Features

- 35A switching capability
- Ambient temp. range up to 125℃
- Plug-In Type Relay
- 1 Form A & 1 Form C contact arrangement
- Plastic sealed and dust protected types available
- Environmental friendly product (RoHS compliant)
- Dimension: 20.4 x 15.1 x 22 mm

Application

Automobile Auxiliary / Automation System / Lighting Control / Headlight Control / Electromagnet Control / Air Conditioning / Heaters / Fuel Pump Control / Wiper Control, etc.

Contact Data

Contact Arrangement	1A	1C
Contact Material	Ag Alloy	
Contact Rating	35A 14VDC 15A 28VDC	NO: 35A 14VDC NC: 20A 14VDC
Max. Switching Power	490W	
Max. Switching Voltage	16VDC	
Max. Switching Current	35A	
Min. Contact Load	1A 6VDC	
Voltage Drop (initial)	NO: Typ. 15mV, 250mV max. (at 10A) NC: Typ. 25mV, 250mV max. (at 10A)	
Contact Resistance	≦50mΩ	
Electrical Endurance	$1x10^5$	
Mechanical Endurance	$1x10^6$	

Coil Parameter

Coil Voltage (VDC)		Coil Resistance (Ω±10%) at 23℃		Pickup Voltage (max) (VDC)	Release Voltage (min) (VDC)	Coil Power Consumption (W)
Rated	Max.	without Resistor	with R1 Resistor			
12	15.6	96	84	9	1.2	approx. 1.5
24	31.2	320	286	18	2.4	approx. 1.8

Operation Condition

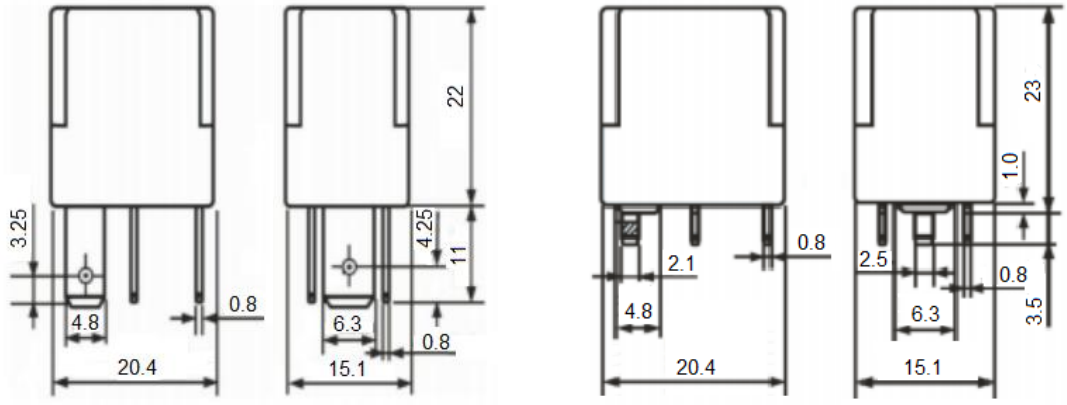
Insulation resistance		100MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	500V, 50/60Hz 1 min.
	Between Contact and Coil	750V, 50/60Hz 1 min.
Shock Resistance		100m/s^2 11ms
Vibration Resistance		10~500Hz, 5.0G
Ambient Temperature		-40~125℃(no freezing)
Operate Time		≦10ms
Release Time		≦5ms
Relative Humidity		85% (at 40℃)
Weight		Approx. 18.5g

Ordering Information

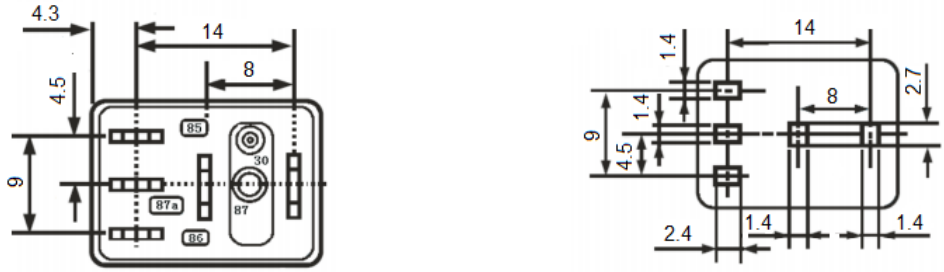
	AI	-12D	R	-A	-S	(XXX)
Model						
Coil Voltage	**12**: 12VDC **24**: 24VDC					
Paralleled Component	**Nil**: Standard **R**: with resistor (680Ω 12V) (2700Ω 24V) **D1**: with diode (the diode anode on #85 terminal) **D2**: with diode (the diode anode on #86 terminal)					
Contact Arrangement	**A**: 1 Form A **C**: 1 Form C					
Construction	**Nil**: Flux tight **S**: Sealed					
Special Code	**Nil**: Standard **XXX**: Customer special requirement					

Dimensions (UNIT: mm)

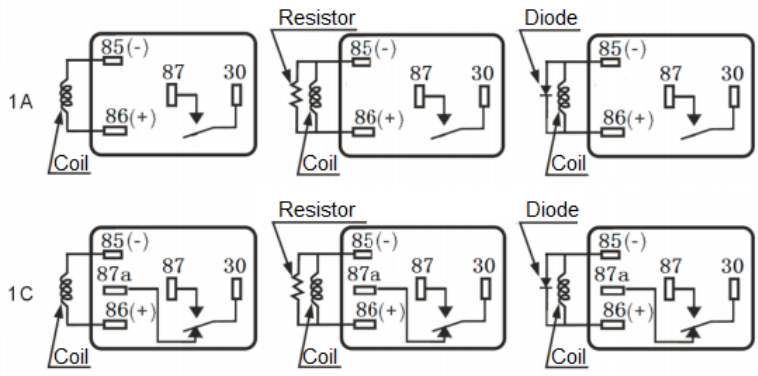
Outline Dimensions



Mounting (Bottom views)

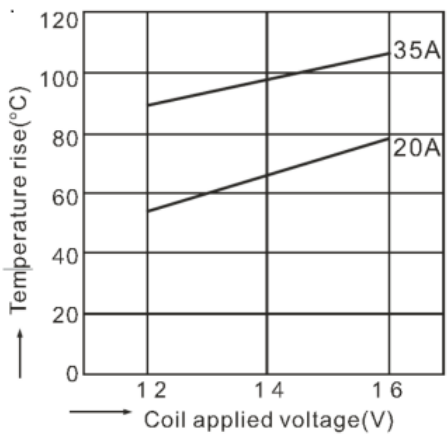


Wiring Diagram (Bottom views)

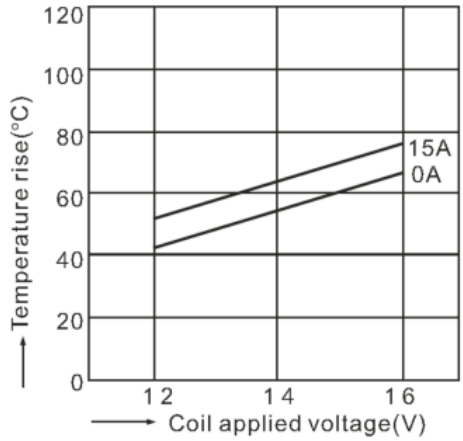


Engineering Data

Coil Temperature Rise (12V type)



Coil Temperature Rise (24V type)



Remark: 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 ±0.4mm.

2) The tolerance without indicating for PCB layout is always ±0.1mm.