

## Features

- 3sets of 120A switching capability
- Auxiliary switch for detection can be provided
- Single coil and double coil are all available
- Can customize the External attachments like manganese-copper shunt,mutual inductor according to the customers' requirements.
- Breakdown voltage: 4KV (between contact and coil)
- Meet the standard of IEC62055-31:2005 and UC3
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (110.0×52.0×24.0) mm
- Main application: smart meter、compound switch



## CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		3A、3B
	Contact resistance(initial)		1mΩ(6VDC 1A)
	Contact material		AgSnO <sub>2</sub>
Rated value	Rated load(Resistance load)		100A 250VAC
	Max.switching voltage		277VAC
	Max.switching current		120A
	Max.switching capacity		25000VA
	Min.allowing load		/
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	2000VAC,1min
		Between contact sets	4000VAC,1min
		Between coil&contacts	4000VAC,1min
	Operate time		≤60ms
Release time		≤60ms	
Mechanical performance	Shock resistance	Functional	98m/s <sup>2</sup> (10g)
		Destructive	980m/s <sup>2</sup> (100g)
Vibration resistance		10Hz~55Hz 1.5mm DA	
Endurance	Mechanical		1×10 <sup>5</sup> ops
	Electrical		100A 250VAC 6×10 <sup>3</sup> ops (ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85℃
	Humidity		5% to 85%
Termination			Plug-in needle+quickly contact type
Unit weight			Approx. 380g(Without attachment)
Construction			Flux proofed

## ■ COIL DATA(23℃)

### ■ Single coil latching

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 9V	≤6.3	≤6.3	305mA	29.5Ω	2.75W	150%Nominal Voltage
DC 12V	≤8.4	≤8.4	229mA	52.4Ω		
DC 24V	≤16.8	≤16.8	114.6mA	209.5Ω		
DC 48V	≤33.6	≤33.6	57.3mA	837.8Ω		

### ■ Double coils latching

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 9V	≤6.3	≤6.3	612/612mA	14.7/14.7Ω	5.5W	150%Nominal Voltage
DC 12V	≤8.4	≤8.4	458/458mA	26.2/26.2Ω		
DC 24V	≤16.8	≤16.8	229/229mA	104.7/104.7Ω		
DC 48V	≤33.6	≤33.6	115/115mA	418.9/418.9Ω		

## ■ ORDERING INFORMATION

**W29LA -3B T -L1 -XXX DC6V**

① Type

② Contact arrangement: 3A=3sets of open contacts  
3B=3 sets of close contacts

③ Contact material: T=AgSnO<sub>2</sub>

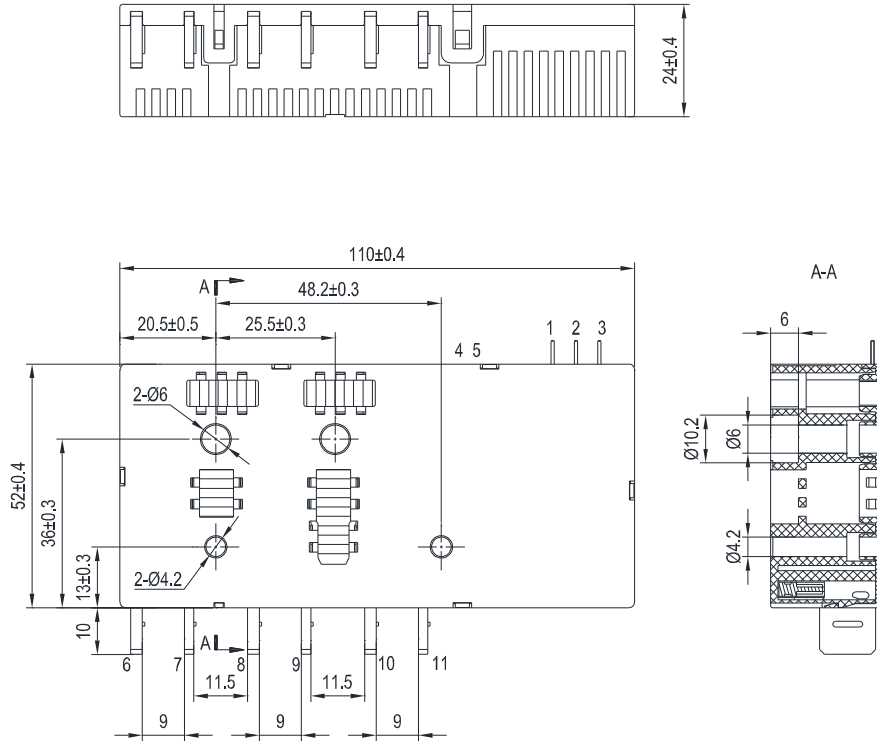
④ Coil type: L1= coil latching 、 L2= coils latching

⑤ Customer special code: numbers or letters denote customer's requirements

⑥ Coil specification: DC9/12/24/48V

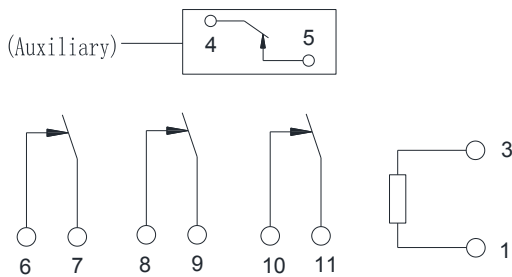
**OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT(Unit: mm)**

Outline Dimensions and PCB Layout



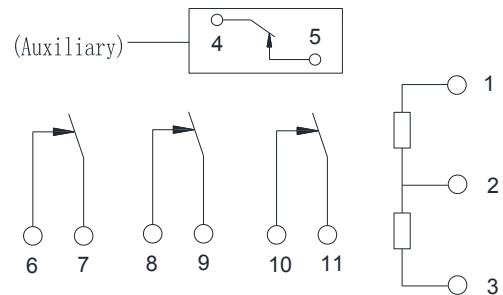
Wiring Diagram

Single coil latching



1 (+) 3 (-) 4-5, 6-7, 8-9, 10-11 Reset  
 3 (+) 1 (-) 4-5, 6-7, 8-9, 10-11 Set  
 4-5 are the Auxiliary contact for detection(optional)

Double coils latching



1 (+) 2 (-) 4-5, 6-7, 8-9, 10-11 Reset  
 3 (+) 2 (-) 4-5, 6-7, 8-9, 10-11 Set  
 4-5 are the Auxiliary contact for detection(optional)

Notes: (1) In case of no tolerance shown in outline dimension:outline dimension $\leq$ 1mm,tolerance should be $\pm$ 0.2mm;outline dimension  $>$ 1mm and  $<$ 5mm,tolerance should be  $\pm$ 0.3mm;outline dimension $\geq$ 5mm,tolerance should be  $\pm$ 0.5mm.  
 (2) The tolerance without indicating for PCB layout is always  $\pm$ 0.1mm.

## ■ NOTICE

- ① With the consideration of shock risen from transit and relay mounting,relay's initial state might be changed,please impose pulse voltage to reset the relay before using (rated coil voltage,impulse width $\geq$ 3 times operation time).
- ② The specification is for reference only,specifications subject to change without notice.