

General Purpose Power Relay, Non-Latching, 30A



DESCRIPTION

General Purpose Power Relays. These general purpose, single pole, through hole mounting power relays are designed for switching control signals within circuits where higher power device switching is required.

DISTINCTIVE FEATURES

- High Contact Capacity
- Fully Sealed Construction
- Non-Latching
- PCB Mounting
- Contact Form: 1 Form A, 1 Form C, with and without common terminal
- SPST or SPDT contact configuration

APPLICATIONS

These relays are suitable for a wide range of applications including automotive electronics, automation control, audio amplification, industrial and domestic appliances, and HVAC systems.

30A

1 Form
A

1 Form
C

250V
AC

28V
DC





ELECTRICAL SPECIFICATION

Contact Form	A – 1 Form A, C – 1 Form C (See Part Number Table)		
Contact Rating	1 Form A 1 Form C	Blank - A:30A 250VAC/24VDC C:NO:20A 250VAC/24VDC NC:15A 250VAC/24VDC	T - A:40A 250VAC/24VDC C:NO:40A 250VAC/24VDC NC:30A 250VAC/24VDC
Contact Resistance	Maximum		100mΩ (6VDC 1A)
Insulation Resistance	Minimum		1000MΩ 500VDC
Load	Maximum Switching Voltage		250VAC/28VDC
	Maximum Switching Current		40A(T) 30A
	Maximum Switching Power		7,500VA,560W
	Minimum Switching Load		5VDC,100mA
Dielectric Strength	Between open contacts		1,500VAC,1min
	Between coil and contacts		2,500VAC,1min

Note: T indicates high power version.

Coil Data

Ambient Temperature: 23°C

Part number	Nominal Voltage VDC	Coil Resistance Ω+/-10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
61-6291	12	160	8.4	1.2	900
61-6268	24	640	16.8	2.4	900



GENERAL SPECIFICATION

Series	Power Relays
Mounting Type	PCB mounting
RoHS	Yes



MATERIALS

Contact Material	Ag Alloy
Outer Case Material	PBT Plastic sealed



CERTIFICATION AND STANDARDS

File Number	Contact Form	Power Consumption	Coil Voltage	Contact rating	Remarks
UL E164730	C	0.9W	5-48VDC	NO/NC: 20A/15A 125VAC	Class F insulation Ambient Temperature: 85°C
	A	0.9W	5-48VDC	30A 125VAC	
	CT	0.9W	5-48VDC	NO/NC: 40A/30A 250VAC	Class F insulation Ambient Temperature: 40°C
	AT	0.9W	5-48VDC	40A 250VAC	
	C	0.9W	5-48VDC	B300	Class F insulation Ambient Temperature: 85°C
	A	0.9W	5-48VDC	C300 R300	
CQC08002027615 (GB/T 21711.1-2008)	A	0.9W	5-48VDC	30A 250VAC	Ambient Temperature: 85°C
	C	0.9W	5-48VDC	NO/NC: 20A/15A 250VAC	
VDE 40009646	A	0.9W	5-48VDC	30 250VAC	Ambient Temperature: 70°C
	C	0.9W	5-48VDC	NO: 20A 250VAC NC: 15A 250VAC/24VDC	
TUV 50125641-0001	A	0.9W	5-48VDC	30A 250VAC	Ambient Temperature: 85°C
	C	0.9W	5-48VDC	NO/NC: 20A/15A 250VAC	
TUV 50125641-0002 (EN 60730-1)	A	0.9W	5-48VDC	30(8)A 250VAC	Ambient Temperature: 85°C
	C	0.9W	5-48VDC	NO/NC: 20(4)A/15(3)A 250VAC	

Specifications subject to change without notice.



ENVIRONMENTAL/OPERATING SPECIFICATION

Life	Electrical Life	100,000
	Mechanical Life	10,000,000
Operate Time	Maximum 15ms	
Release Time	Maximum 10ms	
Operating Temperature	-40°C to +85°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	Solder pins
Terminal Dimensions	See drawing on pages 4 to 7



