

Selection manual of industrial control relay

RKE Miniature General Purpose Relay

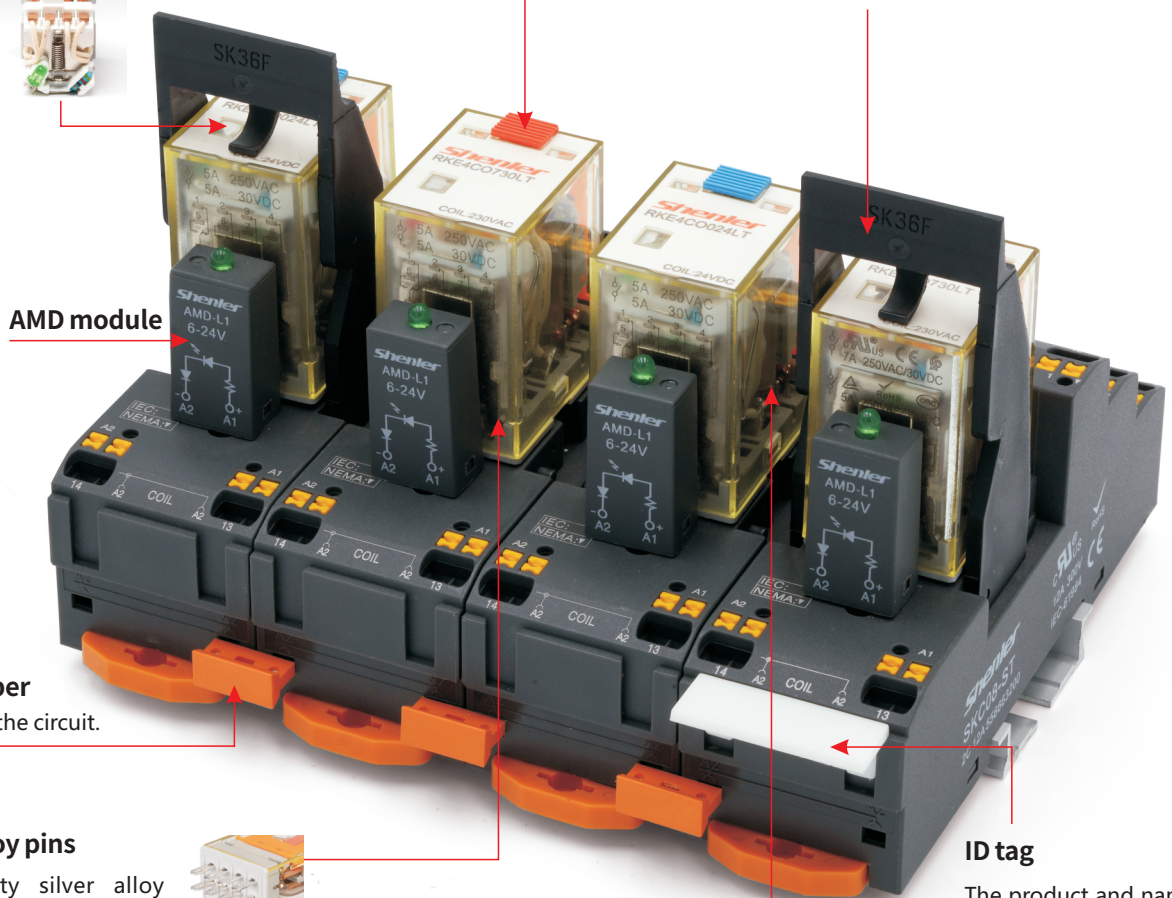
- 2 poles 7A; 4 poles 5A
- With non-polarity LED integrated in relay
- With lockable test button and inspection window
- Identification of coils through test button color (AC red/DC blue)
- Conformity with RoHs Directive



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

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

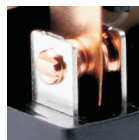
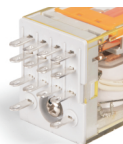
Plastic clip
The relay is firmly attached to the socket by retaining clip.



AMD module

Bus jumper
To extend the circuit.

