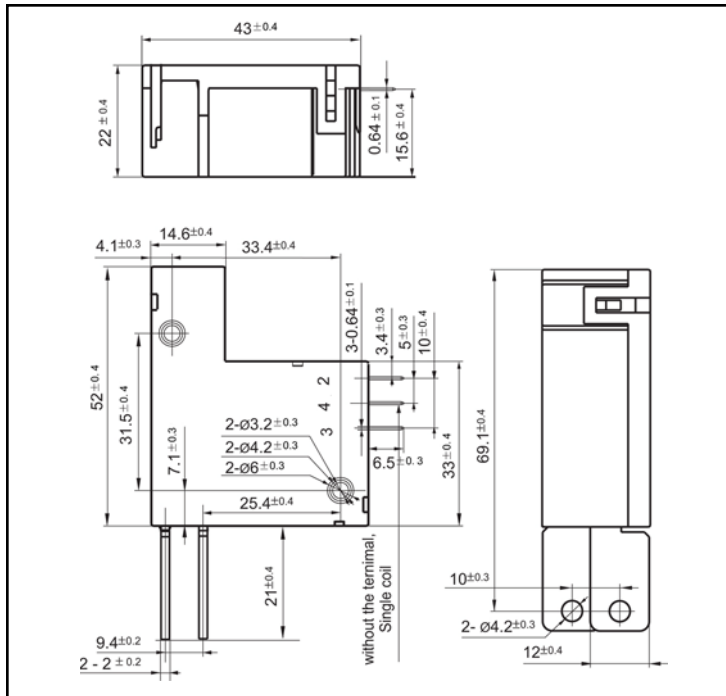
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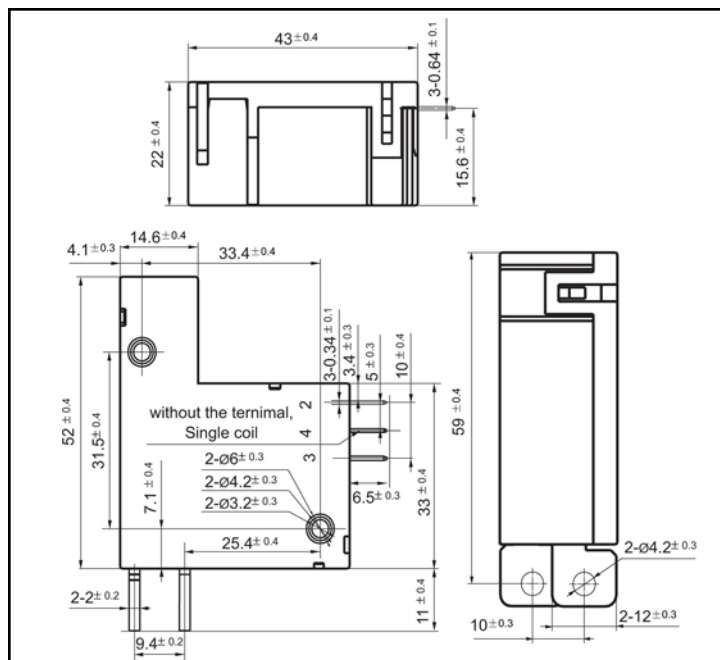
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## MECHANICAL DATA

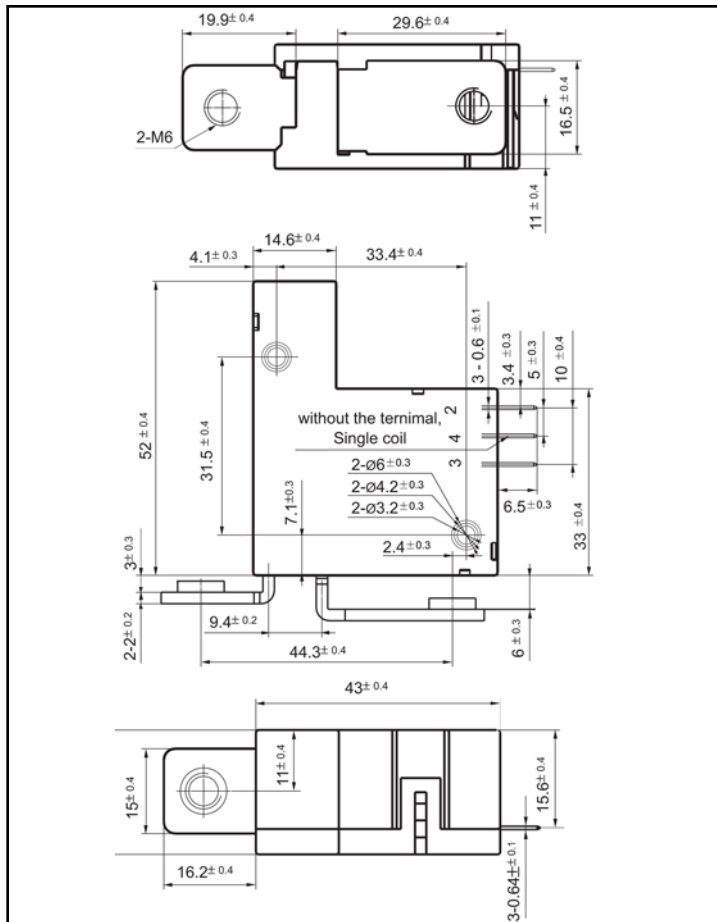
Type 3 Contact Terminal



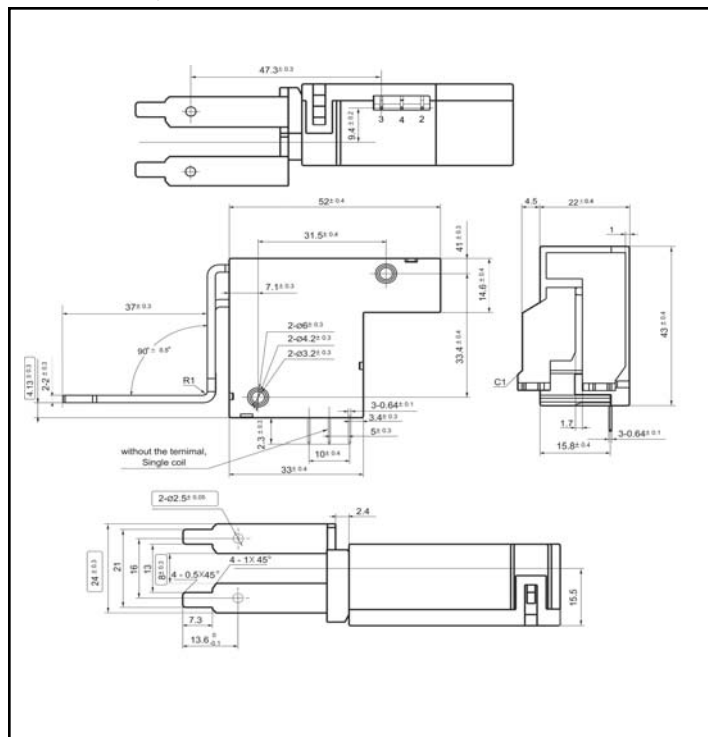
Type 5 Contact Terminal



Type 4 Contact Terminal



Type 6 Contact Terminal



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