DIMENSIONS/DRAWINGS

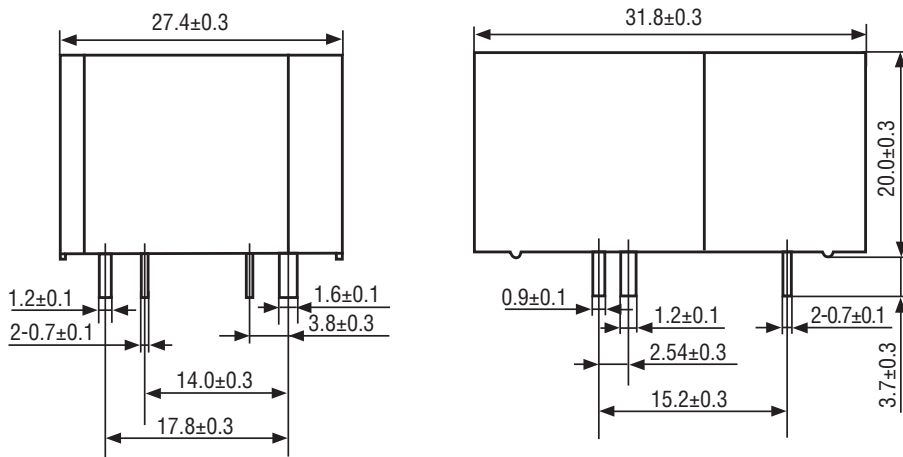
Units	mm - unless stated otherwise
Dimensions (Summary)	31.8 × 27.4 × 20.0
Length	31.8
Width	27.4
Height (Excluding pins)	20.0
Weight	27g (approx.)



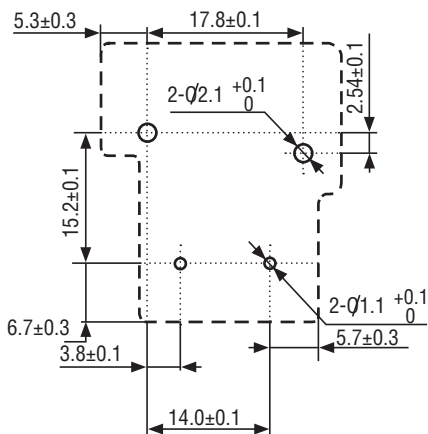
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

1 Form A

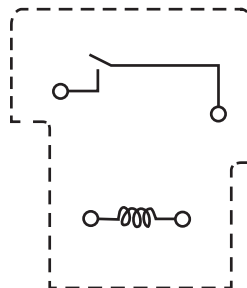
Outline



Mounting Hole Layout
(Bottom View)



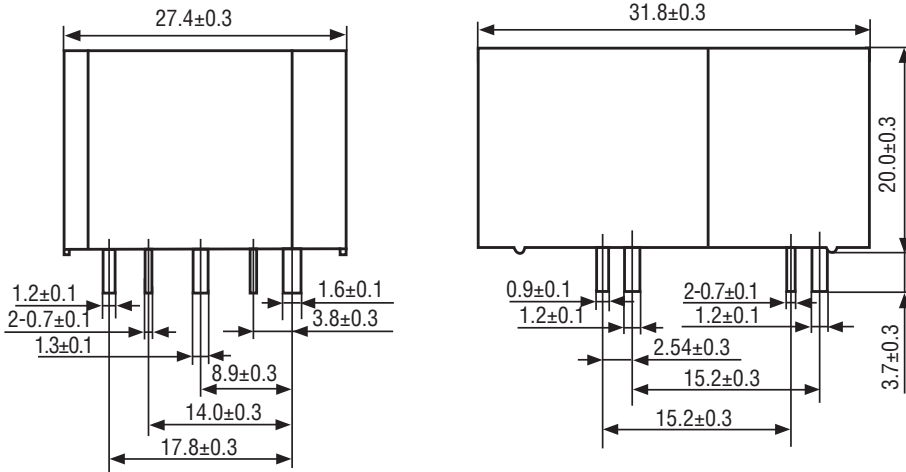
Wiring Diagram
(Bottom View)



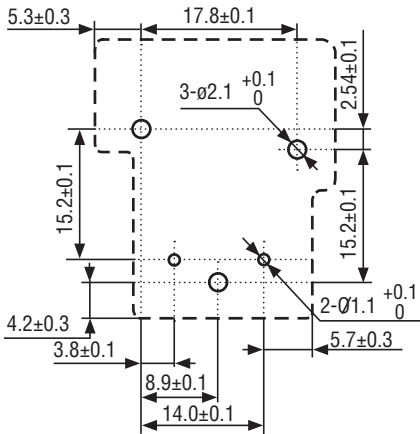
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

1 Form A (Common Terminal)

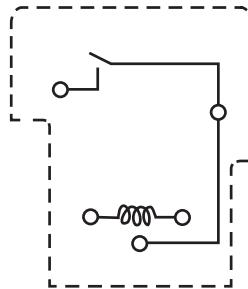
Outline



Mounting Hole Layout
(Bottom View)



