

RMI/RMIH Power Relay



RMI

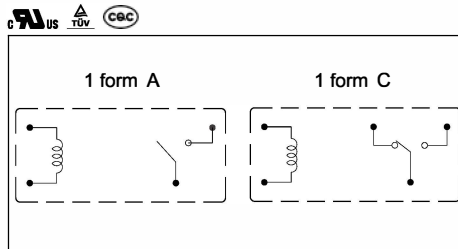
1 Form A/C, 10 A



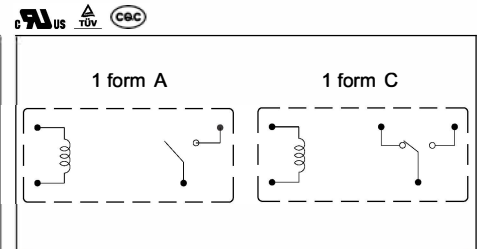
RMIH

1 Form A/C, 16 A

- 1 Form A/C
- Rated current: 10A(RMI); 16A(RMIH)
- Dielectric strength between coil & contact: 5,000 V AC
- Class F Coil
- Flux-proof Type
- Meets IEC 60079-15 Anti-explosion Standard
- High capacity, high endurance (RMIH)



Technical parameters



Technical parameters

Coil data			
Coil input voltage		5/9/12/18/24 V DC	5/9/12/18/24 V DC
Coil power		D Type: 720 mW, L Type: 540 mW	D Type: 720 mW, L Type: 540 mW
Response voltage		< 75% (Room temp.)	< 75% (Room temp.)
Drop out voltage		> 5% (Room temp.)	> 5% (Room temp.)
Operation time / Release time		Less than 20 ms / less than 10 ms	Less than 20 ms / less than 10 ms
Contact data			
Contact numbers		1 Form A/C	1 Form A/C
Contact material		Ag alloy	Ag alloy
Max. switching voltage		277 V AC	277 V AC
Max. switching power		A Type: 2,770 VA, C Type: N.O. 2,770 VA, N.C. 1,385 VA	A Type: 4,432 VA, C Type: N.O. 4,432 VA, N.C. 2,216 VA
Contact ratings		A Type: 10 A 277 V AC, 1/4HP 250 V AC, C Type: N.O. 10 A 277 V AC, N.C. 5 A 277 V AC	A Type: 16 A 277 V AC, 1/3HP 250 V AC, C Type: N.O. 16 A 277 V AC, N.C. 8 A 277 V AC
Contact resistance		Max. 100 mΩ (1 A / 6 V DC)	Max. 100 mΩ (1 A / 6 V DC)
Mechanical service life		1×10 ⁶ times	1×10 ⁶ times
Electrical Service life	AC1	1×10 ⁵ times	1×10 ⁵ times
General data			
Rated withstand impulse voltage	Coil / Contact	5 kV AC / 1 min	5 kV AC / 1 min
	Between contacts	1 kV AC / 1 min	1 kV AC / 1 min
Surge voltage		10 kV AC (1.2/50 μs)	10 kV AC (1.2/50 μs)
Insulation Resistance		1,000 MΩ (500 V DC)	1,000 MΩ (500 V DC)
Vibration		Malfunction 10~55 Hz (Amplitude 1.5 mm) Endurance 10~55 Hz (Amplitude 1.5 mm)	Malfunction 10~55 Hz (Amplitude 1.5 mm) Endurance 10~55 Hz (Amplitude 1.5 mm)
Shock		Malfunction 98 m/s ² , Endurance 980 m/s ²	Malfunction 98 m/s ² , Endurance 980 m/s ²
Ambient temperature (Operation)		-40~105 °C(No condensation)	-40~105 °C(No condensation)
Operating humidity		20~85%	20~85%
Dimension LxWxH (mm)		29.2×12.8×20.6	29.2×12.8×20.6
Enclosure type		Flux-proof, sealed	Flux-proof, sealed
Mounting		PCB	PCB
Weight (g)		14	14
Compliance certification number		cULus:E345228, TUV:R50242245, CQC:CQC11002066332	cULus:E345228, TUV:R50242245, CQC:CQC11002066332

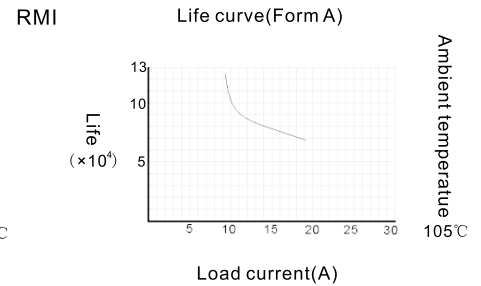
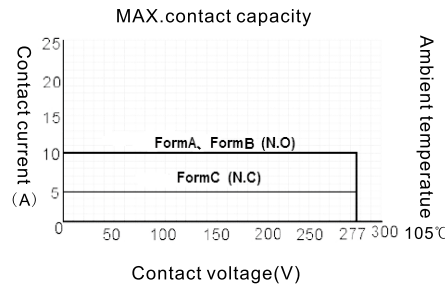
Type designation

Model designation	Construction type	Number of poles	Coil voltage	Coil power	Contact configuration	Contact material	Insulation class	Enclosure type	Special request
RMI	-SS	-1	12	D	M	*	F	-S	XXX
RMI RMIH	SS: Flux-proof	1: 1 pole	05: 5 V 09: 9 V 12: 12 V 18: 18 V 24: 24 V	D: 720 mW L: 540 mW	M: 1 Form A Blank: 1 Form C	Blank: AgSnO ₂	Blank: class A F: class F	Blank: flux-proof S: sealed	335: Stands for product in accordance with IEC 60335-1 (GWT)