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



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

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





Relay

+



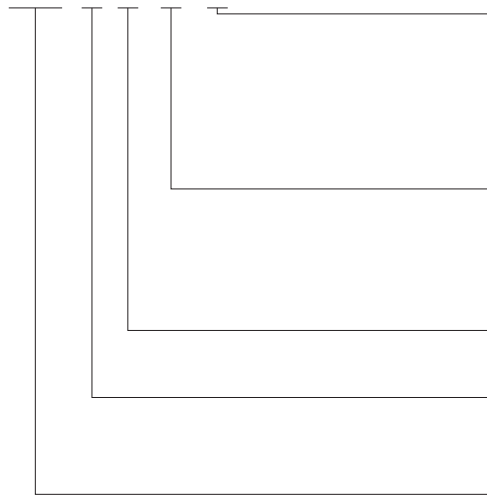
Socket

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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

		2C	4C
Configuration	Load	Resistance	7A/250VAC, 30VDC
	Motor load	1/6HP, 240VAC	
Contact	Max. switching capacity (resistive)	1750VA, 210W	1250VA, 150W
	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electric durability(110%rated voltage, 55°C)	≥20 x 10 ⁴ Cycles (1800 Ops/h)	
	Electric durability (Normal temperature)	≥40x 10 ⁴ Cycles (360 Ops/h)	
	Mechanical durability	≥2000 x 10 ⁴ Cycles (18000 Ops/h)	
	Pick-up voltage (23°C) (Rated voltage)	DC:≤75%, AC:≤80% 50/60Hz	
	Drop-out voltage (23°C) (Rated voltage)	DC:≥10%, AC:≥30% 50/60Hz	
	Maximum voltage (23°C) (Rated voltage)	110%	
Insulation resistance	≥500MΩ (500VDC)		
Coil operating power	DC(W)	approx. 0.9	
	AC(VA)	approx. 1.2	
Operate time&Release time (at nominal voltage)	≤20ms		
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)	
	Between poles	2000VAC/1min (leakage current 1mA)	
	Between contacts and coil	2000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	
	IEC 60664 UL840 Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50μs)	4000V		
Protection level	IP20		
Storage temperature/ humidity	-55~+85°C/ ≤85%RH (18 months)		
Working temperature/ humidity	-55~+70°C/ 5%~85%RH (No condensation)		
Air pressure	86~106KPa		
Shock resistance	10G (half-sine shock pulse: 11ms)		
Vibration resistance	10~55Hz double-amplitude:1.0mm		
Mounting	plug in		
Unit weight	approx. 35g		

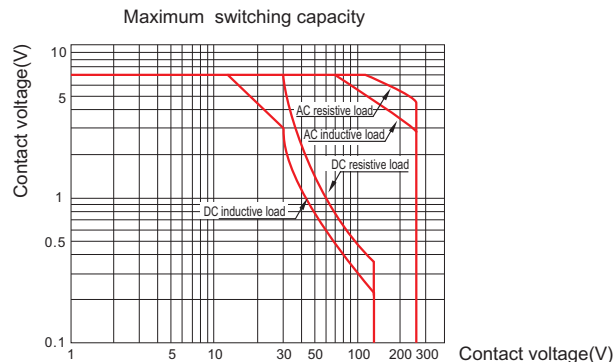
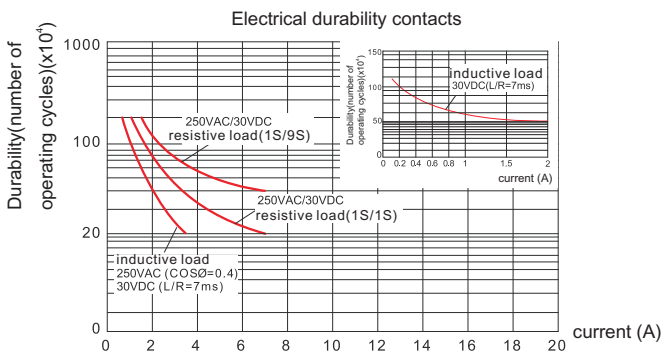
Coil Specifications (23°C)

