RKL
Miniature Power Relay

Shenler

- Contact load: 1C: 16A; 2C: 15A; 4C: 15A
- With non-polarity LED, lockable test button, mechanical indicator



Specifications

Output				
Contact arrangement		1C	2C	4C
Rated current / voltage	Resistance	16A/250VAC 30VDC	15A/250VAC 30VDC	
	Motor load	1/2HP, 120VAC; 1HP, 240VAC	1/3HP, 240VAC	1/6HP, 240VAC
Breaking capacity max.		4000VA,480W	3750VA,450W	
Breaking capacity min.		170mW(17V/10mA)		
Contact material		$AgSnO_2$		
Contact resistance (initial)		≤50mΩ		
Mechanical endurance (18000 Ops/h)		≥1000x10^4 operations		
Electrical endurance (360 Ops/h)		1C ≥20×10^4 operations 2C/4C ≥10×10^4 operations @15A/NO, ≥20×10^4 operations @10A		

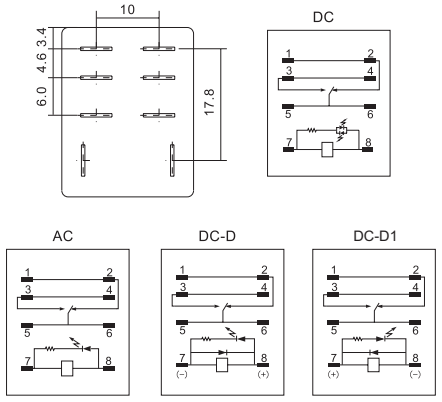
Input		1C	2C	4C
Rated coil power	DC	≈0.9W		≈1.5W
	AC	≈1.1-1.3VA		
Operate voltage (25°C) (rated voltage)		DC≤75% / AC≤80% 50/60Hz		
Release voltage (25°C) (rated voltage)		DC≥10% / AC≥30% 50/60Hz		
Max. voltage (25°C) (rated voltage)		110%		
Operate time (rated voltage)		≤20ms		
Release time (rated voltage)		≤20ms		

General		
Operating ambient temperature/ humidity		-25~+55°C/5%~85%RH(No condensation)
Storage ambient temperature/ humidity		-55~+85°C/≤85%RH
Atmospheric pressure		86~106KPa
Shock resistance		10G (half-sine shock pulse: 11ms)
Vibration resistance		10~55Hz double-amplitude:1.0mm
Certification	Relay	
	Socket	
Unit weight (g)		1C/2C≈35 4C≈65

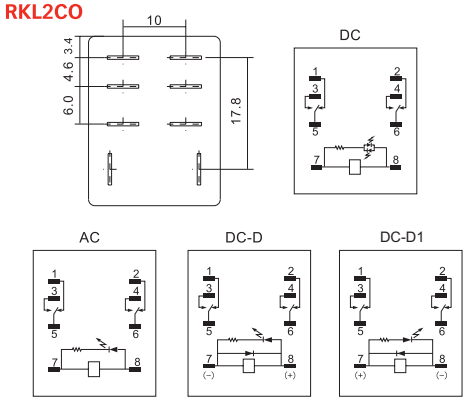
Insulation(IEC 60664 UL 840)			
Rated voltage		250VAC	
Insulation resistance		≥500MΩ (500VDC)	
Initial dielectric strength	Between open contacts	1000VAC/min (leakage current 1mA)	
	Between adjacent contacts	2000VAC/min (leakage current 1mA)	
	Between contact and coil	2000VAC/min (leakage current 1mA)	
Impulse withstand voltage (waveform: 1.2/50μs)		4000V (Altitude of 2000M)	
Overvoltage category		III	II
Pollution degree		3	2
Protection category		IP20	

