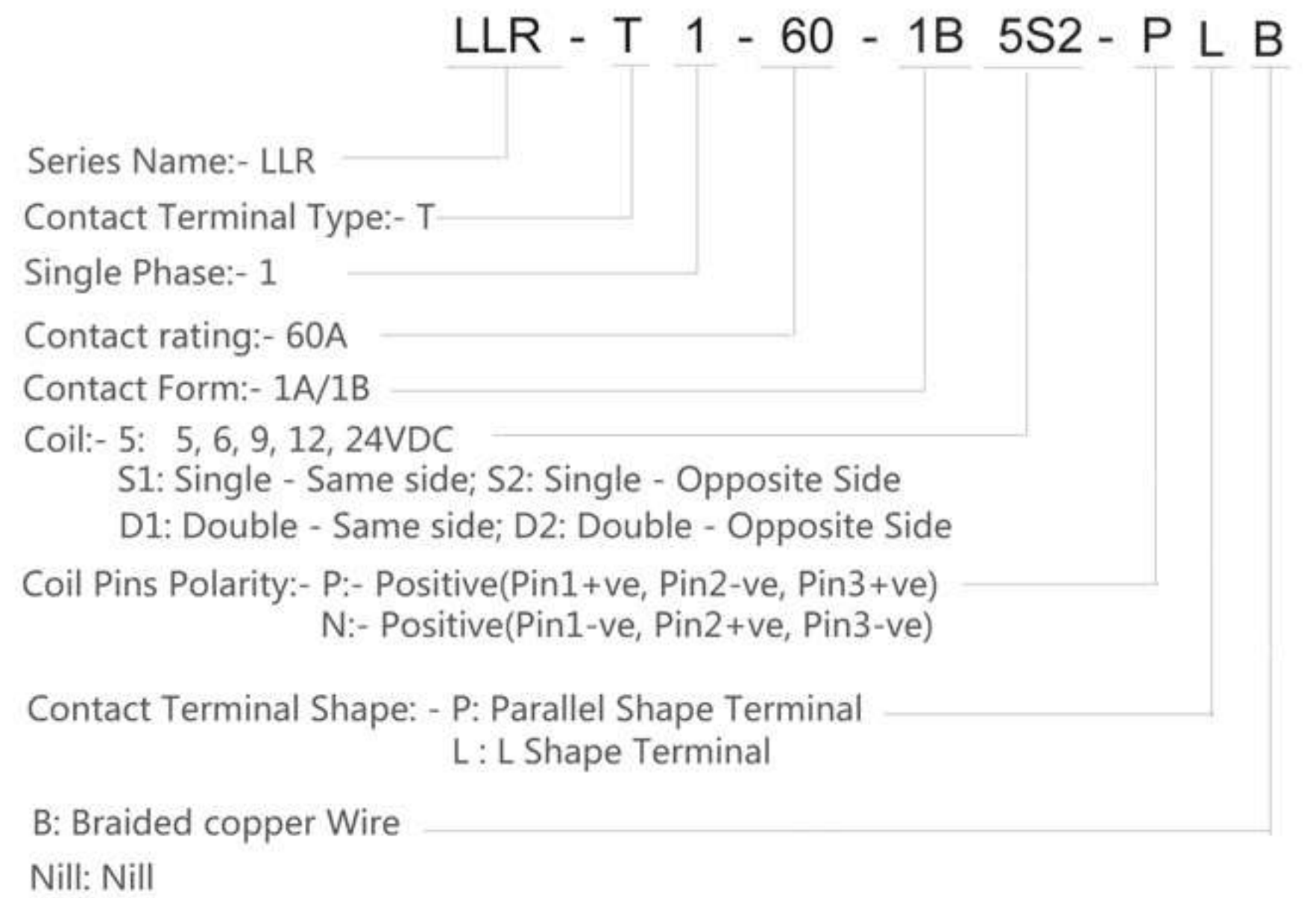
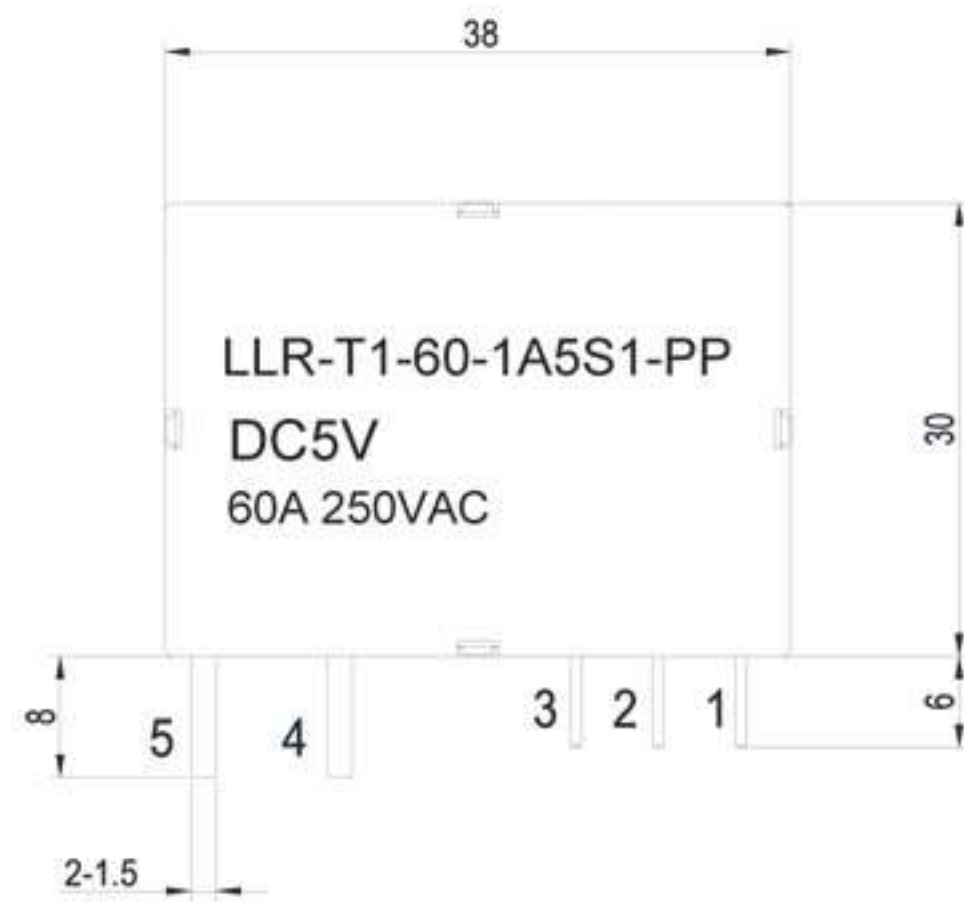