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

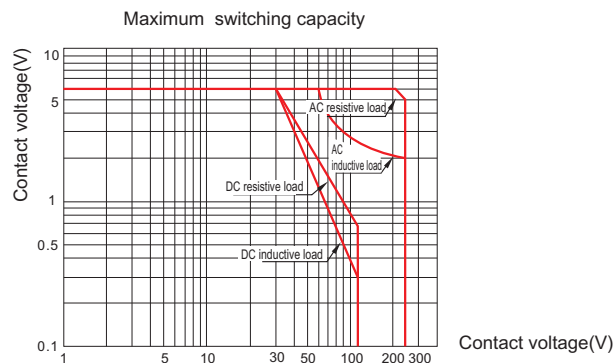
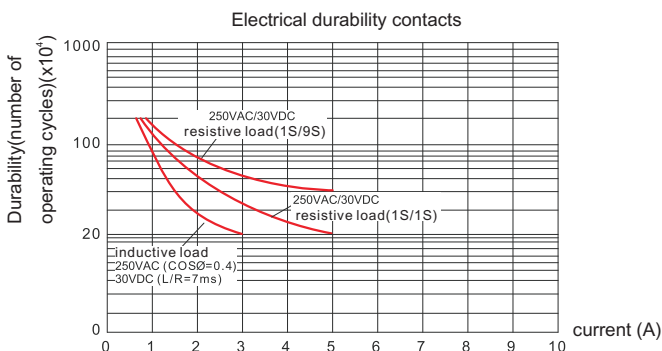
Coil resistance: under coil voltage 110V are measured with tolerance of $\pm 10\% \Omega$, above 110V with tolerance of $\pm 15\% \Omega$.

Contact Specification

RKE2CO

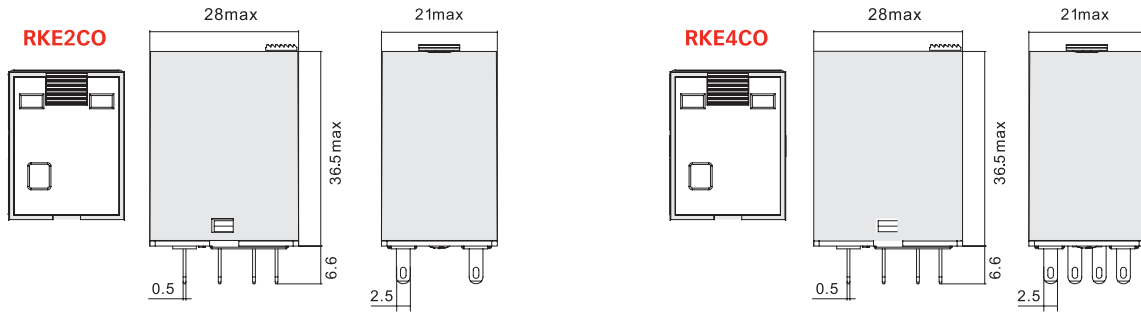


RKE4CO

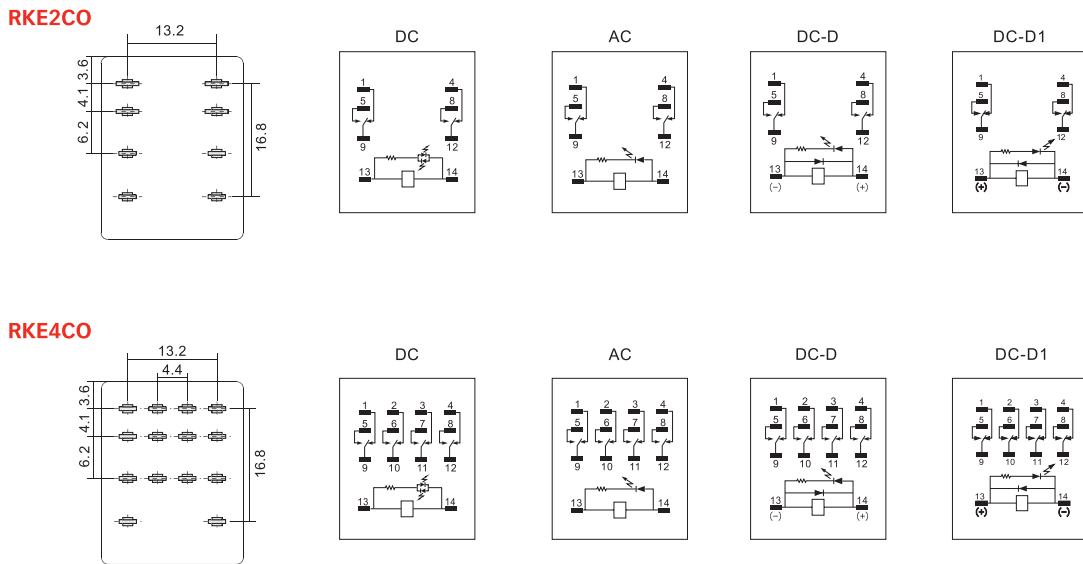


Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc

Dimensions (mm)



