



◆ Feature

- ◇ 40A switching capacity
- ◇ Low consumption,Pulse driven operation
- ◇ Strong resistance abilityto shockand vibration,High reliability
- ◇ Dielectric strength 4kv(coil to contacts)
- ◇ Long service life
- ◇ Environmentallyfriendlyproducts (Accord RoHS)

Contact Capacity

Type number	WJ31N
Nominal capacity (Resistive load)	40A 250VAC
Max.switching current	40A
Max.switching voltage	250VAC
Max.switching power	10,000VA

◆ General Spcification

Contact Material	Silver alloy	
Contact resistance	2mΩ Max.	
Operating time	10ms. Max.	
Releasing time	10ms. Max.	
Insulation Resistance	1,000MΩ Min. (DC500V)	
Dielectric Strength	Contact- contact: AC1, 500V; 50/60Hz1min	
	Contact- coil : AC4, 000V; 50/60Hz1min	
Creepage distance	8mm	
Resistanceto vibration	10~55Hz,1.5mm DA	
Resistanceto shock	Durability	10G min
	Malfunction	100G min
Service Life	Mechanical life(1800 cycles/ Hour)	100,000 cycles
	Electrical life(120cycles/Hour)	10,000 cycles
Ambient temperature	-40°C~+70°C	
Weight		

◆ Coil Data(at 20 °C)

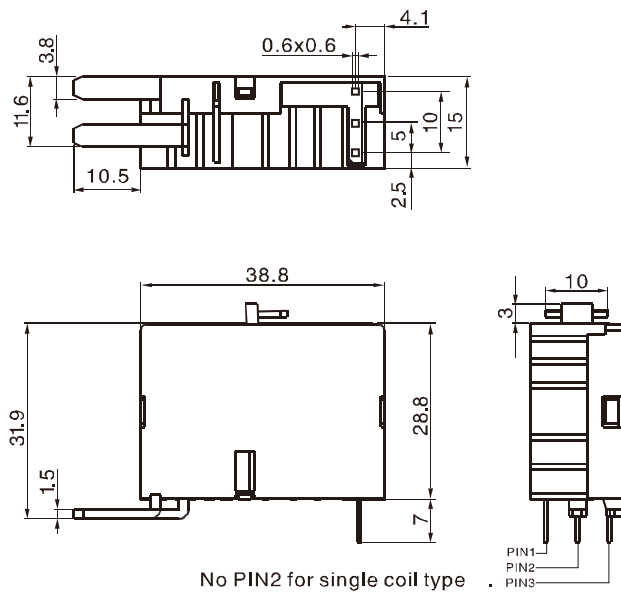
standard model

Nominal voltage (VDC)	Resistance ± 10% (Ω)			Min.Set/Resetvoltage (VDC)	Pulseduration (ms)	Power consumption
	Single coil	Dual coil				
5	25	12.5	12.5	80% nominal voltage	80Min	Single/Dual 1.0W/2.0W
6	36	18	18			
9	81	40.5	40.5			
12	144	72	72			
15	225	112.5	112.5			
18	324	162	162			
24	576	288	288			
48	2304	1152	1152			

◆ Ordering information

WJ31N	40A	12	D	M	1	-M	-XX	Special Parameter : Nil-Standard type,XX-Customized Requirement
								Terminal Type:M-Soldering
								Coil: 1-Single coil, 2-Dual coil
								Contact Form: M-Form A
								Coil type: L-single/dual:1.0W/2.0W; D-single/dual:1.5W/3.0W
								Rated coil voltage(VDC):06, 09, 12, 15, 18, 24, 48
								Switching Capacity: 40A
Model: WJ31N								

◆ Demension(Unit : mm)

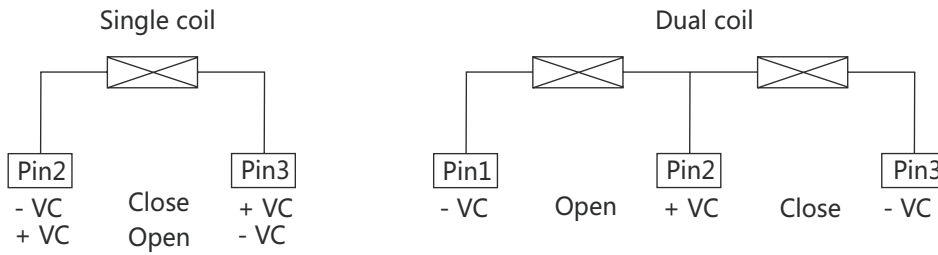


Unless otherwise specified :
 If dimension < 1mm tolerance: ±0.2mm
 If dimension 1~5mm tolerance: ±0.3mm
 If dimension > 5mm tolerance: ±0.4mm
 Note:
 1. Extended terminal dimension is dimension before soldering
 2. Tolerance of mounting holes : ±0.5mm

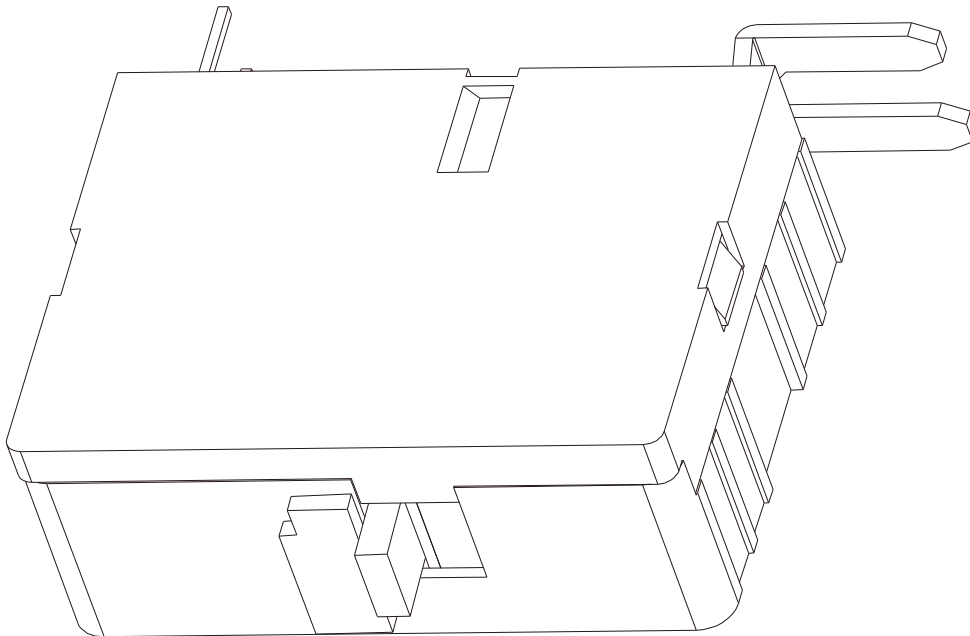
◆ Typical Application

- ◇ 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.