Wiring Diagrams

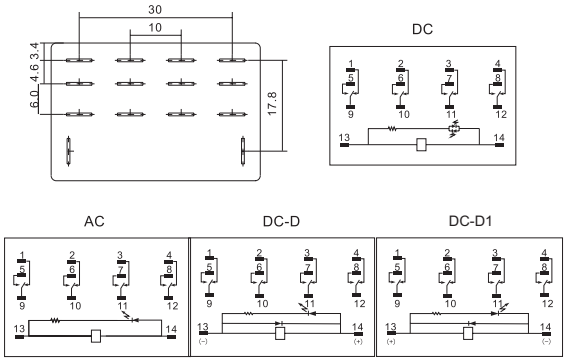
RKL1CO

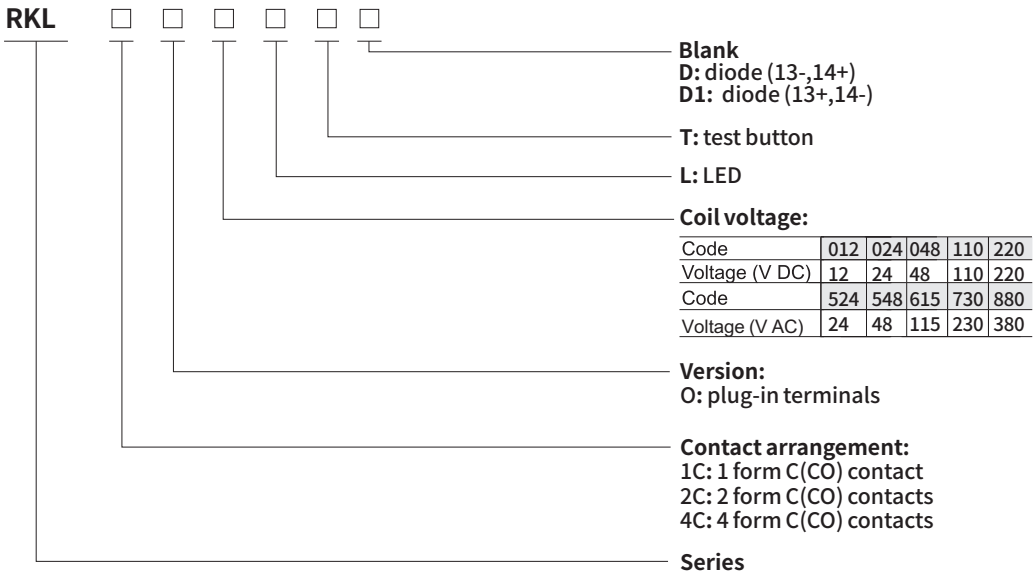


RKL2CO



RKL4CO





Selection example: RKL4CO024LTD, RKL series, 4C 4-pole changeover, O plug-in terminals, 024 coil voltage 24VDC, LTD with LED, test button and diode For 1C and 2C, pin 7 of D is - negative and pin 8 is + positive; pin 7 of D1 is + positive and pin 8 is - negative.For 4C, pin 13 of D is - negative and pin 14 is + positive; pin 13 of D1 is + positive and pin 14 is - negative.

DC Input(1C,2C)		12VDC	24VDC	48VDC	110VDC	220VDC
Rated voltage (VDC)		12	24	48	110	220
Rated current (mA)		67.8	41	20.5	8.7	4.4
Coil resistance (Ω±10%)		180	640	2600	13000 (Ω±15%)	42000 (Ω±15%)
Operate/ Release voltage(V)		9 / 1.2	18 / 2.4	36 / 4.8	82.5 / 11	165 / 22
Coil power (±10% W)		0.81	0.98	0.98	0.96	0.97
Ordering Information						
1C	With LED	RKL1CO012L	RKL1CO024L	RKL1CO048L	RKL1CO110L	RKL1CO220L
	With LED + test button	RKL1CO012LT	RKL1CO024LT	RKL1CO048LT	RKL1CO110LT	RKL1CO220LT
	With LED + test button + diode		RKL1CO024LTD			
2C	With LED	RKL2CO012L	RKL2CO024L	RKL2CO048L	RKL2CO110L	RKL2CO220L
	With LED + test button	RKL2CO012LT	RKL2CO024LT	RKL2CO048LT	RKL2CO110LT	RKL2CO220LT
	With LED + test button + diode		RKL2CO024LTD			RKL2CO220LTD1

