

Automotive Relay, SPDT, 30A



DESCRIPTION

Miniature Heavy Duty single pole Automotive Relays. These miniature, heavy duty single pole, plug-in mounting relays are designed for switching control signals within automotive circuits.

DISTINCTIVE FEATURES

- Miniature Size
- Fully Sealed Construction
- SPDT or SPST Contact Configuration
- Contact Form: 1 Form C, 1 Form A
- Parallel Resistor included
- Plug-in (Spade Connector) Mounting

APPLICATIONS

These relays are suitable for use in air compressors and automotive control circuits for heater, fan motor, defogger, blower fan, etc.

30A

1 Form
A

1 Form
C





ELECTRICAL SPECIFICATION

Contact Form	1 Form A, 1 Form C (See Part Number Table)	
Contact Rating	Refer to table 1	
Contact Resistance	Maximum	50mΩ (6VDC 1A)
Insulation Resistance	Minimum	100MΩ 500VDC
Load	Max Switching Voltage	28VDC
	Max Switching Current	35A
	Max.Make Current	NO: 90A NC: 20A
	Max. Switching Power	490W (12VDC) 420W (24VDC)
Dielectric Strength	Between open contacts	550VAC, 1min
	Between coil and contacts	550VAC, 1min

Coil Data

Part number	Nominal Coil Power	Nominal Coil Power (with Resistor)	Nominal Coil Power (High Sensitivity)	Nominal Coil Power (High Sensitivity) (With Resistor)
61-6307	1.8W (24V)	2.0W (24V)	–	–
61-6308	1.5W (12V)	1.7W (12V)	1.1W (12V)	1.3W (12V)

Table 1 (Contact Rating)

		61-6307	61-6308
Type		Coil Voltage 24VDC	Coil Voltage 12VDC
Rating (Resistive Load)	Contact Rating	NO: 20A 28VDC NC: 10A 28VDC	NO: 35A 14VDC NC: 20A 14VDC
	125°C Switching Current	NO: 15A(28VDC) NC: 8A(28VDC)	NO: 20A(14VDC) NC: 10A(14VDC)

Coil Data

Ambient Temperature: 23°C

Part number	Nominal Voltage VDC	Coil Resistance Ω \pm 10%	Parallel Resistance Ω \pm 5%	Equivalent Resistance Ω \pm 10%	Operate Voltage \leq VDC	Release Voltage \geq VDC	Coil Power W
61-6307	24	320	2700	286	14.4	2.4	2.0
61-6308	12	96	680	84.1	7.2	1.2	1.7



GENERAL SPECIFICATION

Series	Automotive Relays, SPDT, 30A, 12VDC and 24VDC
Mounting Type	Plug in
RoHS	Yes



MATERIALS

Contact Material	Ag Alloy
Outer Case Material	PA



ENVIRONMENTAL/OPERATING SPECIFICATION

Life	Electrical Life	100,000 operations
	Mechanical Life	1,000,000 operations
Operate Time	Max. 10ms	
Release Time	Max. 10ms – Max.20ms (with Diode)	
Operating Temperature	-40°C to +125°C	
Humidity	35~95%RH, +40°C	
Shock Resistance	Endurance	1,000m/s ²
	Misoperation	100m/s ²
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude



TERMINALS

Terminal Type	4.8mm push-on
Terminal Dimensions	See drawing on page 4



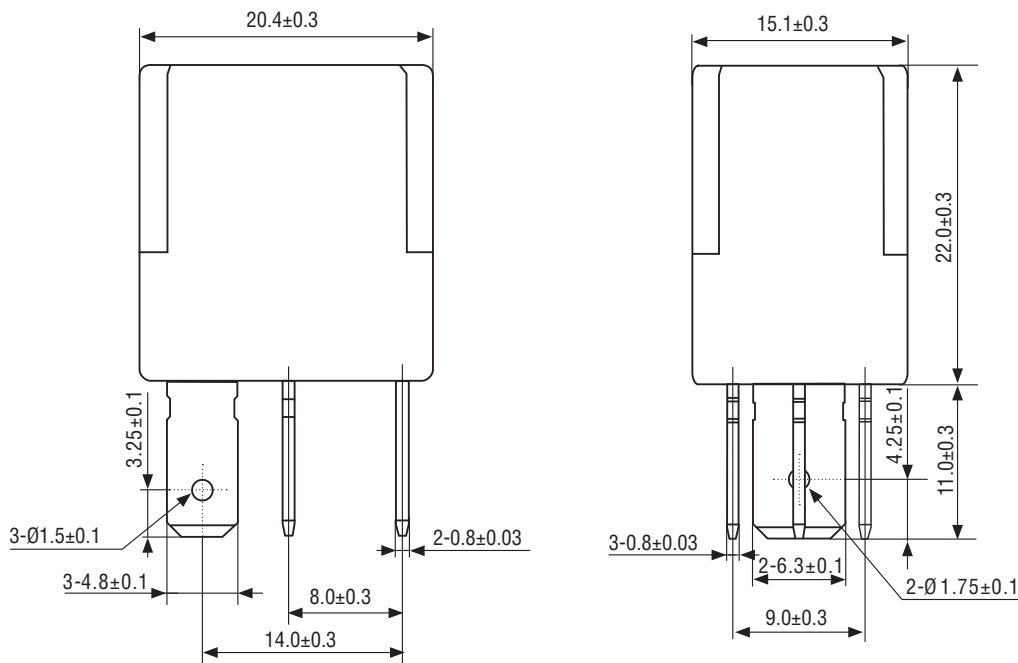
DIMENSIONS/DRAWINGS

Units	mm - unless stated otherwise
Dimensions (Summary)	20.4 × 15.1 × 22.0
Length	20.4
Width	15.1
Height (Excluding pins)	22.0
Weight	18g

