

INDUSTRIAL RELAYS

UL File #E223388



The RG Relay series offers 30A switching capacity. It also offers both PCB terminal and Quick Connect terminal types as well as open and sealed types.

FEATURES

1. Single contact RG series relay offers 30A switching capacity.
2. Up to 30A switching.
3. Nominal power 930mW.
4. Operating power 520mW.
5. Both PCB Terminal & Quick Connect Terminal.
6. Open type without dust cover or sealed cover types available.

ORDERING INFORMATION

RG 1A - 12 D C S F
(1) (2) (3) (4) (5) (6) (7)

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| <p>(1) Basic Designation
RG = RG Series</p> <p>(2) Contact Arrangement
1A = 1 Form A (SPST-NO)
1B = 1 Form B (SPST-NC)
1C = 1 Form C (SPDT)</p> <p>(3) Coil Voltage
DC = 5~48V
AC = 6~277V</p> <p>(4) Coil Type
DC = DC
A = AC</p> | <p>(5) Terminals
Nil = No Common
C = Common Terminal
A = Quick Connect</p> <p>(6) Enclosure
Nil = Open Type
(Without Dust Cover)
S = Sealed</p> <p>(7) Insulation
Nil = Class B
F = Class F</p> |
|--|--|

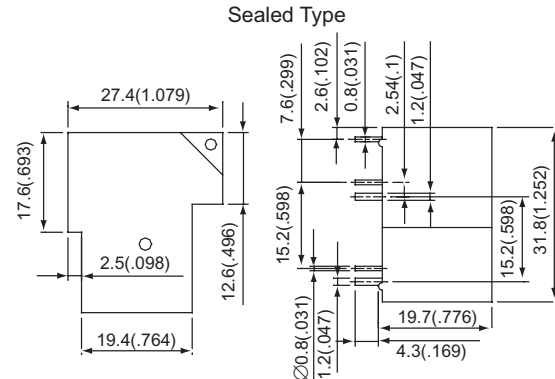
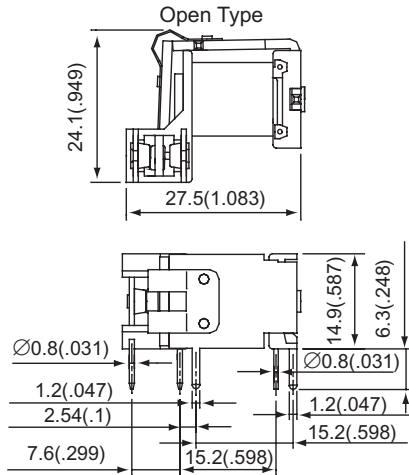
COIL RATINGS (AT 20°C)

Coil Type	Coil Nominal Voltage (V)	Coil Resistance ($\Omega \pm 10\%$)	Pick-Up Voltage (V)	Drop-Out Voltage (V)	Nominal Current (mA)
DC Standard Coils	5	27	3.75	0.5	185
	6	40	4.5	0.6	150
	9	97	6.75	0.9	93
	12	155	9	1.2	77
	18	380	13.5	1.8	47
	24	660	18	2.4	36
	36	1440	27	3.6	25
	48	2560	36	4.8	19
AC	6	10	5.1	0.6	-
	12	43	10.2	1.2	-
	24	160	20.4	2.4	-
	110	3160	93.5	11	-
	220	13490	187	22	-
	277	19900	235.4	27.7	-

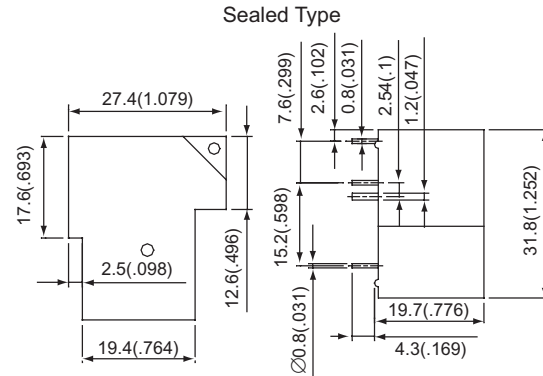
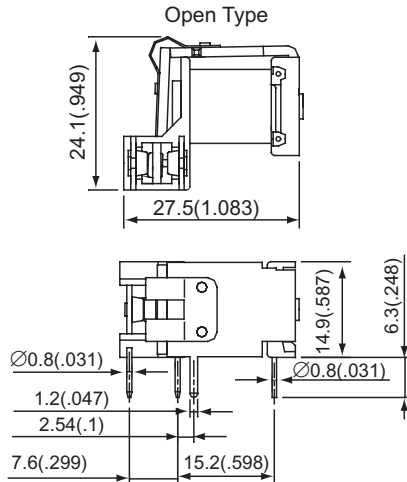
* Max continuous Voltage at 20°C: 130% of Coil Nominal Voltage.

