

## 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)
<b>61-6307</b>	1.8W (24V)	2.0W (24V)	–	–
<b>61-6308</b>	1.5W (12V)	1.7W (12V)	1.1W (12V)	1.3W (12V)

**Table 1 (Contact Rating)**

		<b>61-6307</b>	<b>61-6308</b>
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
<b>61-6307</b>	24	320	2700	286	14.4	2.4	2.0
<b>61-6308</b>	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 <sup>2</sup>
	Misoperation	100m/s <sup>2</sup>
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



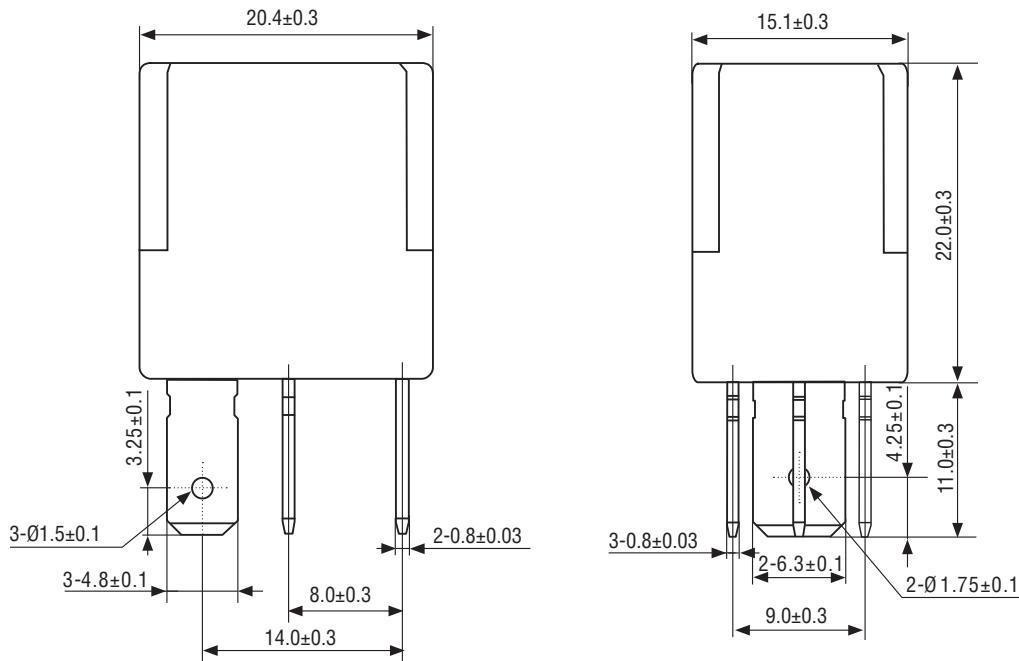
## DIMENSIONS/DRAWINGS

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

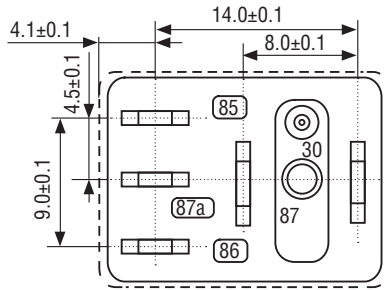


OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

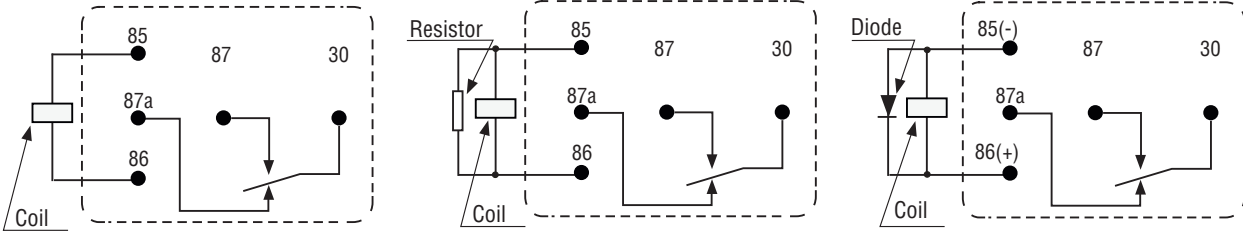
### Outline



### Mounting Hole Layout (Bottom View)



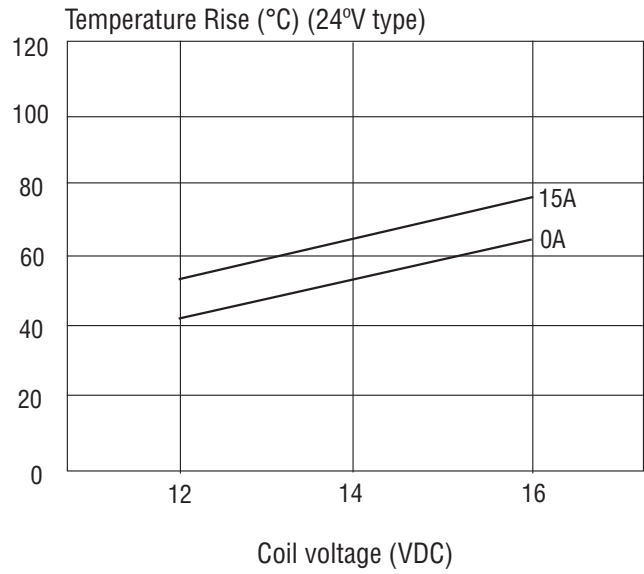
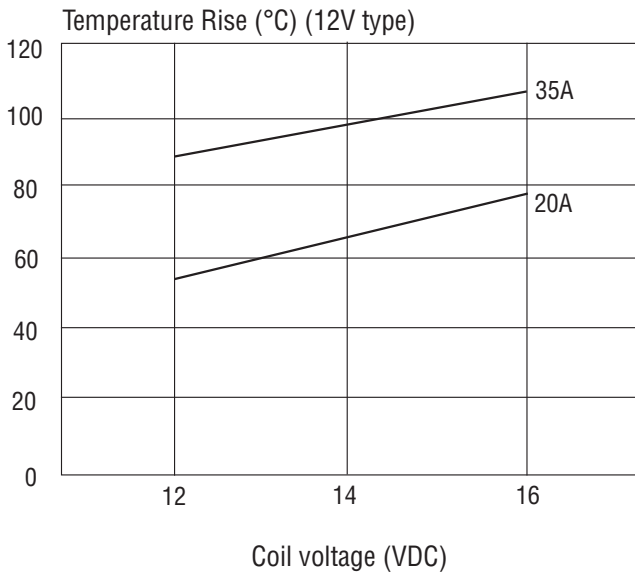
### Wiring Diagram (Bottom View)



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
<b>61-6307</b>	24 VDC	1 Form C	Sealed	39122325	5053556018864	China
<b>61-6308</b>	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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