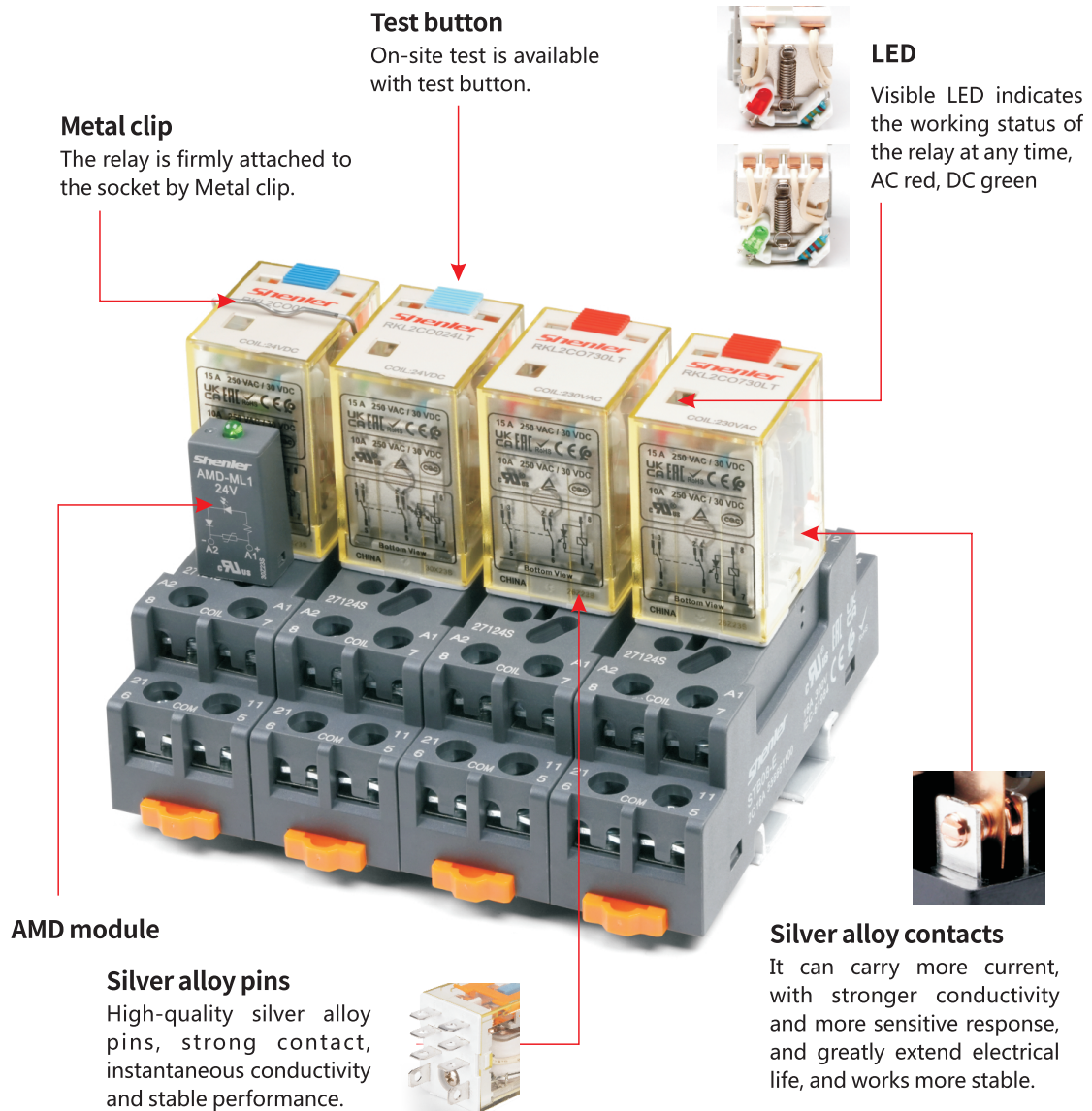


## Selection manual of industrial control relay

### RKL Miniature Power Relay

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





Relay

+

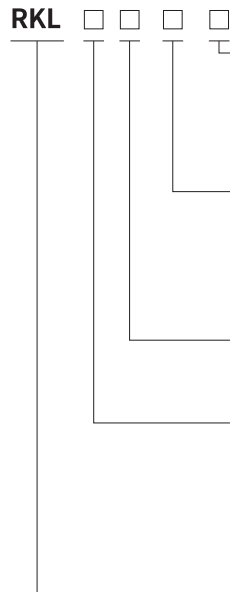


Socket

=



Relay module



**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	
	1/2HP, 120VAC, 1HP, 240VAC		1/3HP 240VAC	1/6HP 240VAC
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 <sup>4</sup> Cycles(1800 Ops/h), 2C: ≥20 x 10 <sup>4</sup> Cycles(1800 Ops/h)			
Mechanical durability	≥1000 x 10 <sup>4</sup> 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
	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
IEC 60664 UL840	Overvoltage level	III		II
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