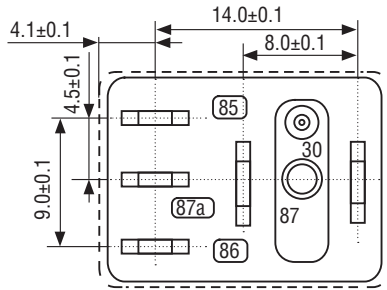


OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

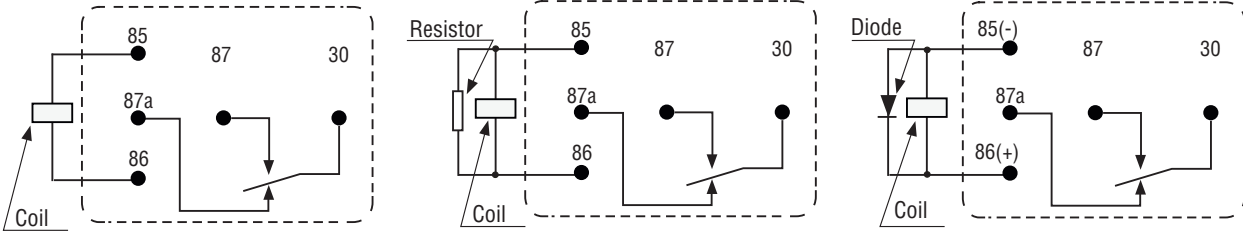
Outline



Mounting Hole Layout (Bottom View)



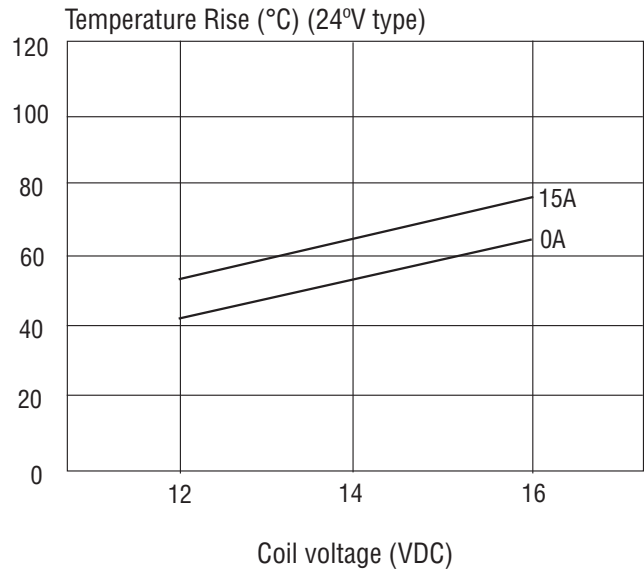
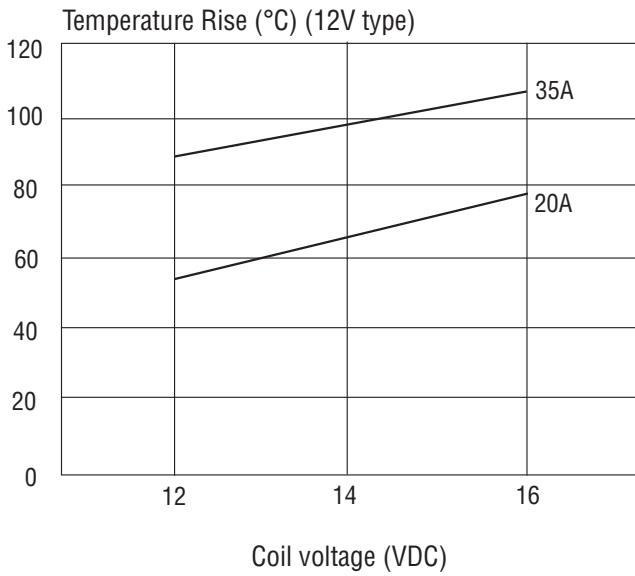
Wiring Diagram (Bottom View)



Remark: Form A: Without 87a terminal
Form C: With all terminals

REFERENCE DATA

Coil Temperature Rise





OPTIONS (MOQ may apply)

Coil Voltage	12 & 24V versions with a standard or high sensitivity coil
Contact Form	1 Form A (SPST-NO) & 1 Form C (SPDT) versions are available

Available with resistor or diode.



PART NUMBER TABLE

Part number	Nominal Coil Voltage	Contact Form	Enclosure	UNSPSC	EAN	Country of Origin
61-6307	24 VDC	1 Form C	Sealed	39122325	5053556018864	China
61-6308	12 VDC	1 Form C	Sealed	39122325	5053556018871	China

For further information on pricing, delivery, and long-term stock agreements please get in touch with your local business development contact, telephone our main office on **01206 838000** or email **Sales@Rapidonline.com**.



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