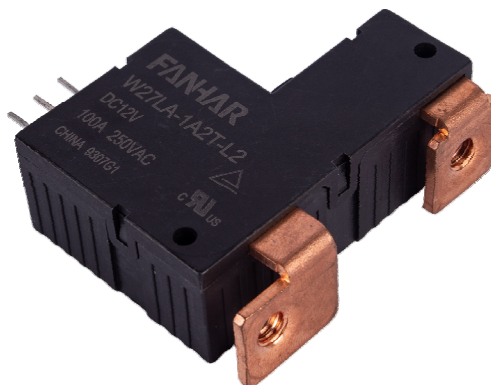


## Features

- 120A switching capability
- It meets the DC load capacity of DC60V and 35A
- Single coil and double coils are optional, status of the auxiliary switch is also optional
- Contact on and off can be controlled by manual control switch
- Provide the contact gap of the product is  $\geq 3\text{mm}$ , it meets the Europe standard of VDE0126 photovoltaic standards
- Breakdown voltage (between contact and coil): 4KV
- Environment-friendly product (RoHS compliant)
- Outline Dimensions: (58.0×40.0×20.8)mm
- Main application: New energy and PV industry (Photovoltaic new energy), Industry control



## CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A, 1B
	Contact resistance(initial)		$\leq 1\text{m}\Omega$ (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
Electrical performance	Insulation resistance(initial)		1000M $\Omega$ (500VDC)
	Dielectric strength (initial)	Between open contacts	2500VAC, 1min
		Between coil&contacts	4000VAC, 1min
	Closing time		$\leq 25\text{ms}$
	Opening time		$\leq 25\text{ms}$
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(Room temperature)		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)

### Single coil latching

Nominal Voltage	Closing voltage VDC	Opening voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	0.375 A	16Ω	2.25W	DC 9V
DC 9V	≤6.75	≤6.75	0.250 A	36 Ω		DC 13.5V
DC 12V	≤9.00	≤9.00	0.188 A	64Ω		DC 18V
DC 24V	≤18.00	≤18.00	0.094 A	256Ω		DC 36V

### Double coils latching

Nominal Voltage	Closing voltage VDC	Opening voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≤4.50	0.75/0.75A	8/8Ω	4.5W	DC 9V
DC 9V	≤6.75	≤6.75	0.5/0.5A	18/18Ω		DC 13.5V
DC 12V	≤9.00	≤9.00	0.375/0.375A	32/32Ω		DC 18V
DC 24V	≤18.00	≤18.00	0.188/0.188A	128/128Ω		DC 36V

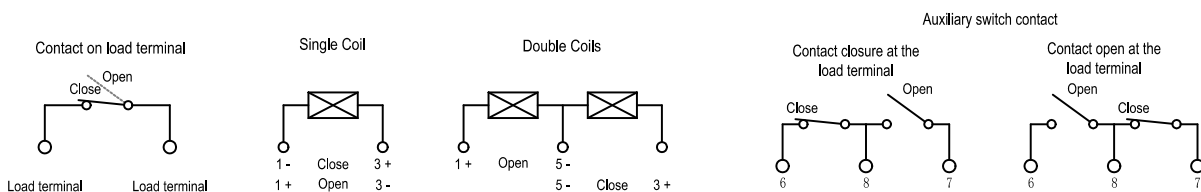
## ORDERING INFORMATION

**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=Type A、2=Type B
- ④ Contact material: T=AgSnO<sub>2</sub>
- ⑤ Coil type: L1=Single coil latching、L2=Double coils latching
- ⑥ 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

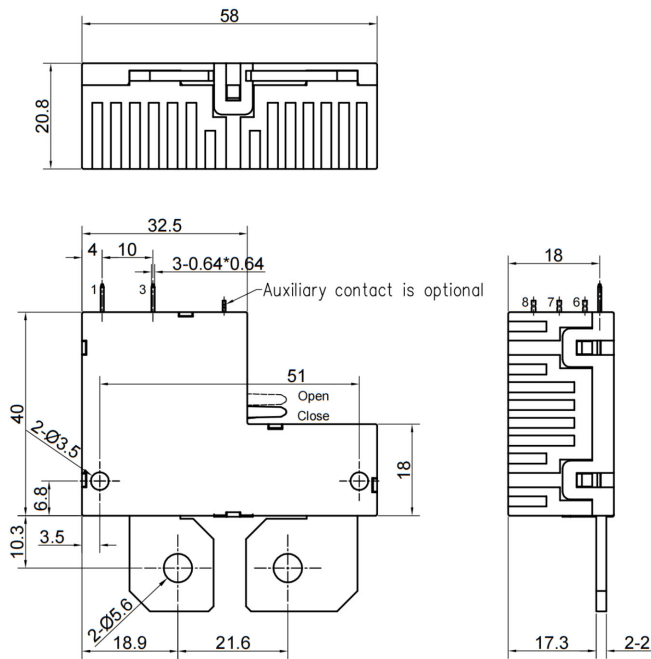
## WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

