INDUSTRIAL RELAYS

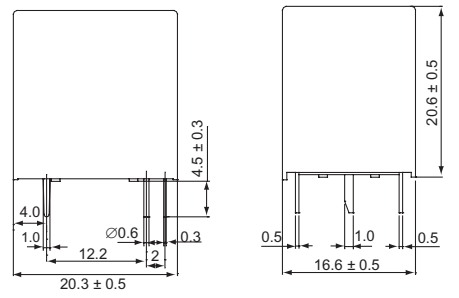
The RB series has a high contact capacity of 15A while still being a miniature size with a universal terminal footprint. Sealed and unsealed types available.

UL & CUL File #223388

FEATURES

1. High contact capacity: 15A
2. Ultra-miniature size with universal terminal footprint.
3. Low coil power consumption.
4. Sealed or unsealed types available.

DIMENSIONS



Unit: mm

ORDERING INFORMATION

RB	1C	-	12	H	S	P
(1)	(2)		(3)	(4)	(5)	(6)

(1) Basic Designation
RB = RB Series

(2) Contact Arrangement
1A = 1 Form A (SPST-NO)
1B = 1 Form B (SPST-NC)
1C = 1 Form C (SPDT)

(3) Coil Voltage
3~48V

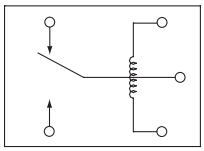
(4) Coil Sensitivity
Nil = 0.45W
H = 0.36W

(5) Enclosure
Nil = Unsealed type
S = Sealed type

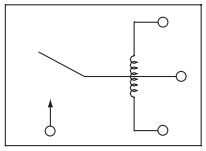
(6) RoHS Compliance
P = RoHS
Nil = Standard

SCHEMATICS (bottom view)

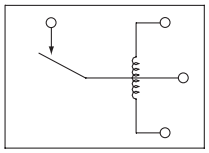
1C



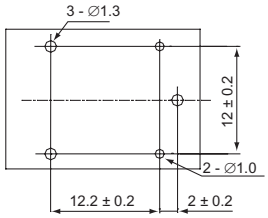
1A

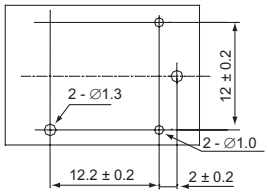


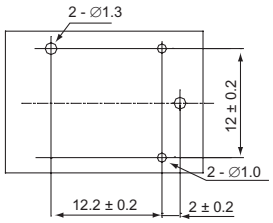
1B



PCB LAYOUT (bottom view)







Unit: mm

COIL RATINGS (AT 20°C)

Nominal Operating Power/ Coil Sensitivity	Coil Nominal Voltage (VDC)	Coil Resistance Ω(± 10%)	Pick-up Voltage (VDC) max.	Drop-Out Voltage (VDC) min.	Max. Allowable Voltage
Coil Sensitivity **Nil** = 0.45W	3	20	2.25	0.15	130% of nominal voltage
	5	55	3.75	0.25	
	6	80	4.50	0.30	
	9	180	6.75	0.45	
	12	320	9.00	0.60	
	18	720	13.5	0.90	
	24	1150	18.0	1.20	
	48	5120	36.0	2.40	
Coil Sensitivity **H** = 0.36W	3	25	2.25	0.15	130% of nominal voltage
	5	69	3.75	0.25	
	6	100	4.50	0.30	
	9	225	6.75	0.45	
	12	400	9.00	0.60	
	18	900	13.5	0.90	
	24	1600	18.0	1.20	
	48	6400	36.0	2.40	

CONTACT RATINGS

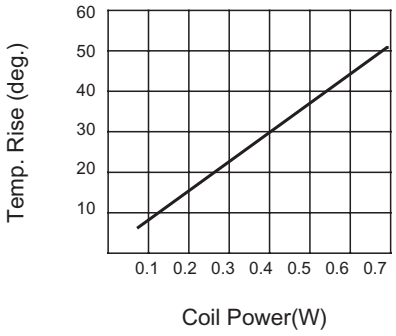
Contact Arrangement	1C; 1A ; 1B
Max. Switching Power	1800VA 240W
Max. Switching Voltage	240VAC 110VDC
Max. Switching Current	15A
Contact Resistance (By voltage drop 6V 1A)	50mΩ max.
UL/ C-UL Rating **Resistive Load (cos ϕ = 1)** **Inductive Load (cos ϕ = 0.75 ~ 0.8)**	15A / 120VAC 10A / 240VAC 4A / 120VAC 7A / 250VAC 10A / 24VDC
Contact Material	silver alloy

CHARACTERISTICS

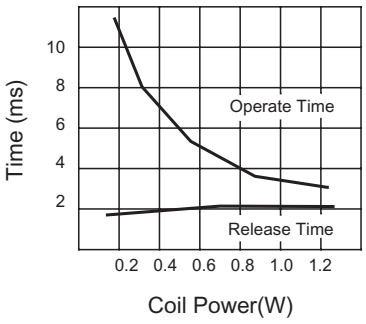
Electrical Life (at 20cpm)	1 x 10^5
Mechanical Life (at 180cpm)	1 x 10^7
Initial Insulation Resistance	Min. 100MΩ 500VDC
Operate Time	15ms max.
Release Time	5ms max.
Initial Breakdown Voltage	50/60Hz 750VAC 1 min. (between open contacts) 50/60Hz 1500VAC 1 min. (between coil & contact)
Vibration Resistance	Functional: 10 to 55Hz at double Amplitude of 1.5mm Destructive: 10 to 55Hz at double Amplitude of 1.5mm
Shock Resistance	Functional: Min. 10G Destructive: Min. 100G
Ambient Temperature	-40°C ~ +85°C
Temperature Rise (max.)	35°
Operating Humidity	45 to 85% RH
Unit Weight	Approx. 12g

REFERENCE DATA

Coil Temperature Rise



Operate Time/ Release Time



Life Expectancy