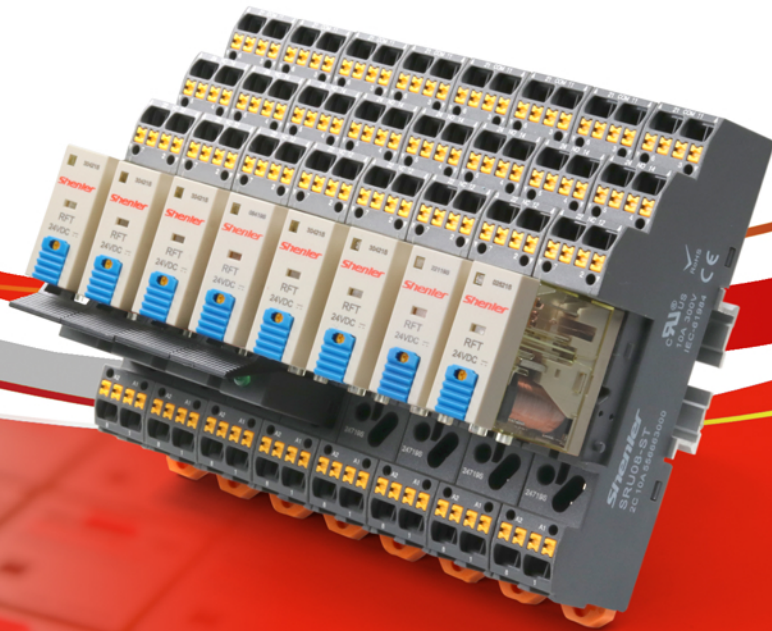


**Shenler**



# Electromagnetic Relay Product Catalogue

Industrial Relays | Interface Relays | Timers | Sockets and Accessories

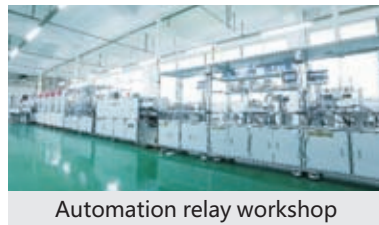




Winding workshop



Automated socket workshop



Automation relay workshop



UL TÜV Witnessing Laboratory

## About Shenle

Founded in 2014, Shenle Corporation Ltd. is an intelligent relay manufacturing factory, mainly engaged in industrial relays, interface relays, automotive relays, relay modules, time relays, solid state relays, sockets, limit switches, buttons, industrial auxiliary materials, automated smart manufacturing and equipment. The company's total construction area is 36,000 square meters, covering an area of 23 acres.

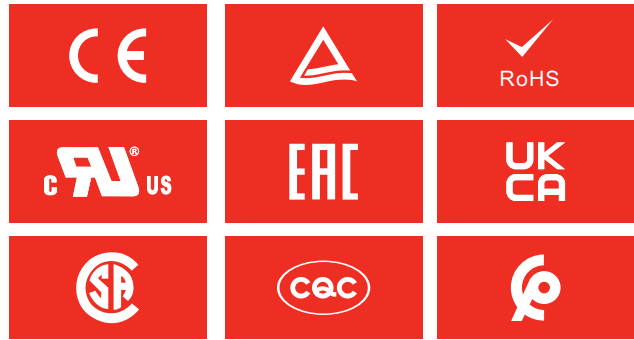
In 2021, the production capacity exceeds 100 million, and the current market share accounts for 30%. Shenle's sales and

service network covers the world, and more than 65% of its products are sold overseas. The products are widely used in machinery manufacturing, hoisting machinery, machine tools, papermaking equipment, motor control, elevators, robots, food and beverages, rubber equipment, ceramics machinery, printing and packaging, injection molding machinery, textile machinery, logistics equipment, electronic manufacturing, petrochemical, new energy and other fields.



# Qualifications

Shenle products have passed CE, TÜV, RoSH, UL, EAC, UKCA, CSA, CQC, CP, certifications.

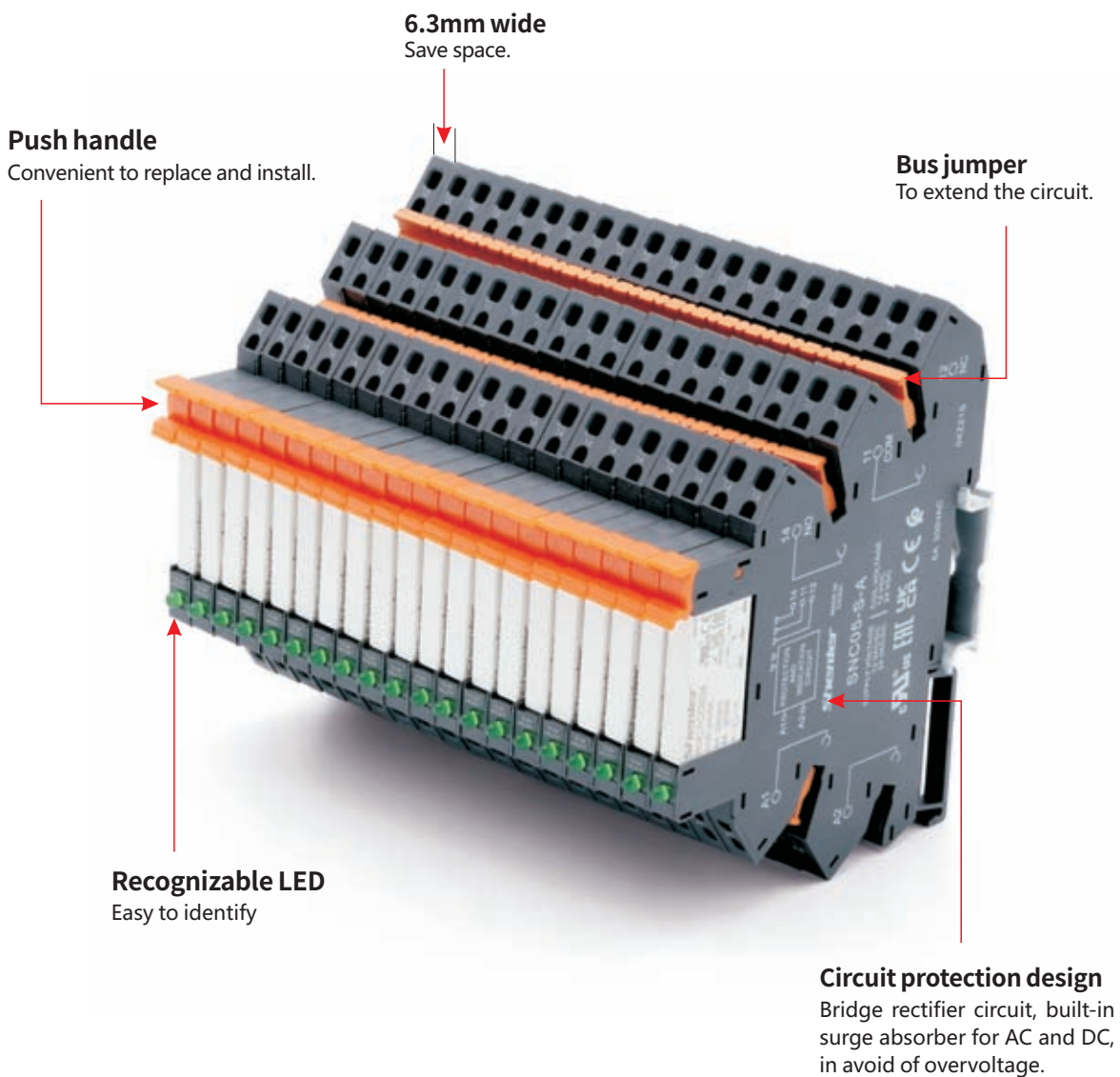


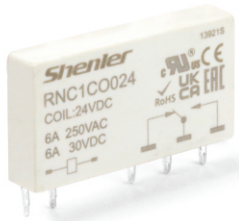
- National Spark Program Project
- Zhejiang Science & Technology Enterprise
- TUV Rheinland Witnessing Laboratory
- Top 10 Brands of Relays in China
- Supporting the whole industry chain of automation equipment manufacturing
- UL Witnessing Laboratory
- High-tech Enterprise
- Zhejiang Enterprise Research Institute

## Contents

<b>Electromagnetic Relay</b>	<b>003</b>	<b>RNC Interface Relay</b>
	<b>011</b>	<b>RFT Interface Relay</b>
	<b>019</b>	<b>R2G Power Relay</b>
	<b>029</b>	<b>RKM Miniature General Purpose Relay</b>
	<b>035</b>	<b>RKE Miniature General Purpose Relay</b>
	<b>039</b>	<b>RKE-LS Sealed Power Relay</b>
	<b>049</b>	<b>RKF Miniature General Purpose Relay</b>
	<b>058</b>	<b>RKF-S Magnetic Blow-out Power Relay</b>
	<b>063</b>	<b>RKL Miniature Power Relay</b>
	<b>068</b>	<b>REH Power Relay</b>
	<b>071</b>	<b>REH Magnetic Blow-out Power Relay</b>
	<b>075</b>	<b>RUB General Purpose Relay</b>
	<b>081</b>	<b>RGF Power Relay</b>
<b>Solid State Relay</b>	<b>085</b>	<b>RSC Solid State Slim Relay</b>
	<b>090</b>	<b>RSD-1D Solid State Relay</b>
	<b>095</b>	<b>Solid State Relay Heat Sink</b>
<b>Timers Relay</b>	<b>097</b>	<b>TKB Timers Relay</b>
<b>Accessories and Protection Modules</b>	<b>100</b>	<b>Accessories and Protection Modules</b>

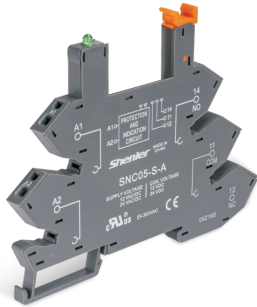
- Ultra slim, high sensitivity and low consumption, the maximum load power 6A.
- Reasonable structure, meets environmental protection requirements, the control voltage range can be extended with matching sockets.
- Shenler industrial relays are widely used in the output signal and safety drive of PLC, CNC system, robot, intelligent manufacturing and other control systems. It is the best choice to realize remote control, production and processing, packaging, transportation, testing, storage and other equipment and automatic assembly lines.





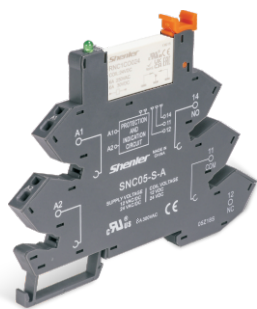
Relay

+



Socket

=



Relay module

RNC □ □ □ □

**Other options**

Blank: Conventional  
A: Gold plated contact

**Coil voltage code**

Code	005	006	012	024
Voltage (V DC)	5	6	12	24
Code	048	060		
Voltage (V DC)	48	60		

**Terminal arrangement**

O: Vertical pin  
P: Horizontal pin

**Contact form**

1A: (NO)  
1C: (CO)

**Series**

**Characteristics**

Configuration	1A,1C	
Load Resistance	6A/250VAC 30VDC	
Max. switching capacity (resistive)	1500VA,180W	
Min. switching capacity	170mW(17V/10mA)	
Initial contact resistance	≤100mΩ (gold plated contact ≤ 30mΩ)	
Material	Ag alloy	
Electrical durability	NO: 6x10 <sup>4</sup> Cycles (600 Ops/h); NC: 3x10 <sup>4</sup> Cycles (600 Ops/h)	
Mechanical durability	≥2 x 10 <sup>7</sup> Cycles (18000 Ops/h)	
Pick-up voltage (23°C) (Rated voltage)	DC:≤75%	
Drop-out voltage (23°C) (Rated voltage)	DC:≥5%	
Maximum voltage (23°C) (Rated voltage)	110%	
Insulation resistance	≥1000MΩ (500VDC)	
Coil operating power	3~24 VDC	approx. 0.175W
	48~60 VDC	approx. 0.21W
Operate time (at nominal voltage)	≤8ms	
Release time (at nominal voltage)	≤4ms	
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)
	Between contacts and coil	4000VAC/1min (leakage current 1mA)
Insulation characteristics	Rated voltage	250VAC
	Pollution level	3
IEC 60664 UL840	Overvoltage level	III
Impulse withstand voltage (waveform: 1.2/50us)	4000V	
Protection level	IP60	
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity	-40~+85°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	PCB	
Unit weight	approx. 6g	

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

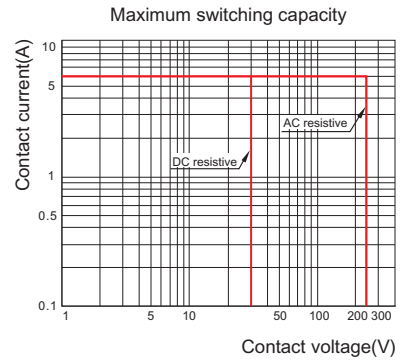
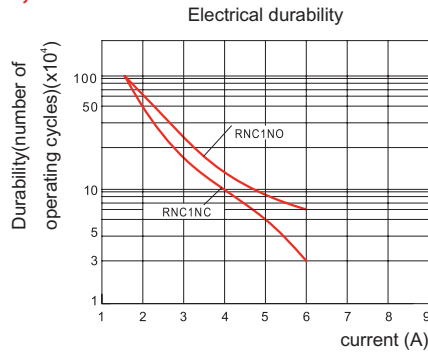
**Coil Specifications (23°C)**

Nominal voltage V.DC (0.17W)	5	6	12	24
Coil resistance Ω	147	212	847	3250
Nominal voltage V.DC (0.21W)	48	60		
Coil resistance Ω	10971	17143		

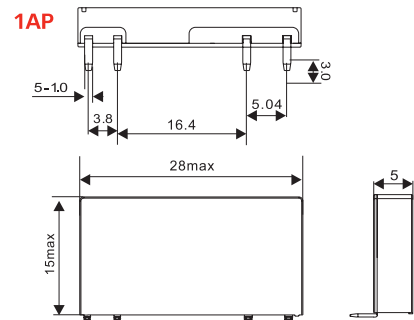
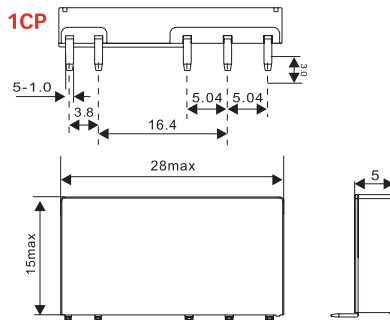
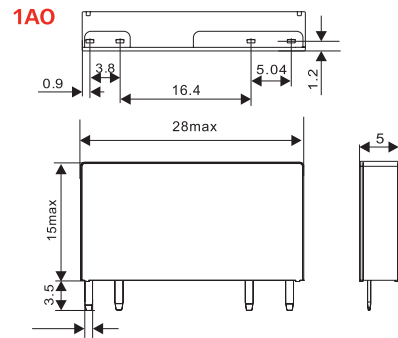
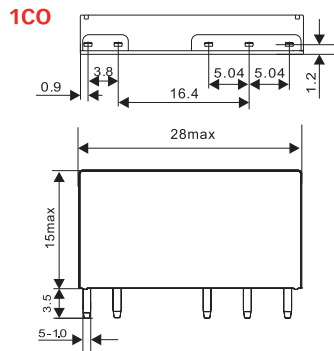
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

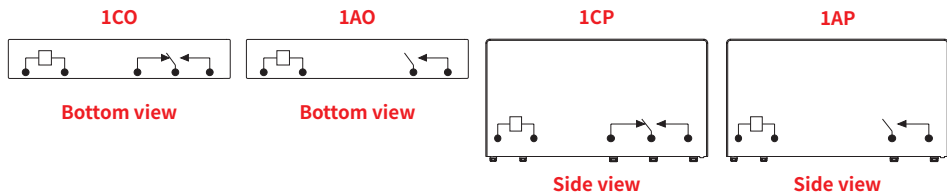
**RNC1A, 1C**



**Dimensions (mm)**



**Wiring Diagrams**





**Characteristics**

Model No.	Input	Relay
SNB05-E-AR	6~24VDC	6~24VDC
SNB05-E-A	6~24V	6~24VDC
SNB05-E-B	48V	24VDC
SNB05-E-C	110V	24VDC
SNB05-E-D	230V	48VDC

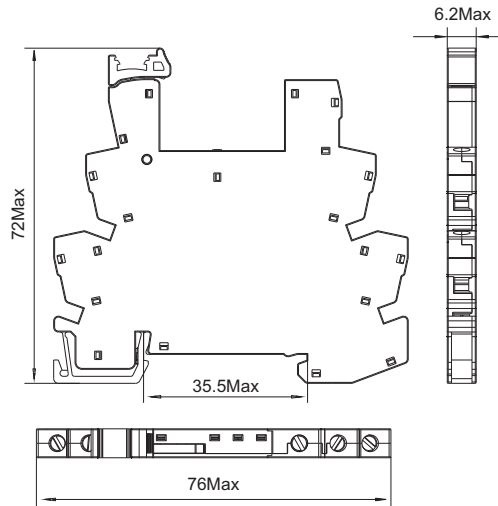


**SNB05-E**

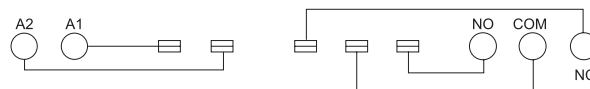
Characteristics			
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	0.5
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5
Ambient temperature		°C	-40~+85
Unit weight		g	24

Relay,accessories Selection Table	
Bus jumper	Legend
 SN20A	 SN64P

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



Model No.	Input	Relay
SNB05-ST-AR	6~24VDC	6~24VDC
SNB05-ST-A	6~24V	6~24VDC
SNB05-ST-B	48V	24VDC
SNB05-ST-C	110V	24VDC
SNB05-ST-D	230V	48VDC



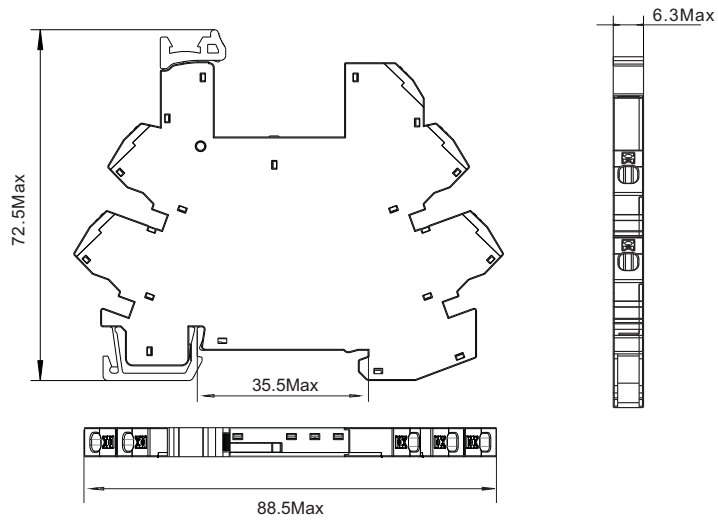
Characteristics			
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5
Ambient temperature		°C	-40~+85
Unit weight		g	24



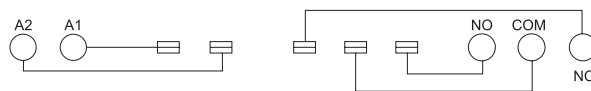
**SNB05-ST**

Relay, accessories Selection Table	
Bus jumper	Legend
 SN20A	 SN64P

**Dimensions (mm)**

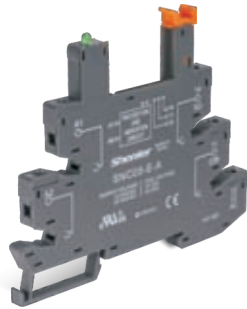


**Connection Diagrams**





**Characteristics**



**SNC05-E**

Model No.	Input	Relay
SNC05-E-A	12~24V	12~24VDC
SNC05-E-B	48~60V	48~60VDC
SNC05-E-C	110V	60VDC
SNC05-E-D	230V	60VDC

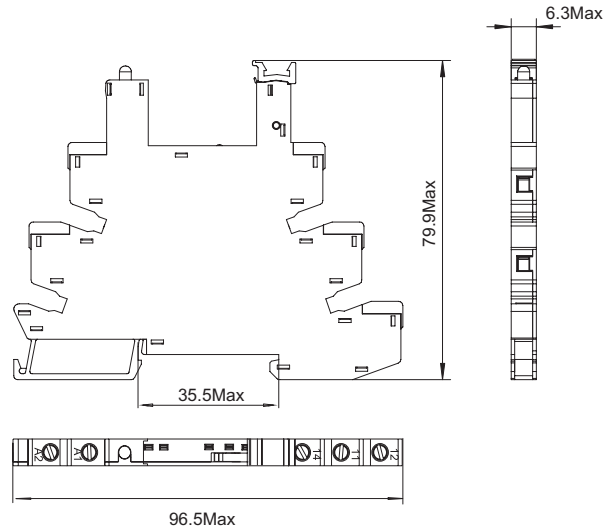
**Characteristics**

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	0.5
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5
Ambient temperature		°C	-40~+85
Unit weight		g	24

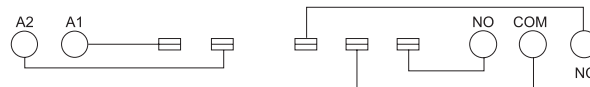
**Relay, accessories Selection Table**

Bus jumper	Legend	Partition plate
		
SN20B	SN64P	SN20S

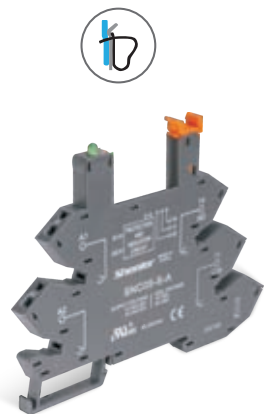
**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



**SNC05-S**

Model No.	Input	Relay
SNC05-E-A	12~24V	12~24VDC
SNC05-E-B	48~60V	48~60VDC
SNC05-E-C	110V	60VDC
SNC05-E-D	230V	60VDC

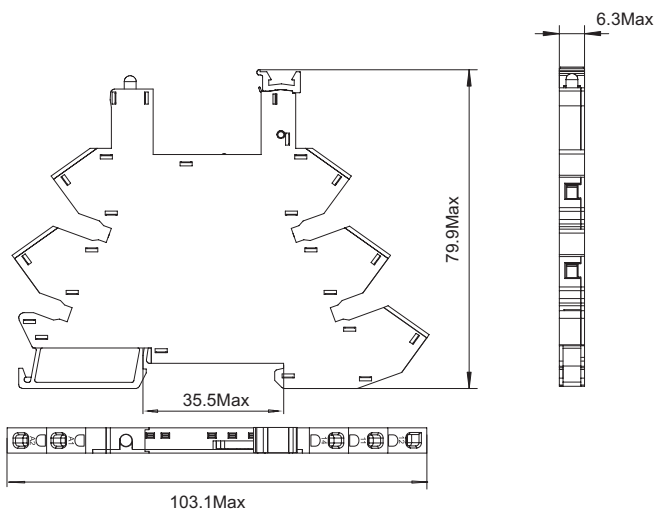
**Characteristics**

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Wire size	AWG/mm <sup>2</sup> 20-16/0.5-1.5		
Ambient temperature	°C	-40~+85	
Unit weight	g	24	

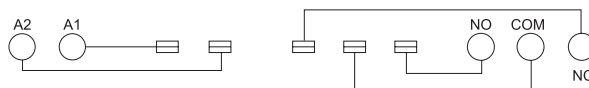
**Relay, accessories Selection Table**

Bus jumper	Legend	Partition plate
		
SN20B	SN64P	SN20S

**Dimensions (mm)**



**Connection Diagrams**



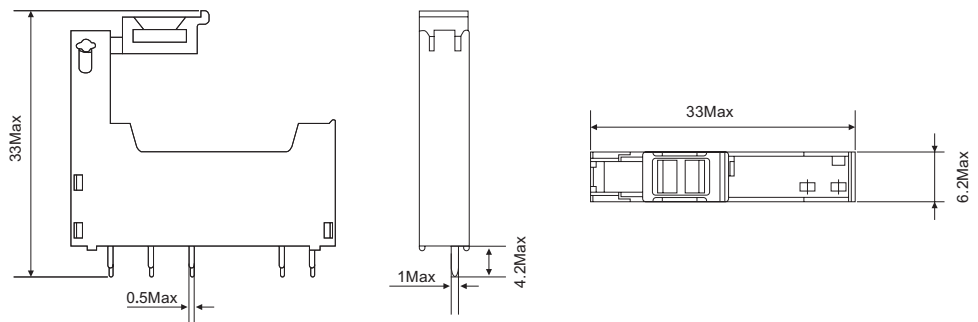
**Characteristics**



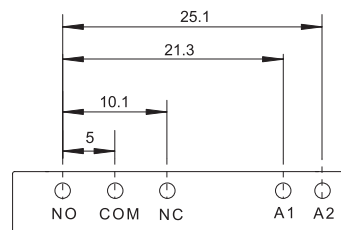
**SNC05-P**

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Wire size	AWG/mm <sup>2</sup>	20-16/0.5-1.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	25	

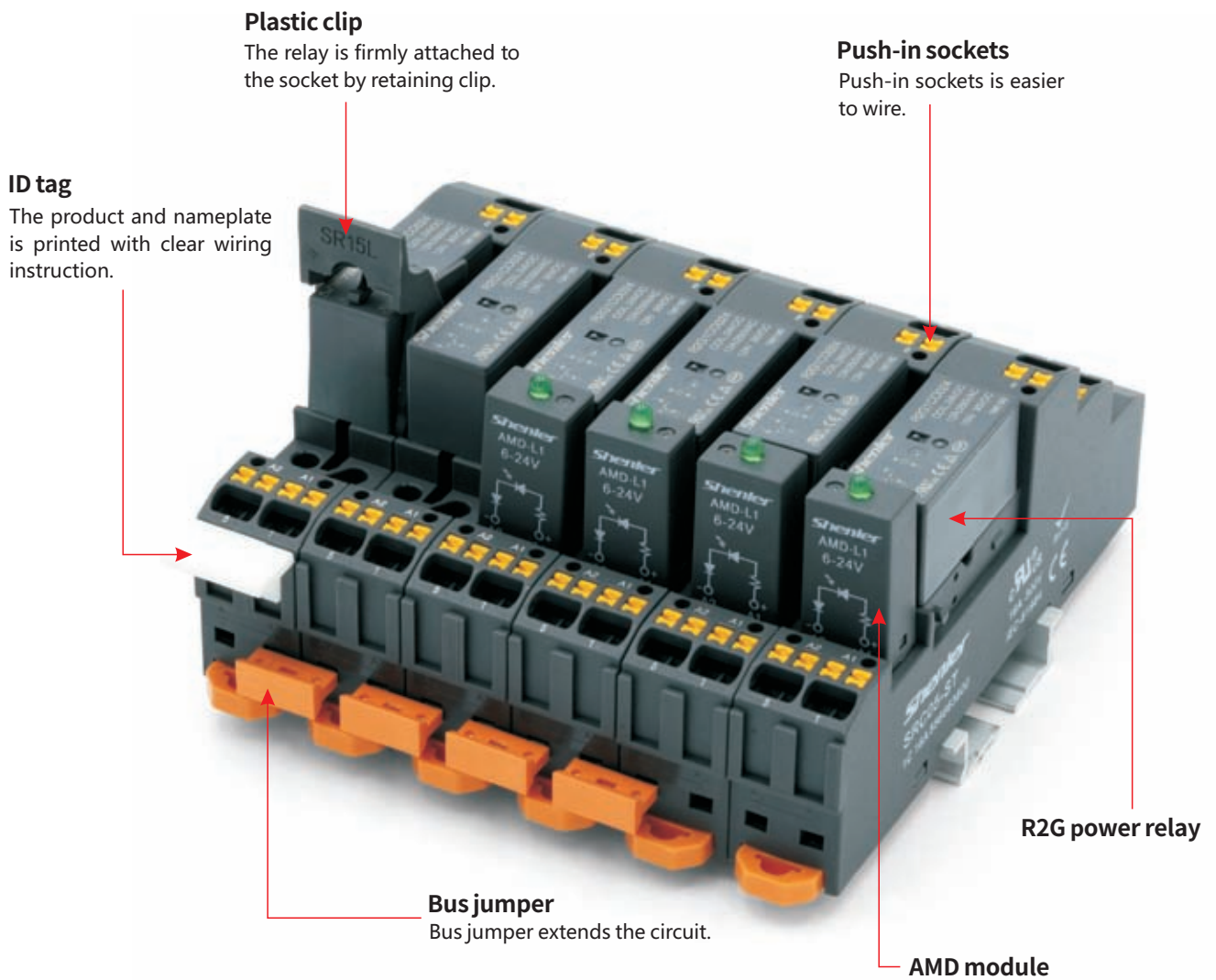
**Dimensions (mm)**



**Connection Diagrams**



- Available for 1 and 2 pole , a variety of high capacity models
- High sensitive of consumed power 400mW
- With up to 8mm of insulation distance between coil and contacts
- High insulation with 10kv of shock resistant voltage
- Meet with the ambient temperature 85°C





Relay

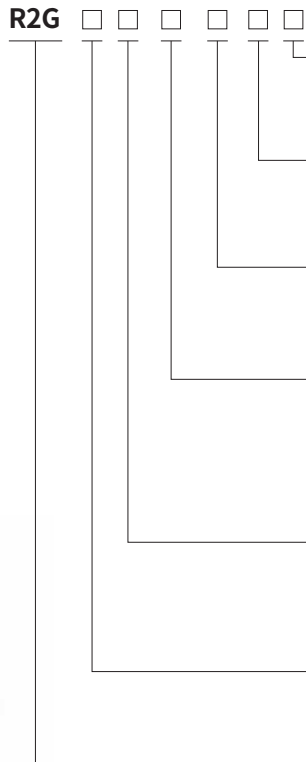
+

Socket

=



Relay module



**Encapsulation Way**

S: Flux proof  
None: Sealed

**Coil Consumption**

None: Standard (400mW)  
T: Sensitive (250mW)

**Material Level**

None: B class  
F: F class

**Coil voltage code**

Code	005	006	009	012	048	060	110
Voltage (V DC)	6	6	9	12	48	60	110
Code	524	615	730				
Voltage (V AC)	24	115	230				

**Terminal arrangement**

O: 3.5mm contact pin pitch 1 pole 12A  
U: 5.0mm contact pin pitch 1 pole 12A  
H: 5.0mm contact pin pitch 1 pole 16A, 2 pole 8A

**Contact form**

1, 2 (A: NO, B: NC, C: CO)

