Shenler



Electromagnetic Relay Product Catalogue

Industrial Relays | Interface Relays | Timers | Sockets and Accessories



Shenle New Energy Industrial Plant



About Shenler

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, In 2023, the production capacity exceeds 100 million pieces, and the current market share accounts for 30%.



Shenle Industrial Plant



Winding workshop



Automation relay workshop



UL TÜV Witnessing Laboratory

Sales and service network

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, RoHS, UL, EAC, UKCA, CSA, CQC, CP, etc.

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

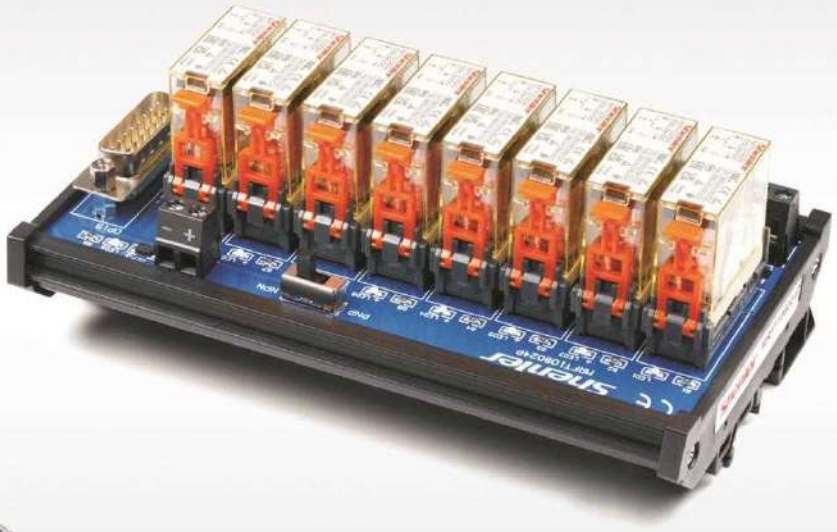
The world's leading supplier of industrial control relays

We have more than 50 series and more than 2600 relay and socket models. Products mainly include PCB relays, industrial relays, interface relays, time relays, sockets, accessories and modules.

Based on the vertically integrated industrial chain, with rich relay experience and creative capabilities, Shenle can provide you more reliable, safe and stable user experience.



























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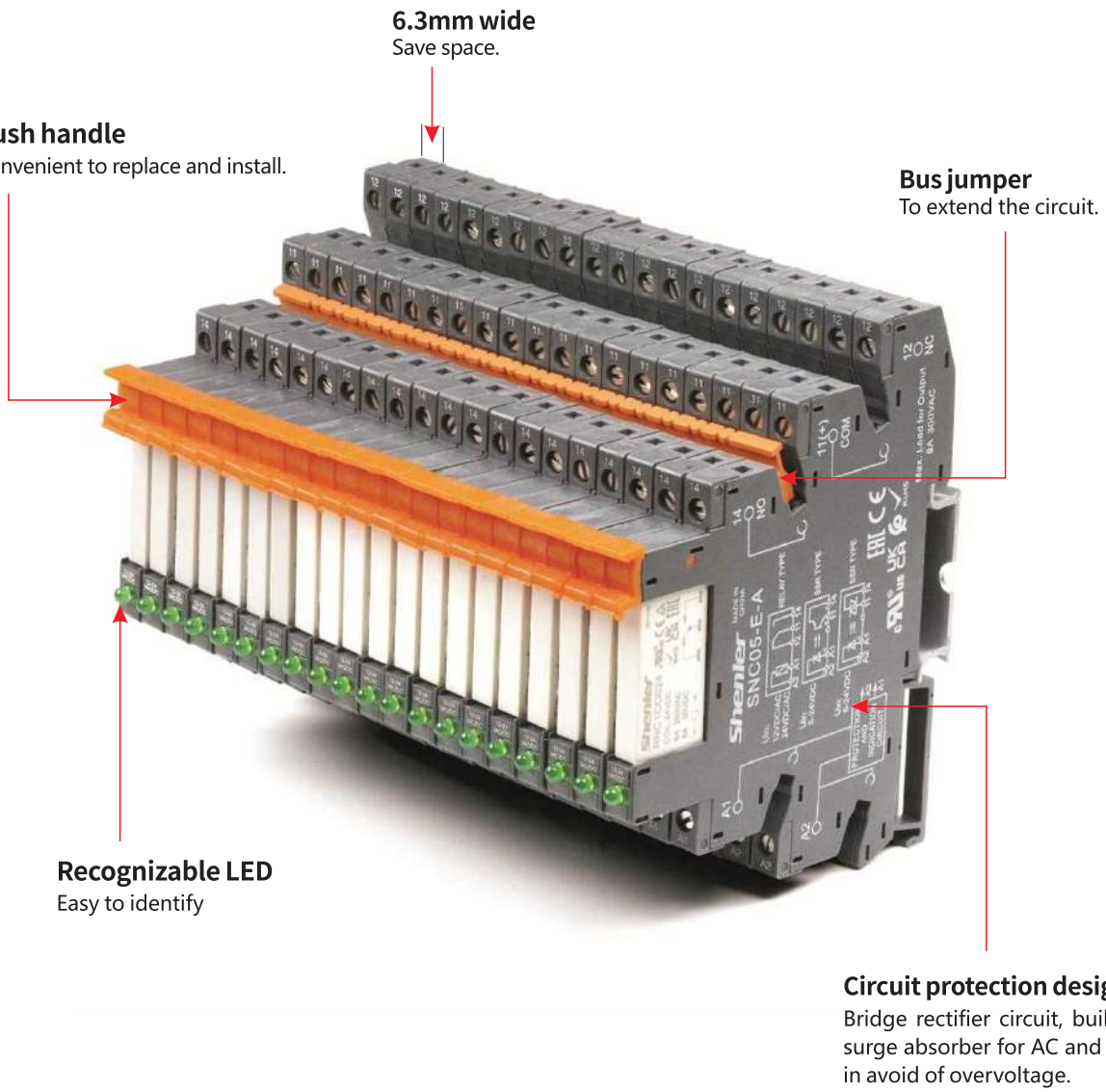
RNC

Interface Relay Module

- 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.



RNC

Interface 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 name



Relay

+



Socket

=



Relay module

Characteristics

Contact	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 (normal temperature)(frequency 1s on, 5s off)	NO: $6x10^4$Cycles (600 Ops/h); NC: $3x10^4$ Cycles (600 Ops/h)
	Mechanical durability	≥$2x10^7$Cycles (18000 Ops/h)
Pick-up voltage (23℃) (Rated voltage)		DC:≤75%
Drop-out voltage (23℃) (Rated voltage)		DC:≥5%
Maximum voltage (23℃) (Rated voltage)		110%
Insulation resistance		≥500MΩ (500VDC)
Coil operating power	3~24 VDC(W)	approx. 0.17W
	48~60 VDC(W)	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 IEC 60664 UL840	Rated voltage	250VAC
	Pollution level	3
	Overvoltage level	III
Impulse withstand voltage (waveform: 1.2/50μs)		4000V
Protection level		IP20
Storage temperature/ humidity		-55~+85℃/ ≤85%RH (18 months)
Working temperature/ humidity		-40~+85℃/ 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

RNC
Interface Relay Module

Coil Specifications (23°C)

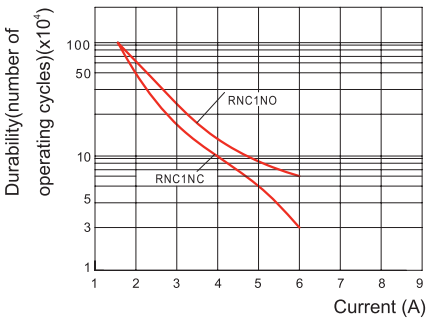
Nominal voltage V.DC (0.17W)	5	6	12	24
Coil resistance Ω	147	212	847	3250
Nominal voltage V.DC (0.21W)	48	60		
Coil resistance Ω	10971	17143		

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

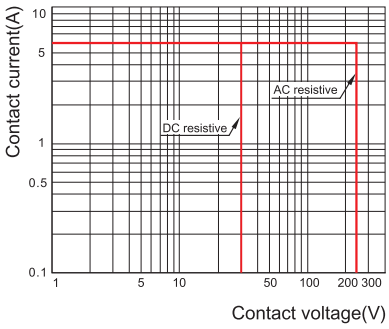
Contact Specification

RNC1A, 1C

Electrical durability

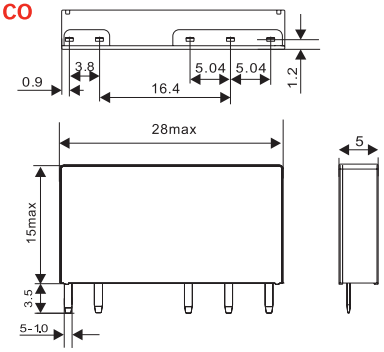


Maximum switching capacity

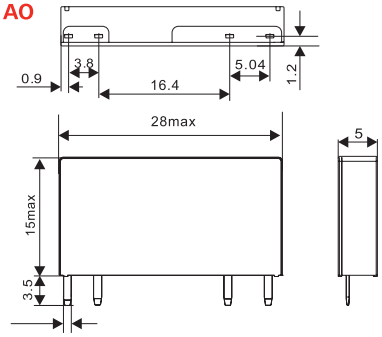


Dimensions (mm)

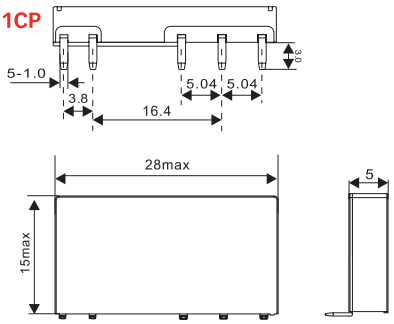
1CO



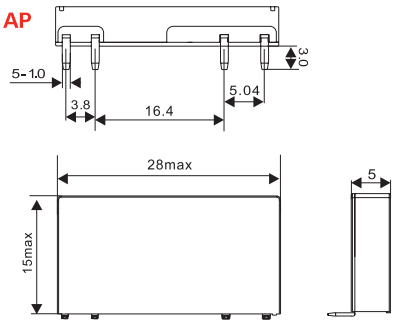
1AO



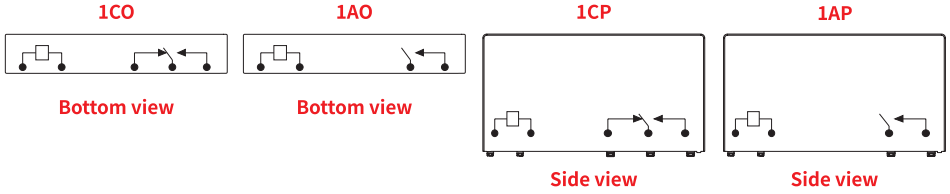
1CP



1AP



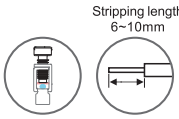
Wiring Diagrams



SNB05-E

RNC Socket

Characteristics





SNB05-E

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-DA	230V	60VDC

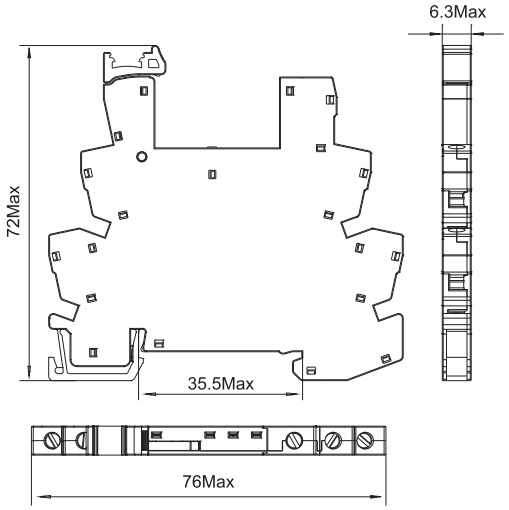
Characteristics

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Max. tightening torque		Nm	0.5
Wire size		AWG/mm^2	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	19.5

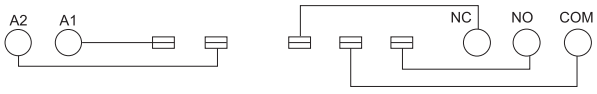
Accessories

Bus jumper	ID tag
	
SN20A	SN64P

Dimensions (mm)



Connection Diagrams



SNB05-ST

RNC Socket

Characteristics





SNB05-ST

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
SNB05-ST-DA	230V	60VDC

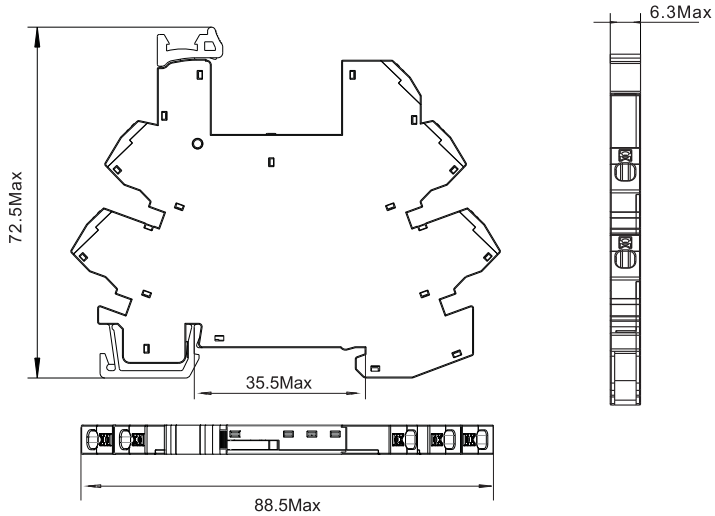
Characteristics

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	19.5

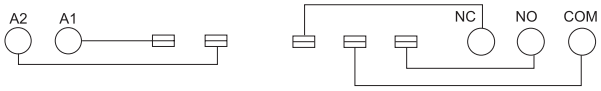
Accessories

Bus jumper	ID tag
	
SN20A	SN64P

Dimensions (mm)



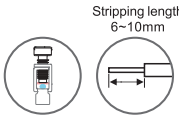
Connection Diagrams



SNC05-E

RNC Socket

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
SNC05-E-AR	12~24VDC	12~24VDC

Characteristics

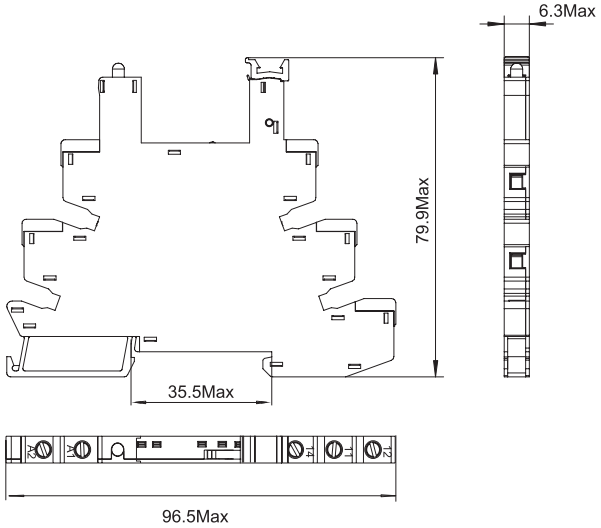
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Max. tightening torque		Nm	0.5
Wire size		AWG/mm^2	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	24

Accessories

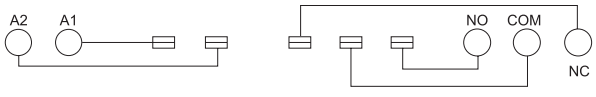
Bus jumper	ID tag	Partition plate
		
SN20B	SN64P	SN20S

*SNC05-E-DR optional, anti-interference function.

Dimensions (mm)



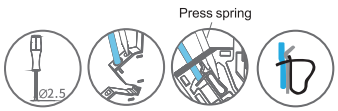
Connection Diagrams



SNC05-S

RNC Socket

Characteristics





SNC05-S

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

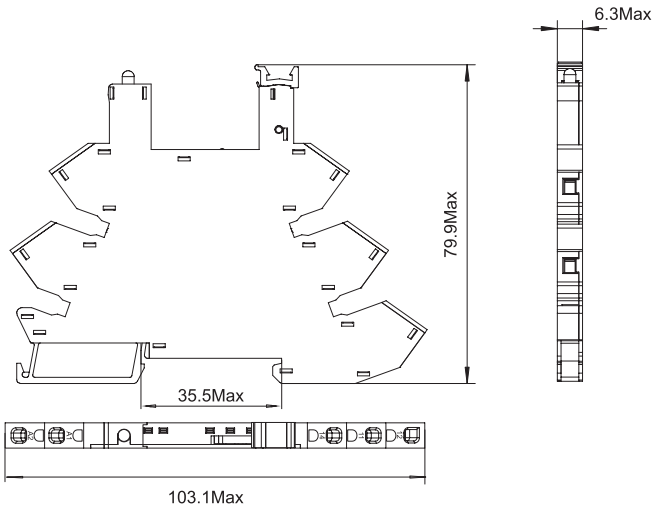
Characteristics			
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	25

Accessories

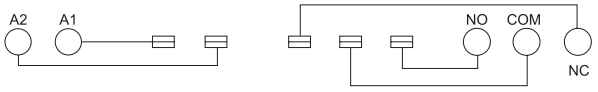
Bus jumper	ID tag	Partition plate
		
SN20B	SN64P	SN20S

*SNC05-S-DR optional, anti-interference function.

Dimensions (mm)



Connection Diagrams



SNC05-P

RNC Socket

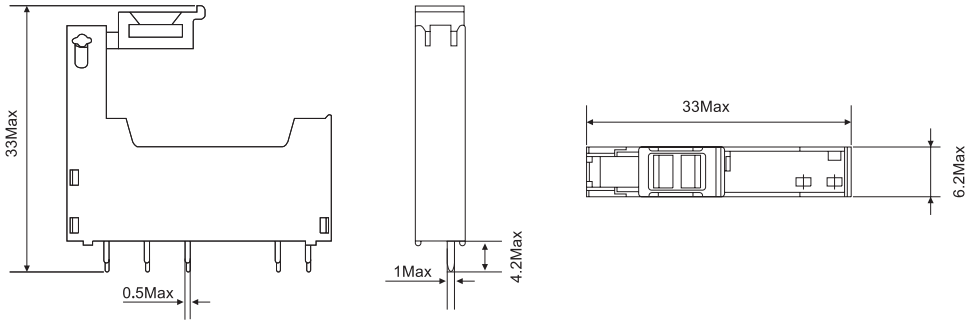
Characteristics



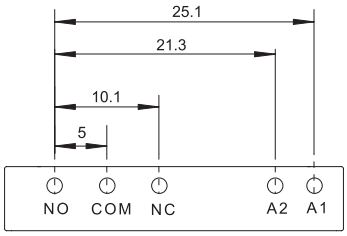
SNC05-P

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^2	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	2.6

Dimensions (mm)



Connection Diagrams



RFT
Interface Relay

- 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

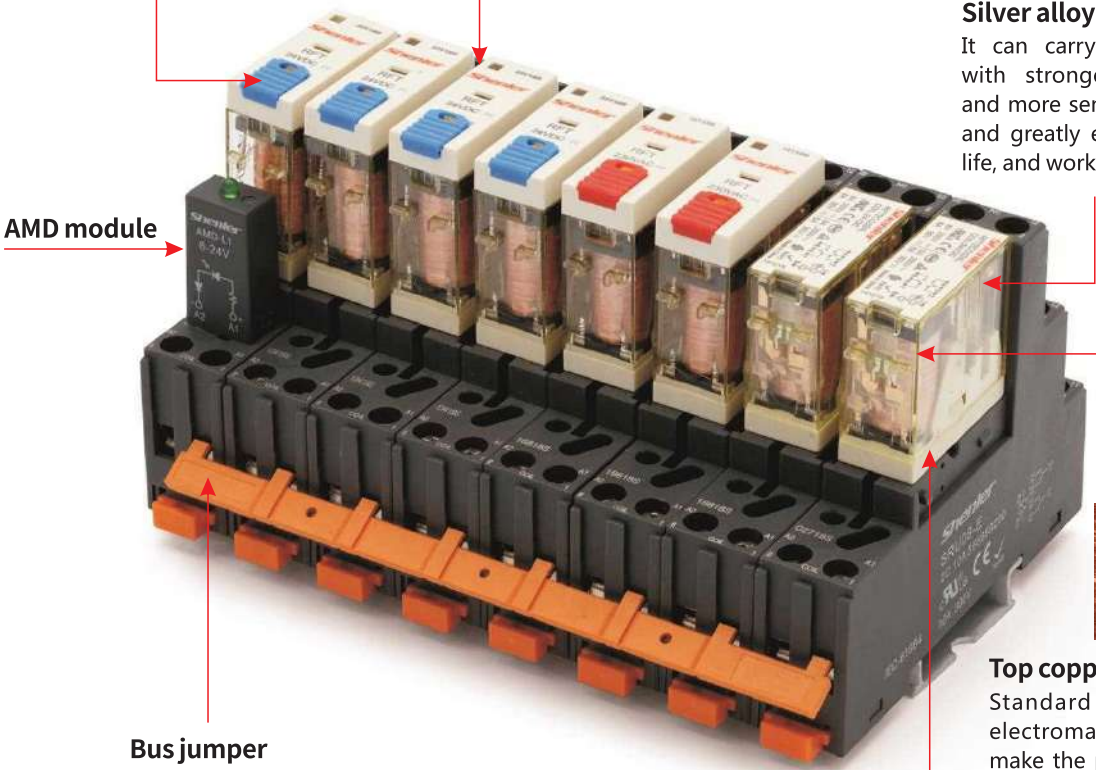


LED
Visible LED indicates the working status of the relay at any time, AC red, DC green

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



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





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.

Bus jumper
Bus jumper extends the circuit.



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

RFT
Interface Relay





Relay

+



Socket

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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 name

Characteristics

Contact	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
	Min. switching capacity		170mW(17V/10mA)	
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (high temp., frequency 1s on, 1s off)		≥20 x 10^4Cycles (1800 Ops/h)	
	Electrical durability (normal temp., frequency 1s on, 5s off)		≥30 x 10^4Cycles(600 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75% ,AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10% ,AC:≥30% 50/60Hz	
Maximum voltage (23℃)(Rated voltage)			110%	
Insulation resistance			≥1000MΩ (500VDC)	
Coil operating power	DC(W)		approx. 0.53	
	AC(VA)		approx. 1.0(60Hz)	
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 IEC 60664 UL840	Rated voltage		250VAC	
	Pollution level		3	
	Overvoltage level		III	
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)	

RFT
Interface Relay

Protection level	IP20
Storage temperature/ humbidity	-55~+85℃/5%~68%RH
Working temperature/ humbidity	-40~+55℃/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

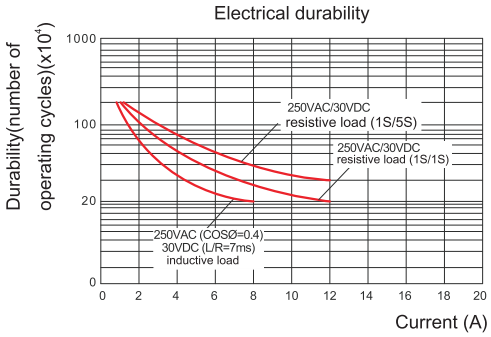
Coil Specifications (23°C)

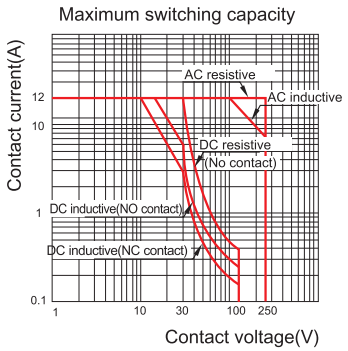
Nominal voltage V.DC	6	12	24	48	110	
Coil resistance Ω	68	270	1100	4400	22800	
Nominal voltage V.AC	6	12	24	48	115	230
Coil resistance Ω	16	63	260	1100	6300	23500

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

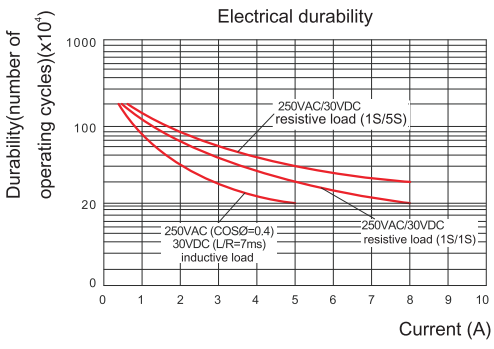
Contact Specification

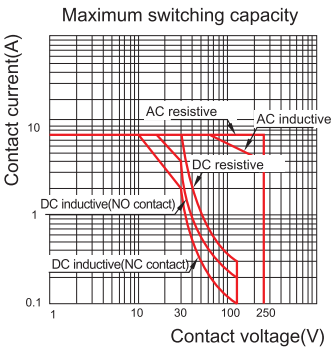
RFT1CO





RFT2CO

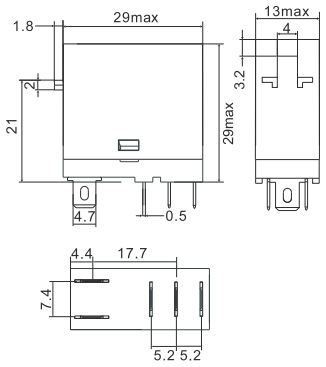




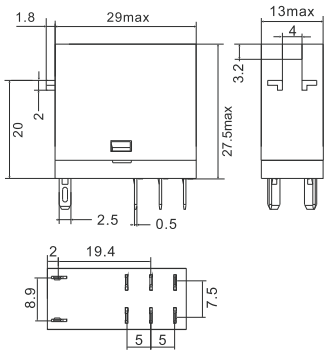
RFT
Interface Relay

Dimensions (mm)

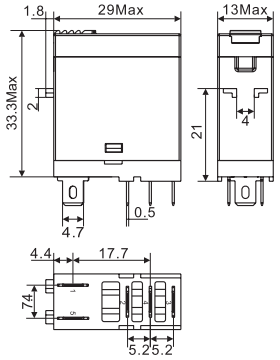
RFT1CO



RFT2CO



RFT1CO-LT



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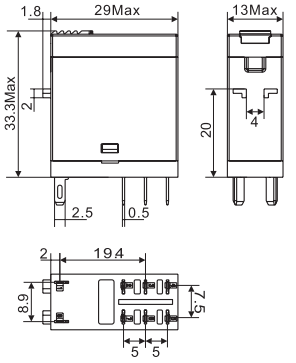
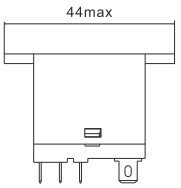


RFT1CO-B



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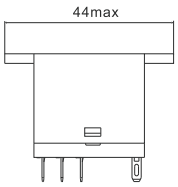
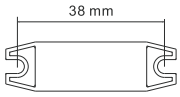
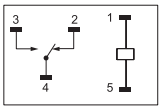


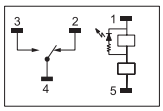


Wiring Diagrams

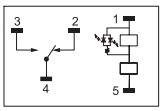
RFT1CO



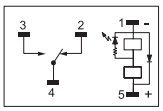
RFT1COL/LT AC



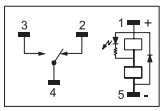
RFT1COL/LT DC



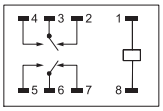
RFT1COLD/LTD DC



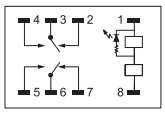
RFT1COLD1/LTD1



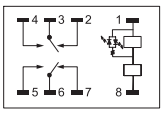
RFT2CO



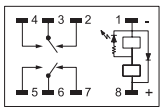
RFT2COL/LT AC



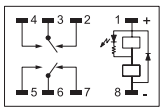
RFT2COL/LT DC



RFT2COLD/LTD DC



RFT2COLD1/LTD1



RFT-LS

Magnetic Blow-out Interface Relay

RFT □ □ □ □

Other options
L S: LED + magnet
LD S: LED+diode (1-,5+ ; 1-,8+)+magnet
LD1 S: LED+diode (1+,5-; 1+,8-)+magnet

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 name



Relay

+



Socket

=



Relay module

Characteristics

Contact	Configuration		1C-LS	2C-LS
	Load	Resistance	12A/250VAC, 30VDC	8A/250VAC, 30VDC
		Motor load	1/3HP, 240VAC	1/6HP, 240VAC
		Inductive (DC load)	12A,30VDC(L/R=7 ms)	8A,30VDC(L/R=7 ms)
	Max. switching capacity (resistive)		3000VA, 360W	2000VA, 240W
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (high temp., frequency 1s on, 1s off)		≥20 x 10^4Cycles (1800 Ops/h)	
	Electrical durability (normal temp., frequency 1s on, 5s off)		≥30 x 10^4Cycles(600 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75% ,AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10% ,AC:≥30% 50/60Hz	
Maximum voltage (23℃)(Rated voltage)			110%	
Insulation resistance			≥1000MΩ (500VDC)	
Coil operating power	DC(W)		approx. 0.53	
	AC(VA)		approx. 1.0(60Hz)	
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 IEC 60664 UL840	Rated voltage		250VAC	
	Pollution level		3	
	Overvoltage level		III	
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)	
Protection level			IP20	
Storage temperature/ humbidity			-55~+85℃/5%~68%RH	
Working temperature/ humbidity			-40~+55℃/5%~85%RH((No condensation)	

RFT-LS

Magnetic Blow-out
Interface Relay

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. 20.56g	approx. 20.245g

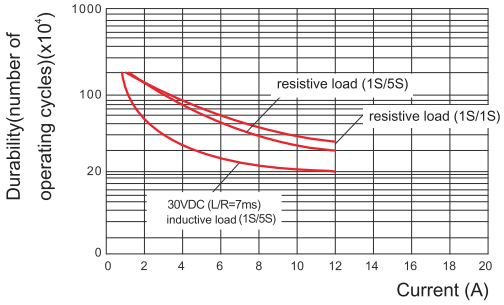
Coil Specifications (23°C)

Nominal voltage V.DC	6	12	24	48	110	
Coil resistance Ω	68	270	1100	4400	22800	
Nominal voltage V.AC	6	12	24	48	115	230
Coil resistance Ω	16	63	260	1100	6300	23500

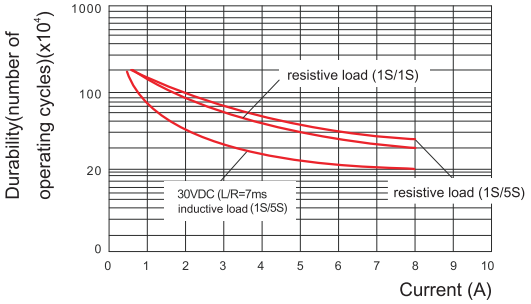
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

RFT1CO LS Electrical durability

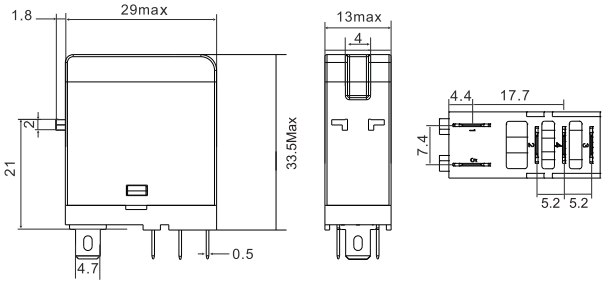


RFT2CO LS Electrical durability

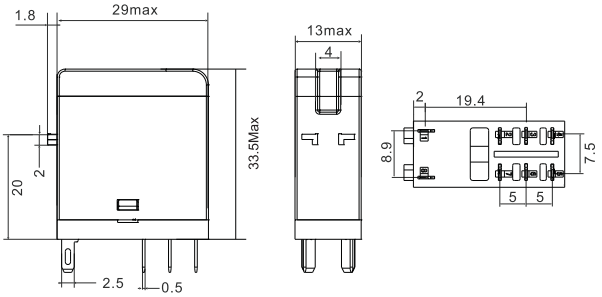


Dimensions (mm)

RFT1CO LS

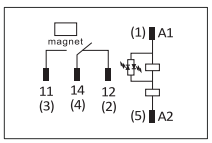


RFT2CO LS

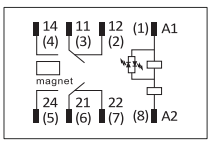


Wiring Diagrams

RFT1CO LS



RFT2CO LS



SRT05-A&SRT08-A

RFT Socket

Characteristics



SRT05-A



SRT08-A

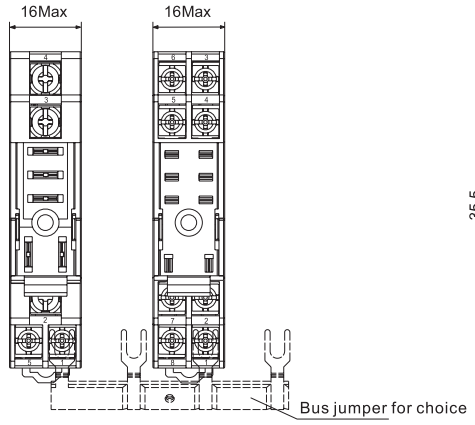


Type			SRT05-A	SRT08-A
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	22	27

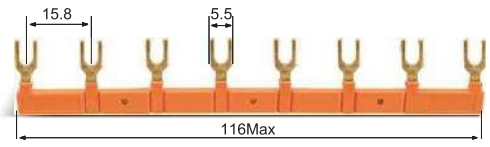
Accessories

Plastic clip	Bus jumper
 SR20 (included in socket)	 SR08C

Dimensions (mm)



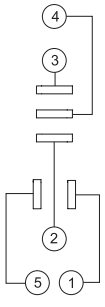
SRT05-A SRT08-A



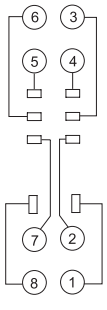
Bus jumper SR08C

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



SRT05-A



SRT08-A

①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRT05-E&SRT08-E

RFT Socket

Characteristics



SRT05-E



SRT08-E

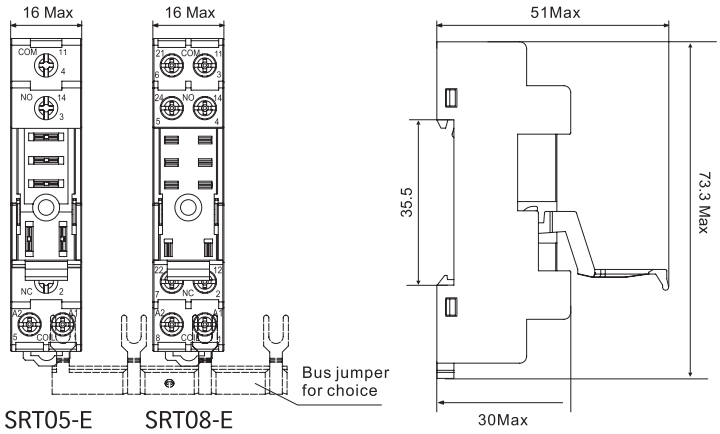


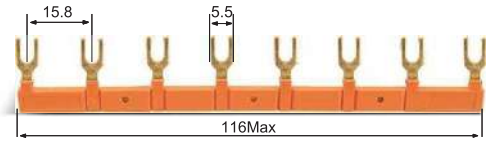
Type			SRT05-E	SRT08-E
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm ^{2}	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	22	27

Accessories

Plastic clip	Bus jumper
	
SR20 (included in socket)	SR08C

Dimensions (mm)

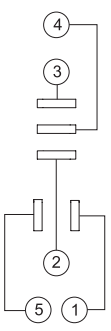




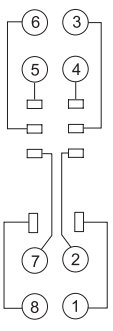
Bus jumper SR08C

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



SRT05-E



SRT08-E

①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRT05-ES&SRT08-ES

RFT Socket

Characteristics



SRT05-ES



SRT08-ES

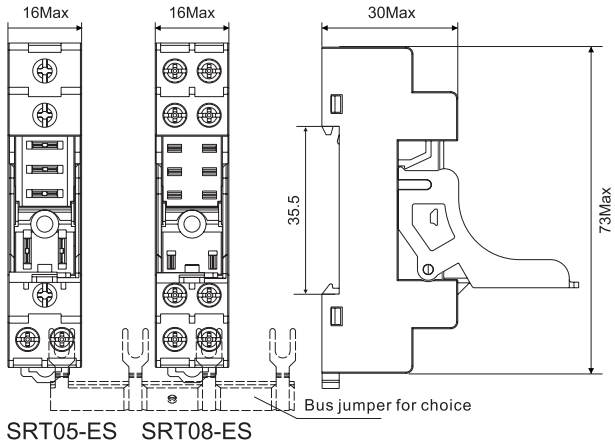


Type			SRT05-ES	SRT08-ES
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm ^{2}	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	22	27

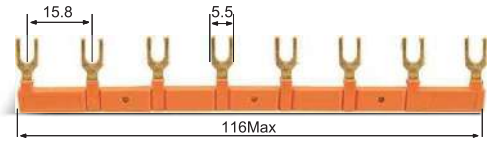
Accessories

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

Dimensions (mm)



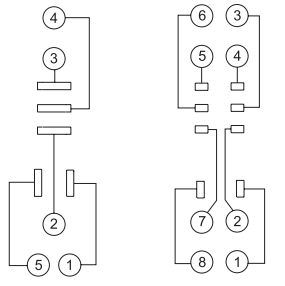
SRT05-ES SRT08-ES



Bus jumper SR08C

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



SRT05-ES

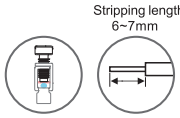
SRT08-ES

①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRU05-E&SRU08-E

RFT Socket

Characteristics



SRU05-E



SRU08-E



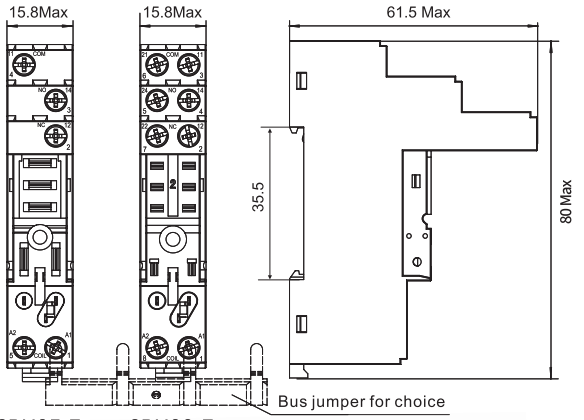
Type			SRU05-E	SRU08-E
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	35	43

Accessories

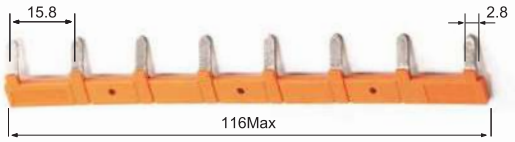
Socket	Plastic clip	Metal clip★	ID tag	Module	Bus jumper
SRU05-E	 SR20T	 SR27M	SR2P	 AMD	 SR08B
SRU08-E	 SR20U	 SR32M			

★ SR27M is for relay with no test button; SR32M is for relay with test button.

