



INDUSTRIAL RELAYS

UL & CUL File# E256619

FEATURES

1. 15A high switching capability.
2. Sealed type available.
3. Low coil power consumption.
4. TV rating certified.

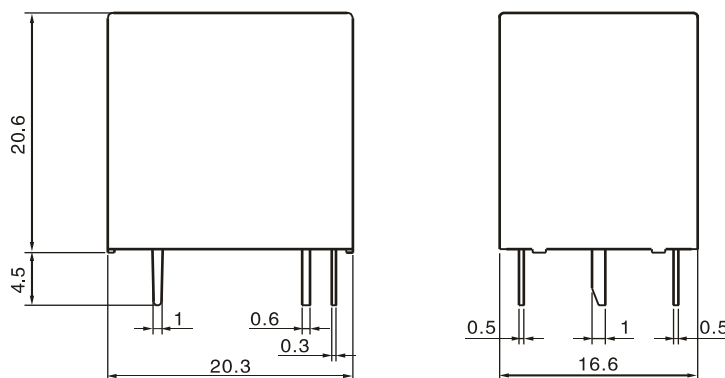
ORDERING INFORMATION

RB 1A - 12 H S F
(1) (2) (3) (4) (5) (6)

- | | |
|--|--|
| (1) Basic Designation
RB = RB Series | (4) Coil Sensitivity
Nil = 0.45W
H = 0.36W |
| (2) Coil Arrangement
1A = 1 Form A
1B = 1 Form B
1C = 1 Form C | (5) Enclosure
Nil = Unsealed type
S = Sealed type |
| (3) Coil Voltage
3~48V | (6) Insulation System
Nil = Standard
F = Class F |

DIMENSIONS

Unit: mm

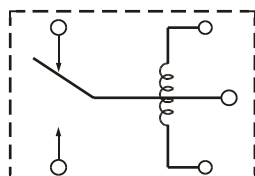


Unless otherwise specified:
If dimension < 1mm, tolerance: $\pm 0.2\text{mm}$;
If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$;
If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$.

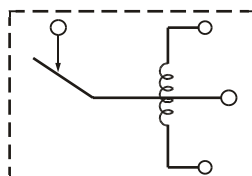
Note: 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of P.C.B. layout: $\pm 0.1\text{mm}$.

SCHEMATICS

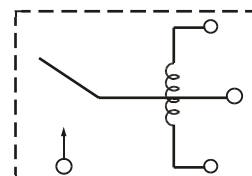
Bottom view
Unit: mm



1C



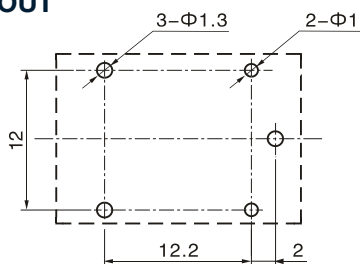
1B



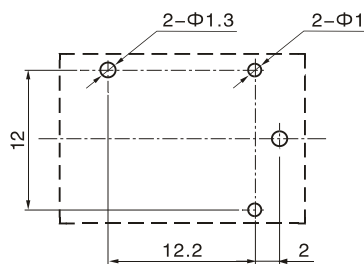
1A

PCB LAYOUT

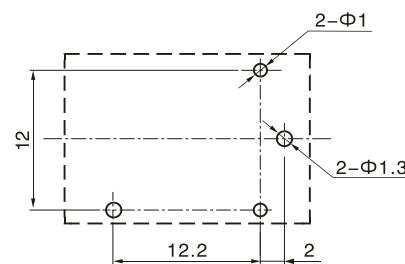
Bottom view
Unit: mm



1C



1B



1A





COIL RATINGS (AT 20°C)

Type	Coil Nominal Voltage (VDC)	Nominal Current (mA) $\pm 10\%$	Coil Resistance $\Omega(\pm 10\%)$	Max. Allowable Voltage (VDC)	Pick-Up Voltage (VDC) max.	Drop-out Voltage (Min.)	Nominal Operating Power (W)
High Sensitive	3	120.00	25	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	Approx. 0.36W
	5	71.42	70				
	6	60.00	100				
	9	40.00	225				
	12	30.00	400				
	18	20.00	900				
	24	15.00	1600				
Standard	48	7.50	6400	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	Approx. 0.45W
	3	150.00	20				
	5	89.28	56				
	6	75.00	80				
	9	50.00	180				
	12	37.50	320				
	18	25.00	720				
	24	18.75	1280				
	48	9.38	5120				

CONTACT RATINGS

Contact Arrangement	1A, 1B, 1C
Max. Switching Power	2500VA
Max. Switching Voltage	250VAC
Max. Switching Current	15A
Nominal switching capacity (res. load)	10A 250VAC
Contact Resistance (By voltage drop 1A 6VDC)	50m Ω max.
Contact Material	silver alloy

CHARACTERISTICS

Initial Contact Resistance (at 6VDC 1A)	50m Ω Max.
Operate Time	15 ms max.
Release Time	5 ms max.
Initial Insulation Resistance	100m Ω Min. (DC500V)
Initial Dielectric Strength	Between open contacts: AC1000V, 50/60Hz 1Min.
	Between coil and contact: AC1500V, 50/60Hz 1Min.
Vibration Resistance	Functional: 10 to 55Hz at double Amplitude of 1.5mm
	Destruction: 10 to 55Hz at double Amplitude of 1.5mm
Shock Resistance	Functional: Min. 10G Min.
	Destruction: Min. 100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h): 10,000,000
	Electrical (at 1,800 ops./h): 100,000
Ambient Temperature	-40°C ~ +105°C (no condensation)
Ambient Temperature (F Class)	-40°C ~ +105°C
Unit Weight	Approx. 12.5g

