

**Character**

- ◇ 25A contact switching capability
- ◇ Only impulse excitation needed, both for single and double coil.
- ◇ Low power consumption, strong load capability
- ◇ Small in size, PCB type installation
- ◇ 4KV dielectric strength between coil and contacts
- ◇ RoHS compliant
- ◇ Outline dimensions: (38.8 x 28.7 x 15) mm
- ◇ VDE certificate No.: 40039308

Contact Data

Contact Form	1C	1B	
Contact Material	AgSnO ₂	AgSnO ₂	
Contact Resistance	Max.1.0mΩ (1A 6VDC)	Max.2.0mΩ (1A 6VDC)	
Rated Load(Resistive)	25A 250VAC	40A 250VAC	
Max. Switching Voltage	440VAC	440VAC	
Max. Switching Current	25A	40A	
Max. Switching Power	6250VA	10000VA	
Service Life	Mechanical Endurance	1×10 ⁶ OPS	1×10 ⁶ OPS
	Electrical Endurance	3×10 ⁴ OPS	3×10 ⁴ OPS
Max. Short-circuit Current	750A/10ms	750A/10ms	

Characteristics

Operate Time	20ms Max.	20ms Max.	
Release Time	20ms Max.	20ms Max.	
Insulation Resistance (500VDC)	1000MΩ Min.	1000MΩ Min.	
Dielectric Strength (50/60hz, 1min)	Contact to Coil	4000VAC	4000VAC
	Across Open Contacts	1500VAC	1500VAC
	Contact to contact		
Surge Voltage (1.2/50 μs)	Contact to Coil	6KVAC	12KVAC
Creepage Distance	8mm	8mm	
Unit Weight	About 44g	约44g	

Environmental Data

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

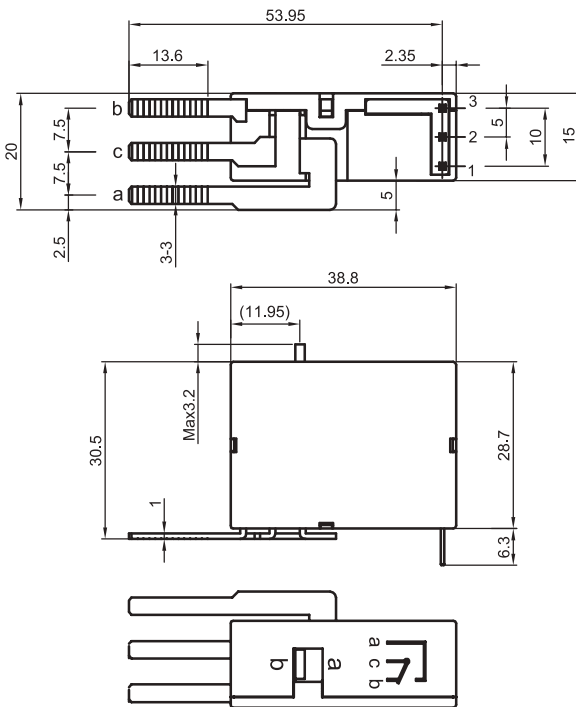
Coil Data (20°C)

Coil Voltage (VDC)	Coil Resistance(Ω) $\pm 10\%$		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			≤ 4.5	≤ 4.5	9	
<input type="checkbox"/> 9	81	40.5/40.5	1.0	2.0	≤ 6.75	≤ 6.75	13.5	≥ 50
<input type="checkbox"/> 12	144	72/72			≤ 9	≤ 9	18	
<input type="checkbox"/> 24	576	288/288			≤ 18	≤ 18	36	

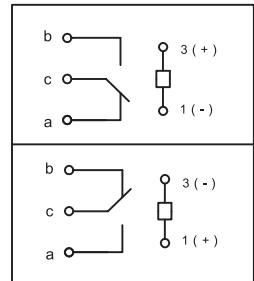
Ordering information

GRT508Y	25A	1C	12VDC	S	XX	Terminal type:	Custom design
						Coil type:	S, single coil D, double coil
						Coil voltage:	6, 9, 12, 24V
						Contact form:	1C: a set of contacts remain closed
						Contact current:	25A
						Relay Series:	GRT508Y

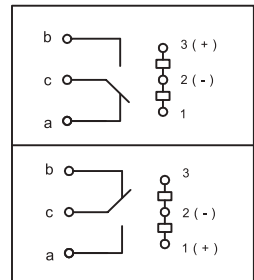
Dimensional Drawings/Wiring Diagrams(unit:mm)



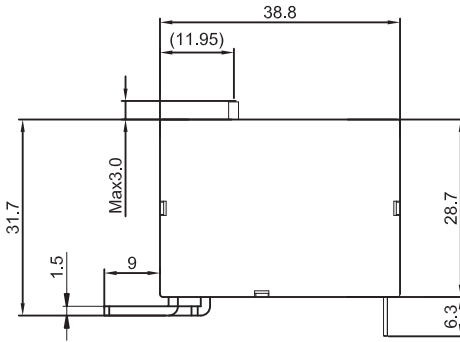
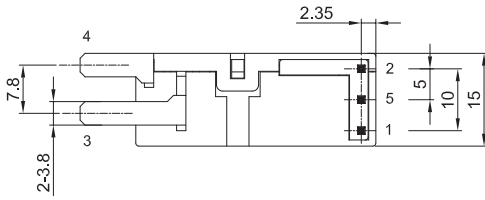
Single coil



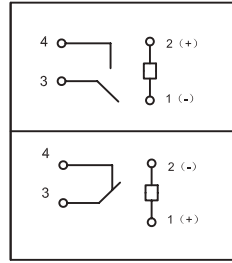
Double coil



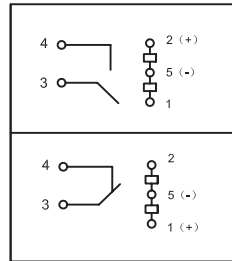
Note: No tolerance marked. If dimension ≤ 1 mm, the tolerance is ± 0.2 mm; if dimension 1-5mm, the tolerance is ± 0.3 mm; if dimension ≥ 5 mm, the tolerance is ± 0.5 mm.



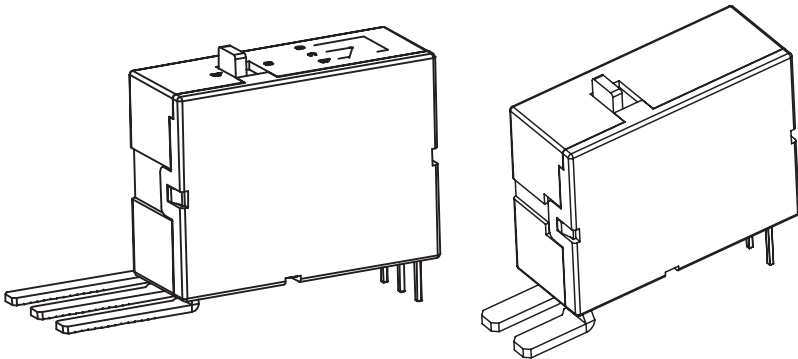
Single coil



Double coil



Typical Terminal Type



Typical application

- Smart Meter
- Smart Home



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°C-260°C, time is 2S-5S. Please do not adopt reflow soldering. Normally, the temperature for wave soldering is required 250°C and time is $\leq 2S$.

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.