LLR-T1-60-1A5S1-PP  
LLR-T1-60-1B5S2-PLB

Latching Relay

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60A 250VAC, 1A/1B, Single/Double Coil,  
with and w/o Braided copper wire,  
AgSnO<sub>2</sub>  
(Standard and Customized)



### 1) Characteristic

- 60A switching capability
- Breakdown Voltage (between contact and coil), 4KV
- Environmental friendly product (RoHS compliant)
- Outline Dimension: (38.0 x 30.0 x 16.5) mm
- Compliances: IEC62055-31: 2005 UC1

### 2) Specification

Insulation resistance		1000MO (500VDC)
Dielectric Strength	Between Coil & Contacts	4000VAC 1 min
	Between Open Contacts	2000VAC
Operate Time		≤ 20 msec. Max.
Release Time		≤ 20 msec. Max.
Shock resistance	Functional	98m/s <sup>2</sup> (10g)
	Destructive	980m/s <sup>2</sup> (100g)
Vibration resistance		10~55Hz 1.5mm
Humidity		5% to 85%
Ambient temperature		-40~+85°C
Termination		PCB
Unit weight		50g
Construction		Sealed

### 3) Contact Data

Contact form	1A, 1B
Contact material	AgSnO <sub>2</sub>
Contact resistance	≤ 1 mΩ (6VDC 1A)
Contact Rating	60 A 250VAC
Max. Switching Power	15000VA
Mechanical life	1×10 <sup>5</sup>
Electrical life	1×10 <sup>4</sup>

## 4) Coil Data

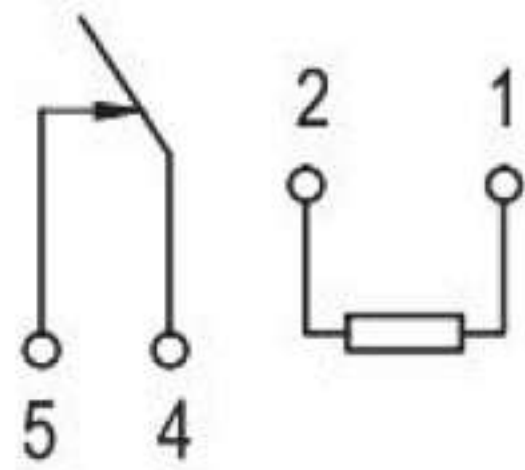
Coil power		Single Coil: 1.5W Double Coil: 3 W	
(VDC) Rated Voltage	(VDC) Pick-up voltage	(ms) Pulse Duration	( $\Omega$ ) Coil Resistance
Single coil			
5V	$\leq 3.75$	100 ms	16 $\Omega$
6V	$\leq 4.50$	100 ms	24 $\Omega$
9V	$\leq 6.75$	100 ms	54 $\Omega$
12V	$\leq 9.00$	100 ms	96 $\Omega$
24V	$\leq 18.00$	100 ms	384 $\Omega$
Double coil			
5V	$\leq 3.75$	100 ms	8/8 $\Omega$
6V	$\leq 4.50$	100 ms	12/12 $\Omega$
9V	$\leq 6.75$	100 ms	27/27 $\Omega$
12V	$\leq 9.00$	100 ms	48/48 $\Omega$
24V	$\leq 18.00$	100 ms	192/192 $\Omega$