Dimensions (mm)



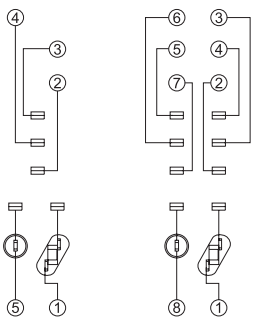
SRU05-E SRU08-E



Bus jumper SR08B

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRU05-E SRU08-E

SRU05-ST&SRU08-ST

RFT Socket

Characteristics



SRU05-ST



SRU08-ST



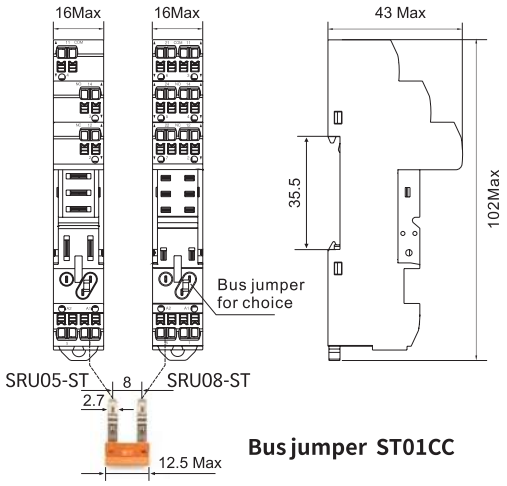
Type			SRU05-ST	SRU08-ST
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	-	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	35	43

Accessories

Socket	Plastic clip	Metal clip★	ID tag	Module	Bus jumper
SRU05-ST	SR20T	SR27M	SR2P	AMD	ST01CC
SRU08-ST	SR20U	SR32M			

★ SR27M is for relay with no test button; SR32M is for relay with test button.

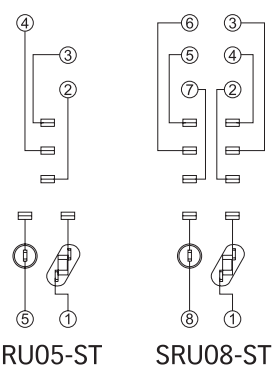
Dimensions (mm)



Bus jumper ST01CC

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRT05-P&SRT08-P

RFT Socket

Characteristics

SRT05-P

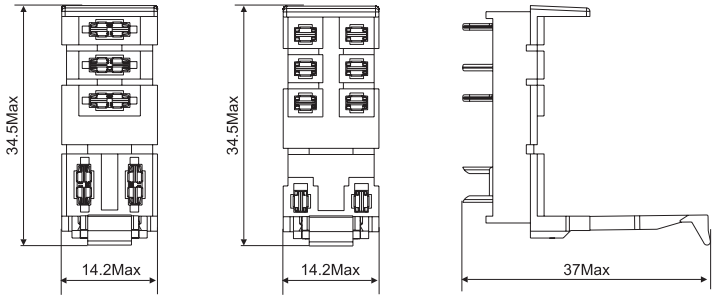


Type			SRT05-P	SRT08-P
Nominal load	Current	A	16	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Ambient temperature		℃	-40~+85	
Unit weight		g	4	

SRT08-P

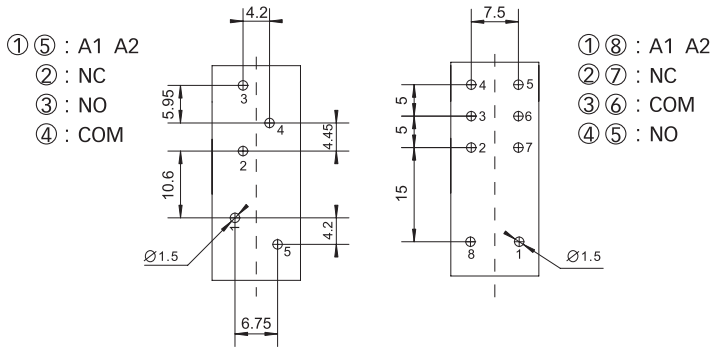


Dimensions (mm)



SRT05-P SRT08-P

Connection Diagrams

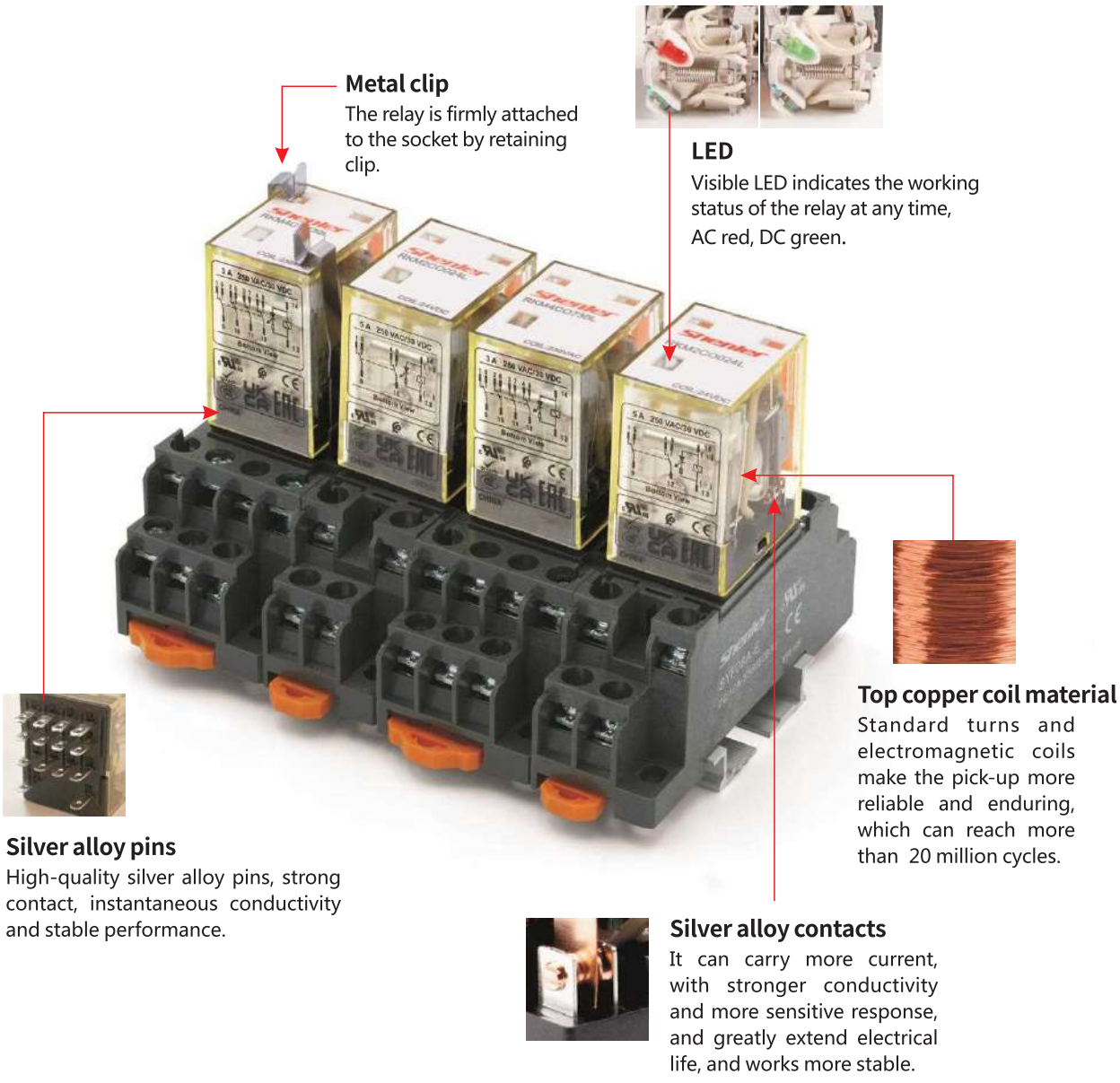


SRT05-P Bottom view SRT08-P Bottom view

RKM

Miniature General
Purpose Relay

- 2 poles 5A, 4 poles 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.

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 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.

RKM

Miniature General Purpose Relay



Relay

+



Socket

=



Relay module

RKM □ □ □ □

Other options
L: LED
LD: LED + diode (13-,14+)
LD1: LED+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
2C: 2CO
3C: 3CO
4C: 4CO

Series name

Characteristics

Contact	Configuration		2C/3C	4C
	Load	Resistance	5A/250VAC, 30VDC	3A/250VAC, 30VDC
		Motor load	1/3HP, 240VAC	1/6HP, 240VAC
	Max. switching capacity (resistive)		1250VA, 150W	750VA, 90W
	Min. switching capacity		170mW(17V/10mA)	
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability		≥10 x 10^4Cycles (1800 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23℃) (Rated voltage)			110%	
Insulation resistance			≥500MΩ (500VDC)	
Coil operating power	DC(W)		approx. 0.9	
	AC(VA)		approx. 1.2(60Hz)	
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 IEC 60664 UL840	Rated voltage		250VAC	
	Pollution level		3	2
	Overvoltage level		III	II
Impulse withstand voltage (waveform: 1.2/50us)			4000V(Altitude 2000m)	
Protection level			IP20	
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)	
Working temperature/ humidity			-55~+70℃/ 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 theparameters before using.

RKM

Miniature General
Purpose Relay

Coil Specifications (23°C)

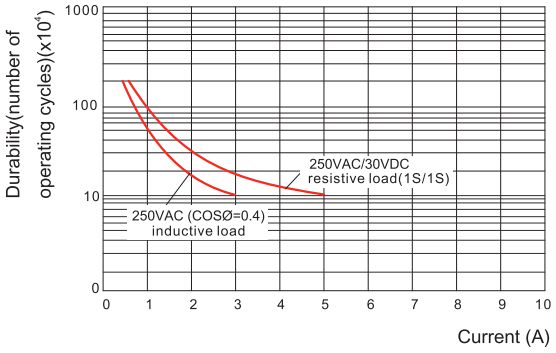
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	180	640	2600	13000	42000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	11.5	180	370	640	4430	16500	42000

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

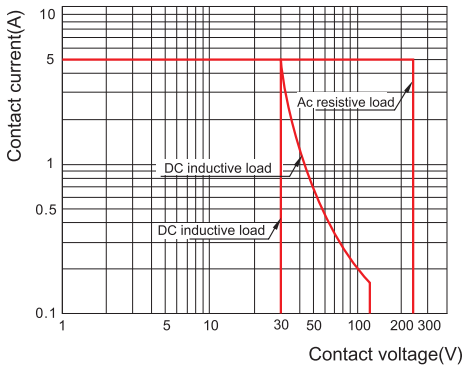
Contact Specification

RKM2CO

Electrical durability contacts

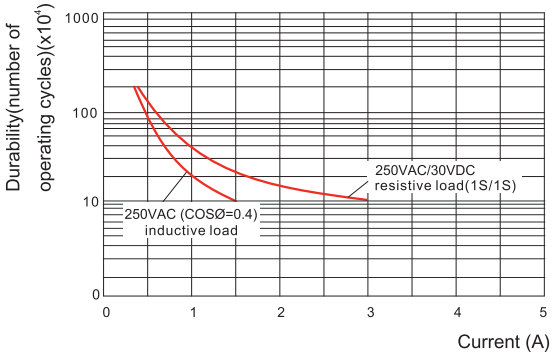


Maximum switching capacity

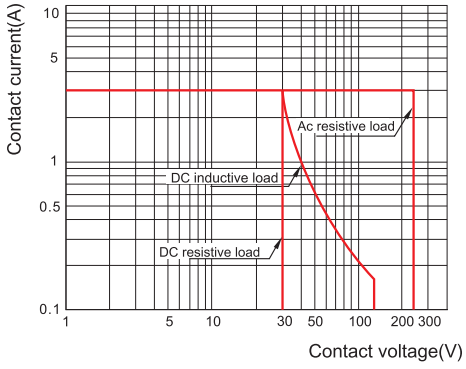


RKM4CO

Electrical durability contacts



Maximum switching capacity

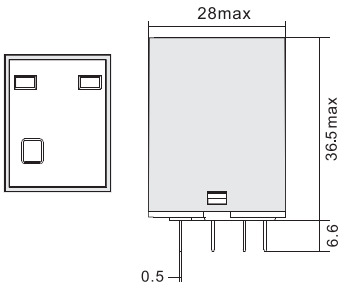


RKM

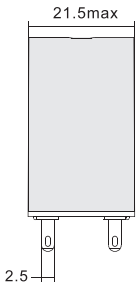
Miniature General
Purpose Relay

Dimensions (mm)

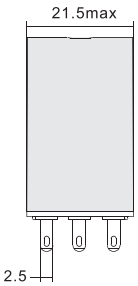
RKM2CO/3CO/4CO



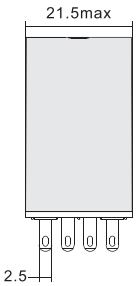
RKM2CO



RKM3CO

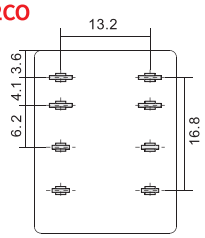


RKM4CO

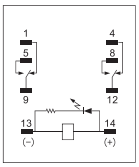


Wiring Diagrams

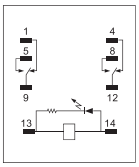
RKM2CO



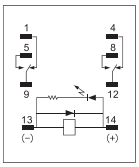
DC



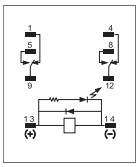
AC



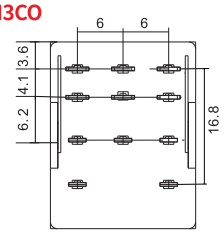
DC-D



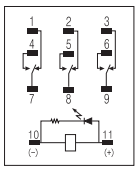
DC-D1



RKM3CO



DC



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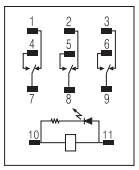
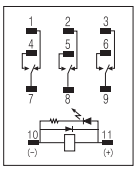
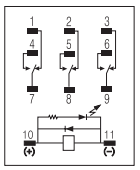


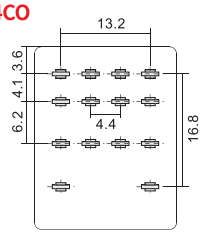
DC-D



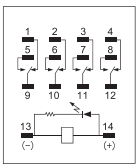
DC-D1



RKM4CO



DC



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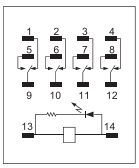
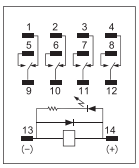
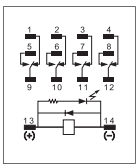


DC-D



DC-D1



SYF08A-E & SYF11A-E & SYF14A-E RKM Socket

Characteristics

SYF08A-E



SYF14A-E

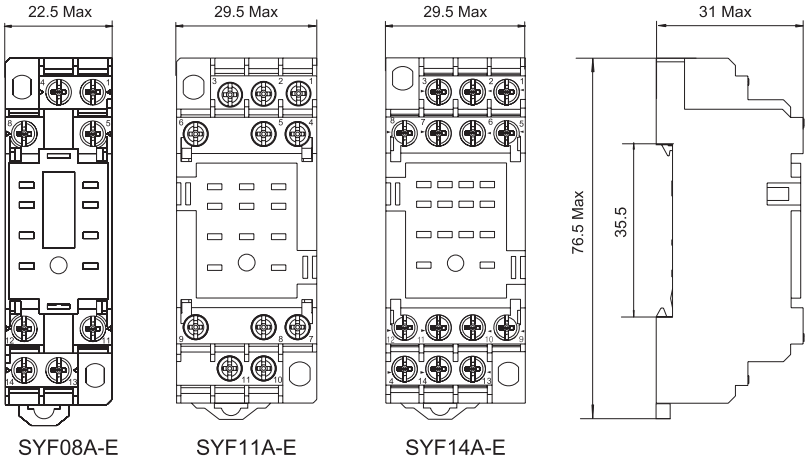


Type			SYF08A-E	SYF11A-E	SYF14A-E
Nominal load	Current	A	10	7	7
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	3000		
	Between contacts	V/min	2000		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm²	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	37	56	57

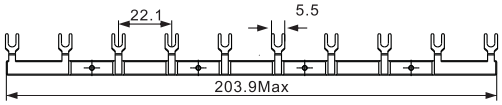
Accessories

Socket	Bus jumper		Metal clip
SYF08A-E			
SYF11A-E			
SYF14A-E	SY08C	SY10C	SY36S

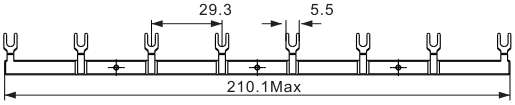
Dimensions (mm)



SYF08A-E SYF11A-E SYF14A-E

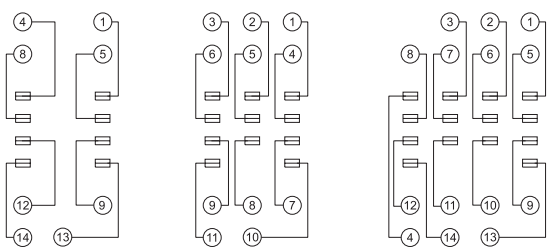


SY10C - Adapt to SYF08A-E



SY08C - Adapt to SYF11A-E/SYF14A-E

Connection Diagrams



SYF08A-E

⑭⑬ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

SYF11A-E

⑩⑪ : A1 A2
①②③ : NC
④⑤⑥ : NO
⑦⑧⑨ : COM

SYF14A-E

⑭⑬ : A1 A2
①②③④ : NC
⑤⑥⑦⑧ : NO
⑨⑩⑪⑫ : COM

SYF08A & SYF11A & SYF14A RKM Socket

Characteristics

SYF08A



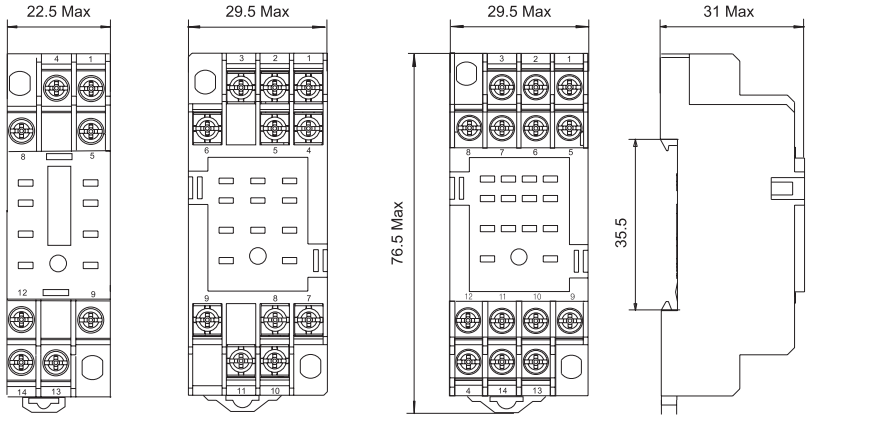
SYF14A

Type			SYF08A	SYF11A	SYF14A
Nominal load	Current	A	10	7	7
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	3000		
	Between contacts	V/min	2000		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm²	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	34	47	56

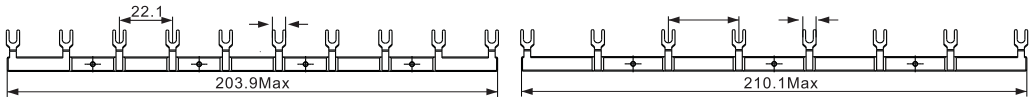
Accessories

Socket	Bus jumper		Metal clip
SYF08A			
SYF11A			
SYF14A	SY08C	SY10C	SY36S

Dimensions (mm)



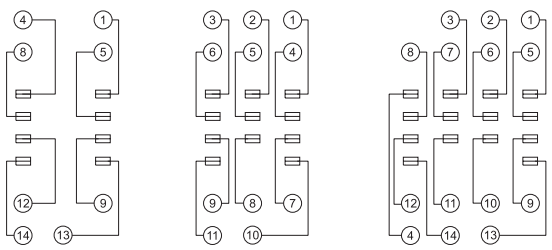
SYF08A SYF11A SYF14A



SY10C - Adapt to SYF08A

SY08C - Adapt to SYF11A/SYF14A

Connection Diagrams



SYF08A

⑭⑬ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

SYF11A

⑩⑪ : A1 A2
①②③ : NC
④⑤⑥ : NO
⑦⑧⑨ : COM

SYF14A

⑭⑬ : A1 A2
①②③④ : NC
⑤⑥⑦⑧ : NO
⑨⑩⑪⑫ : COM

RKE

Miniature General
Purpose Relay

- 2 poles 7A; 4 poles 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

Metal clip

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

Test button

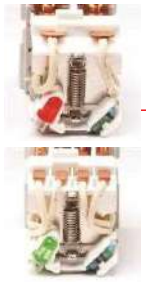
On-site test is available with test button.

Plastic clip

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

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

ID tag

Silver alloy pins

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



RKE

Miniature General Purpose Relay



Relay

+



Socket

=



Relay module

RKE □ □ □ □

Other options

LT: LED + test button
LTD: LED + test button + diode (13-,14+)
LTD1: LED + test button + diode (13+,14-)
LT M: LED+test button, with 0.65Un coil tuned
LTA: LED + test button +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

Characteristics

Contact	Configuration		2C	4C
	Load	Resistance	7A/250VAC, 30VDC	5A/250VAC, 30VDC
		Motor load	1/6HP, 240VAC	
	Max. switching capacity (resistive)		1750VA, 210W	1250VA, 150W
	Min. switching capacity		170mW(17V/10mA)	
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (high temp., frequency 1s on, 1s off)		≥20 x 10^4Cycles (1800 Ops/h)	
	Electrical durability (normal temp., frequency 1s on, 1s off)		≥40x 10^4Cycles (360 Ops/h)	
	Electrical durability (normal temp., frequency 1s on, 9s off)		≥50x 10^4Cycles (1800 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23℃) (Rated voltage)			110%	
Insulation resistance			≥500MΩ (500VDC)	
Coil operating power	DC(W)		approx. 0.9	
	AC(VA)		approx. 1.2(60Hz)	
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 IEC 60664 UL840	Rated voltage		250VAC	
	Pollution level		3	
	Overvoltage level		III	
Impulse withstand voltage (waveform: 1.2/50μs)			4000V	
Protection level			IP20	
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)	
Working temperature/ humidity			-55~+70℃/ 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	

RKE

Miniature General
Purpose Relay

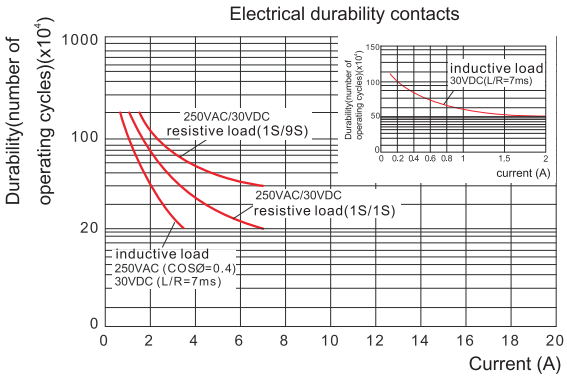
Coil Specifications (23°C)

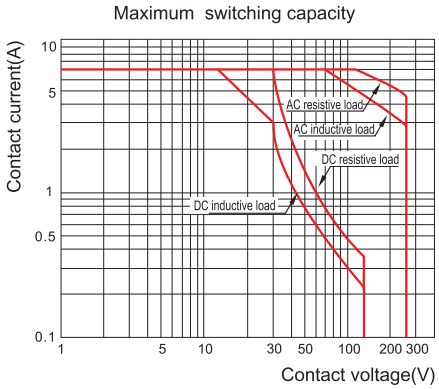
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	180	640	2600	13000	42000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	11.5	180	370	640	4430	16500	42000

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

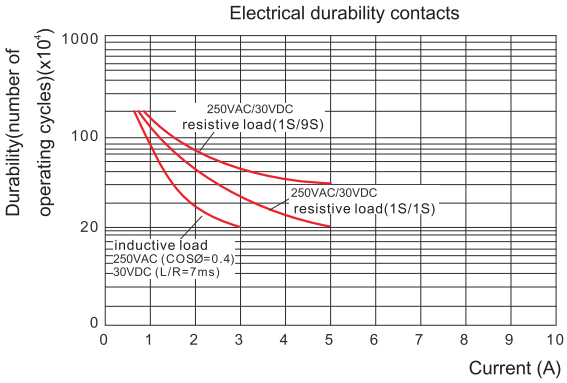
Contact Specification

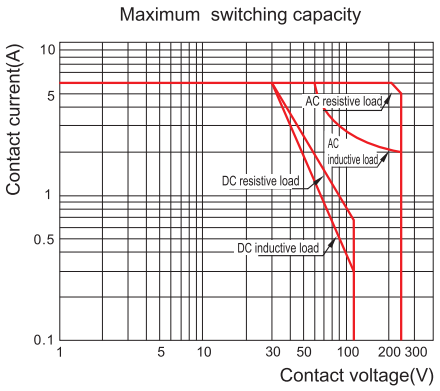
RKE2CO





RKE4CO





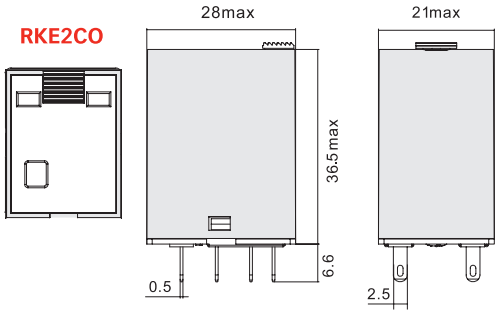
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc

RKE

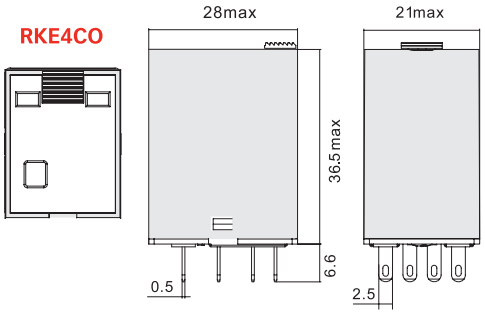
Miniature General
Purpose Relay

Dimensions (mm)

RKE2CO

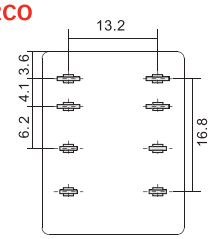


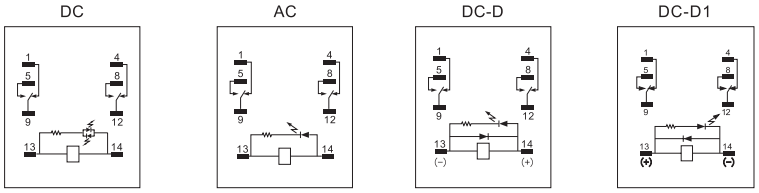
RKE4CO



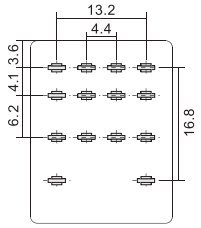
Wiring Diagrams

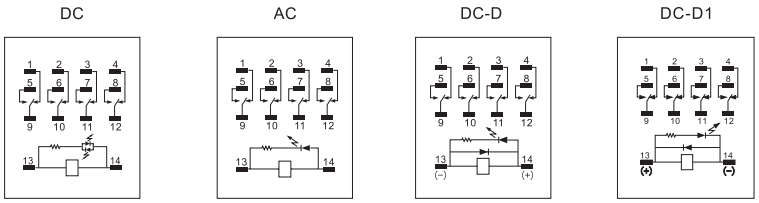
RKE2CO





RKE4CO





RKE-LS

Sealed Power Relay



Relay

+



Socket

=



Relay module

RKE □ □ □ □

- Other options
  - LS: LED + Sealed
  - LSA: LED + Sealed + Signal Control
- 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

Humidity proof

Dust proof

Oil proof

IP62

Protection level

- Good performance in bad working condition, especially in much oil, dust, humidity places
- IP62
- 2 poles7A; 4 poles 5A
- With non-polarity LED integrated in relay
- Conformity with RoHs Directive

Characteristics

Contact	Configuration		2C	4C
	Load	Resistance	7A/250VAC, 30VDC	5A/250VAC, 30VDC
		Motor load	1/6HP, 240VAC	
	Max. switching capacity (resistive)		1750VA, 210W	1250VA, 150W
	Min. switching capacity		170mW(17V/10mA)	
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (110%rated voltage, 55℃)		≥20 x 10^4Cycles (1800 Ops/h)	
	Electrical durability (Normal temperature)		≥40 x 10^4Cycles (360 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23℃) (Rated voltage)			110%	
Insulation resistance			≥500MΩ (500VDC)	
Coil operating power	DC(W)		approx. 0.9	
	AC(VA)		approx. 1.2(60Hz)	
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 IEC 60664 UL840	Rated voltage		250VAC	
	Pollution level		3	2
	Overvoltage level		III	
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)	
Protection level			IP62	
Storage temperature/ humidity			-20~+85℃/ ≤85%RH (18 months)	
Working temperature/ humidity			-55~+70℃/ 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	

RKE-LS

Sealed Power Relay

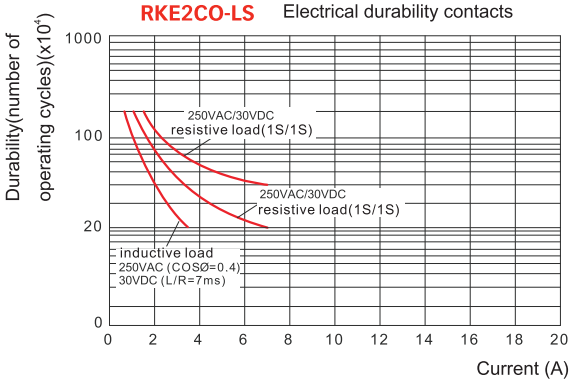
Coil Specifications (23°C)

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

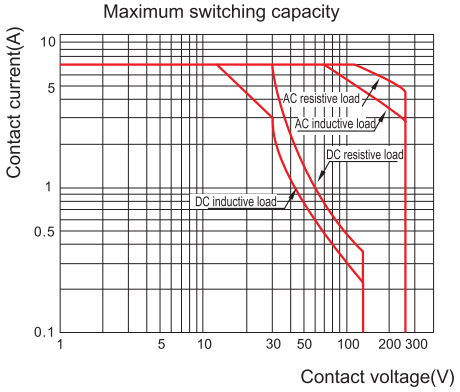
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

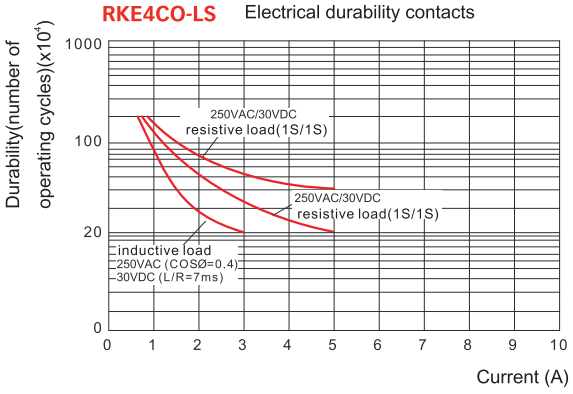
RKE2CO-LS Electrical durability contacts



