



Features

- 80A switching capability.
- Optional Contact arrangement.
- Extended operation range.
- Optional mounting bracket.

Typical Applications

Fog lamp & headlight control, Rear window defogger, Air-conditioning, Power distribution, Fuel pump control, ABS, Traction control system, Cooling fan control, Hearing control, Power supply management system, Battery disconnection device

CHARACTERISTICS

| | | | |
|----------------------------------|------------------------------|----------------------|---------------------------------|
| Contact Arrangement | 1A, 1C | Coil power | 1.6W~1.8W |
| Contact voltage drop | Typ. 30mV (at 10A 13.5 VDC) | Coil Voltage | 6VDC, 12VDC, 24VDC |
| | Max. 250mV (at 10A 13.5 VDC) | Operate time | Max. : 10ms |
| Initial contact resistance | Max. 50mΩ (at 1A 24 VDC) | Release time | Max. : 7ms |
| Electrical life | 1×10 ⁵ ops | Ambient temp. | -40°C~ +125°C |
| Mechanical life | 1×10 ⁷ ops | Vibration Resistance | 10Hz~40Hz 1.5mm DA |
| Max. Carry current | 80A (NO) /60A(NC) | Shock resistance | Functional 98m/s ² |
| Max. Make current ⁽¹⁾ | 80A (NO) /60A(NC) | | Destructive 294m/s ³ |
| Min. Applicable load | 6VDC, 1A | Termination | Plug-in |
| Insulation resistance | 100MΩ, 500VDC | Weight | Approx. 37g |
| Dielectric Strength | 550VAC 1min | Construction | Dust covered/Sealed IP67 |

Note(1): Inrush current for lamp load

CONTACT DATA

| Nominal Voltage VDC | Load Version | | Carry current (A) | | | Electrical life (ops) | Contact Material | Testing Ambient temp. | Contact Wiring Diagram |
|---------------------|-------------------|-----|-------------------|-------|-------|-----------------------|---|-----------------------|------------------------|
| | | | 1C | | 1A | | | | |
| | | | N. O. | N. C. | N. O. | | | | |
| 12 VDC | Res. 14VDC on/off | | 80 | 60 | 80 | 1×10 ⁵ | AgSnO ₂ In ₂ O ₃ | 23°C | Diagram 1 |
| | Motor | on | 180 | --- | 180 | 1×10 ⁵ | AgSnO ₂ In ₂ O ₃ | 23°C | Diagram 2 |
| | | off | 40 | --- | 40 | | | | |
| | 14VDC Lamp | on | 4×H4/6 | --- | 4×H4 | 1×10 ⁵ | AgSnO ₂ In ₂ O ₃ | 23°C | Diagram 3 |
| off | | 0W | --- | /60W | | | | | |
| 24 VDC | Res. 27VDC on/off | | 50 | 20 | 50 | 1×10 ⁵ | AgSnO ₂ In ₂ O ₃ | 23°C | Diagram 1 |

Contact Wiring Diagram

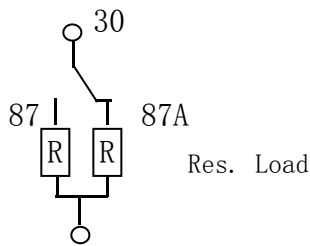


Diagram 1

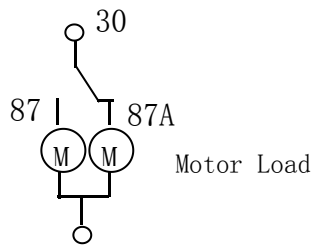


Diagram 2

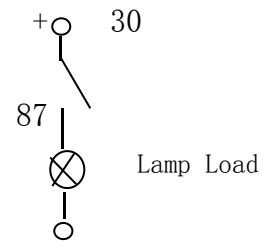


Diagram 3

COIL DATA

23°C

| Nominal Voltage VDC | Max. Allowable Overdrive VDC | | Pick-up Voltage VDC | Drop-out Voltage VDC | Coil Resistance Ω $\pm 10\%$ | Parallel Resistance Ω |
|---------------------|------------------------------|------|---------------------|----------------------|-------------------------------------|------------------------------|
| | 23°C | 85°C | | | | |
| 6 | 10.1 | 7.9 | <3.6 | >0.6 | 22 | --- |
| 6 | 10.1 | 7.9 | <3.6 | >0.6 | 22 | 180 |
| 12 | 20.2 | 15.7 | <7.2 | >1.2 | 85 | --- |
| 12 | 20.2 | 15.7 | <7.2 | >1.2 | 85 | 680 |
| 24 | 40.5 | 31.5 | <14.4 | >2.4 | 350 | --- |
| 24 | 40.5 | 31.5 | <14.4 | >2.4 | 350 | 2700 |