## 5) Typical Application

- Smart meter, Compound switch

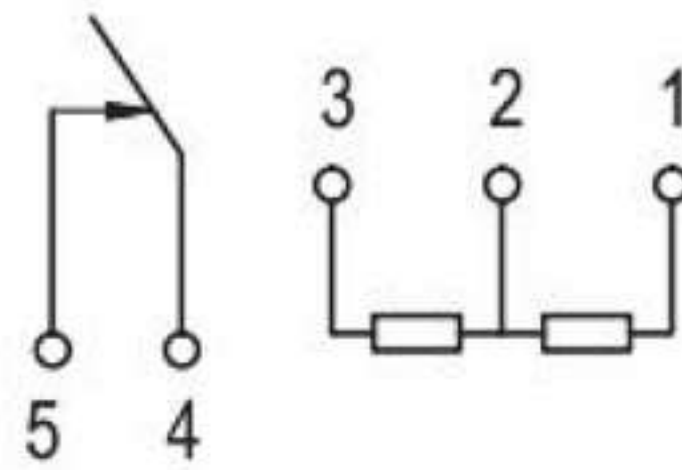
## Wiring Diagram:

Single coil latching



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

Double coils latching

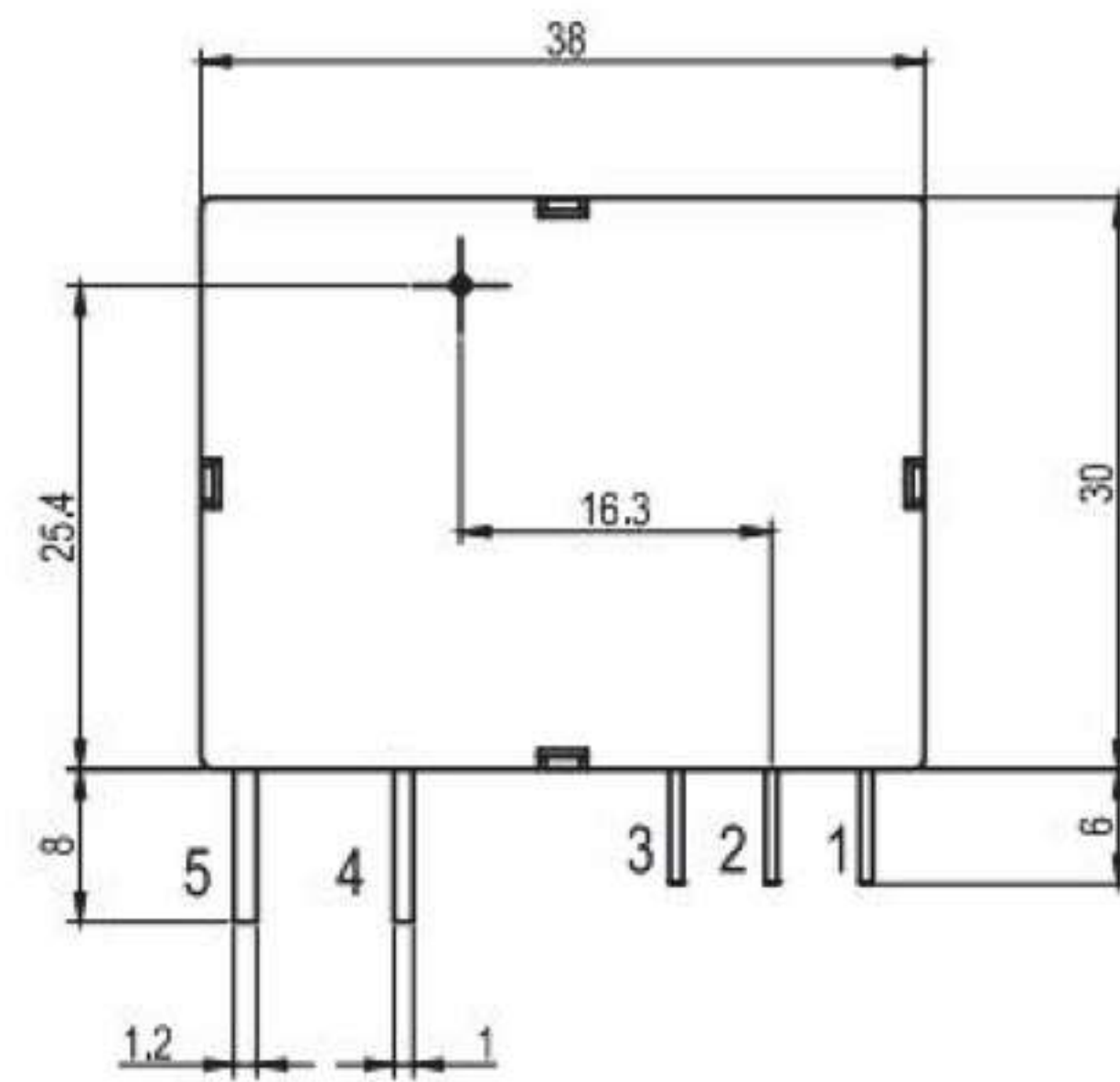
