

### ◆ Feature

- ◇ 120A switching capability
- ◇ Low power consumption, pulse driven operation
- ◇ Strong resistance ability to shock and vibration, high reliability
- ◇ Dielectric strength 4kv (coil to contacts)
- ◇ Long service life
- ◇ RoHS compliant
- ◇ Tested and approved according to UC3 for IEC62055-31
- ◇ Dimensions: 132mm × 52mm × 30mm

### ◆ Contact Capacity

|                        |             |
|------------------------|-------------|
| Type                   | WJ33G       |
| Rated load             | 120A 250VAC |
| Max. switching current | 120A        |
| Max. switching voltage | 250VAC      |
| Max. switching power   | 30,000VA    |

### ◆ General Specification

|   |   |                |
|---|---|----------------|
| Contact material                              | Silver alloy                                |                |
| Contact resistance                            | 1mΩ Max.                                    |                |
| Operate time                                  | 30ms. Max.                                  |                |
| Release time                                  | 30ms. Max.                                  |                |
| Insulation resistance(initial)                | 1,000MΩ Min. (DC500V)                       |                |
| Dielectric strength                           | Contact - contact : AC2, 000V; 50/60Hz 1min |                |
|   | Contact - coil : AC4, 000V; 50/60Hz 1min    |                |
| Creepage and dearance distance (coil contact) | 8mm   |                |
| Vibration resistance                          | 10~55Hz, 1.5mm DA                           |                |
| Shock resistance                              | Durability                                  | 100G min       |
|   | Malfunction                                 | 10G min        |
| Expected life                                 | Mechanical life(1800 cycles/Hour)           | 100,000 cycles |
|   | Electrical life(120 cycles/Hour)            | 10,000 cycles  |
| Ambient temperature                           | -40°C~+85°C                                 |                |
| Humidity                                      | 5°C~+85%RH                                  |                |