**Series name**

**Characteristics**

		1C/1A	2C/2A	
Contact	Configuration	1C/1A	2C/2A	
	Load	Resistive load (AC-1)	12A, 16A/250VAC, 30VDC	8A/250VAC, 30VDC
		Motor load (AC-15)	1/2HP, 240VAC; 3/4HP, 120VAC	1/3HP, 240VAC, 1/4HP, 120VAC
	Max. switching capacity (resistive)	3000VA, 360W; 4000VA, 480W	2000VA, 240W	
	Min. switching capacity	170mW(17V/10mA)		
	Initial contact resistance	≤100mΩ		
	Material	Ag alloy		
	Electric durability (110% rated voltage, 85°C)	3.5mm: 1NO 12A; 1NC 6A ≥10 <sup>5</sup> Cycles(85°C)	5.0mm: 2NO 8A; 2NC 4A ≥10 <sup>5</sup> Cycles(85°C)	
		5.0mm: 1NO 16A; 1NC 8A ≥10 <sup>5</sup> Cycles(85°C)	-	
	Durability (Normal temperature)	3.5mm: 1NO 12A; 1NC 12A ≥5x10 <sup>4</sup> Cycles(23°C)	5.0mm: 2NO 8A; 2NC 8A ≥5x10 <sup>4</sup> Cycles(23°C)	
		5.0mm: 1NO 16A; 1NC 16A ≥3x10 <sup>4</sup> Cycles(23°C)	-	
	Mechanical durability	Dc≥5000x10 <sup>4</sup> Cycles (18000 Ops/h); Ac≥3000x10 <sup>4</sup> Cycles (18000 Ops/h)		
	Pick-up voltage (23°C) (Rated voltage)	DC≤70%		
	Drop-out voltage (23°C) (Rated voltage)	DC:≥10%		
	Maximum voltage (23°C) (Rated voltage)	130%		
Insulation resistance	≥1000MΩ (500VDC)			
Coil operating power	DC(W)	approx. 0.43		
	AC(VA)	approx. 1		
Operate time	≤10ms			
Release time (at nominal voltage)	≤5ms			
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)	1000VAC/1min (leakage current 1mA)	
	Between poles		2500VAC/1min (leakage current 1mA)	
	Between contacts and coil	5000VAC/1min (leakage current 1mA)	5000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC		
	Pollution level	3		
IEC 60664 UL840	Overvoltage level	III		

Protection level	IP50
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months) ★
Working temperature/ humidity	-40~+85°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	PCB
Unit weight	approx. 13g

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

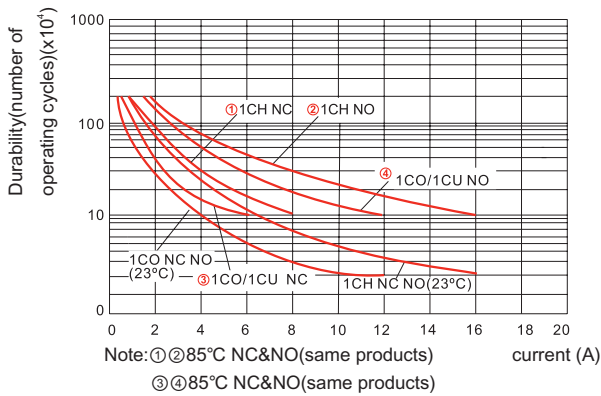
**Coil Specifications (23°C)**

Nominal voltage V.DC	5	6	9	12	24	48	60	110
Coil resistance Ω	62.5	90	200	360	1440	5220	8570	28800
Nominal voltage V.AC	24	115	230					
Coil resistance Ω	350	8100	23800					

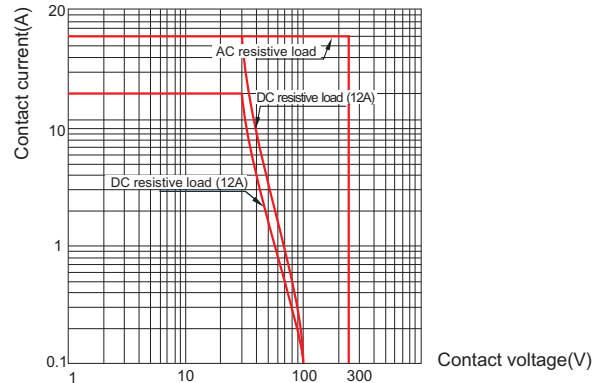
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

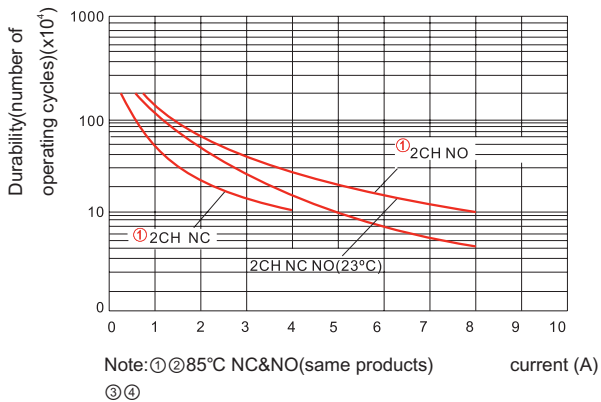
**R2G-1** Electrical durability contacts



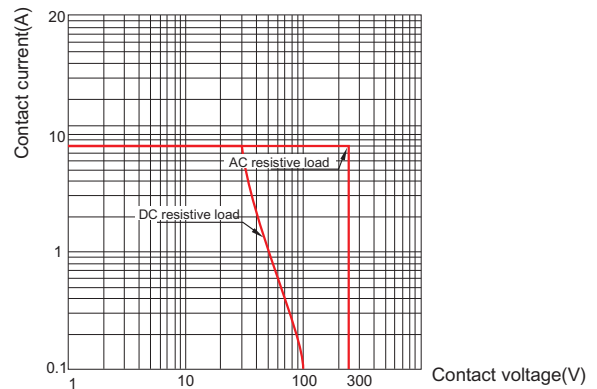
Maximum switching capacity



**R2G-2** Electrical durability contacts

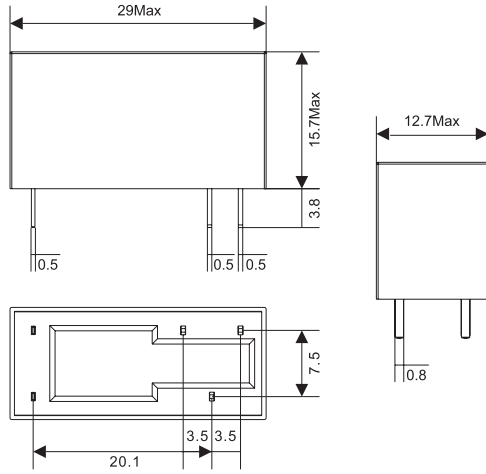


Maximum switching capacity

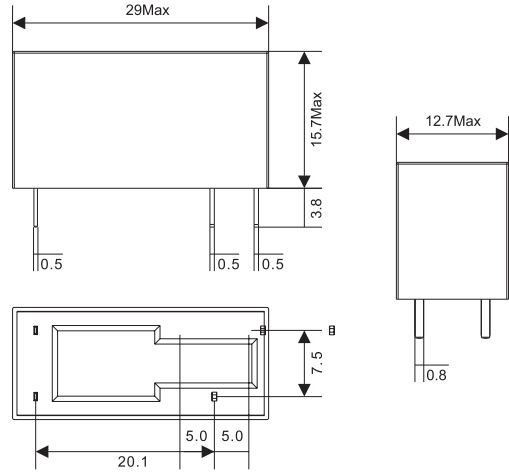


**Dimensions (mm)**

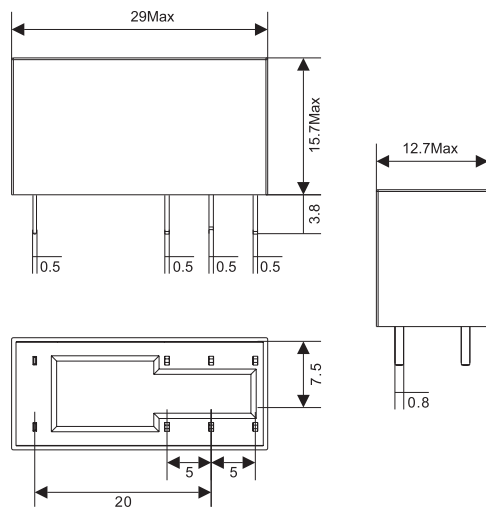
**R2G1CO 3.5mm**



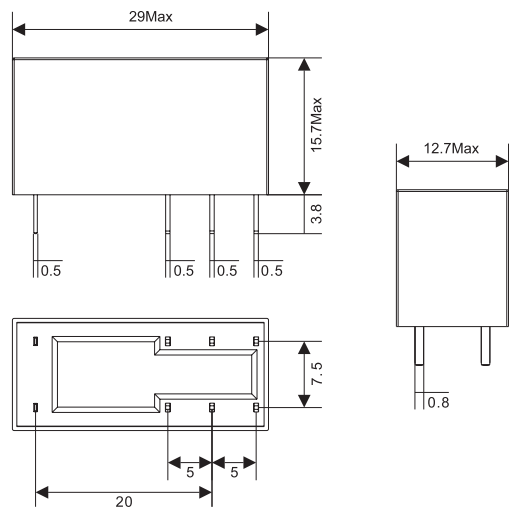
**R2G1CU 5.0mm**



**R2G1CH 5.0mm**



**R2G2CH 5.0mm**



**Wiring Diagrams**

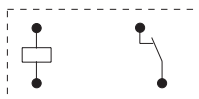
**R2G1AO/1AU**



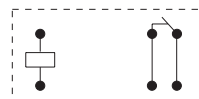
**R2G1AH**



**R2G1BO/1BU**



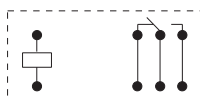
**R2G1BH**



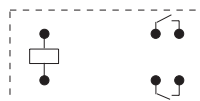
**R2G1CO/1CU**



**R2G1CH**



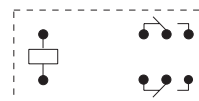
**R2G2AH**



**R2G2BH**



**R2G2CH**



## Characteristics



SRC05-ST



SRC08-ST



Type		SRC05-ST	SRC08-ST
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	-	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	37	42

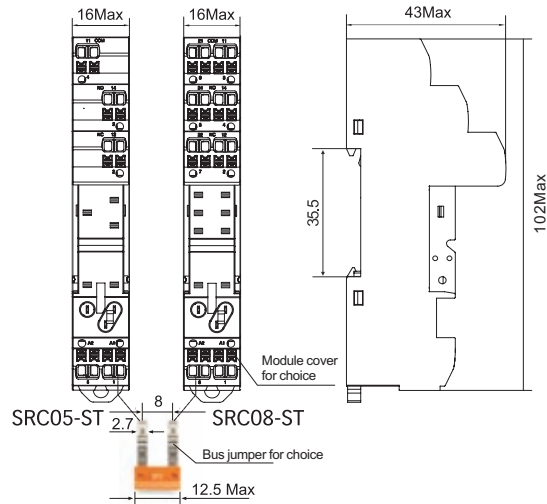
### Relay, accessories Selection Table

Socket	ID tag	Bus Jumper	Module
SRC05-ST			
SRC08-ST	SR2P	ST01CC	AMD

### Clip selection table

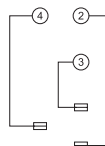
Relay H (mm)	15	20	25
Clip Type			
	SR15L	SR20F	SR25C

## Dimensions (mm)



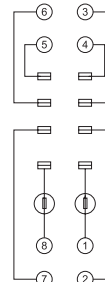
## Connection Diagrams

- ① ⑤ : A1 A2
- ② : NC
- ③ : NO
- ④ : COM



SRC05-ST

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



SRC08-ST



## Characteristics



SRC08-E



SRC08-E



Type		SRC05-E	SRC08-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 <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	33	37

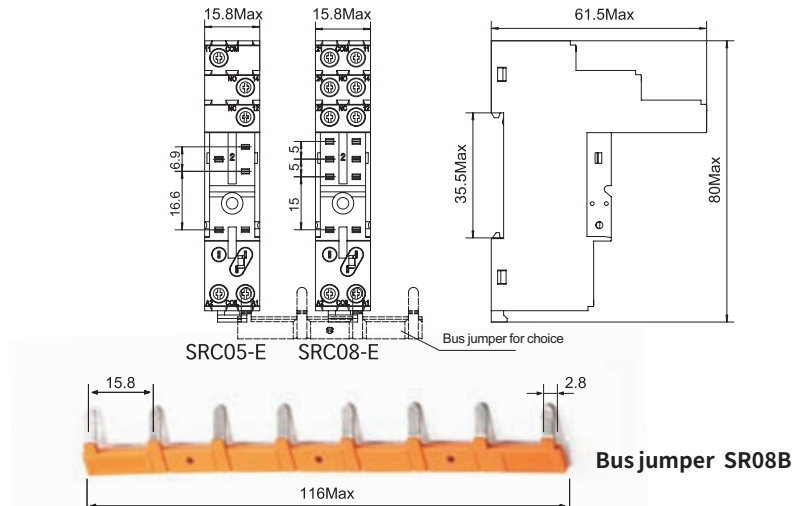
### Relay, accessories Selection Table

Socket	ID tag	Bus Jumper	Module
SRC05-E			
SRC08-E	SR2P	SR08B	AMD

### Clip selection table

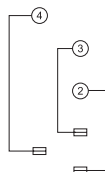
Relay H (mm)	15	20	25
Clip Type			
	SR15L	SR20F	SR25C

## Dimensions (mm)

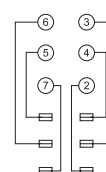


## Connection Diagrams

- ① ⑤ : A1 A2
- ② : NC
- ③ : NO
- ④ : COM



SRC05-E



SRC08-E

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

Characteristics



SRB05-E



SRB08-E



Type		SRB05-E	SRB08-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 <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	33	37

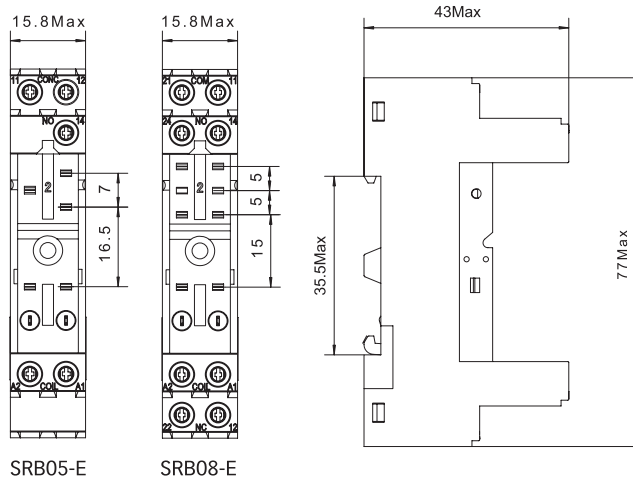
Relay, accessories Selection Table

Socket	ID tag	Module
SRB05-E	SR2P	AMD
SRB08-E		

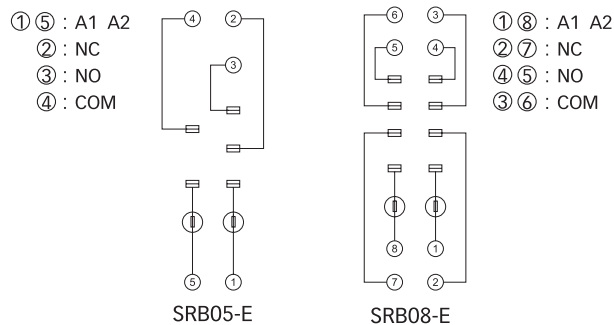
Clip selection table

Relay H (mm)	15	20	25
Clip Type	SR15L	SR20F	SR25C

Dimensions (mm)



Connection Diagrams



**Characteristics**

SRC05-P





SRC08-P

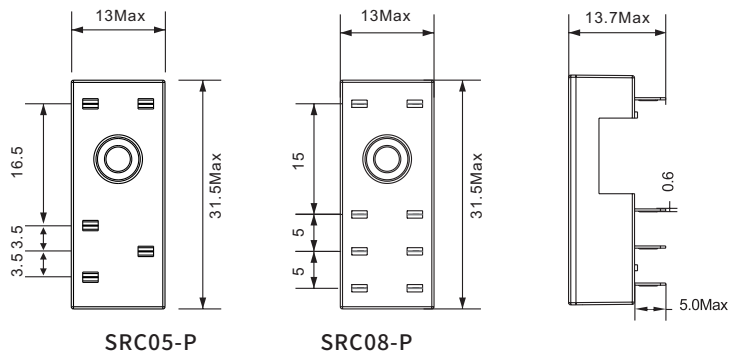


Type		SRC05-P	SRC08-P
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm <sup>2</sup>	-	
Ambient temperature	°C	-40~+85	
Unit weight	g	10	10

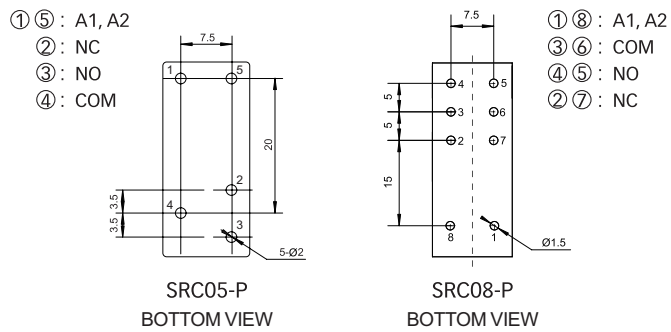
**Relay, accessories Selection Table**

Socket	Metal clip
SRC05-P	 SR15M
SRC08-P	 SR1520M

**Dimensions (mm)**



**Connection Diagrams**



- ◆ Slim and compact size
- ◆ 1 pole 12A; 2 pole 8A
- ◆ 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

**Test button**  
On-site test is available with test button.

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

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

**AMD module**

**Bus jumper**  
Bus jumper extends the circuit.

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

**Top copper coil material**  
Standard turns and electromagnetic coils make the pick-up more reliable and enduring, which can reach more than 20 million cycles.





Relay  
+



Socket  
=



Relay module

RFT □ □ □ □

**Other options**

- blank: standard type
- L: with LED
- D: with diode (1-,5+ ; 1-,8+)
- D1: with diode(1+,5-; 1+,8-)
- LD: with LED and diode (1-,5+ ; 1-,8+)
- LD1: with LED and diode (1+,5-; 1+,8-)
- LT: LED + Test button
- LTD: LED + test button+diode (1-, 5+; 1-, 8+)
- LTD1: LED + test button+diode (1+, 5-; 1+, 8-)
- B: cover with flange (selection plus B,namely LB,DB,LDB, etc.)
- A:gold plated contact

**Coil voltage code**

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

**Terminal arrangement**

O: plug in

**Contact form**

- 1C: 1CO
- 2C: 2CO

**Series**

**Characteristics**

		1C	2C
Configuration		1C	2C
Load	Resistance	12A/250VAC, 30VDC	8A/250VAC, 30VDC
	Motor load	1/3HP, 240VAC	1/6HP, 240VAC
	Max. switching capacity (resistive)	3000VA, 360W	2000VA, 240W
Contact	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electrical durability (high temp., frequency 1s on, 1s off)	≥20 x 10 <sup>4</sup> Cycles (1800 Ops/h)	
	Electrical durability (normal temp., frequency 1s on, 5s off)	≥30 x 10 <sup>4</sup> Cycles(600 Ops/h)	
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	≥1000MΩ (500VDC)		
Coil operating power	DC(W)	approx. 0.53	
	AC(VA)	approx. 1.0	
Operate time (at nominal voltage)	≤20ms		
Release time (at nominal voltage)	≤10ms		
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)	
	Between poles	3000VAC/1min (leakage current 1mA)	
	Between contacts and coil	5000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	
	IEC 60664 UL840 Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50us)	4000V		

Protection level	IP50
Storage temperature/ humidity	55~+85°C/5%~68%RH(18 months)
Working temperature/ humidity	-40~+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. 18g

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

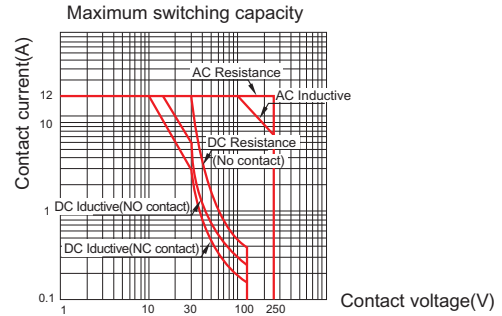
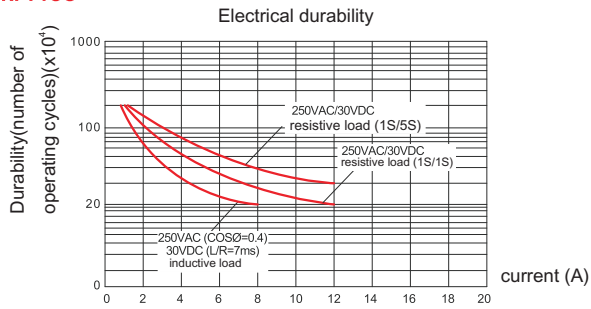
**Coil Specifications (23°C)**

Nominal voltage V.DC	6	12	24	48	110	
Coil resistance Ω	68	270	1100	4300	22800	
Nominal voltage V.AC	6	12	24	48	115	230
Coil resistance Ω	16	63	240	1085	6300	23000

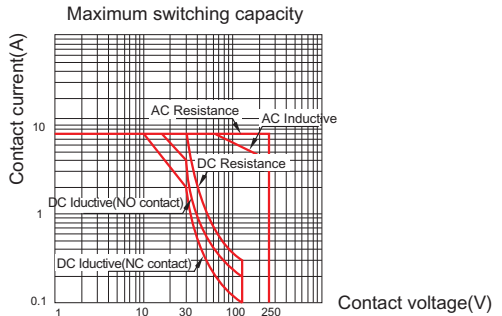
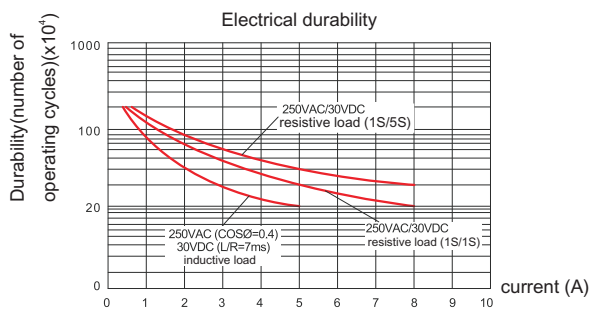
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

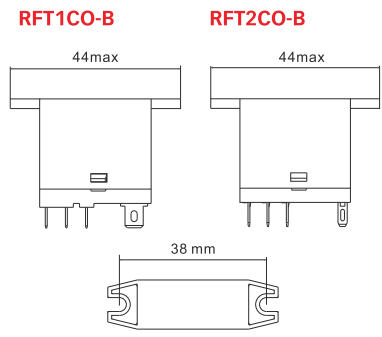
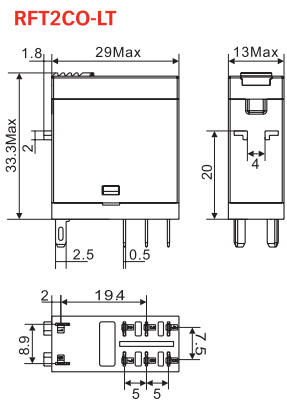
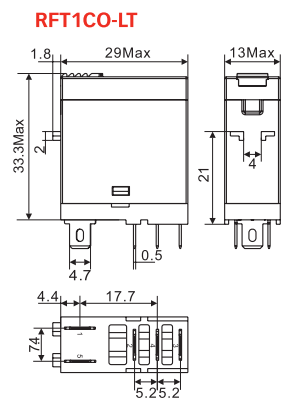
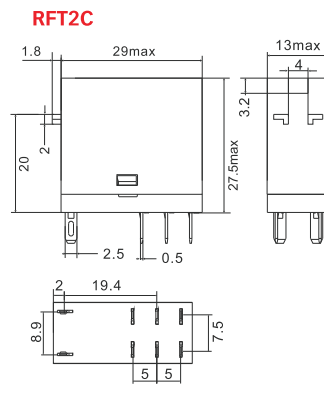
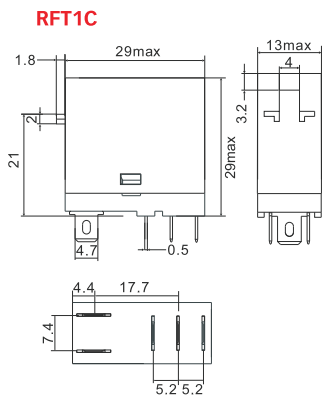
**RFT1CO**



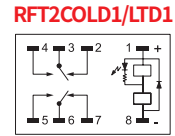
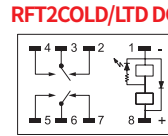
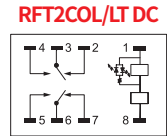
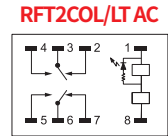
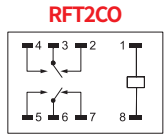
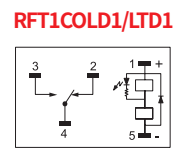
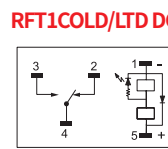
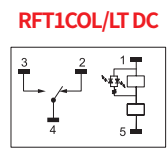
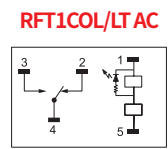
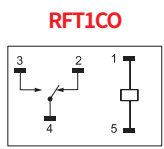
**RFT2CO**



**Dimensions (mm)**



**Wiring Diagrams**



**Characteristics**



SRT05-A





SRT08-A

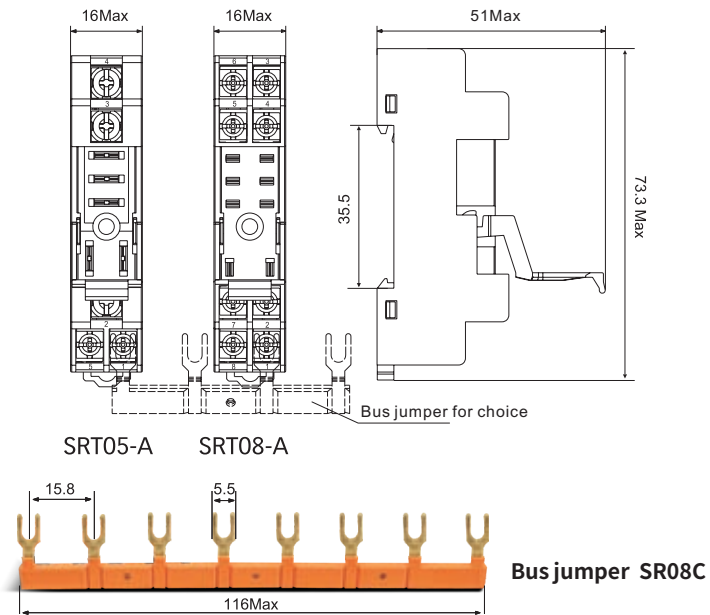


Type			SRT05-A	SRT08-A
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature		°C	-40~+85	
Unit weight		g	22	27

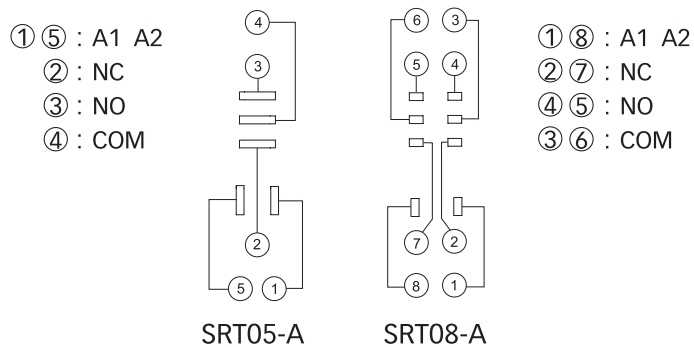
**Relay, accessories Selection Table**

Plastic clip	Bus jumper
 SR20 (included in socket)	 SR08C

**Dimensions (mm)**



**Connection Diagrams**





**Characteristics**





SRT05-E



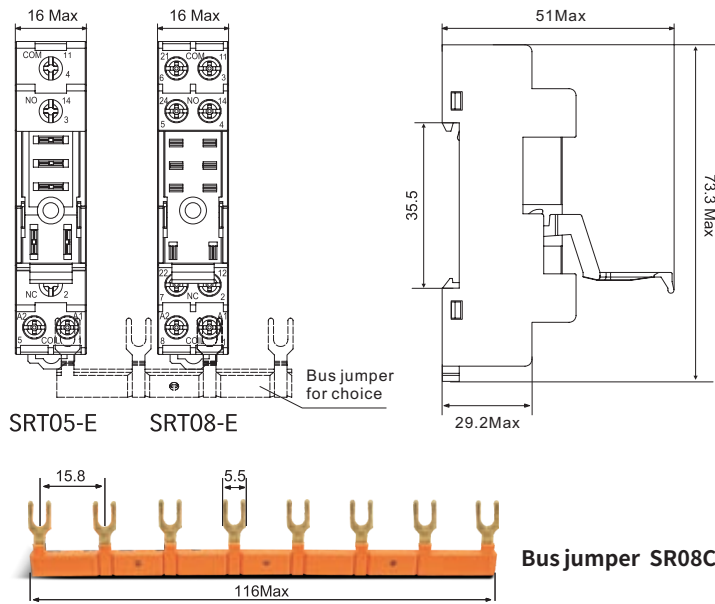
SRT08-E



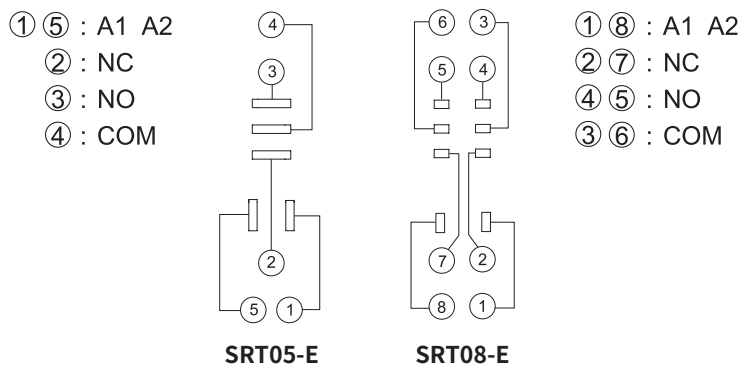
Type			SRT05-E	SRT08-E
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature		°C	-40~+85	
Unit weight		g	22	27

Relay, accessories Selection Table	
Plastic clip	Bus jumper
	
(included in socket)	SR08C

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



SRT05-ES





SRT08-ES

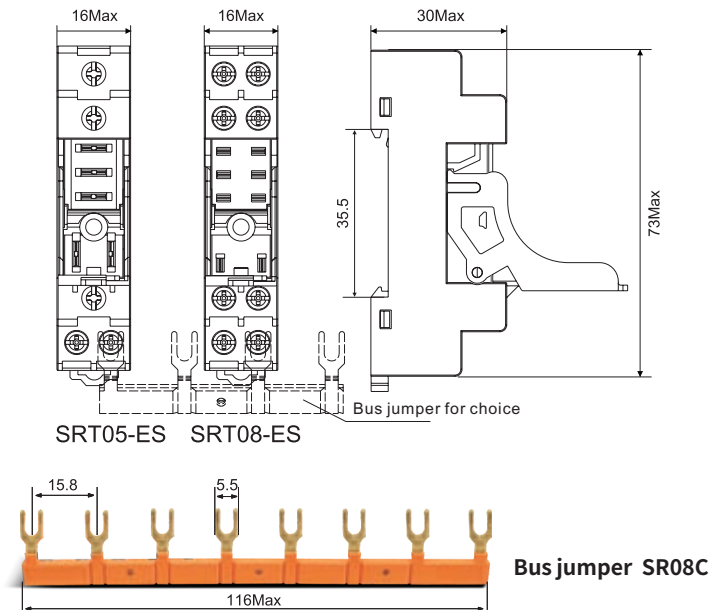


Type			SRT05-ES	SRT08-ES
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature		°C	-40~+85	
Unit weight		g	22	27

