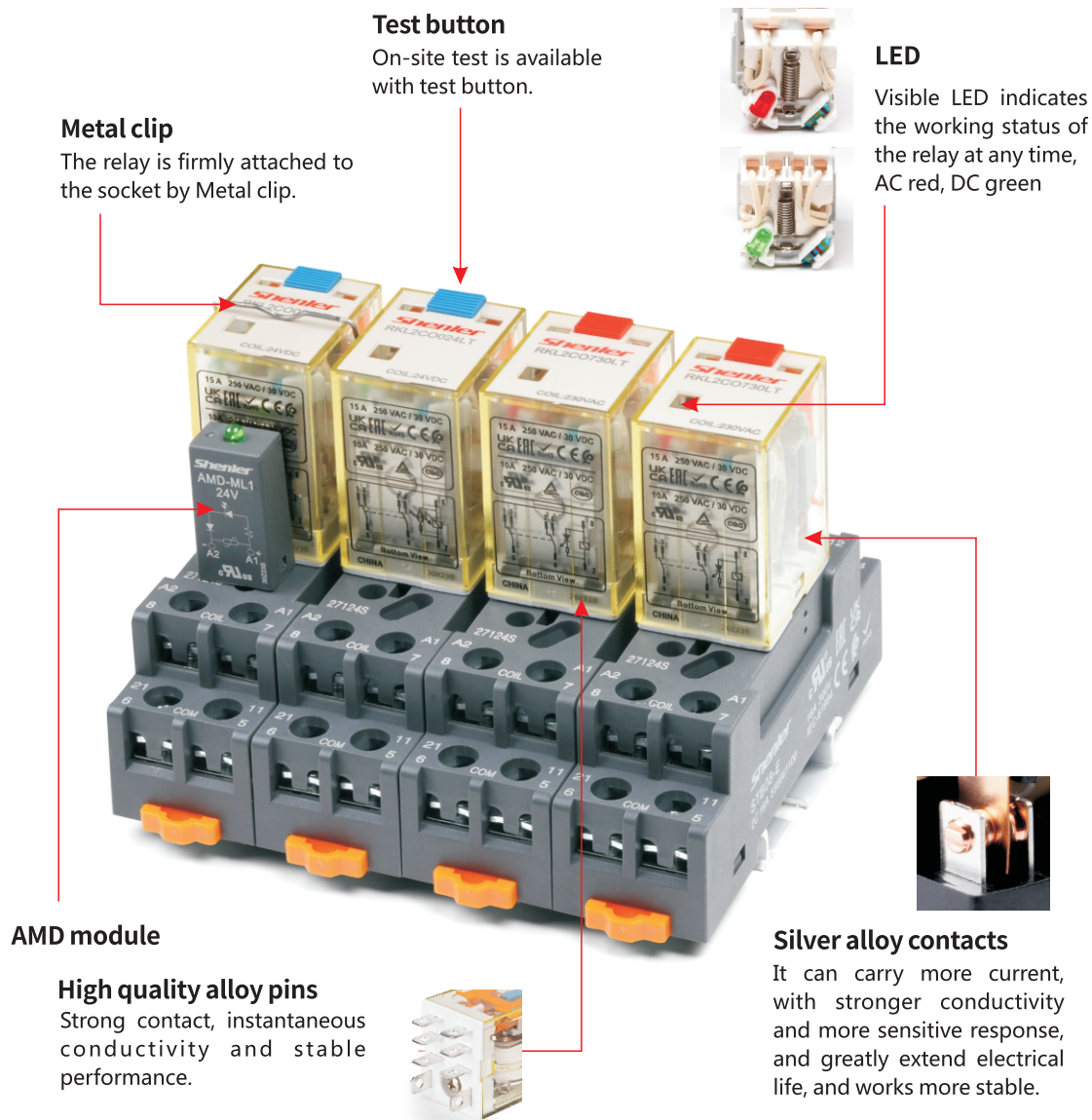


Selection manual of industrial control relay

RKL

Miniature Power Relay

- 1 pole 16A; 2,3,4 poles 15A
- 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





