## **Features**

- 120A switching capability
- Single coil and double coil are all available
- Double contact structure
- Can customize the External attachments like manganese-copper
- Shunt,mutual inductor according to the customers' requirements.
- Breakdown voltage: 4KV (between contact and coil)
- Meet the standard of IEC62055-31:2005 and UC3
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (42.0×32.0×20.8) mm
- Main application: smart meter



# **■** CHARACTERISTICS

Specifications	Item						
Contact Data	Contact arrangement		1A、1B				
	Contact resistance(initial)		1mΩ(6VDC 1A)				
	Contact material		AgSnO <sub>2</sub>				
Rated value	Rated load(Resistance load)		100A 250VAC				
			120A 250VAC				
	Max.switching voltage		277VAC				
	Max.switching current		120A				
	Max.switching capacity		30000VA				
	Min.allowing load		1				
Electrical	Insulation resistance(initial)		1000MΩ(500VDC)				
	Dielectric	Between open contacts	2000VAC,1min				
	strength	Between coil&contacts					
performance	(initial)						
	Operate time		≤30ms				
	Release time		≤30ms				
Mechanical	Shock	Functional	98m/s <sup>2</sup> (1				
performance	resistance	Destructive	980m/s <sup>2</sup>	·			
•	Vibration resistance		10Hz~55Hz 1.5mm DA				
	Mechanical		2×10⁵ops				
Endurance	Electrical		120A 2	250VAC	6×10³ops	(ON/OFF=1s/9s)	
			100A 2	250VAC	1×10 <sup>4</sup> ops	(ON/OFF=1s/9s)	
Operate	Ambient temperature		-40°C∼85°C				
condition	Humidity		5% to 85%				
Termination			Plug-in needle type+Screw type(XB)				
Unit weight			Approx.70g(Without attachment)				
Construction			Flux proofed				

# ■ COIL DATA(23°C)

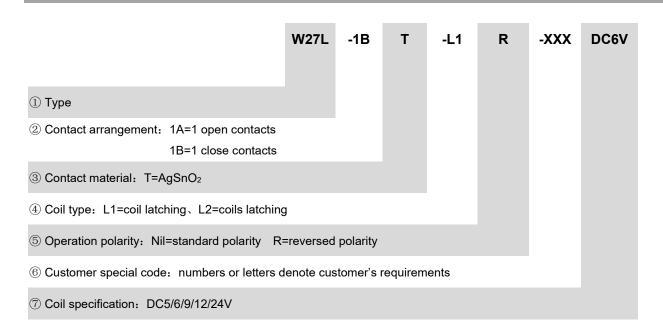
### ■Single coil latching

Nominal	Pick-up Voltage	Drop-out Voltage	Rated Current	Coil Resistance	Naminal Dawar	Max Voltage
Voltage	VDC	VDC	(±10%)	(±10%)	Nominal Power	
DC 6V	≤4.50	≤4.50	375mA	16Ω		
DC 9V	≤6.75	≤6.75	250mA	36Ω	2.25W	150%Nominal
DC 12V	≤9.00	≤9.00	187.5mA	64Ω	2.23	Voltage
DC 24V	≤18.00	≤18.00	93.8mA	256Ω		

### ■ Double Coils latching`

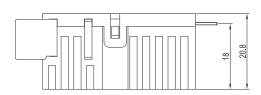
Nominal	Pick-up Voltage	Drop-out Voltage	Rated Current	Coil Resistance	Naminal Dawar	Max Voltage
Voltage	VDC	VDC	(±10%)	(±10%)	Nominal Power	
DC 6V	≤4.50	≤4.50	750/750mA	8/8Ω		
DC 9V	≤6.75	≤6.75	500/500mA	18/18Ω	4.5W	150%Nominal
DC 12V	≤9.00	≤9.00	375/375mA	32/32Ω	4.500	Voltage
DC 24V	≤18.00	≤18.00	188/188mA	128/128Ω		

### ORDERING INFORMATION



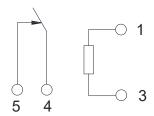
# ■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit: mm)

## 1A/1B Outline Dimensions

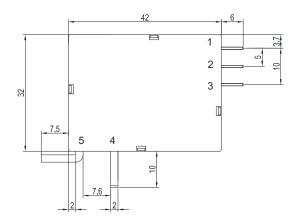


#### Wiring Diagram

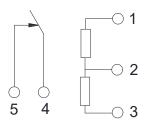
## Single coil latching



1 (+) 3 (-) 4-5 Reset 3 (+) 1 (-) 4-5 Set



## Double coils latching



1 (+) 2 (-) 4-5 Reset 3 (+) 2 (-) 4-5 Set

- Notes: (1) In case of no tolerance shown in outline dimension:outline dimension≤1mm,tolerance should be±0.2mm;outline dimension >1mm and <5mm,tolerance should be ±0.3mm;outline dimension≥5mm,tolerance should be ±0.5mm.
  - (2) The tolerance without indicating for PCB layout is always ±0.1mm.

#### ■ NOTICE

- ① With the consideration of shock risen from transit and relay mounting,relay's initial state might be changed,please impose pulse voltage to reset the relay before using(rated coil voltage,impulse width≥5 times operation time).
- ② The specification is for reference only, specifications subject to change without notice.