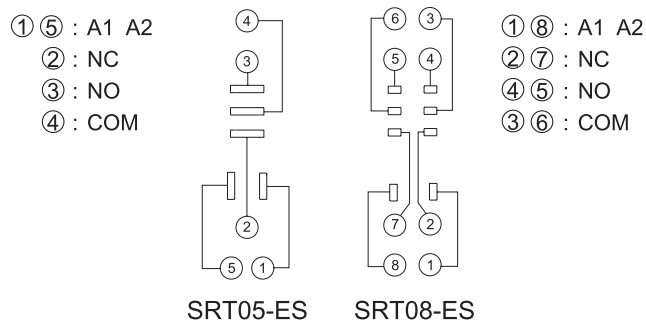
**Relay, accessories Selection Table**

Socket	Plastic clip	Bus jumper
SRT05-ES	 SR20L (included in socket)	 SR08C
SRT08-ES		

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**







SRU05-E



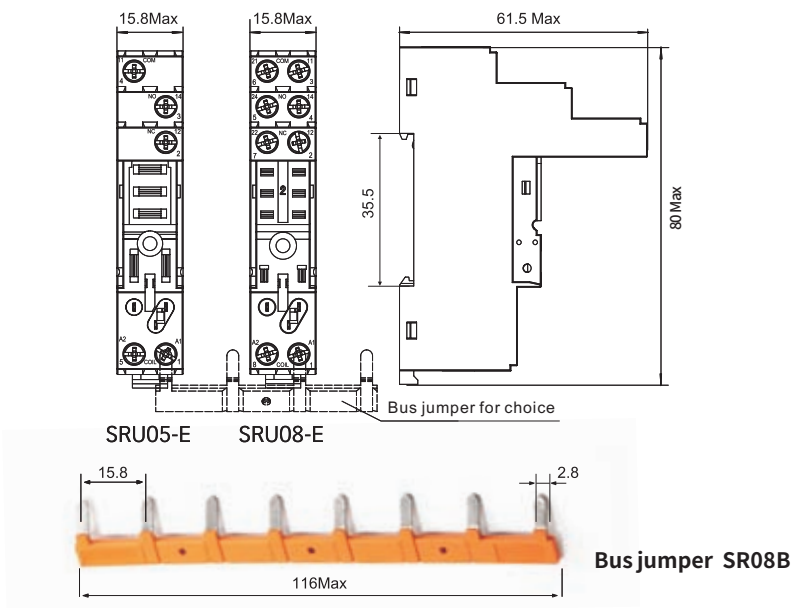
SRU08-E



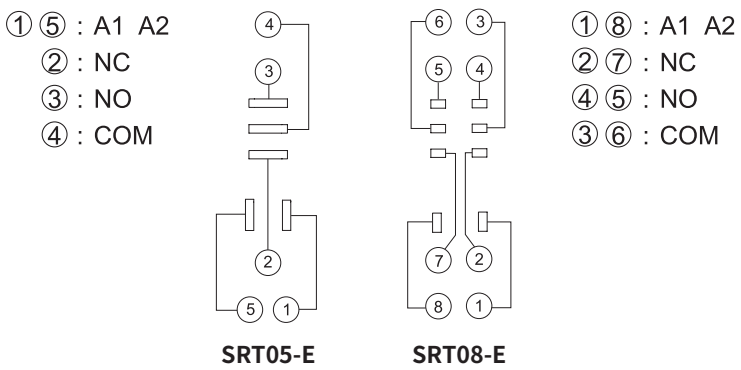
Type			SRU05-E	SRU08-E
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature		°C	-40~+85	
Unit weight		g	35	43

Socket	Plastic clip	ID tag	Module	Bus jumper
SRU05-E				
SRU08-E	SR20T	SR2P	AMD	SR08B

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



SRU05-ST



SRU08-ST

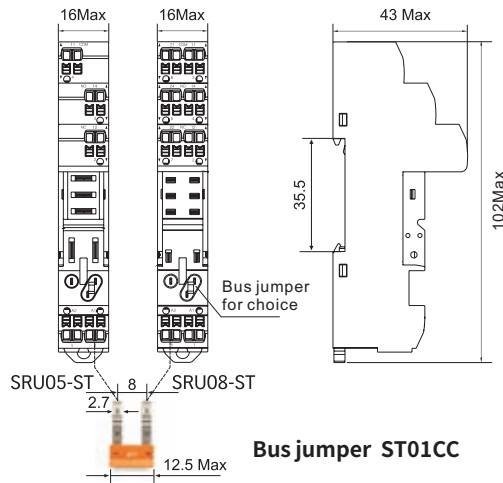


Type			SRU05-ST	SRU08-ST
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque	Nm	-		
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	35	43	

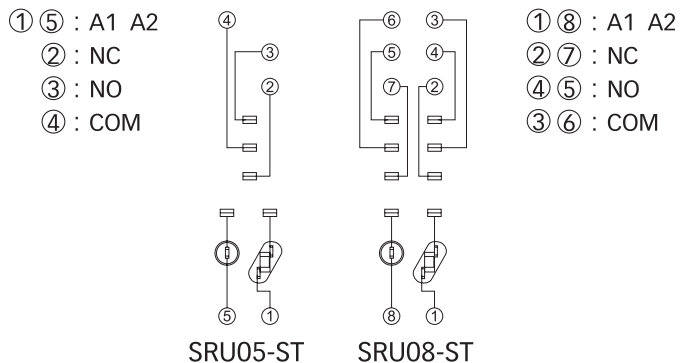
**Relay, accessories Selection Table**

Socket	Plastic clip	ID tag	Module	Bus jumper
SRU05-ST				
SRU08-ST	SR20T	SR2P	AMD	ST01CC

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**

**SRT05-P**

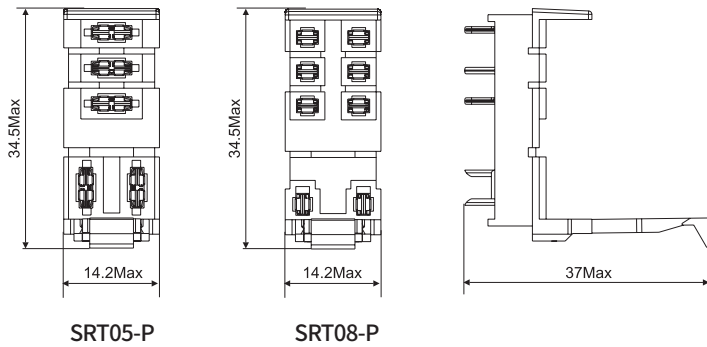


**SRT08-P**

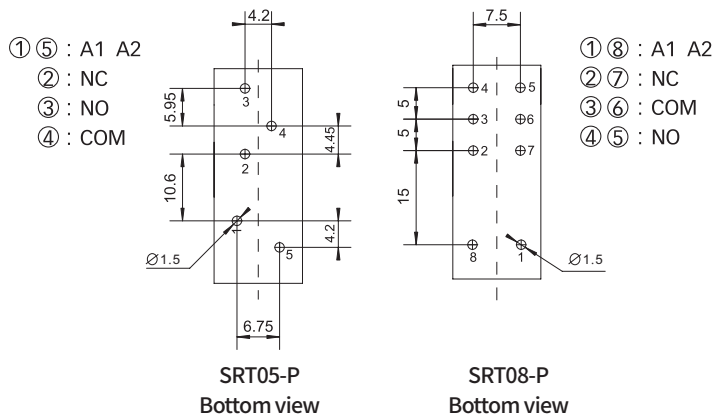


Type			SRT05-P	SRT08-P
Nominal load	Current	A	8	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Ambient temperature		°C	-40~+85	
Unit weight		g	4	

**Dimensions (mm)**



**Connection Diagrams**



# Selection manual of industrial control relay

## RKM Miniature General Purpose Relay

- 2 pole 5A, 4 pole 3A
- With LED integrated in relay
- With inspection window
- Shenler industrial relays are widely used in the output signal and safety drive of PLC, CNC system, robot, intelligent manufacturing and other control systems. It is the best choice to realize remote control, production and processing, packaging, transportation, testing, storage and other equipment and automatic assembly lines.

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

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

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

**Top copper coil material**  
Standard turns and electromagnetic coils make the pick-up more reliable and enduring, which can reach more than 20 million cycles.

**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

+

RKM □ □ □ □

**Other options**

L: LED  
LD: LED + Test button (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

**Mount options**

O: plug in

**Contact form**

2C: 2CO  
3C: 3CO  
4C: 4CO

**Series name**



Socket

=



Relay module

**Characteristics**

Configuration	2C/3C	4C	
	Resistance	5A/250VAC, 30VDC	3A/250VAC, 30VDC
Load	Motor load	1/3HP, 240VAC	1/6HP, 240VAC
	Max. switching capacity (resistive)	1250VA, 150W	750VA, 90W
Contact	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electrical durability	≥10 x 10 <sup>4</sup> Cycles (1800 Ops/h)	
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	
	AC(VA)	approx. 1.2	
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	4000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	2
IEC 60664 UL840	Overvoltage level	III	II
Impulse withstand voltage (waveform: 1.2/50us)	4000V		
Protection level	IP50		
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)		
Working temperature/ humidity	-55~+70°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		

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

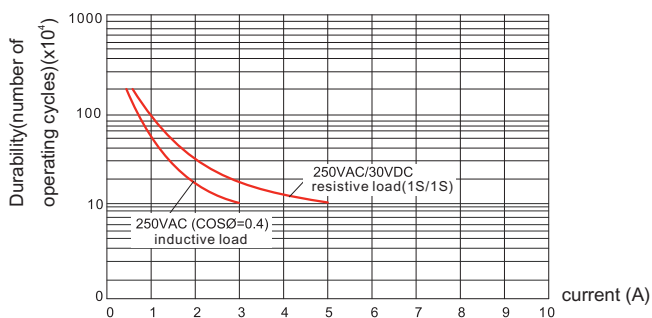
**Coil Specifications (23°C)**

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

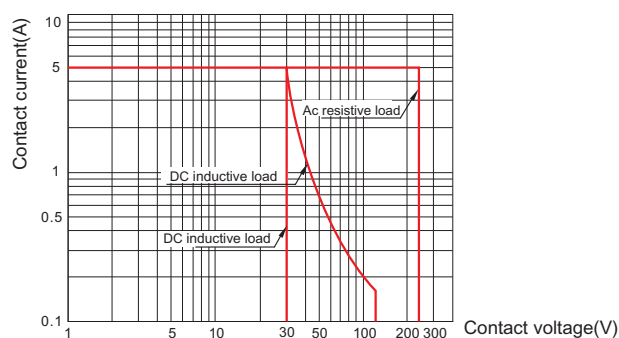
Coil resistance: under coil voltage 110V are measured with tolerance of  $\pm 10\% \Omega$ , above 110V with tolerance of  $\pm 15\% \Omega$ .

**Contact Specification**

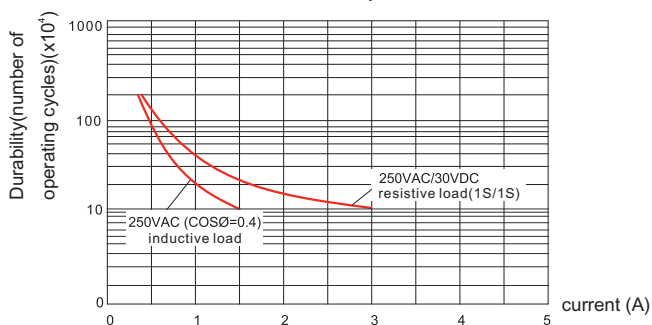
**RKM2CO** Electrical durability contacts



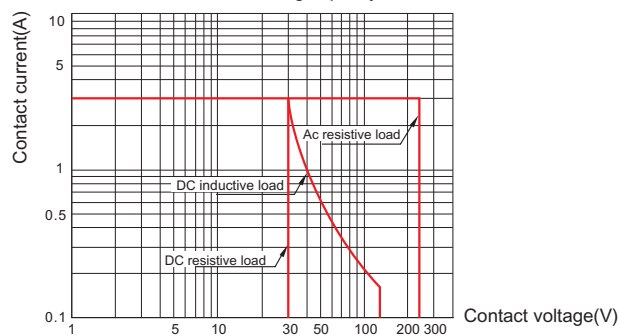
Maximum switching capacity



**RKM4CO** Electrical durability contacts

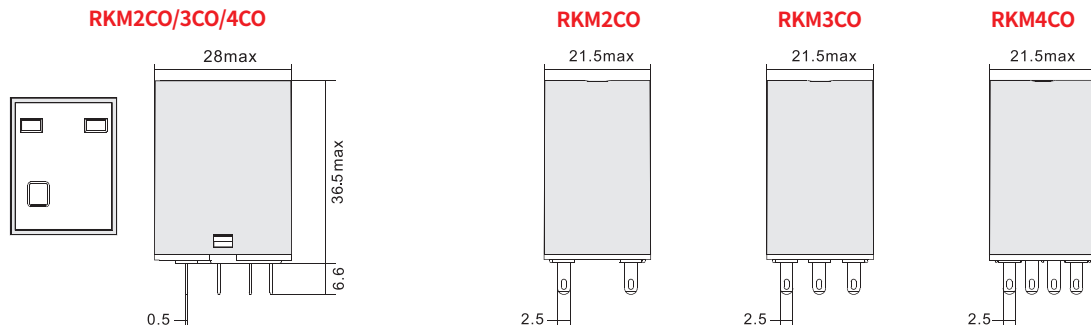


Maximum switching capacity

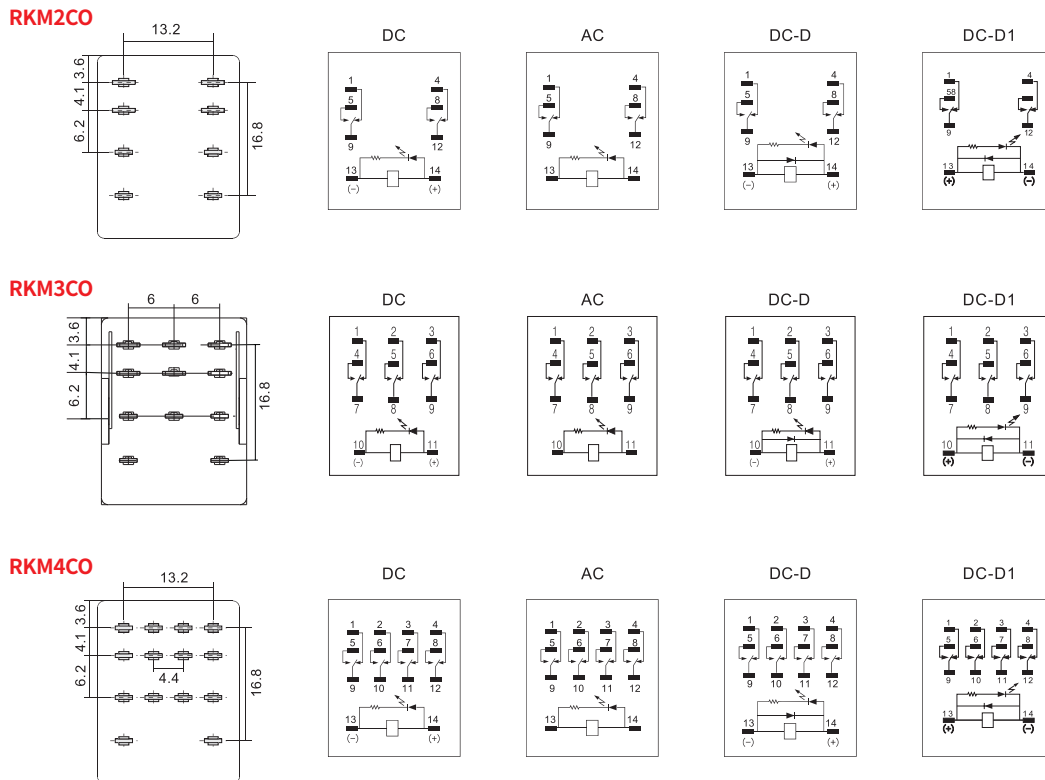




**Dimensions (mm)**



**Wiring Diagrams**



**Characteristics**



SYF08A-E




SYF14A-E

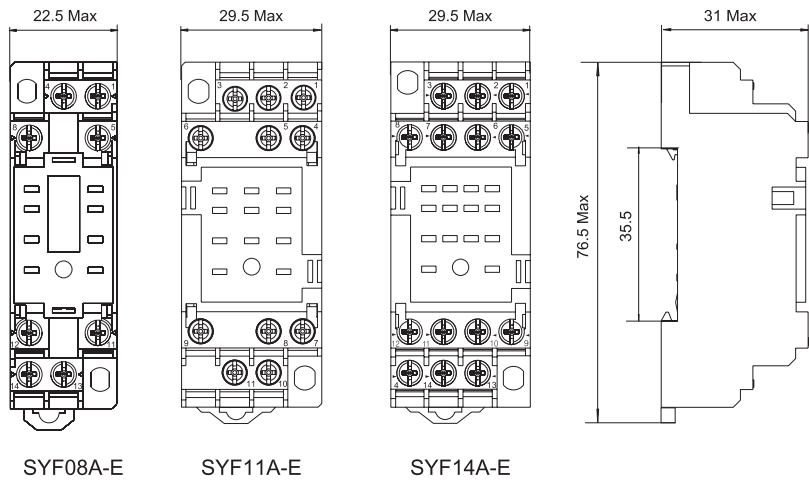


Type			SYF08A-E	SYF11A-E	SYF14A-E
Nominal load	Current	A	10	7	7
	Voltage	V	300		
Dielectric strength		V/min	2000		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5		
Ambient temperature		°C	-40~+85		
Unit weight		g	36	56	57

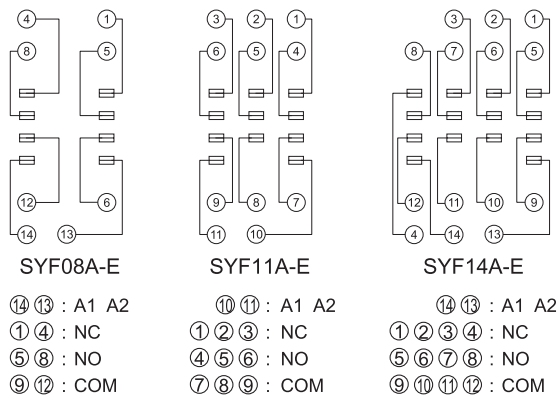
**Relay, accessories Selection Table**

Socket	Metal clip
SYF08A-E	 SY36S
SYF11A-E	
SYF14A-E	

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



SYF08A




SYF14A

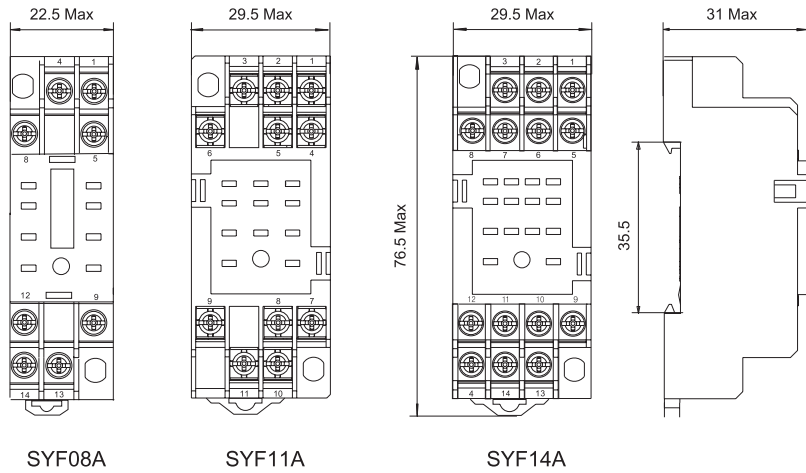


Type		SYF08A	SYF11A	SYF14A
Nominal load	Current	A	10	7
	Voltage	V	300	
Dielectric strength		V/min	2000	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5	
Ambient temperature		°C	-40~+85	
Unit weight	g	34	47	56

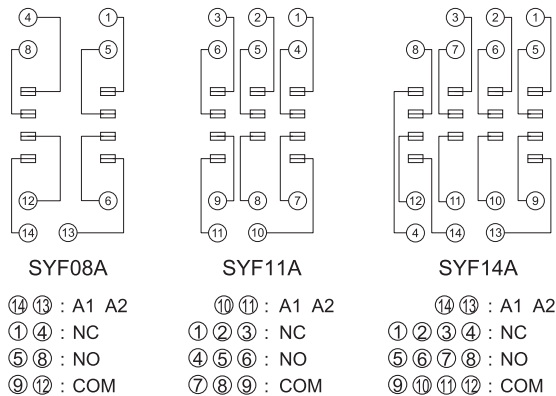
**Relay, accessories Selection Table**

Socket	Metal clip
SYF08A	 SY36S
SYF11A	
SYF14A	

**Dimensions (mm)**



**Connection Diagrams**



**Selection manual of industrial control relay**

**RKE**  
Miniature General Purpose Relay

- 2 pole 7A; 4 pole 5A
- 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

**Test button**  
On-site test is available with test button.

**Plastic clip**  
The relay is firmly attached to the socket by retaining clip.

**AMD module**

**Bus jumper**  
To extend the circuit.

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

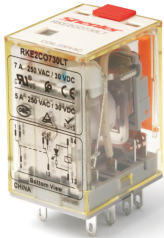
**Silver alloy contacts**  
It can carry more current, with stronger conductivity and more sensitive response, and greatly extend electrical life, and works more stable.

**ID tag**  
The product and nameplate is printed with clear wiring instruction.



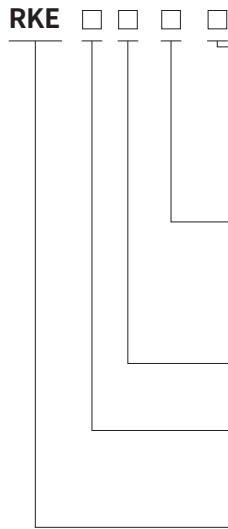
# RKE

Miniature General Purpose Relay



Relay

+



**Other options**

- LT: LED + test button
- LTD: LED + test button + diode (13-,14+)
- LTD1: LED + test button + diode (13+,14-)
- LTM: LED+test button, with 0.65Un coil tuned
- A:gold plated contact

**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**

2C: 2CO

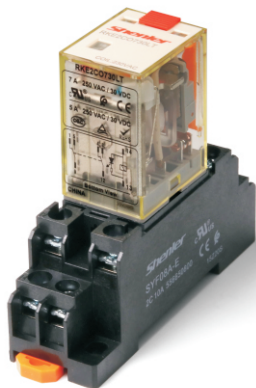
4C: 4CO

**Series name**



Socket

=



Relay module

## Characteristics

Configuration		2C	4C
Load	Resistance	7A/250VAC, 30VDC	5A/250VAC, 30VDC
	Motor load	1/6HP, 240VAC	
Contact	Max. switching capacity (resistive)	1750VA, 210W	1250VA, 150W
	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electric durability(110%rated voltage, 55°C)	≥20 x 10 <sup>4</sup> Cycles (1800 Ops/h)	
	Electric durability (Normal temperature)	≥40x 10 <sup>4</sup> Cycles (360 Ops/h)	
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	
	AC(VA)	approx. 1.2	
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	4000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	
IEC 60664 UL840	Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50us)		4000V	
Protection level		IP50	
Storage temperature/ humidity		-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity		-55~+70°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	

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

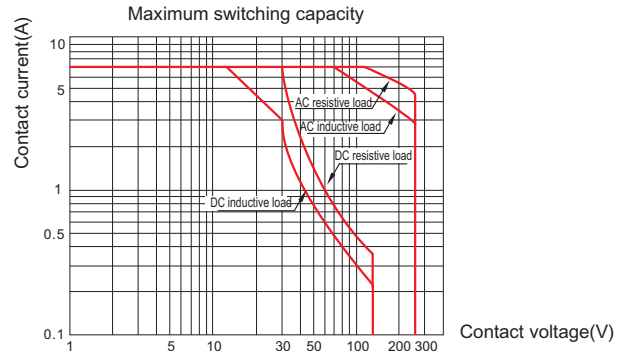
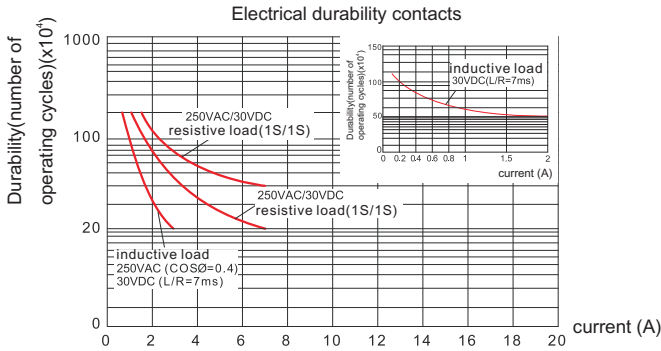
**Coil Specifications (23°C)**

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

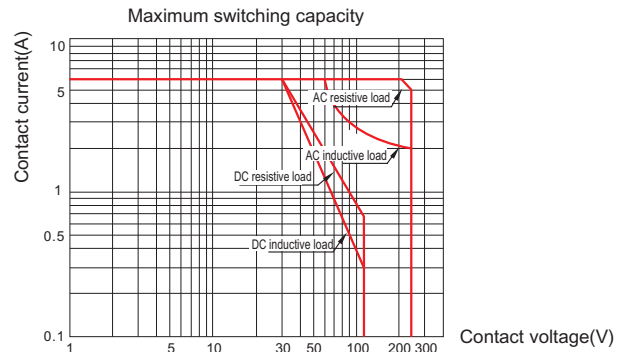
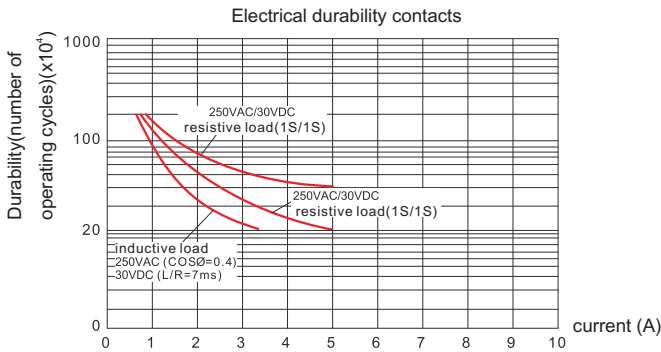
Coil resistance: under coil voltage 110V are measured with tolerance of  $\pm 10\% \Omega$ , above 110V with tolerance of  $\pm 15\% \Omega$ .

**Contact Specification**

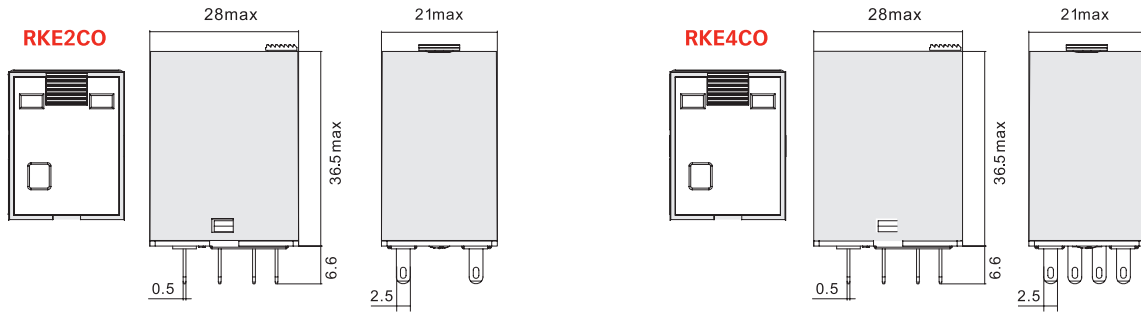
**RKE2CO**



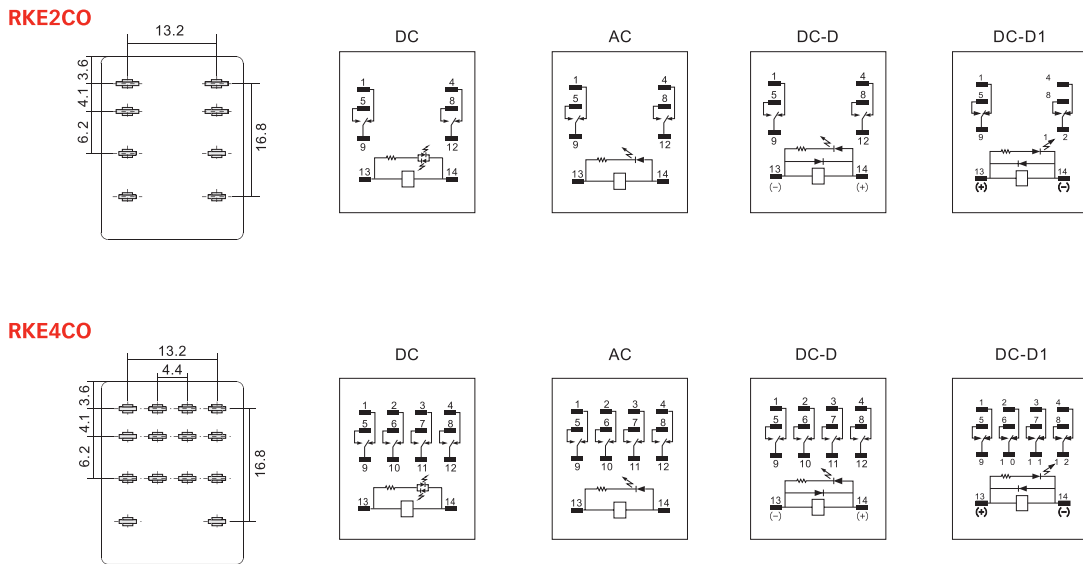
**RKE4CO**



**Dimensions (mm)**



**Wiring Diagrams**





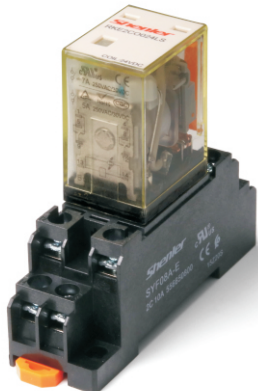
Relay

+



Socket

=



Relay module

RKE □ □ □ □

**Other options**

- LS: LED + Sealed
- LSA: LED + Sealed + Signal Control
- LTM: LED+test button, with 0.65Un coil tuned

**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**

0: plug in

**Contact form**

- 2C: 2CO
- 4C: 4CO

**Series name**



Humidity proof



Dust proof



Oil proof



Protection level

- ◆ Good performance in bad working condition, especially in much oil, dust, humidity places ◆ IP62
- ◆ 2 pole 7A; 4 pole 5A ◆ With non-polarity LED integrated in relay ◆ Conformity with RoHs Directive

**Characteristics**

Configuration		2C	4C
Load	Resistance	7A/250VAC, 30VDC	5A/250VAC, 30VDC
	Motor load	1/6HP, 240VAC	
Max. switching capacity (resistive)		1750VA, 210W	1250VA, 150W
Contact	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electric durability(110%rated voltage, 55°C)	≥20 x 10 <sup>4</sup> Cycles (1800 Ops/h)	
	Electric durability (Normal temperature)	≥40 x 10 <sup>4</sup> Cycles (360 Ops/h)	
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	
	AC(VA)	approx. 1.2	
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	4000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	
	Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50us)		4000V	
Protection level		IP62	
Storage temperature/ humidity		-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity		-55~+70°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	