Relay

+



Socket

=



Relay module

RKL □ □ □ □

Other options

LT: LED + test button

LTD: LED + test button + diode (13-,14+)

LTD1: LED + Test button + diode (13+,14-)

Coil voltage code

Code	006	012	024	048	110	220	
Voltage (V DC)	6	12	24	48	110	220	
Code	506	524	536	548	615	730	880
Voltage (V AC)	6	24	36	48	115	230	380

Terminal arrangement

O: plug in

Contact form

1C: 1CO

2C: 2CO

3C: 3CO

4C: 4CO

Series name

Characteristics

Configuration		1C	2C	3C	4C
Load	Resistance	16A/250VAC 30VDC	15A/250VAC 30VDC		
	Motor load	1/2HP, 120VAC, 1HP, 240VAC	1/3HP 240VAC	1/6HP 240VAC	
Contact	Max. switching capacity (resistive)	4000VA, 480W	3750VA, 450W		
	Min. switching capacity	170mW(17V/10mA)			
	Initial contact resistance	≤50mΩ			
	Material	Ag alloy			
	Electrical durability	1C/3C/4C: ≥10 x 10 ⁴ Cycles(1800 Ops/h), 2C: ≥20 x 10 ⁴ Cycles(1800 Ops/h)			
Mechanical durability		≥1000 x 10 ⁴ Cycles (1800 Ops/h)			
Pick-up voltage (23°C) (Rated voltage)		DC: ≤75%, AC: ≤80% 50/60Hz			
Drop-out voltage (23°C) (Rated voltage)		DC: ≥10%, AC: ≥30% 50/60Hz			
Maximum voltage (23°C) (Rated voltage)		110%			
Insulation resistance		≥500MΩ (500VDC)			
Coil operating power	DC(W)	approx. 0.9	approx. 0.9	approx. 1.4	approx. 1.5
	AC(VA)(60Hz)	approx. 1.2		approx. 2.3	
Operate time&Release time (at nominal voltage)		≤20ms			
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)			
	Between poles	2000VAC/1min (leakage current 1mA)			
	Between contacts and coil	2000VAC/1min (leakage current 1mA)			
Insulation characteristics	Rated voltage	250VAC			
	Pollution level	3			2
	Overvoltage level	III			II
IEC 60664 UL840					
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		-25~+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:1.0mm			
Mounting	plug in			
Unit weight	approx. 35g	approx. 35g	approx. 50g	approx. 65g

Coil Specifications (23°C)

RKL1, RKL2

Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	180	640	2600	13000	42000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	11.5	180	370	640	4430	16500	42000

RKL3

Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	25	100	400	1600	8400	33000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	6.5	102	230	410	2500	10000	26000

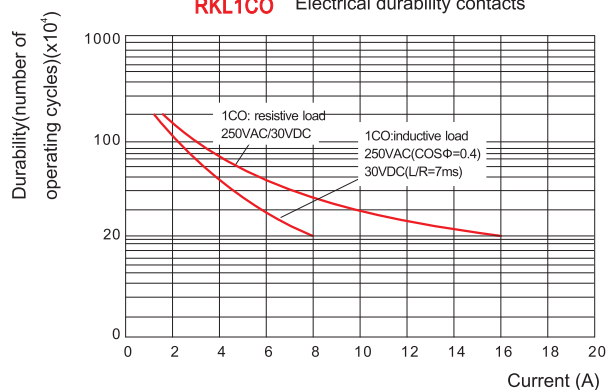
RKL4

Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	24	96	360	1500	8000	31000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	5	80	180	320	1680	8000	20000

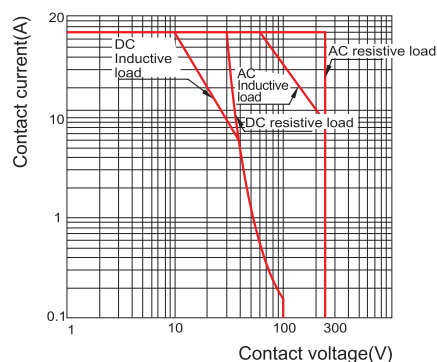
Coil resistance: under coil voltage 110V are measured with tolerance of $\pm 10\%$, above 110V with tolerance of $\pm 15\%$.