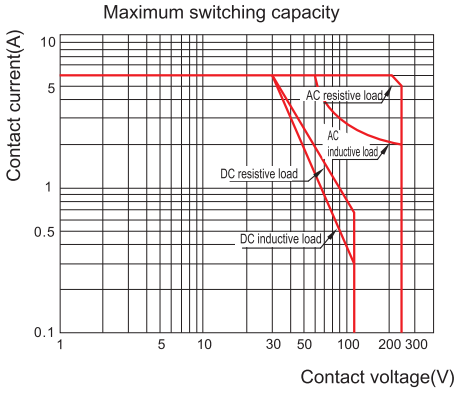
Maximum switching capacity



RKE4CO-LS Electrical durability contacts

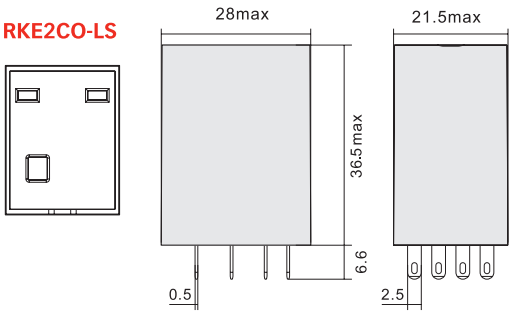


Maximum switching capacity

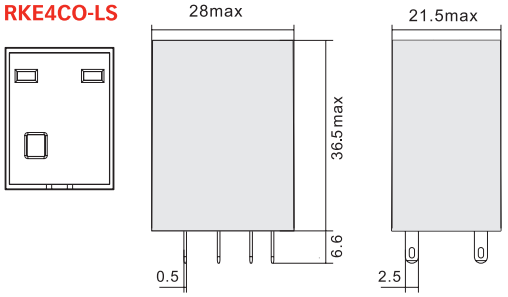


Dimensions (mm)

RKE2CO-LS



RKE4CO-LS



SYF08A-E & SYF11A-E & SYF14A-E RKE Socket

Characteristics

SYF08A-E



SYF14A-E

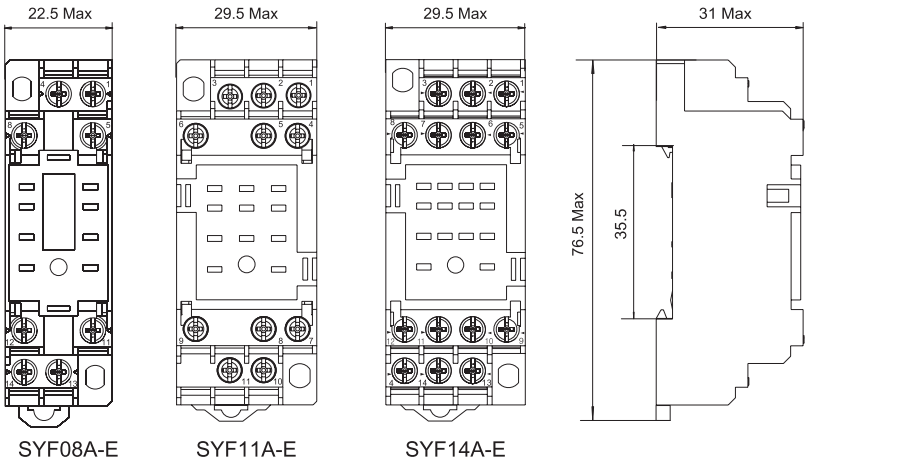


Type			SYF08A-E	SYF11A-E	SYF14A-E
Nominal load	Current	A	10	7	7
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	3000		
	Between contacts	V/min	2000		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm²	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	37	56	57

Accessories

Socket	Bus jumper		Metal clip
SYF08A-E			
SYF11A-E			
SYF14A-E	SY08C	SY10C	SY36S

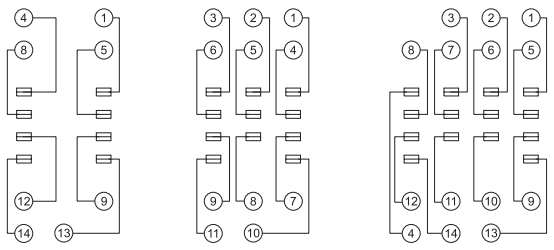
Dimensions (mm)



SY10C - Adapt to SYF08A-E

SY08C - Adapt to SYF11A-E/SYF14A-E

Connection Diagrams



⑭⑬ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

⑩⑪ : A1 A2
①②③ : NC
④⑤⑥ : NO
⑦⑧⑨ : COM

⑭⑬ : A1 A2
①②③④ : NC
⑤⑥⑦⑧ : NO
⑨⑩⑪⑫ : COM

SYF08A & SYF11A & SYF14A RKE Socket

Characteristics

SYF08A



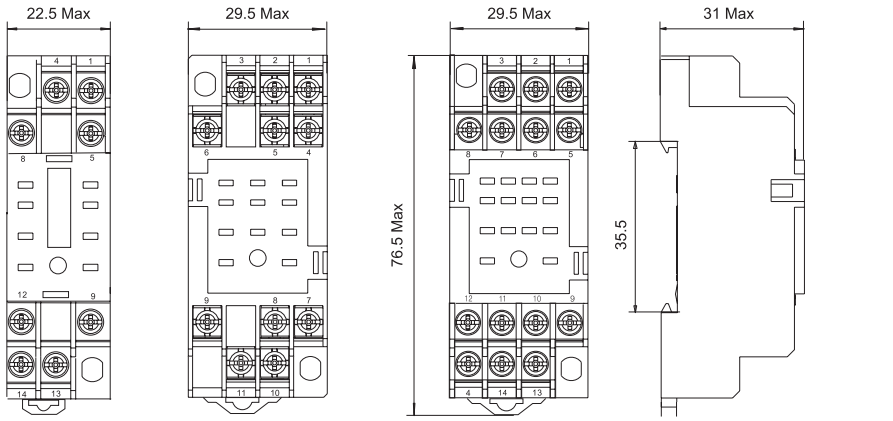
SYF14A

Type			SYF08A	SYF11A	SYF14A
Nominal load	Current	A	10	7	7
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	3000		
	Between contacts	V/min	2000		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm²	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	34	47	56

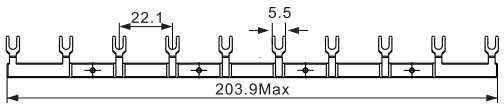
Accessories

Socket	Bus jumper		Metal clip
SYF08A			
SYF11A			
SYF14A	SY08C	SY10C	SY36S

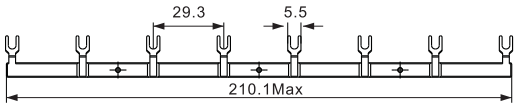
Dimensions (mm)



SYF08A SYF11A SYF14A

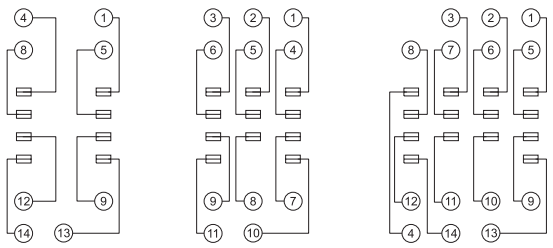


SY10C - Adapt to SYF08A



SY08C - Adapt to SYF11A/SYF14A

Connection Diagrams

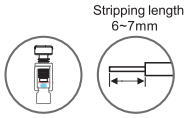


SYF08A	SYF11A	SYF14A
⑭⑬ : A1 A2	⑩⑪ : A1 A2	⑭⑬ : A1 A2
①④ : NC	①②③ : NC	①②③④ : NC
⑤⑧ : NO	④⑤⑥ : NO	⑤⑥⑦⑧ : NO
⑨⑫ : COM	⑦⑧⑨ : COM	⑨⑩⑪⑫ : COM

SKB08-E & SKB14-E

RKE Socket

Characteristics



SKB08-E



SKB14-E

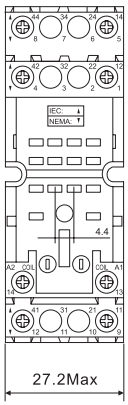


Type			SKB08-E	SKB14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	50	56

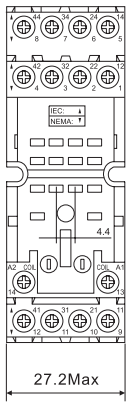
Accessories

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

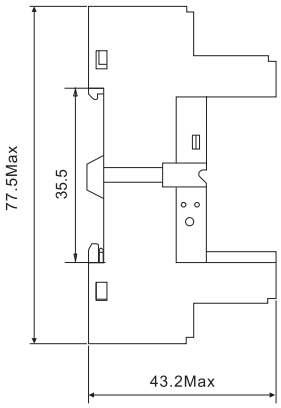
Dimensions (mm)



SKB08-E



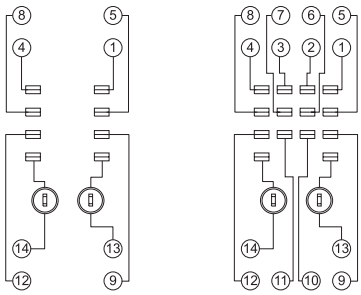
SKB14-E



Connection Diagrams

SKB08-E

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

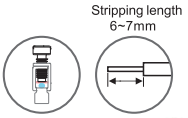


SKB14-E

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

SKC08-E & SKC11-E & SKC14-E RKE Socket

Characteristics



SKC08-E



SKC14-E

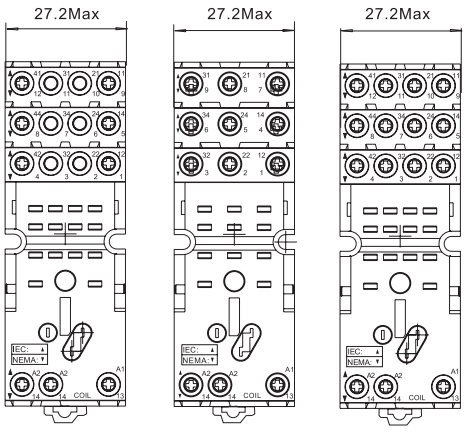


Type			SKC08-E	SKC11-E	SKC14-E
Nominal load	Current	A	12	10	10
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	4000		
	Between contacts	V/min	2500		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm^2	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	50	56	62

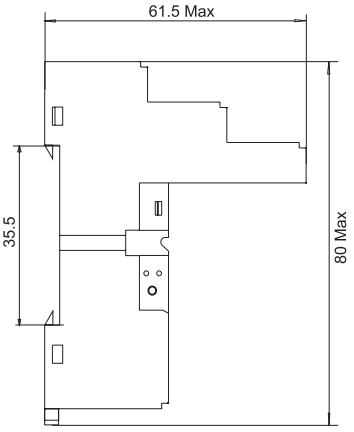
Accessories

Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E				
SKC11-E				
SKC14-E	SK36F	SK36M	SK4P	AMD

Dimensions (mm)

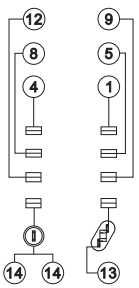


SKC08-E SKC11-E SKC14-E

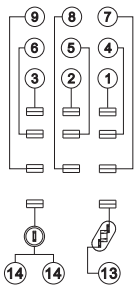


Connection Diagrams

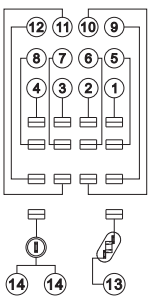
SKC08-E



SKC11-E



SKC14-E



SKC08-ST & SKC14-ST

RKE Socket

Characteristics



SKC08-ST



SKC14-ST

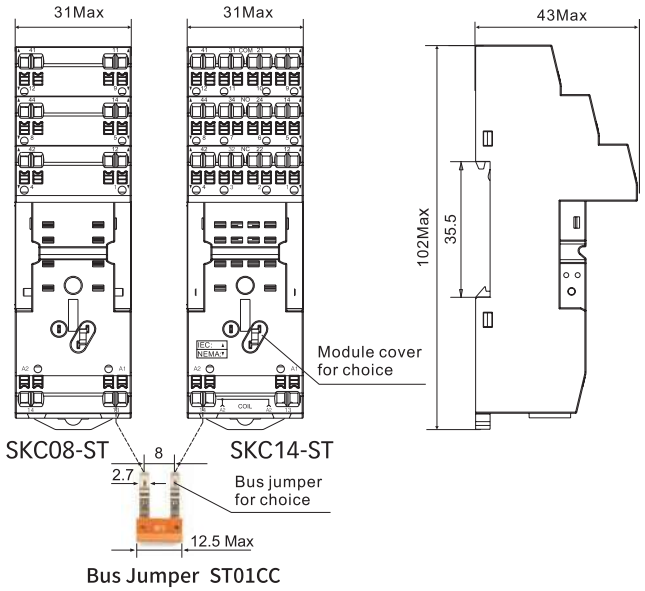


Type			SKC08-ST	SKC14-ST
Nominal load	Current	A	12	8
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	-	
Wire size		AWG/mm²	20-16/0.5-1.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	80	80

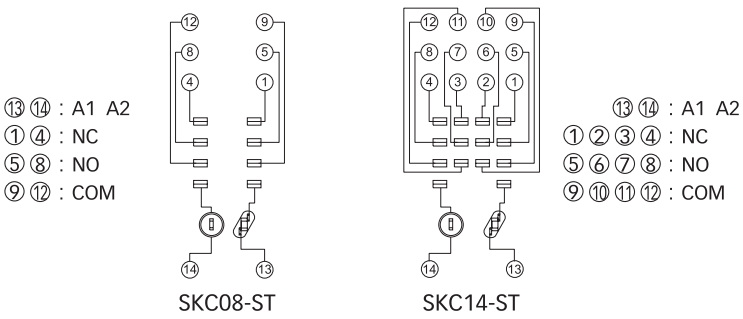
Accessories

Socket	Plastic clip	Metal clip	ID tag	Module	Bus Jumper
SKC08-ST					
SKC14-ST	SK36F	SK36M	SK4P	AMD	ST01CC

Dimensions (mm)



Connection Diagrams



SKF08-E & SKF14-E

RKE Socket

Characteristics



SKF08-E



SKF14-E

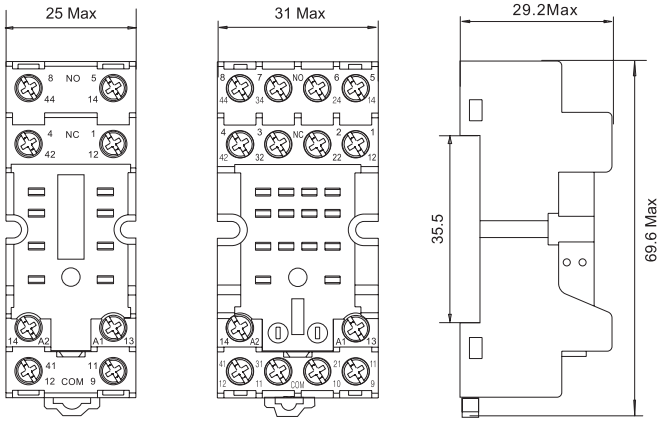


Type			SKF08-E	SKF14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2000	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	35	45

Accessories

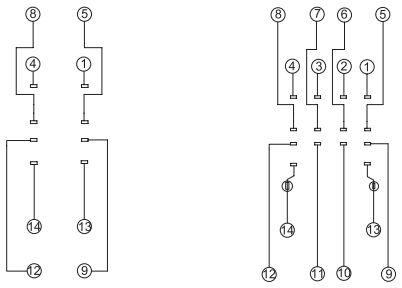
Socket	Metal clip	ID tag	Module
SKF08-E			
SKF14-E	SK36M	SK2P	AMD

Dimensions (mm)



SKF08-E SKF14-E

Connection Diagrams



SKF08-E

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

SKF14-E

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

SKF14-A

RKE Socket

Characteristics



SKF14-A

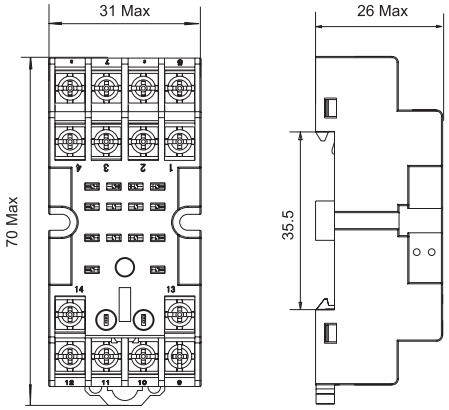


Type			SKF14–A
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Max. tightening torque		Nm	1.0
Wire size		AWG/mm²	20-14/0.5-2.5
Ambient temperature		℃	-40~+85
Unit weight		g	42.9

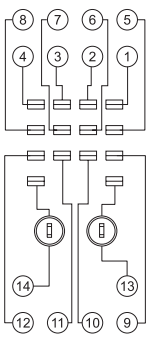
Accessories

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

Dimensions (mm)



Connection Diagrams



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

SY08-P & SY14-P

RKE Socket

Characteristics

SY08-P

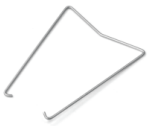


SY14-P

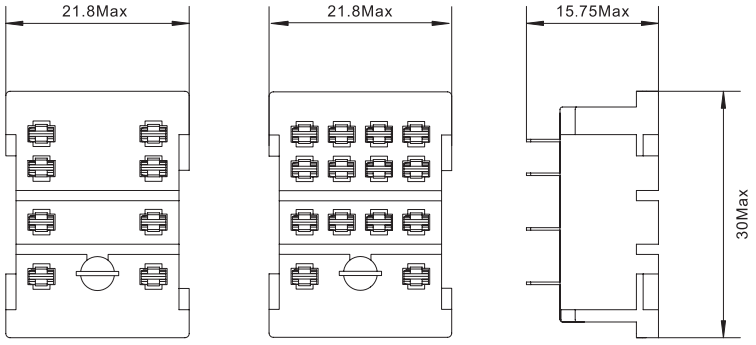


Type			SY08-P	SY14-P
Nominal load	Current	A	10	6
	Voltage	V	300	
Dielectric strength		V/min	2000	
Ambient temperature		℃	-40~+85	
Unit weight		g	7	7

Accessories

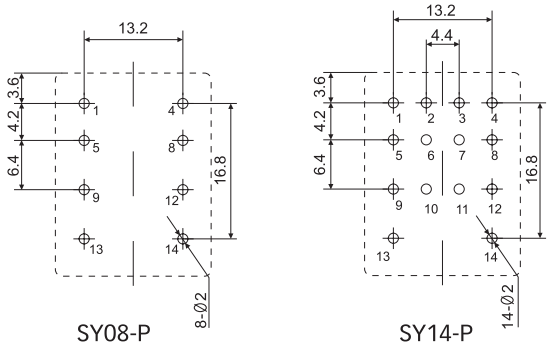
Socket	Metal clip
SY08-P	 SY36M
SY14-P	

Dimensions (mm)



SY08-P SY14-P

Connection Diagrams



SY08-P

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

SY14-P

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

RKF

Miniature General
Purpose Relay

- 2 poles 12A; 4 poles 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





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.

ID tag



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.

AMD module

RKF

Miniature General Purpose Relay



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-)
LTA: LED + test button + gold plated contact
LTDA: LED + test button + diode+gold plated contact
LT M: 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

Contact	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
	Min. switching capacity		170mW(17V/10mA); LTA: 500mW(5V/10mA)	
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (110%rated voltage, 55℃)		≥20 x 10^4Cycles (1800 Ops/h)	
	Electrical durability (Normal temperature)		≥40 x 10^4Cycles (360 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23℃) (Rated voltage)			110%	
Insulation resistance			≥1000MΩ (500VDC)	
Coil operating power		DC(W)	approx. 0.9	
		AC(VA)	approx. 1.2(60Hz)	
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 IEC 60664 UL840		Rated voltage	250VAC	
		Pollution level	3	2
		Overvoltage level	III	II
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)	
Protection level			IP20	
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)	
Working temperature/ humidity			-55~+70℃/ 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	

RKF

Miniature General
Purpose Relay

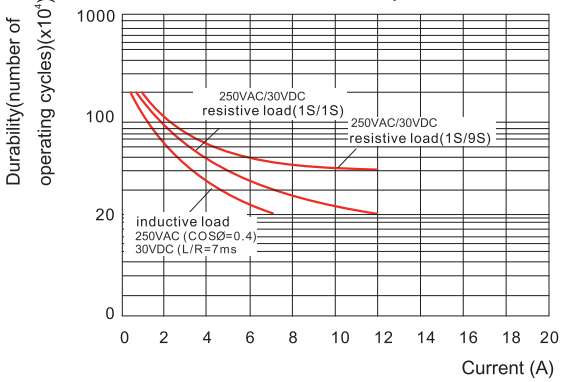
Coil Specifications (23°C)

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

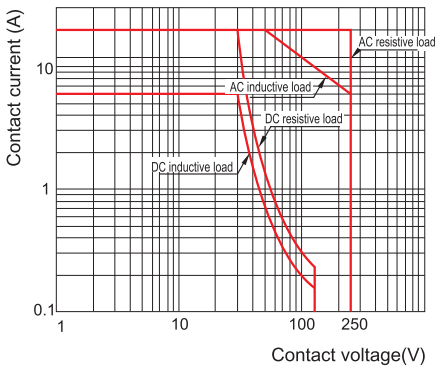
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

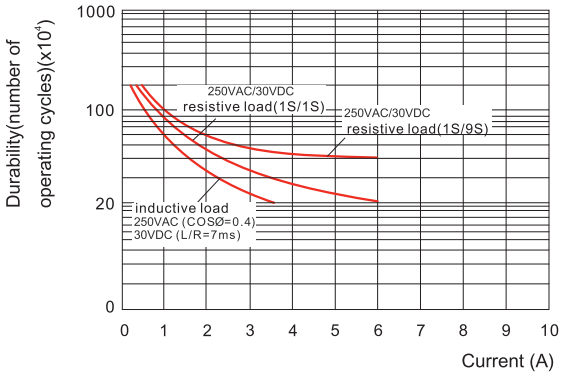
RKF2C Electrical durability contacts



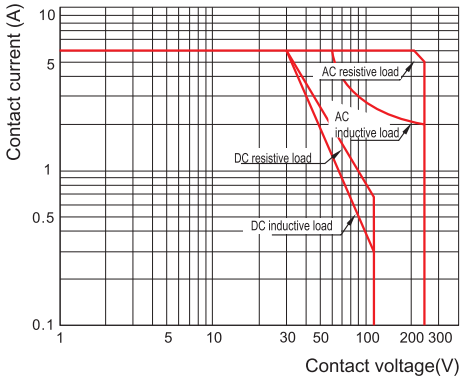
Maximum switching capacity



RKF4C Electrical durability contacts



Maximum switching capacity

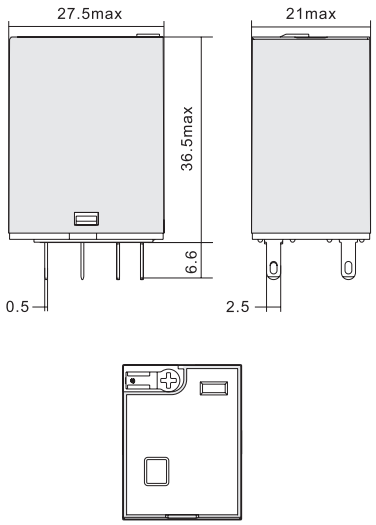


RKF

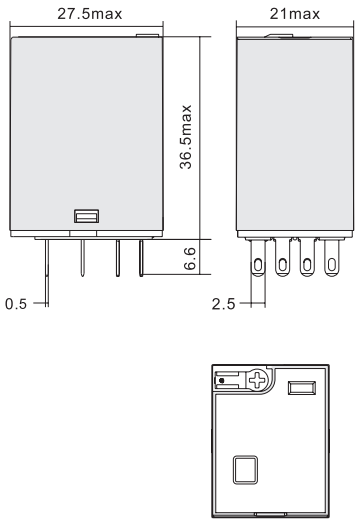
Miniature General
Purpose Relay

Dimensions (mm)

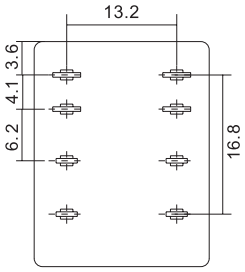
RKF2CO



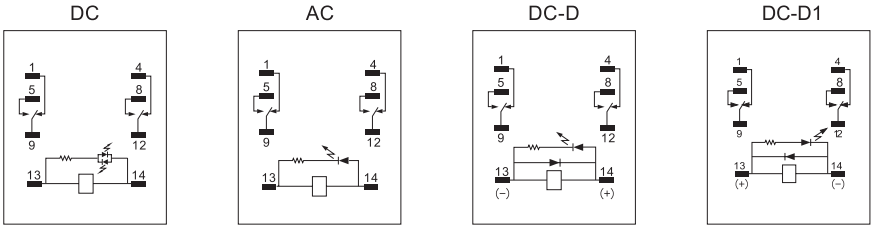
RKF4CO

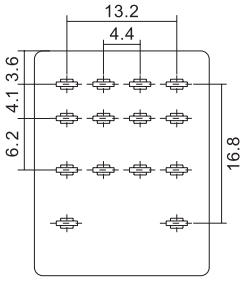


Wiring Diagrams

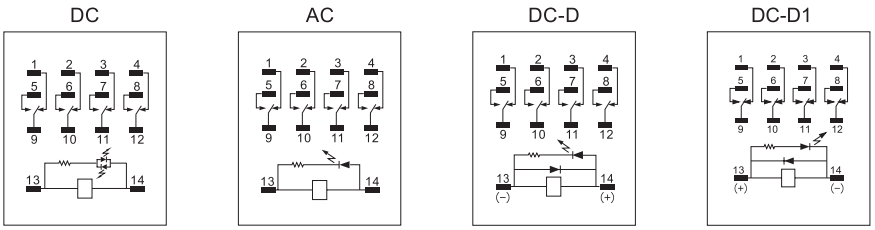


RKF2CO





RKF4CO



SKF08-E & SKF14-E

RKF Socket

Characteristics



SKF08-E



SKF14-E

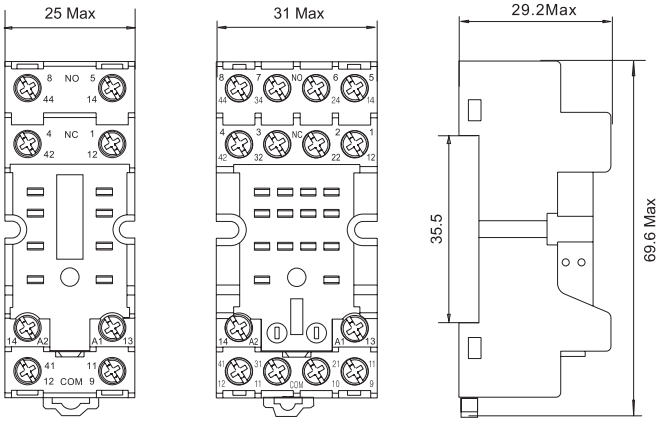


Type			SKF08-E	SKF14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2000	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	35	45

Accessories

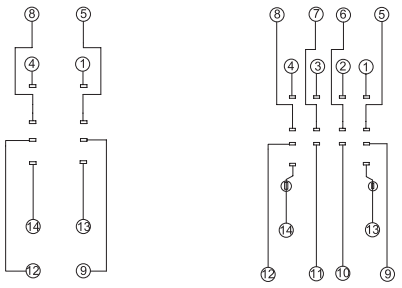
Socket	Metal clip	ID tag	Module
SKF08-E			
SKF14-E	SK36M	SK2P	AMD

Dimensions (mm)



SKF08-E SKF14-E

Connection Diagrams



SKF08-E

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

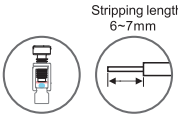
SKF14-E

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

SKB08-E & SKB14-E

RKF Socket

Characteristics



SKB08-E



SKB14-E

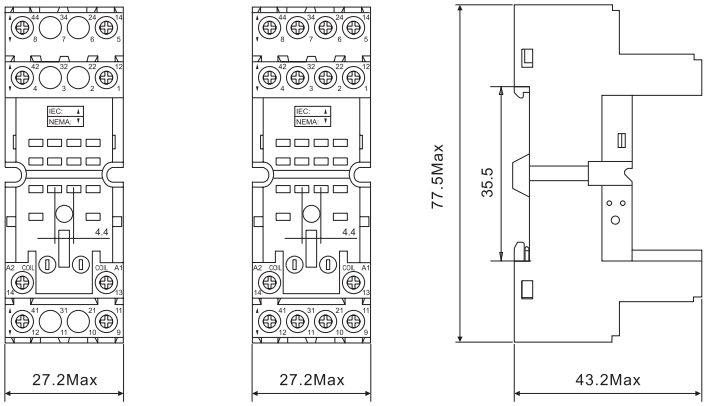


Type			SKB08-E	SKB14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	50	56

Accessories

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

Dimensions (mm)

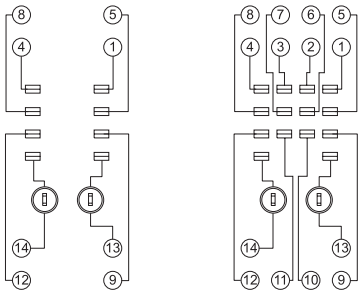


SKB08-E SKB14-E

Connection Diagrams

SKB08-E

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

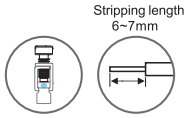


SKB14-E

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

SKC08-E & SKC11-E & SKC14-E RKF Socket

Characteristics



SKC08-E



SKC14-E

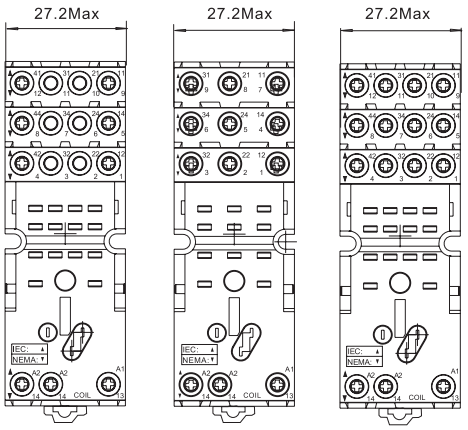


Type			SKC08-E	SKC11-E	SKC14-E
Nominal load	Current	A	12	10	10
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	4000		
	Between contacts	V/min	2500		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm^2	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	50	56	62

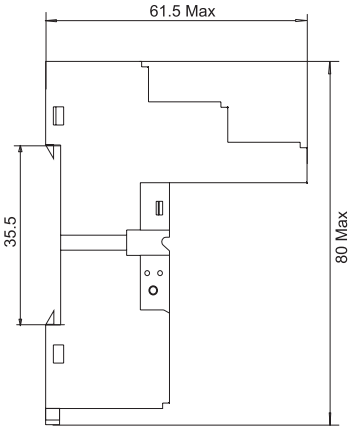
Accessories

Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E				
SKC11-E				
SKC14-E	SK36F	SK36M	SK4P	AMD

Dimensions (mm)

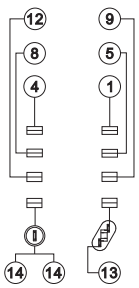


SKC08-E SKC11-E SKC14-E

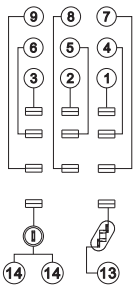


Connection Diagrams

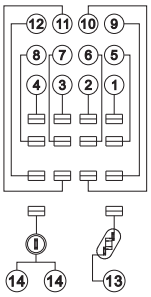
SKC08-E



SKC11-E



SKC14-E



SKC08-ST & SKC14-ST

RKF Socket

Characteristics



SKC08-ST



SKC14-ST

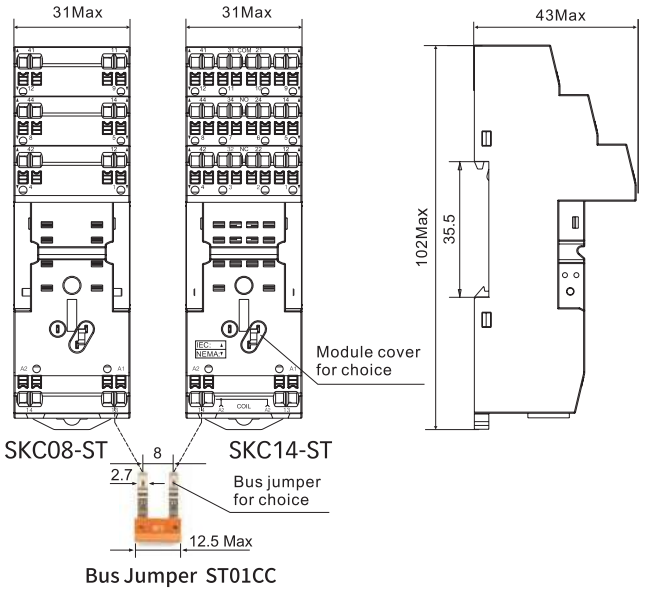


Type			SKC08-ST	SKC14-ST
Nominal load	Current	A	12	8
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	-	
Wire size		AWG/mm²	20-16/0.5-1.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	80	80

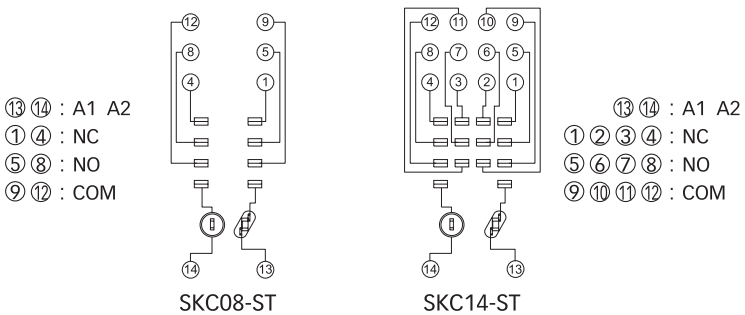
Accessories

Socket	Plastic clip	Metal clip	ID tag	Module	Bus Jumper
SKC08-ST					
SKC14-ST					
	SK36F	SK36M	SK4P	AMD	ST01CC

Dimensions (mm)