Wiring Diagrams





Relay

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Socket

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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



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

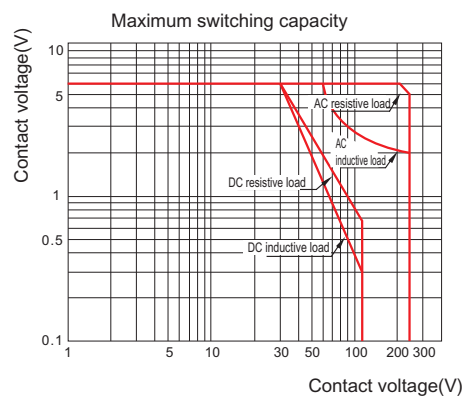
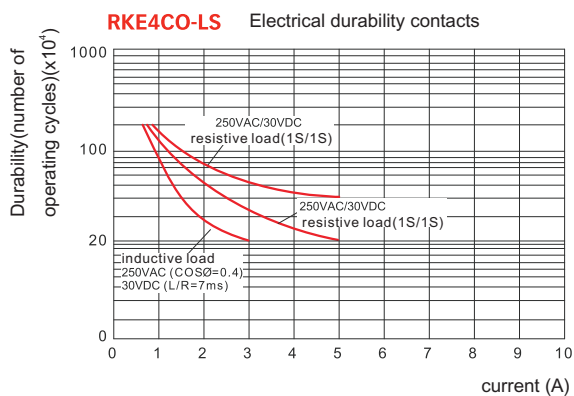
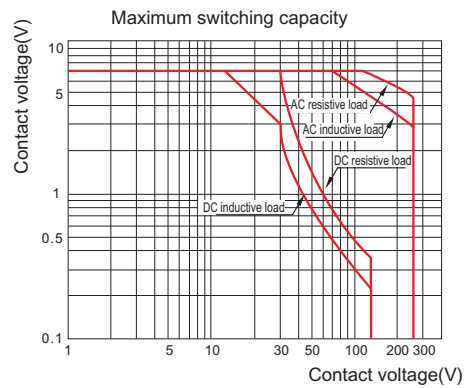
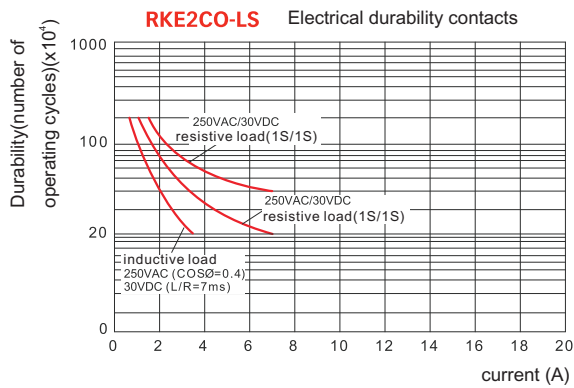
Configuration		2C	4C
Load	Resistance	7A/250VAC, 30VDC	5A/250VAC, 30VDC
	Motor load	1/6HP, 240VAC	
Max. switching capacity (resistive)		1750VA, 210W	1250VA, 150W
Contact	Min. switching capacity	170mW(17V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	Electrical durability(110%rated voltage, 55°C)	≥20 x 10 ⁴ Cycles (1800 Ops/h)	
	Electrical durability (Normal temperature)	≥40 x 10 ⁴ Cycles (360 Ops/h)	
	Mechanical durability		≥2000 x 10 ⁴ Cycles (18000 Ops/h)
Pick-up voltage (23°C) (Rated voltage)		DC:≤75%, AC:≤80% 50/60Hz	
Drop-out voltage (23°C) (Rated voltage)		DC:≥10%, AC:≥30% 50/60Hz	
Maximum voltage (23°C) (Rated voltage)		110%	
Insulation resistance		≥500MΩ (500VDC)	
Coil operating power	DC(W)	approx. 0.9	
	AC(VA)	approx. 1.2	
Operate time&Release time (at nominal voltage)		≤20ms	
Initial breakdown voltage	Between open contacts	1000VAC/1min (leakage current 1mA)	
	Between poles	2000VAC/1min (leakage current 1mA)	
	Between contacts and coil	2000VAC/1min (leakage current 1mA)	
Insulation characteristics	Rated voltage	250VAC	
	Pollution level	3	2
IEC 60664 UL840	Overvoltage level	III	
Impulse withstand voltage (waveform: 1.2/50μs)		4000V	
Protection level		IP62	
Storage temperature/ humidity		-20~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity		-55~+70°C/ 5%~85%RH (No condensation)	
Air pressure		86~106KPa	
Shock resistance		10G (half-sine shock pulse: 11ms)	
Vibration resistance		10~55Hz double-amplitude:1.0mm	
Mounting		plug in	
Unit weight		approx. 35g	