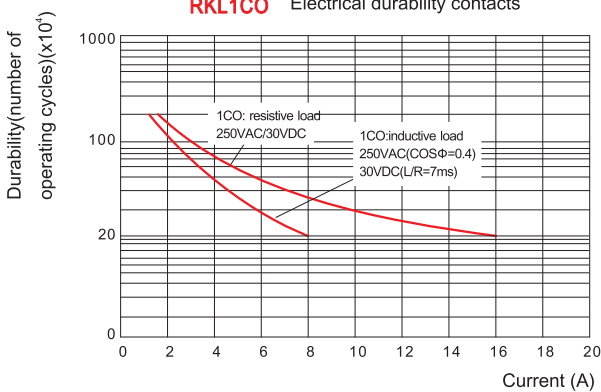
**RKL4**

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

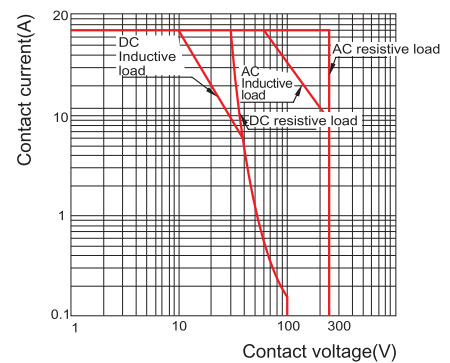
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

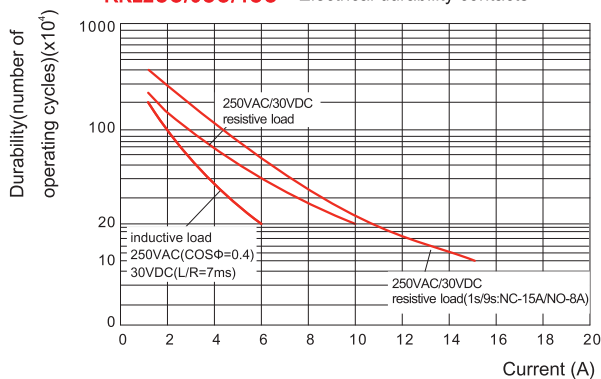
**RKL1CO** Electrical durability contacts



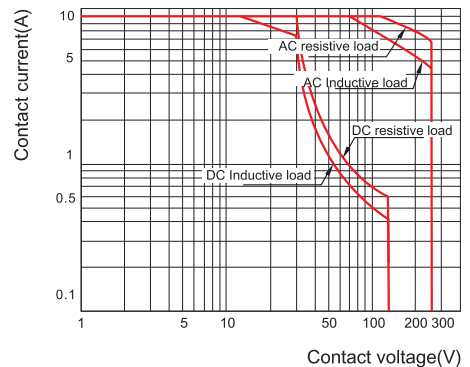
**RKL1CO** Maximum switching capacity



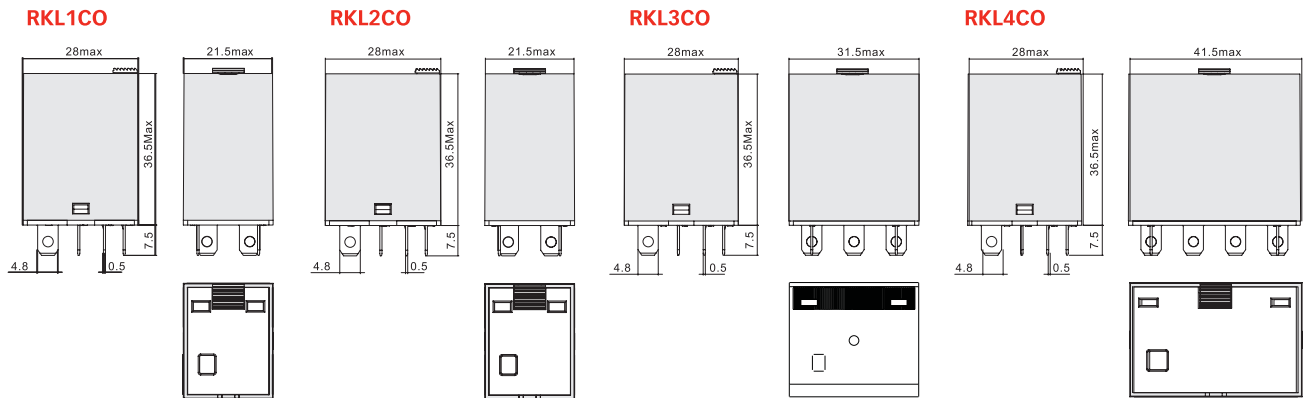
**RKL2CO/3CO/4CO** Electrical durability contacts