Connection Diagrams



SY08-P & SY14-P

RKF Socket

Characteristics

SY08-P

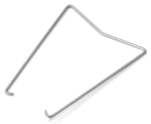


SY14-P

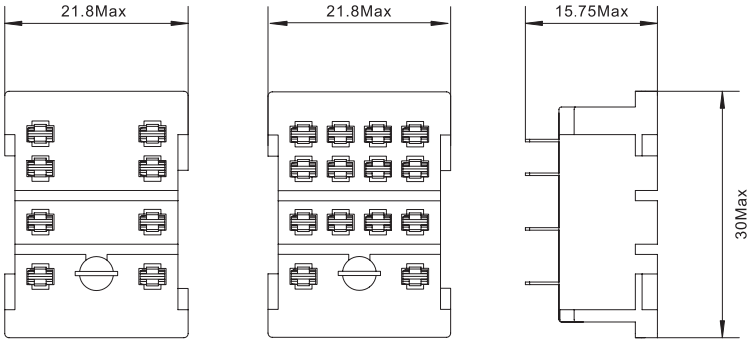


Type			SY08-P	SY14-P
Nominal load	Current	A	10	6
	Voltage	V	300	
Dielectric strength		V/min	2000	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	7	7

Accessories

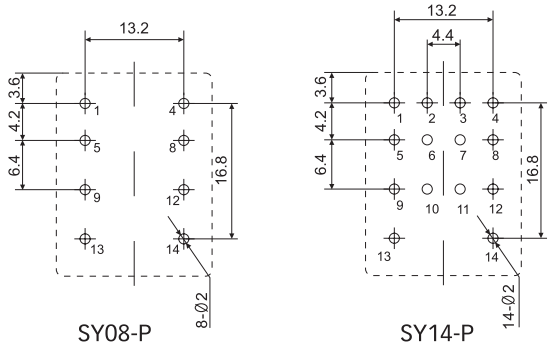
Socket	Metal clip
SY08-P	 SY36M
SY14-P	

Dimensions (mm)



SY08-P SY14-P

Connection Diagrams



SY08-P SY14-P

⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

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

Selection manual of industrial control relay

RKF-S

Magnetic Blow-out Power Relay

CE



Relay

+



Socket

=



Relay module

RKF □ □ □ □

Other options

LT S: LED + test button+magnet

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

LTD1 S: LED + test button + diode (13 + , 14 -) +magnet

LT SM: LED+test button+magnet, 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 button and inspection window
- Identification of coil through test button color (AC red / DC blue)

Characteristics

Contact	Configuration		2C
	Load	Resistance	15A/250VAC 30VDC (NO:15A, NC:7.5A); 10A 60VDC
		Motor load	1/3HP, 240VAC
	Max.Switching capacity (resistive)		3750VA, 600W
	Max.Switching capacity (inductive)		2500VA, 90W
	Min. switching capacity		170mW(17V/10mA)
	Initial contact resistance		≤50mΩ
	Material		Ag alloy
	Electrical durability (110%rated voltage, 55℃)		≥10 x 10^4Cycles(NO:15A, NC:7.5A); ≥20 x 10^4 Cycles (NO/NC:12A)
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz
Maximum voltage (23℃) (Rated voltage)			110%
Insulation resistance			≥1000MΩ (500VDC)
Coil operating power	DC(W)		approx. 0.9
	AC(VA)		approx. 1.2(60Hz)
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 IEC 60664 UL840	Rated voltage		250VAC
	Pollution level		3
	Overvoltage level		III
Protection level			IP20
Storage temperature/ humidity			-25~+85℃/ ≤85%RH (18 months)

RKF-S

Magnetic Blow-out
Power Relay

Working temperature/ humidity	-55~+70℃/ 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

Coil Specifications (23℃)

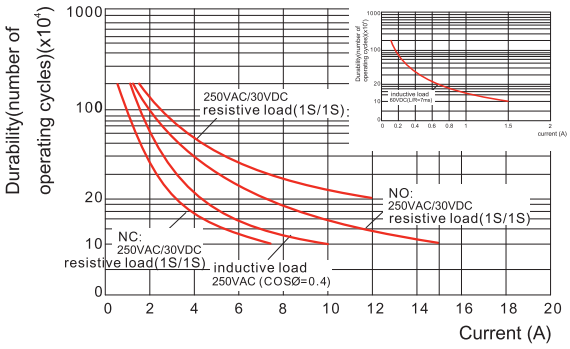
Nominal voltage V.DC	6	12	24	48	110	
Coil resistance Ω	40	180	640	2600	13000	
Nominal voltage V.AC	6	12	24	48	115	230
Coil resistance Ω	11.5	180	370	640	4430	16500

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

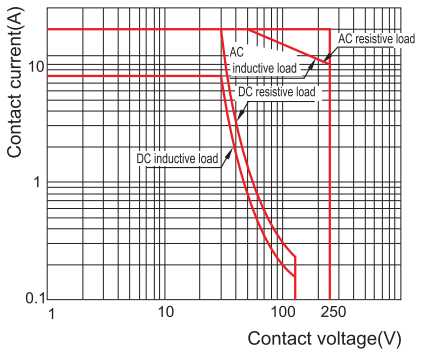
Contact Specification

RKF2CO

Electrical durability contacts



Maximum switching capacity

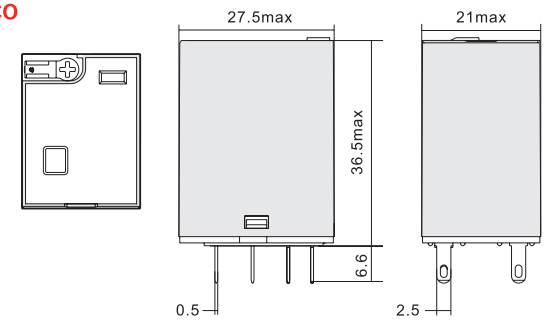


RKF-S

Magnetic Blow-out
Power Relay

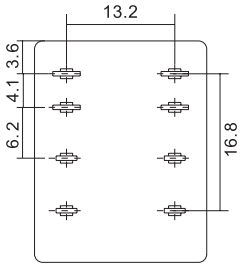
Dimensions (mm)

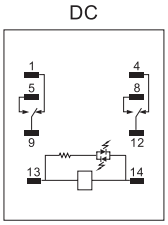
RKF2CO

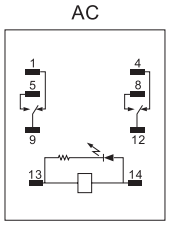


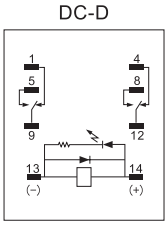
Wiring Diagrams

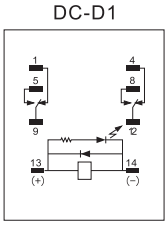
RKF2CO











SYF08A-E S

RKF—S Magnetic Blow—out
Power Relay Socket

Characteristics



SYF08A-E S

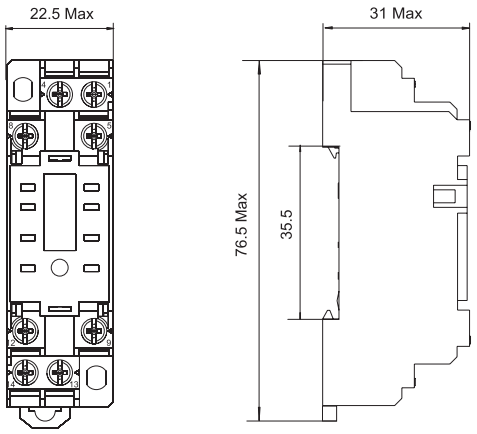


Type			SYF08A-E S
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	3000
	Between contacts	V/min	2000
Max. tightening torque		Nm	1.0
Wire size		AWG/mm²	20-14/0.5-2.5
Ambient temperature		℃	-40~+65
Unit weight		g	37

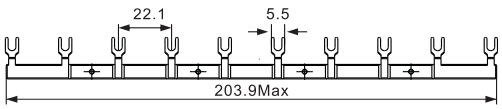
Accessories

Socket	Bus jumper	Metal clip
SYF08A-E S	 SY10C	 SY36S

Dimensions (mm)

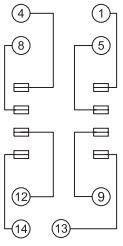


SYF08A-E S



SY10C

Connection Diagrams



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

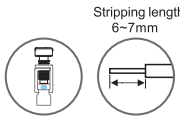
SYF08A-E S

SKC08-E S

RKF—S Magnetic Blow—out
Power Relay Socket

CE

Characteristics



SKC08-E S

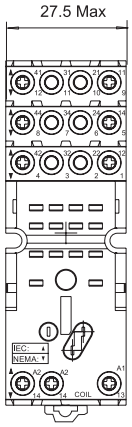


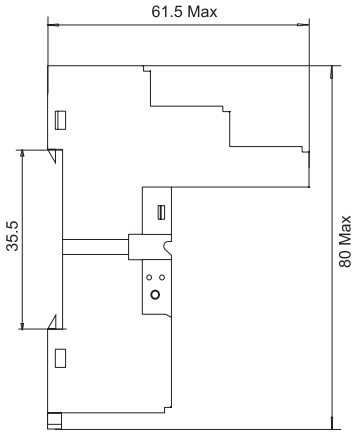
Type			SKC08-E S
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	-
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	50

Accessories

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

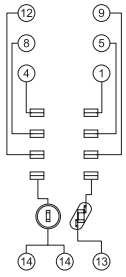
Dimensions (mm)





SKC08-E S

Connection Diagrams



⑬⑭ : A1 A2
①④ : NC
⑤⑧ : NO
⑨⑫ : COM

SKC08-E S

RKH

Miniature General
Purpose Relay

- 4 poles 7A
- 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.

CE RoHS EAC

Selection manual of industrial control relay

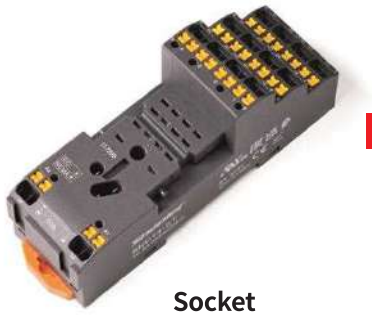
RKH

Miniature General Purpose Relay



Relay

+



Socket

=



Relay module

RKH □ □ □ □

Other options

LT: LED + test button
LTD: LED + test button + diode (13-,14+)
LTD1: LED + test button + diode (13+,14-)
LTA: LED + test button + gold plated contact
LTDA: LED + test button + diode+gold plated contact
LT M: 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

4C: 4CO

Series name

Characteristics

Contact	Configuration		4C
	Load	Resistance	7A/250VAC, 30VDC
		Motor load	1/6HP,240VAC
	Max. switching capacity (resistive)		1500VA, 180W
	Min. switching capacity		170mW(17V/10mA); LTA: 500mW(5V/10mA)
	Initial contact resistance		≤50mΩ
	Material		Ag alloy
	Electrical durability		≥15 x 10^4Cycles(1800 Ops/h),
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz
Maximum voltage (23℃) (Rated voltage)			110%
Insulation resistance			≥1000MΩ (500VDC)
Coil operating power	DC(W)		approx. 0.9
	AC(VA)		approx. 1.2(60Hz)
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 IEC 60664 UL840	Rated voltage		250VAC
	Pollution level		2
	Overvoltage level		II
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)
Protection level			IP20
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)
Working temperature/ humidity			-55~+85℃/ 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

RKH

Miniature General
Purpose Relay

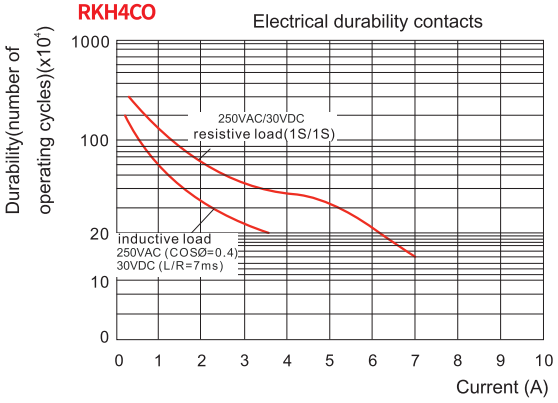
Coil Specifications (23°C)

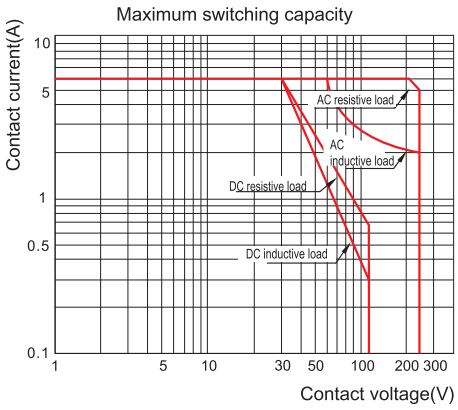
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	180	640	2600	13000	42000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	11.5	180	370	640	4430	16500	42000

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

Contact Specification

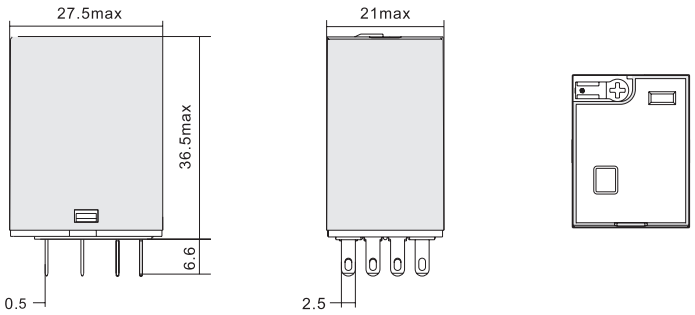
RKH4CO



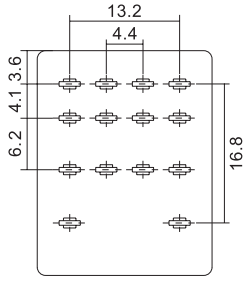


Dimensions (mm)

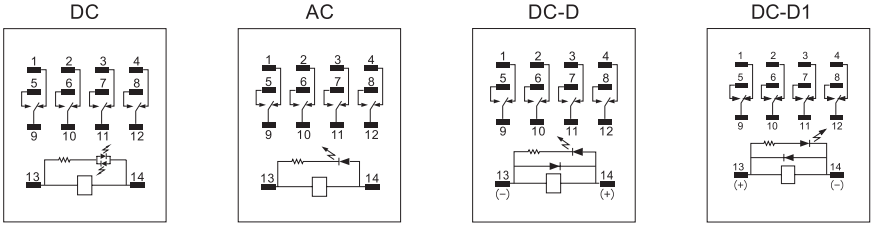
RKH4CO



Wiring Diagrams



RKH4CO



SKF14-E

RKH Socket

Characteristics



SKF14-E

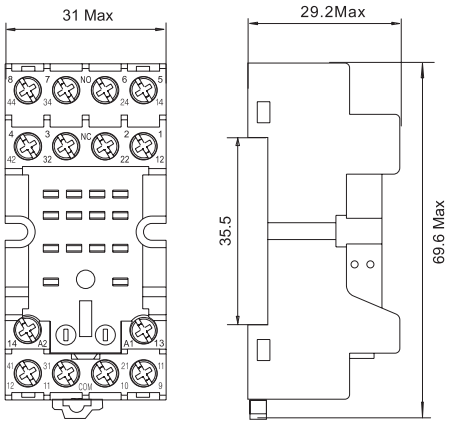


Type			SKF14-E
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Max. tightening torque		Nm	1.0
Wire size		AWG/mm²	20-14/0.5-2.5
Ambient temperature		℃	-40~+85
Unit weight		g	45

Accessories

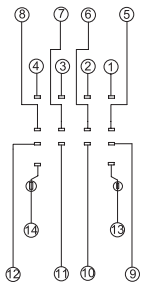
Socket	Metal clip	ID tag	Module
SKF14-E	 SK36M	SK2P	 AMD

Dimensions (mm)



SKF14-E

Connection Diagrams



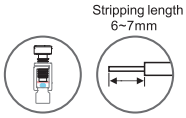
SKF14-E

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

SKB14-E

RKH Socket

Characteristics



SKB14-E

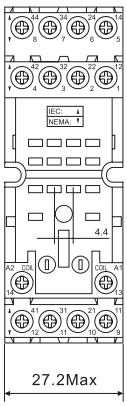


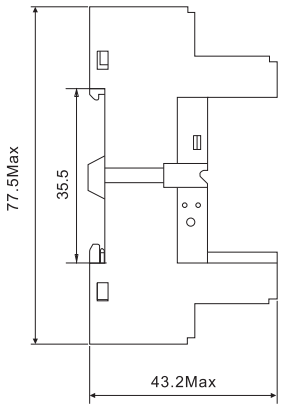
Type			SKB14-E
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	1.0
Wire size		AWG/mm²	20-14/0.5-2.5
Ambient temperature		℃	-40~+85
Unit weight		g	56

Accessories

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

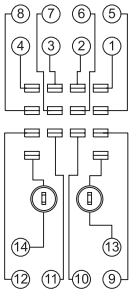
Dimensions (mm)





SKB14-E

Connection Diagrams



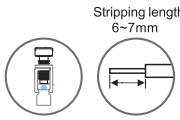
SKB14-E

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

SKC14-E

RKH Socket

Characteristics



SKC14-E

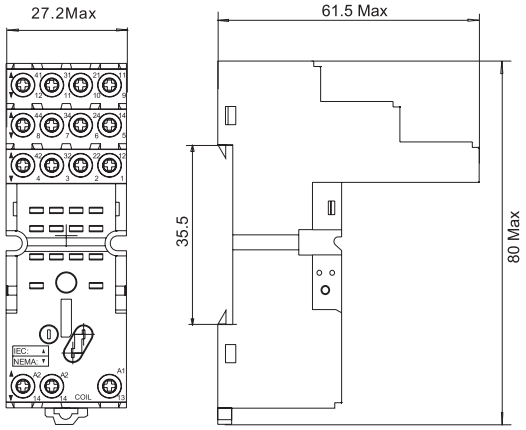


Type			SKC14-E
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	1.0
Wire size		AWG/mm²	20-14/0.5-2.5
Ambient temperature		℃	-40~+85
Unit weight		g	62

Accessories

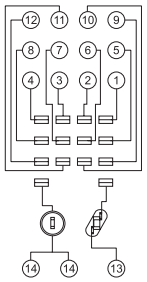
Socket	Plastic clip	Metal clip	ID tag	Module
SKC14-E	 SK36F	 SK36M	SK4P	 AMD

Dimensions (mm)



SKC14-E

Connection Diagrams



SKC14-E

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

SKC14-ST

RKH Socket

Characteristics



SKC14-ST

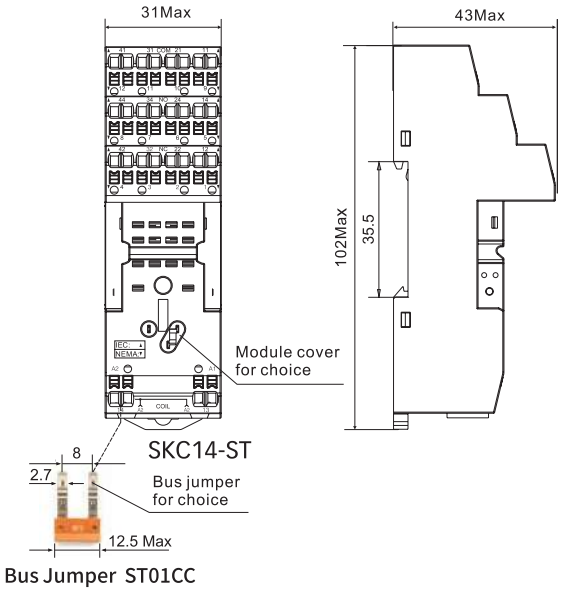


Type			SKC14-ST
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	-
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	80

Accessories

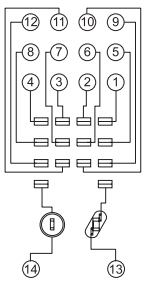
Socket	Plastic clip	Metal clip	ID tag	Module	Bus Jumper
SKC14-ST	 SK36F	 SK36M	SK4P	 AMD	 ST01CC

Dimensions (mm)



Bus Jumper ST01CC

Connection Diagrams



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

SKC14-ST

RKL

Miniature Power Relay

- 1 pole 16A; 2,3,4 poles 10A
- With non-polarity LED integrated in relay
- With lockable test button and inspection window
- Identification of coils through test button color (AC red/DC blue)
- Conformity with RoHS Directive

Test button

On-site test is available with test button.

Metal clip

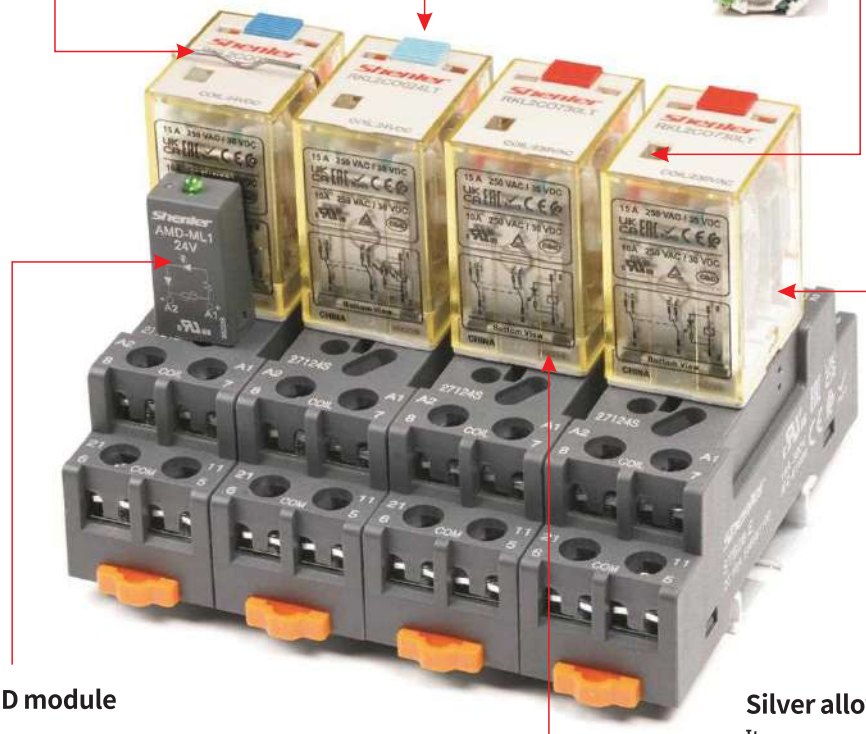
The relay is firmly attached to the socket by Metal clip.





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

Silver alloy pins

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



Selection manual of industrial control relay

RKL

Miniature Power Relay

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



Relay

+



Socket

=



Relay module

Characteristics

Contact	Configuration		1C	2C	3C	4C
	Load	Resistance	16A/250VAC 30VDC	15A/250VAC 30VDC		
		Motor load	1/2HP, 120VAC, 1HP, 240VAC	1/3HP 240VAC	1/6HP 240VAC	
	Max. switching capacity (resistive)		4000VA, 480W	3750VA, 450W		
	Min. switching capacity		170mW(17V/10mA)			
	Initial contact resistance		≤50mΩ			
	Material		Ag alloy			
	Electrical durability		1C/3C/4C: ≥10 x 10^4Cycles(1800 Ops/h), 2C: ≥20 x 10^4Cycles(1800 Ops/h)			
	Mechanical durability		≥1000 x 10^4Cycles (1800 Ops/h)			
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz			
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz			
Maximum voltage (23℃) (Rated voltage)			110%			
Insulation resistance			≥500MΩ (500VDC)			
Coil operating power		DC(W)	approx. 0.9	approx. 0.9	approx. 1.4	approx. 1.5
		AC(VA)(60Hz)	approx. 1.2		approx. 2.3	
Operate time&Release time (at nominal voltage)			≤20ms			
Initial breakdown voltage		Between open contacts	1000VAC/1min (leakage current 1mA)			
		Between poles	2000VAC/1min (leakage current 1mA)			
		Between contacts and coil	2000VAC/1min (leakage current 1mA)			
Insulation characteristics IEC 60664 UL840		Rated voltage	250VAC			
		Pollution level	3			2
		Overvoltage level	III			II
Impulse withstand voltage (waveform: 1.2/50μs)			4000V(Altitude 2000m)			
Protection level			IP20			
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)			
Working temperature/ humidity			-25~+55℃/ 5%~85%RH (No condensation)			
Air pressure			86~106KPa			

RKL

Miniature Power Relay

Shock resistance	10G (half-sine shock pulse: 11ms)			
Vibration resistance	10~55Hz double-amplitude:1.0mm			
Mounting	plug in			
Unit weight	approx. 35g	approx. 35g	approx. 50g	approx. 65g

Coil Specifications (23°C)

RKL1, RKL2

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

RKL3

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

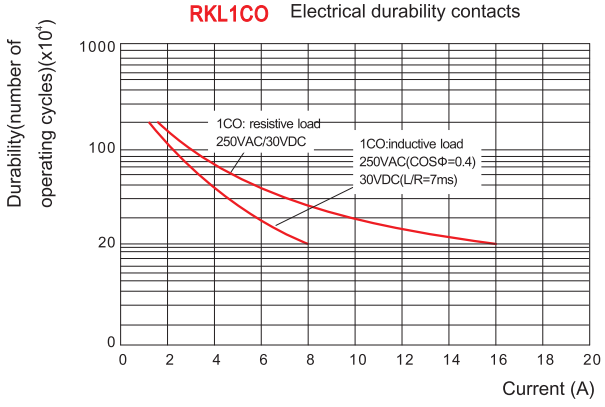
RKL4

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

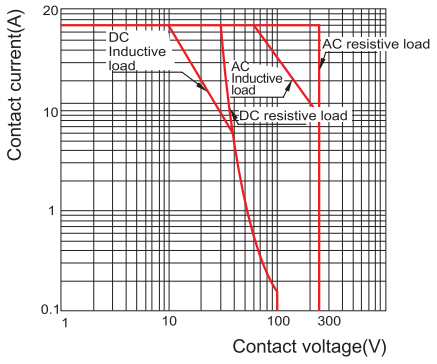
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

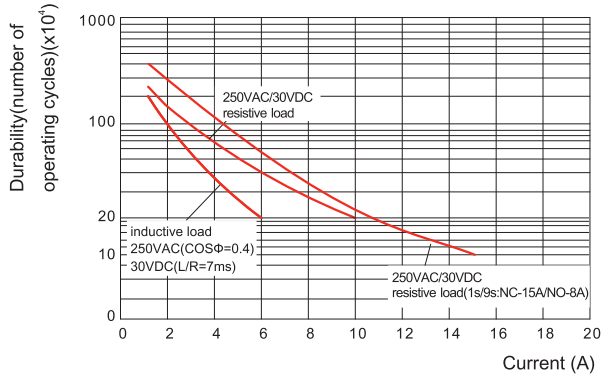
RKL1CO Electrical durability contacts



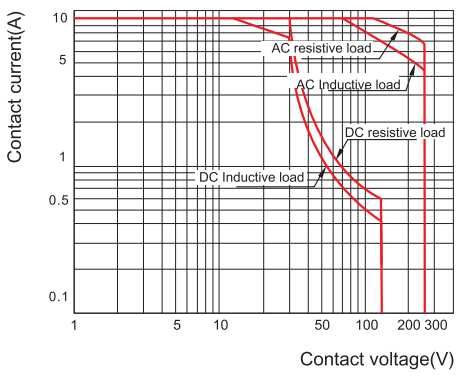
RKL1CO Maximum switching capacity



RKL2CO/3CO/4CO Electrical durability contacts



RKL2CO/3CO/4CO Maximum switching capacity



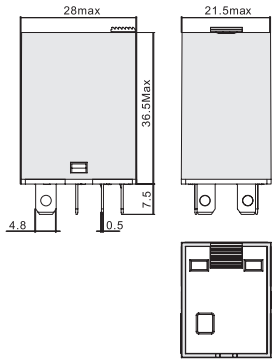
Selection manual of industrial control relay

RKL

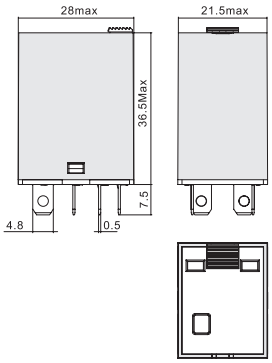
Miniature Power Relay

Dimensions (mm)

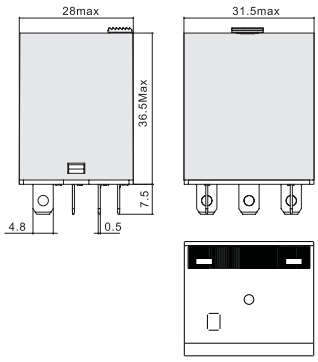
RKL1CO



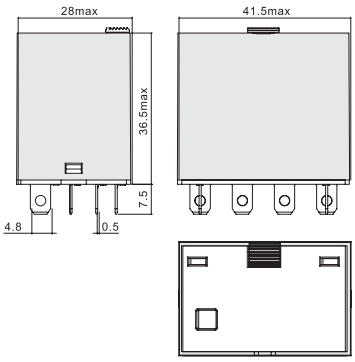
RKL2CO



RKL3CO

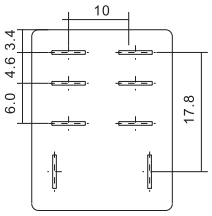


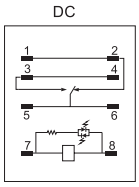
RKL4CO

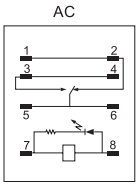


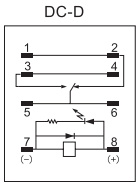
Wiring Diagrams

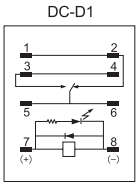
RKL1CO



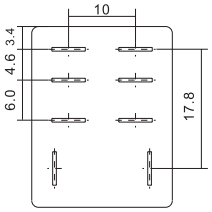


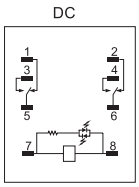


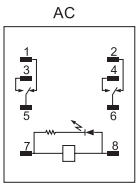


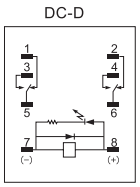


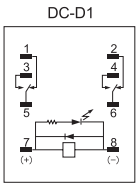
RKL2CO



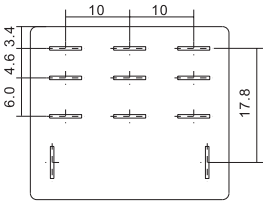


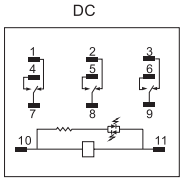


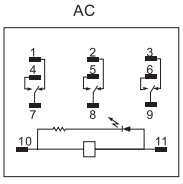


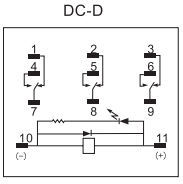


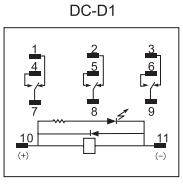
RKL3CO



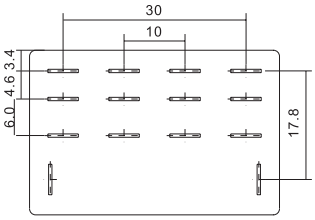


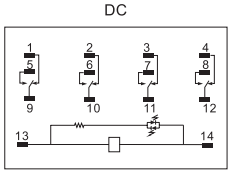


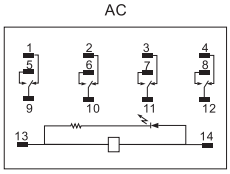


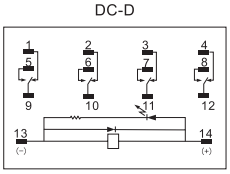


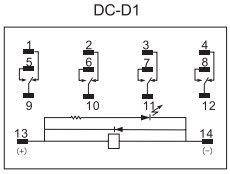
RKL4CO











STB08-E & STB11-E & STB14-E RKL Socket

Characteristics



STB08-E



STB14-E

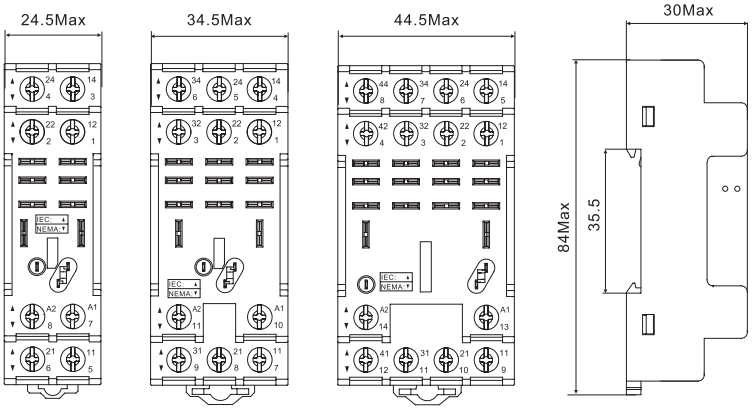


Type			STB08-E	STB11-E	STB14-E
Nominal load	Current	A	16		
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	4000		
	Between contacts	V/min	2500		
Max. tightening torque		Nm	1.0		
Wire size		AWG/mm²	20-14/0.5-2.5		
Ambient temperature		℃	-40~+85		
Unit weight		g	46	62	78

Accessories

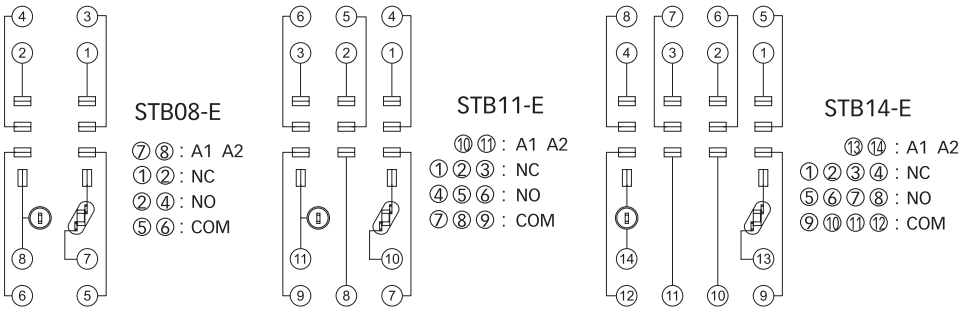
Socket	Metal clip	Module
STB08-E	 SK36M	 AMD
STB11-E	 ST36M3C	
STB14-E	 ST36M4C	 BMD

Dimensions (mm)



STB08-E STB11-E STB14-E

Connection Diagrams



STB08-E
⑦⑧ : A1 A2
①② : NC
②④ : NO
⑤⑥ : COM

STB11-E
⑩⑪ : A1 A2
①②③ : NC
④⑤⑥ : NO
⑦⑧⑨ : COM

STB14-E
⑬⑭ : A1 A2
①②③④ : NC
⑤⑥⑦⑧ : NO
⑨⑩⑪⑫ : COM

REH
Power Relay

- 2 poles, 3 poles 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





LED

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





Metal clip

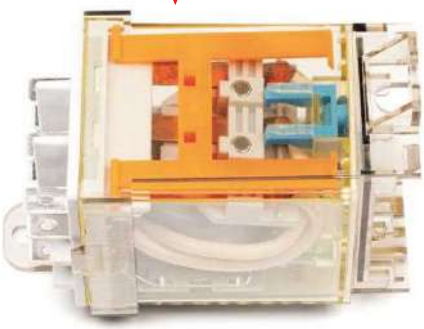
The relay is firmly attached to the socket by Metal clip.