DIMENSIONS

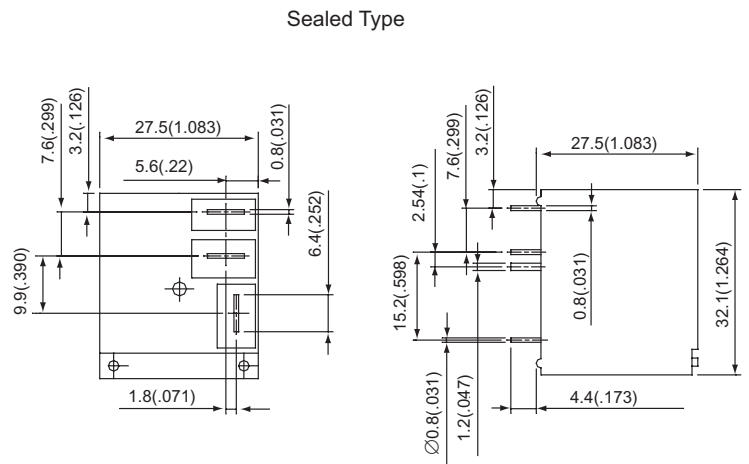
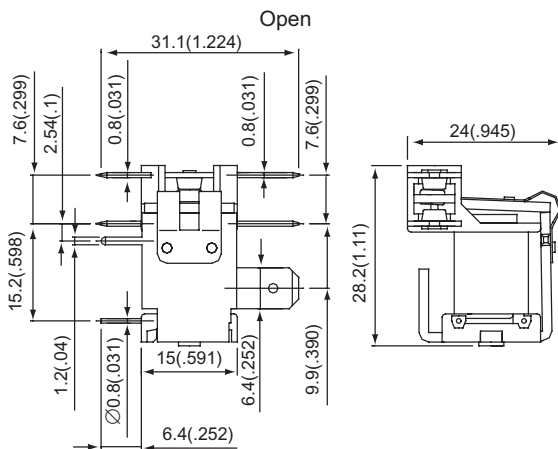
Common Terminals (C)



No Common (Nil)



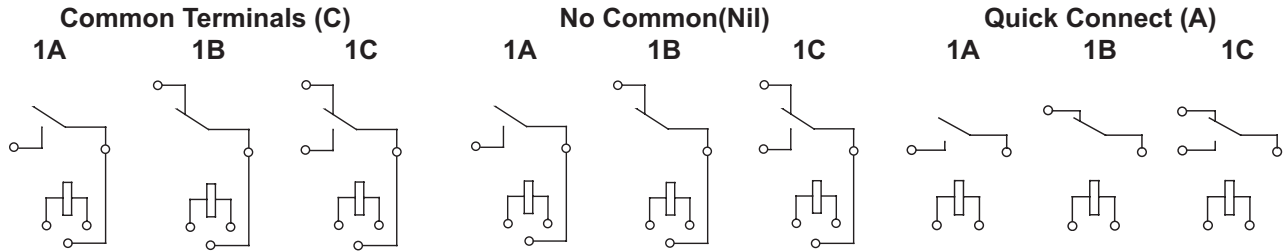
Quick Connect (A)



Unit: mm(inch)

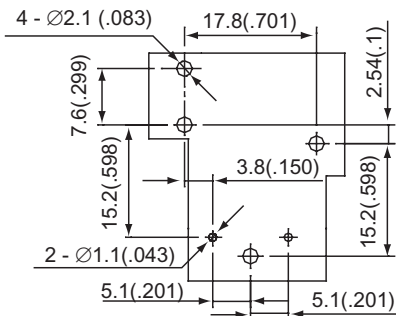
Tolerance: $\pm 0.2(.008)$

SCHEMATICS

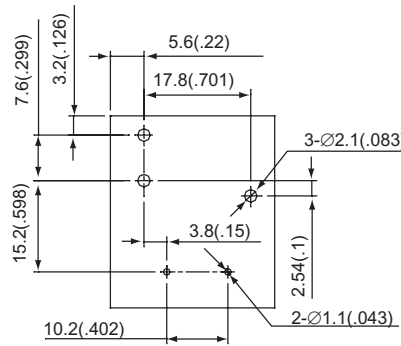


PCB BOARD LAYOUT (bottom view)