Coil Specifications (23°C)

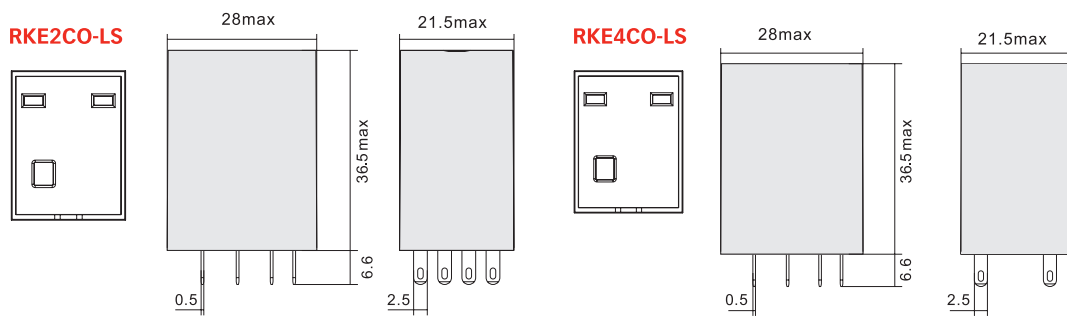
Nominal voltage V.DC	6	12	24	48	110	220	
Coil resistance Ω	40	180	640	2600	13000	42000	
Nominal voltage V.AC	6	24	36	48	115	230	380
Coil resistance Ω	11.5	180	370	640	4430	16500	42000

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

Contact Specification



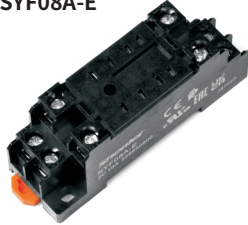
Dimensions (mm)



Characteristics



SYF08A-E




SYF14A-E

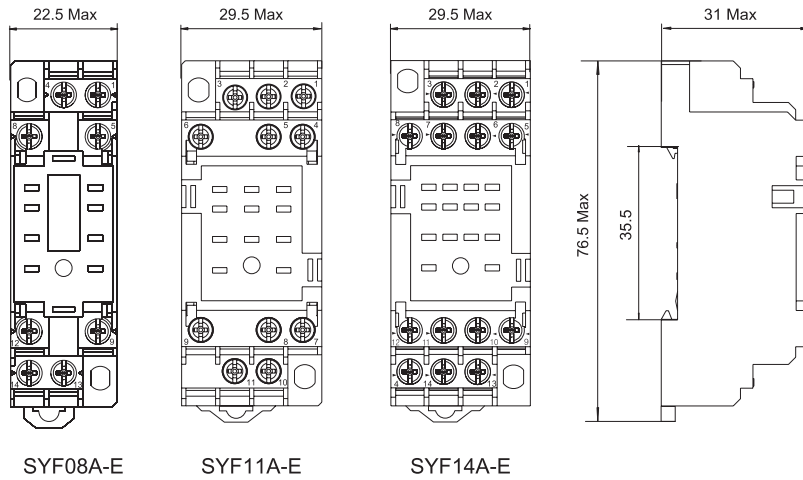


Type		SYF08A-E	SYF11A-E	SYF14A-E
Nominal load	Current	A	10	7
	Voltage	V	300	
Dielectric strength	V/min	2000		
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm ²	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	37	56	57