Test button

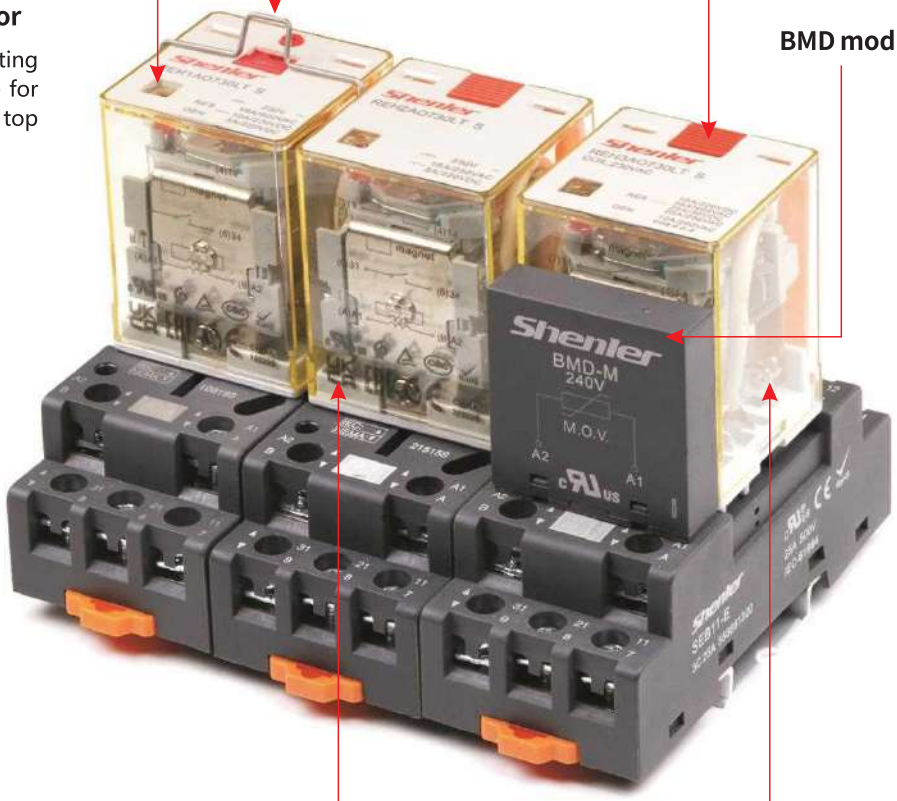
On-site test is available with test button.

REH-DA Mounting Adaptor

To meet with different mounting way , extra cover is available for both bracket mount and top flange integrated.







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.

REH
Power Relay



Relay

+



Socket

=



Relay module

REH □ □ □ □

Other options
L:LED
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

Contact	Configuration		2C,3C	2COLS,2COLTS
	Load	Resistive	16A/400VAC 30VDC	
		Resistive	–	10A/220VDC
		inductive	–	3A/220VDC(L/R=7ms)
		Motor load	1/2HP, 120VAC; 1HP,240VAC	
	Max. switching capacity (resistive)		6400VA, 480W	2200W
	Max. switching capacity (inductive)		2500VA, 90W	660W
	Initial contact resistance		≤50mΩ	
	Material		Ag alloy	
	Electrical durability (110%rated voltage, 55℃)		≥60 x 10^4Cycles (600 Ops/h)	
	Electrical durability (Normal temperature)		≥5000 x 10^4Cycles (18000 Ops/h)	
	Mechanical durability		≥2000 x 10^4Cycles (18000 Ops/h)	
Pick-up voltage (23℃) (Rated voltage)			DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23℃) (Rated voltage)			110%	
Insulation resistance			≥1000MΩ (500VDC)	
Coil operating power		DC(W)	approx. 1.5	
		AC(VA)	approx. 2.5(60Hz)	
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 IEC 60664 UL840		Rated voltage	300VAC	
		Pollution level	3	
		Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50μs)			6000V	
Protection level			IP20	
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)	
Working temperature/ humidity			-40~+55℃/ 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	

REH
Power Relay

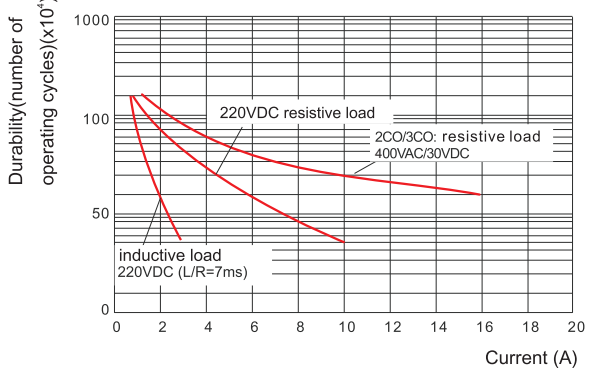
Coil Specifications (23°C)

Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	24	96	385	1540	8070	32270	
Nominal voltage V.AC	6	24	48	115	230	380	400
Coil resistance Ω	8	100	350	2200	8000	28500	30000

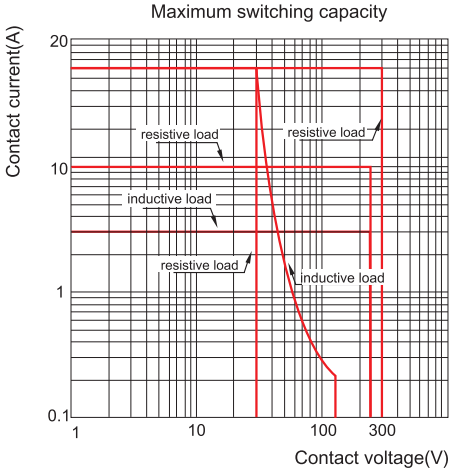
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

REH2CO/3CO Electrical durability contacts

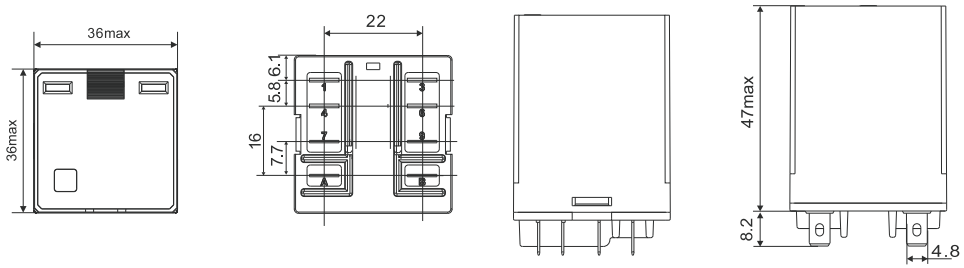


Maximum switching capacity

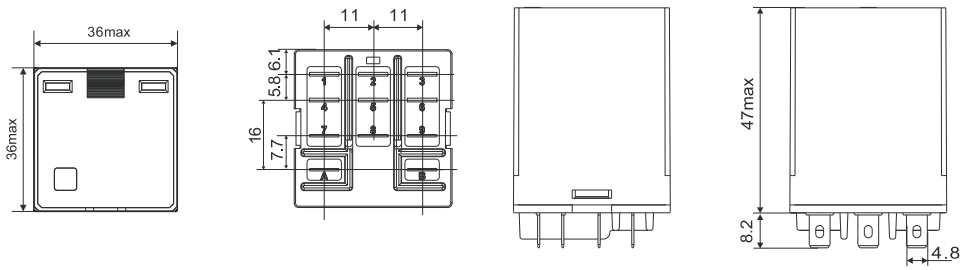


Dimensions (mm)

REH2CO

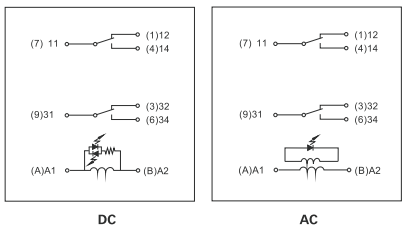


REH3CO

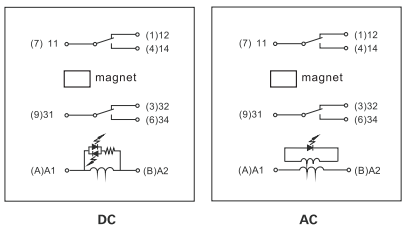


Wiring Diagrams

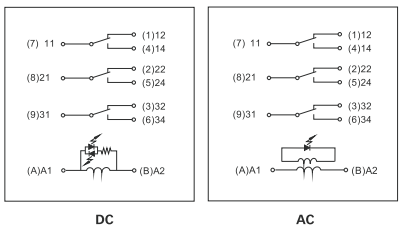
REH2CO



REH2COLTS



REH3CO



REH-S

Magnetic Blow-out Power Relay



Relay

+



Socket

=



Relay module

REH □ □ □ □

Other options

L S: LED + magnet

LT S: LED +test button + magnet

LT SM: LED+test button+magnet, with 0.65Un coil tuned

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)
- Large creepage distance and high insulation resistance

Characteristics

Contact	Configuration		1A,1B	2A,2B,2FO	3A
	Load	Resistive	16A/500VAC	16A/250VAC	16A/300VAC
		Resistive	10A/220VDC 16A/30VDC		
		inductive	10A/250VAC(cosØ0.4); 3A/220VDC(L/R=7ms)		
	Switching capacity	Resistive	8000VA	4000VA	4800VA
		Resistive	2200W		
		inductive	2500VA(cosΦ0.4);660W(L/R=7ms)		
	Initial contact resistance		≤50mΩ		
	Material		Ag alloy		
	Electrical durability(110%rated voltage, 55°C)		≥60 x 10^4Cycles (600 Ops/h)		≥20 x 10^4Cycles (600 Ops/h)
	Mechanical durability		≥5000 x 10^4Cycles (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(60Hz)		
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 IEC 60664 UL840	Rated voltage		500VAC	250VAC	400VAC
	Pollution level		2	3	3
	Overvoltage level		II	III	II
Protection level			IP20		
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		

REH-S

Magnetic Blow-out
Power Relay

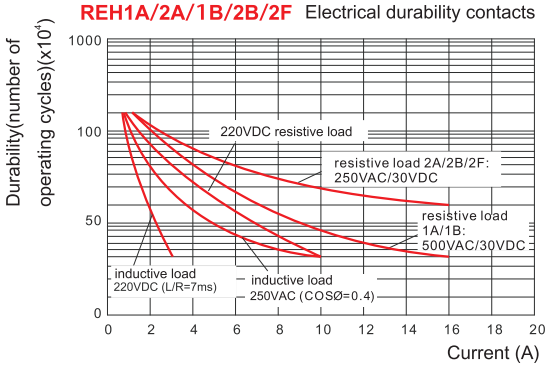
Coil Specifications (23°C)

Nominal voltage V.DC	12	24	48	110	220	
Coil resistance Ω	96	385	1540	8070	32270	
Nominal voltage V.AC	24	48	115	230	380	400
Coil resistance Ω	100	350	2200	8000	28500	30000

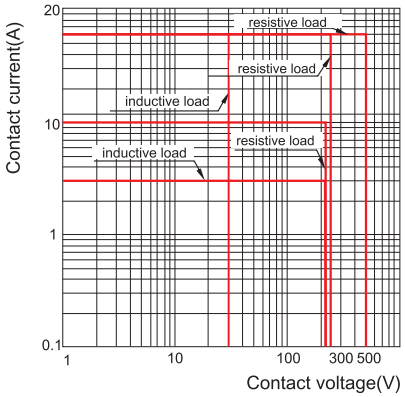
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

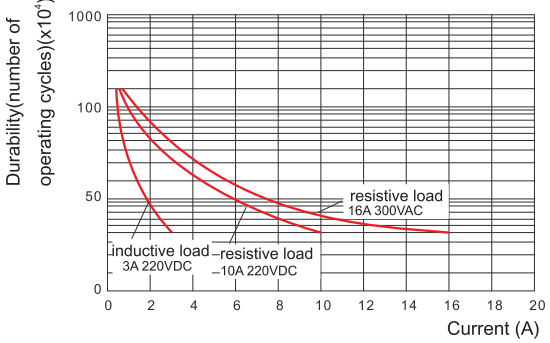
REH1A/2A/1B/2B/2F Electrical durability contacts



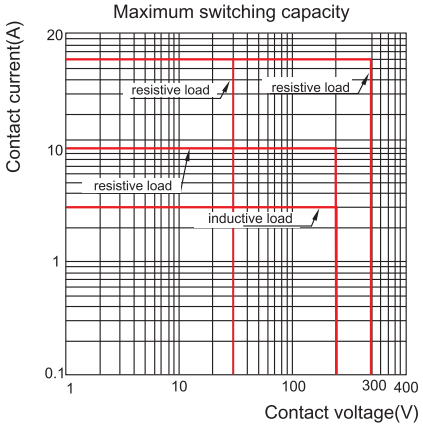
Maximum switching capacity



REH3AO Electrical durability contacts

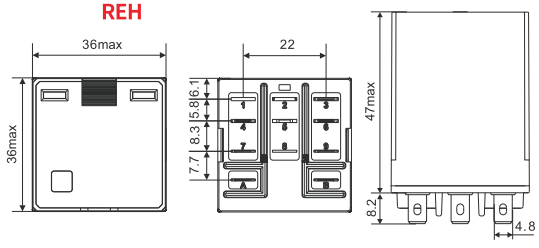


Maximum switching capacity

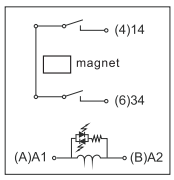


Dimensions (mm) & Wiring Diagrams

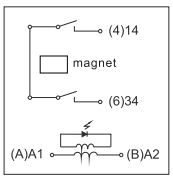
REH



REH1AO

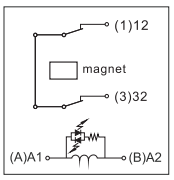


DC

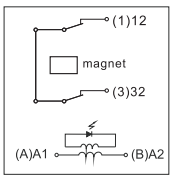


AC

REH1BO

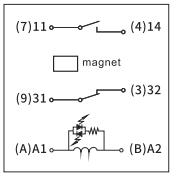


DC

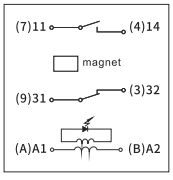


AC

REH2FO

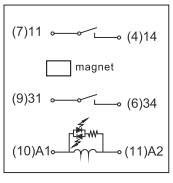


DC

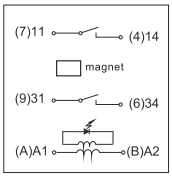


AC

REH2AO

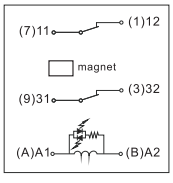


DC

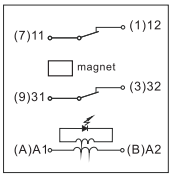


AC

REH2BO

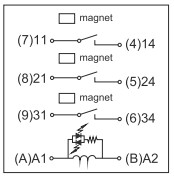


DC

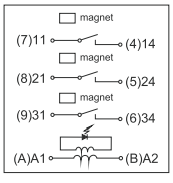


AC

REH3AO



DC



AC

SEB11-E

REH-S Socket

Characteristics



SEB11-E

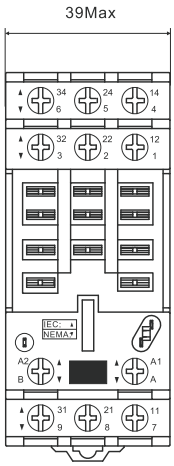


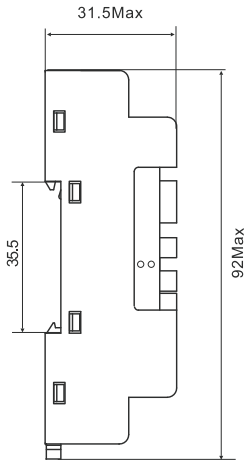
Type			SEB11-E
Nominal load	Current	A	25
	Voltage	V	500
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	1.2
Wire size		AWG/mm²	20-12/0.5-3.3
Ambient temperature		℃	-40~+75
Unit weight		g	64

Accessories

Socket	Metal clip	Module
SEB11-E	 SE52M	 BMD

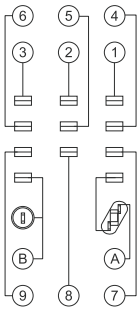
Dimensions (mm)





Connection Diagrams

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



SEB11-E S

REH-S Socket

Characteristics



SEB11-E S

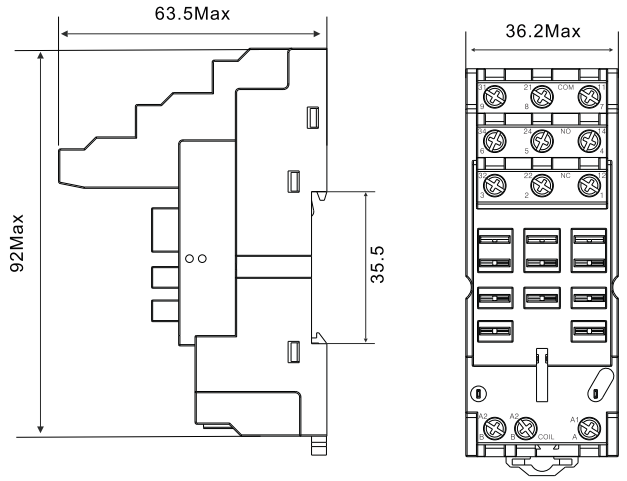


Type			SEB11-E S
Nominal load	Current	A	25
	Voltage	V	500
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque		Nm	1.2
Wire size		AWG/mm²	20-12/0.5-3.3
Ambient temperature		℃	-40~+75
Unit weight		g	85.9

Accessories

Socket	Metal clip	Module	ID tag
SEB11-E S	 SE52M	 BMD	 SK2P

Dimensions (mm)



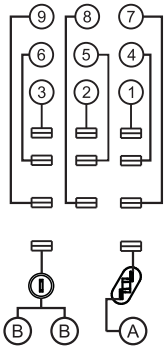
Connection Diagrams

Ⓐ Ⓑ :A1 A2

③ ② ① :NC

⑥ ⑤ ④ :NO

⑨ ⑧ ⑦ :COM



SEB11-PS

REH-S Socket

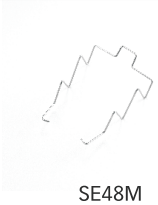
Characteristics

SEB11-PS

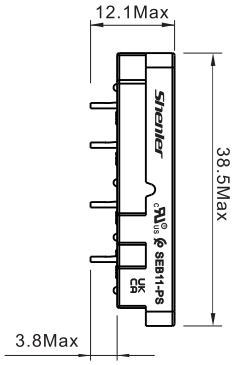


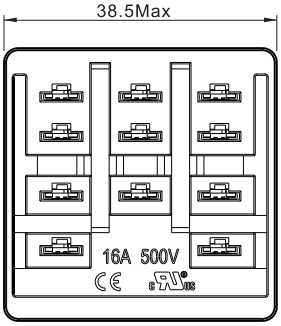
Type			SEB11-PS
Nominal load	Current	A	16
	Voltage	V	500
Dielectric strength		V/min	2500
Ambient temperature		℃	-40~+75
Unit weight		g	11.9

Accessories

Socket	Metal clip
SEB11-PS	 SE48M

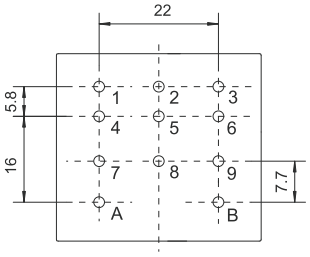
Dimensions (mm)





Connection Diagrams

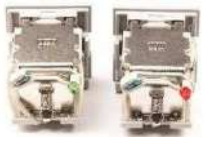
Ⓐ Ⓑ : A1 A2
① ② ③ : NC
④ ⑤ ⑥ : NO
⑦ ⑧ ⑨ : COM



RUB

General Purpose
Relay

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



LED

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

Metal clip

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

Test button

On-site test is available with test button.

BMD module



Silver alloy pins

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





Silver alloy contacts

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

RUB

General Purpose Relay



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: 2CO

3C: 3CO

Series name

Characteristics

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

RUB

General Purpose Relay

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

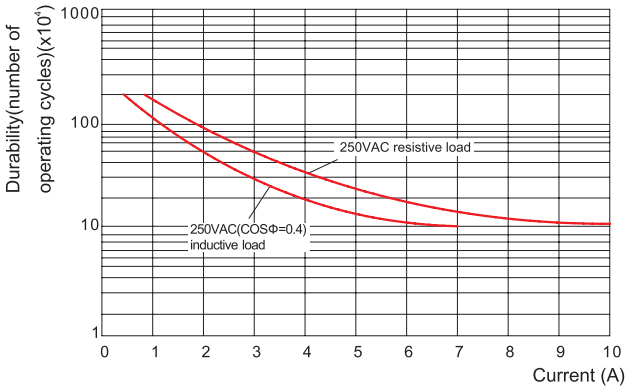
Coil Specifications (23°C)

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

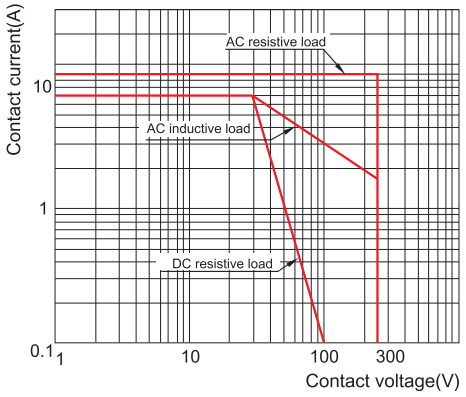
Coil resistance: under coil voltage 110V are measured with tolerance of ±10%Ω, above 110V with tolerance of ±15%Ω.

Contact Specification

RUB2C/3C Electrical durability contacts



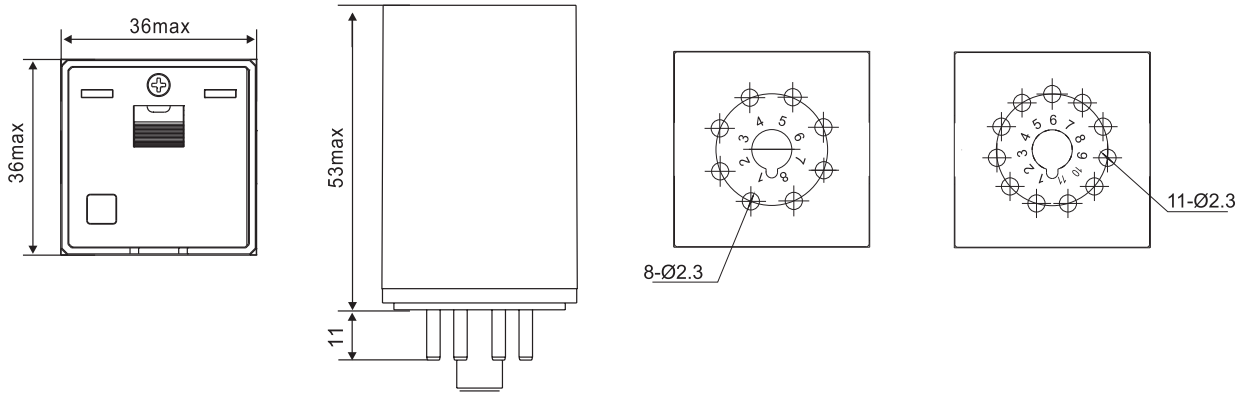
Maximum switching capacity



RUB

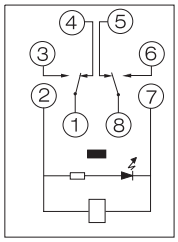
General Purpose
Relay

Dimensions (mm)



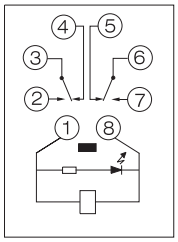
Wiring Diagrams

RUB2C1



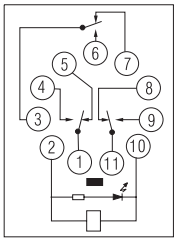
⑦ ② : A1, A2
① ⑧ : COM
③ ⑥ : NO
④ ⑤ : NC

RUB2C2



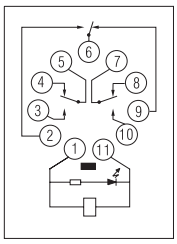
⑧ ① : A1, A2
③ ⑥ : COM
② ⑦ : NO
④ ⑤ : NC

RUB3C1



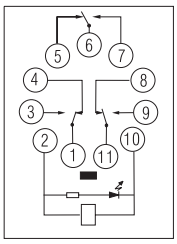
⑩ ② : A1, A2
① ③ ⑪ : COM
④ ⑥ ⑨ : NO
⑤ ⑦ ⑧ : NC

RUB3C2



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

RUB3C5

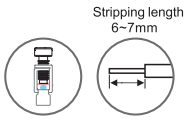


⑩ ② : A1, A2
① ⑥ ⑪ : COM
③ ⑦ ⑨ : NO
④ ⑤ ⑧ : NC

SUB08-E & SUB11-E

RUB Socket

Characteristics



SUB08-E



SUB11-E

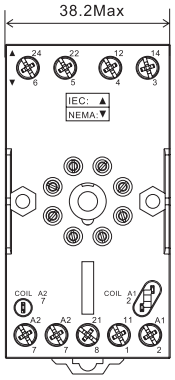


Type			SUB08-E	SUB11-E
Nominal load	Current	A	12	
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	50	55

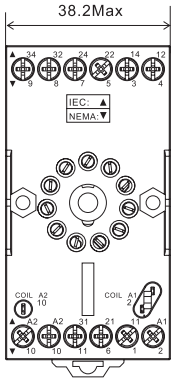
Accessories

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

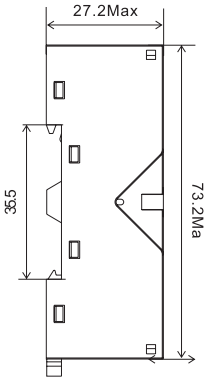
Dimensions (mm)



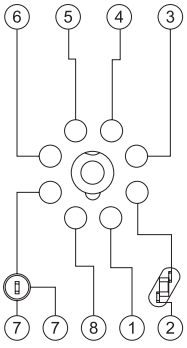
SUB08-E



SUB11-E



Connection Diagrams



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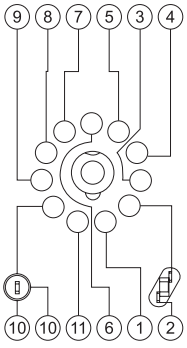


SUB11-E

SUB08-A & SUB11-A

RUB Socket

Characteristics



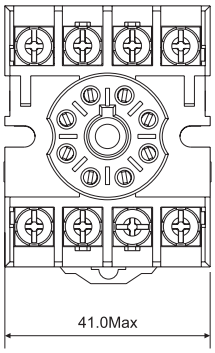
SUB08-A



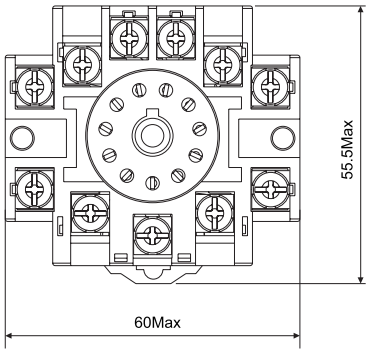


Type			SUB08-A	SUB11-A
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength		V/min	2500	
Max. tightening torque		Nm	1.0	
Wire size		AWG/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40～+85	
Unit weight		g	37	50

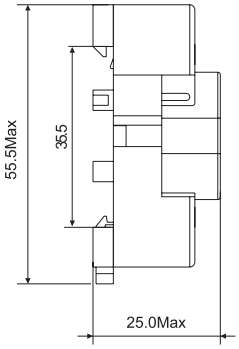
Dimensions (mm)



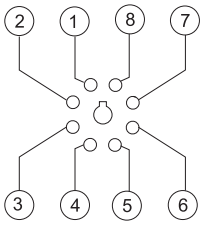
SUB08-A



SUB11-A



Connection Diagrams



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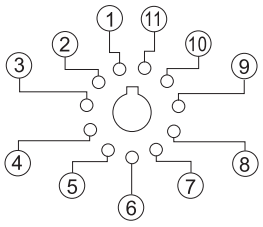
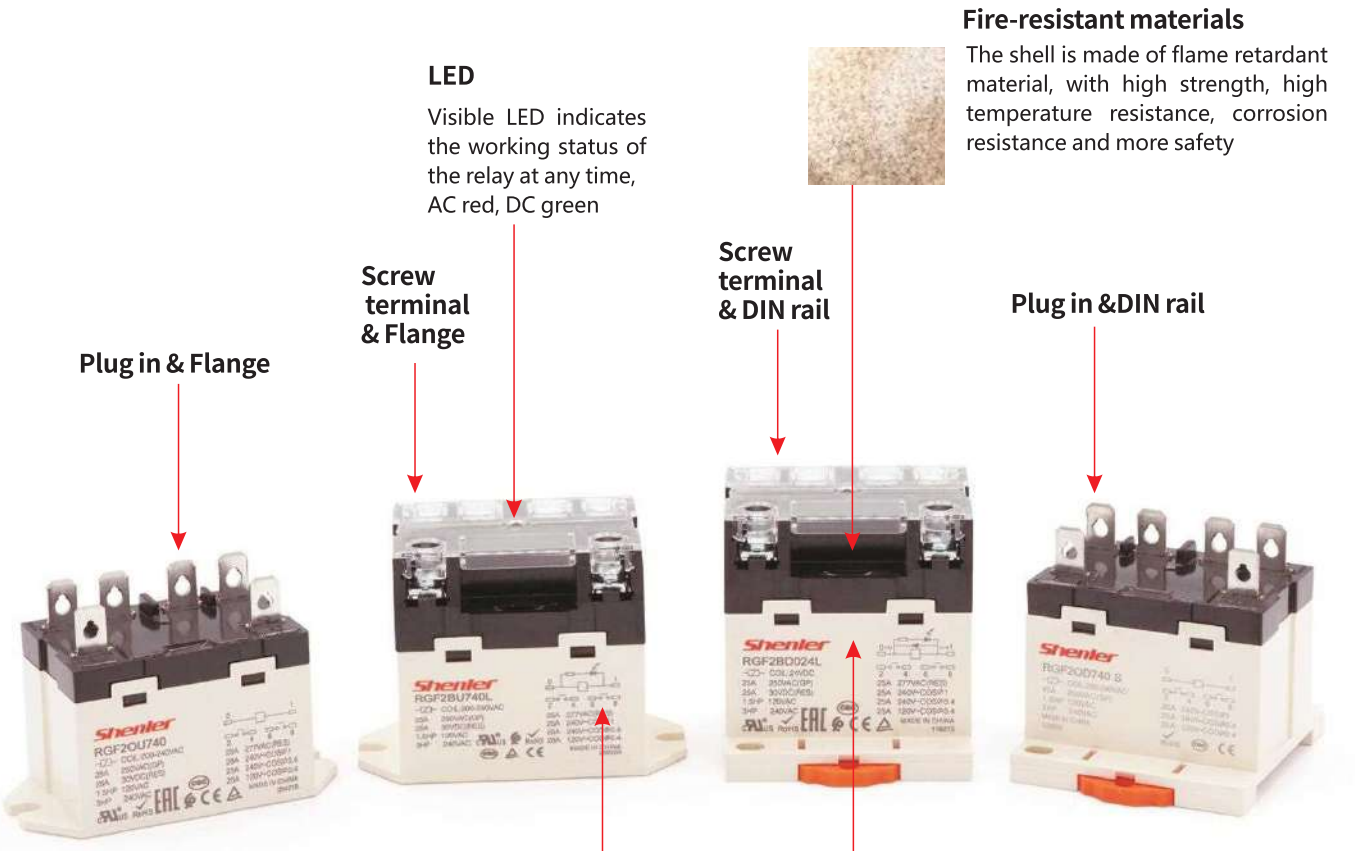


SUB11-A

RGF
Power Relay

- 1 pole 30A ; 2 poles 25A/40A
- Top-mounted 1/4" quick-connect terminals
- Locating slot for DIN rail mounting
- With finger protection cover (IP20)
- Conformity with RoHS directive
- With safety module monitor
- Widely used in large load such as air conditioners and refrigerators



RGF
Power Relay



RGF1BD



RGF1BU



RGF1OU



RGF2OD

RGF □ □ □ □

Other options
L: with LED (only for BU and BD type)
S: with 40A/250VAC contact load (for 2 poles 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 & Mounting 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

Contact	Configuration		1A	2A	2A-S
	Load	Resistive	30A 277VAC/30VDC	25A 277VAC/30VDC	40A 250VAC/30VDC
		Motor load	1.5 HP, 120VAC; 3HP,240VAC		
	Max. switching capacity (resistive)		8310VA, 900W	6925VA,750W	10000VA,1200W
	Initial contact resistance		≤50mΩ		
	Material		Ag alloy		
	Electrical durability		≥10^5Cycles (1800 Ops/h)		≥$5x10^4$ Cycles (360 Ops/h)
	Mechanical durability		⩾5000 x 10^4Cycles (1800 Ops/h)		
Pick-up voltage (23℃) (Rated voltage)			DC:≤80% , AC:≤80% 50/60Hz		
Drop-out voltage (23℃) (Rated voltage)			DC:≥15% , AC:≥15% 50/60Hz		
Maximum voltage (23℃) (Rated voltage)			110%		
Insulation resistance			≥1000MΩ (500VDC)		
Coil operating power		DC(W)	approx. 1.9		
		AC(VA)	approx. 2.5(60Hz)		
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 IEC 60664 UL840		Rated voltage	277VAC		
		Pollution level	3		
		Overvoltage level	III		
Impulse withstand voltage (waveform: 1.2/50μs)			6000V		
Protection level			IP20		
Storage temperature/ humidity			-55~+85℃/ ≤85%RH (18 months)		
Working temperature/ humidity			-25~+55℃/ 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		

RGF
Power Relay

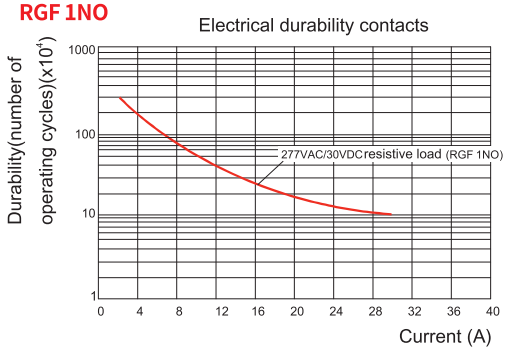
Coil Specifications (23°C)

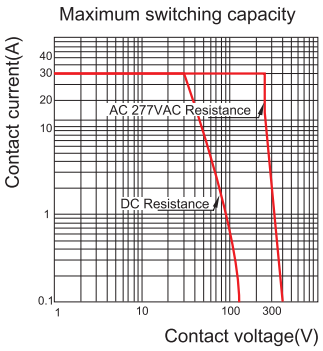
Nominal voltage V.DC	6	12	24	48	110	220		
Coil resistance Ω	18.9	75	303	1220	6360	25474		
Nominal voltage V.AC	6	12	24	48	100-120	200-240	380	400
Coil resistance Ω	14	55	275	1100	5200	21000	62650	62650

