

Selection manual of industrial control relay

RUB General Purpose Relay

- 2 poles, 3 poles contact load 10A
- With non-polarity LED integrated in relay
- With lockable test button and inspection window
- Identification of coils through test button color (AC red/DC blue)
- Conformity with RoHS Directive



LED

Visible LED indicates the working status of the relay at any time, AC red, DC green

Metal clip

The relay is firmly attached to the socket by Metal clip.

Test button

On-site test is available with test button.

BMD module



Silver alloy pins

High-quality silver alloy pins, strong contact, instantaneous conductivity and stable performance.



Silver alloy contacts

It can carry more current, with stronger conductivity and more sensitive response, and greatly extend electrical life, and works more stable.





Relay

+



Socket

=



Relay module

RUB □ □ □ □

Other options

- LT: LED + test button
- LTD: LED + test button + diode
RUB2C1 (2-,7+); RUB2C2 (1-,8+); RUB3C1 (2-,10+);
RUB3C5 (2-10+); RUB3C2 (1-,11+)
- LTD1: LED + Test button + diode
RUB2C1 (2+,7-); RUB2C2 (1+,8-); RUB3C1 (2+,10-);
RUB3C5 (2+,10-); RUB3C2 (1+,11-)

Coil voltage code

Code	006	012	024	048	110	220	
Voltage (V DC)	6	12	24	48	110	220	
Code	506	512	524	536	548	615	730
Voltage (V AC)	6	12	24	36	48	115	230

Wiring type

- 1: 1
- 2: 2-1
- 5: 5-1 (3C only)

Contact form

- 2C: 2C0
- 3C: 3C0

Series name

Characteristics

Configuration	2C,3C	
Rated current / Rated voltage	10A/250VAC 30VDC (resistive RES); 7A/250VAC 30VDC (inductive GEN)	
Contact	Max. switching capacity (resistive)	2500VA, 300W
	Initial contact resistance	≤50mΩ
	Material	Ag alloy
	Electrical durability	≥10 ⁵ Cycles(1800 Ops/h)
	Mechanical durability	≥2000 x 10 ⁴ Cycles (18000 Ops/h)
	Pick-up voltage (23°C) (Rated voltage)	≤80%
Drop-out voltage (23°C) (Rated voltage)	DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23°C) (Rated voltage)	110%	
Insulation resistance	≥100MΩ (500VDC)	
Coil operating power	DC(W)	approx. 1.5
	AC(VA)	approx. 2.7(60Hz)
Operate time	≤30ms	
Release time (at nominal voltage)	≤20ms	
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)
	Between poles	2500VAC/1min (leakage current 1mA)
	Between contacts and coil	2500VAC/1min (leakage current 1mA)
Insulation characteristics	Rated voltage	250VAC
	Pollution level	3
IEC 60664 UL840	Overvoltage level	III
Impulse withstand voltage (waveform: 1.2/50μs)	4000V(Altitude 2000m)	
Protection level	IP20	
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity	-10~+55°C/ 5%~85%RH (No condensation)	

Air pressure	86~106KPa
Shock resistance	10G (half-sine shock pulse: 11ms)
Vibration resistance	10~55Hz double-amplitude:1.5mm
Mounting	plug in
Unit weight	approx. 85g

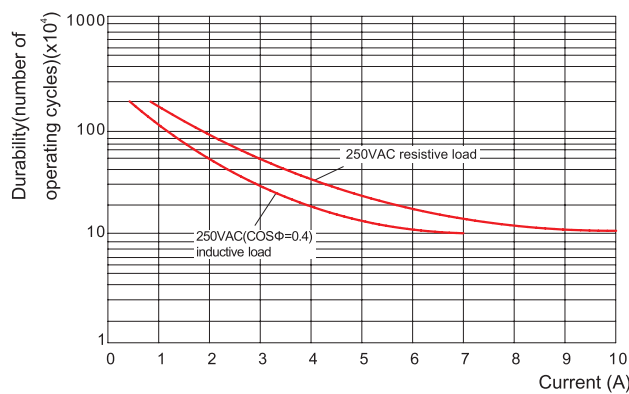
Coil Specifications (23°C)

Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	23.7	96	430	1640	7360	29500	
Nominal voltage V.AC	6	12	24	36	48	115	230
Coil resistance Ω	3.9	17	62.5	144	305	1250	5900

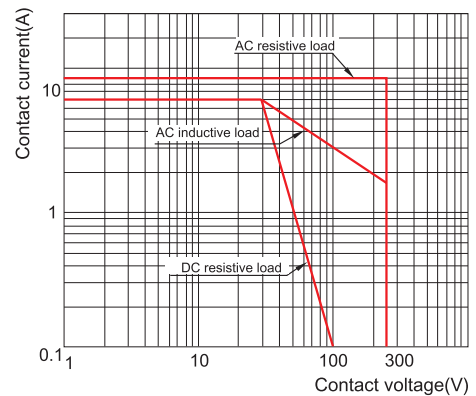
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