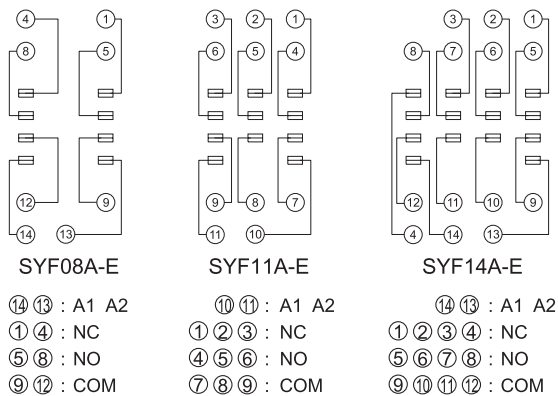
Accessories

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

Dimensions (mm)



Connection Diagrams



Characteristics



SYF08A




SYF14A

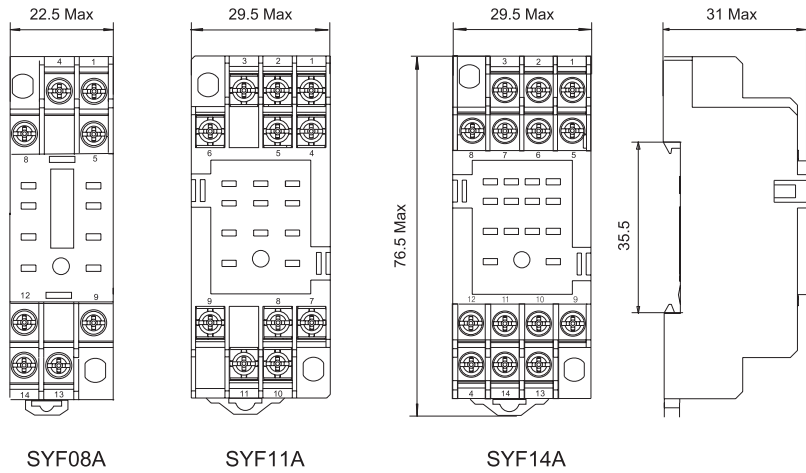


Type		SYF08A	SYF11A	SYF14A
Nominal Current load	A	10	7	7
Voltage	V	300		
Dielectric strength	V/min	2000		
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm ²	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	34	47	56

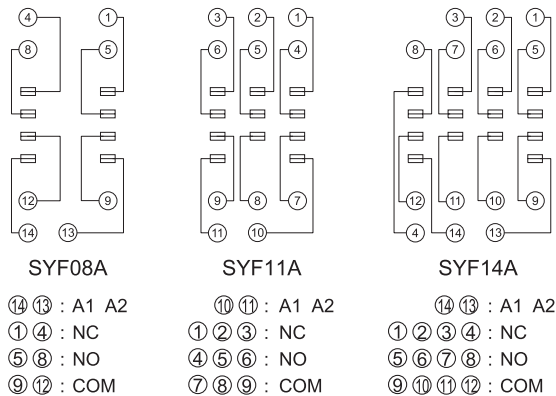
Accessories

Socket	Metal clip
SYF08A	 SY36S
SYF11A	
SYF14A	

Dimensions (mm)



Connection Diagrams



Characteristics



SKB08-E







SKB14-E

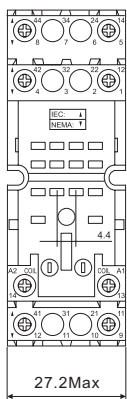


Type		SKB08-E	SKB14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	56

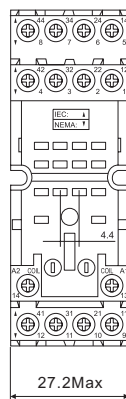
Accessories

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

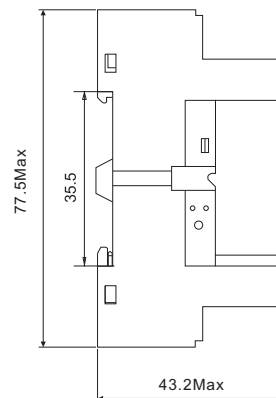
Dimensions (mm)