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

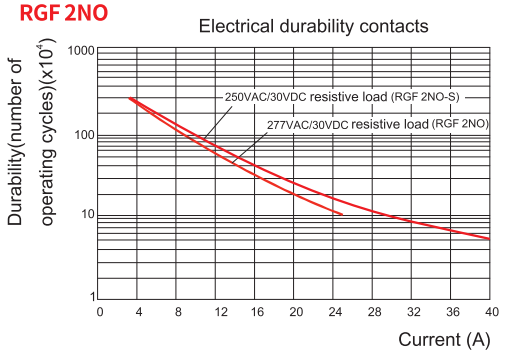
Contact Specification

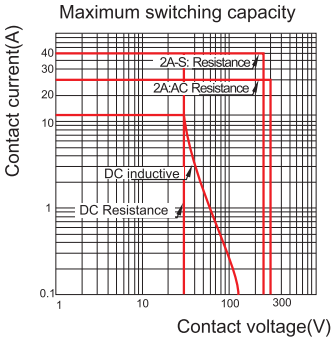
RGF 1NO





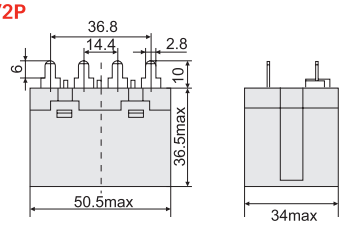
RGF 2NO



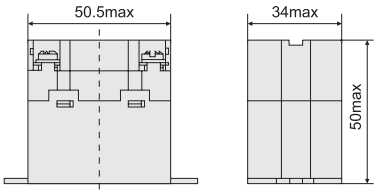


Dimensions (mm)

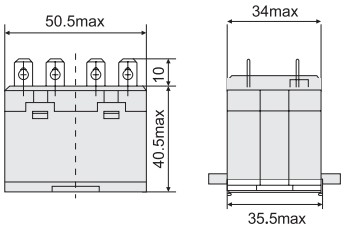
RGF1P/2P



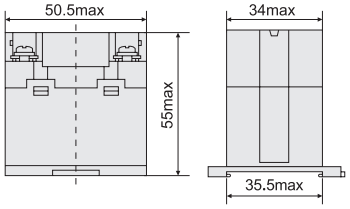
RGF1BU/2BU



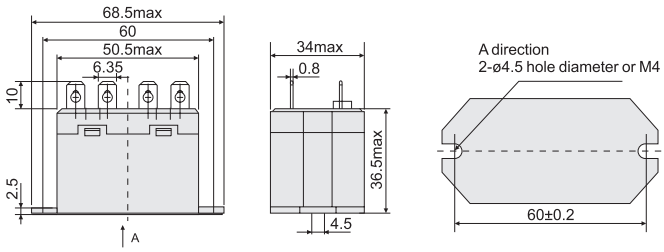
RGF1OD/2OD



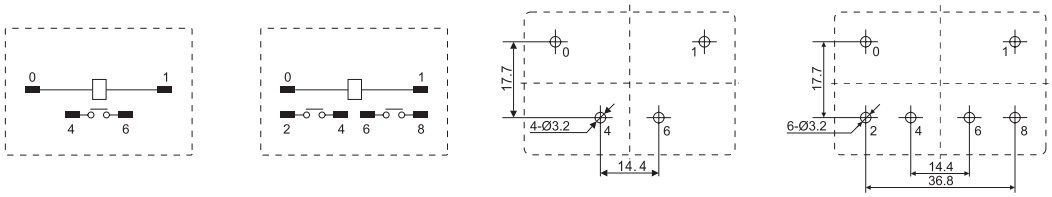
RGF1BD/2BD



RGF1OU/2OU



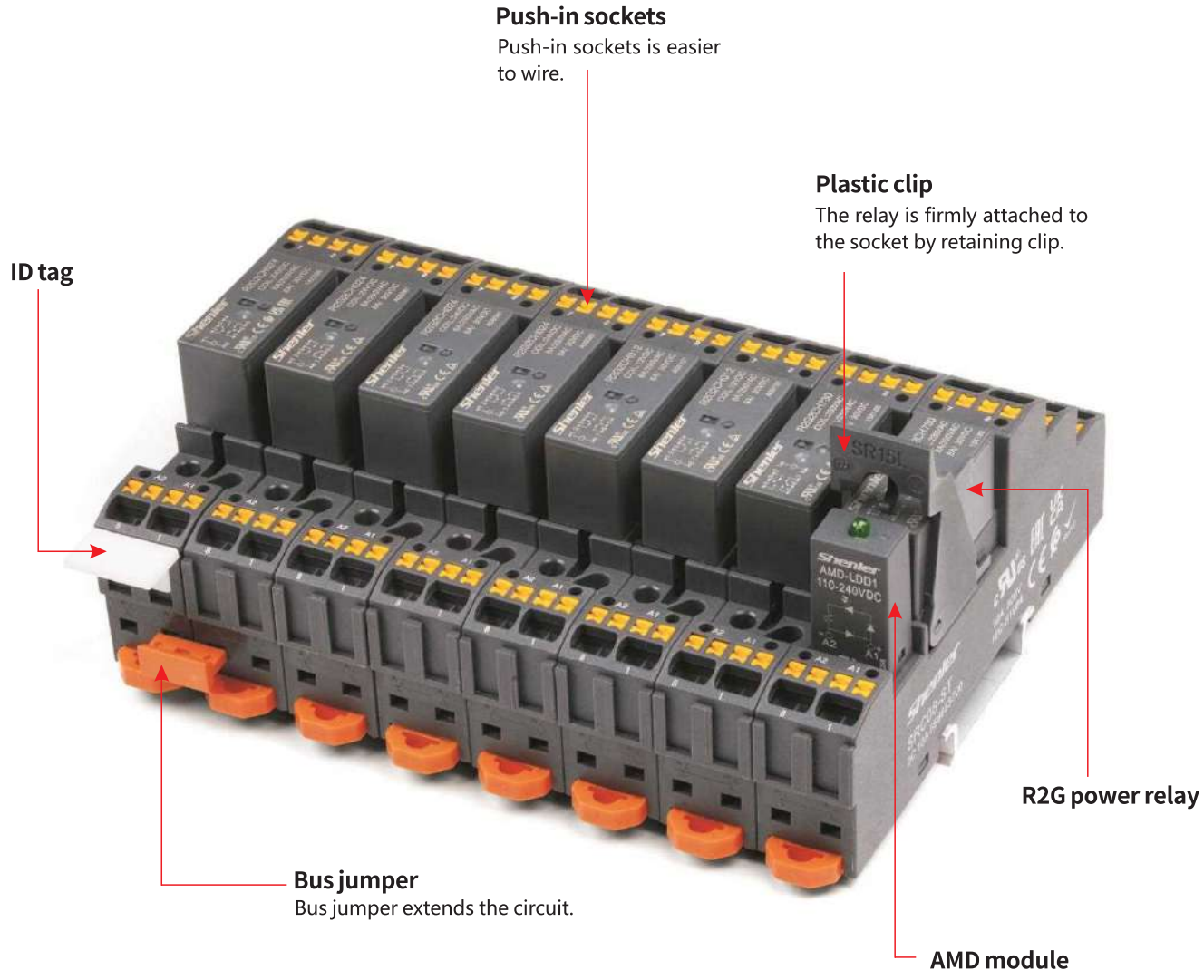
Wiring Diagrams



RGF1 RGF2 RGF1P RGF2P

R2G
Power Relay

- Available for 1 and 2 poles, 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℃



R2G
Power Relay

R2G □ □ □ □ □ □

Encapsulation Way
Blank: Sealed

Coil Consumption
Blank: Standard (400mW)

Material Level
Blank: B class

Coil voltage code

Code	005	006	009	012	048	060	110
Voltage (V DC)	5	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 pole16A, 2 poles 8A

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

Series name



Relay

+



Socket

=



Relay module

Characteristics

Contact	Configuration		1C/1A	2C/2A
	Load	Resistive load (AC-1)	12A,16A/250VAC,30VDC	8A/250VAC,30VDC
		Motor load (AC-3)	1/2HP, 240VAC;3/4HP,120VAC	1/3HP,240VAC,1/4HP,120VAC
	Max. switching capacity (resistive)		3000VA,360W;4000VA,480W	2000VA,240W
	Initial contact resistance		≤100mΩ	
	Material		Ag alloy	
	Electrical durability (normal temp., frequency 1s on, 9s off)		3.5mm: 1NO 12A ⩾8X10^{4}Cycles	5.0mm: 2NO 8A ⩾5X10^{4}Cycles
			5.0mm: 1NO 16A ⩾5X10^{4}Cycles	–
	Mechanical durability		DC≥2000X10^4 CYCLES (18000 OPS/H); AC≥1000X10^4 CYCLES (18000 OPS/H)	
Pick-up voltage (23℃) (Rated voltage)			DC≤70% AC:≤75%	
Drop-out voltage (23℃) (Rated voltage)			DC:≥10% AC:≥15%	
Maximum voltage (23℃) (Rated voltage)			130%	
Insulation resistance			≥1000MΩ (500VDC)	
Coil operating power		DC(W)	approx. 0.4	
		AC(VA)	approx. 0.75(60Hz)	
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 IEC 60664 UL840		Rated voltage	250VAC	
		Pollution level	3	
		Overvoltage level	III	

Protection level	IP40(socket not included)
② Storage temperature/ humbidity	-55~+85℃/ 5%~68%RH (18 months)
Working temperature/ humbidity	-40~+85℃/ 5%~85%RH (No condensation)
Air pressure	86~106KPa
Shock resistance	10G (half-sine shock pulse: 11ms)
③ Vibration resistance	10~55Hz double-amplitude:1.5mm
Mounting	PCB
Unit weight	approx. 13g

① Only for DC
② If the storage time exceeds 18 months (calculated from the factory date) , to avoid affecting the performance parameters , it is recommended to re-test the parameters before use.
③ not length direction

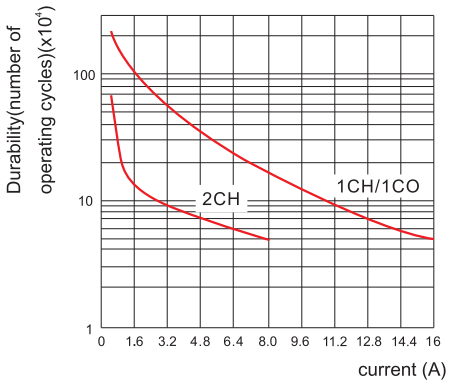
Coil Specifications (23℃)

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	32500					

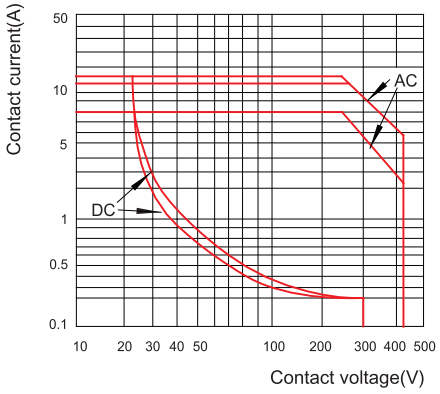
Coil resistance tolerance: under coil voltage 5000Ω are measured with tolerance of ±10%Ω, greater or equal to 5000Ω with tolerance of ±15%Ω.

Contact Specification

250VAC NO resistive load curve diagram

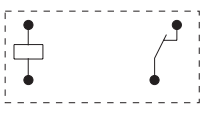


Maximum load on/off curve

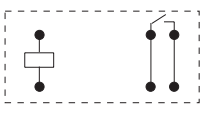


Wiring Diagrams

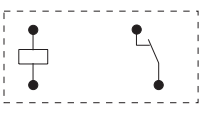
R2G1AO/1AU



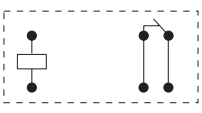
R2G1AH



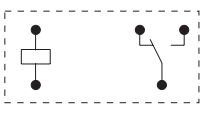
R2G1BO/1BU



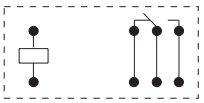
R2G1BH



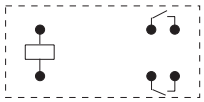
R2G1CO/1CU



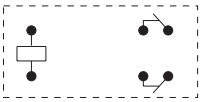
R2G1CH



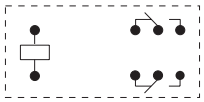
R2G2AH



R2G2BH

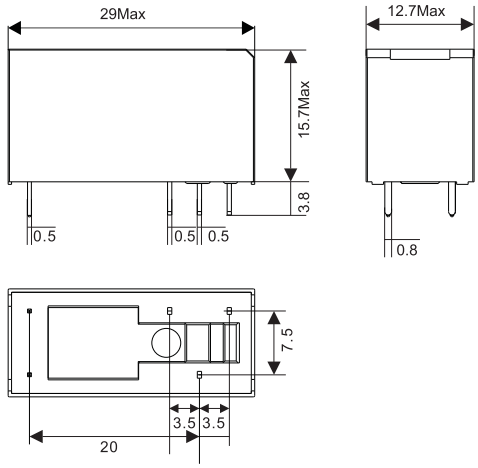


R2G2CH

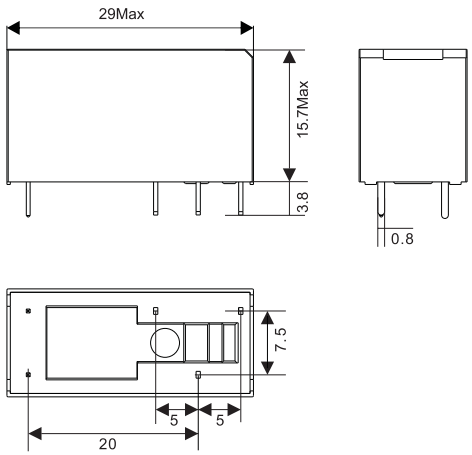


Dimensions (mm)

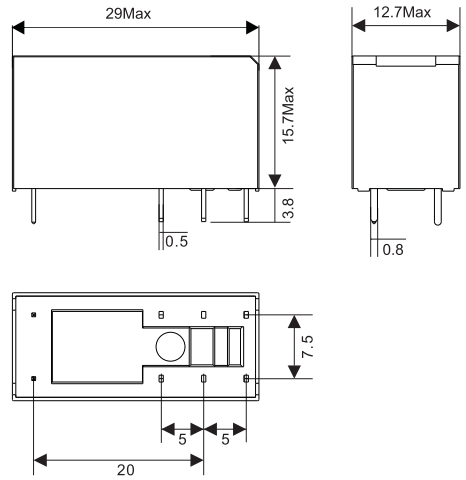
R2G1CO 3.5mm



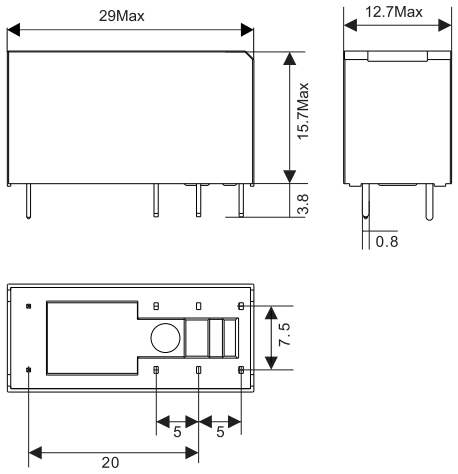
R2G1CU 5.0mm



R2G1CH 5.0mm



R2G2CH 5.0mm



SRC05-ST & SRC08-ST

R2G Socket

Characteristics



SRC05-ST



SRC08-ST



Type			SRC05-ST	SRC08-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/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	37	42

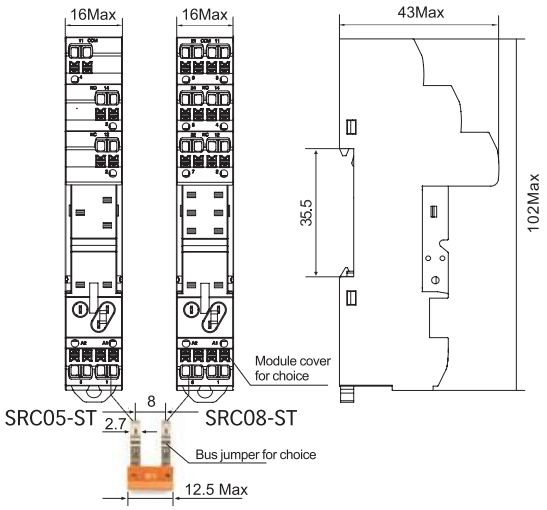
Accessories

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

Clip selection table

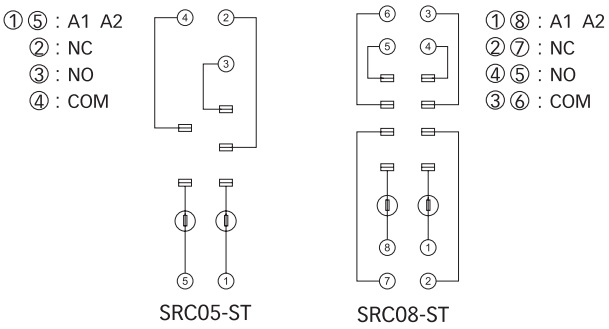
Relay H (mm)	15	20	25
Clip Type			
	SR15L	SR20F	SR25C

Dimensions (mm)



Bus jumper ST01CC

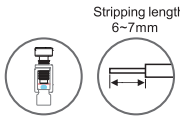
Connection Diagrams



SRC05-E & SRC08-E

R2G Socket

Characteristics



SRC05-E



SRC08-E



Type			SRC05-E	SRC08-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/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	33	37

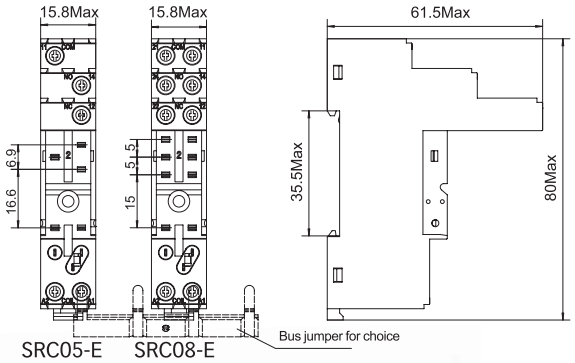
Accessories

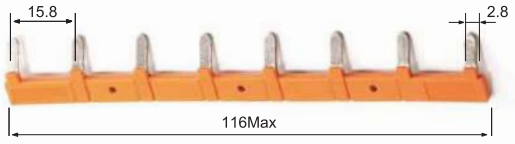
Socket	ID tag	Bus Jumper	Module
SRC05-E			
SRC08-E	SR2P	SR08B	AMD

Clip selection table

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

Dimensions (mm)

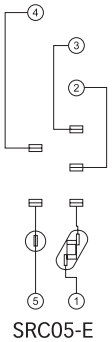


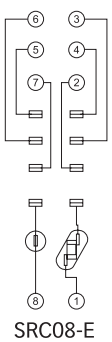


Bus jumper SR08B

Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM





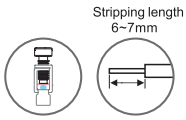
①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRC05-E SRC08-E

SRB05-E & SRB08-E

R2G Socket

Characteristics



SRB05-E



SRB08-E



Type			SRB05-E	SRB08-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/mm²	20-14/0.5-2.5	
Ambient temperature		℃	-40~+85	
Unit weight		g	33	37

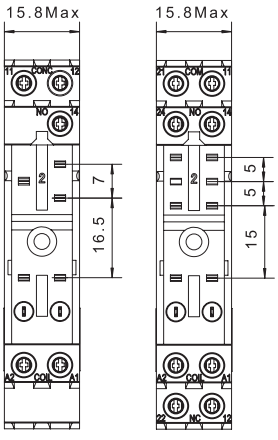
Accessories

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

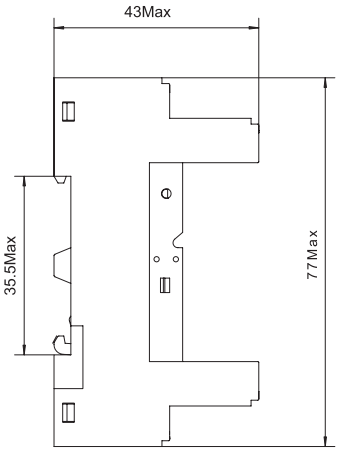
Clip selection table

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

Dimensions (mm)

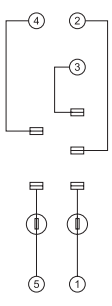


SRB05-E SRB08-E

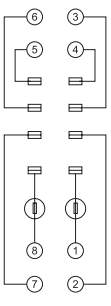


Connection Diagrams

①⑤ : A1 A2
② : NC
③ : NO
④ : COM



SRB05-E



SRB08-E

①⑧ : A1 A2
②⑦ : NC
④⑤ : NO
③⑥ : COM

SRC05-P & SRC08-P

R2G Socket

Characteristics

SRC05-P



SRC08-P

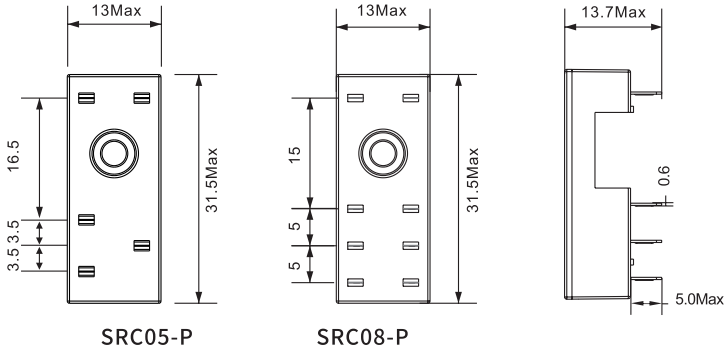


Type			SRC05-P	SRC08-P
Nominal load	Current	A	12	8
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque		Nm	-	
Wire size		AWG/mm²	-	
Ambient temperature		℃	-40~+85	
Unit weight		g	10	10

Accessories

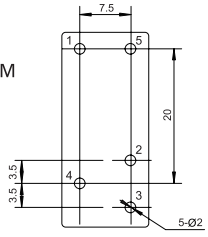
Socket	Metal clip		
SRC05-P			
SRC08-P	SR15M	SR1520M	SR2025M

Dimensions (mm)



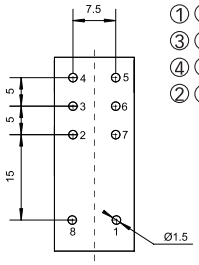
Connection Diagrams

①⑤：A1, A2
②：NC
③：NO
④：COM



SRC05-P
BOTTOM VIEW

①⑧：A1, A2
③⑥：COM
④⑤：NO
②⑦：NC

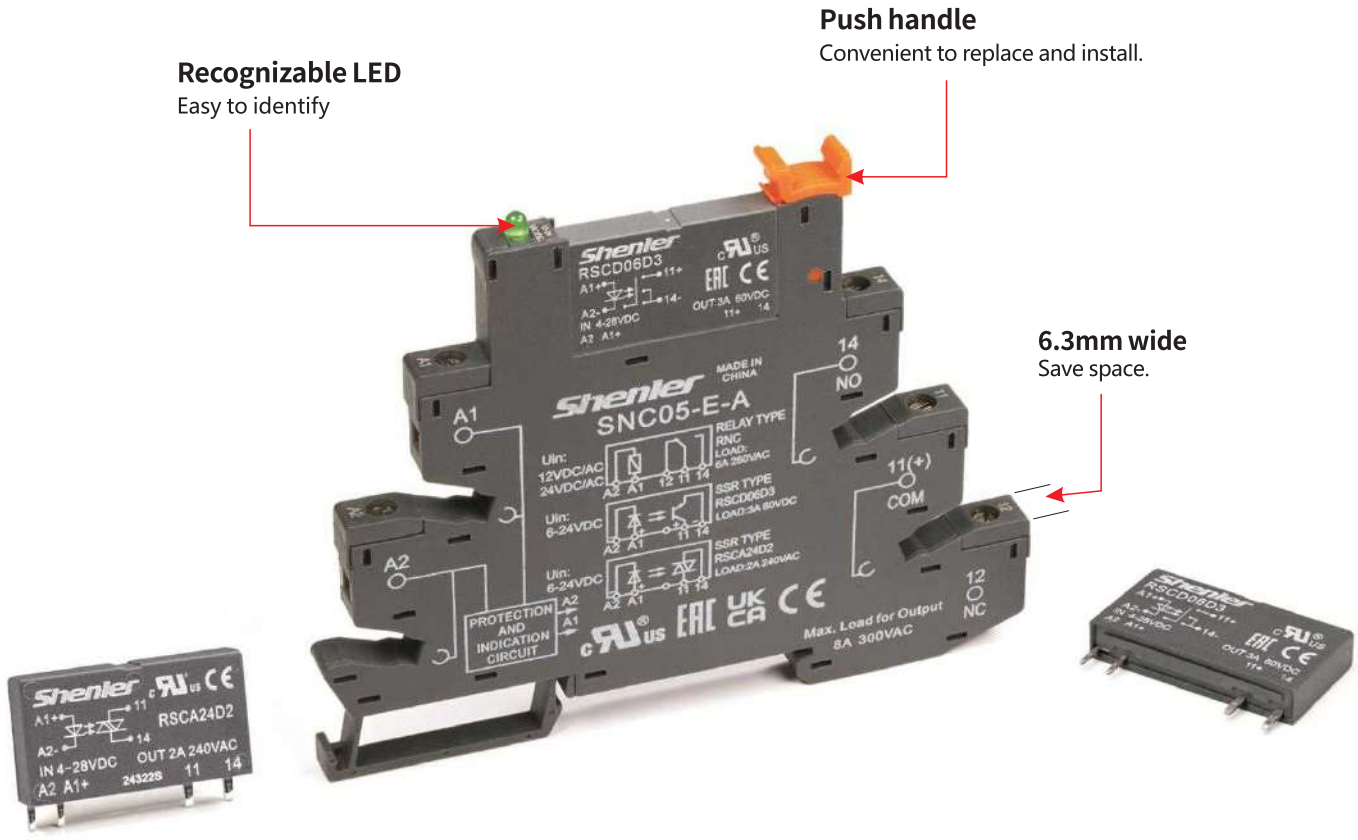


SRC08-P
BOTTOM VIEW

RSC

Solid State DC AC Slim Relay

- Ultra thin, small size, fast switching response
- no contact, no spark, long service life
- NO DC,AC output
- MOSFET output for DC, TRIAC output for AC.
- Imported optocoupler isolation
- Wide supply DC 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.



RSCA

Solid State AC Slim Relay

RSC A 24 D □ □

- **Load current**
  Blank: Zero voltage switching
  R: Random switching
- **Rated load current**
  2 : 2A
- **Control voltage range**
  D : 4-28V DC
  E:15-28VDC
- **Rated load range**
  24 : 240VAC
- **Load type**
  A: AC load
- **Series name**



Relay

+



Socket

=



Relay Module

Product performance

Input parameter(Ta=25℃)				
Part No.	RSCA24D2	RSCA24D2R	RSCA24E2	RSCA24E2R
Control voltage range	4~28VDC		15~28VDC	
Must turn-on voltage	4VDC		15VDC	
Must turn-off voltage	1VDC		5VDC	
Control current range	20mA			

Output parameters(Ta=25℃)				
Part No.	RSCA24D2	RSCA24E2	RSCA24D2R	RSCA24E2R
Rated load voltage	240VAC			
Load voltage range	24~280VAC			
Maximum transient voltage	600VPK			
Load current range	0.02~2A			
Trigger type	Zero voltage switching		Random switching	
Maximum conduction time	½ cycle		1ms	
Maximum turn-off time	½ cycle		½ cycle	
Non-repetitive surge current (within 10ms)	≤50A			
Maximum off-state leakage current (at rated voltage)	≤1.5mA			
Maximum on-state voltage drop (at rated current)	≤1.3V			
Out-of-state voltage index rise rate dv/dt	200V/us			
Load current safety factor	40-60%			

Other parameters(Ta=25℃)	
Dielectric withstand voltage (Input / Output,50Hz/60Hz)	2500VAC
Insulation resistance(@500VDC)	1000MΩ
Operating temperature range	-30℃~+80℃
Storage temperature range	-30℃~+100℃
Operating ambient humidity range	35 ~ 85%RH (No condensation)
Weight	approx. 4g

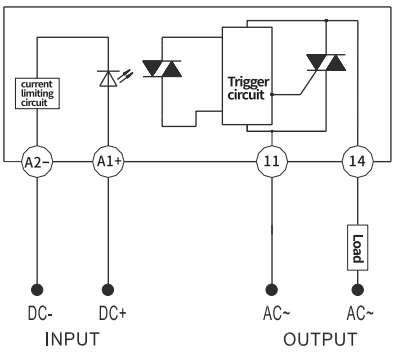
Note:

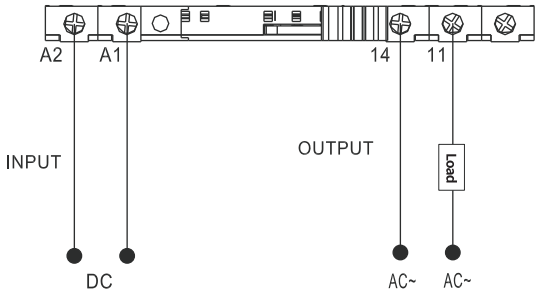
1.When welding and installing the printed substrate, please complete the welding within 8 seconds at 260℃ welding temperature (no more than 2 seconds for each pin).
2.The positive and negative polarity of input and output shall not be connected wrongly, otherwise it is easy to damage the product.
3.The 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.

RSCA

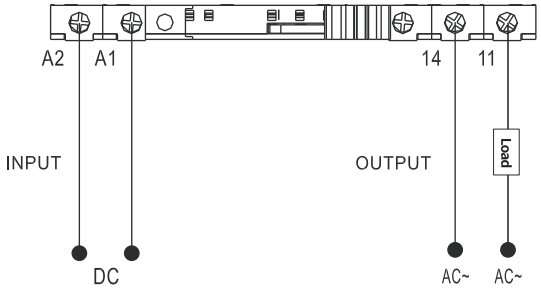
Solid State AC Slim Relay

Wiring Diagrams



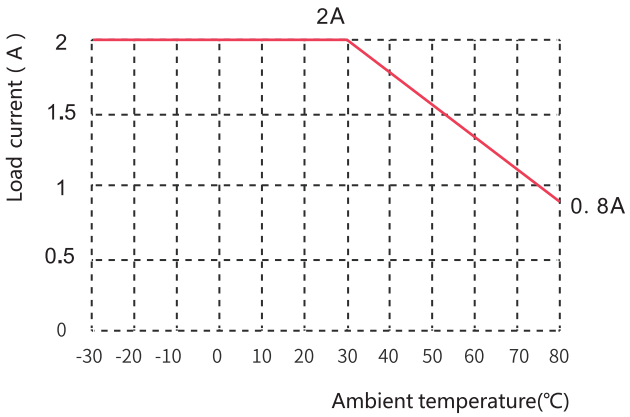


WITH SOCKET SNC05-E-A

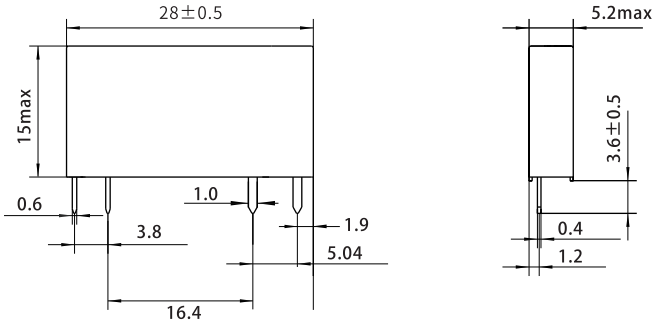


WITH SOCKET SNB05-E-A&SNB05-ST-A

Contact Specification



Dimension(mm)



RSCD

Solid State DC Slim Relay

RSC D 06 □ □

- Load current
  1:1 A
  3:3 A
- Control Voltage range
  D:4-28VDC
  E:15-28VDC
- Rated load voltage
  06:60VDC
- Load type
  D: DC load
- Series name



Relay

+



Socket

=



Relay Module

Product performance

Input parameter(Ta=25℃)				
Part No.	RSCD06D1	RSCD06D3	RSCD06E1	RSCD06E3
Control voltage range	4~28VDC		15~28VDC	
Must turn-on voltage	4VDC		15VDC	
Must turn-off voltage	1VDC		5VDC	
Control current range	20mA			

Output parameters(Ta=25℃)				
Part No.	RSCD06D1	RSCD06E1	RSCD06D3	RSCD06E3
Rated load voltage	60VDC			
Load voltage range	5~60VDC			
Peak withstand voltage	100VDC			
Load current range	0.002~1A		0.002~3A	
Non-repetitive surge current (within 10ms)	16A		30A	
Maximum on-state voltage drop (at rated current)	≤1.3V		≤0.1V	
Maximum off-state leakage current (at rated voltage)	≤0.1mA			
Maximum turn-on time	≤1ms			
Maximum turn-off time	≤1ms			
Load current safety factor	40~60%			

Other parameters(Ta=25℃)	
Dielectric withstand voltage (Input / Output,50Hz/60Hz)	2500VAC
Insulation resistance(@500VDC)	1000MΩ
Operating temperature range	-30℃~+80℃
Storage temperature range	-30℃~+100℃
Operating ambient humidity range	35~85%RH (No condensation)
Weight	approx. 4g

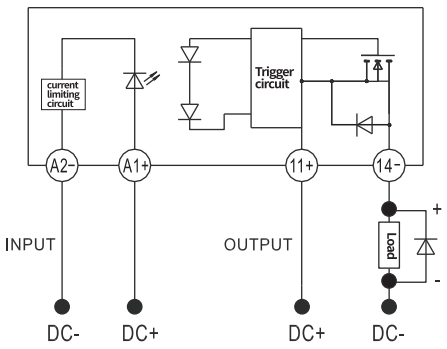
Note:

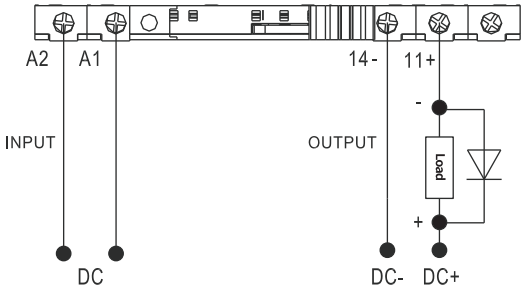
1.When welding and installing the printed substrate, please complete the welding within 8 seconds at 260℃ welding temperature (no more than 2 seconds for each pin).
2.The positive and negative polarity of input and output shall not be connected wrongly,otherwise it is easy to damage the product.
3.The 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.
5.When connecting inductive load, be sure to reverse parallel the freewheeling diode at the load end (see the wiring diagram for the specific connection method)!