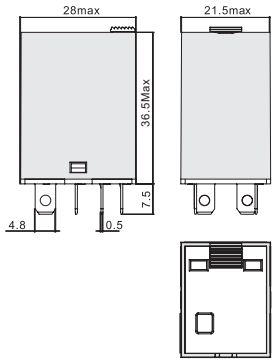
AC Input(1C,2C)		24VAC	48VAC	115VAC	230VAC
Rated voltage (VAC)		24	48	115	230
Rated current 50Hz (mA)		53.9	26.6	10.4	5.9
Rated current 60Hz (mA)		47.5	25.2	9.7	5.3
Coil resistance (Ω±10%)		180	640	4430(Ω±15%)	16500(Ω±15%)
Operate/ Release voltage(V)		19.2/ 7.2	38.4/ 14.4	92/ 34.5	184/ 69
Coil power 50Hz (±10% VA)		1.29	1.28	1.20	1.30
Coil power 60Hz		R1.14	1.21	1.12	1.17
Ordering Information					
1C	With LED + test button	RKL1CO524LT	RKL1CO548LT	RKL1CO615LT	RKL1CO730LT
2C	With LED	RKL2CO524L	RKL2CO548L	RKL2CO615L	RKL2CO730L
	With LED + test button	RKL2CO524LT	RKL2CO548LT	RKL2CO615LT	RKL2CO730LT
Accessories					
1C socket / 2C socket		STB08-E			
Metal clip		SK36M			
Module		AMD			

DC Input(4C)	12VDC	24VDC	48VDC	110VDC	220VDC
Rated voltage (VDC)	12	24	48	110	220
Rated current (mA)	120	61	30	13.3	7.1
Coil resistance (Ω±10%)	96	360	1500	8000 (Ω±15%)	29000 (Ω±15%)
Operate/ Release Voltage (V)	9 / 1.2	18 / 2.4	36 / 4.8	82.5/ 11	165/ 22
Coil power (±10% W)	1.44	1.46	1.44	1.46	1.56
Ordering Information					
4C With LED	RKL4CO012L	RKL4CO024L	RKL4CO048L	RKL4CO110L	RKL4CO220L
4C With LED + test button	RKL4CO012LT	RKL4CO024LT	RKL4CO048LT	RKL4CO110LT	RKL4CO220LT
4C With LED + test button + diode		RKL4CO024LTD			

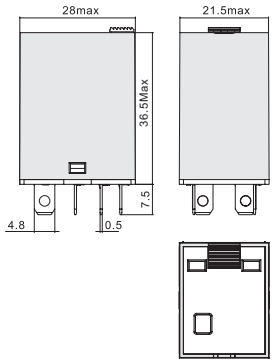
AC Input(4C)	24VAC	48VAC	115VAC	230VAC
Rated voltage (VAC)	24	48	115	230
Rated current 50Hz (mA)	53.6	25.9	11.1	5.7
Rated current 60Hz (mA)	49.2	24.7	10.8	5.4
Coil resistance (Ω±10%)	180	320	1680 (Ω±15%)	8000 (Ω±15%)
Operate/ Release Voltage (V)	19.2 / 7.2	38.4 / 14.4	92 /34.5	184 / 69
Coil power 50Hz (±10% VA)	1.29	1.24	1.28	1.31
Coil power 60Hz (±10% VA)	1.18	1.19	1.24	1.24
Ordering Information				
4C With LED	RKL4CO524L	RKL4CO548L	RKL4CO615L	RKL4CO730L
4C With LED + test button	RKL4CO524LT	RKL4CO548LT	RKL4CO615LT	RKL4CO730LT
Accessories				
Socket	STB14-E			
Metal clip	ST36M4C			
Module	BMD			

Dimensions(mm)