Contact Specification

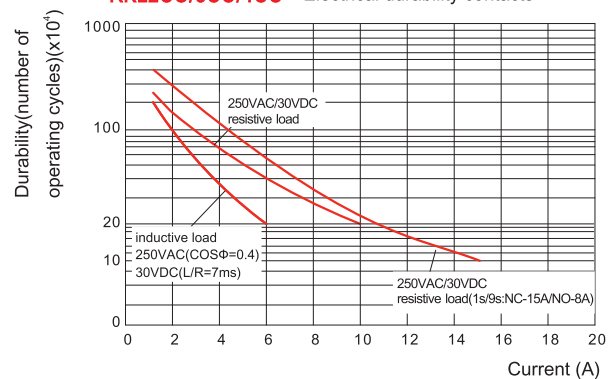
RKL1CO Electrical durability contacts



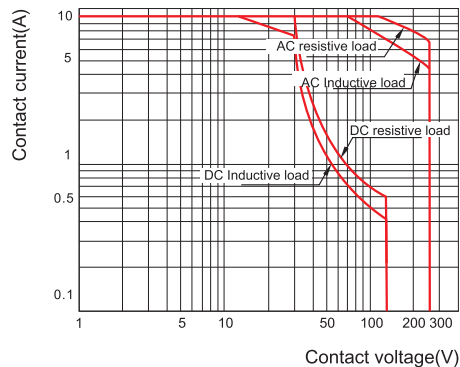
RKL1CO Maximum switching capacity



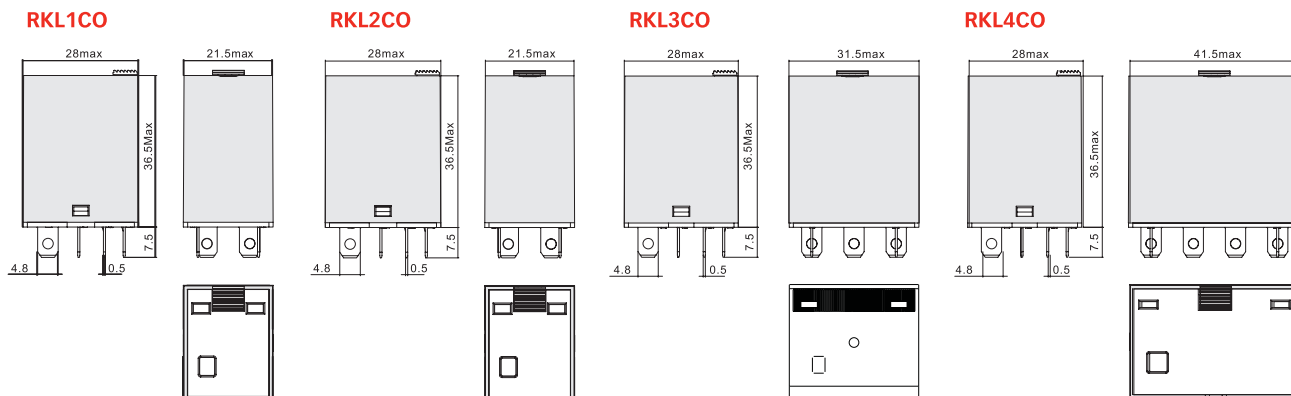
RKL2CO/3CO/4CO Electrical durability contacts



RKL2CO/3CO/4CO Maximum switching capacity

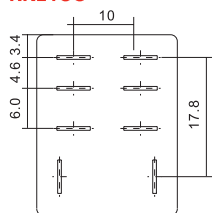


Dimensions (mm)