SKB08-E



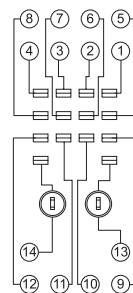
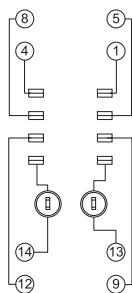
SKB14-E



Connection Diagrams

SKB08-E

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



SKB14-E

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

Characteristics



SKC08-E







SKC14-E

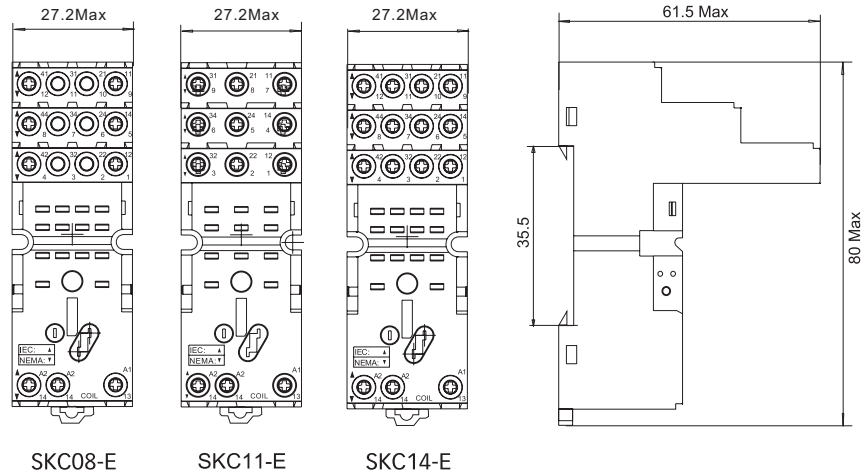


Type		SKC08-E	SKC11-E	SKC14-E	
Nominal load	Current	A	12	10	
	Voltage	V	300		
Dielectric strength	Between coil and contact	V/min	4000		
	Between contacts	V/min	2500		
Max. tightening torque	Nm	1.0			
Wire size	AWG/mm ²	20-14/0.5-2.5			
Ambient temperature	°C	-40~+85			
Unit weight	g	50	56	62	

Accessories

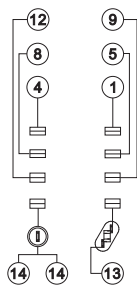
Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E				
SKC11-E				
SKC14-E				

Dimensions (mm)

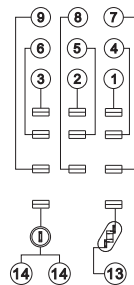


Connection Diagrams

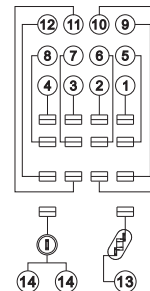
SKC08-E



SKC11-E



SKC14-E



Characteristics



SKC08-ST



SKC14-ST

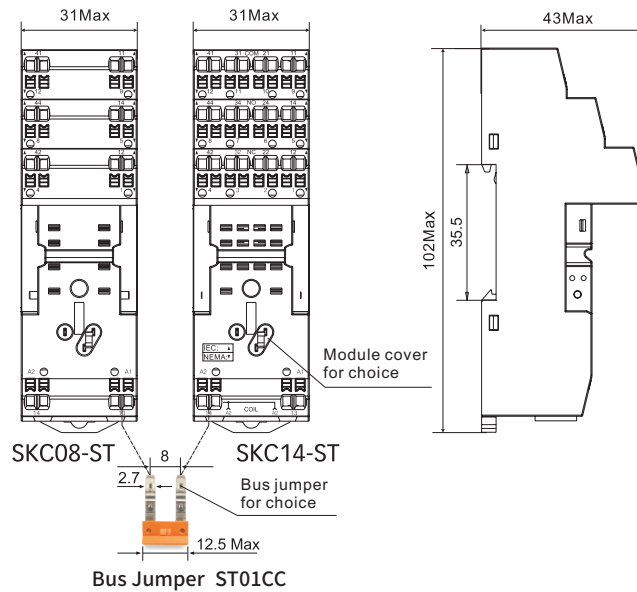


Type		SKC08-ST	SKC14-ST
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm ²	20-16/0.5-1.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	80	80