RSCD

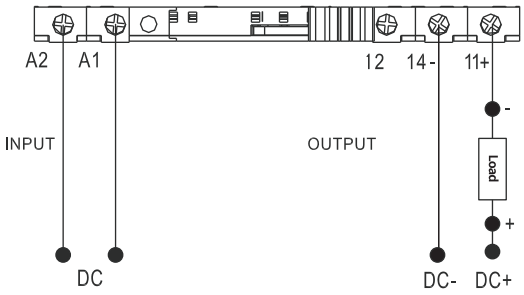
Solid State DC Slim Relay

Wiring Diagrams

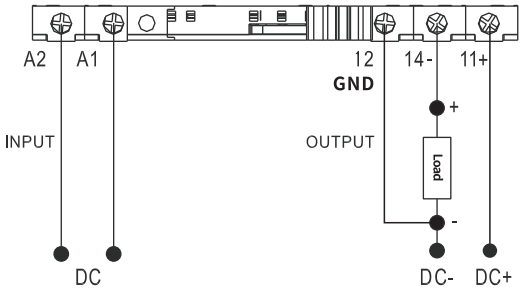




WITH SOCKET SNC05-E-A
For Resistive Load

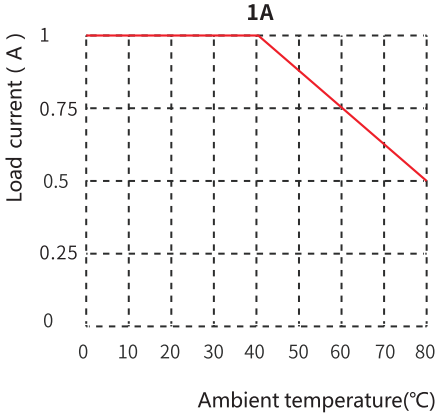


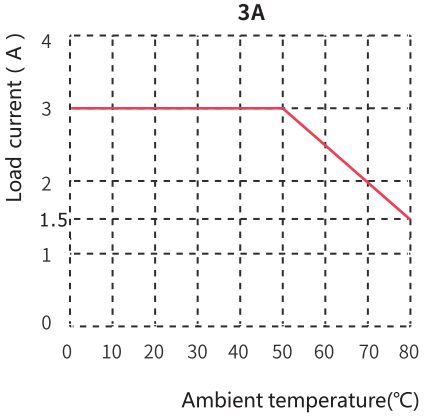
WITH SOCKET SNB05-E-A &SNB05-ST-A
&SNB05-ST-A T



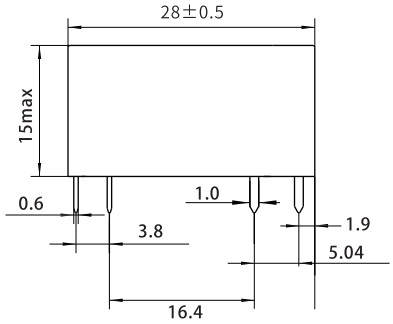
WITH SOCKET SNB05-E-A D
&SNB05-ST-A D
For Inductive Load

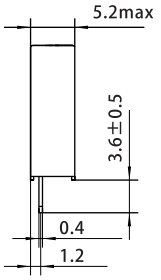
Contact Specification





Dimension(mm)

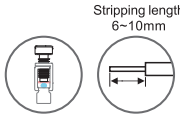




SNB05-E-A

Solid state slim relay socket

Characteristics





SNB05-E-A D

Model No.	Input	Relay
SNB05-E-A	6~24VDC	4~28VDC
★ SNB05-E-A D	6~24VDC	4~28VDC
★ SNB05-E-A T	6~24VDC	4~28VDC

★ SNB05-E-A D, output with diode
★ SNB05-E-A T, output with TVS

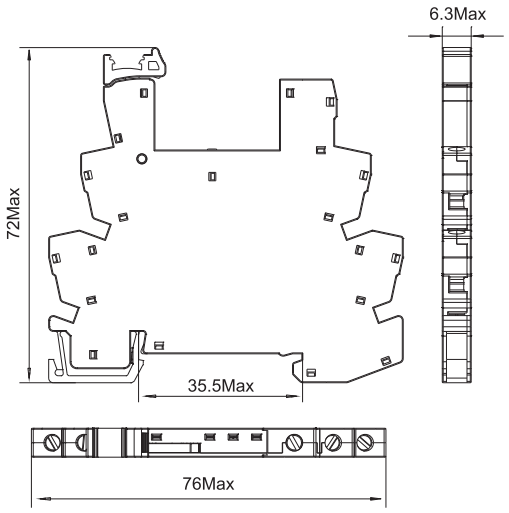
Characteristics

Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Input/Output	V/min	2000
Max. tightening torque		Nm	0.5
Wire size		AWG/mm^2	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	19.5

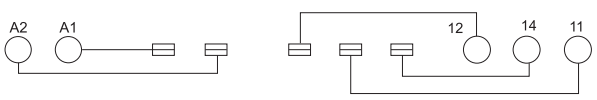
Accessories

Bus jumper	ID tag
	
SN20A	SN64P

Dimensions (mm)



Connection Diagrams



SNB05-ST

Solid state slim relay socket

Characteristics

Model No.	Input	Relay
SNB05-ST-A	6~24V	4~28VDC
★SNB05-ST-A D	6~24V	4~28VDC
★SNB05-ST-A T	6~24V	4~28VDC

★ SNB05-E-A D, output with diode
★ SNB05-E-A T, output with TVS





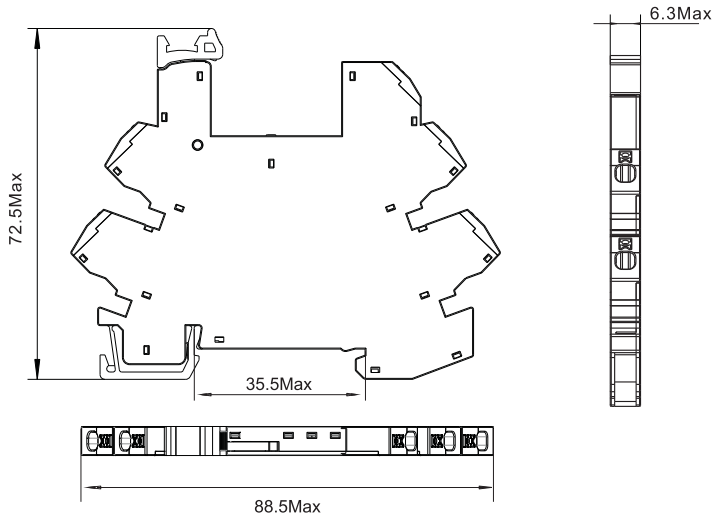
SNB05-ST-A

Characteristics			
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Input/Output	V/min	2000
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	19.5

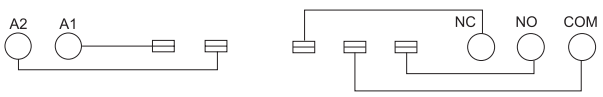
Accessories

Bus jumper	ID tag
	
SN20A	SN64P

Dimensions (mm)



Connection Diagrams



SNC05-E-A

Solid state slim relay socket

Characteristics



SNC05-E-A

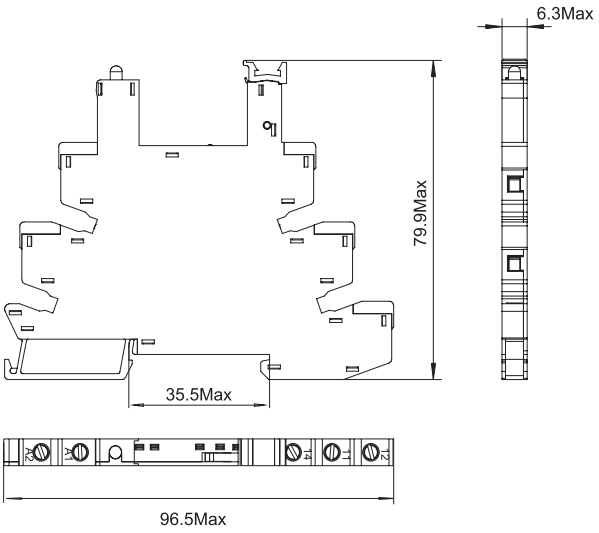
Model No.	Input	Relay
SNC05-E-A	6~24VDC	4~28VDC

Characteristics			
Nominal load	Current	A	8
	Voltage	V	300
Dielectric strength	Input/Output	V/min	2000
Max. tightening torque		Nm	0.5
Wire size		AWG/mm²	20-16/0.5-1.5
Ambient temperature		℃	-40~+85
Unit weight		g	24

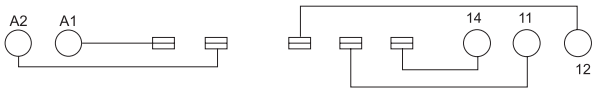
Accessories

Bus jumper	ID tag	Partition plate
 SN20B	SN64P	 SN20S

Dimensions (mm)



Connection Diagrams



SNC05-P1

Solid state slim relay socket

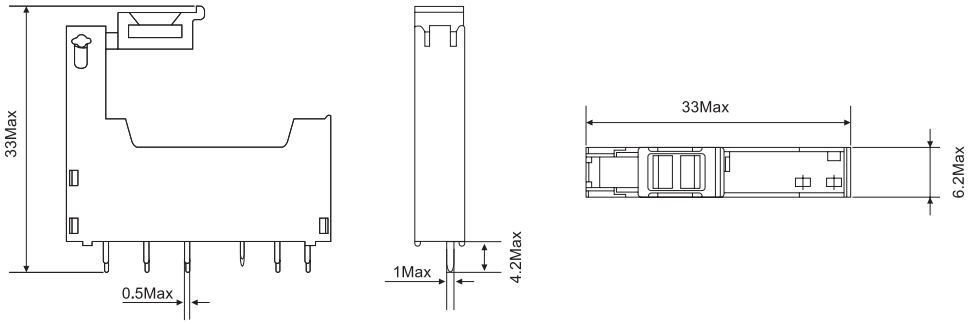
Product performance

SNC05-P1

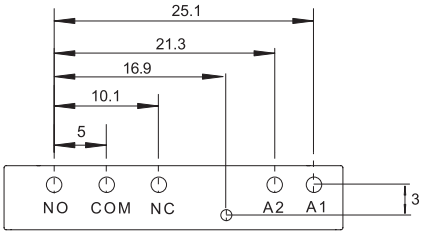


Nominal load	Current	A	6
	Voltage	V	300
Dielectric strength	Input/output	V/min	2500
Ambient temperature		℃	-40~+85
Unit weight		g	2.6

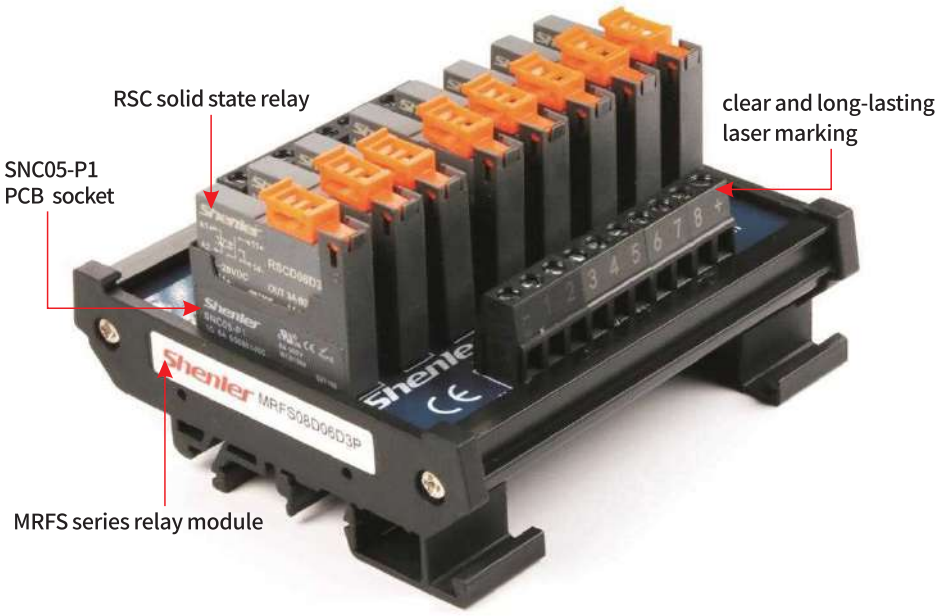
Dimension (mm)



Wiring Diagram



Physical drawing of product application



RSD

AC DC Solid state relay

- 1 N/O SPST DC AC output
- No contact, no spark, long service life
- MOSFET output is used for DC, and TRIAC or SCR output is used for AC, with fast switching response
- Using optocoupler isolation, high isolation voltage
- Wide control voltage range, LED indicator
- Optional IP20 protective cover, panel mounting
- Widely used in constant temperature systems, temperature regulation, electricfurnace heating control, CNC machinery, solenoid valves, motor control, etc.



Metal cooling base plate

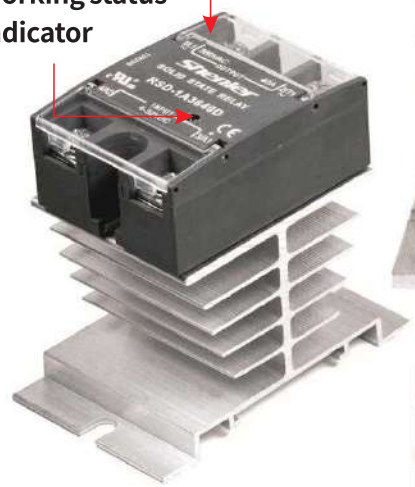
The back adopts thickened metal plate; smooth surface helps fast cooling and avoid overheat.

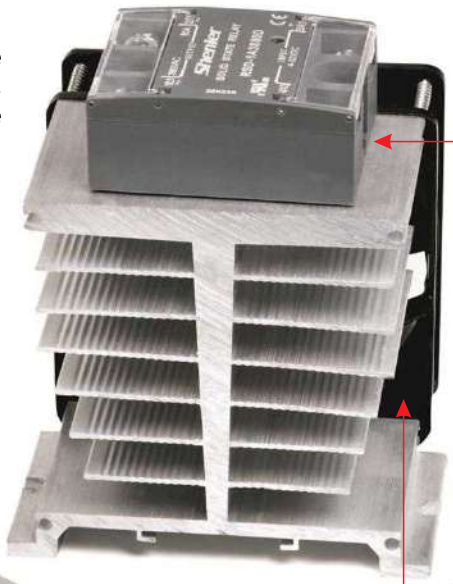


Transparent protective cover

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

Working status indicator









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)

RSD-1D

DC Solid state relay





Relay

RSD 1 D □ □ D □

Options
T:TVS

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

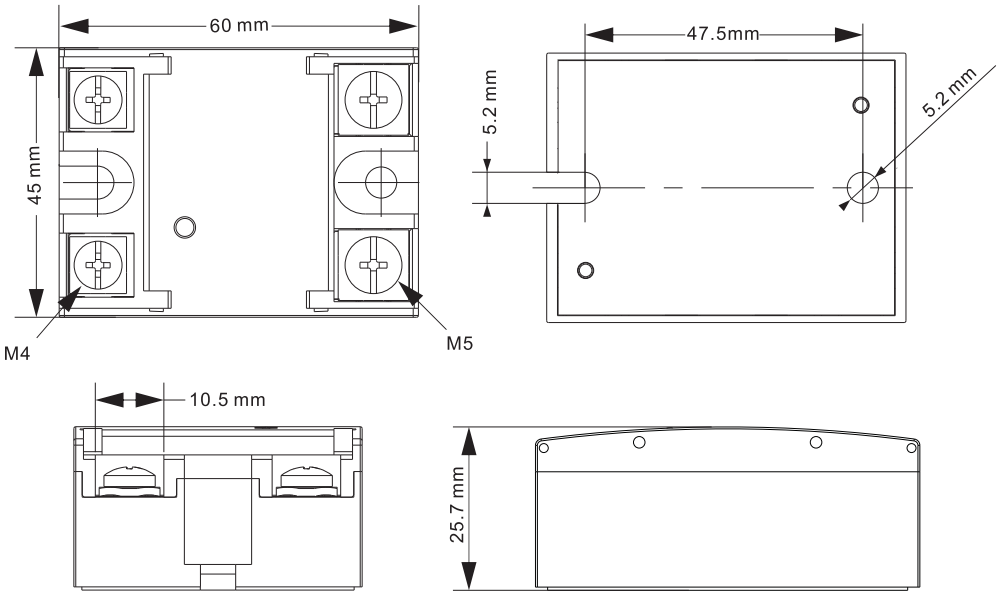
Input parameter (Ta=25℃)													
Control voltage range	4~32VDC												
Must ON voltage	4VDC												
Must OFF voltage	1VDC												
Control current range	6~20mA												
Output parameters (Ta=25℃)													
Part No.	RSD-1D06xxD					RSD-1D10xxD					RSD-1D20xxD		
Load voltage range(VDC)	7-48					7-75					7-120		
Blocking voltage(VDC)	60					100					200		
Maximum load current(A)	20	40	60	80	100	20	40	60	80	100	20	40	60
Maximum surge current (Apk,@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℃)													
Dielectric withstand voltage (50/60Hz)	Between Input and Output	2500Vrms											
	Input/Output to base	2500Vrms											
Insulation resistance(@500VDC)	1000MΩ												
Operating temperature range	-30℃~+80℃												
Storage temperature range	-40℃~+100℃												
Operating ambient humidity range	35 ~ 85%RH (No condensation)												
Cooling mode	fan forced cooling is added for more than 60A												
Unit weight	approx.90g												

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

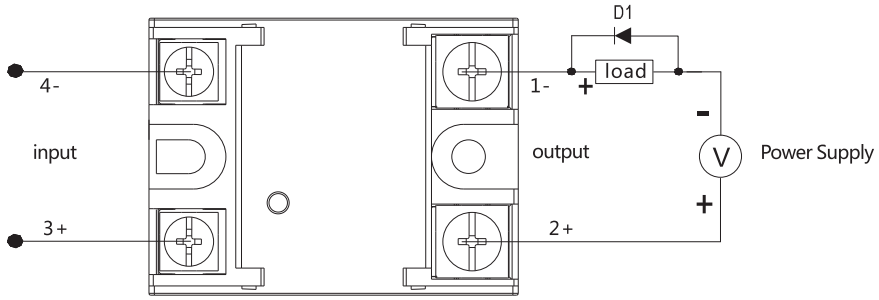
RSD-1D

DC Solid state relay

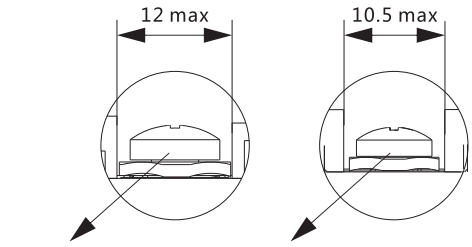
Dimensions (mm)



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)



To use cold rolled copper lugs



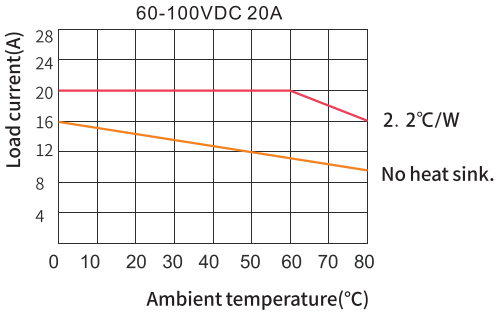
Output screw torque:(1.5-1.8)N·m

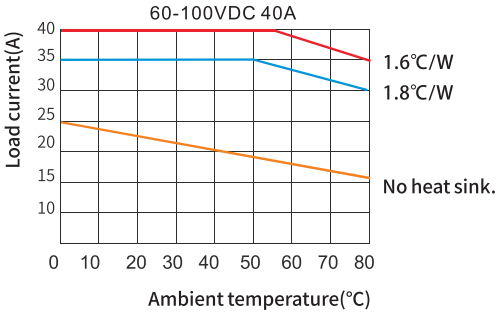
Input screw torque: (1.2-1.4)N·m

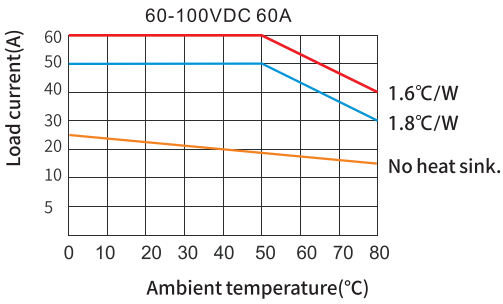
RSD-1D

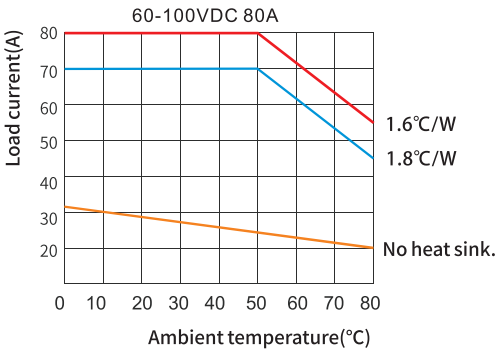
DC Solid state relay

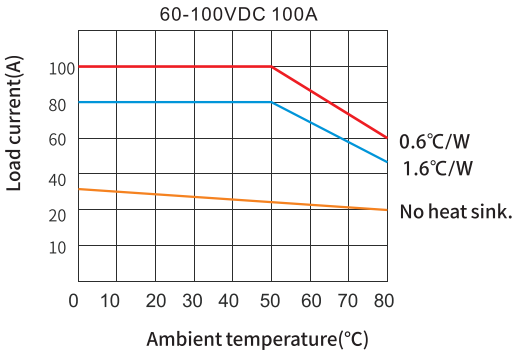
Performance curve

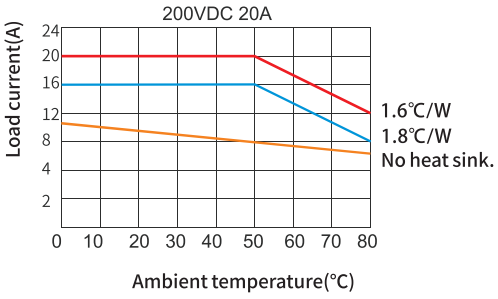


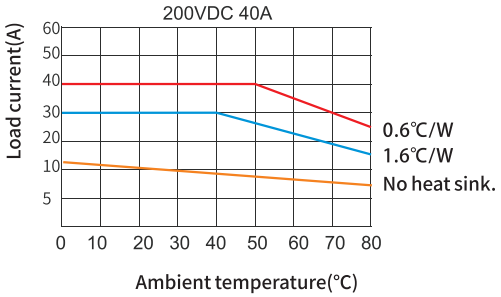


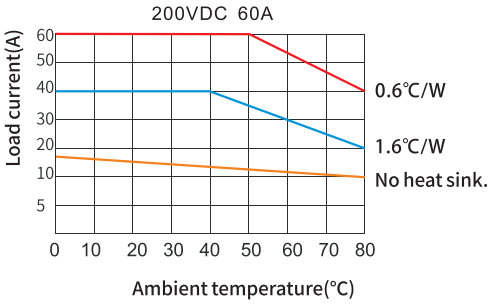












RSD-1D

DC Solid state relay

Current level selection

Considering the load surge current and relay overload capacity, to make the relay work with long life and high reliability, it is recommended to select the current magnification corresponding to the load type in the table below.

Load type	Resistance	Electric heating wire	Incandescent lamp	Transformer/ 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 installation: 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 ℃, air cooling is needed to ensure that the temperature of the product bottom plate does not exceed 80 ℃.
10. Before installation, maintenance and other operations, be sure to cut off the power supply in case of electric shock!

RSD-1A

AC Solid state relay





Relay

RSD 1 A □ □ □ □ □

Protection type
Blank: RC (standard)
T: TVS

Switching mode
Blank: Zero voltage switching
R:Random switching

Control voltage (input) range
D:4-32V DC control
A:90-280V AC control
E: 18-36VAC/DC control

Max. load current
10：10A
15：15A
25：25A
40：40A
60：60A
80：80A

Rated load voltage
38：380VAC
48：480VAC

Load type
A: AC

1: Single phase

Series name

Current level selection

Considering the load surge current and the overload capacity of the relay, so that the relay can work with long life and high reliability, it is recommended to select the current amplification factor corresponding to the load type in the following table.

Load type	Resistance	Electric heating wire	Incandescent lamp	Transformer /Electromagnet
Power factor	1.0	0.7	0.5	0.4
Magnification	1.5	2	2.5	4

Load type	Single phase motor	Three phase motor	Capacitor
Power factor	0.2	0.3	surge
Magnification	7	6	10

Voltage option

Load type	240V resistive or inductive load	380V resistive load	380V inducutive load	Capacitor load
Voltage	380V		480V	

RSD-1A

AC Solid state relay

Product performance

Input parameter (Ta=25℃)

Part No.	RSD-1AxxxxD	RSD-1AxxxxDR	RSD-1AxxxxA	RSD-1AxxxxAR
Control voltage range	4~32VDC		90~280VAC	
Must ON voltage	4VDC		90VAC	
Must OFF voltage	1VDC		10VAC	
Control current range	6~25mA		6~20mA	
Maximum opening time	1/2cycle	1ms	20ms	
Maximum closing time	1/2cycle	10ms	30ms	

Part No.	RSD-1AxxxxE	RSD-1AxxxxER
Control voltage range	18-36VAC/DC	
Must ON voltage	18VAC/DC	
Must OFF voltage	4VAC/DC	
Control current range	6-20mA	
Maximum opening time	20ms	
Maximum closing time	30ms	

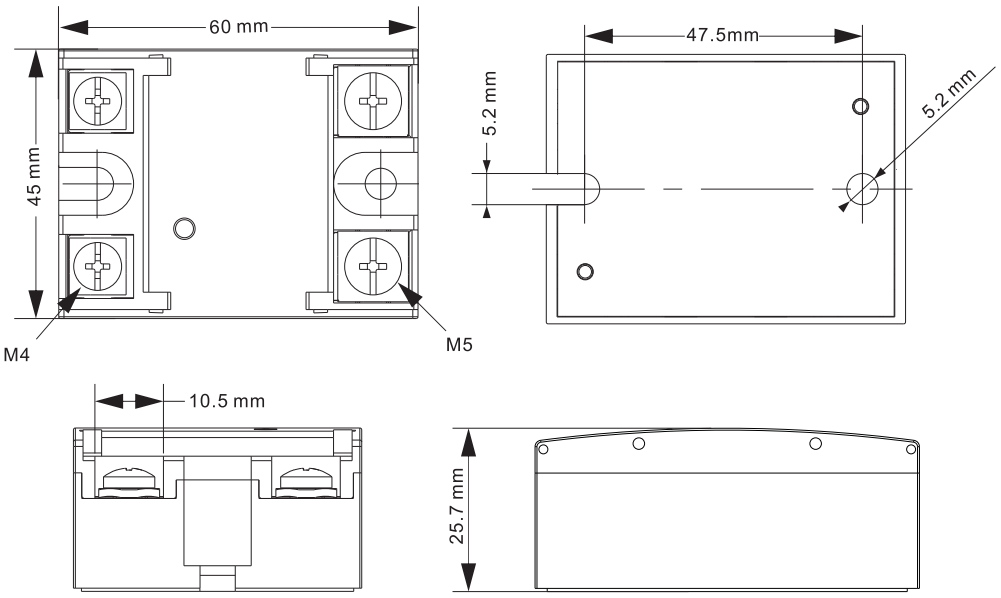
Input parameter (Ta=25℃)						
Part No.	RSD-1A38xxxx			RSD-1A48xxxx		
Rated load voltage (47-63Hz)	380VAC			480VAC		
Load voltage range	24-440VAC			40-530VAC		
Transient Overvoltage	800Vpk			1200Vpk		
Critical rise rate of open-state voltage dv/dt	500V/μs					
Minimum load current	150mA					
Maximum open-state leakage current (at rated voltage)	10mA					
Maximum conduction voltage drop (at rated current)	1.5V					
Maximum load current	10A	15A	25A	40A	60A	80A
Maximum surge current [@ 10ms]	120A	160A	250A	500A	700A	1000A
Maximum I^2T value [@ 10ms]	$80A^2s$	$112A^2s$	$312A^2s$	$800A^2s$	$1800A^2s$	$5000A^2s$

Other parameters (Ta=25 ℃)		
Dielectric withstand voltage (50/60Hz)	Input/Output	4000Vrms
	Input,output/base	2500Vrms
Insulation resistance(@500VDC)	1000MΩ	
Operating temperature range	-30℃~+80℃	
Storage temperature range	-40℃~+100℃	
Operating ambient humidity range	35 ~ 85%RH (No condensation)	
Cooling mode	fan forced cooling is added for more than 60A	
Unit weight	approx.100g	

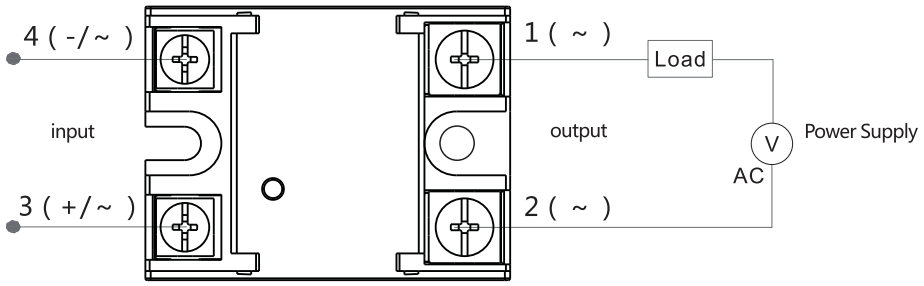
RSD-1A

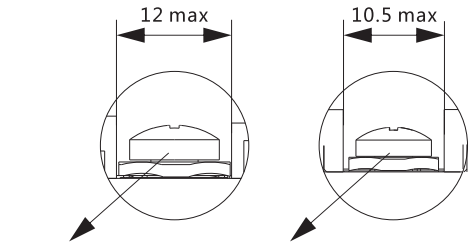
AC Solid state relay

Dimensions (mm)



Wiring Diagrams





To use cold rolled copper lugs



Output screw torque:(1.5-1.8)N·m

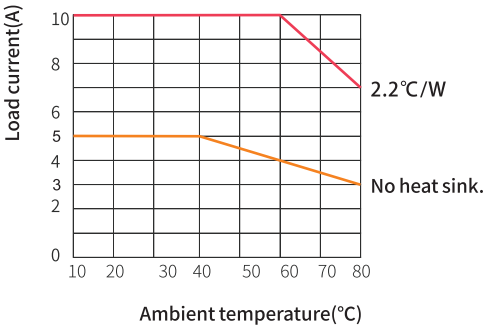
Input screw torque: (1.2-1.4)N·m

RSD-1A

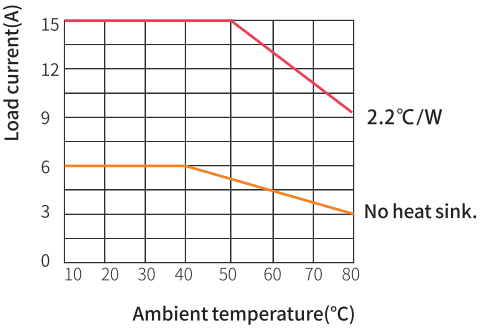
AC Solid state relay

Performance curve

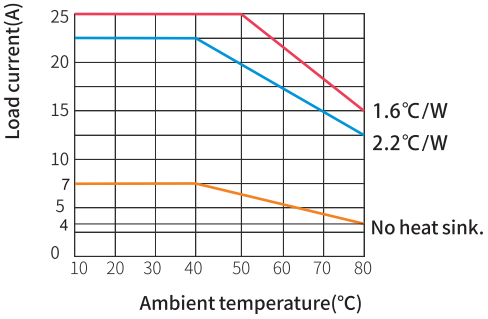
10A



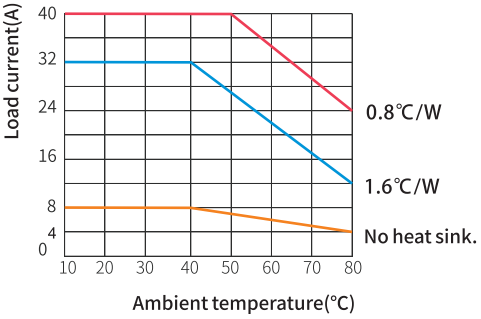
15A



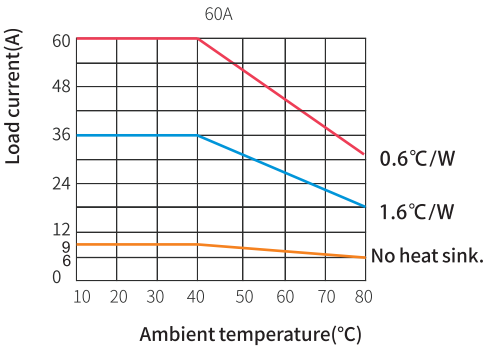
25A



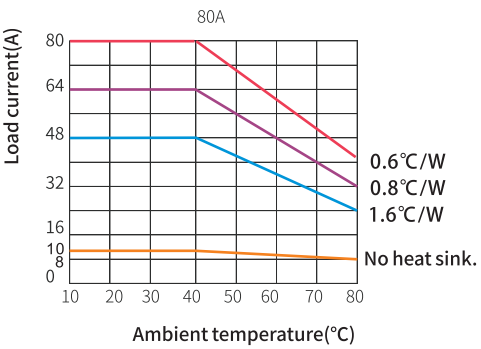
40A



60A



80A



RSD-1A

AC Solid state relay

Matters needing attention

1. Please be sure to set fast fuse, air switch and other protective equipment on the power supply side to prevent short circuit. The principle of selecting the current level of the breaker is slightly greater than the load current. Resistive load and inductive load should be protected by fast fuse, and motor, power compensation capacitor and other loads should be protected by air switch.
2. When the solid-state relay (hereinafter referred to as SSR) works below - 20 ℃, the minimum control voltage needs to be increased by 1V.
3. Selection of SSR: For AC load and most AC inductive load, zero-crossing SSR shall be selected; For 380V inductive load and capacitive load, it is recommended to use 480V zero-crossing trigger SSR; It is used as phase output control or optional when the frequency is high.
4. Overvoltage protection selection: built-in RC absorption circuit (standard configuration); Built-in transient voltage suppression diode TVS.
5. Installation between SSR and radiator: select the matching radiator (thermal resistance shall be as small as possible), and evenly coat the SSR base plate with thermal conductive silicone grease orPlace the silicone pad, use M5 screws and spring washers, and tighten them with 2N. m torque. After 3 hours of use, tighten them with the same torqueTimes. To ensure that the SSR base plate is in close contact with the radiator and installed firmly.
6. The product wiring should use standard wire, the sectional area can be selected according to 5-8A per square millimeter, and the terminal should ensure that the wiring is firm and looseIt will cause abnormal heating of the product and damage the product. In case of high temperature and high humidity environment, conductive paste should also be applied to the connection part.
7. Input terminal adopts M4 screw, wiring tightening torque is (1.2-1.4) N.m, output terminal adopts M5 screw, wiring tightening torqueIs (1.5-1.8) N.m
8. Please do not connect the current above the rated specification. Otherwise, abnormal heat of SSR may be caused.
9. Do not apply voltage exceeding the rated value on the input circuit and output circuit, otherwise it will cause SSR failure or burning.
10. Requirements for installation conditions: it should be installed vertically on the case with good ventilation conditions, and make full use of the heat dissipation conditions of air convection. When two or more SSRs are installed side by side, there should be an appropriate large gap.
11. The SSR needs to install a radiator. Refer to the product derating curve.Fan forced cooling is added for more than 60A, air cooling should also be used. In order to prevent the SSR from overheating and damage, a temperature control switch of 80 ℃ can be installed on the radiator in series in the control circuit for protection.