★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

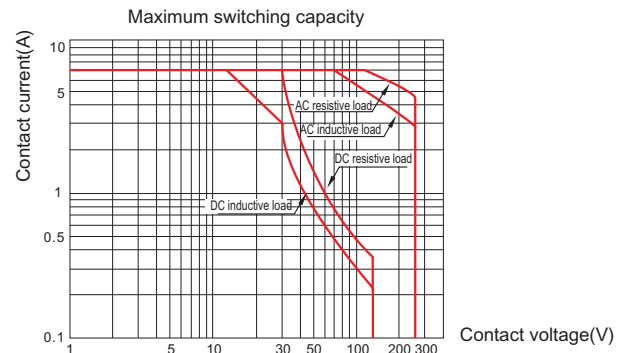
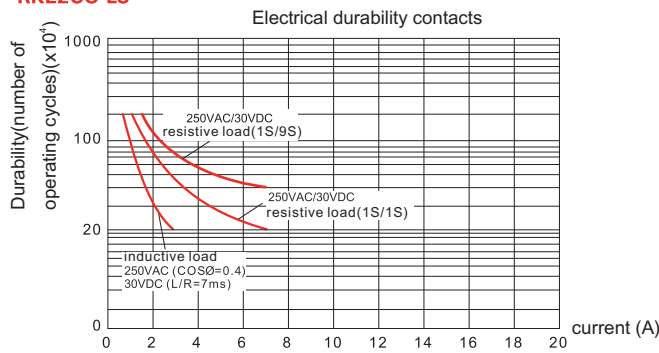
**Coil Specifications (23°C)**

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

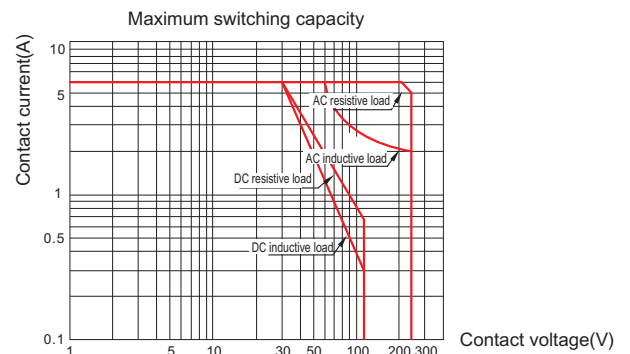
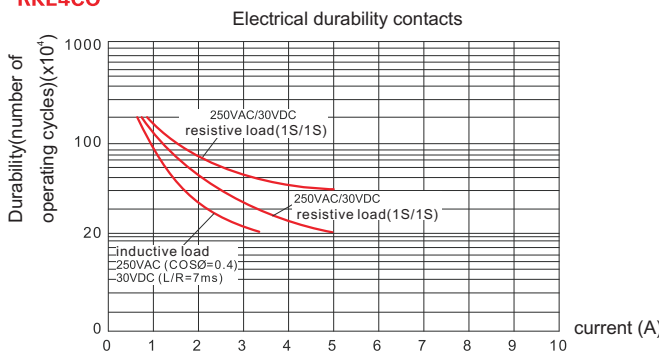
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

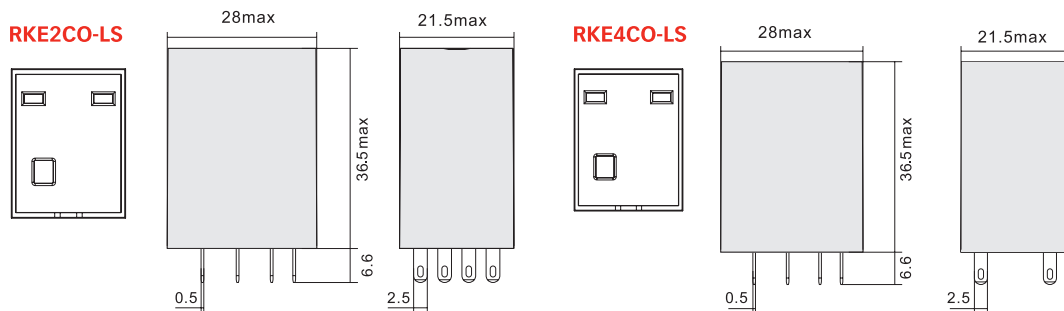
**RKE2CO-LS**



**RKE4CO**



**Dimensions (mm)**



**Characteristics**



SYF08A-E



SYF14A-E

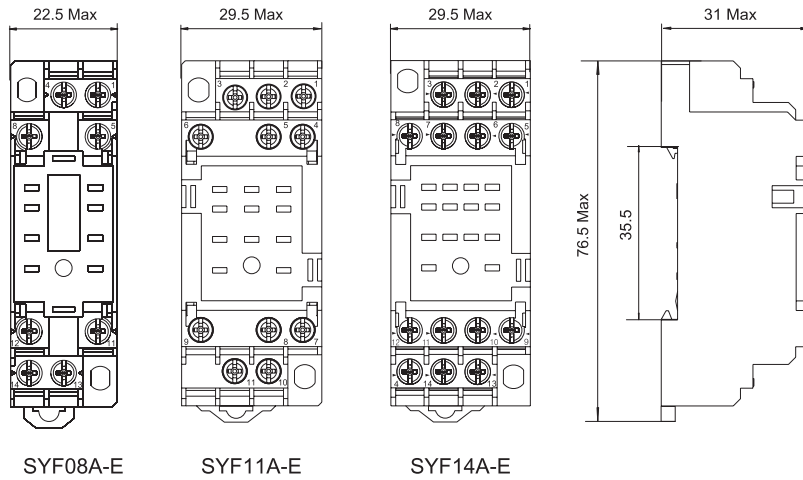


Type		SYF08A-E	SYF11A-E	SYF14A-E
Nominal load	Current	A	10	7
	Voltage	V	300	
Dielectric strength		V/min	2000	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5	
Ambient temperature		°C	-40~+85	
Unit weight		g	36	56
			56	57

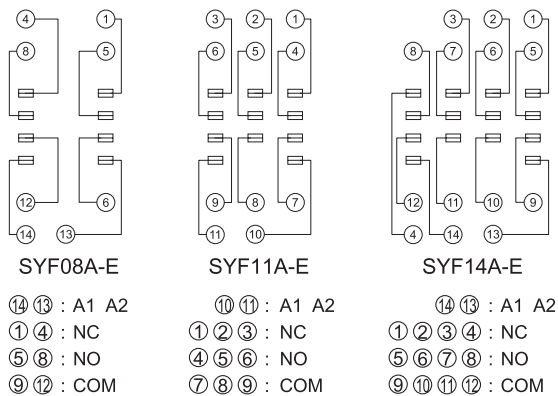
**Relay,accessories Selection Table**

Socket	Metal clip
SYF08A-E	<p>SY36S</p>
SYF11A-E	
SYF14A-E	

**Dimensions (mm)**



**Connection Diagrams**



**Characteristics**



SYF08A



SYF14A

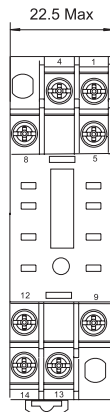


Type		SYF08A	SYF11A	SYF14A
Nominal Current load	A	10	7	7
Voltage	V	300		
Dielectric strength	V/min	2000		
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm <sup>2</sup>	20-16/0.5-1.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	34	47	56

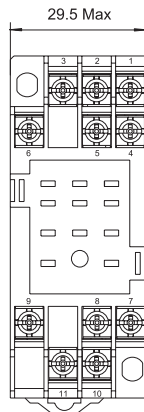
**Relay, accessories Selection Table**

Socket	Metal clip
SYF08A	 SY36S
SYF11A	
SYF14A	

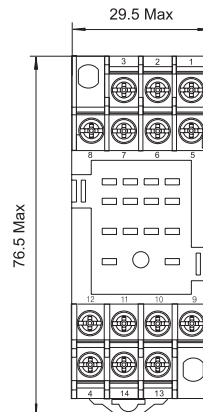
**Dimensions (mm)**



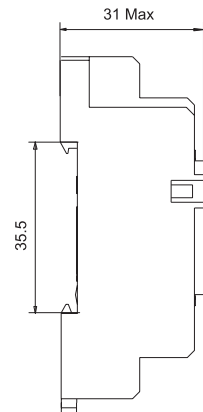
SYF08A



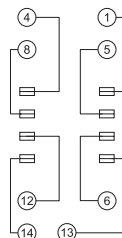
SYF11A



SYF14A

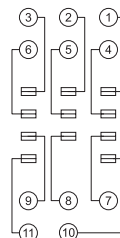


**Connection Diagrams**



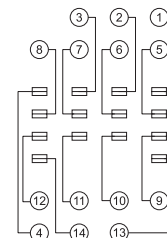
SYF08A

⑭ ⑬ : A1 A2  
 ① ④ : NC  
 ⑤ ⑧ : NO  
 ⑨ ⑫ : COM



SYF11A

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



SYF14A

⑭ ⑬ : A1 A2  
 ① ② ③ ④ : NC  
 ⑤ ⑥ ⑦ ⑧ : NO  
 ⑨ ⑩ ⑪ ⑫ : COM

**Characteristics**



SKB08-E







SKB14-E

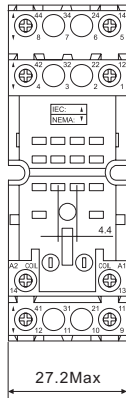


Type		SKB08-E	SKB14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	56

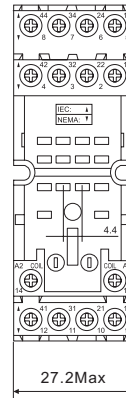
**Relay, accessories Selection Table**

Socket	Plastic clip	Metal clip	ID tag	Module
SKB08-E				
SKB14-E	SK36F	SK36M	SK4P	AMD

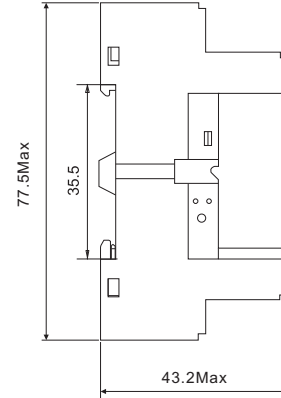
**Dimensions (mm)**



SKB08-E



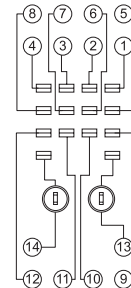
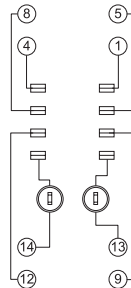
SKB14-E



**Connection Diagrams**

SKB08-E

- ⑬ ⑭ : A1 A2
- ① ④ : NC
- ⑤ ⑧ : NO
- ⑨ ⑫ : COM



SKB14-E

- ⑬ ⑭ : A1 A2
- ① ② ③ ④ : NC
- ⑤ ⑥ ⑦ ⑧ : NO
- ⑨ ⑩ ⑪ ⑫ : COM

**Characteristics**



SKC08-E



SKC14-E

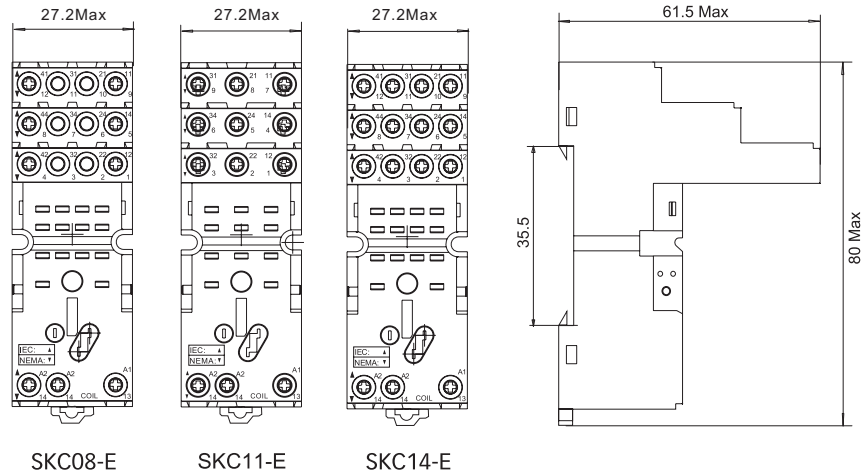


Type		SKC08-E	SKC11-E	SKC14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	50	56	62

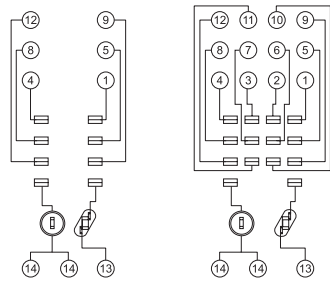
**Relay, accessories Selection Table**

Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E				
SKC11-E				
SKC14-E				

**Dimensions (mm)**



**Connection Diagrams**



- SKC08-E SKC14-E
- ⑬ ⑭ : A1 A2
  - ① ④ : NC
  - ⑤ ⑧ : NO
  - ⑨ ⑫ : COM
- ⑬ ⑭ : A1 A2
  - ① ② ③ ④ : NC
  - ⑤ ⑥ ⑦ ⑧ : NO
  - ⑨ ⑩ ⑪ ⑫ : COM

## Characteristics



SKC08-ST



SKC14-ST

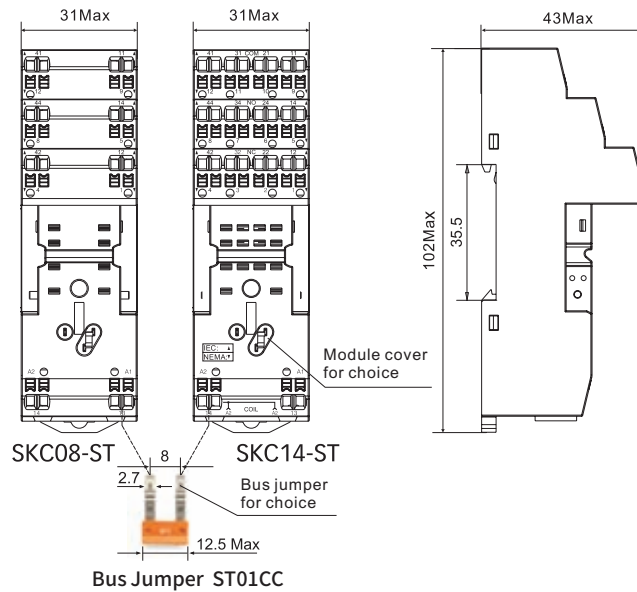


Type		SKC08-ST	SKC14-ST
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	80	80

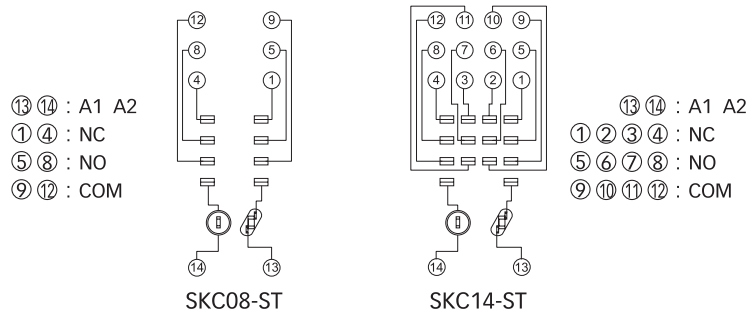
### Relay, accessories Selection Table

Socket	Plastic clip	ID tag	Module	Bus Jumper
SKC08-ST				
SKC14-ST	SK36F	SK4P	AMD	ST01CC

## Dimensions (mm)



## Connection Diagrams



## Characteristics



SKF08-E



SKF14-E

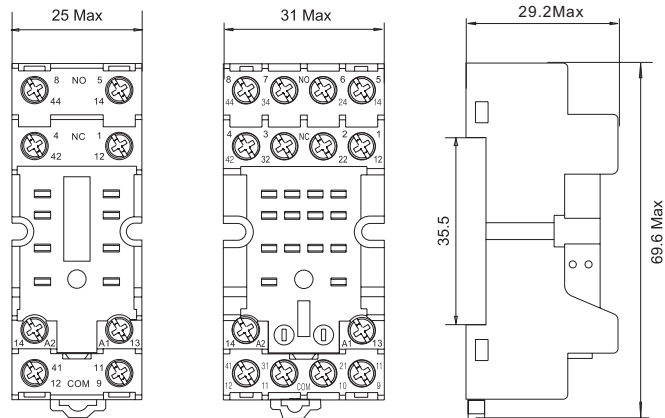


Type		SKF08-E	SKF14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C		
Unit weight	g	35	45

### Relay, accessories Selection Table

Socket	Metal clip	ID tag	Module
SKF08-E			-
SKF14-E	 SK36M	 SK4P	 AMD

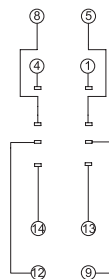
## Dimensions (mm)



SKF08-E

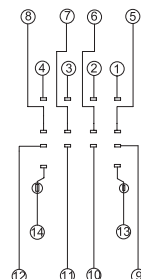
SKF14-E

## Connection Diagrams



SKF08-E

⑬ ⑭ : A1 A2  
 ① ④ : NC  
 ⑤ ⑧ : NO  
 ⑨ ⑫ : COM



SKF14-E

⑬ ⑭ : A1 A2  
 ① ② ③ ④ : NC  
 ⑤ ⑥ ⑦ ⑧ : NO  
 ⑨ ⑩ ⑪ ⑫ : COM

**Characteristics**






SKF14-A

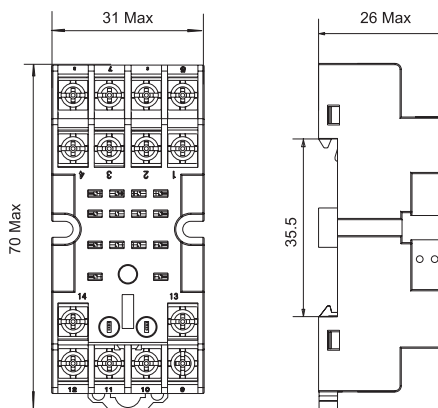


Type		SKF14-A	
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength		V/min	2500
Max. tightening torque		Nm	1.0
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5
Ambient temperature		°C	-40~+85
Unit weight		g	42.9

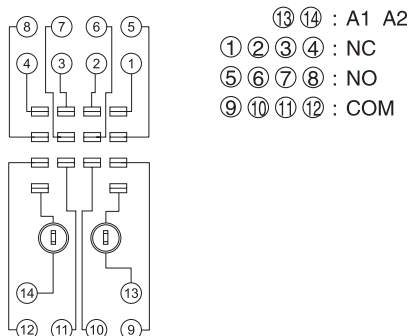
**Relay, accessories Selection Table**

Socket	Metal clip	ID tag	Module
SKF14-A	 SK36M	 SK2P	 AMD

**Dimensions (mm)**



**Connection Diagrams**





**Characteristics**

SY08-P




SY14-P

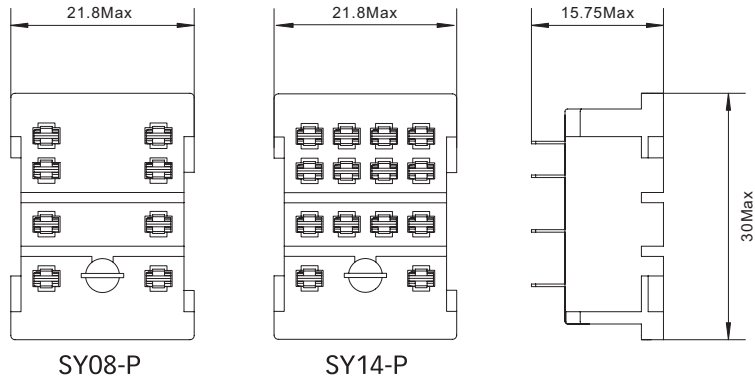


Type		SY08-P	SY14-P
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	V/min	2000	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	7	7

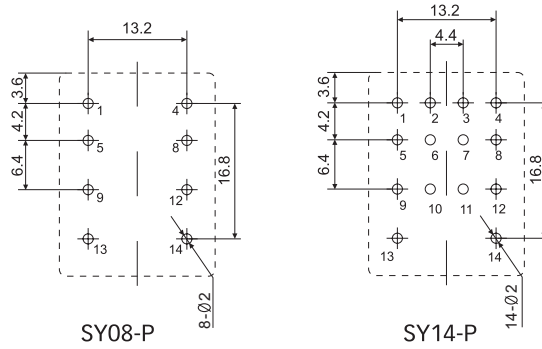
**Relay, accessories Selection Table**

Socket	Metal clip
SY08-P	 SY36M
SY14-P	

**Dimensions (mm)**



**Connection Diagrams**



- ⑬ ⑭ : A1 A2
- ① ④ : NC
- ⑤ ⑧ : NO
- ⑨ ⑫ : COM

- ⑬ ⑭ : A1 A2
- ① ② ③ ④ : NC
- ⑤ ⑥ ⑦ ⑧ : NO
- ⑨ ⑩ ⑪ ⑫ : COM

**Selection manual of industrial control relay**

**RKF**  
Miniature General Purpose Relay

- ◆ 2 pole 12A; 4 pole 6A
- ◆ 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
- ◆ Gold plated contacts optional

**Plastic clip**

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

**Test button**

On-site test is available with test button.

**LED**

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

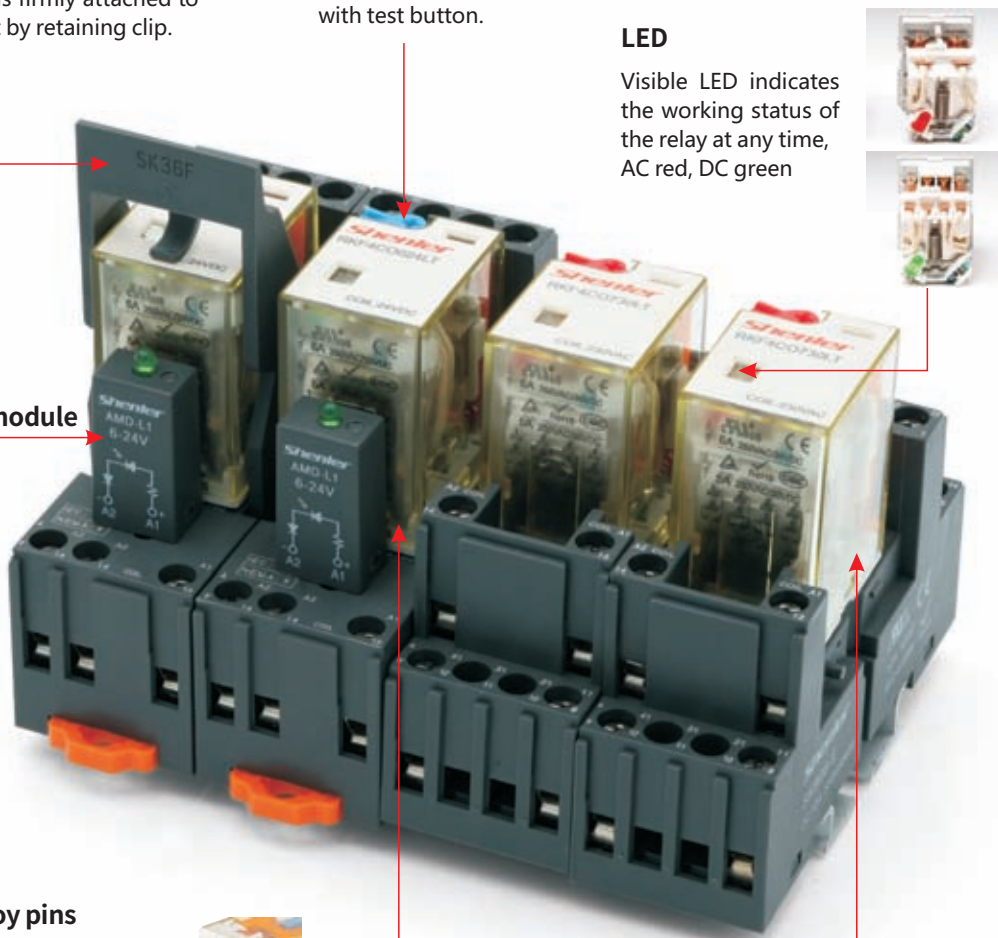
**AMD module**

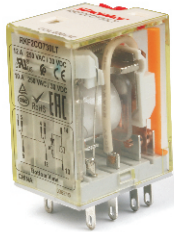
**Silver alloy pins**

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

**Silver alloy contacts**

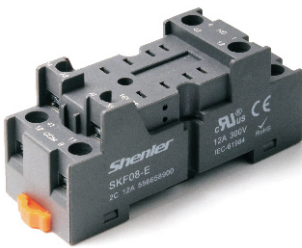
It can carry more current, with stronger conductivity and more sensitive response, and greatly extend electrical life, and works more stable.





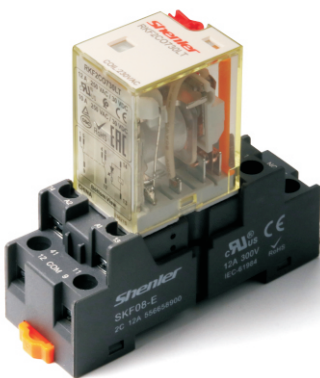
Relay

+



Socket

=



Relay module

RKF □ □ □ □

**Other options**

- LT: LED + test button
- LTD: LED + test button + diode (13-,14+)
- LTD1: LED + test button + diode (13+,14-)
- LT A: LED + test button + gold plated contact
- LTD A: LED + test button + diode+gold plated contact
- LTM: LED+test button, with 0.65Un coil tuned

**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**

- 2C: 2CO
- 4C: 4CO

**Series name**

**Characteristics**

Configuration		2C	4C
Load	Resistance	12A/250VAC, 30VDC	6A/250VAC, 30VDC
	Motor load	1/3HP, 240VAC	1/6HP, 240VAC
Max. switching capacity (resistive)		3000VA, 360W	1500VA, 180W
Contact	Min. switching capacity	170mW(17V/10mA); LTA: 500mW(5V/100mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electric durability(110%rated voltage, 55°C)	≥20 x 10 <sup>4</sup> Cycles (1800 Ops/h)	
	Electric durability (Normal temperature)	≥40 x 10 <sup>4</sup> Cycles (360 Ops/h)	
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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		≥1000MΩ (500VDC)	
Coil operating power	DC(W)	approx. 0.9	
	AC(VA)	approx. 1.2	
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	4000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	2
	Overvoltage level	III	II
IEC 60664 UL840			
Impulse withstand voltage (waveform: 1.2/50us)		4000V	
Protection level		IP50	
Storage temperature/ humidity		-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity		-55~+70°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	

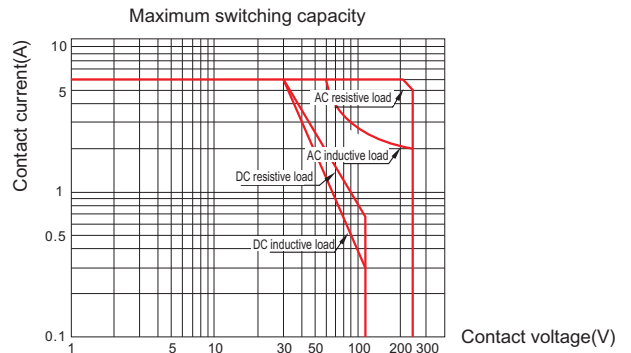
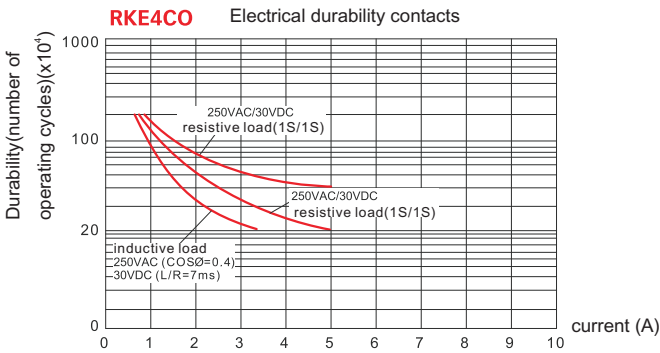
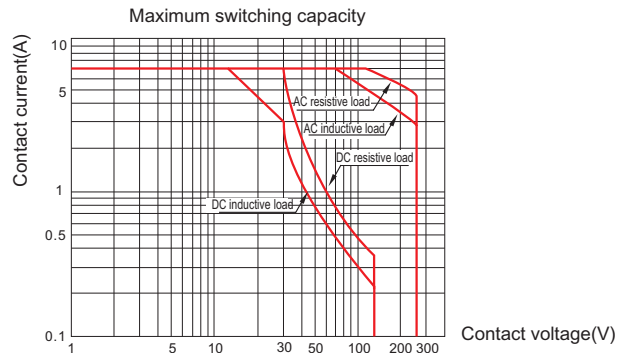
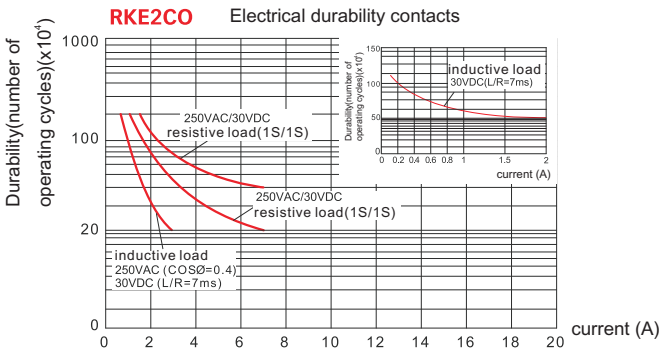
★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

**Coil Specifications (23°C)**

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

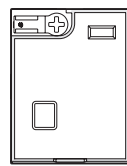
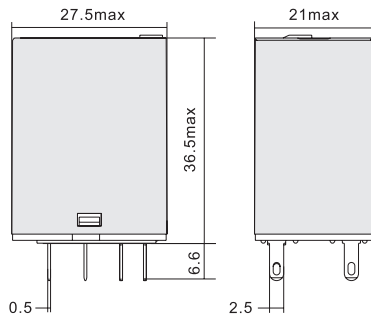
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

**Contact Specification**

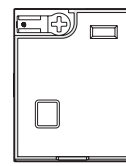
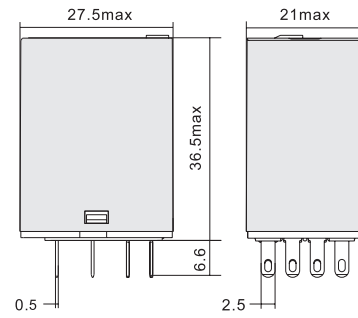


**Dimensions (mm)**

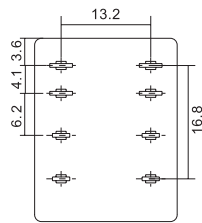
**RKF2CO**



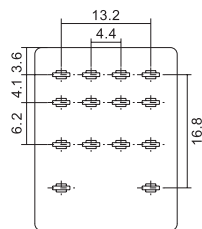
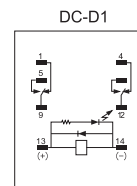
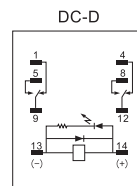
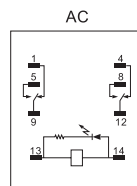
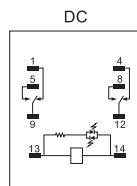
**RKF4CO**



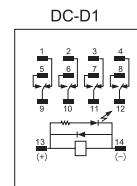
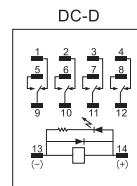
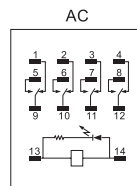
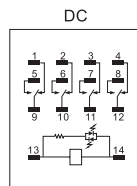
**Wiring Diagrams**