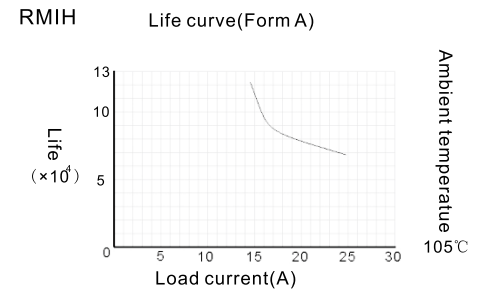
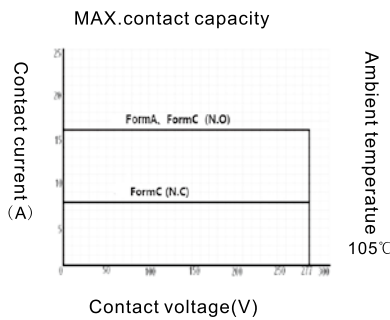
RMI SSA approval rating			
cULus			
(1formA)	10A/277VAC (Resistive)	105 °C	100,000ops
	1/4HP250VAC (HP)	105 °C	30,000ops
(1formC)	N.O.10A/277VAC (Resistive)	105 °C	100,000ops
	N.C.5A/277VAC (Resistive)	105 °C	100,000ops
TUV			
(1formA)	10A/277VAC	105 °C	100,000ops
(1formC)	N.O.10A/277VAC	105 °C	100,000ops
	N.C.5A/277VAC	105 °C	100,000ops
	N.O.5A/277VAC	105 °C	50,000ops
	N.C.5A/277VAC	105 °C	50,000ops
CQC			
(1formA)	10A/277VAC	105 °C	100,000ops
	10A/250VAC	105 °C	100,000ops
(1formC)	N.O.10A/277VAC	105 °C	100,000ops
	N.C.5A/277VAC	105 °C	100,000ops
	N.O.10A/250VAC	105 °C	100,000ops
	N.C.5A/250VAC	105 °C	100,000ops

Coil rating								
Rated voltage (VDC)	Rated current (mA)		Coil resistance ($\Omega \pm 10\%$)		Operating power (mW)		Operating voltage (VDC)	Release voltage (VDC)
	L type	D type	L type	D type	L type	D type		
5	108	138.9	46.3	36	540	720	≤ 3.75	≥ 0.25
9	60	78.3	150	115	540	720	≤ 6.75	≥ 0.45
12	44.9	60	267	200	540	720	≤ 9.00	≥ 0.60
18	30	40	600	450	540	720	≤ 13.50	≥ 0.90
24	22.5	29.3	1,065	820	540	720	≤ 18.00	≥ 1.20

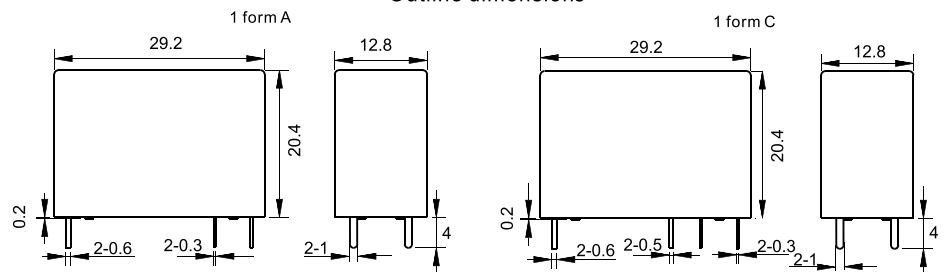
MAX. allowable coil voltage: 130% of rated coil voltage (Room temperature ~ 85°C)



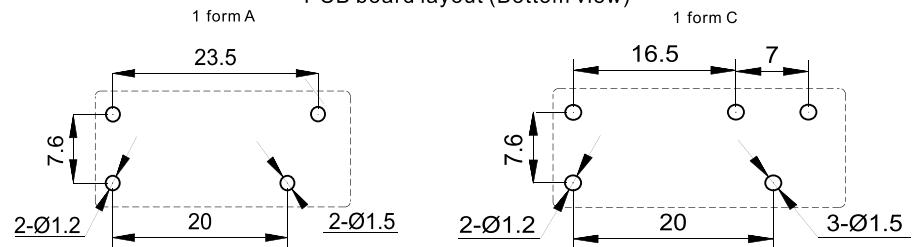
RMIH SSA approval rating			
cULus			
(1formA)	16A/277VAC (Resistive)	105 °C	100,000ops
	1/3HP250VAC (HP)	105 °C	30,000ops
(1formC)	N.O.16A/277VAC (Resistive)	105 °C	100,000ops
	N.C.8A/277VAC (Resistive)	105 °C	100,000ops
TUV			
(1formA)	16A/277VAC	105 °C	100,000ops
(1formC)	N.O.16A/277VAC	105 °C	100,000ops
	N.C.8A/277VAC	105 °C	100,000ops
CQC			
(1formA)	16A/277VAC	105 °C	100,000ops
	16A/250VAC	105 °C	100,000ops
(1formC)	N.O.16A/277VAC	105 °C	100,000ops
	N.C.8A/277VAC	105 °C	100,000ops
	N.O.16A/250VAC	105 °C	100,000ops
	N.C.8A/250VAC	105 °C	100,000ops



Outline dimensions



PCB board layout (Bottom view)



Tolerance	
Outline dimension	
<1mm	$\pm 0.2\text{mm}$
1~5mm	$\pm 0.3\text{mm}$
>5mm	$\pm 0.4\text{mm}$
PCB board layout	
Pitch-row	$\pm 0.1\text{mm}$
Aperture	$+0.1\text{mm}$