### ◆ Coil Data(at 20°C)

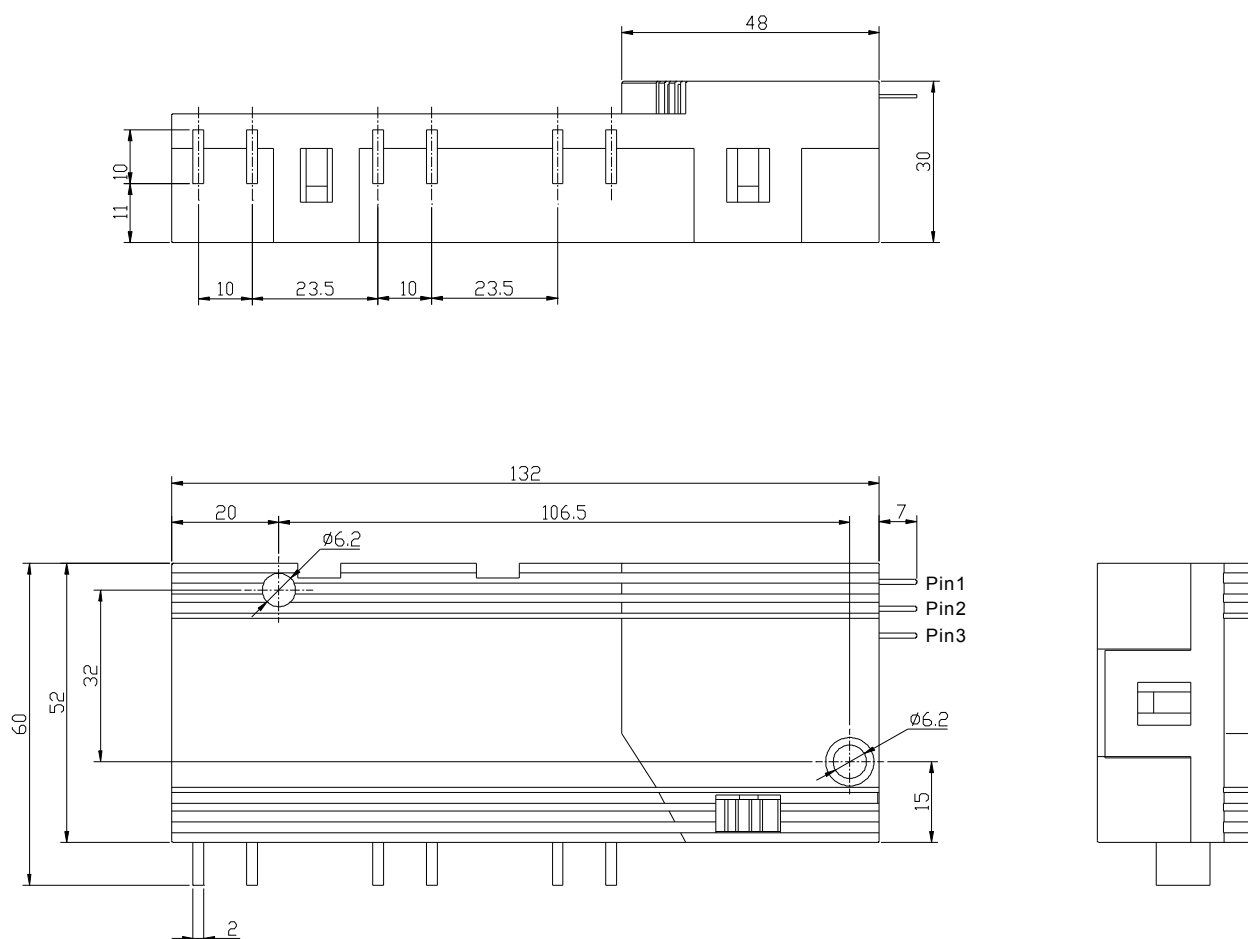
standard type

| Nominal Voltage<br>(VDC) | Coil Resistance ± 10% (Ω) |           |       | Min.Set/Reset Voltage(Max)<br>(VDC) | Pulse Duration<br>(ms) | Coil Power            |
|--------------------------|---------------------------|-----------|-------|-------------------------------------|------------------------|-----------------------|
|                          | Single coil               | Dual coil |       |                                     |                        |                       |
| 5                        | 5                         | 2.5       | 2.5   | 70%<br>nominal voltage              | 100min                 | Single/Dual<br>5W/10W |
| 6                        | 7.2                       | 3.6       | 3.6   |                                     |                        |                       |
| 9                        | 16.2                      | 8.1       | 8.1   |                                     |                        |                       |
| 12                       | 28.8                      | 14.4      | 14.4  |                                     |                        |                       |
| 24                       | 115.2                     | 57.6      | 57.6  |                                     |                        |                       |
| 48                       | 460.8                     | 230.4     | 230.4 |                                     |                        |                       |

## ◆ Ordering Information

|       |      |    |   |   |     |   |
|-------|------|----|---|---|-----|---|
| WJ33G | 120A | 12 | D | 2 | XXX |   |
|       |      |    |   |   |     | Customer special code.                        |
|       |      |    |   |   |     | Coil sort: 1-Single coil, 2-Dual coil.        |
|       |      |    |   |   |     | Coil type:D-standard type.                    |
|       |      |    |   |   |     | Rated coil voltage(VDC):05,06, 09, 12, 24, 48 |
|       |      |    |   |   |     | Switching Capacity: 120A.                     |
|       |      |    |   |   |     | Type: WJ33G, Contact Form: 3 Pole             |

## ◆ Outline Demension(Unit: mm)

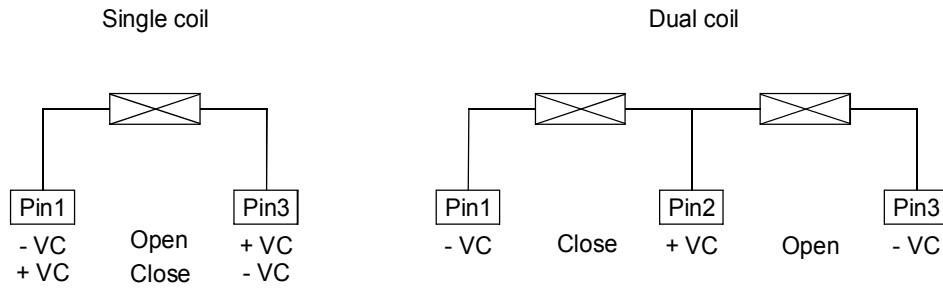


Remark: Unless otherwise specified, < 1mm:  $\pm 0.2$ mm; 1-5mm:  $\pm 0.3$ mm; > 5mm:  $\pm 0.4$ mm.

## ◆ Typical Application

- ◇ Energy meter used in smart grid
- ◇ Remote control
- ◇ Combination switch
- ◇ Electrical power

## ◆ Wiring Diagram



### 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.