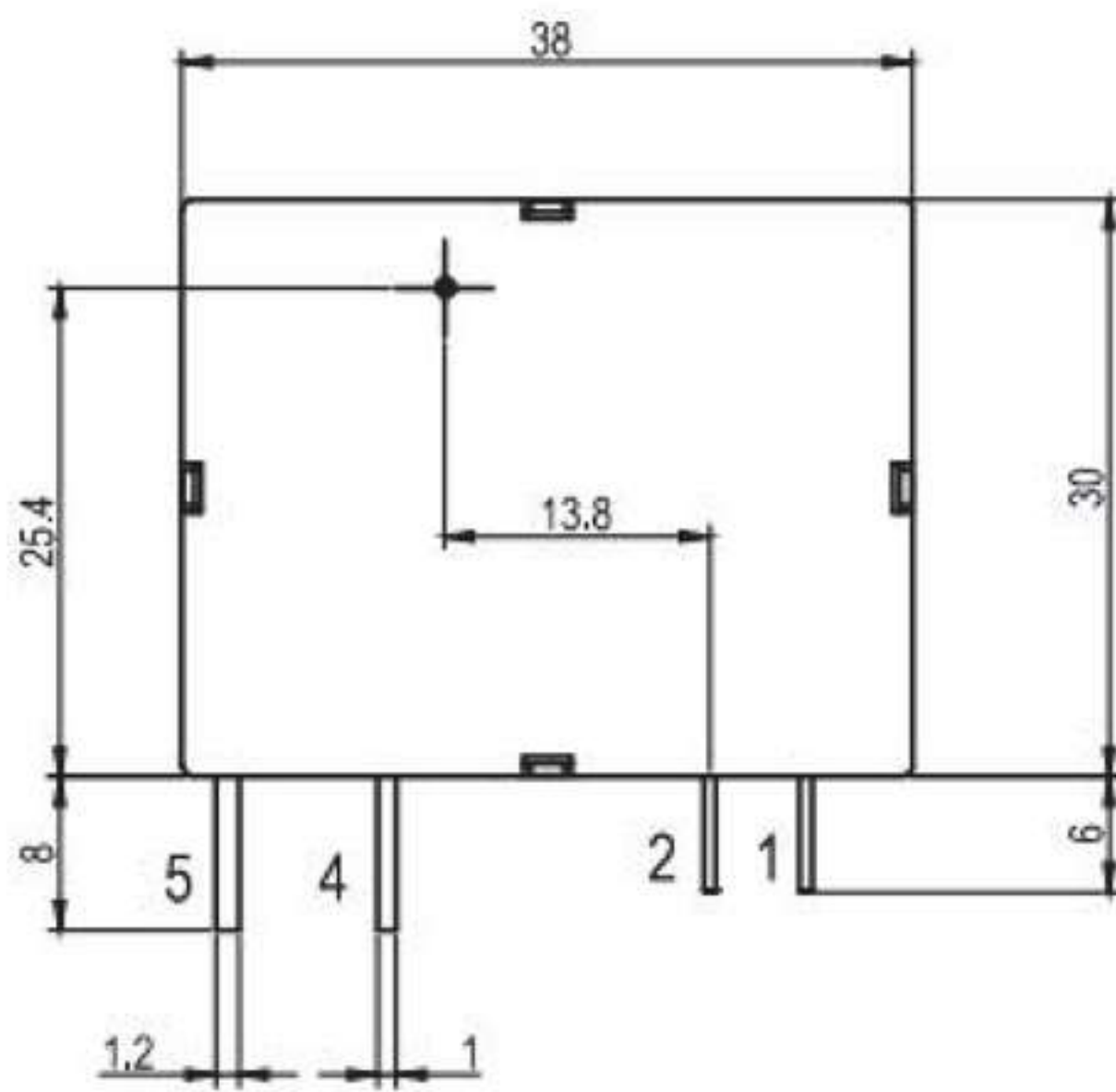
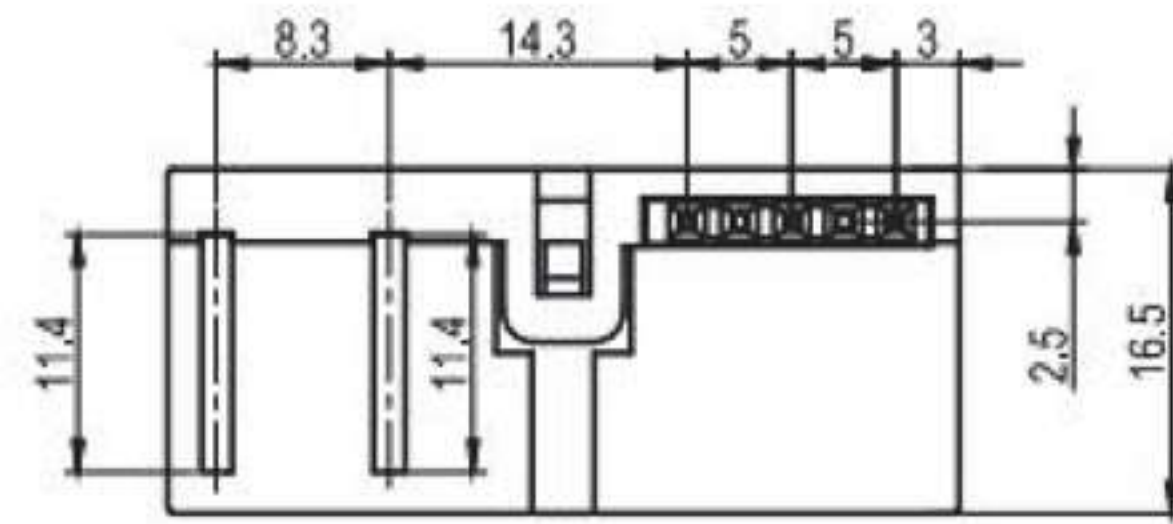
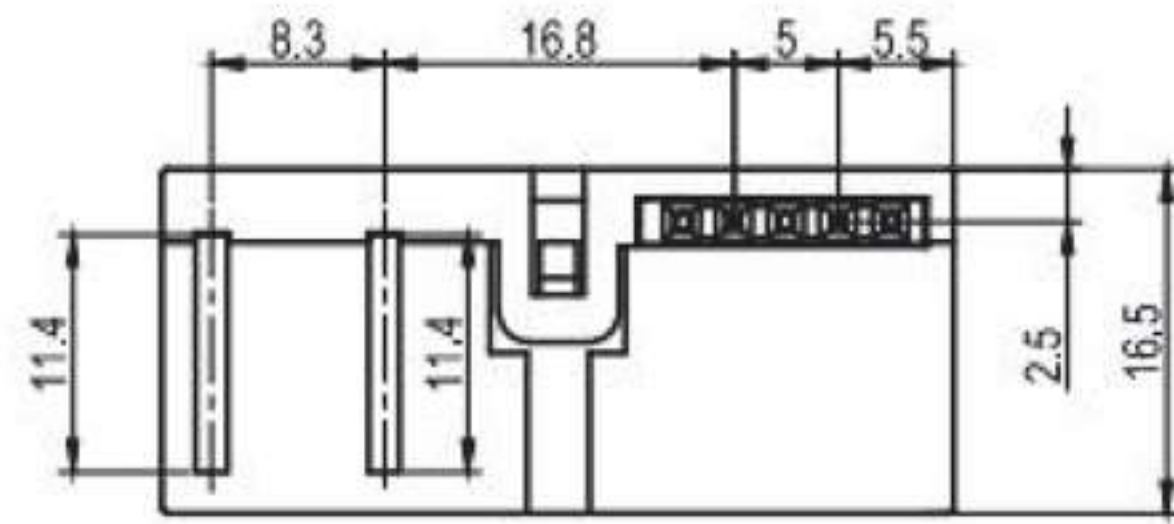


