

# WJ31I Series Magnetic Latching Relay



### Feature

- ♦ 60A switching capability
- ♦ Motor driven, strong resistance to magnetic field interference
- ♦ Strong resistance ability to shock and vibration, high reliability
- Dielectric strength 4kv(coil to contacts)
- ♦ Long service life
- ♦ RoHS compliant
- $\diamond$  Tested and approved according to UC3 for IEC62055-31
- ♦ Dimensions: 38mm × 30mm × 16.5mm

## Contact Capacity

Туре	WJ31I
Rated Load	60A 250VAC
Max.switching current	60A
Max.switching voltage	250VAC
Max.switching power	15,000VA

# General Spcification

Contact material	Silver alloy			
Contact resistance	1mΩ Max.			
Operate time	20ms. Max.			
Release time	20ms. 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			

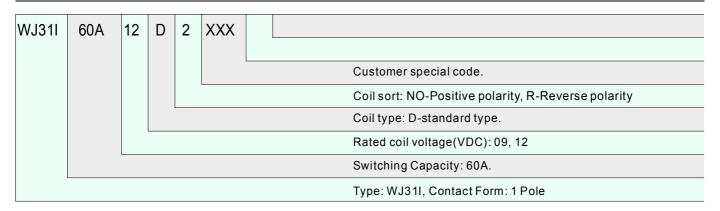
# ◆ Coil Data(at 20°C)

standard type

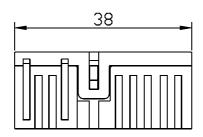
Nominal Voltage (VDC)	Coil Resistance ±10% (Ω) Single coil	Min.Set/Reset Voltage(Max) (VDC)	Pulse Duration (ms)	Coil Power
9	- 45	70%		1.8W
12		nominal voltage	100min —	3.2W

### WJ311 Series Magnetic Latching Relay

## Ordering Information

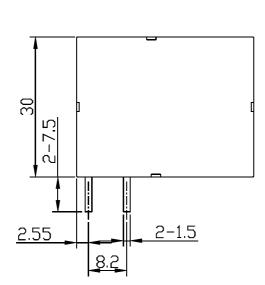


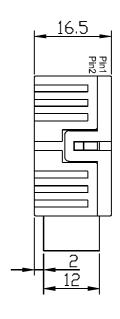
## Outline Demension(Unit: mm)



Remark:Unless otherwise specified,

< 1mm: ±0.2mm; 1-5mm: ±0.3mm; > 5mm: ±0.4mm.

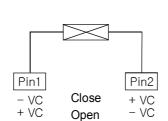




# Typical Application

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

## Wiring Diagram



Positive polarity

#### Pin1 Pin2 Open + VC - VC - VC + VC Close

Reverse polarity

#### 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.