WJ31G Series Magnetic latching relay

◆ Feature

- ◇ 120A switching capacity
- ◇ Low consumption,Pulse driven operation
- ◇ Strong resistance ability to shock and vibration,High reliability
- ◇ Dielectric strength 4kv(coil to contacts)
- ◇ Long service life
- ◇ Environmentally friendly products(Accord RoHS)
- ◇ Accord IEC62055-31 UC3 Clause
  （Connect:3000A ， Bear ：6000 A Short-circuit current ）
- ◇ Drawing ：52.5 mm×43.2mm×22.0mm

Contact Capacity

Type number	WJ31G	WJ31G
Nominal capacity(Resistive load)	100A 250VAC	120A 250VAC
Max.switching current	100A	120A
Max.switching voltage	250VAC	250VAC
Max.switching power	25,000VA	30,000VA

◆ General Spcification

Contact Material	Silver alloy	
Contact resistance	1mΩ Max.	
Operating time	20ms. Max.	
Releasing time	20ms. Max.	
Insulation Resistance	1,000MΩ Min. (DC500V)	
Dielectric Strength	Contact - contact ： AC2, 000V; 50/60Hz,1min	
	Contact - coil ：AC4, 000V; 50/60Hz,1min	
Creepage distance	8mm	
Resistance to vibration	10~55Hz, 1.5mm DA	
Resistance to shock	Durability	10G min
	Malfunction	100G min
Service Life	Mechanical life(1800 cycles/Hour)	100,000 cycles
	Electrical life(120 cycles/Hour)	10,000 cycles
Ambient temperature	-40℃~+70℃	
Weight	100g	

◆ Coil Data(at 20℃)

standard model

Nominal voltage (VDC)	Resistance ±10% (Ω)			Min.Set/Reset voltage (VDC)	Pulse duration (ms)	Power comsumption
	Single coil	Dual coil				
5	10.4	5.2	5.2	80% nominal voltage	100min	Single/Dual 2.4W/4.8W
6	15	7.5	7.5			
9	33.8	16.9	16.9			
12	60	30	30			
24	240	120	120			
48	960	480	480			

◆ Ordering information

WJ31G	100A	12	D	2	XX	

Special Parameter：Nil-Standard type,XX-Customized Requirement

Coil: 1-Single coil, 2-Dual coil.

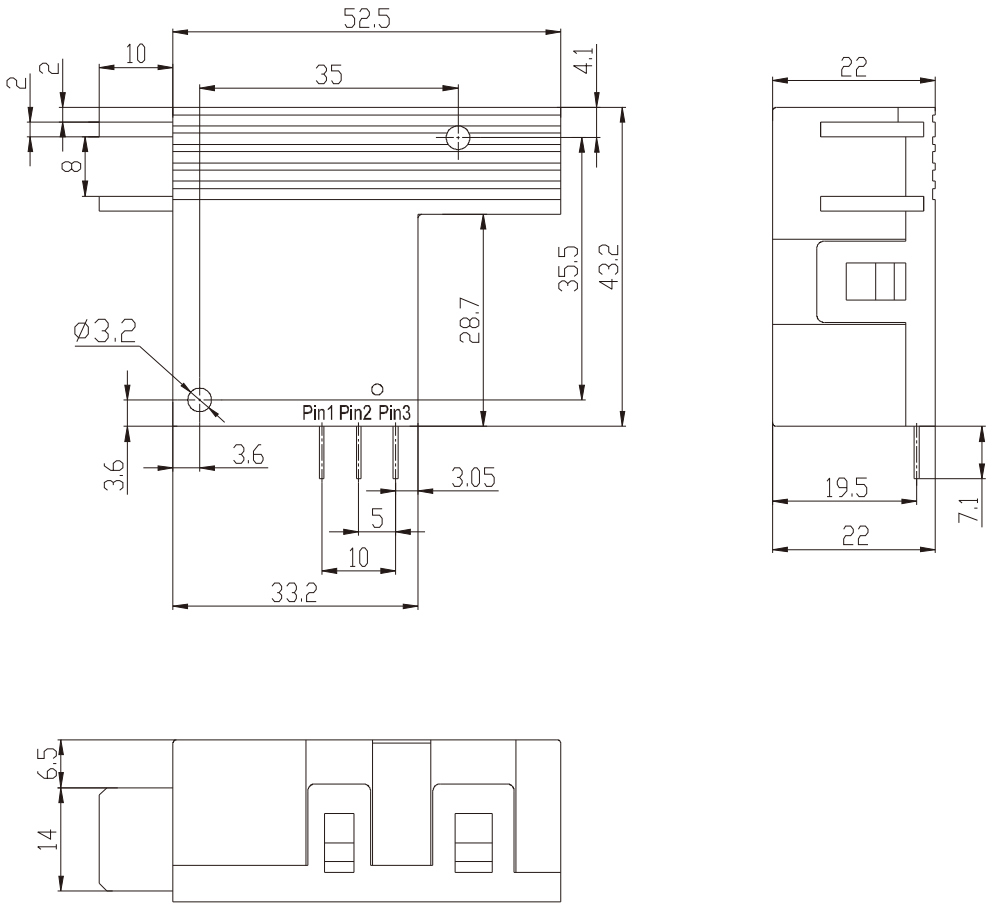
Coil type: D-standard type.