1(+)  
2(-) 4-5 Reset  
3(+)  
2(-) 4-5 Set

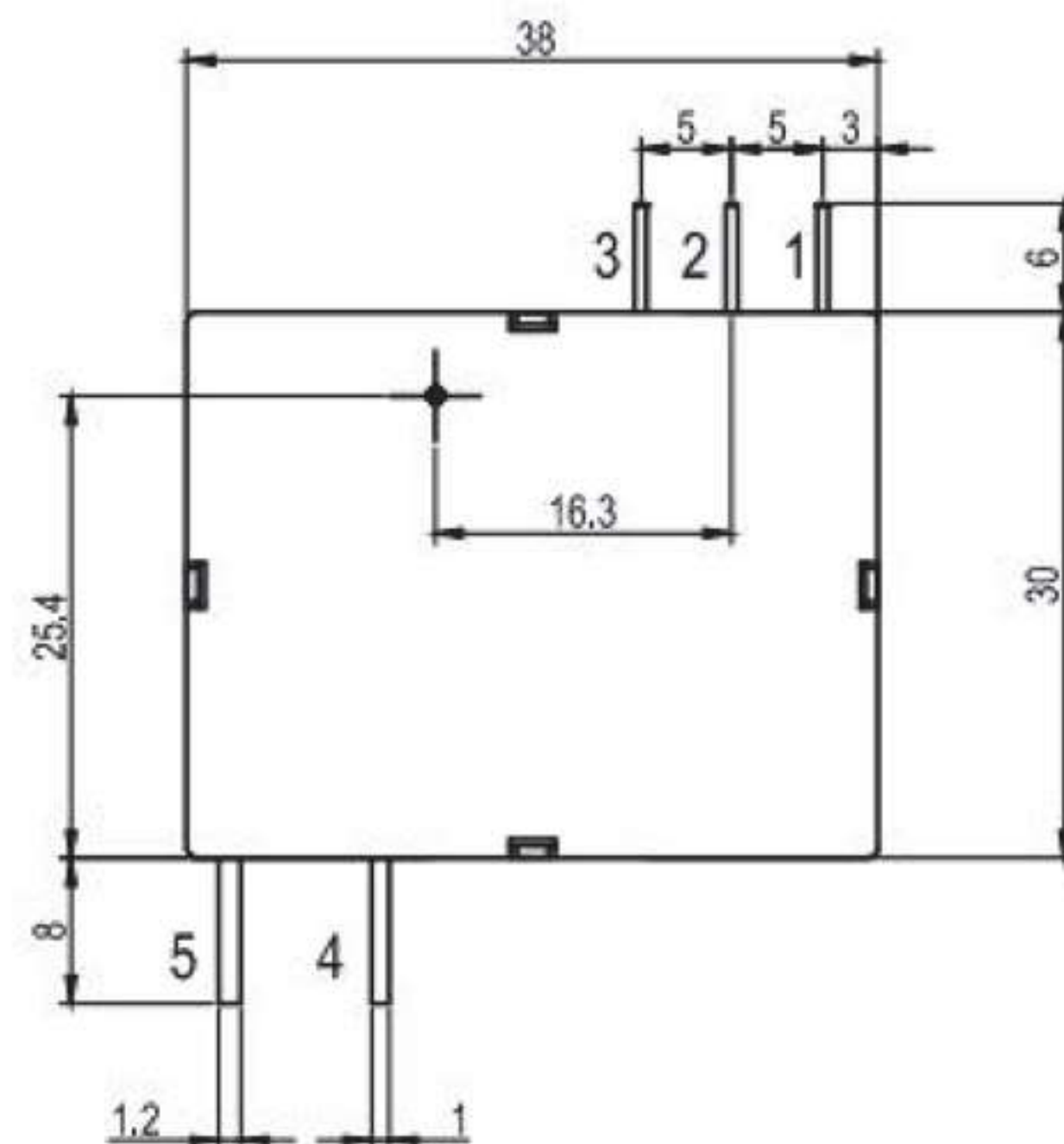