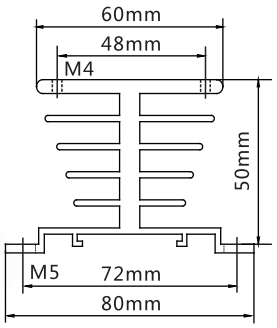
12. Warning! During installation, maintenance and other operations, be sure to cut off the power supply before installation or maintenance. In case of electric shock!

KSR-1

Single phase heat sink

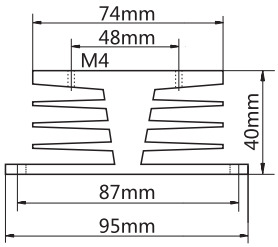
- Selection of heat sink: select the heat sink corresponding to thermal resistance according to "Performance curve" of solid-state relay . The smaller the thermal resistance value, the better the heat dissipation effect. >>>>>





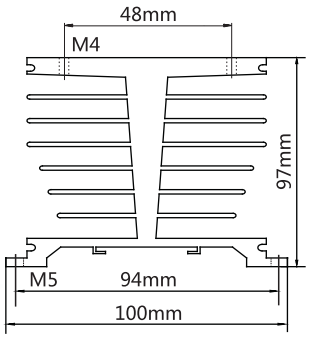
Part No.	L x W x H	Weight≈	Thermal resistance
KSR-1A-50	50×80×50	70g	2.2℃/W





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

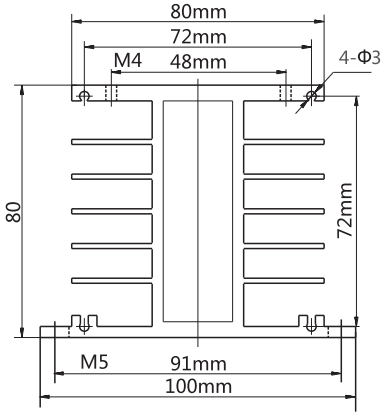




Part No.	L x W x H	Weight≈	Thermal resistance
KSR-1T-50	50×100×97	324g	1.6℃/W
KSR-1TF-76	76×100×97	580g	0.6℃/W

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





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

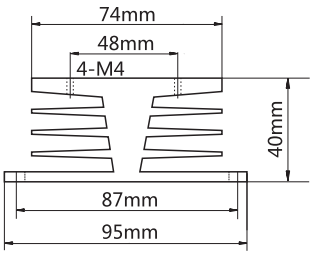
Note: the length of KSR-1HF-76 with fan is 76mm

KSR-3

Three phase heat sink

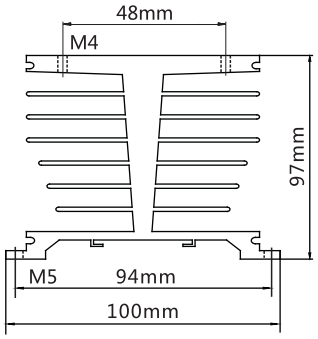
- Installation: Evenly coat the bottom plate of the solid-state relay with thermal grease or place a silicone pad, then install and tighten the screws.





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

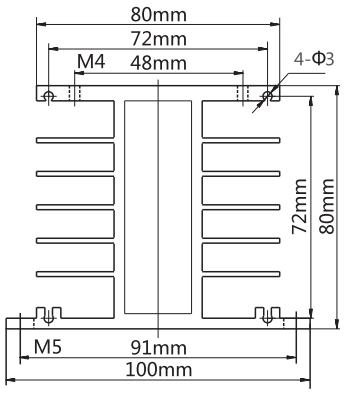




Part No.	L x W x H	Weight≈	Thermal resistance
KSR-3T-110	110×100×97	750g	0.8℃/W
KSR-3TF-136	136×100×97	1100g	0.35℃/W

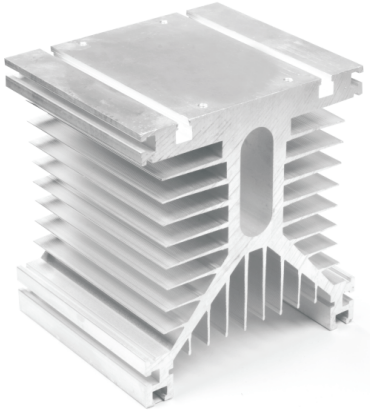
Note: the length of KSR-3TF-136 with fan is 136mm.

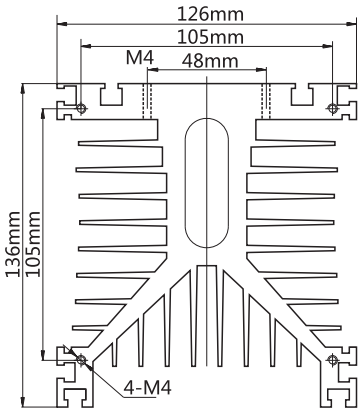




Part No.	L x W x H	Weight≈	Thermal resistance
KSR-3H-110	110×100×80	460g	1℃/W
KSR-3H-150	150×100×80	630g	0.8℃/W
KSR-3HF-136	136×100×80	670g	0.5℃/W
KSR-3HF-176	176×100×80	840g	0.4℃/W

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





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

The length of fan is 38mm.

TKB
Timer Relay

- Built-in dedicated timing IC chip, accurate timing
- Equipped with power and action status indicator
- Laser marking, clear and durable
- Adjustment plate positioning buckle design, shockproof
- Comply with IEC60947-5-1:2016

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 SK52M.



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

CE

TKB
Timer Relay



Relay

+



Socket

=



Relay module

TKB 2 B 230A 5S

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

Supply voltage
120A: 120VAC
230A: 230VAC
24D: 24VDC

Function
B: On-delay
E: Interval time-delay opeartion
F: Repeat-cycle off time delay

Terminal Type
2: 2CO
4: 4CO

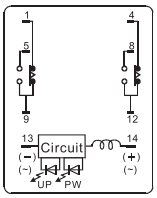
Series name

Characteristics

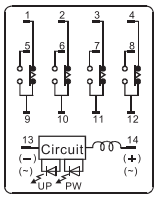
Configuration		TKB2B	TKB2E	TKB4B	TKB4E
Rated supply voltage		120VAC, 230VAC 50/60Hz; DC24V			
Operating voltage range		Rated voltage 85-110% (90%-110% is DC12V)			
Power consumption		3.5W			
Max.output load		5A, 250 VAC (p.f.=1)		3A, 250 VAC (p.f.=1)	
Min. output load		10 mA, 17 VDC			
Repetitive error		±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 circuit1500V 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			
	Malfunction	10~55Hz with 0.5mm single amplitude each in 3 directions for 10 minutes each			
Shock resistance	Destruction	30G			
	Malfunction	10G			
Storage temperature		-55~+85℃/ 5%~68%RH (18 months)			
Ambient temperature		-10℃~55℃			
Ambient humidity		35~85%RH (No condensation)			
Life expectancy	Mechanical	$>10^7$ (under no load, at 1,800 operations/hour)			
	Electrical	$>10^5$			
Unit weight		approx. 60g			

TKB
Timer Relay

Wiring Diagrams



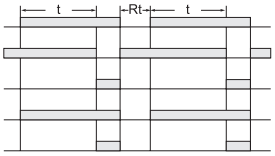
TKB2B TKB2E



TKB4B TKB4E

Timing charts

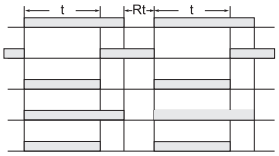
Power13-14
Time-limit contact (NC)9-1、12-4
Time-limit contact (NO)9-5、12-8
Power indicator
Output indicator



TKB2B

NOTE: t :set time, Rt: reset time

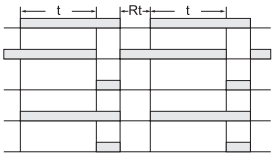
Power13-14
Time-limit contact (NC)9-1、12-4
Time-limit contact (NO)9-5、12-8
Power indicator
Output indicator



TKB2E

NOTE: t :set time, Rt: reset time

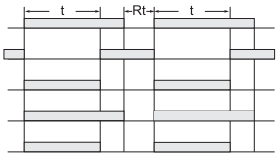
Power13-14
Time-limit contact (NC)9-1、10-2、
11-3、12-4
Time-limit contact (NO)9-5、10-6、
11-7、12-8
Power indicator
Output indicator



TKB4B

NOTE: t :set time, Rt: reset time

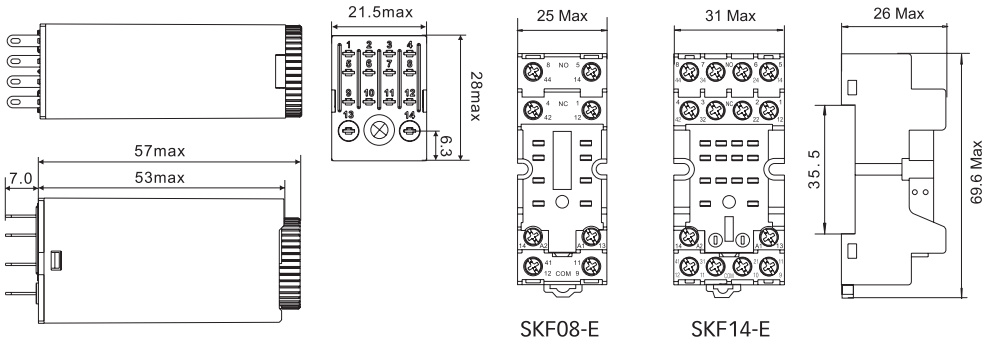
Power13-14
Time-limit contact (NC)9-1、10-2、
11-3、12-4
Time-limit contact (NO)9-5、10-6、
11-7、12-8
Power indicator
Output indicator



TKB4E

NOTE: t :set time, Rt: reset time

Dimensions(mm)



SKF08-E SKF14-E

MRFC1
Relay Module

Application

It is used for PLC output load current amplification and isolation protection. It is installed in the digital output terminal of PLC, MCU industrial control board, time relay, button and other controllers. It amplifies the output current of the output terminal for high-power equipment and weak current control. In such occasions, to protect the control system core is not destroyed.

Characteristics

- Built-in RNC1CO series relay. It conforms to
- Quick installation of 35mm U-type and E-type industrial DIN rail
- DC input with diode freewheeling protection, input with LED display
- Input NPN and PNP compatible
- Supports customization, please consult our staff for more module models



MRFC 1 □ □

Coil voltage
012: 12VDC
024: 24VDC

Relay digitals
2 ~ 32 (even)

Contact form
1NC - 1NO

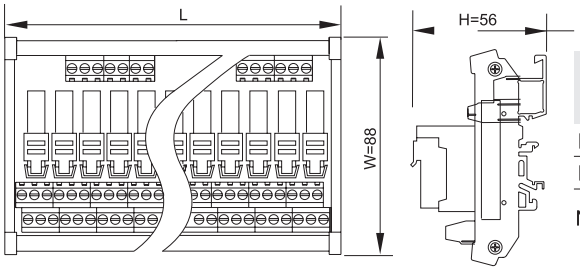
Series name

RoHS

MRFC1
Relay Module

Technical Parameters (MRFC1 Series)	
Input (Coil)	
Norminal input voltage	DC 12V / DC 24V
Norminal current	48mA / 26mA
Minimum start voltage	DC12V: 90%Ue; DC24V: 85Ue
Drop-out voltage	DC: 10%Ue; AC: 30%Ue
Start time	⩽20ms
Drop-out time	⩽10ms
Output (Contact)	
Contact structure	1 NC - 1 NO / SPDT (Single pole double throw)
Resistive load	6A / 250 VAC, 30 VDC
Motor resistive	1 / 3HP, 240VAC
Minimum applicable load	5VDC / 100mA
Electrical durability	≥6 x 10^4Cycles (1800 Ops/h)
Mechanical durabilty	≥2000 x 10^4Cycles (1800 Ops/h)
Material	Ag alloy
General Data	
Power per group	DC about 0.6W; AC about 1W
Action display	LED display
Ambient tempreture	-40 ~ + 55℃ (No icing)
Ambient humidity	5 ~ 85% RH (No condensation)
Terminal wiring specication	0.2 ~ 2.5mm² (26 ~ 12WG)
Torque	0.4Nm
Stripping length	6 ~ 8mm

Dimensions (mm)



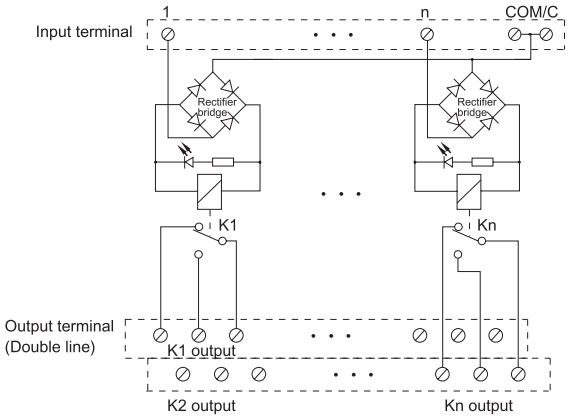
Width=88, Height=56,
Length see the table below (mm)

Digit	04	08	16	32
L	40	70	137	272

Note: Any other digits can be customized.

Wiring Diagrams

1. 2...n is the input control terminal for each bit, and COM/C is the common terminal



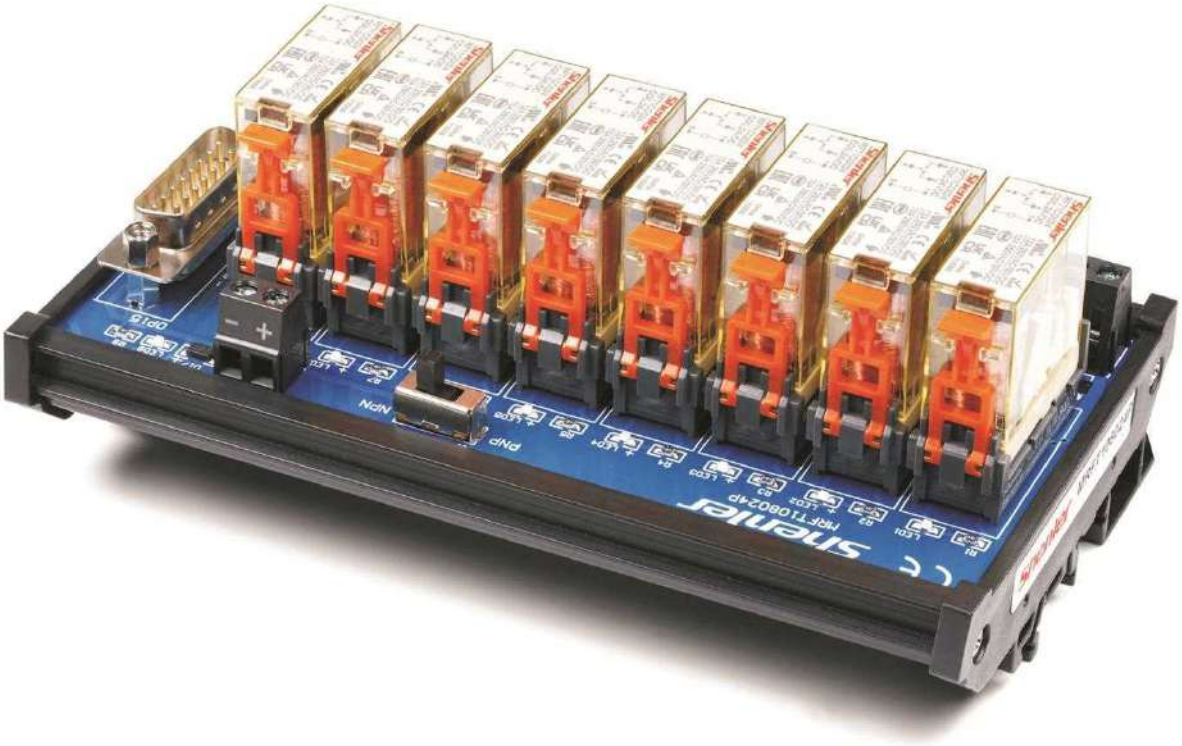
MRFT1
Relay Module

Application

It is used for PLC output load current amplification and isolation protection. It is installed in the digital output terminal of PLC,MCU industrial control board,time relay, button and other controllers. It amplifies the output current of the output terminal for high-power equipment and weak current control. In such occasions, to protect the control system core is not destroyed.

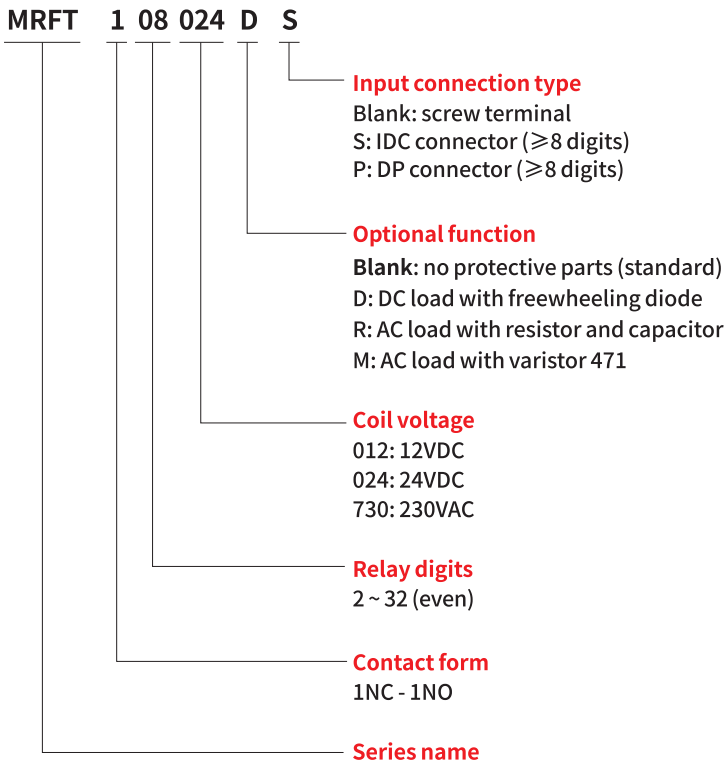
Characteristics

- Built-in RFT1CO series relay. It conforms to
- The output end can optionally be equipped with additional protection absorbing devices such as resistors and capacitors, freewheeling diodes, and overvoltage protection absorbing devices.
- Quick installation of 35mm U-type and E-type industrial DIN rail
- DC input with diode freewheeling protection, input with LED display
- Input NPN and PNP compatible
- Supports customization, please consult our staff for more module models



RoHS

MRFT1
Relay Module

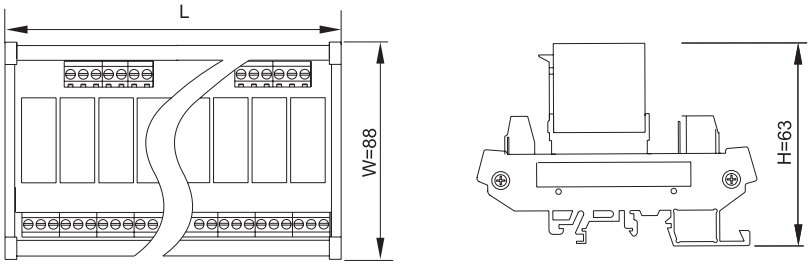


Note: When DC load with freewheeling diode, the contact is 1 NO (normally open)

Technical Parameters	
Input (Coil)	
Norminal Input Voltage	DC 12V/ DC 24V/ AC 230V
Norminal Current	48mA / 26mA / 4.8mA
Minimum Starting Voltage	DC12V:⩽90%Ue; DC24V:⩽85Ue; AC:⩽80%Ue
Drop-out Voltage	DC:⩾10%Ue; AC:⩾30%Ue
Start Time	≤20ms
Drop-out Time	≤10ms
Output (Contact)	
Contact structure	1NC - 1NO / SPDT (Single pole double throw)
Resistive load	12A / 250VAC, 30VDC
Motor load	1 / 3HP, 240VAC
Minimum appl icable load	5VDC / 100mA
Electrical durability	≥20 x 10^4Cycles (1800 Ops/h)
Mechanical durability	≥2000 x 10^4Cycles (1800 Ops/h)
Material	Ag alloy
General Data	
Power per group	DC about 0.6W; AC about1W
Action display	LED display
Ambient temperature	-40 ~ + 55℃ (No icing)
Environment humidity	5 ~ 85% RH (No condensation)
Terminal wiring specification	0.2 ~ 2.5mm^2 (26 ~ 12WG)
Torque	0.4Nm
Stripping length	6 ~ 8mm

MRFT1
Relay Module

Dimensions (mm)



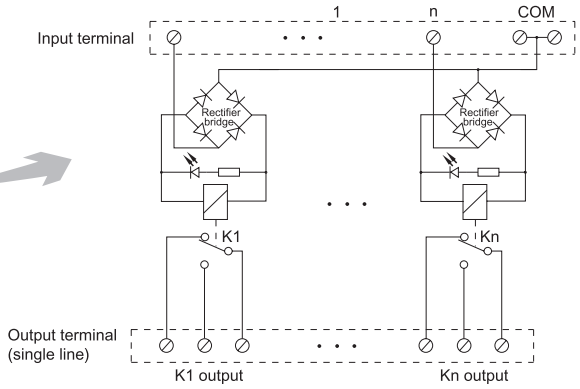
Length see the table below (mm)													
Digit	02	04	06	08	10	12	14	16	18	20	22	24	32
L(MRFT)	41	71	101	131	162	199	229	252	290	320	350	380	501
Digit					08	16							
L(MRFTP, DP connector input)					149	274							

Note: Any other digits can be customized

Wiring Diagrams

MRFT1/ MRFG1 (output without protection parts, suitable for AC/DC loads)

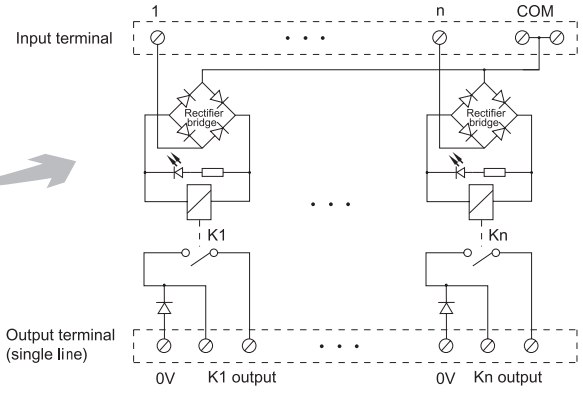




MRFT1D/ MRFG1D (output with freewheeling diode, suitable for DC load)





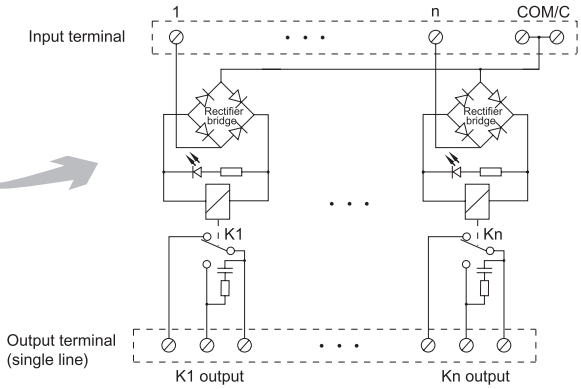


MRFT1
Relay Module



MRFT1R/ MRFG1R (output with resistor and capacitor absorption, suitable for AC load)

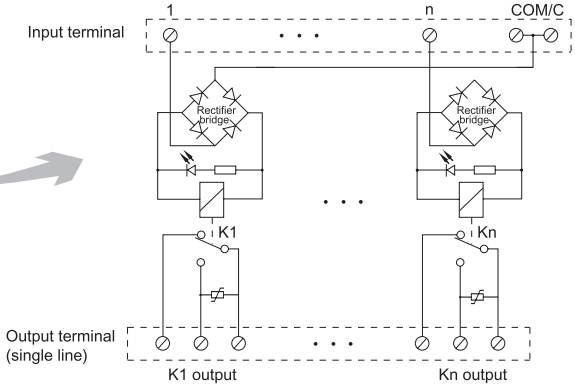






MRFT1M/ MRFG1M (output with varistor 471, suitable for AC load)



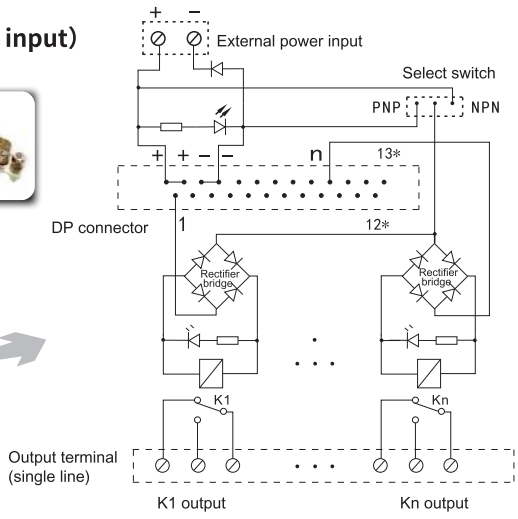


Note: The above schematic diagram is a circuit diagram for control voltage of DC 24V and below. For control voltage AC 230V, there is no rectifier bridge inside. 1, 2...n is the input control terminal for each bit, and COM/C is the common terminal.

MRFT1P series (DP connector DC24V input)







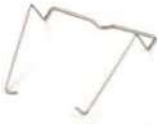
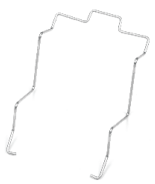
Note: The numbers marked in the location * are subject to the silk screen markings on the circuit board.

Accessory Series

SR15L	SR20T	SR20U	SR20F	SR25C	SK28L	SK36F	REH-DA
							
SRC/SRB	SRU	SRU	SRC/SRB	SRC/SRB	SKB/SKC	SKB/SKC	REH

SR2P	SK2P	SU3P	SK4P	SN64P	ST01CC	SN20A
						
SRC/SRB/SRU	SKF SEB11-E S	SUB	SKC/SKB	SNC05-E/S SNB05-E/ST	SKC08/14-ST SRU05/08-ST SRC05/08-ST	SNB-E SNB-ST

SN20B	SR08B	SR08C	SY08C	SY10C	SY36S	SR15M	SR2025M
							
SNC05-E/S	SRU05/08-E, SRC05/08-E	SRT05/08-E/-A/-ES	SYF	SYF	SYF	SRC05/08-P	SRC05/08-P

SR27M	SR32M	SK36M	ST36M3C	ST36M4C	SE52M	SK52M	SU60M
							
SRU-E/SRU-ST	SRU-E/SRU-ST	SKC/SKB/SKF STB08-E	STB11-E	STB14-E	SEB11-E/E S/P/PS	SKF	SUB-E

AMD Module

Socket accessories



AMD – □ □ □ □

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

LED
N： red
blank： green

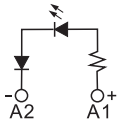
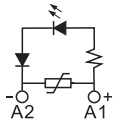
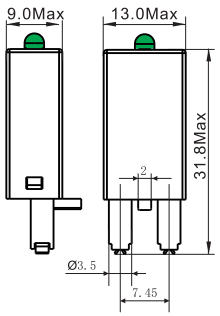
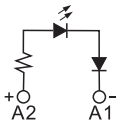
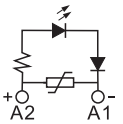
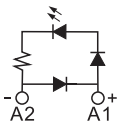
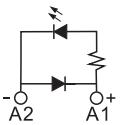
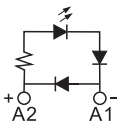
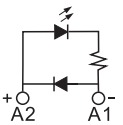
Polarity
blank : A1 - , A2 +
1: A1 + , A2 -

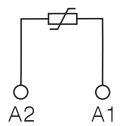
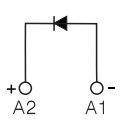
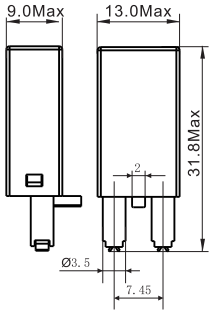
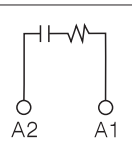
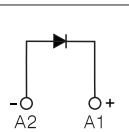
Description
L: LED　　LD: LED+D
LDD:LED+D+D　　ML: LED+varistor+D
M: Varistor　　D: diode　　RC: RC

Series

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

Parameters, Wiring diagrams and Dimensions (mm)

Part No.	Wiring Diagram	Voltage	Function	Part No.	Wiring Diagram	Voltage	Function	Dimensions (mm)
AMD-L1 AMD-L1N		6-24V 24-60V 110-240V	>LED indicator in AC/DC circuit (Polarity A2 - , A1 +	AMD-ML1 AMD-ML1N		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit >LED indicator in AC/DC circuit (Polarity A2 - , A1 +)	
AMD-L AMD-LN		6-24V 24-60V 110-240V	>LED indicator in AC/DC circuit (Polarity A2 +, A1 -)	AMD-ML AMD-MLN		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit >LED indicator in AC/DC circuit (Polarity A2 +, A1 -)	
AMD-LDD1 AMD-LDD1N		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit >LED reverse voltage protection in DC circuit (Polarity A2 - , A1 +)	AMD-LD1 AMD-LD1N		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit (Polarity A2 - , A1 +)	
AMD-LDD AMD-LDDN		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit >LED reverse voltage protection in DC circuit (Polarity A2 +, A1 -)	AMD-LD AMD-LDN		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit (Polarity A2 +, A1 -)	

Part No.	Wiring Diagram	Voltage	Function	Part No.	Wiring Diagram	Voltage	Function	Dimensions (mm)
AMD-M		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit	AMD-D		6-250VDC	>Limit peak voltage in DC circuit (Polarity A2 +, A1 -)	
AMD-RC		6-24VAC 24-60VAC 110-240VAC	> RC absorption in AC circuit	AMD-D1		6-250VDC	>Limit peak voltage in DC circuit (Polarity A2 - , A1 +)	

BMD Module

Socket accessories



c UL us

BMD – □ □ □ □

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

LED
N： red
blank： green

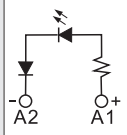
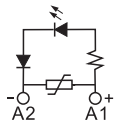
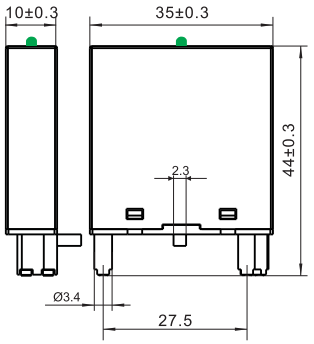
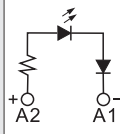
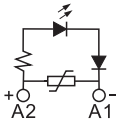
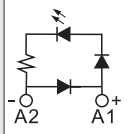
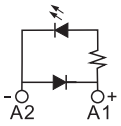
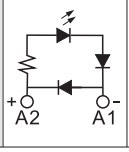
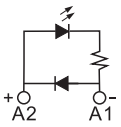
Polarity
blank : A1 - , A2 +
1: A1 + , A2 -

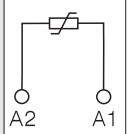
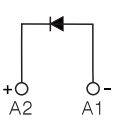
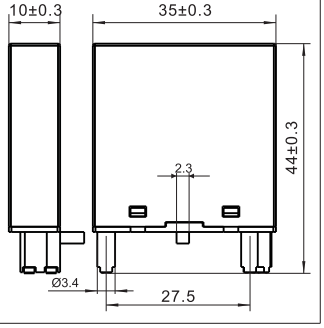
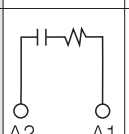
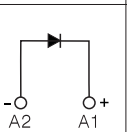
Description
L: LED
LD: LED+D
LDD:LED+D+D
ML: LED+varistor+D
M: Varistor
D: diode
RC: RC

Series

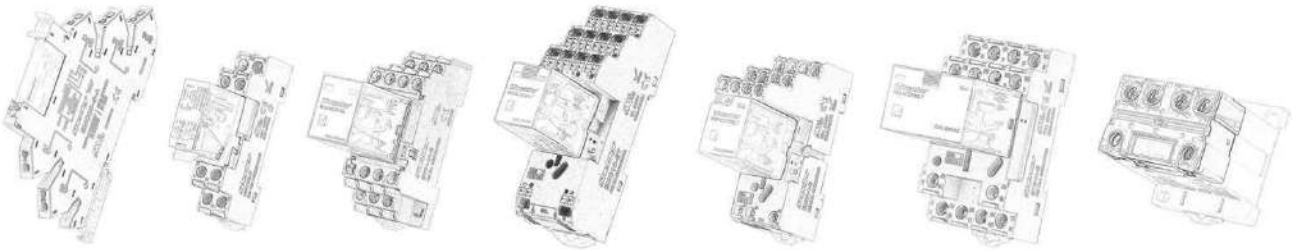
- For surge suppressor
- With LED
- Work with relay socket

Parameters, Wiring diagrams and Dimensions (mm)

Part No.	Wiring Diagram	Voltage	Function	Part No.	Wiring Diagram	Voltage	Function	Dimensions (mm)
BMD-L1 BMD-L1N		6-24V 24-60V 110-240V	>LED indicator in AC/DC circuit (Polarity A2 - , A1 +	BMD-ML1 BMD-ML1N		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit >LED indicator in AC/DC circuit (Polarity A2 - , A1 +)	
BMD-L BMD-LN		6-24V 24-60V 110-240V	>LED indicator in AC/DC circuit (Polarity A2 + , A1 -)	BMD-ML BMD-MLN		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit >LED indicator in AC/DC circuit (Polarity A2 + , A1 -)	
BMD-LDD1 BMD-LDD1N		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit >LED reverse voltage protection in DC circuit (Polarity A2 - , A1 +)	BMD-LD1 BMD-LD1N		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit (Polarity A2 - , A1 +)	
BMD-LDD BMD-LDDN		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit >LED reverse voltage protection in DC circuit (Polarity A2 + , A1 -)	BMD-LD BMD-LDN		6-24VDC 24-60VDC 110-240VDC	>Limit peak voltage in DC circuit >LED indicator in DC circuit (Polarity A2 + , A1 -)	

Part No.	Wiring Diagram	Voltage	Function	Part No.	Wiring Diagram	Voltage	Function	Dimensions (mm)
BMD-M		24V 60V 120V 240V	>Overvoltage protection in AC/DC circuit	BMD-D		6-250VDC	>Limit peak voltage in DC circuit (Polarity A2 + , A1 -)	
BMD-RC		6-24VAC 24-60VAC 110-240VAC	> RC absorption in AC circuit	BMD-D1		6-250VDC	>Limit peak voltage in DC circuit (Polarity A2 - , A1 +)	

Note



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