Rated coil voltage(VDC):06, 09, 12, 24, 48

Switching Capacity: 100A;120A

Model: WJ31G, Contact Form: 1 Pole

◆ Demension(Unit ：mm)

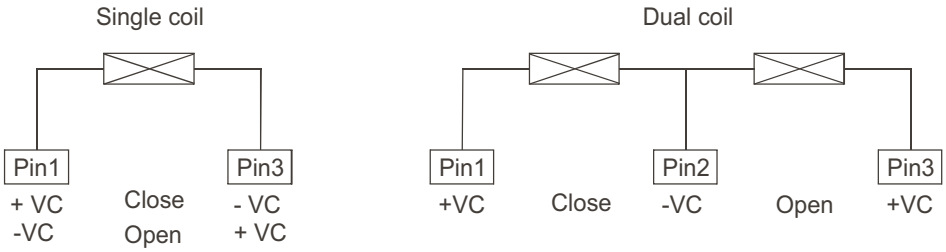


Remark：Unless otherwise specified，＜1mm：±0.2mm ；1-5 mm：±0.3mm ；＞5mm：±0.4mm 。

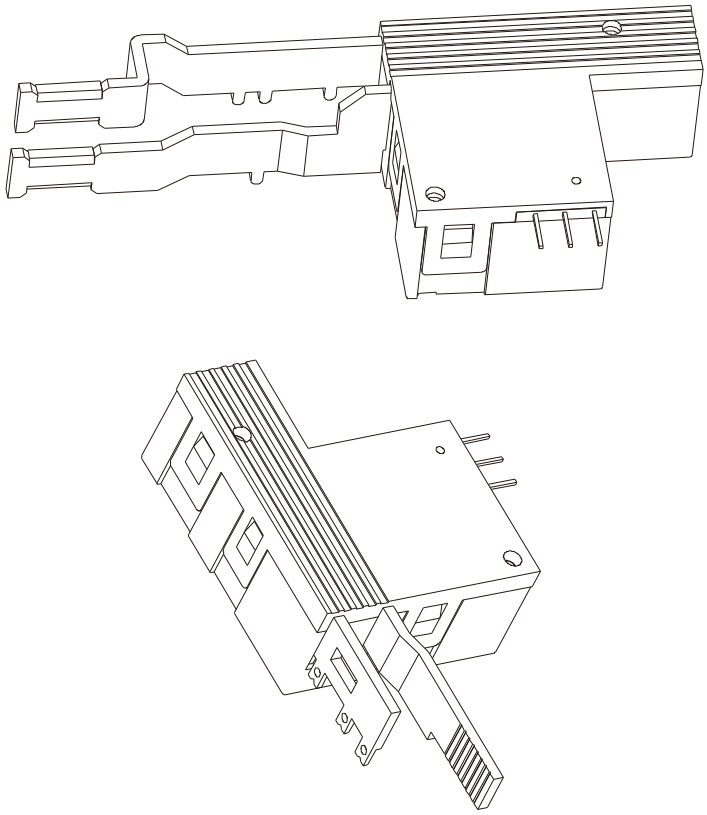
◆ Typical Application

◇ Energy meter used in smart grid ◇ remote control ◇ Combination switch ◇electric accessory

◆ Wiring Diagram



◆ Typical terminals



Note: The drawings above is typical terminals, it also can be designed with customer's special terminal requirements.Please contact us if other part needed.

Precautions :

1. The original position of latching relay is "closed" when shipping. It is possible that during transit or installation, the relay may change its state to be "open" position, it is recommended to set the relay in to state needed via apply voltage to the coil.
2. In order to let relay operate normally, the voltage which apply to the coil should reach to the rated voltage, the pulse width should be 50ms to 100ms; Do not energize both coil at the same time on Dual coil or energize the coil for longer than 1 minute.
3. Relay without copper wire, the terminal can not be soldered, bend, and rigid fasten both two terminals;
4. Keep away from corrosive gas and other condition which may damage the relay.

Disclaimer:

This datasheet is the customers' reference. All the specification are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application.Thus the user should in a right position to choose the suitable product for their own application.If there is any query, please contact Sanyou for the technical service.However it is the user's responsibility to determine which product should be used only.