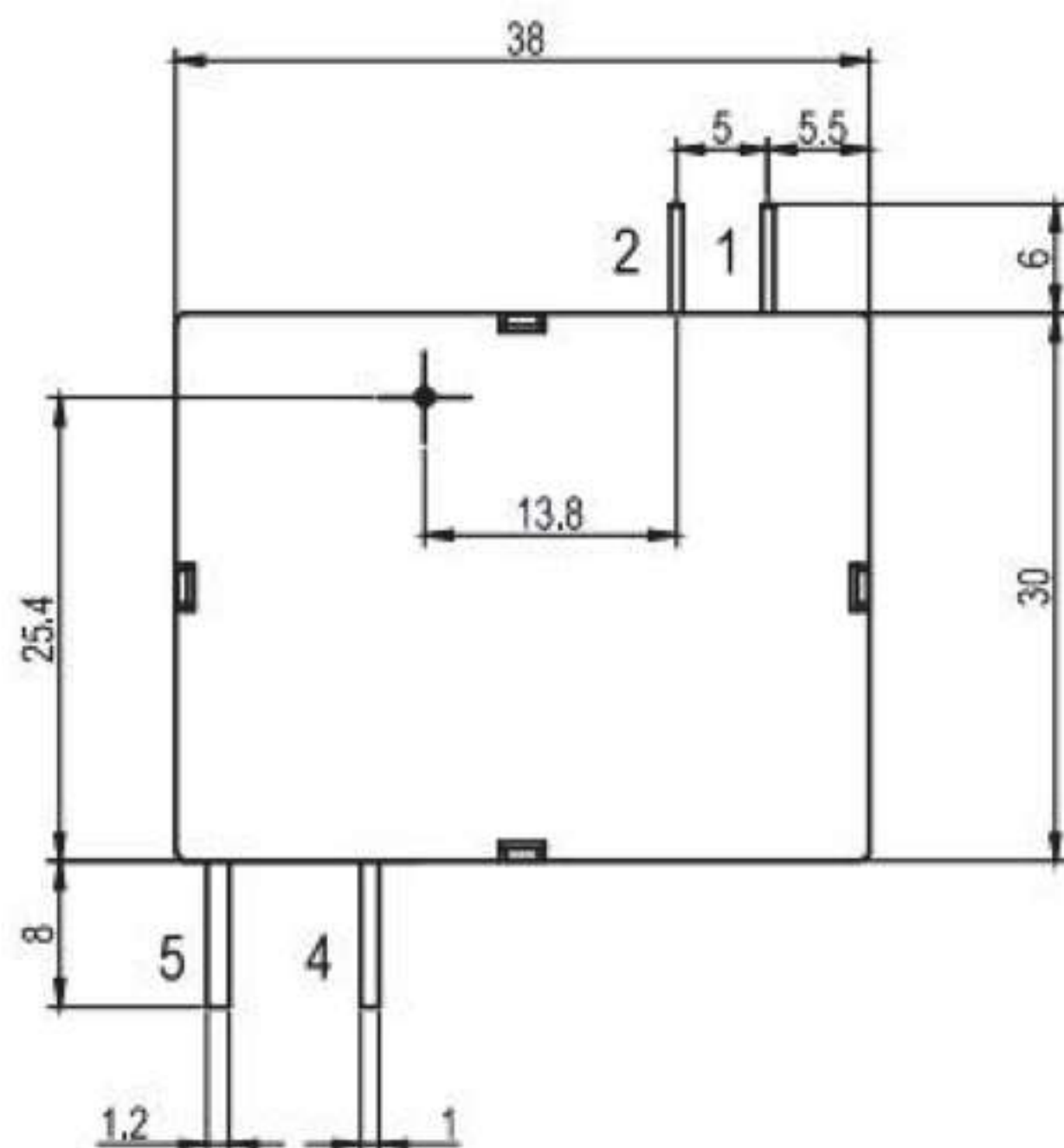
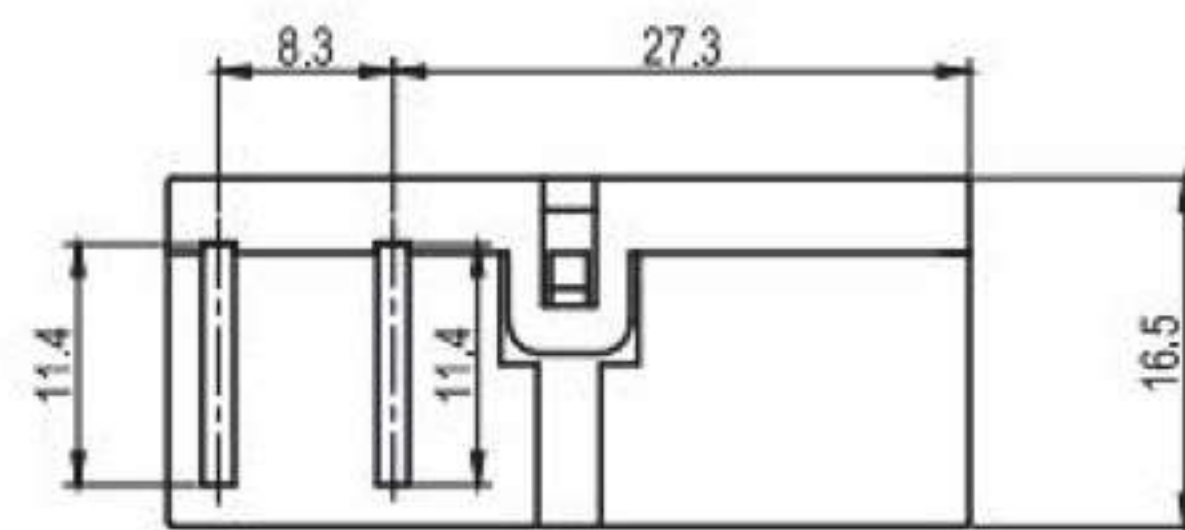
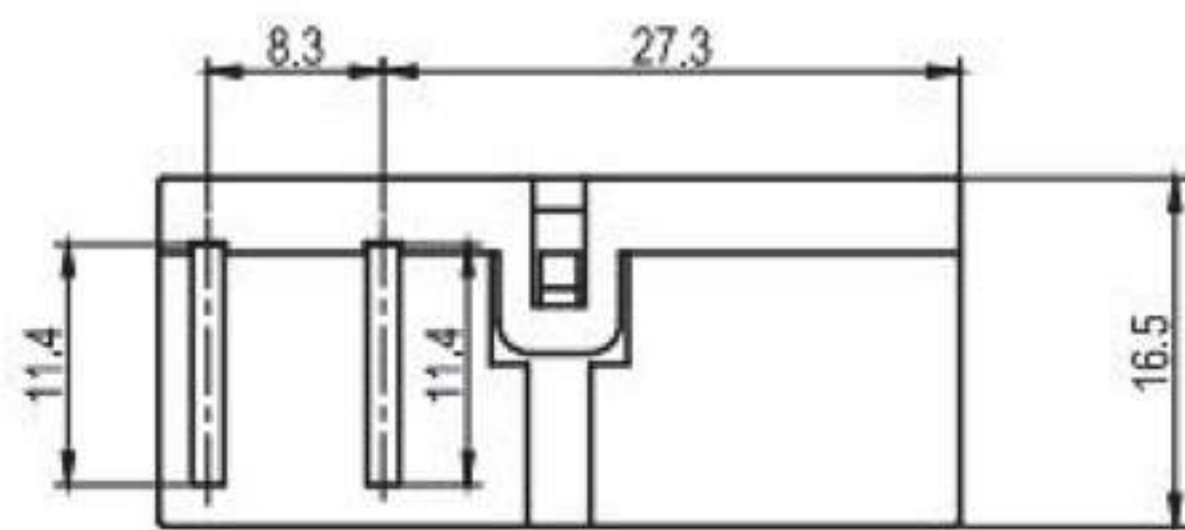