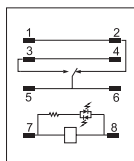


Wiring Diagrams

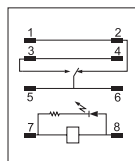
RKL1CO



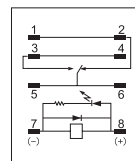
DC



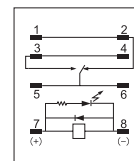
AC



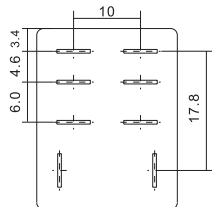
DC-D



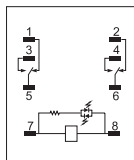
DC-D1



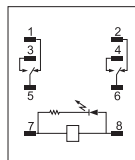
RKL2CO



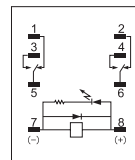
DC



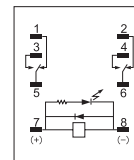
AC



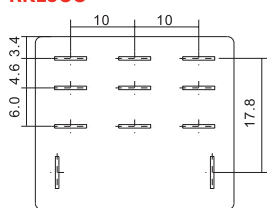
DC-D



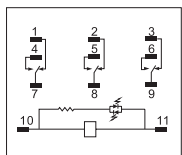
DC-D1



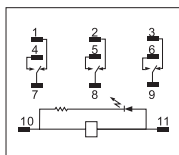
RKL3CO



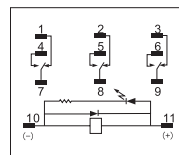
DC



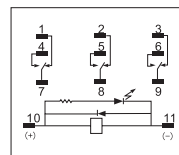
AC



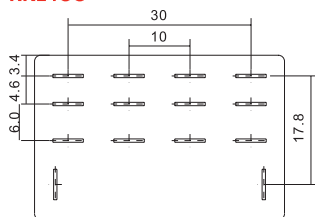
DC-D



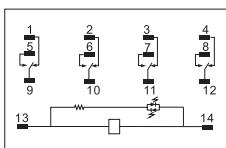
DC-D1



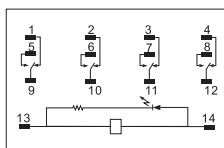
RKL4CO



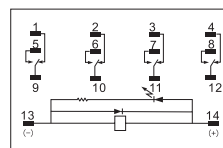
DC



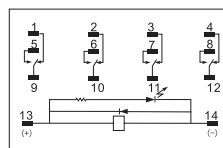
AC



DC-D



DC-D1



Characteristics



STB08-E

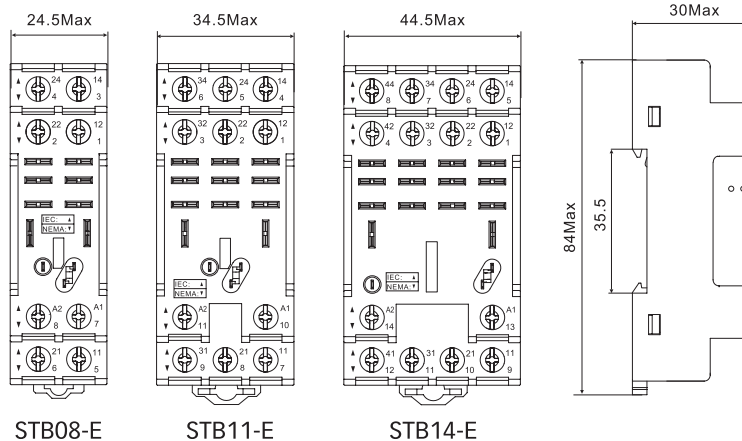


STB14-E



Type			STB08-E	STB11-E	STB14-E
Nominal load	Current	A	16		
	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	46	62	78
Accessories					
Socket		Metal clip	Module		
STB08-E		 SK36M	 AMD		
STB11-E		 ST36M3C			
STB14-E		 ST36M4C	 BMD		

Dimensions (mm)



Connection Diagrams