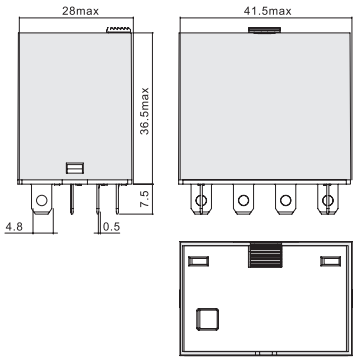
RKL1CO



RKL2CO

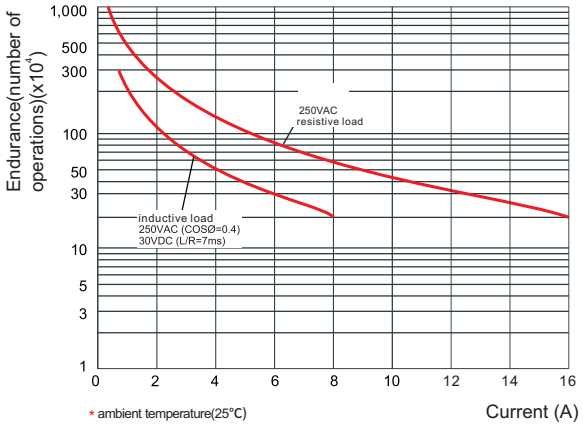


RKL4CO

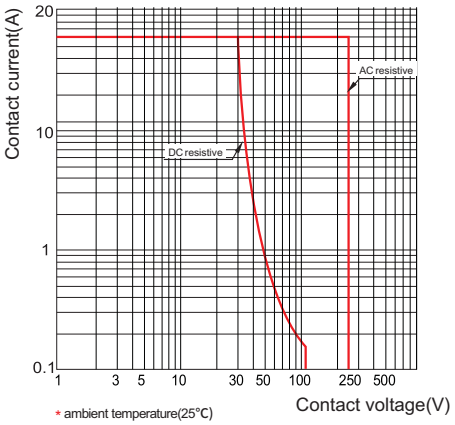


Specifications

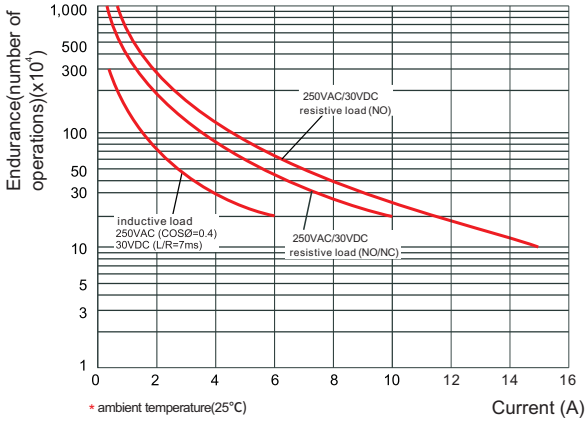
RKL1CO Electrical endurance



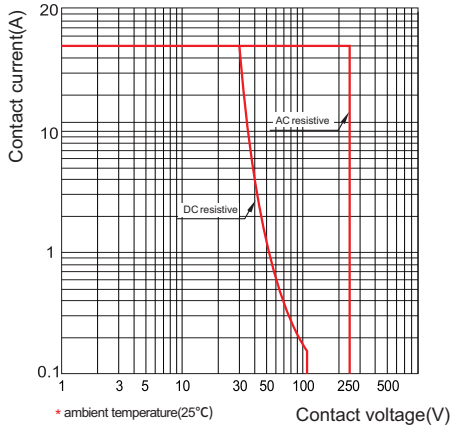
Breaking capacity max.



RKL2CO/4CO Electrical endurance



Breaking capacity max.



RKL
Socket for Relay



STB08-E



STB14-E



SK36M



ST36M4C

Metal clip



AMD



BMD

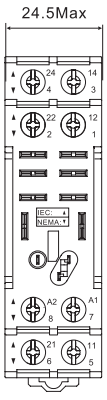
Module

Socket

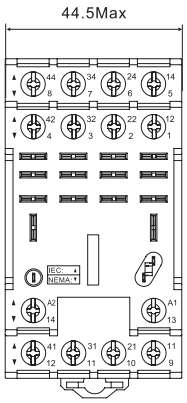
Model No.		STB08-E	STB14-E
Rated load current		16A	
Rated load voltage		300V	
Dielectric strength	Between coil and contact	4000V/min	
	Between contacts	2500V/min	
Screw torque		0.8~1.0Nm	
Wire range (screw terminal)		0.5~2.5mm²	
Operating ambient temperature		-40~+85℃	
Length x Width x Height (mm)		84 x 24.5 x 30	84 x 44.5 x 30
Unit weight (g)		46	78

Accessories not included with socket.

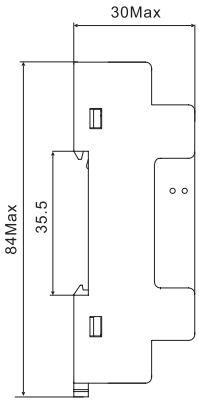
Dimensions (mm)



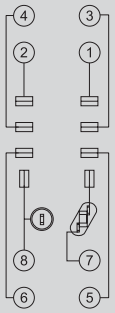
STB08-E



STB14-E

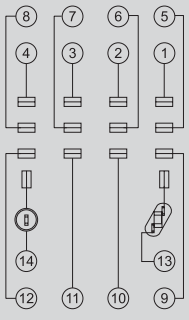


Wiring Diagrams



STB08-E

⑦⑧ : A1 A2
①② : NC
③④ : NO
⑤⑥ : COM



STB14-E

⑬⑭ : A1 A2
①②③④ : NC
⑤⑥⑦⑧ : NO
⑨⑩⑪⑫ : COM