

**Character**

- ◇ 60A contact switching capability
- ◇ Only impulse excitation needed, both for single and double coil.
- ◇ Low power consumption with great load capability, small in size
- ◇ Custom assemblies available with flexible wire and/or copper straps, and/or with integrated shunt
- ◇ 4KV dielectric strength between coil and contacts
- ◇ RoHS compliant
- ◇ Outline dimensions: (38.5 x 30 x 16.5) mm

**Contact Data**

Contact Form		1B
Contact Material		AgSnO <sub>2</sub>
Contact Resistance		Max.1.0mΩ (1A 6VDC)
Rated Load(Resistive)		60A 250VAC
Max. Switching Voltage		250VAC
Max. Switching Current		60A
Max. Switching Power		15000VA
Service Life	Mechanical Endurance	1×10 <sup>6</sup> OPS
	Electrical Endurance	1×10 <sup>4</sup> OPS
Max. Short-circuit Current		2000A/10ms
		4500A/10ms (no explosion)

**Characteristics**

Operate Time		20ms Max.
Release Time		20ms Max.
Insulation Resistance (500VDC)		1000MQ Min.
Dielectric Strength (50/60hz, 1min)	Contact to Coil	4000VAC
	Across Open Contacts	2000VAC
	Contact to contact	
Surge Voltage (1.2/50 μ s)	Contact to Coil	12KVAC
Creepage Distance		8mm
Unit Weight		About 50g

**Environmental Data**

Ambient Temperature	-40℃ ~ +85℃	Relative Humidity	5%-85% RH
Vibration	10-55Hz 1.5mm	Shock	98m/s <sup>2</sup>

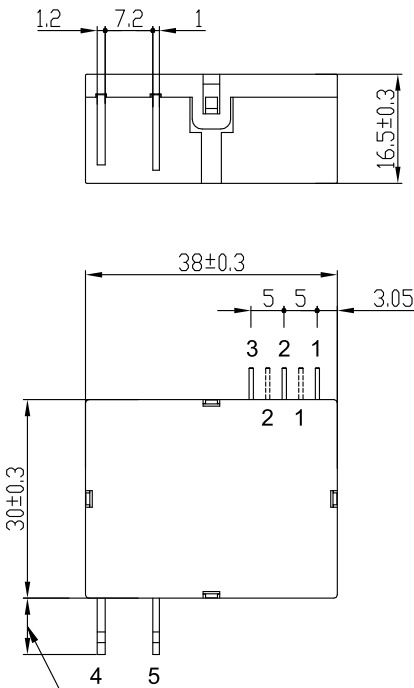
Coil Data (20°C)

Coil Voltage (VDC)	Coil Resistance( $\Omega$ ) $\pm 10\%$		Coil Power(w)		Operating Voltage (VDC)	Releasing Voltage (VDC)	Allowing voltage (VDC)	Pulse Duration (ms)
	Single	Double	Single	Double				
<input type="checkbox"/> 6	36	18/18	1.0	2.0	$\leq 4.2$	$\leq 4.2$	9	$\geq 50$
<input type="checkbox"/> 9	81	40.5/40.5			$\leq 6.3$	$\leq 6.3$	13.5	
<input type="checkbox"/> 12	144	72/72			$\leq 8.4$	$\leq 8.4$	18	
<input type="checkbox"/> 24	576	288/288			$\leq 16.8$	$\leq 16.8$	36	

Ordering information

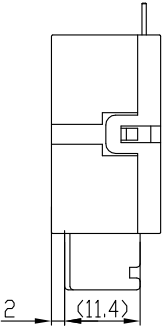
GRT508B	60A	1B	12VDC	S	XX	Terminal type:	Custom design
						Coil type:	S: single coil D: double coil
						Coil voltage:	6, 9, 12, 24, 48V
						Contact form:	1B: a set of contacts remain closed
						Contact current:	60A
						Relay Series:	GRT508B

Dimensional Drawings/Wiring Diagrams(unit:mm)



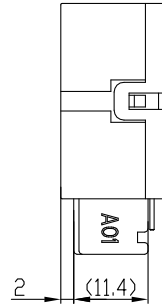
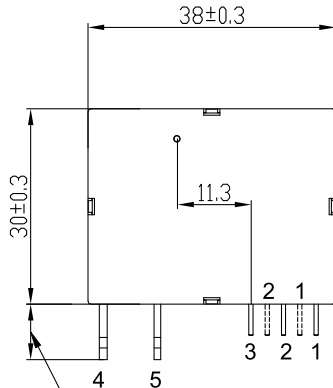
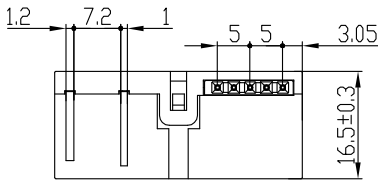
See the corresponding specification  
for the actual length

VERSION : A



Note: 1. For single coil, the pin marked as dotted line; 2. No dimensional tolerance noted:  $\pm 0.3$  mm.

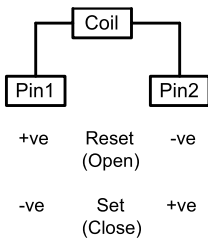
VERSION : B



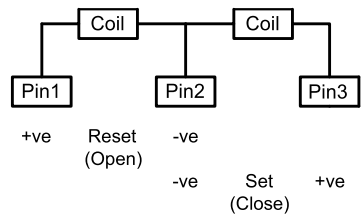
See the corresponding specification  
for the actual length

Note: 1. For single coil, the pin marked as dotted line; 2. No dimensional tolerance noted:  $\pm 0.3\text{mm}$ .

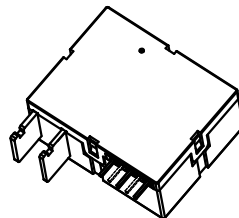
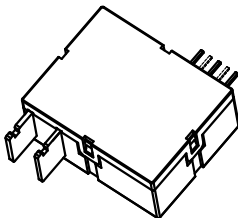
single coil



Double coil



### Typical Terminal Type



### Typical application

- Smart Meter
- Electric Remote Control
- Electrical Leakage Protector



## Notes:

1.The factory defaults of relay contacts is set to be closed (reset state), however, due to the transportation or installation, contacts may be impacted, and change its state, so it is necessary to take action to reset before usage (access to power)

2.To be sure latching relay operating reliably, the excitation voltage to coil is to be attained rating, the setting of pulse width should be more than rating, long time (more than 1 min) applied voltage to coil is not acceptable

3.PCB type latching relay, suggested welding temperature is  $240^{\circ}\text{C}$  - $260^{\circ}\text{C}$  , time is 2S-5S. Please do not adopt reflow soldering. Normally, the temperature for wave soldering is required  $250^{\circ}\text{C}$  and time is  $\leq 2\text{S}$ .

4.Latching relay which is without copper braided wires, the load leading pin can neither be tin soldered nor be wrenched. Don't do any extra force to load

5.When screws or bolt is used for load leading terminal of latching relay, please be sure to connect tightly, in case of any damage or the other safety accident causing by over temperature rise.

6.Due to limited signal wire strength of coil or shunts, do not twist or pull the signal wire, it is easy to get it broken.

7.Please handle gently when doing coming inspection and usage, preventing falling to impact the parameters. Distinguish the product which needs destructive inspection with normal products when entering to the factory, forbidding using it.

## Statement:

Product specification brochure is for reference only. GRT can't ensure relays meet all performance parameters in each specific application field.

Customers should choose the right products as per according to specific using conditions.