**RKL2CO/3CO/4CO** Maximum switching capacity

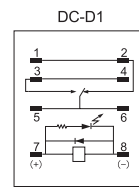
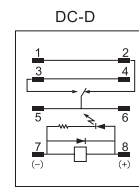
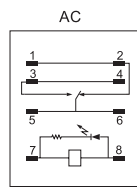
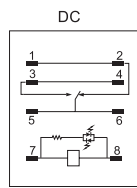
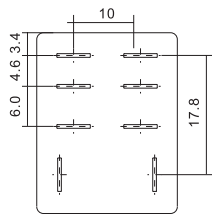


**Dimensions (mm)**

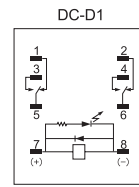
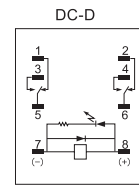
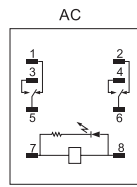
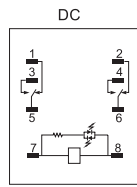
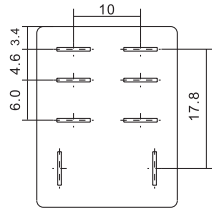


**Wiring Diagrams**

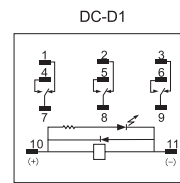
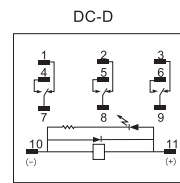
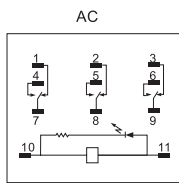
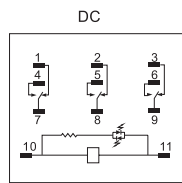
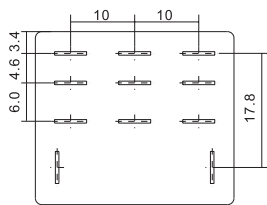
**RKL1CO**



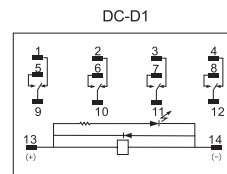
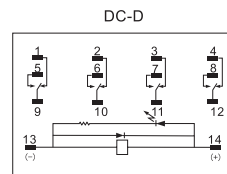
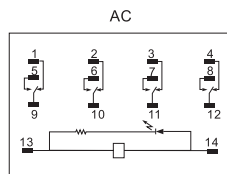
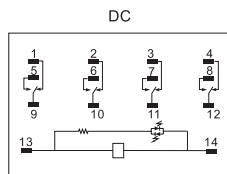
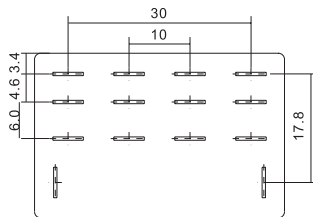
**RKL2CO**



**RKL3CO**



**RKL4CO**



**Characteristics**



**STB08-E**



**STB14-E**

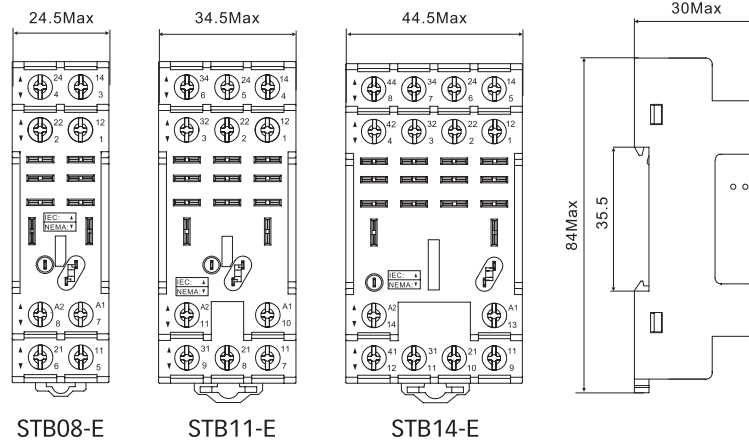


Type		STB08-E	STB11-E	STB14-E
Nominal load	Current	A	16	
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	46	62	78

**Accessories**

Socket	Metal clip	Module
STB08-E	SK36M	AMD
STB11-E	ST36M3C	
STB14-E	ST36M4C	BMD

**Dimensions (mm)**



**Connection Diagrams**