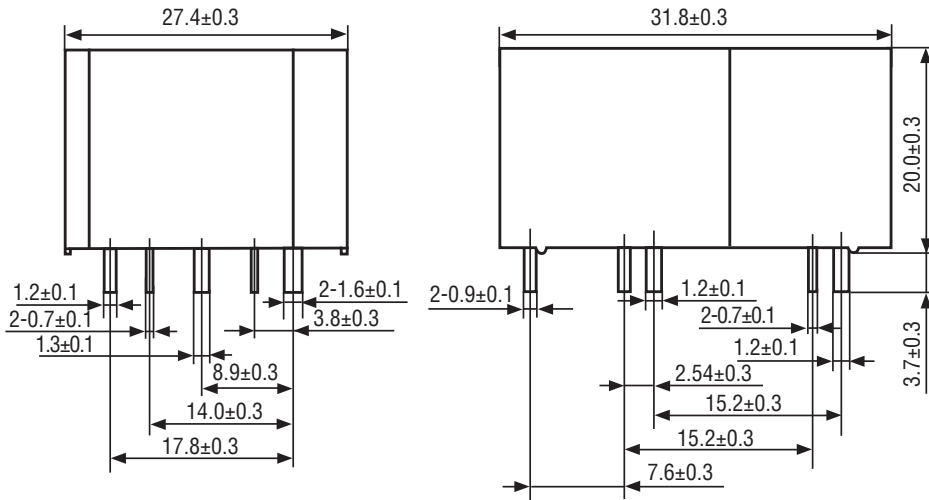
Wiring Diagram
(Bottom View)



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

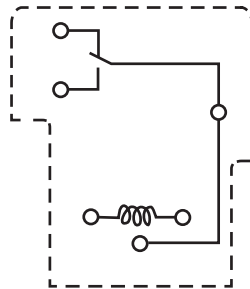
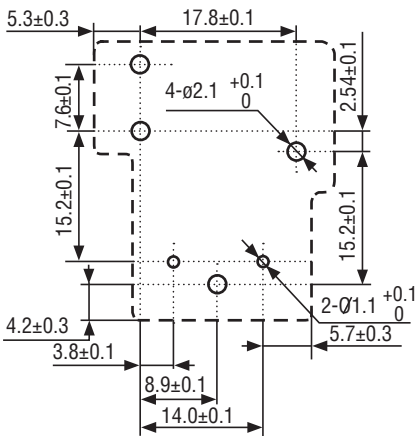
1 Form C (Common Terminal)

Outline



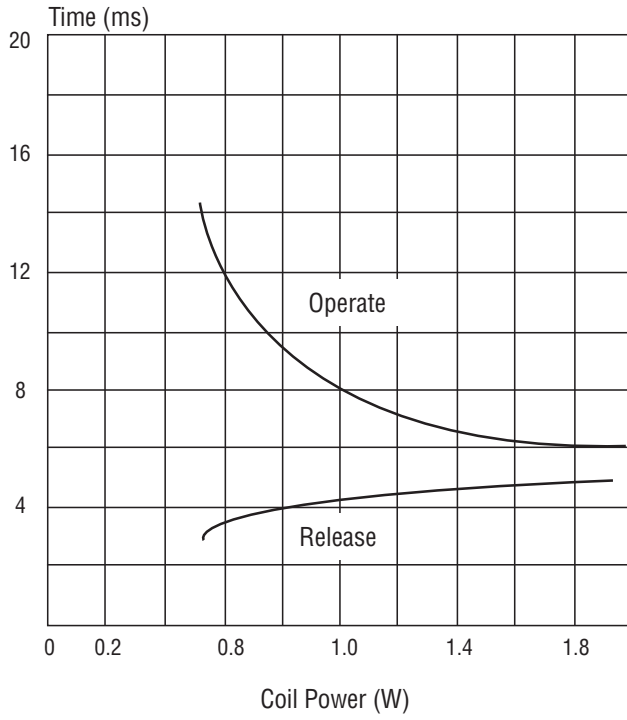
Mounting Hole Layout
(Bottom View)

Wiring Diagram
(Bottom View)