**RKF2CO**



**RKF4CO**



## Characteristics



SKF08-E



SKF14-E

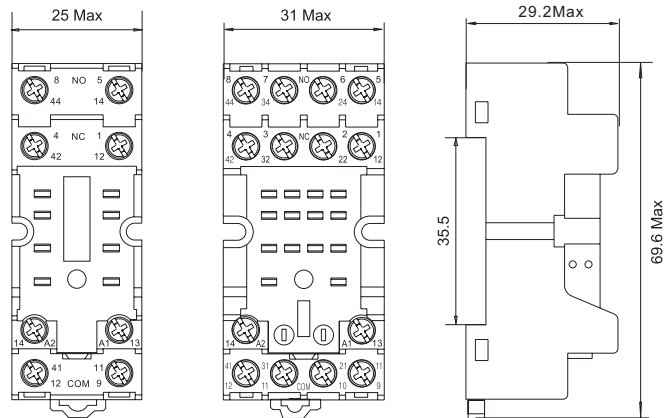


Type		SKF08-E	SKF14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	35	45

### Relay, accessories Selection Table

Socket	Metal clip	ID tag	Module
SKF08-E			-
SKF14-E			

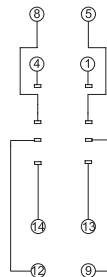
## Dimensions (mm)



SKF08-E

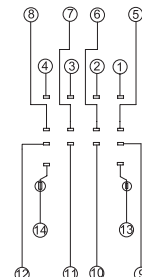
SKF14-E

## Connection Diagrams



SKF08-E

⑬ ⑭ : A1 A2  
 ① ④ : NC  
 ⑤ ⑧ : NO  
 ⑨ ⑫ : COM



SKF14-E

⑬ ⑭ : A1 A2  
 ① ② ③ ④ : NC  
 ⑤ ⑥ ⑦ ⑧ : NO  
 ⑨ ⑩ ⑪ ⑫ : COM

## Characteristics



SKB08-E







SKB14-E

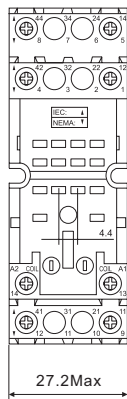


Type		SKB08-E	SKB14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	56

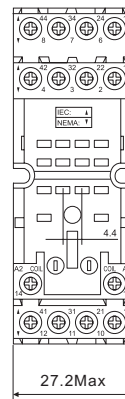
### Relay, accessories Selection Table

Socket	Plastic clip	Metal clip	ID tag	Module
SKB08-E				
SKB14-E	SK36F	SK36M	SK4P	AMD

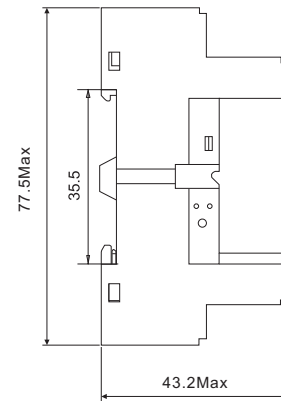
## Dimensions (mm)



SKB08-E



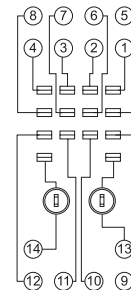
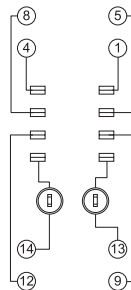
SKB14-E



## Connection Diagrams

SKB08-E

- ⑬ ⑭ : A1 A2
- ① ④ : NC
- ⑤ ⑧ : NO
- ⑨ ⑫ : COM



SKB14-E

- ⑬ ⑭ : A1 A2
- ① ② ③ ④ : NC
- ⑤ ⑥ ⑦ ⑧ : NO
- ⑨ ⑩ ⑪ ⑫ : COM

## Characteristics



SKC08-E



SKC14-E

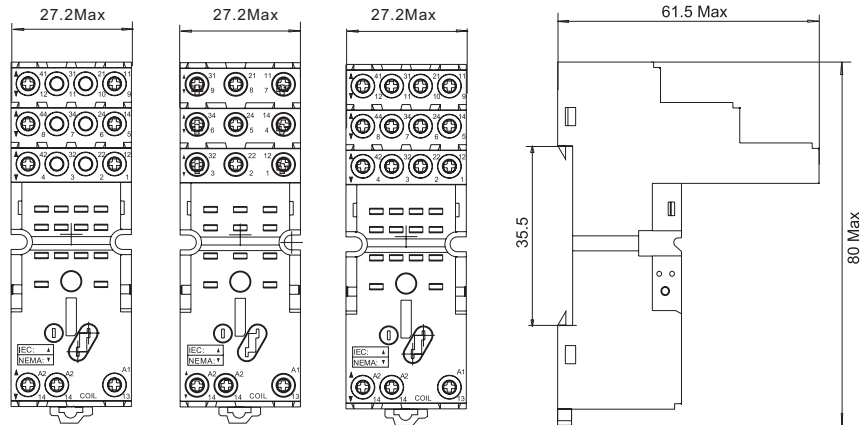


Type		SKC08-E	SKC11-E	SKC14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	50	56	62

### Accessory Selection Table

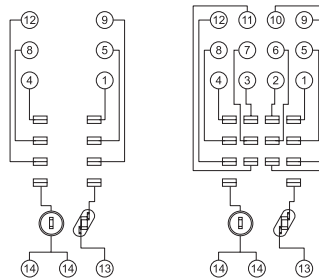
Socket	Plastic clip	Metal clip	ID tag	Module
C08-E				
C11-E				
C14-E	SK36F	SK36M	SK4P	AMD

## Dimensions (mm)



SKC08-E SKC11-E SKC14-E

## Connection Diagrams



SKC08-E

SKC14-E

⑬ ⑭ : A1 A2  
 ① ④ : NC  
 ⑤ ⑧ : NO  
 ⑨ ⑫ : COM

⑬ ⑭ : A1 A2  
 ① ② ③ ④ : NC  
 ⑤ ⑥ ⑦ ⑧ : NO  
 ⑨ ⑩ ⑪ ⑫ : COM



## Characteristics



SKC08-ST



SKC14-ST

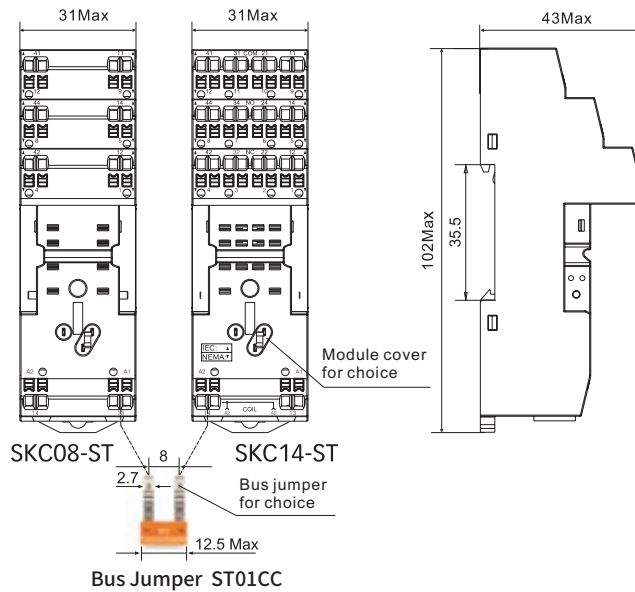


Type		SKC08-ST	SKC14-ST
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	80	80

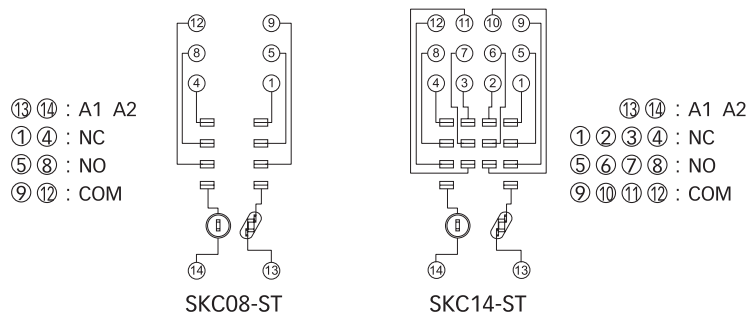
### Relay, accessories Selection Table

Socket	Plastic clip	ID tag	Module	Bus Jumper
SKC08-ST				
SKC14-ST	SK36F	SK4P	AMD	ST01CC

## Dimensions (mm)



## Connection Diagrams



**Characteristics**

SY08-P



SY14-P

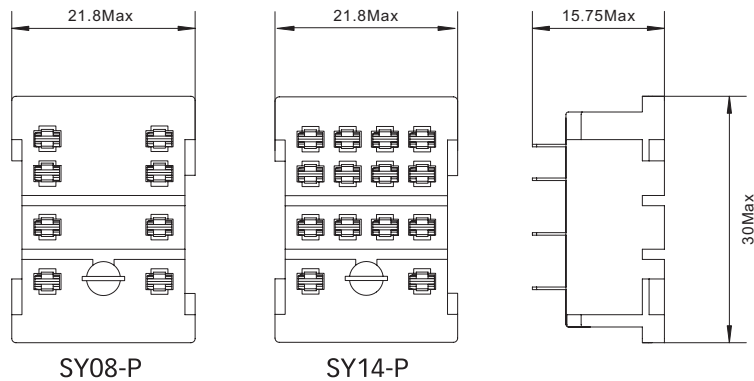


Type		SY08-P	SY14-P
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	V/min	2000	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	7	7

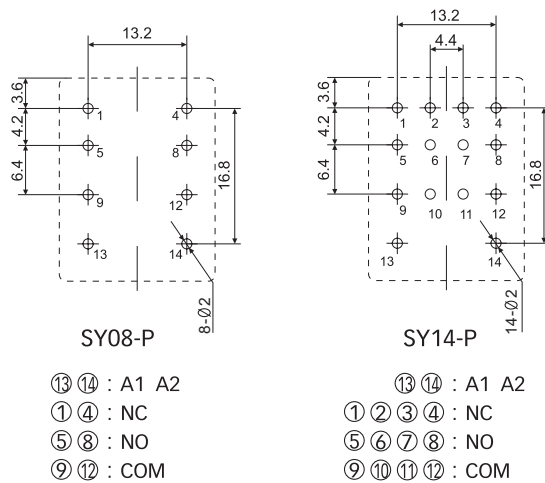
**Relay, accessories Selection Table**

Socket	Metal clip
SY08-P	<p>36M</p>
SY14-P	

**Dimensions (mm)**



**Connection Diagrams**





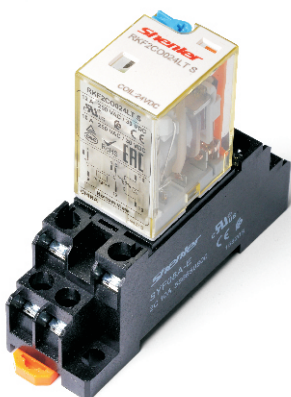
Relay

+



Socket

=



Relay module

RKF □ □ □ □

**Other options**

- LTS: LED + test button+magnet
- LTDS: LED + test button +diode (13 -, 14 +) +magnet
- LTD1S: LED + test button + diode (13 + , 14 - ) +magnet
- LTM: LED+test button, with 0.65Un coil tuned

**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**

2C: 2CO

**Series name**

- ◆ Good performance for motor load application.With non-polarity LED,lockable test and inspection window
- ◆ Identification of coil through test button color (AC red / DC blue)

**Characteristics**

Configuration	2C	
Load	Resistance	15A/250VAC 30VDC (NO:15A, NC:7.5A); 10A 60VDC
	Motor load	1/3HP, 240VAC
Switching capacity (resistive)	3750VA, 600W	
Switching capacity (perceptual)	2500VA, 90W	
Min. switching capacity	170mW(17V/10mA)	
Initial contact resistance	≤50mΩ	
Material	Ag alloy	
Electric durability(110%rated voltage, 55°C)	≥10 x 10 <sup>4</sup> Cycles NO:15A, NC:7.5A); ≥20 x 10 <sup>4</sup> Cycles(NO/NC:12A)	
Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	≥1000MΩ (500VDC)	
Coil operating power	DC(W)	approx. 0.9
	AC(VA)	approx. 1.2
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
	IEC 60664 UL840 Overvoltage level	III
Impulse withstand voltage (waveform: 1.2/50us)	4000V	
Protection level	IP50	
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)	

Working temperature/ humidity	-55~+70°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

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

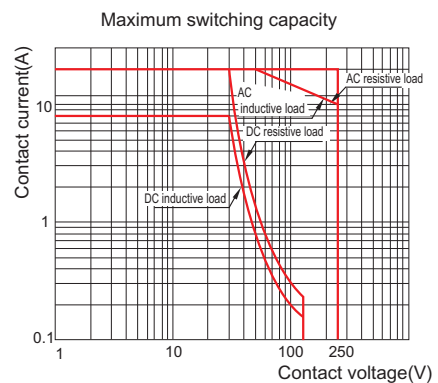
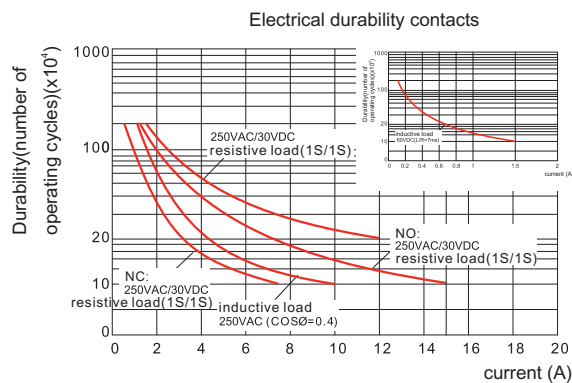
**Coil Specifications (23°C)**

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

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

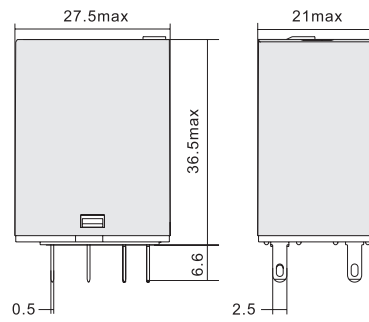
**Contact Specification**

**RKF2CO**



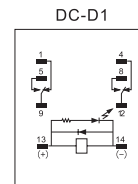
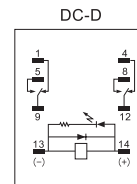
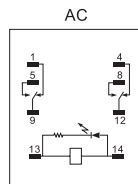
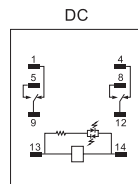
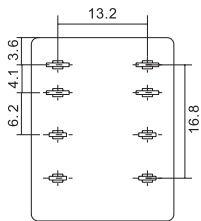
**Dimensions (mm)**

**RKF2CO**



**Wiring Diagrams**

**RKF2CO**



**Characteristics**




SYF08A-E S

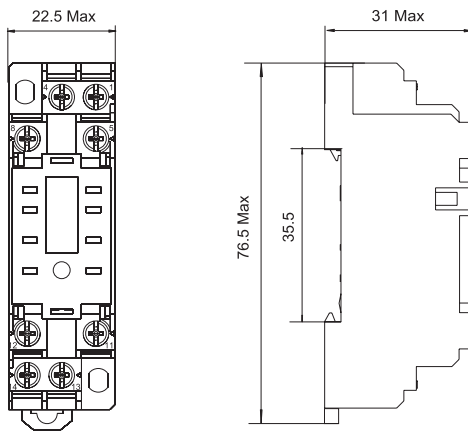


Type			SYF08A-E S
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength		V/min	2000
Max. tightening torque		Nm	1.0
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5
Ambient temperature		°C	-40~+65
Unit weight		g	37

**Relay,accessories Selection Table**

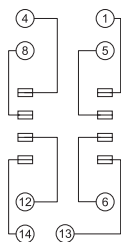
Socket	Metal clip
SYF08A-E S	 SY36S

**Dimensions (mm)**



SYF08A-E S

**Connection Diagrams**



- ⑭ ⑬ : A1 A2
- ① ④ : NC
- ⑤ ⑧ : NO
- ⑨ ⑫ : COM

SYF08A-E S

# SKC08-E S

RKF Magnetic Blow-out Power Relay Socket



## Characteristics







SKC08-E S

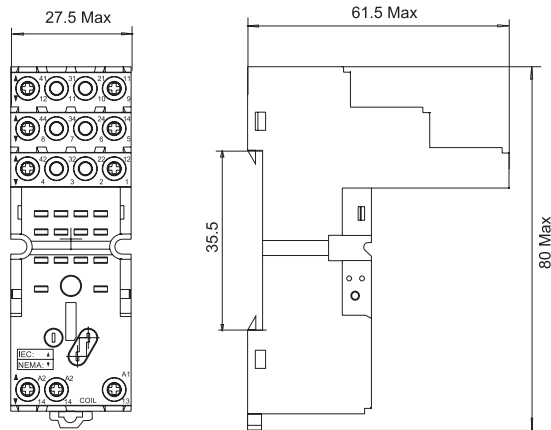


Type			SKC08-E S
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm <sup>2</sup>	20-16/0.5-1.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	

### Relay, accessories Selection Table

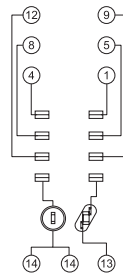
Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E S	 SK36F	 SK36M	 SK4P	 AMD

## Dimensions (mm)



SKC08-E S

## Connection Diagrams



- ⑬ ⑭ : A1 A2
- ① ④ : NC
- ⑤ ⑧ : NO
- ⑨ ⑫ : COM

SKC08-E S

## Selection manual of industrial control relay

### RKL Miniature Power Relay

- ◆ 1 pole 16A; 2,3,4 pole 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

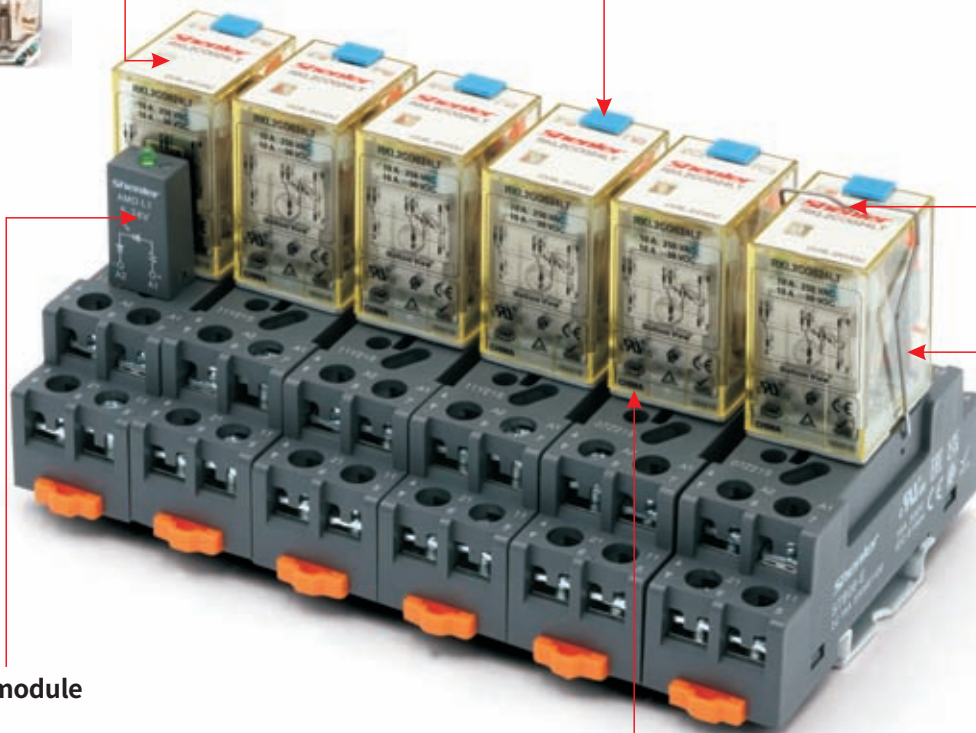
Visible LED indicates the working status of the relay at any time, AC red, DC green

#### Test button

On-site test is available with test button.

#### Metal clip

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



#### AMD 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

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		10A/250VAC 30VDC	
	Motor load		1/3HP 240VAC	1/6HP 240VAC
	1/2HP, 120VAC, 1HP, 240VAC			
Max. switching capacity (resistive)	4000VA, 480W		2500VA, 300W	
Min. switching capacity	170mW(17V/10mA)			
Initial contact resistance	≤50mΩ			
Material	Ag alloy			
Electrical durability	1C/3C/4C: ≥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)	approx. 1.2	approx. 1.2	approx. 2
Operate time	≤20ms			
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		
IEC 60664 UL840	Overvoltage level	III		
Impulse withstand voltage (waveform: 1.2/50us)	4000V			
Protection level	IP50			
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

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

**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**

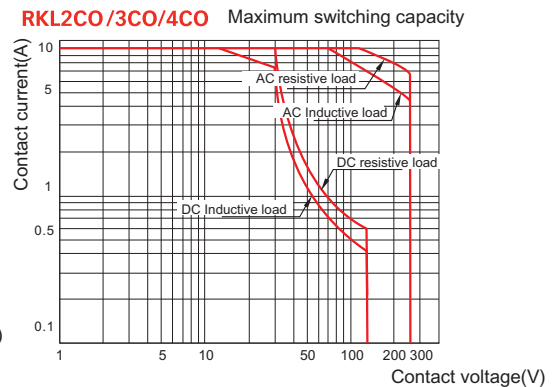
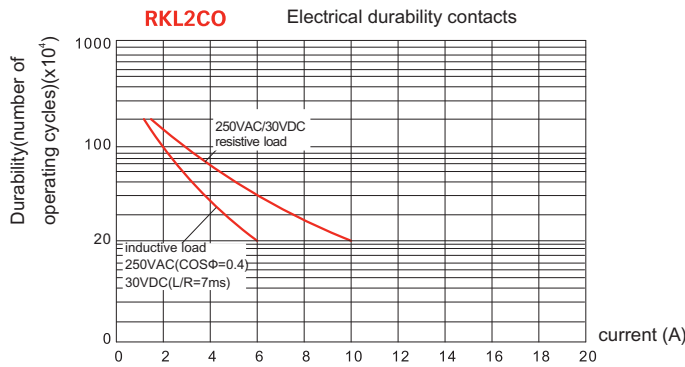
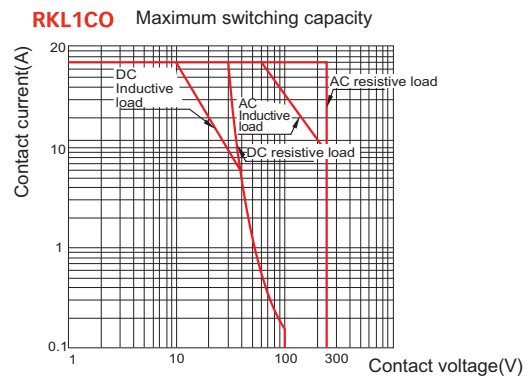
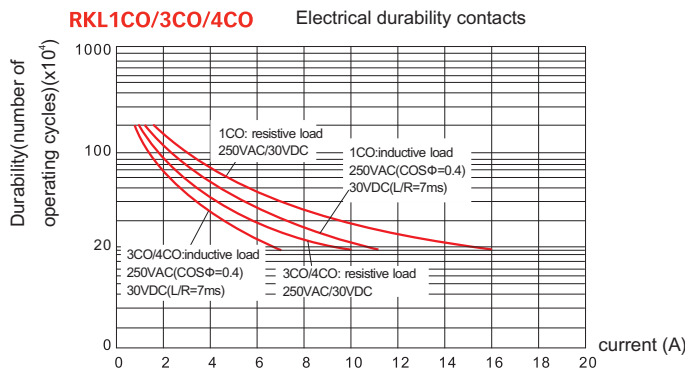
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	100	400	1600	8400	33000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	6.5	102	230	410	2500	10000	26000

**RKL4**

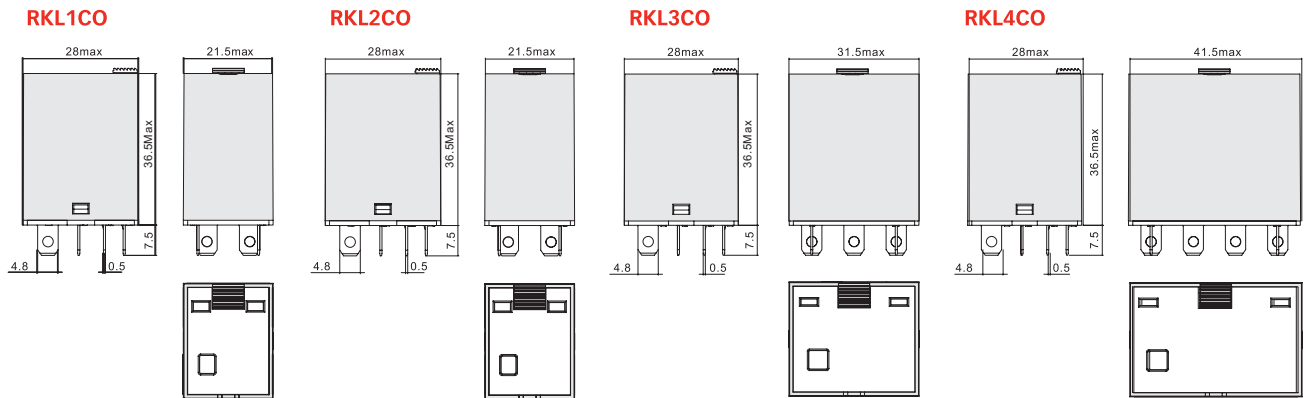
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	24	96	360	1500	6800	29000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	5	80	180	320	1680	8000	20000

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

**Contact Specification**

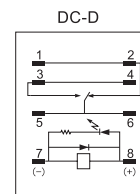
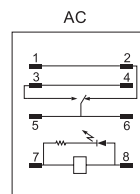
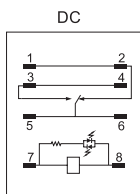
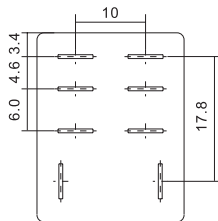


**Dimensions (mm)**

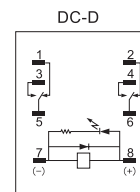
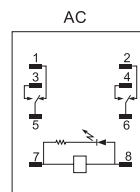
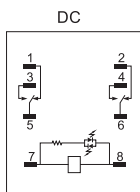
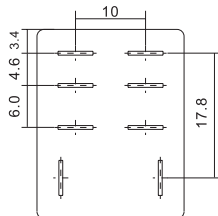


**Wiring Diagrams**

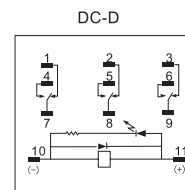
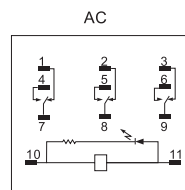
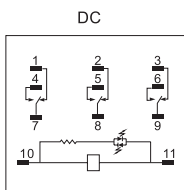
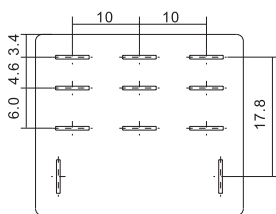
**RKL1CO**



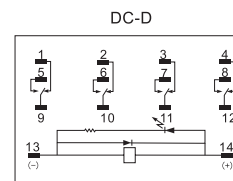
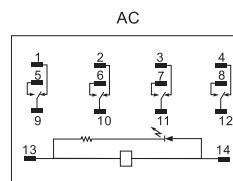
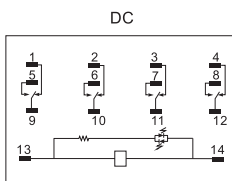
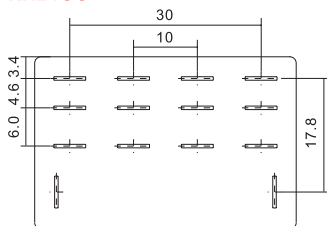
**RKL2CO**



**RKL3CO**



**RKL4CO**



**Characteristics**



STB08-E



STB14-E

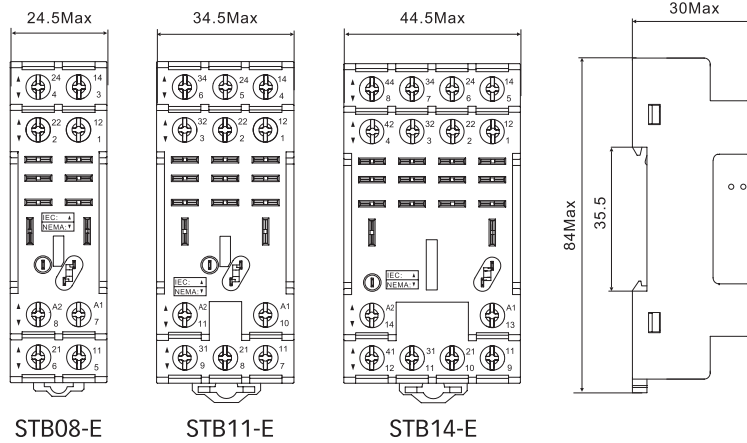


Type			STB08-E	STB11-E	STB14-E
Nominal load	Current	A	16		
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	4000		
	Between contacts	V/min	2500		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm <sup>2</sup>	20-14/0.5-2.5		
Ambient temperature		°C	-40~+85		
Unit weight		g	46	62	78