## 6) Dimensions(mm)/ Circuit Diagram

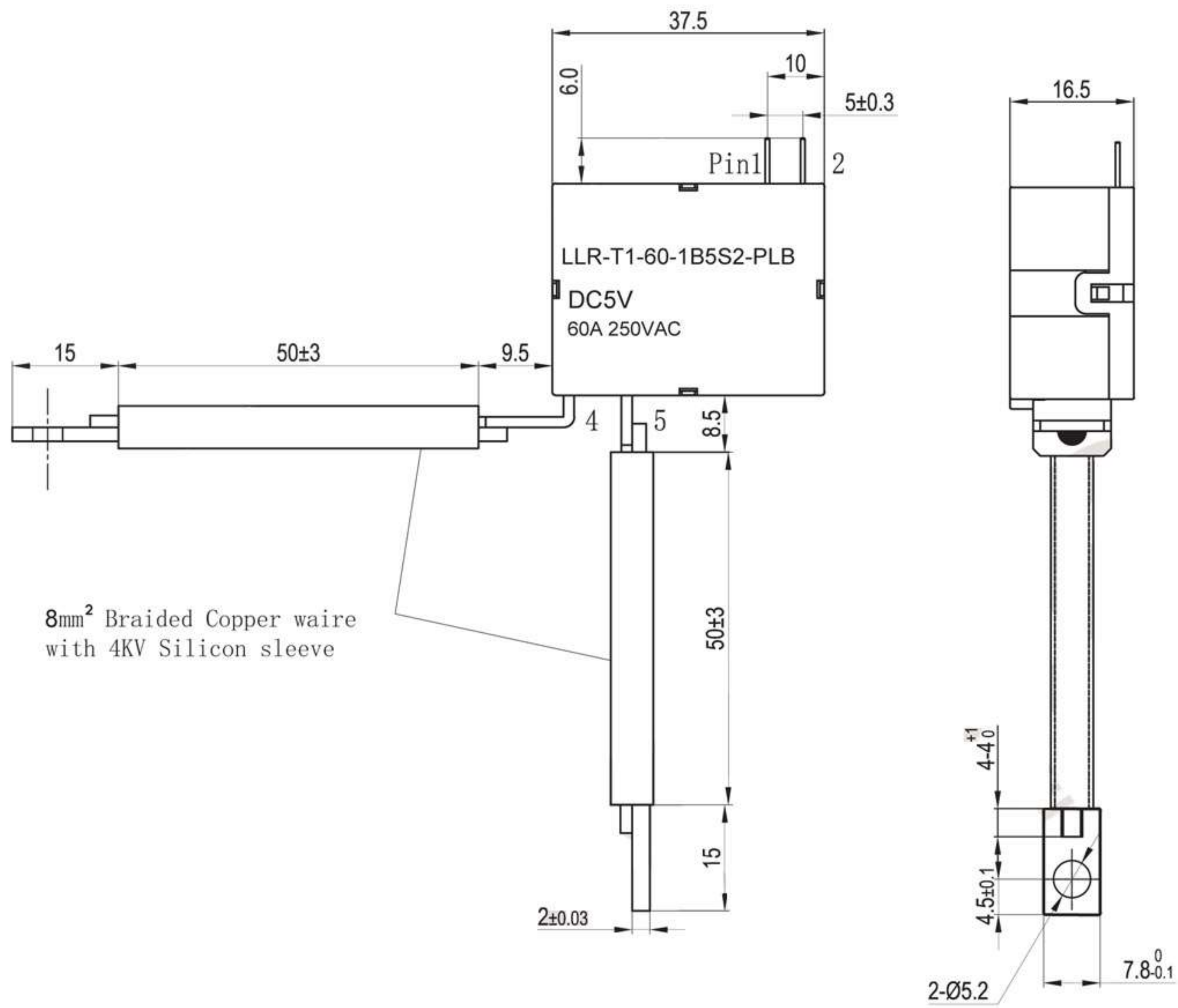
i) S1 &amp; D1 Type - Same Side contact and coil:



ii) S2 &amp; D2 Type - Opposite Side contact and coil:



iii) S2 & D2 Type - Opposite Side With Braided copper wire (Customize)



COIL CONNECTIONS