ORDERING INFORMATION

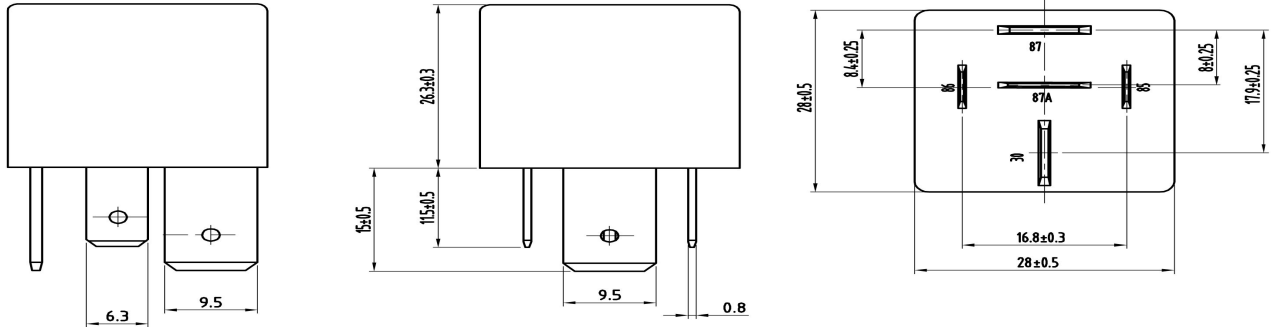
| | | | | | | | |
|--------------------------------|--|------|----|---|---|----|-----|
| | M8/ | 012- | 1H | 1 | G | R- | XXX |
| Relay Type | | | | | | | |
| Coil voltage | 006:6VDC 012:12VDC 024:24VDC | | | | | | |
| Contact arrangement | 1H: 1 Form A 1Z: 1 Form C | | | | | | |
| Version | 1: QC Terminal 2: QC Terminal & Metal Shrouded | | | | | | |
| Contact Material | G:AgSnO ₂ In ₂ O ₃ | | | | | | |
| Parallel resistor | Nil: Without resistor R: With resistor D:Parallel diode (D1:anode on #86,D2:anode on #85) | | | | | | |
| Customer special request code: | | | | | | | |

Outline Dimensions

Unit:mm

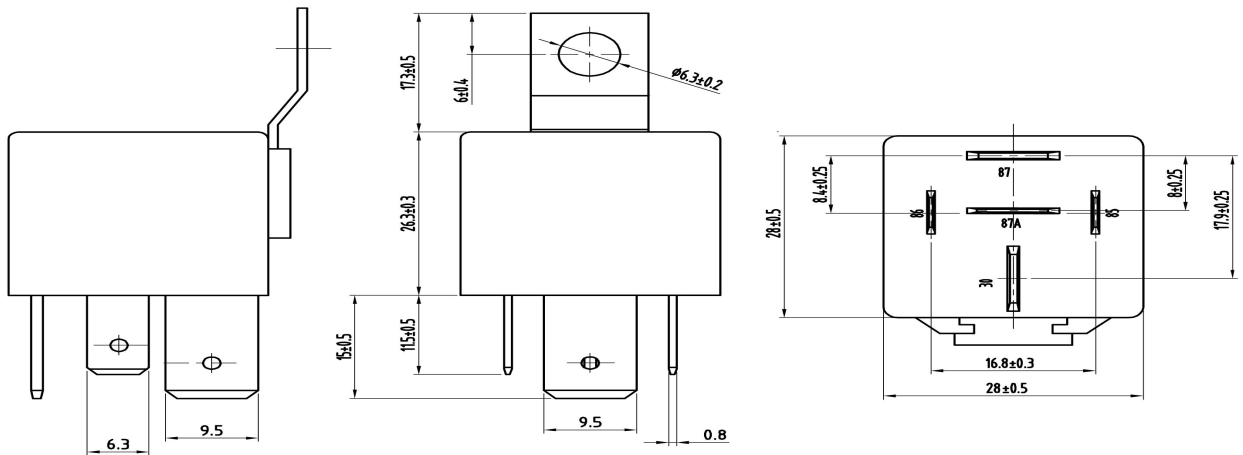
Plug-in Type

M8/□□□-1□1□□



Plug-in Type & Metal shrouded Type

M8/□□□-1□2□□



Wiring Diagram

