

**Features:**

- 120A switching capacity
- Low power consumption
- Strong anti-shock capability
- Withstand voltage between contacts and coil: 4 KV
- Single/Dual coils available
- Environmentally friendly products(Accord RoHS)
- Dimensions: 113mm×52mm×28 mm

**Typical Application:**

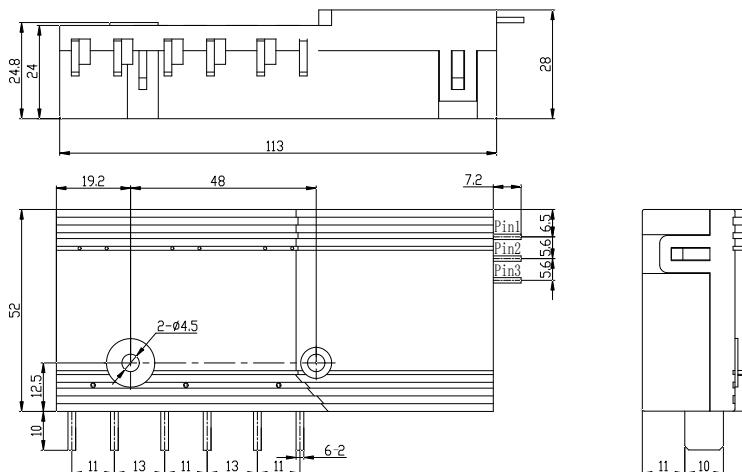
- Smart meter
- Remote electrical control
- Power composite switch
- Electrical equipment

**Contact Data**

Contact form	3 Form A or 3 Form B
Rated Load	120A 250VAC
Max.switching voltage	277V
Max.switching current	120A
Max.switching power	33,240VA
Contact Material	Silver alloy
Contact resistance	≤1 mΩ
Max.Operate/Release time	30ms/30ms
	1x10 <sup>4</sup> cycles
Electrical Endurance	(120A 250VAC Resistive electrical 5000 cycles+ Capacitive 5000 cycles PF=0.5 )
Mechanical Endurance	1x10 <sup>5</sup> cycles

**Insulation Data**

Insulation Resistance	≥1,000MΩ (500VDC)
Dielectric Strength	Contact-Contact AC2,000V; 50/60Hz 1min
	Contact-Coil AC4,000V; 50/60Hz 1min
Contact-Coil (Creepage distance)	≥8.0mm

**Outline Dimensions (Unit: mm)****Coil Data**

Coil voltage range		5 to 48VDC		
Coil insulation system according UL		Class F		
Coil type, standard type				
Rated Voltage VDC	Operate/Release Voltage VDC	Coil resistance Single/Dual Ω (1±10%)	Rated power Single/Dual W	Pulse Duration ms
5	≤3.5	5/2.5	5/10	≥100
9	≤6.3	16.2/8.1	5/10	≥100
12	≤8.4	28.8/14.4	5/10	≥100
24	≤16.8	115.2/57.6	5/10	≥100
48	≤33.6	460.8/230.4	5/10	≥100

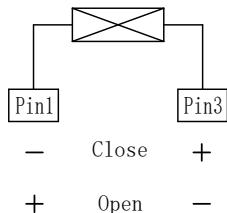
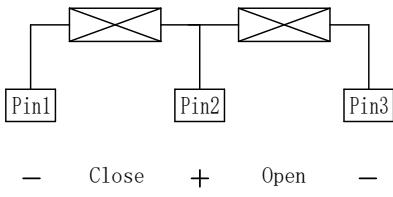
All figures are given for coil without pre-energization, at ambient temperature 20°C.

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACHHS	
Ambient Temperature	-40°C to +85°C
Ambient Humidity	5% ~ 85% RH
Vibration resistance	10 ~ 55Hz, 1.5mm DA
Shock resistance	Durability 100g Malfunction 10g
Packaging type	Dust proof type

Note: Some product dimensional tolerance is not specified. When < 1mm, the tolerance is ±0.2mm; when between 1~5mm, the tolerance is ±0.3mm; when > 5mm, the tolerance is ±0.4mm.

### Wiring Diagrams

**Single**

**Dual**


### Model naming rules

WJ33E	-120	-12	D	2	XXX	
Customer required type						
Coil type: 1- means single coil; 2- means dual coil						
Coil Power Consumption: D - Standard Type						
Coil Specifications (VDC): 05 , 09 , 12 , 24 , 48						
Rated current: 120A						
Type: WJ33E						

Customized special suffix is available after being evaluated by Sanyou.

### Examples of Ordering Codes

WJ33E-120-12D2

Relay WJ33E, Rated current 120 A, Coil Specifications 12 VDC, Standard type, Dual coil

### Cautions

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 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 product specification is for reference only and may change without prior notice. Customers should select the appropriate product model according to the performance parameter requirements of their specific application areas. The customer will bear the responsibility and loss caused by improper selection. For more technical support, please contact Sanyou Corporation Limited.