

INDUSTRIAL RELAYS

UL & CUL File #E256619
TUV Files # 50227671, 50262367

FEATURES

- Miniature relay with high switching capability: 30A.
- Contact form: Form A, Form B or 1 Form C.
- Special type of 4000VAC dielectric strength and 6000V surge voltage (1.2/50 μ S) between coil and contact (DJ, DMJ, DBJ not including Open type) available.
- Sealed type and open type available.

TYPICAL APPLICATIONS

Automobile, Heater and Ventilation Equipment, Air Conditioner, Home Appliances

ORDERING INFORMATION

RG **-S** **-1** **12** **D** **M** **J** **1** **-F** **-XX**
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

- | | |
|--|---|
| (1) Type Designation
RG = RG Series | (7) Terminal Type
Nil = Standard
J = Without #6 terminal |
| (2) Protective Construction
Nil = Open type
S = Flux proofed
SH = Sealed type washable | (8) Contact Material
Nil = AgSnO ₂
1 = AgCdO |
| (3) Number of Poles
1 = 1 pole | (9) Insulation System
Nil = Standard
B = Class B ⁽¹⁾
F = Class F ⁽²⁾ |
| (4) Coil Voltage (VDC)
05, 06, 09, 12, 15, 18, 24, 48, 110 | (10) Special Parameter
Nil = Standard type, 10-3A product
Letter or Number = Special Requirement |
| (5) Coil Power
D = 0.90W | |
| (6) Contact Form
Nil = Form C
B = Form B
M = Form A | |

Note 1: Heat resistivity = -40°C to +130°C.
Note 2: Heat resistivity = -40°C to +155°C.

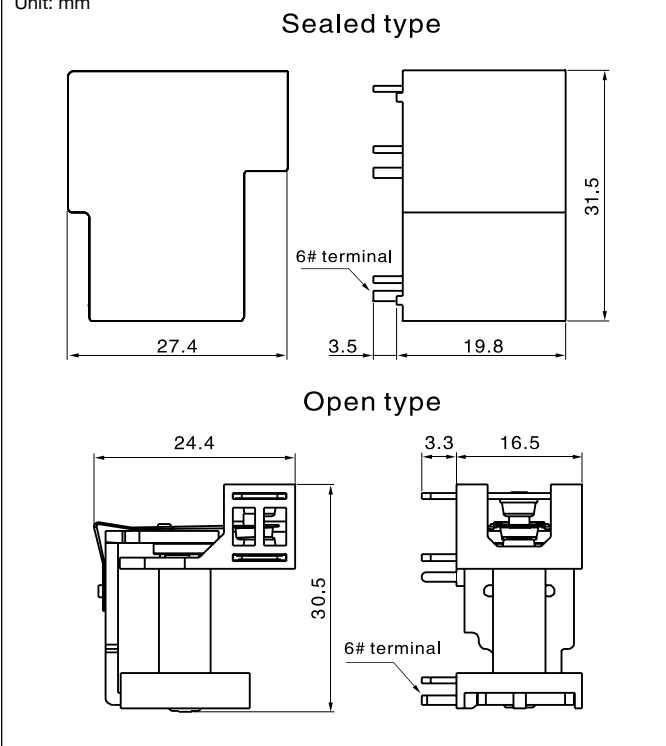
COIL DATA (AT 20°C)

Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance $\pm 10\%$ (Ω)	Max. Allowable Voltage	Pick-up Voltage (Max.)	Drop-Out Voltage (VDC)	Nominal Operating Power
5	180.00	27				
6	150.00	40				
9	100.00	90				
12	75.00	160	110% of Nominal Voltage	75% of Nominal Voltage	5% of Nominal Voltage	Approx. 0.90W
15	60.00	250				
18	50.00	360				
24	37.50	640				
48	18.75	2,560				
110	8.20	13,400				

Unless otherwise specified:
If dimension <1mm tolerance: ± 0.2 mm;
If dimension 1-5 mm tolerance: ± 0.3 mm
If dimension >5mm tolerance: ± 0.4 mm
Note 1. Extended terminal dimension is dimension before soldering.
Note 2. Tolerance of P.C.B. layout is: ± 0.1 mm.

