

## Features

- 120A switching capability
- Single coil and double coil are all available
- Contact on and off can be controlled by manual control switch
- We can provide the contact gap is 2.1mm, it meets the standard of VDE0126
- Breakdown voltage: 4KV (between contact and coil)
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (58.0×40.0×20.8) mm
- Main application: Photovoltaic new energy



## CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A、1B
	Contact resistance(initial)		1mΩ(6VDC 1A)
	Contact material		AgSnO <sub>2</sub>
Rated value	Rated load(Resistance load)		100A 277VAC 100A 415VAC
	Max.switching voltage		440VAC
	Max.switching current		120A
	Max.switching capacity		41500VA
	Min.allowing load		/
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	2000VAC,1min
		Between coil&contacts	4000VAC,1min
	Operate time		≤25ms
	Release time		≤25ms
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>6</sup> ops
	Electrical	100A 277VAC	1.5×10 <sup>4</sup> ops (ON/OFF=1s/9s)
100A 415VAC		1×10 <sup>4</sup> ops (ON/OFF=1s/9s)	
Operate condition	Ambient temperature		-40℃~95℃
	Humidity		5% to 95%
Termination			INT'L PCB+Quickly contact terminal
Unit weight			Approx.95g(Without attachment)
Construction			Flux proofed

## COIL DATA(23°C)

### Singel coil latching

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	375mA	16Ω	2.25W	150%Nominal Voltage
DC 9V	≤6.75	≤6.75	250mA	36Ω		
DC 12V	≤9.00	≤9.00	187.5mA	64Ω		
DC 24V	≤18.00	≤18.00	93.8mA	256Ω		

### Double coils latching`

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	750/750mA	8/8Ω	4.5W	150%Nominal Voltage
DC 9V	≤6.75	≤6.75	500/500mA	18/18Ω		
DC 12V	≤9.00	≤9.00	375/375mA	32/32Ω		
DC 24V	≤18.00	≤18.00	188/188mA	128/128Ω		

## ORDERING INFORMATION

**W27LA -1A 1 T -L1 R -XXX DC6V**

① Type

② Contact arrangement: 1A=1 open contacts,  
1B=1 close contacts

③ PCB mounting: 1=A type、2=B type

④ Contact material: T=AgSnO<sub>2</sub>

⑤ Coil type: L1= coil latching L2= coils latching

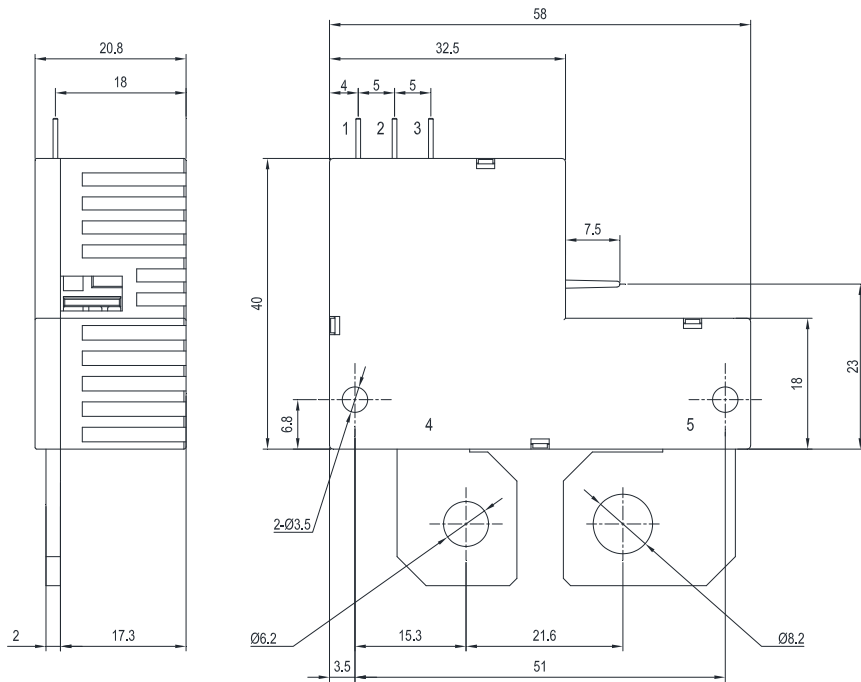
⑥ Operation polarity: Nil=standard polarity R=reversed polarity

⑦ Customer special code: numbers or letters denote customer's requirements

⑧ Coil specification: DC6/9/12/24V

**A type**

Outline Dimensions and PCB Layout



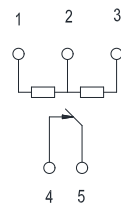
Wiring Diagram

Single coil latching



1(+)/3(-) 4-5 Reset  
3(+)/1(-) 4-5 Set

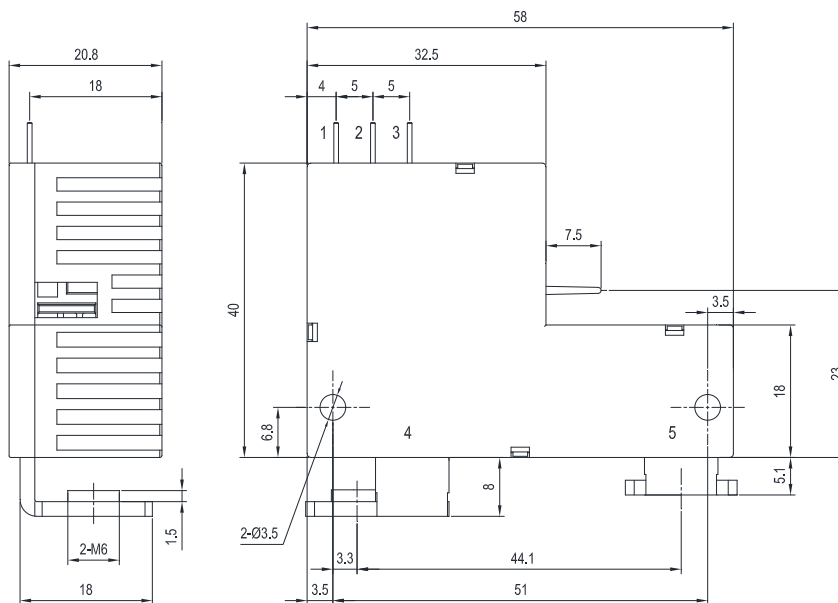
Double coils latching



1(+)/2(-) 4-5 Reset  
3(+)/2(-) 4-5 Set

**B type**

Outline Dimensions and PCB Layout

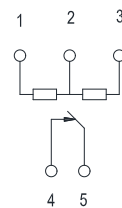


Single coil latching



1(+)/3(-) 4-5 Reset  
3(+)/1(-) 4-5 Set

Double coils latching



1(+)/2(-) 4-5 Reset  
3(+)/2(-) 4-5 Set

Notes : (1) In case of no tolerance shown in outline dimension:outline dimension≤1mm,tolerance should be±0.2mm;outline dimension >1mm and <5mm,tolerance should be ±0.3mm;outline dimension≥5mm,tolerance should be ±0.5mm.

(2) The tolerance without indicating for PCB layout is always ±0.1mm.

## ■ SAFETY APPROVAL RATINGS

Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	1A、1B	AgSnO <sub>2</sub>	100A	415VAC	95°C
				100A	277VAC	95°C
TUV	R 50412805	1A、1B	AgSnO <sub>2</sub>	100A	415VAC	95°C
				100A	277VAC	95°C

## ■ 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  $\geq 5$  times operation time).
- ② The specification is for reference only, specifications subject to change without notice.