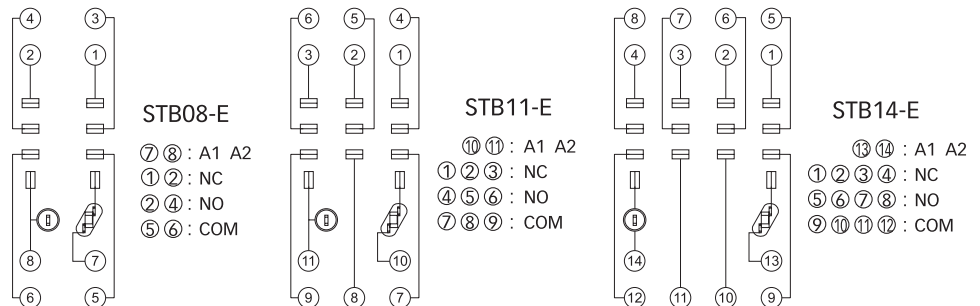
**Relay, accessories Selection Table**

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

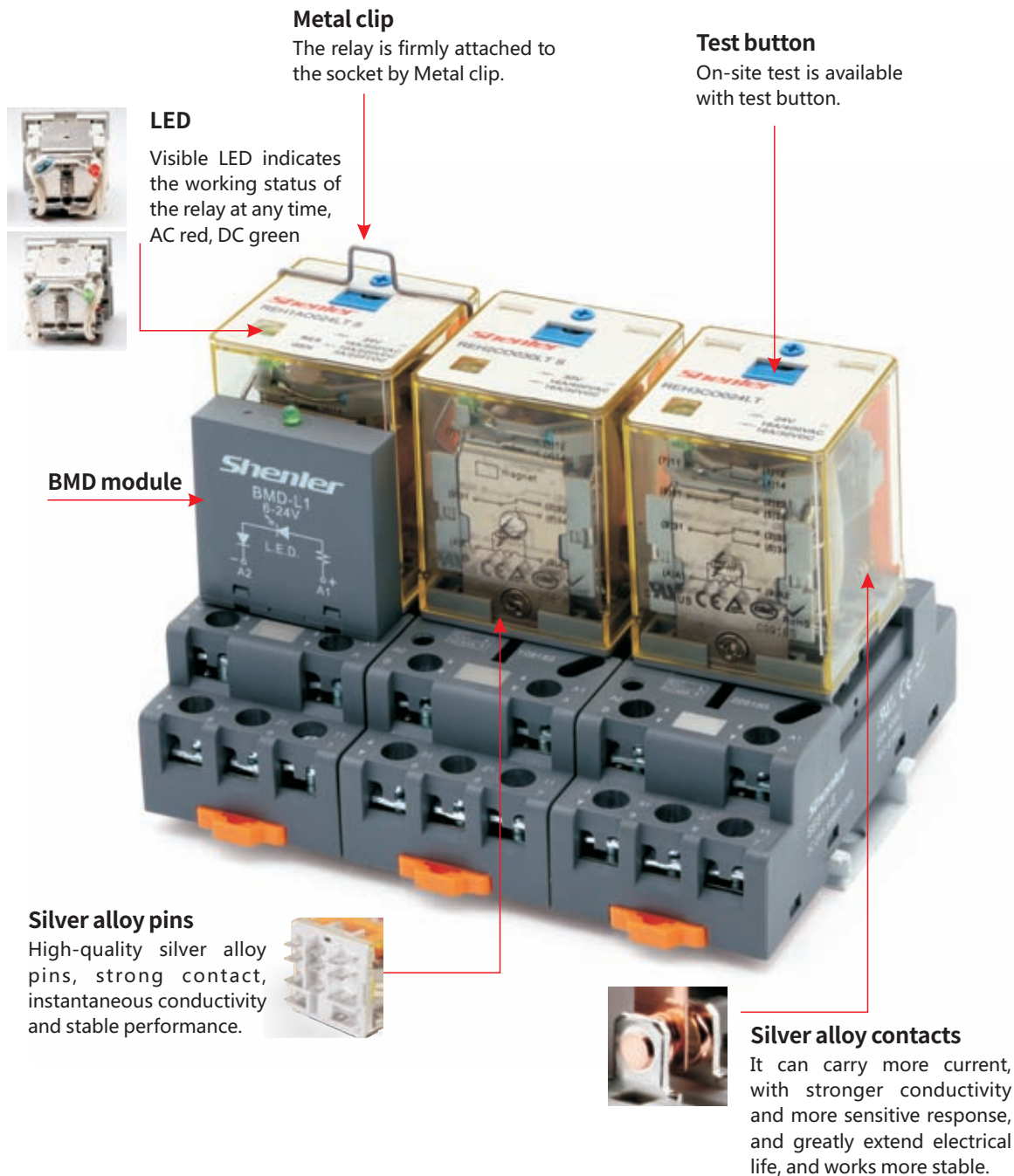
**Dimensions (mm)**



**Connection Diagrams**



- 2 pole 3 pole contact load 16A
- 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



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

**Test button**  
On-site test is available with test button.

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

**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

REH □ □ □ □

**Other options**

- LT: LED + test button
- LTD: LED + test button + diode (A1-, A2+)
- LTD1: LED + Test button + diode (A1+, A2-)

**Coil voltage code**

Code	006	012	024	048	110	220	
Voltage (V DC)	6	12	24	48	110	220	
Code	506	524	548	615	730	880	900
Voltage (V AC)	6	24	48	115	230	380	400

**Terminal arrangement**

O: plug in

**Contact form**

- 2C: 2CO
- 3C: 3CO

**Series name**

**Characteristics**

Configuration	2C,3C	
Load	Resistance	16A/300VAC 30VDC
	Motor load	1/2HP, 120VAC; 1HP, 240VAC
Contact	Max. switching capacity (resistive)	4800VA, 480W
	Initial contact resistance	≤50mΩ
	Material	Ag alloy
	Electric durability(110%rated voltage, 55°C)	≥60 x 10 <sup>4</sup> Cycles (600 Ops/h)
	Electric durability (Normal temperature)	≥5000 x 10 <sup>4</sup> Cycles (18000 Ops/h)
	Mechanical durability	≥2000 x 10 <sup>4</sup> Cycles (18000 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	≥1000MΩ (500VDC)	
Coil operating power	DC(W)	approx. 1.5
	AC(VA)	approx. 2.5
Operate time&Release time (at nominal voltage)	≤20ms	
Initial breakdown voltage	Between open contacts	1500VAC/1min (leakage current 1mA)
	Between poles	4000VAC/1min (leakage current 1mA)
	Between contacts and coil	4000VAC/1min (leakage current 1mA)
Insulation characteristics	Rated voltage	300VAC
	Pollution level	3
IEC 60664 UL840	Overvoltage level	III
Impulse withstand voltage (waveform: 1.2/50us)	6000V	
Protection level	IP50	
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity	-55~+70°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. 90g	

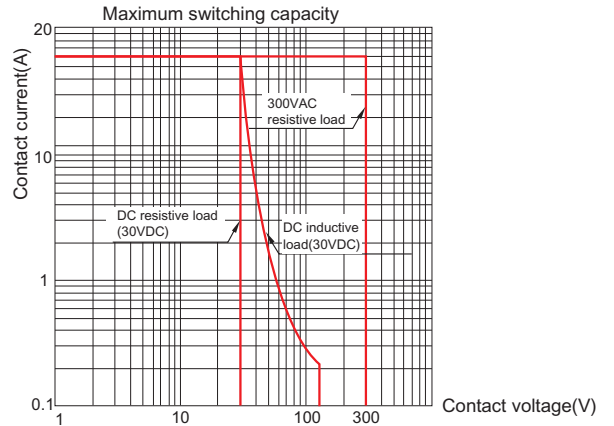
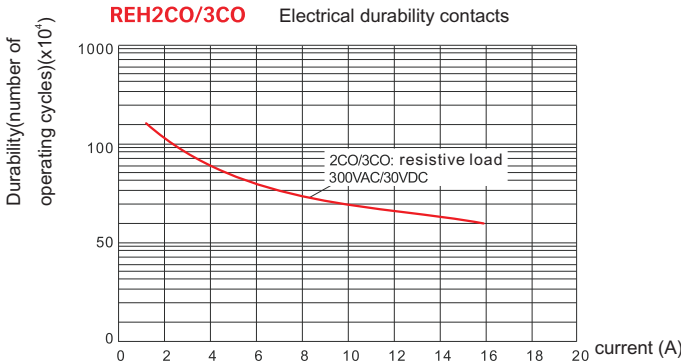
★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

**Coil Specifications (23°C)**

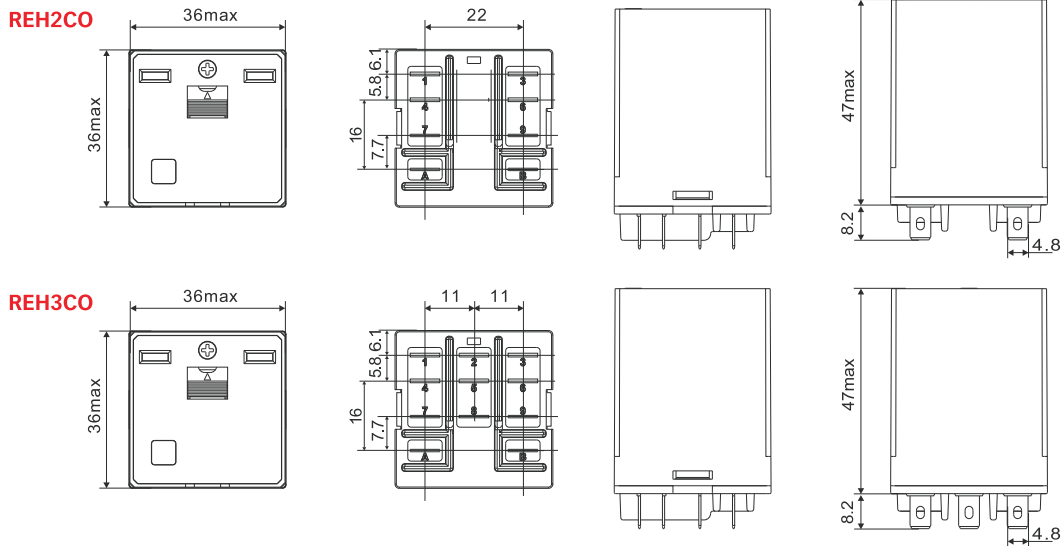
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance $\Omega$	24	96	385	1540	8070	32270	
Nominal voltage V.AC	6	24	48	115	230	380	400
Coil resistance $\Omega$	8	100	350	2200	8000	26000	27000

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

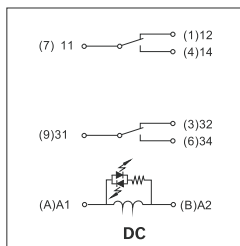
**Contact Specification**



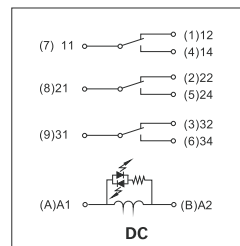
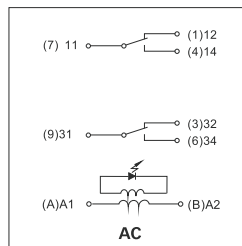
**Dimensions (mm)**



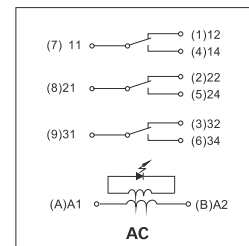
**Wiring Diagrams**



**REH2CO**



**REH3CO**



# REH

Magnetic Blow-out Power Relay



Series Name

+

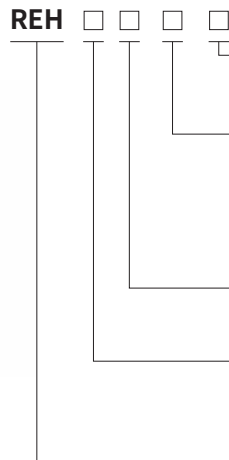


Socket

=



Relay module



**Other options**

LTS: LED +test button + magnet

**Coil voltage code**

Code	012	024	048	110	220	
Voltage (V DC)	12	24	48	110	220	
Code	524	548	615	730	880	900
Voltage (V AC)	24	48	115	230	380	400

**Terminal arrangement**

O: plug in

**Contact form**

Code	1A	1B	2A	2B	2FO	3A
Contact form	1NO	1NC	2NO	2NC	1NO&1NC	3NO

**Series name**

- Good performance in DC motor load
- With non-polarity LED and lockable test button.
- High capacity load (16A@400VAC) for well replacement of contactor
- With blow-out magnet
- Identification of coil through test button color (AC red /DC blue)

### Characteristics

Configuration	1A,1B	2A,2B,2FO	3A		
Load	Resistance	16A/500VAC	16A/250VAC	16A/300VAC	
	Resistance	10A/220VDC 16A/30VDC			
	inductive	10A/250VAC(cosØ0.4); 3A/220VDC(L/R=7ms)			
Contact	Switching capacity	Resistance	8000VA	4000VA	4800VA
		Resistance	2200W		
		inductive	2500VA(cosØ0.4);660W(L/R=7ms)		
Initial contact resistance	≤50mΩ				
Material	Ag alloy				
Electric durability(110%rated voltage, 55°C)	≥60 x 10 <sup>4</sup> Cycles (600 Ops/h)		≥20 x 10 <sup>4</sup> Cycles(600 Ops/h)		
Mechanical durability	≥5000 x 10 <sup>4</sup> Cycles (18000 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	≥1000MΩ (500VDC)				
Coil operating power	DC (W)	approx. 1.5			
	AC (VA)	approx. 2.5			
Operate time&Release time (at nominal voltage)	≤20ms				
Initial breakdown voltage	Between open contacts	1500VAC/1min (leakage current 1mA)			
	Between poles	4000VAC/1min (leakage current 1mA)			
	Between contacts and coil	4000VAC/1min (leakage current 1mA)			
Insulation characteristics	Rated voltage	400VAC	250VAC	250VAC	
	Pollution level	2	3	3	
IEC 60664 UL840	Overvoltage level	II	III	III	
Protection level	IP50				
Storage temperature/ humidity	-20~+85°C/ ≤85%RH (18 months) ★				
Working temperature/ humidity	-40~+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. 90g				

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.



# Selection manual of industrial control relay

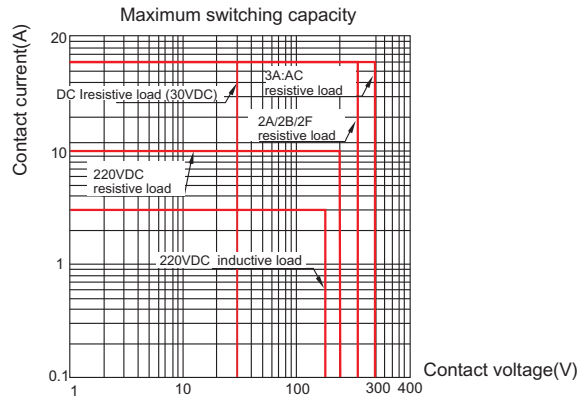
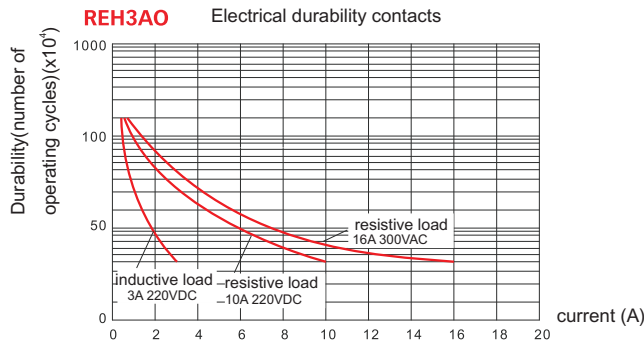
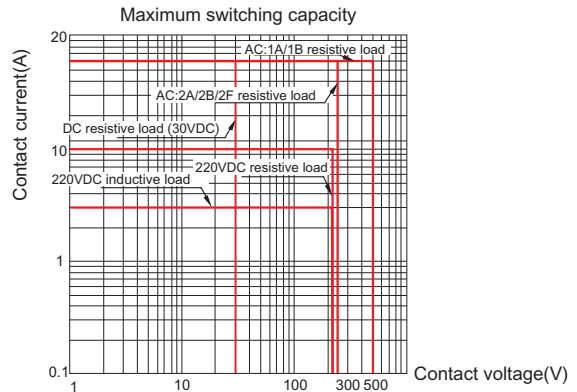
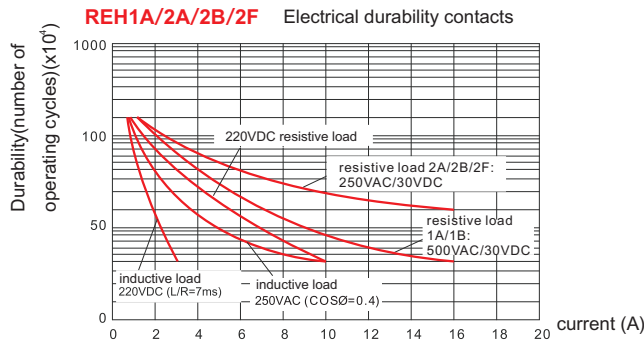
# REH Magnetic Blow-out Power Relay

## Coil Specifications (23°C)

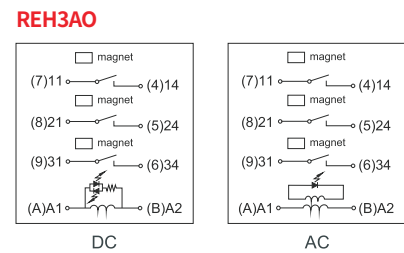
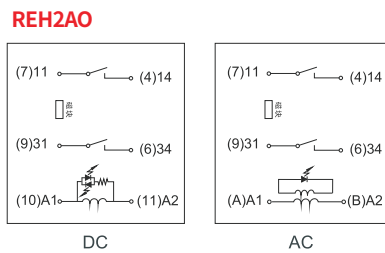
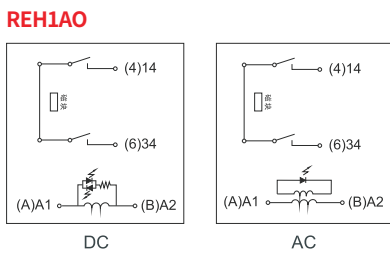
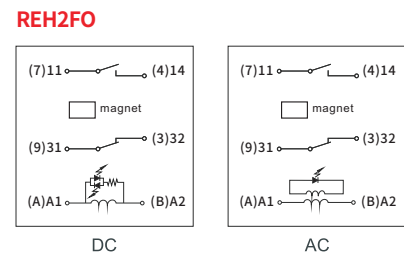
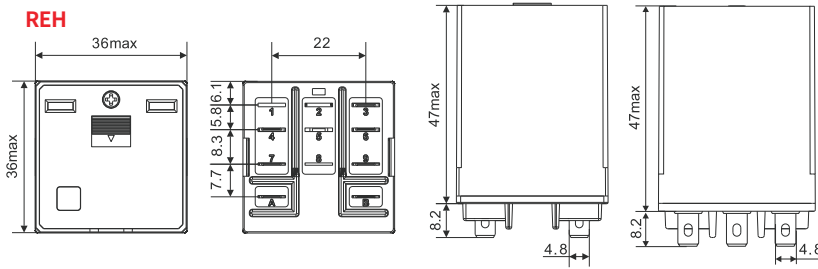
Nominal voltage V.DC	12	24	48	110	220	
Coil resistance $\Omega$	96	385	1540	8070	32270	
Nominal voltage V.AC	24	48	115	230	380	400
Coil resistance $\Omega$	100	350	2200	8000	26000	27000

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

## Contact Specification



## Dimensions (mm) & Wiring Diagrams



**Characteristics**





SEB11-E

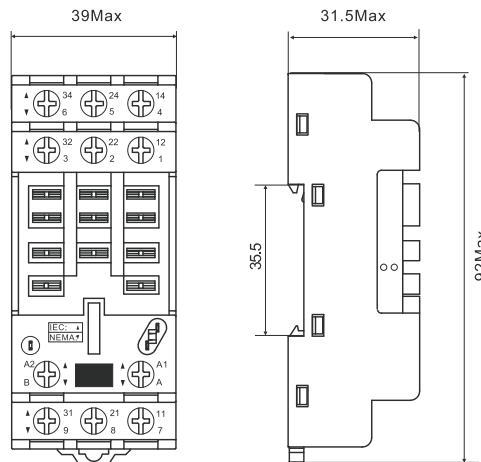


Type			SEB11-E
Nominal load	Current	A	25
	Voltage	V	500
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.2	
Wire size	AWG/mm <sup>2</sup>	20-12/0.5-3.3	
Ambient temperature	°C	-40~+75	
Unit weight	g	64	

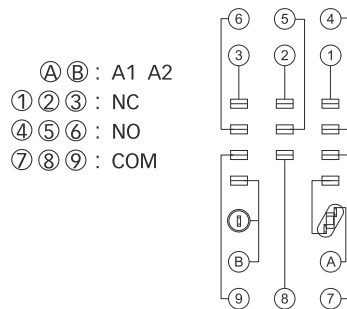
**Relay, accessories Selection Table**

Socket	Metal clip	Module
SEB11-E	 SE52M	 BMD

**Dimensions (mm)**



**Connection Diagrams**




**Characteristics**

SEB11-P

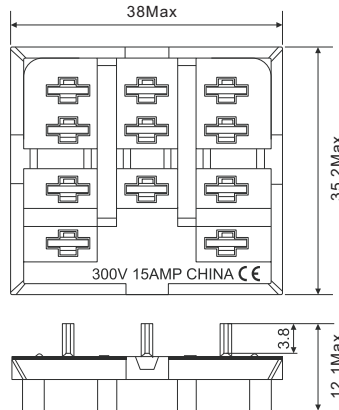


Type			SEB11-P
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength		V/min	25000
Ambient temperature		°C	-40~+75
Unit weight		g	8.4

**Relay,accessories Selection Table**

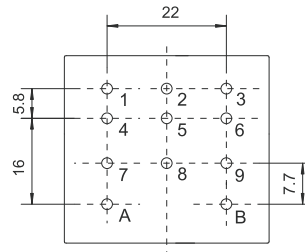
Socket	Metal clip
SEB11-P	 SE48M

**Dimensions (mm)**



**Connection Diagrams**

- Ⓐ Ⓑ : A1 A2
- ① ② ③ : NC
- ④ ⑤ ⑥ : NO
- ⑦ ⑧ ⑨ : COM



**Selection manual of industrial control relay**

**RUB**  
General Purpose Relay

- ◆ 2 pole 3 pole 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

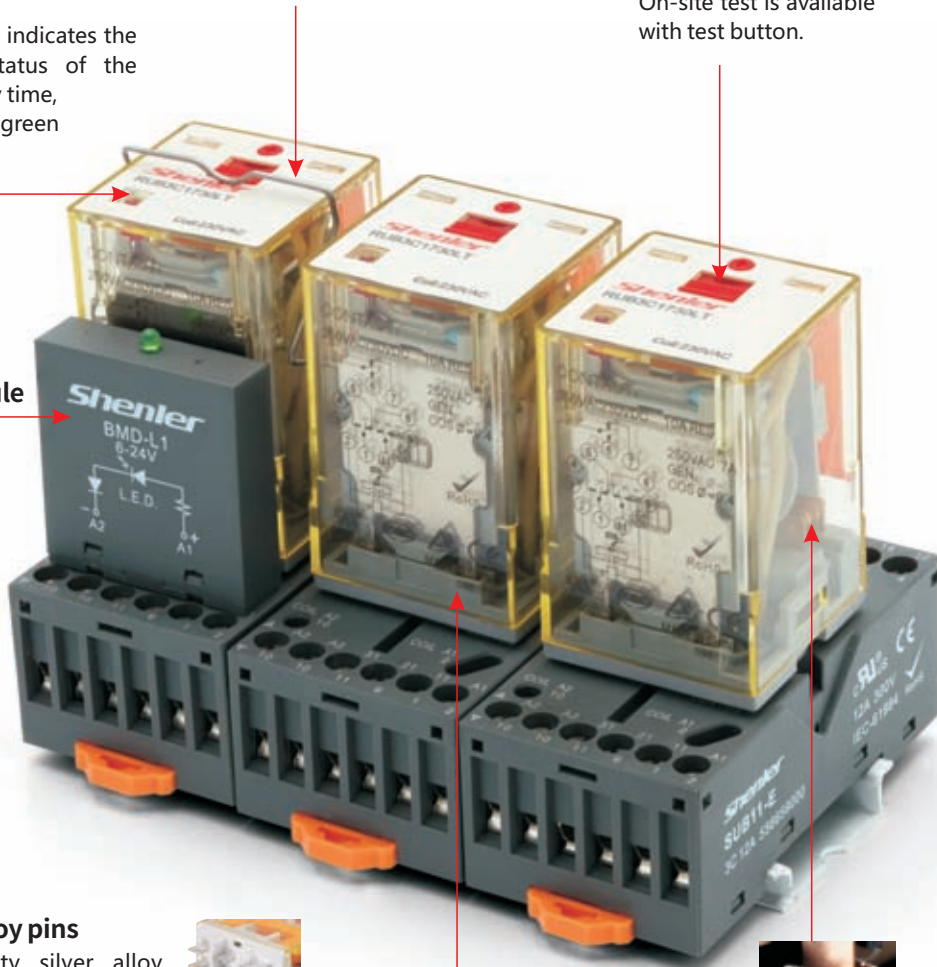
**Metal clip**

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 (perceptual GEN)	
Contact	Max. switching capacity (resistive)	2500VA, 300W
	Initial contact resistance	≤50mΩ
	Material	Ag alloy
	Electrical durability	≥10 <sup>5</sup> Cycles(1800 Ops/h)
	Mechanical durability	≥2000 x 10 <sup>4</sup> 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
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: 1.2/50us)	4000V	
Protection level	IP50	
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. 85g

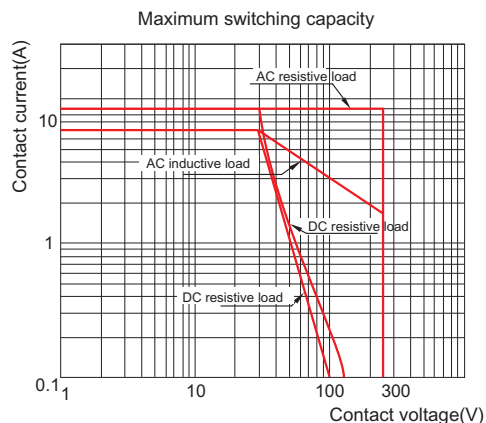
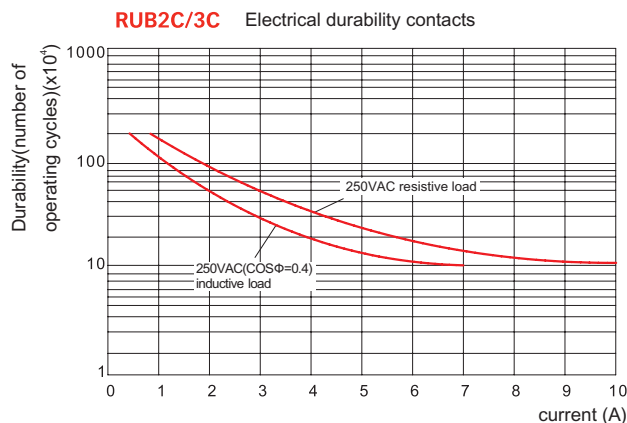
★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

**Coil Specifications (23°C)**

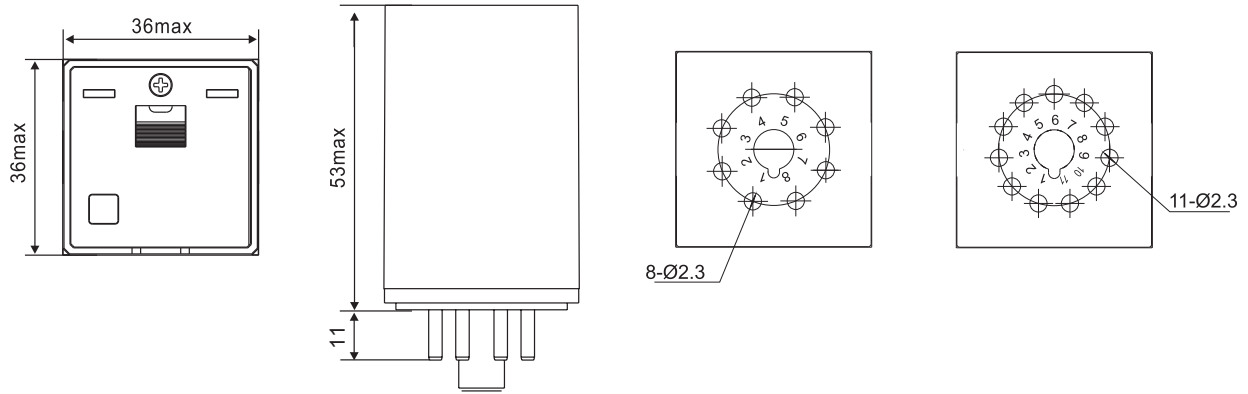
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	23.7	96	430	1640	7360	29500	
Nominal voltage V.AC	6	12	24	36	48	115	230
Coil resistance Ω	3.9	17	62.5	144	305	1250	5900

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

**Contact Specification**

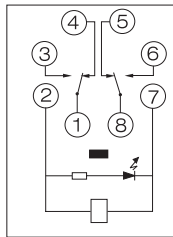


Relay Kit Dimensions (mm)



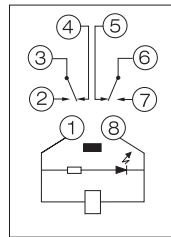
Wiring Diagrams

**RUB2C1**



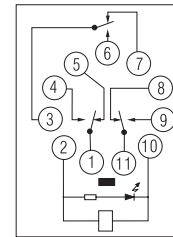
⑦ ② : A1, A2  
COM  
NO  
④ ⑤ : NC

**RUB2C2**



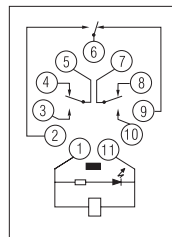
⑧ ① : A1, A2  
③ ⑥ : COM  
② ⑦ : NO  
④ ⑤ : NC

**RUB3C1**



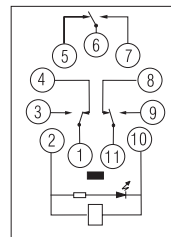
⑩ ② : A1, A2  
① ③ ⑪ : COM  
④ ⑥ ⑨ : NO  
⑤ ⑦ ⑧ : NC

**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

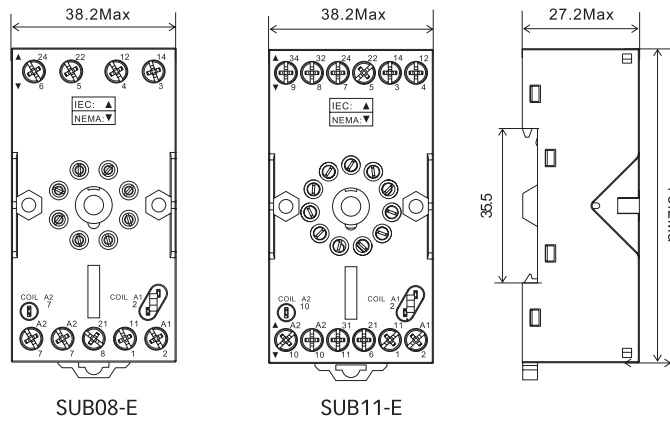


Type		SUB08-E	SUB11-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	V/min	2500	
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	55

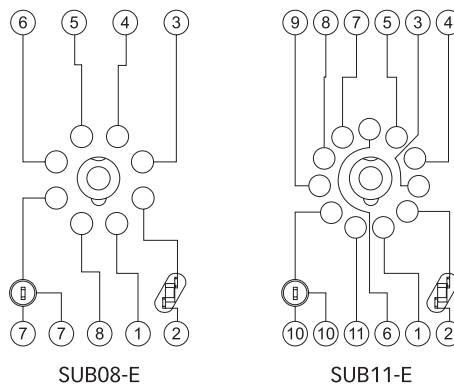
**Relay, accessories Selection Table**

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

**Dimensions (mm)**



**Connection Diagrams**





**Characteristics**



**SUB08-A**

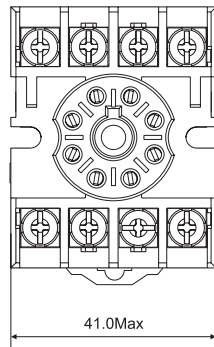


**SUB11-A**

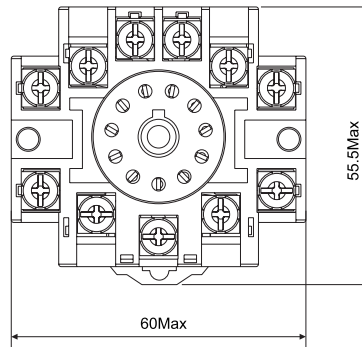


Type		SUB08-A	SUB11-A
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	V/min	2500	
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm <sup>2</sup>	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	37	50

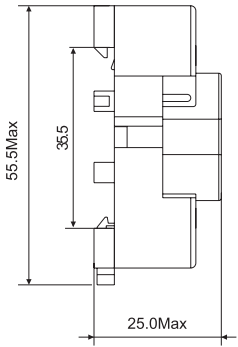
**Dimensions (mm)**



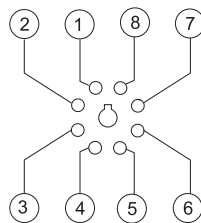
SUB08-A



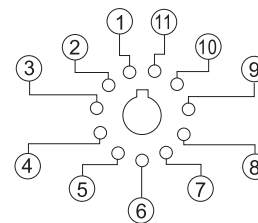
SUB11-A



**Connection Diagrams**



SUB08-A



SUB11-A

**Selection manual of industrial control relay**

**RGF**  
Power Relay

- 1 pole 30A; 2 pole 25A/40A
- Top-mounted 1/4" quick-connect terminals
- Locating slot for DIN rail mounting
- With finger protection cover
- Conformity with RoHs directive
- With safety module monitor

**Fire-resistant materials**  
The shell is made of flame retardant material, with high strength, high temperature resistance, corrosion resistance and more safety



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

**Screw terminal & Flange**

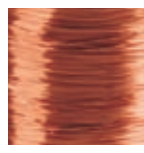
**Screw terminal & DIN rail**

**Plug in & DIN rail**

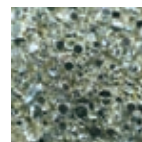
**Plug in & Flange**



**Top copper coil material**  
Standard turns and electromagnetic coils make the pick-up more reliable and enduring, which can reach more than 20 million cycles.