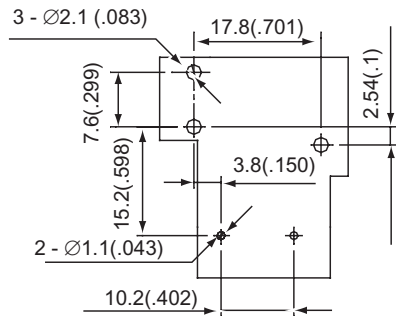
Common Terminals(C)



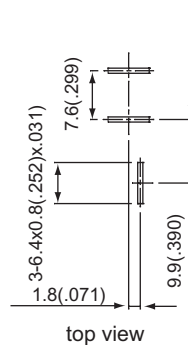
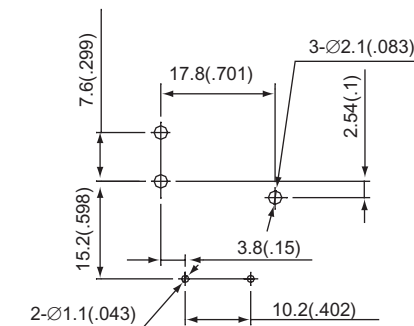
Quick Connect- Sealed Type



No Common (Nil)



Quick Connect- Open Type



Unit: mm(inch)

CONTACT RATINGS

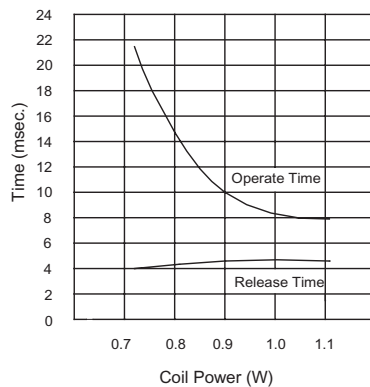
Contact Arrangement	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)
Max. Switching Power	7500VA 600W	5000VA 300W	7500VA 600W
Max. Switching Voltage	277VAC 30VDC		
Max. Switching Current	30A	20A	30A
Contact Resistance	≤50mΩ		
Resistive Load	30A / 250VAC 20A / 277VAC 20A / 30VDC	20A / 240VAC 15A / 277VAC 10A / 30VDC	NO: 30A / 240VAC 20A / 277VAC 20A / 30VDC
			NC: 20A / 240VAC 15A / 277VAC 10A / 30VDC
Contact Material	silver alloy	silver alloy	silver alloy

CHARACTERISTICS

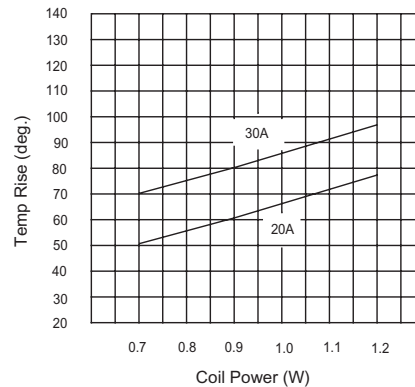
Electrical Life	1 x 10 ⁵
Mechanical Life	1 x 10 ⁷
Initial Insulation Resistance	Min. 500MΩ 500VDC
Contact Resistance (Initial)	≤50mΩ
Operate Time	≤15ms
Release Time	≤15ms
Initial Dielectric Strength	50/60Hz 2500VAC 1 min. (between all conductors) (For No Common Terminal (Nil)) 50/60Hz 2500VAC 1 min. (between all conductors) (For Common Terminals (C)) 50/60Hz 1500VAC 1 min. (between open contact)
Vibration Resistance	Malfunction: 10 to 55Hz at Double Amplitude of 1.5mm Destructive: 10 to 55Hz at Double Amplitude of 1.5mm
Shock Resistance	Malfunction: 10G(11ms) Destructive: 100G(6ms)
Ambient Temperature	-55°C ~ +85°C
Relative Humidity	85% at 40°C
Unit Weight	Quick Connect: Approx. 30g Open and Sealed Types: Approx. 25g

REFERENCE DATA

Timing



Coil Temperature Rise



Life Curves