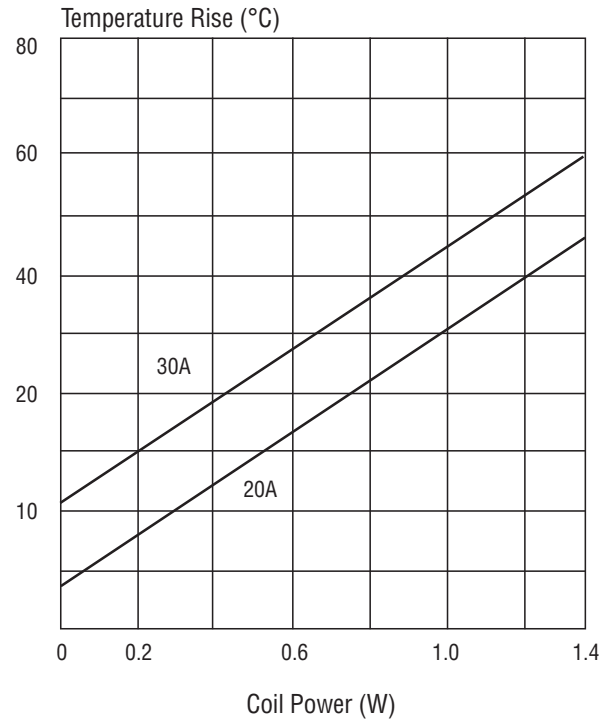


REFERENCE DATA

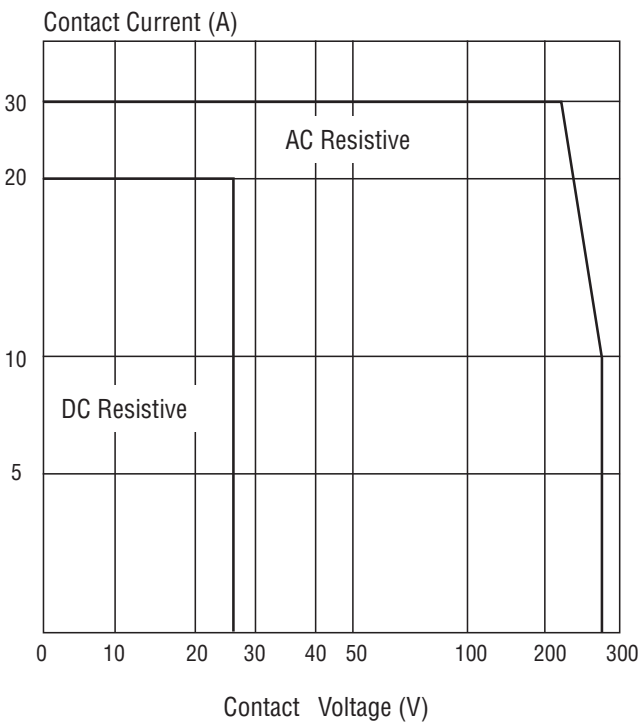
Time Curve



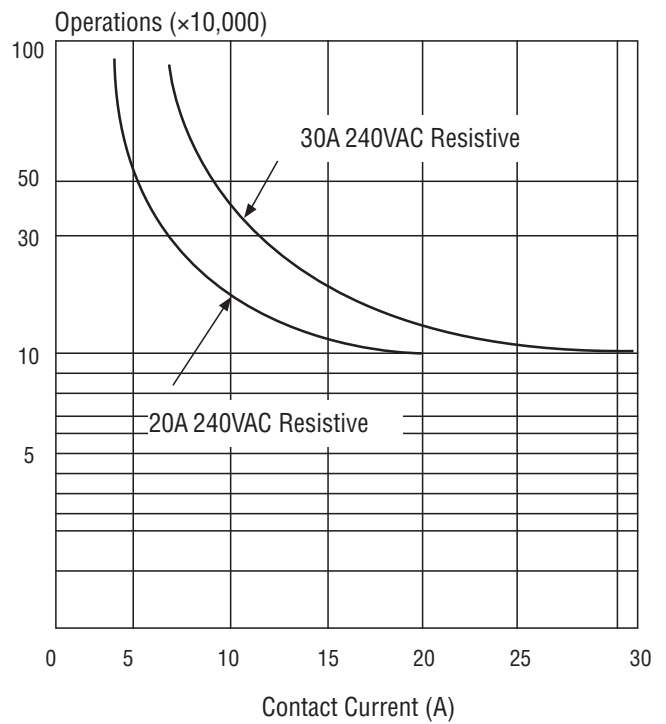
Coil Temperature Rise



Maximum Switching Power



Life Curves





OPTIONS (MOQ may apply)

Coil Voltage	5, 6, 9, 12 & 48V
Contact Current	High power 'T' version
Contact Form	1 Form C
Contact Configuration	Common terminal type
Enclosure	Available with open type enclosure



PART NUMBER TABLE

Part number	Nominal Coil Voltage	Contact Form	Common Terminal	Enclosure	High Power 'T'	UNSPSC	EAN	Country of Origin
61-6291	12VDC	1 Form A	No	Sealed	No	39122325	5053556018703	China
61-6268	24VDC	1 Form A	No	Sealed	No	39122325	5053556018888	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**.



Tried & trusted technology

Important Notice: This data sheet and its contents (the "Information") belong to Rapid Electronics Limited or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but Rapid Electronics Limited assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where Rapid Electronics Limited were aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict Rapid Electronics Limited's liability for death or personal injury resulting from its negligence.