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





RGF1BD



RGF2BU



RGF2OD



RGF2OU

RGF □ □ □ □

**Other options**

- L: with LED (only for BU and BD type)
- F: with auxiliary module
- S: with 40A/250VAC contact load (for 2 pole only)

**Coil voltage code**

Code	006	012	024	048	110	220		
Voltage (V DC)	6	12	24	48	110	220		
Code	506	512	524	548	615	740	880	900
Voltage (V AC)	6	12	24	48	100-120	200-240	380	400

**Terminal arrangement**

- O: plug in
- OD: plug in & DIN rail
- OU: plug in & flange
- P: PCB
- BU: screw terminal & flange
- BD: screw terminal & DIN rail

**Contact form**

- 1: 1A (NO)
- 2: 2A (NO)

**Series name**

**Characteristics**

Configuration		1A	2A	2A-S
Load	Resistance	30A 277VAC/30VDC	25A 277VAC/30VDC	40A 250VAC/30VDC
	Motor load	1.5 HP, 120VAC; 3HP, 240VAC		
Contact	Max. switching capacity (resistive)	8310 VA, 900W	6925VA, 750W	10000VA, 1200W
	Initial contact resistance	≤50mΩ		
Auxiliary module	Configuration	1CO		
	Load (Resistive)	250VAC, 3A		
	Switching capacity (resistive)	750VA		
	Contact resistance	≤50mΩ		
Material	Ag alloy			
Electrical durability	≥10 <sup>5</sup> Cycles (1800 Ops/h)		≥5x10 <sup>4</sup> Cycles (360 Ops/h)	
Mechanical durability	≥5000 x 10 <sup>4</sup> Cycles (1800 Ops/h)			
Pick-up voltage (23°C) (Rated voltage)	DC: ≤80% , AC: ≤80% 50/60Hz			
Drop-out voltage (23°C) (Rated voltage)	DC: ≥15% , AC: ≥15% 50/60Hz			
Maximum voltage (23°C) (Rated voltage)	110%			
Insulation resistance	≥1000MΩ (500VDC)			
Coil operating power	DC(W)	approx. 0.9		
	AC(VA)	approx. 2.5		
Operate time & Release time (at nominal voltage)	≤30ms			
Initial breakdown voltage	Between open contacts	2000VAC/1min (leakage current 1mA)		
	Between poles	2000VAC/1min (leakage current 1mA)		
	Between contacts and coil	4000VAC/1min (leakage current 1mA)		
Insulation characteristics	Rated voltage	277VAC		
	Pollution level	3		
IEC 60664 UL840	Overvoltage level	III		
Impulse withstand voltage (waveform: 1.2/50us)	6000V			
Protection level	IP50			

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:1.5mm
Mounting	plug in type; screw type; PCB type; DIN rail mounting type
Unit weight	plug in type about 90g; screw type around 120g; screw type +DIN rail mountingwith auxiliary module about 135g

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

**Coil Specifications (23°C)**

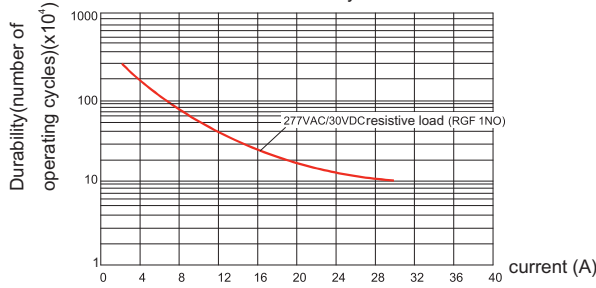
Nominal voltage V.DC	6	12	24	48	110	220		
Coil resistance Ω	18.9	75	303	1220	6360	25474		
Nominal voltage V.AC	6	12	24	48	100-120	200-240	380	400
Coil resistance Ω	14	55	275	1100	5200	21000	62650	62650

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

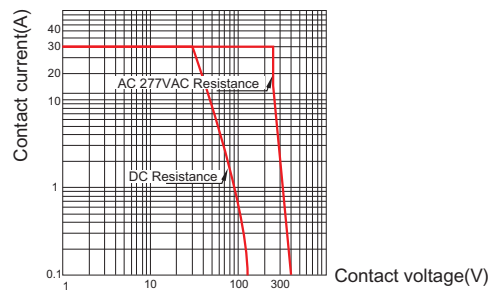
**Contact Specification**

**RGF 1NO**

Electrical durability contacts

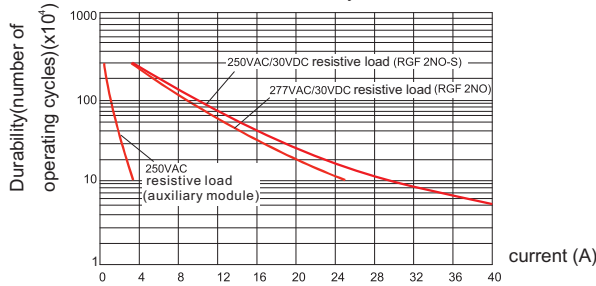


Maximum switching capacity

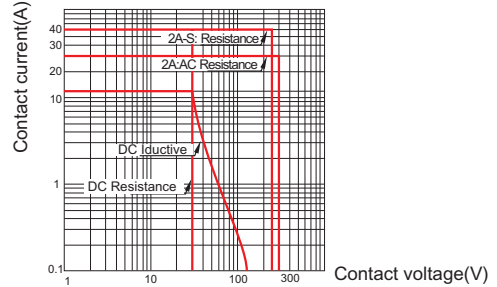


**RGF 2NO**

Electrical durability contacts

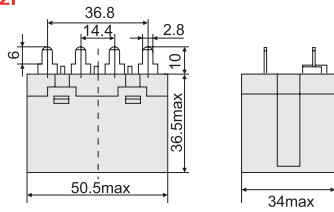


Maximum switching capacity

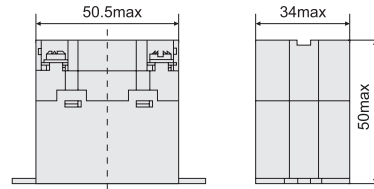


**Dimensions (mm) & Wiring Diagrams**

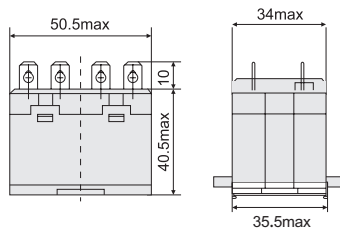
**RGF1P/2P**



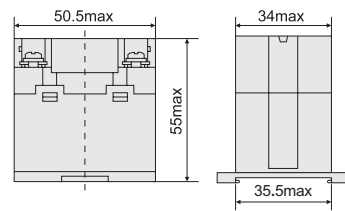
**RGF1BU/2BU**



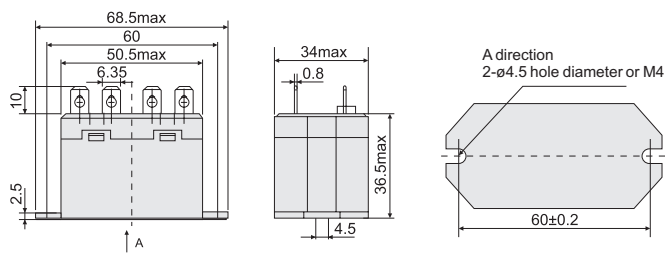
**RGF10D/20D**



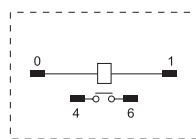
**RGF1BD/2BD**



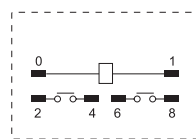
**RGF10U/20U**



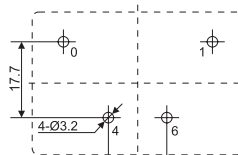
**Wiring Diagrams**



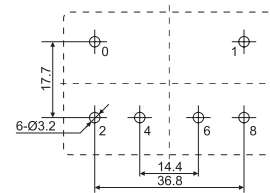
RGF1



RGF2



RGF1P



RGF2P

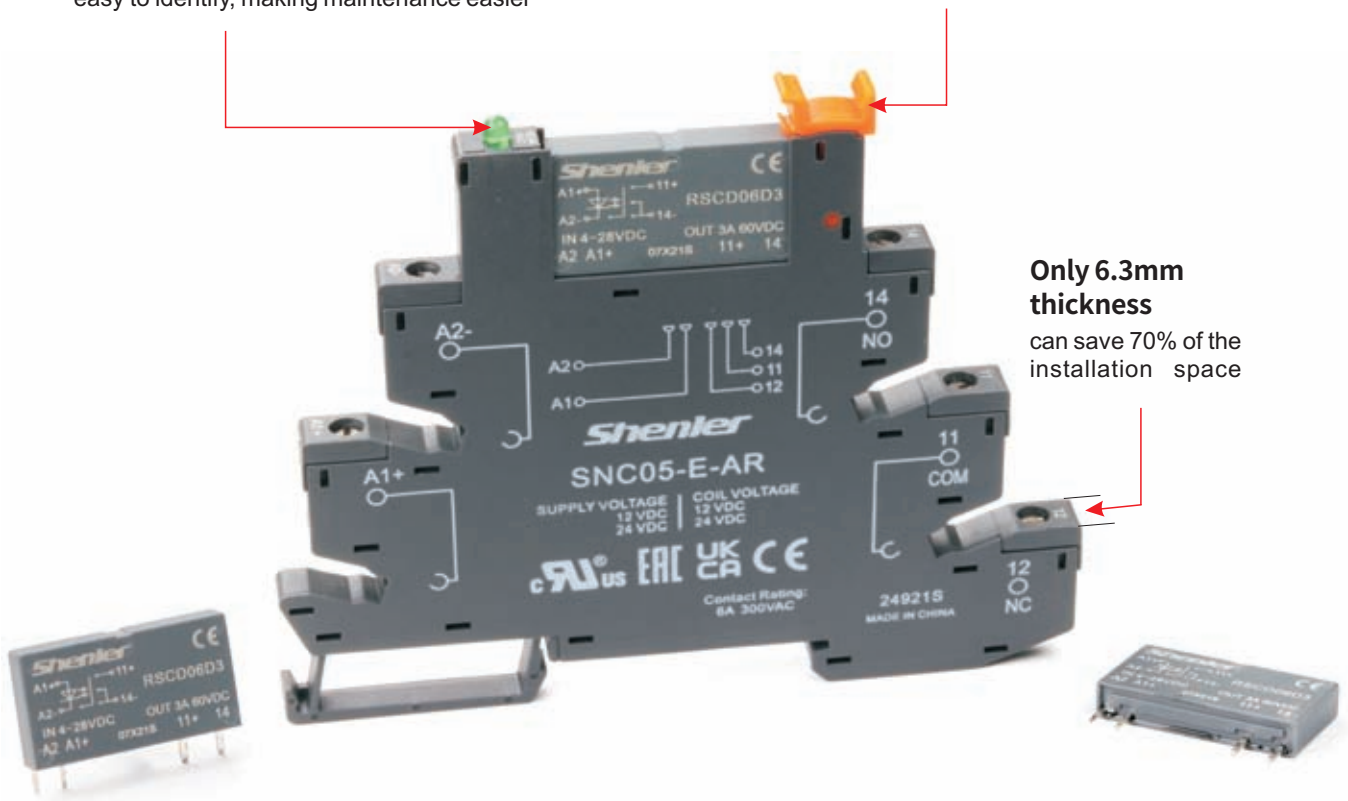
- ◆ Ultra thin, small size, fast switching response
- ◆ no contact, no spark, long service life
- ◆ MOSFET output for DC, SCR output for AC.
- ◆ Imported optocoupler isolation
- ◆ Wide supply voltage range
- ◆ Shenler industrial control relay is widely used in the output signal and safety drive of PLC, CNC system, robot, intelligent manufacturing and other control systems. It is one of the best choices to realize the automatic assembly line of various equipment and products such as remote control, production and processing, packaging, transportation, detection and storage.

### Clear LED indicator

Led top high projection display, intuitive and easy to identify, making maintenance easier

### Release lever

Press the lever on the top to make it easy to assemble and replace relay and protect the relay pins from damage



### Only 6.3mm thickness

can save 70% of the installation space





Relay

+

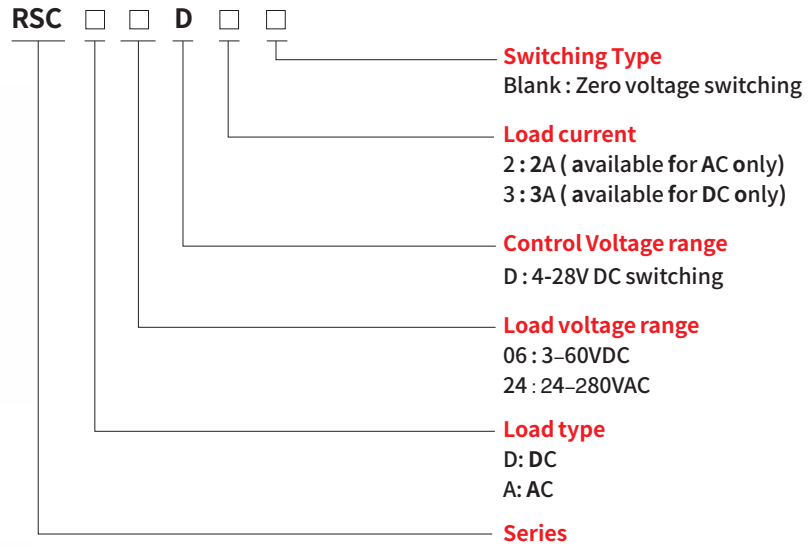


Socket

=



Relay Module



**Product performance**

Input parameter(Ta=25°C)	
Control voltage range	4~28VDC
Must turn-on voltage	4VDC
Must turn-off voltage	1VDC
Control current range	6~20mA

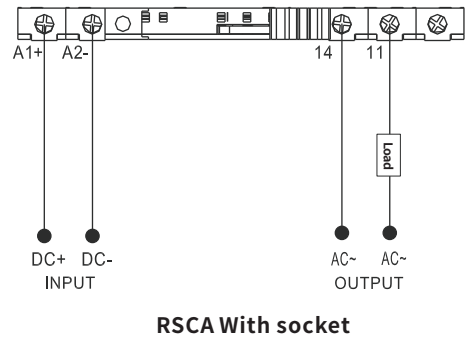
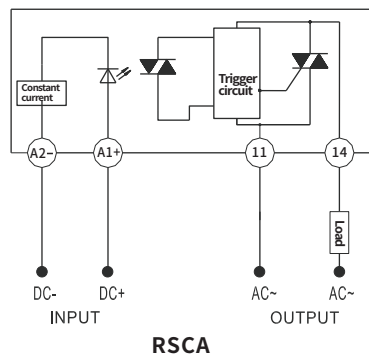
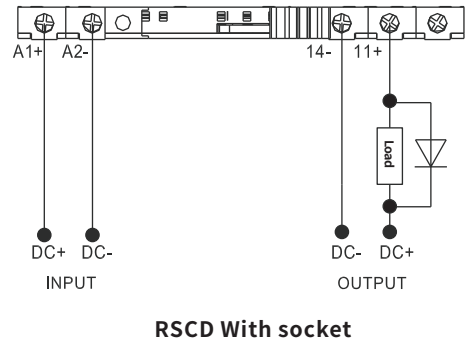
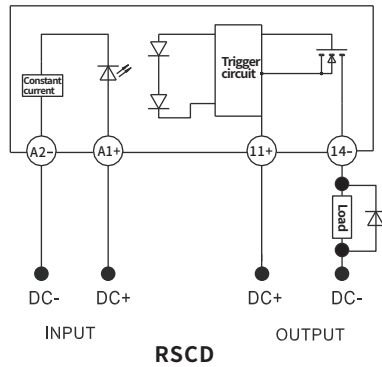
Output parameters(Ta=25°C)		
Part No.	RSCD06D3	RSCA24D2
Load voltage range	3~60VDC	24~280VAC
Peak withstand voltage	100VDC	600VAC
Load current range	0.002~3A	0.02~2A
Maximum turn-on time	≤1ms	1 / 2 cycle
Maximum turn-off time	≤1ms	1 / 2 cycle
Non-repetitive surge current (within 10ms)	30A	50A
Maximum off-state leakage current (at rated voltage)	≤0.1mA	≤1.5mA
Maximum on-state voltage drop (at rated current)	≤0.1V	≤1.3V
Load current safety factor	40~60%	

Other parameters(Ta=25°C)	
Dielectric withstand voltage (Input / Output,50Hz/60Hz)	2500VAC
Insulation resistance(@500VDC)	1000MΩ
Operating temperature range	-30°C~+80°C
Storage temperature range	-30°C~+100°C
Weight	4g

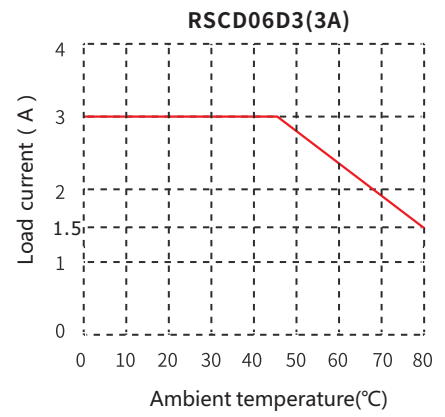
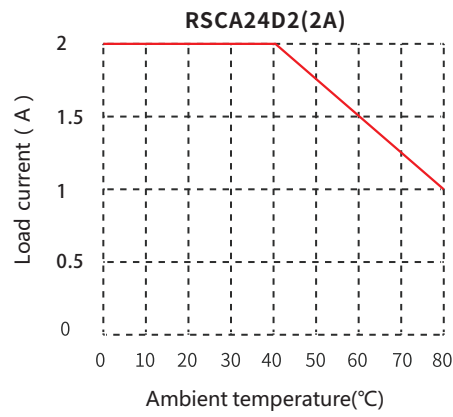
**Note:**

1. When welding and installing the printed substrate, please complete the welding within 8 seconds at 260°C welding temperature (no more than 2 seconds for each pin).
2. The positive and negative polarity of input and output shall not be connected wrongly, otherwise it is easy to damage the product.
3. The recommended installation torque for base wiring is 0.5N m.
4. When the ambient temperature of the product is high, please refer to the temperature curve for derating.

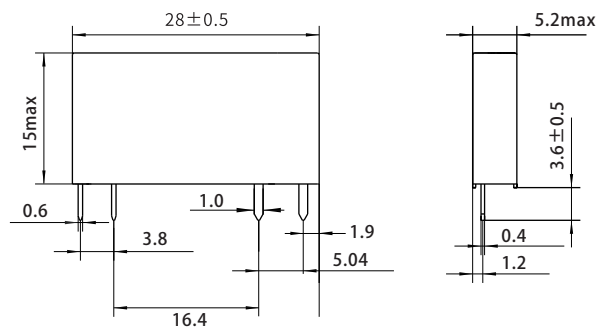
**Wiring diagram**



**Contact Specification**

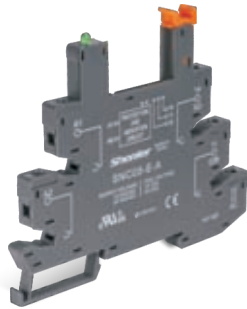


**Dimension(mm)**





**Characteristics**



**SNC05-E**

Model No.	Input	Relay
SNC05-E-A	12~24V	12~24VDC
SNC05-E-B	48~60V	48~60VDC
SNC05-E-C	110V	60VDC
SNC05-E-D	230V	60VDC

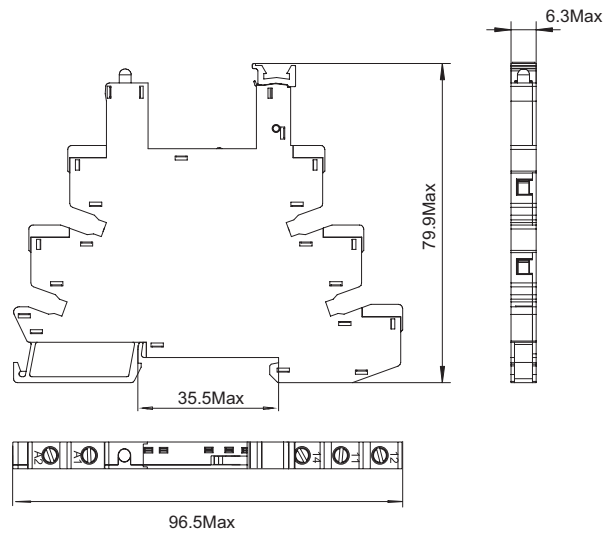
**Characteristics**

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	0.5
Wire size		AWG/mm <sup>2</sup>	20-16/0.5-1.5
Ambient temperature		°C	-40~+85
Unit weight		g	24

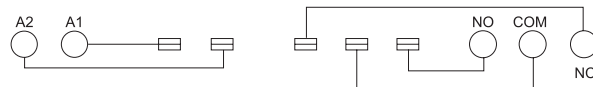
**Relay, accessories Selection Table**

Bus jumper	Legend	Partition plate
 SN20B	 SN64P	 SN20S

**Dimensions (mm)**



**Connection Diagrams**



## SNC05-P1

Solid state slim relay  
PCB socket



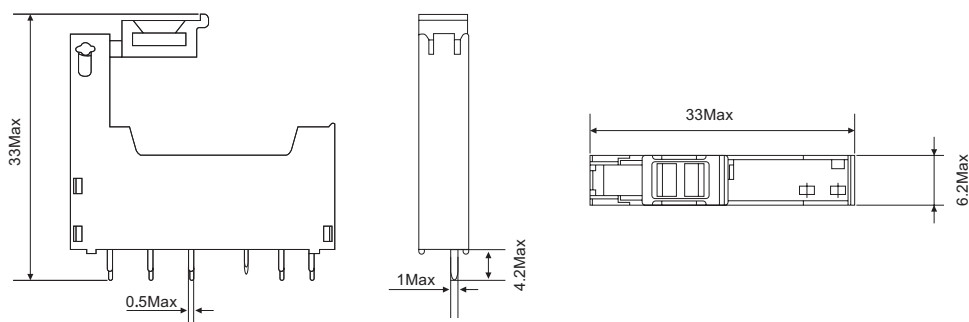
### Product performance

#### SNC05-P1

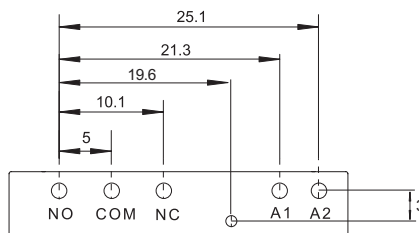


Nominal load	Current	A	6
	Voltage	V	300
Dielectric strength	Input/output	V/min	2500
Ambient temperature		°C	-40~+85
Unit weight		g	25

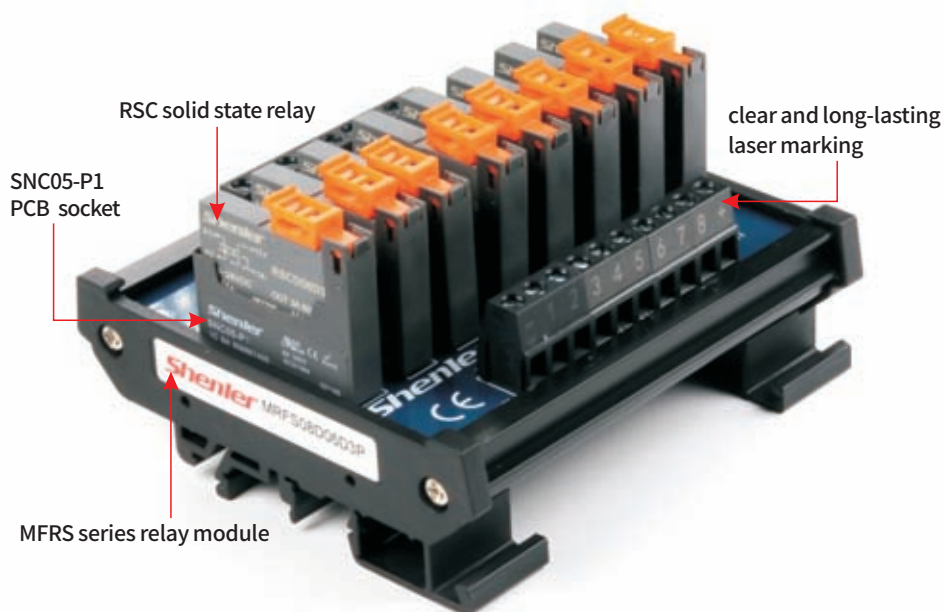
### Dimension (mm)



### Wiring Diagram



### Physical drawing of product application



- ◆ 1 N/O SPST DC output
- ◆ No contact, no spark, long service life
- ◆ MOSFET output, fast switching response
- ◆ Imported optocoupler isolation
- ◆ Wide control voltage range, LED indicator
- ◆ Optional IP20 protective cover, panel mounting
- ◆ Widely used in DC heating, DC power supply, DC valve, DC motor, etc.



**MOS tube**

The relay adopts MOS tube with low internal resistance, which has low calorific value and long service life



**Brass cooling base plate**

The back adopts thickened brass plate; smooth surface helps fast cooling and avoid overheat.



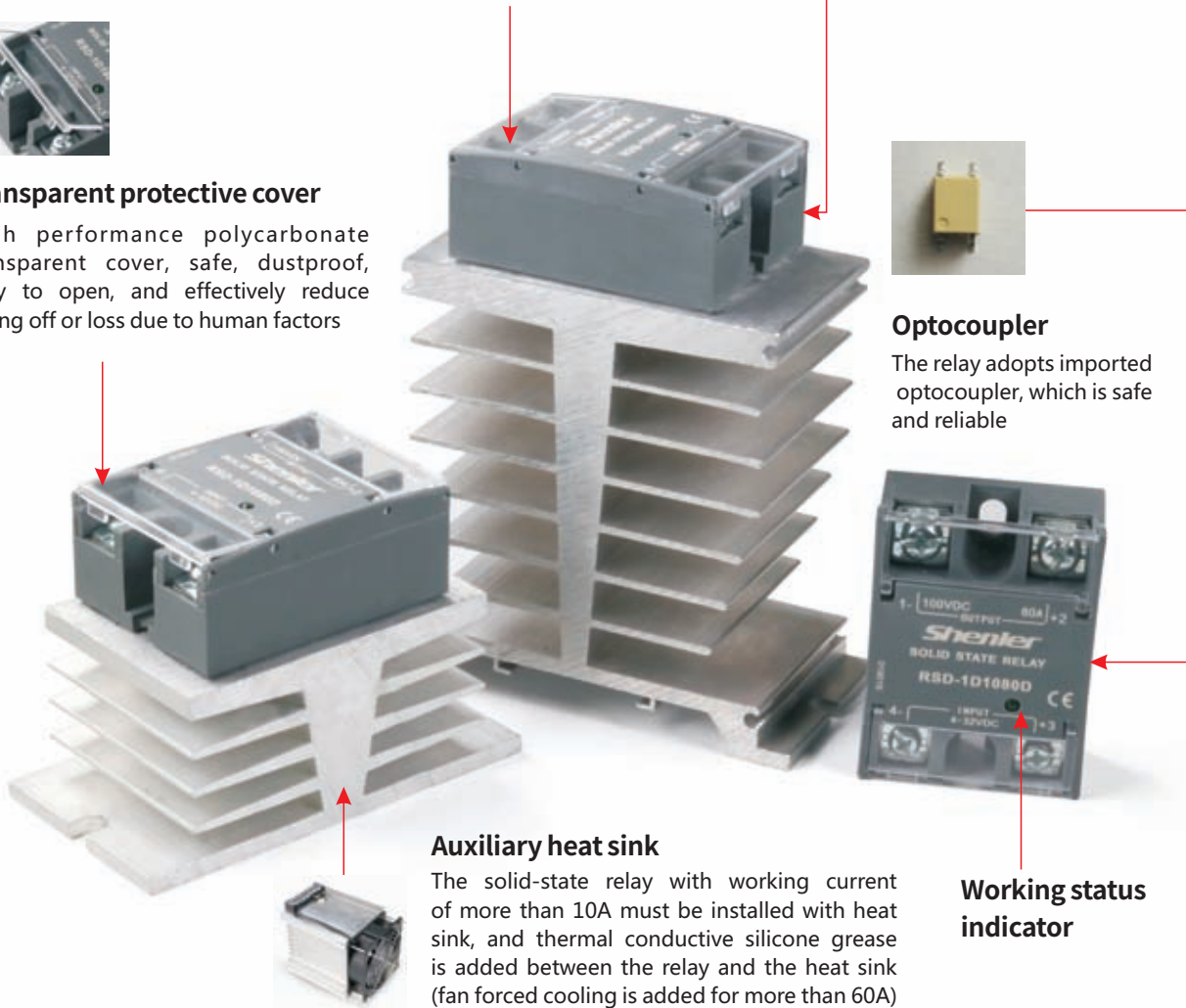
**Transparent protective cover**

High performance polycarbonate transparent cover, safe, dustproof, easy to open, and effectively reduce falling off or loss due to human factors



**Optocoupler**

The relay adopts imported optocoupler, which is safe and reliable



**Auxiliary heat sink**

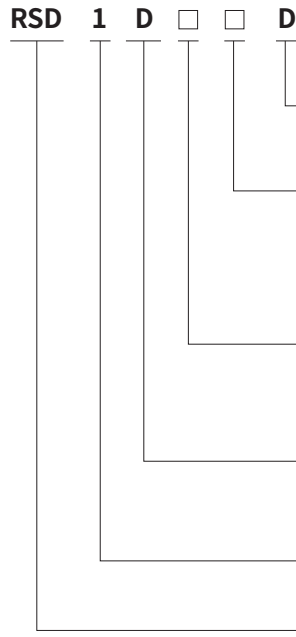
The solid-state relay with working current of more than 10A must be installed with heat sink, and thermal conductive silicone grease is added between the relay and the heat sink (fan forced cooling is added for more than 60A)

**Working status indicator**





Relay



**Control type**  
D:4-32VDC DC control

**Load current**

Code	20	40	60	80	100
Current (A)	20	40	60	80	100
Note	For load voltage code 06 and 10 only				

**Load voltage**

Code		06	10	20
Voltage Range (VDC)		7-48	7-75	7-120

**Load type**  
D: DC load

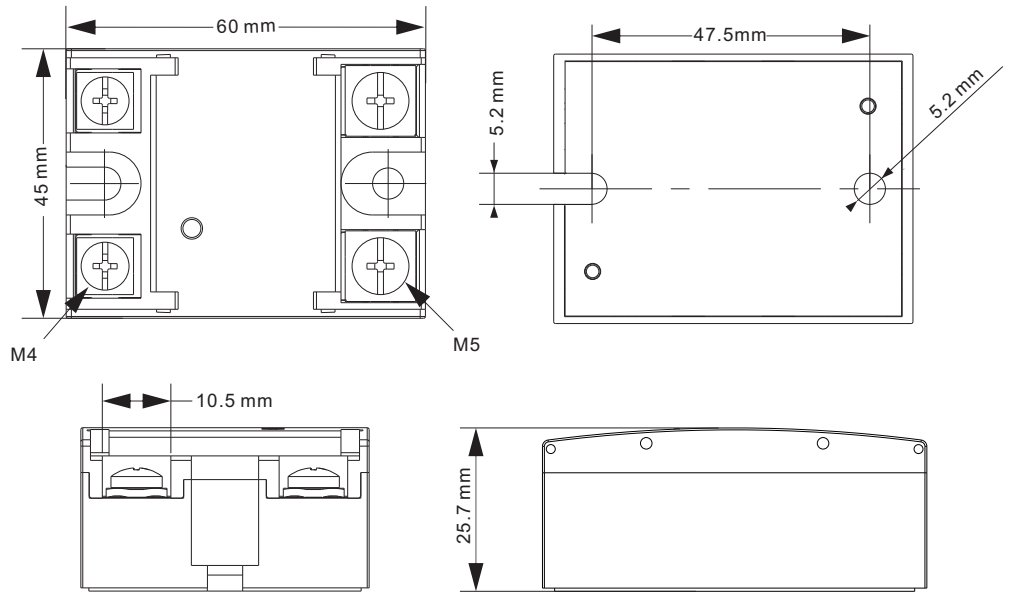
**Single-phase**

**Series name**

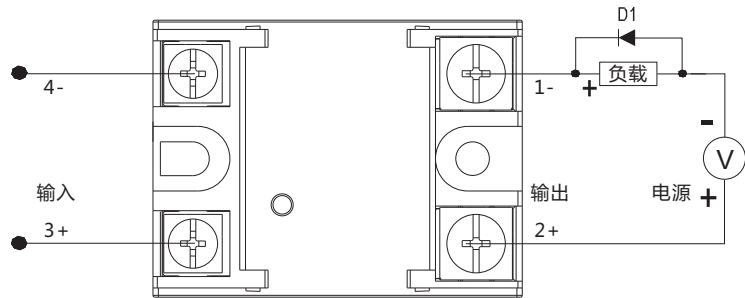
Product performance														
Input parameter ( Ta=25°C )														
Control voltage range	4~32VDC													
Must ON voltage	4VDC													
Must OFF voltage	1VDC													
Control current range	6~20mA													
Output parameters ( Ta=25°C )														
Part No.	RSD-1D06xxD					RSD-1D10xxD					RSD-1D20xxD			
Load voltage range(VDC)	7-48					7-75					7-120			
Maximum load current(A)	20	40	60	80	100	20	40	60	80	100	20	40	60	
Maximum surge current (A <sub>pk</sub> @10ms)	110	160	200	260	300	90	140	180	220	280	80	160	200	
Maximum PWM(Hz) ★	900	700	700	500	500	900	600	600	400	400	800	600	400	
Maximum conduction voltage drop(V)	≤1										≤1.2			
Maximum off- state leakage current(mA)	≤0.3													
Minimum load current(mA)	≥2													
Maximum conduction time(ms)	1													
Maximum off time(ms)	1													
Other parameters ( Ta=25°C )														
Dielectric withstand voltage (50/60Hz)	Between Input and Output										2500Vrms			
	Input/Output to base										2500Vrms			
Insulation resistance(@500VDC)	1000MΩ													
Operating temperature range	-30°C~+80°C													
Storage temperature range	-40°C~+100°C													
Operating ambient humidity range	5 ~ 85%HR													
Cooling mode	Install the heat sink and add fan forced cooling when the temperature exceeds 60°C													
Weight Approx	90g													

★ Note: For PWM rating, a voltage of at least 8 Vdc must be applied to the control input.