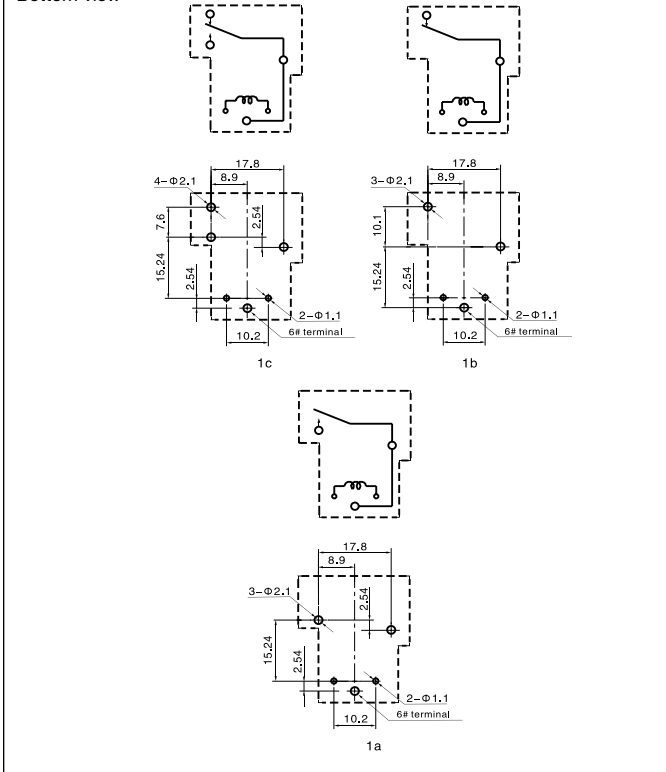
DIMENSIONS

Unit: mm



WIRING DIAGRAM & PCB LAYOUT

Bottom view



CHARACTERISTIC DATA

Contact Material	Silver Alloy	
Initial contact resistance (@ 6VDC 1A)	50m Ω Max.	
Operate time (@ nominal voltage)	15msec. Max.	
Release Time (@ nominal voltage)	10msec. Max.	
Initial insulation resistance	1000M Ω Min. (DC500V)	
Initial dielectric strength	Between open contacts: AC1500V, 50/60Hz 1 Min. Between coil and contact: AC1500V, 50/60Hz 1Min.	
Vibration Resistance	Functional	10 ~ 55Hz @ double amplitude of 1.5mm
	Destructive	10 ~ 55Hz @ double amplitude of 1.5mm
Shock Resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (@10,800 ops./h)	10,000,000
	Electrical (@600 ops./h)	100,000
Ambient Temperature	-40°C to +105°C (no condensation)	
Unit Weight	Open Type: Approximately 20.0g	Sealed Type: Approximately 24.0g

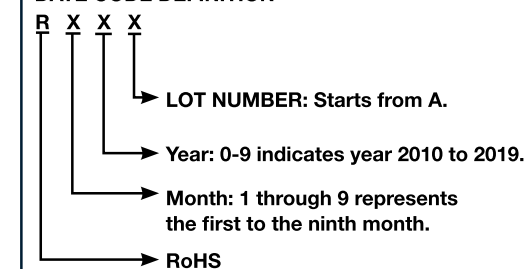
CONTACT CAPACITY

Model	Nominal Switching Capacity (res. load)	Max. Switching Current	Max. Switching Voltage	Max. Switching Power
RG-DM	30A 250VAC	30A	250VAC	7500VA
RG-DB	15A 250VAC	15A	250VAC	3750VA
RG-D	20A/10A 250VAC	20A	250VAC	5000VA

SAFETY APPROVAL RATINGS

UL/CUL	TUV
E256619	R50182354
FORM A 40A 277VAC, Resistive 30A 240VAC, Resistive 15A 240VDC 1-1/2 HP 240VAC 3/4 HP 120VAC TV-8 120VAC 30A 240VAC, General Use Pilot Duty: 470VA, 240VAC Electronic Ballast: 10A 277VAC/120VAC	FORM A 30A 240VAC FORM B 15A 240VAC FORM C 20A/10A 240VAC
FORM C: N.O. 20A 240VAC, Resistive 10A 240VAC, Resistive 15A 240VDC 1-1/2 HP 240VAC 3/4 HP 125VAC TV-8 120VAC 20A 240VAC, General Use Pilot Duty: 470VA, 240VAC Electronic Ballast: 10A 277VAC/120VAC	FORM C: N.C. 10A 240VAC, Resistive 1/2 HP 240VAC 1/4 HP 125VAC TV-3 120VAC 10A 240VAC, General Use Pilot Duty: 275VA, 240VAC Electronic Ballast: 5A 277VAC/120VAC

DATE CODE DEFINITION



CHARACTERISTIC CURVES