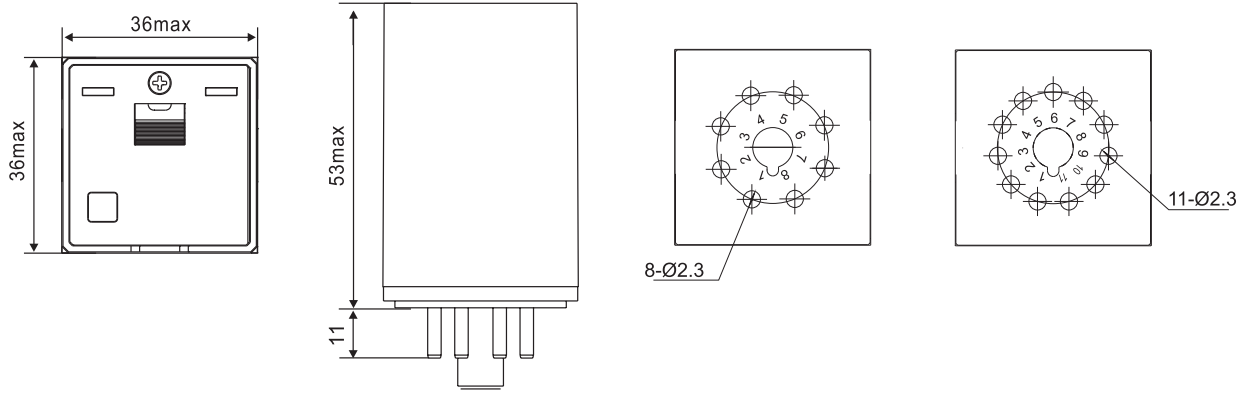
RUB2C/3C Electrical durability contacts



Maximum switching capacity

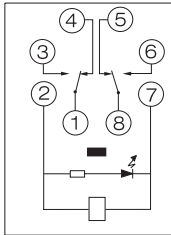


Dimensions (mm)



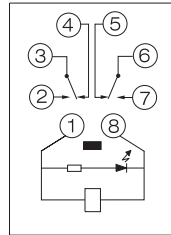
Wiring Diagrams

RUB2C1



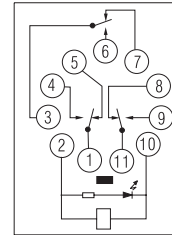
- ⑦ ② : A1, A2
- ① ⑧ : COM
- ③ ⑥ : NO
- ④ ⑤ : NC

RUB2C2



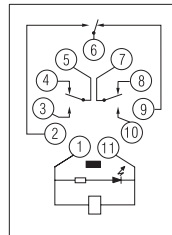
- ⑧ ① : A1, A2
- ③ ⑥ : COM
- ② ⑦ : NO
- ④ ⑤ : NC

RUB3C1



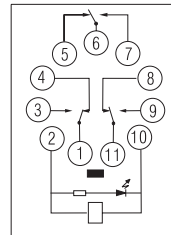
- ⑩ ② : A1, A2
- ① ③ ⑪ : COM
- ④ ⑥ ⑨ : NO
- ⑤ ⑦ ⑧ : NC

RUB3C2



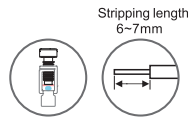
- ⑪ ① : A1, A2
- ⑤ ⑥ ⑦ : COM
- ② ③ ⑩ : NO
- ④ ⑧ ⑨ : NC

RUB3C5



- ⑩ ② : A1, A2
- ① ⑥ ⑪ : COM
- ③ ⑦ ⑨ : NO
- ④ ⑤ ⑧ : NC

Characteristics



SUB08-E






SUB11-E

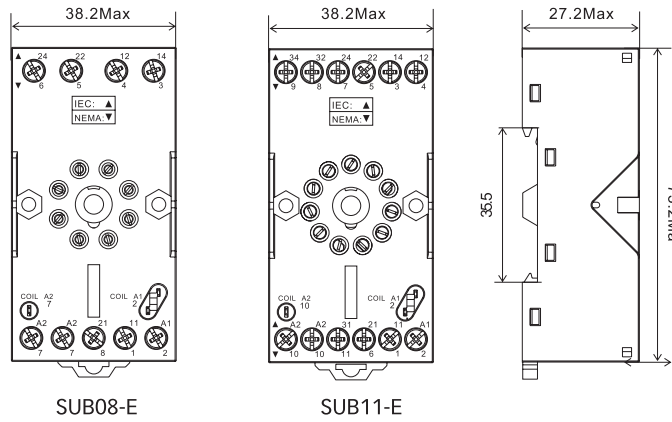


Type		SUB08-E	SUB11-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	55

Accessories

Socket	Metal clip	ID tag	Module
SUB08-E	 SU60M	 SU3P	 BMD
SUB11-E			

Dimensions (mm)



Connection Diagrams