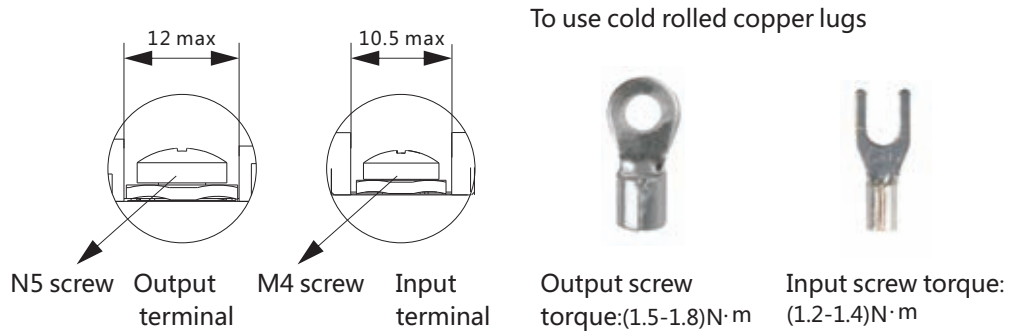
**Dimensions (mm)**



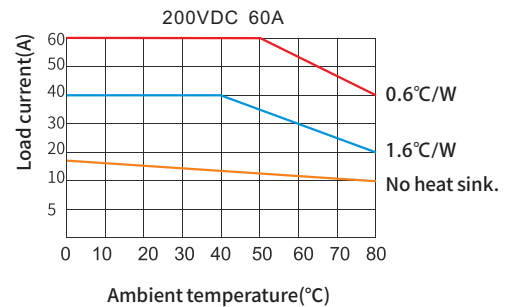
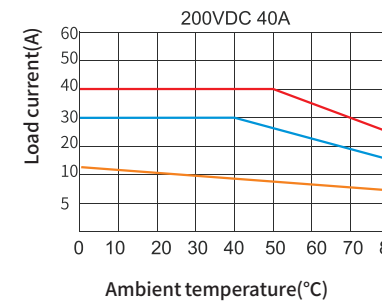
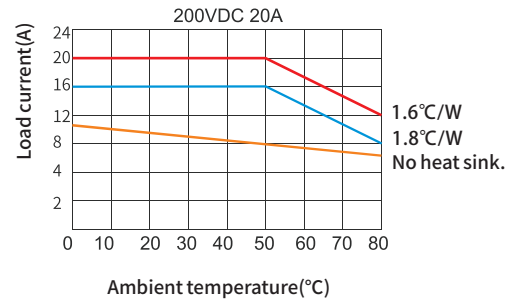
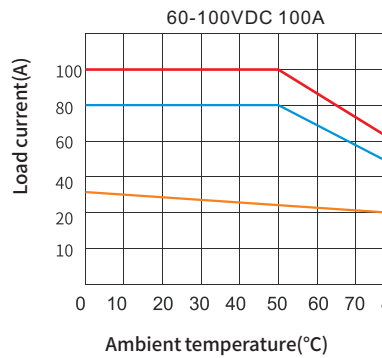
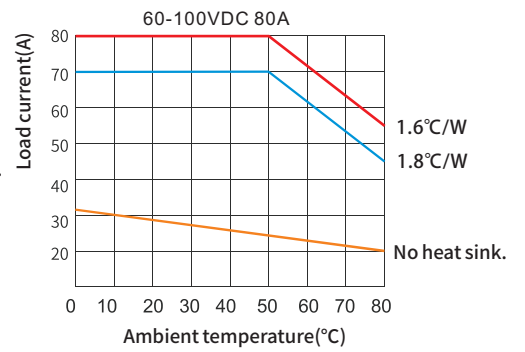
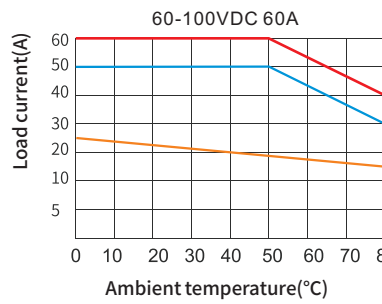
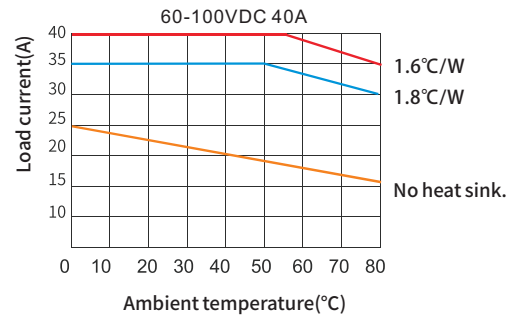
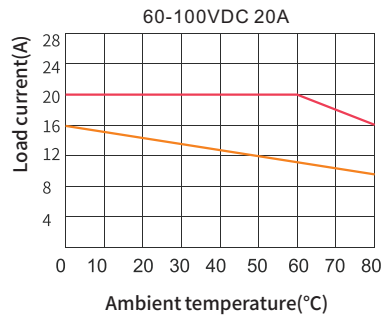
**Wiring Diagrams**



\*When inductive load is used, suppression circuit must be added, as shown in the figure: reverse parallel freewheeling diode D1 at both ends of the load (D1 is a fast recovery diode)



**Performance curve**



### Comparison table of derating coefficient

Considering the load surge current and the overload capacity of the relay to make the relay work with long life and high reliability, it is recommended to take the value of derating coefficient corresponding to the load type in the following table.

Load type	Resistance	Electric heating wire	Incandescent lamp	ransformer / electromagnet	Motor
Power factor	1.0	0.7	0.5	0.4	0.2
Magnification	1.5multiple	2multiple	2.5multiple	4multiple	7multiple

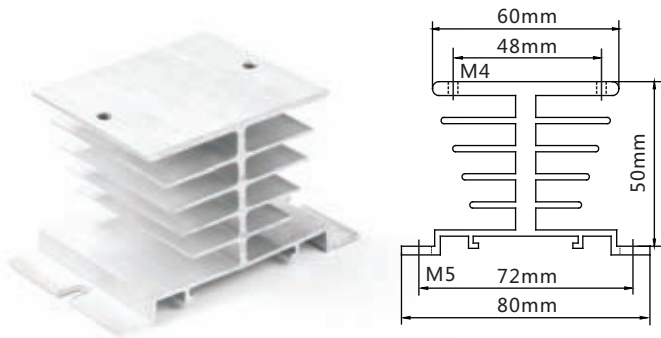
### Note

1. Please be sure to set fuse, air circuit breaker and other protective equipment on the power side to prevent short circuit.
2. When connecting inductive load, be sure to reverse parallel freewheeling diode at the load end (see "Terminal configuration and wiring diagram" for specific connection method)!
3. M5 screw and spring washer are used with 2N.m torque. After 3 hours of use, tighten it once with the same torque. To ensure the close contact and firm installation between the base plate of the solid-state relay (hereinafter referred to as the product) and the heat sink.
4. The product wiring shall be standard wire, and the cross-sectional area can be selected according to 5-8A per square millimeter. The terminal shall ensure that the wiring is firm. Loose wiring will lead to abnormal heating and damage to the product. In case of high temperature and high humidity environment, conductive compound shall also be coated on the connection part.
5. The input terminal is standard M4 screw, and the wiring tightening torque is (1.2-1.4) N.m. the output terminal is standard M5 screw, and the wiring tightening torque is (1.5-1.8) N.m.
6. Please do not connect the current above the rated specification. Otherwise, it may cause abnormal heating of the product.
7. Do not apply voltage exceeding the rated value on the input circuit and output circuit, and pay attention to the wrong connection of positive and negative polarity, otherwise the product will fail or burn.
8. Requirements for installatio: it shall be installed vertically on the chassis with good ventilation conditions, and make full use of the heat dissipation conditions of air convection. When two or more products are installed side by side, an appropriate large gap shall be reserved.
9. When the ambient temperature of the product is high, please refer to "Performance curve" to check the current temperature curve for derating. When it exceeds 60 °C, air cooling is needed to ensure that the temperature of the product bottom plate does not exceed 80 °C.
10. Before installation, maintenance and other operations, be sure to cut off the power supply in case of electric shock!

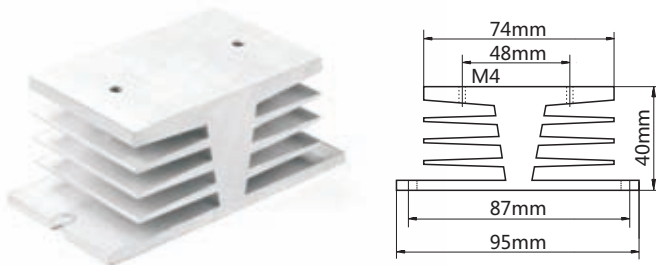
## KSR-1 Series

Single phase heat sink

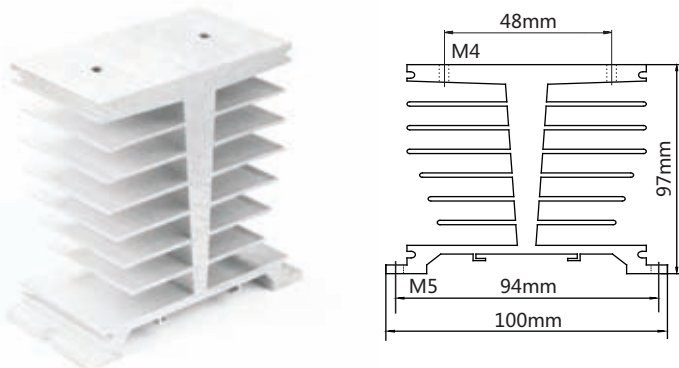
- Selection of heat sink: select the heat sink corresponding to thermal resistance according to "Performance curve" of solid-state relay to see the current temperature curve of solid-state relay. The smaller the thermal resistance value, the better the heat dissipation effect. >>>>>



Part No.	W x L x H	Weight≈	Thermal resistance
KSR-1A-50	50×80×50	70g	2.2°C/W

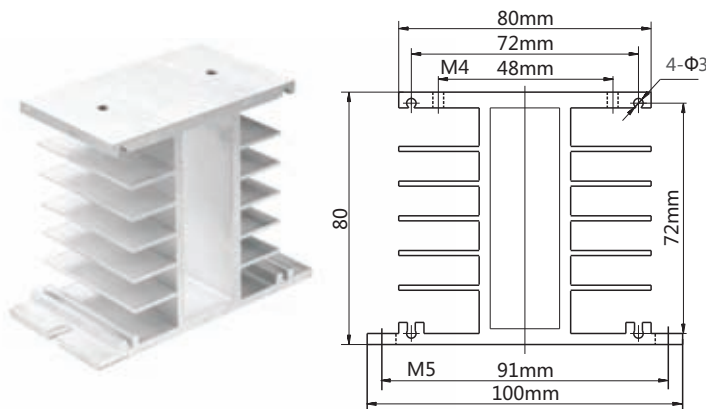


Part No.	W x L x H	Weight≈	Thermal resistance
KSR-1E-50	50×95×40	225g	1.8°C/W



Part No.	W x L x H	Weight≈	Thermal resistance
KSR-1T-50	50×100×97	324g	1.6°C/W
KSR-1TF-76	76×100×97	580g	0.6°C/W

Note: the length of KSR-1TF-76 with fan is 76mm



Part No.	W x L x H	Weight≈	Thermal resistance
KSR-1H-50	50×100×80	220g	1.8°C/W
KSR-1HF-76	76×100×80	480g	0.8°C/W

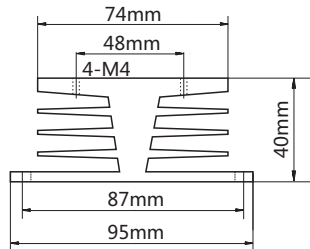
Note: the length of KSR-1TF-76 with fan is 76mm



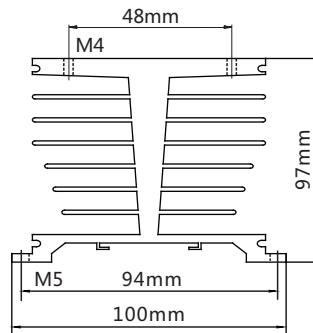
## KSR-1 Series

Single phase heat sink

- Selection of heat sink: select the heat sink corresponding to thermal resistance according to "Performance curve" of solid-state relay to see the current temperature curve of solid-state relay. The smaller the thermal resistance value, the better the heat dissipation effect.

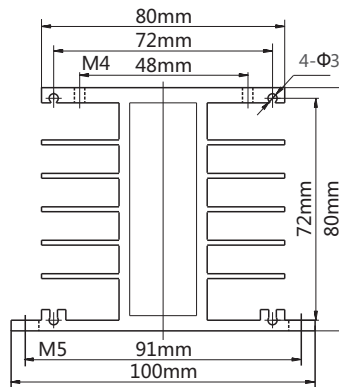


Part No.	W x L x H	Weight≈	Thermal resistance
KSR-3E-50	105×95×40	460g	1.1°C/W



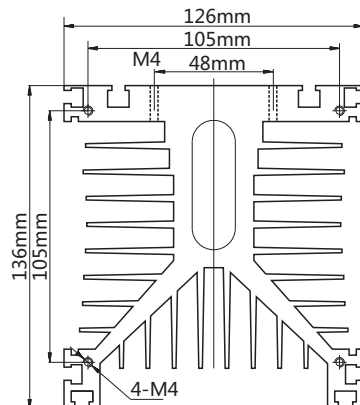
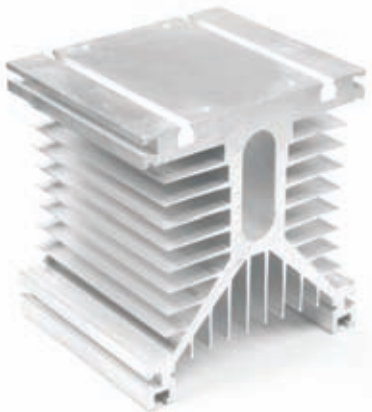
Part No.	W x L x H	Weight≈	Thermal resistance
KSR-3T-110	110×100×97	750g	0.8°C/W
KSR-3TF-136	136×100×97	1100g	0.35°C/W

Note: the length of KSR-3TF-13 with fan is 136mm



Part No.	W x L x H	Weight≈	Thermal resistance
KSR-3H-110	110×100×80	460g	1°C/W
KSR-3H-150	150×100×80	630g	0.8°C/W
KSR-3HF-136	136×100×80	670g	0.5°C/W
KSR-3HF-176	176×100×80	840g	0.4°C/W

Note: the length of KSR-3HF-13 with fan is 136mm  
Note: the length of KSR-3HF-176 with fan is 176mm



Part No.	W x L x H	Weight≈	Thermal resistance
KSR-3Y-110	110×126×136	1400g	0.5°C/W
KSR-3Y-150	150×126×136	1900g	0.4°C/W

Note: the length of KSR-3Y Series with fan is 38mm

- ◆ Built-in dedicated IC program control mini time relay
- ◆ Reset time include mindway reset time under 100ms
- ◆ Use ⊖ screwdriver to set time
- ◆ Meet IEC60947-5-1: 2016 (GB/T14048.5-2017)

**Silver alloy contacts**



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

**Time dial**  
Various delay time is optional.

**Top copper coil material**

Standard turns and electromagnetic coils make the pick-up more reliable and enduring, which can reach more than 20 million cycles.



**Metal clip**

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



**Silver alloy pins**

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



**TKB 2 B 230A 5S**



Relay

+



Socket

=



Relay module

**Rated time**

- 1s: 0.1s-1s
- 10s: 0.5s-10s
- 60s: 2.0s-60s
- 5min: 0.2min-5min
- 30min: 1min-30min
- 5s: 0.2s-5s
- 30s: 1s-30s
- 3min: 0.1min-3min
- 10min: 0.5min-10min

**Supply voltage**

- 120A: 120VAC
- 230A: 230VAC
- 24D: 24VDC

**Function**

- B: On-delay**
- E: Interval time-delay operation**
- F: Repeat-cycle off time delay**

**Terminal Tyoe**

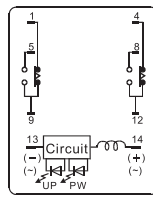
- 2: 2CO
- 4: 4CO

**Series name**

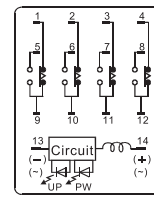
Characteristics		TKB2B	TKB2E	TKB4B	TKB4E
Configuration		TKB2B	TKB2E	TKB4B	TKB4E
Rated supply voltage		120VAC, 230VAC 50/60Hz; DC24V			
Operating voltage range		Rated voltage 85-110% (90%-110% is DC12V)			
Power consumption		3.5W			
Max.output load		5A, 250 VAC (p.f.=1)		3A, 250 VAC (p.f.=1)	
Min. output load		10 mA, 17 VDC			
Repetitive error		±2% (FS max.)			
Setting error		±5% (FS max.)			
Voltage error		±2% (FS max.)			
Temperature error		±2% (FS max.)			
Resetting time		Min.time: 0.2 sec			
Insulation resistance		100MΩ(DC500V)			
Dielectric strength		Between current-carrying and Non-current-carrying parts 2000V 50/60Hz min			
		Between control output terminals and operating circuit 1500V 50/60Hz min			
		Between contacts 1000V 50/60Hz min			
Vibration resistance	Destruction	10~55Hz with 0.75mm single amplitude each in 3directions for 2 hours each			
	Malfubction	10~55Hz with 0.5mm single amplitude each in 3 directions for 10 minutes each			
Shock resistance	Destruction	30G			
	Malfubction	10G			
Storage temperature		-55~+85°C/ ≤85%RH (18 months) ★			
Ambient temperature		-10°C~55°C			
Ambient humidity		35~85%RH			
Life expectancy	Mechanical	> 10 <sup>7</sup> (under no load, at 1,800 operations/hour)			
	Electrical	> 10 <sup>5</sup>			
Weight		approx. 35g			

★ If the storage exceeds 18 months (calculated from the factory date), it is recommended to re-test the parameters before using.

wiring diagram



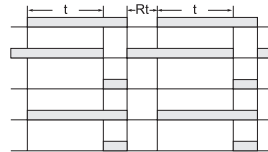
TKB2B TKB2E



TKB4B TKB4E

Timing charts

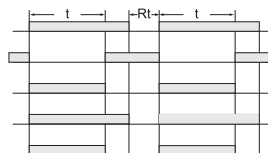
Power13-14  
Time-limit contact (NC)9-1、12-4  
Time-limit contact (NO)9-5、12-8  
Power indicator  
Output indicator



TKB2B

NOTE: t :set time, Rt: reset time

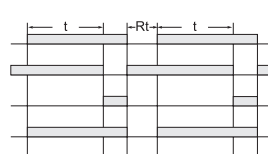
Power13-14  
Time-limit contact (NC)9-1、12-4  
Time-limit contact (NO)9-5、12-8  
Power indicator  
Output indicator



TKB2E

NOTE: t :set time, Rt: reset time

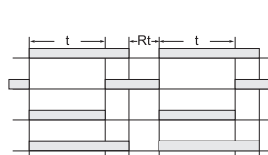
Power13-14  
Time-limit contact (NC)9-1、10-2、11-3、12-4  
Time-limit contact (NO)9-5、10-6、11-7、12-8  
Power indicator  
Output indicator



TKB4B

NOTE: t :set time, Rt: reset time

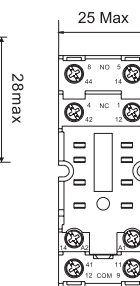
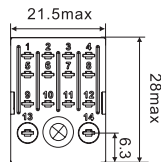
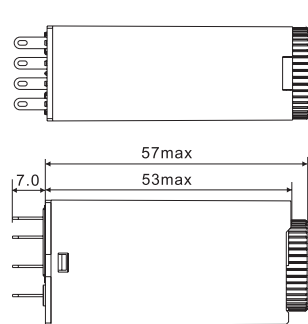
Power13-14  
Time-limit contact (NC)9-1、10-2、11-3、12-4  
Time-limit contact (NO)9-5、10-6、11-7、12-8  
Power indicator  
Output indicator



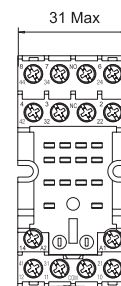
TKB4E

NOTE: t :set time, Rt: reset time

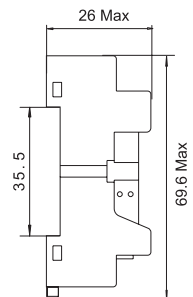
Dimensions(mm)



SKF08-E



SKF14-E



SR15L	SR20T	SR20F	SR25C	SK28L	SK36F
-------	-------	-------	-------	-------	-------



SRC/SRB	SRU	SRC	SRC/SRU	SKB/SKC	SKB/SKC
---------	-----	-----	---------	---------	---------

SN20S	SR2P	SK2P	SU3P	SK4P	SN64P
-------	------	------	------	------	-------



SNC05-E/S	SRC/SRB/SRU	SKE/SKF	SUB	SKC/SKB	SNC05-E/S
-----------	-------------	---------	-----	---------	-----------

ST01CC	SN20A	SN20B	SR08B	SR08C	PFP	SY36S	SR15M
--------	-------	-------	-------	-------	-----	-------	-------



SKC08/14-ST  
SRU05/08-ST  
SRC05/08-ST

SNB-E	SNC05-E/S	SRU05/08-E, SRC05/08-E	SRT05/08-E/-A/-ES	DIN	SYF	SRC05/08-P
-------	-----------	---------------------------	-------------------	-----	-----	------------

SR1520M	SR2025M	ST36M3C	ST36M4C	SK36M	SE48M	SE52M	SU60M
---------	---------	---------	---------	-------	-------	-------	-------



SRC05/08-P	SRC05/08-P	STB11-E	STB14-E	SKC/SKB/SKE/ SKF	SEB11-P	SEB11-E	SUB
------------	------------	---------	---------	---------------------	---------	---------	-----



AMD - □ □ □ □

**Voltage**  
VAC:AC voltage  
VDC:DC voltage  
V:AC and DC voltage general

**LED**  
N : red  
blank: green

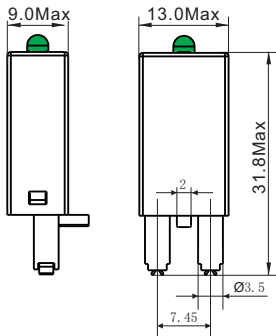
**Polarity**  
blank : A1 -, A2 +  
1: A1 + , A2 -

**Description**  
L : LED  
LDD: LED + diode  
RC: RC circuit  
ML: Varistor + LED  
M: Varistor  
D:diode

**Series**

- ◆ For surge suppressor
- ◆ With LED
- ◆ Work with relay socket

Dimensions & Schemes (mm)



AMD-L 6-24VAC/DC	AMD-L1 6-24VAC/DC	AMD-L 110-240VAC/DC	AMD-L1 110-240VAC/DC	AMD-LDD 6-24VDC	AMD-LDD1 6-24VDC		
AC/DC circuit + LED	AC/DC circuit + LED	AC/DC circuit + LED	AC/DC circuit + LED	DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression DC circuit+ LED		
AMD-LDD 110V/240VDC	AMD-LDD1 110V/240VDC	AMD-D 6-250VDC	AMD-D1 6-250VDC	AMD-ML 24VAC/DC	AMD-ML1 24VAC/DC	AMD-ML 240VAC/DC	AMD-ML1 240VAC/DC
DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression	DC Voltage peak suppression	AC/DC Circuit over-voltage protection AC/DC circuit+ LED	AC/DC Circuit over-voltage protection AC/DC circuit+ LED	AC/DC Circuit over-voltage protection AC/DC circuit+ LED	AC/DC Circuit over-voltage protection AC/DC circuit+ LED
AMD-LD 6-24VDC	AMD-LD1 6-24VDC	AMD-LD 110-240VDC	AMD-LD1 110-240VDC	AMD-RC 6-24VAC	AMD-RC 110-240VAC	AMD-M 24VAC/DC	AMD-M 240VAC/DC
DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression DC circuit+ LED	DC Voltage peak suppression DC circuit+ LED	AC circuit + RC	AC circuit + RC	AC/DC Voltage peak suppression	AC/DC Voltage peak suppression



BMD - □ □ □ □

**Voltage**  
VAC: AC voltage  
VDC: DC voltage  
V: AC and DC voltage general

**LED**  
N : red  
blank: green

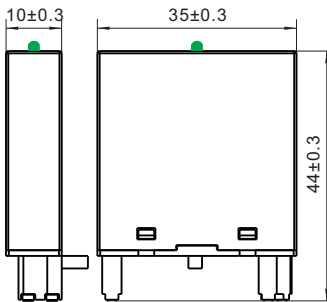
**Polarity**  
blank : A1 -, A2 +  
1: A1 +, A2 -

**Description**  
L : LED  
LDD: LED + diode  
RC: RC circuit  
ML: Varistor + LED  
M: Varistor  
D: diode

**Series**

- ◆ For surge suppressor
- ◆ With LED
- ◆ Work with relay socket

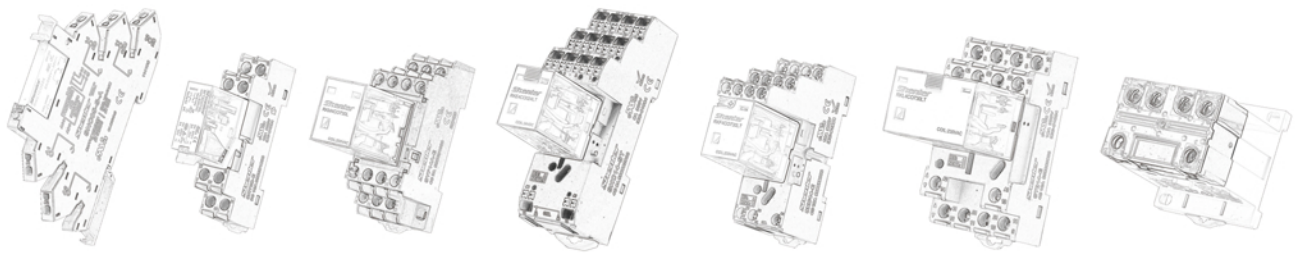
**Dimensions & Schemes (mm)**



BMD-L 6-24VAC/DC	BMD-L1 6-24VAC/DC	BMD-L 110-240VAC/DC	BMD-L1 110-240VAC/DC	BMD-LDD 6-24VDC	BMD-LDD1 6-24VDC		
BMD-LDD 110V/240VDC	BMD-LDD1 110V/240VDC	BMD-D 6-250VDC	BMD-D1 6-250VDC	BMD-ML 24VAC/DC	BMD-ML1 24VAC/DC	BMD-ML 240VAC/DC	BMD-ML1 240VAC/DC
BMD-LD 6-24VDC	BMD-LD1 6-24VDC	BMD-LD 110-240VDC	BMD-LD1 110-240VDC	BMD-RC 6-24VAC	BMD-RC 110-240VAC	BMD-M 24VAC/DC	BMD-M 240VAC/DC







**Shenler**

SHENLE CORPORATION LTD.

Address: No.666 East Jiaotong Rd., Wu'niu St., Yongjia, Wenzhou,  
Zhejiang, China

Post code: 325000

Tel: + 86-577-62994088/57150677/57150678/57150666

Fax: + 86-577-62985000/62981722

E-mail: sales@shenler.com

Website: www.shenler.com



The official Website: [Shenle Relay](http://www.shenler.com)

Note:

We reserve the right to make technical changes or modify the contents of this document without prior notice.

We reserve all rights in this document and in the subject matter and illustrations contained therein.

Any reproduction, disclosure to third parties or utilization of its contents in whole or in parts is forbidden without prior written consent of Shenler.

Copyright ©2020 shenler electric (6)

All rights reserved.