### Standard polarity wiring diagram

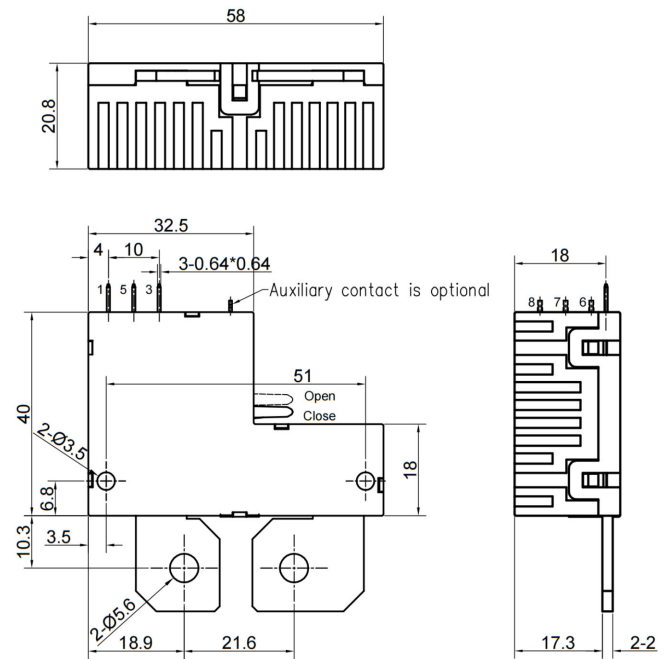


## WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

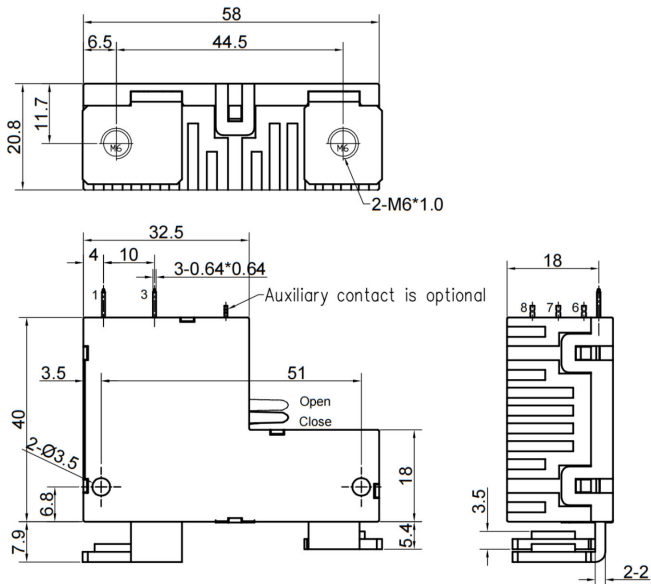
A Type Single Coil Latching  
(Auxiliary contact is optional)



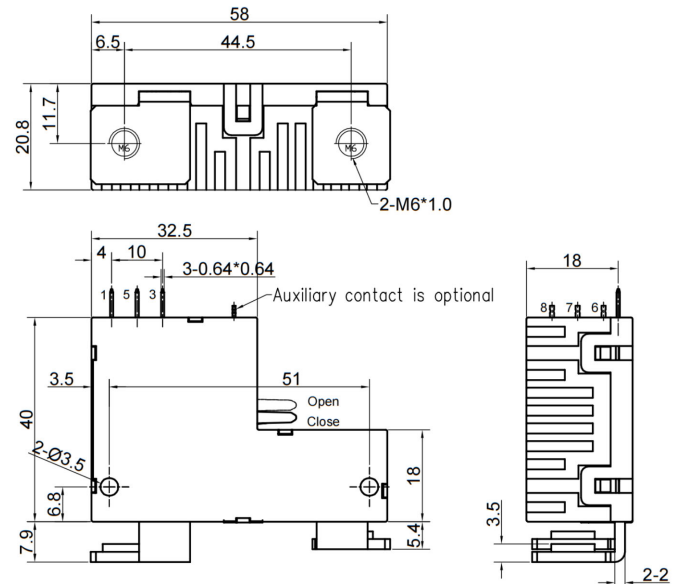
A Type Double Coils Latching  
(Auxiliary contact is optional)



B Type Single Coil Latching  
(Auxiliary contact is optional)



B Type Double Coils Latching  
(Auxiliary contact is optional)



Remark: (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.

Please contact us for more detailed outline installation dimensions.

## 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≥5 times operation time.
- ② In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;
- ③ In order to maintain the "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize the voltage to "set" coil and "reset" coil simultaneously.
- ④ The specification is for reference only.Specifications subject to change without notice.