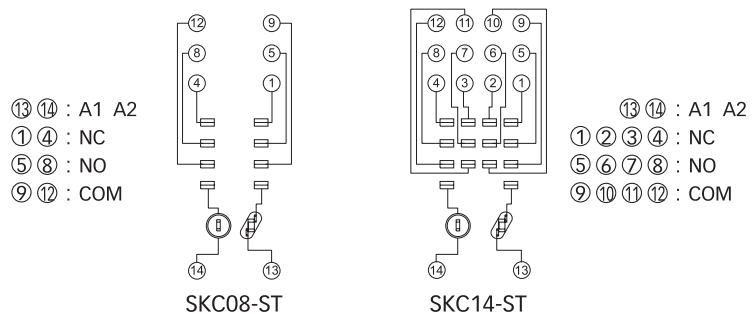
Accessories

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

Dimensions (mm)



Connection Diagrams



Characteristics






SKF08-E



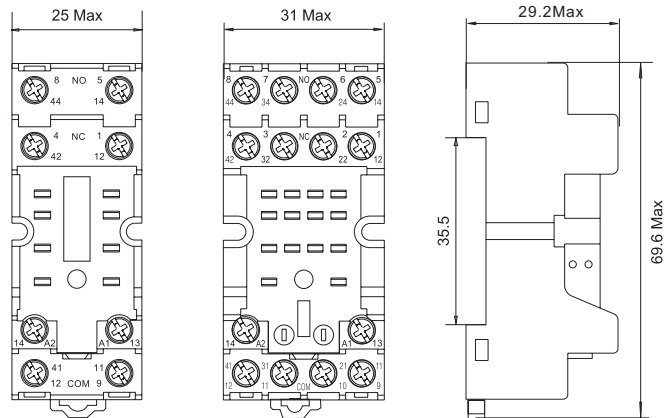
SKF14-E



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

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

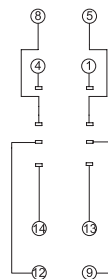
Dimensions (mm)



SKF08-E

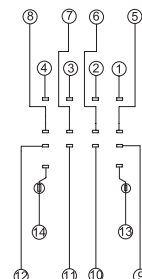
SKF14-E

Connection Diagrams



SKF08-E

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 ① ④ : NC
 ⑤ ⑧ : NO
 ⑨ ⑫ : COM



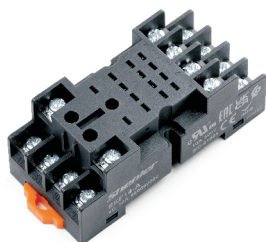
SKF14-E

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

Characteristics






SKF14-A

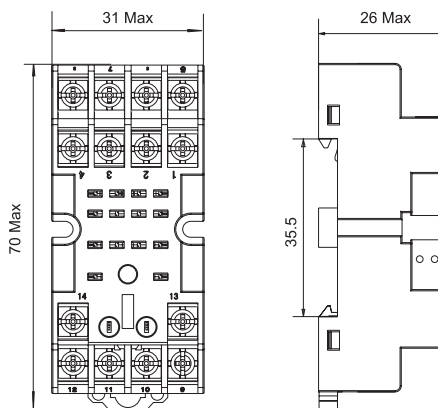


Type		SKF14-A
Nominal load	Current	A 10
	Voltage	V 300
Dielectric strength		V/min 2500
Max. tightening torque		Nm 1.0
Wire size		AWG/mm ² 20-14/0.5-2.5
Ambient temperature		°C -40~+85
Unit weight		g 42.9

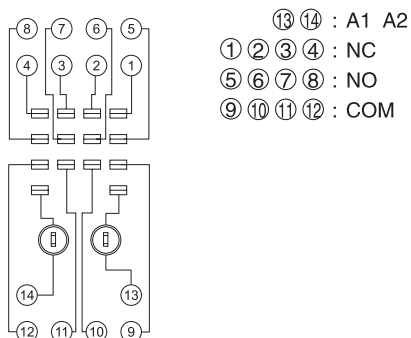
Accessories

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

Dimensions (mm)

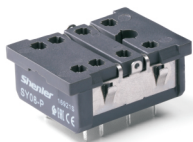


Connection Diagrams



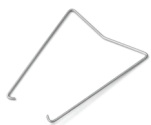
Characteristics

SY08-P

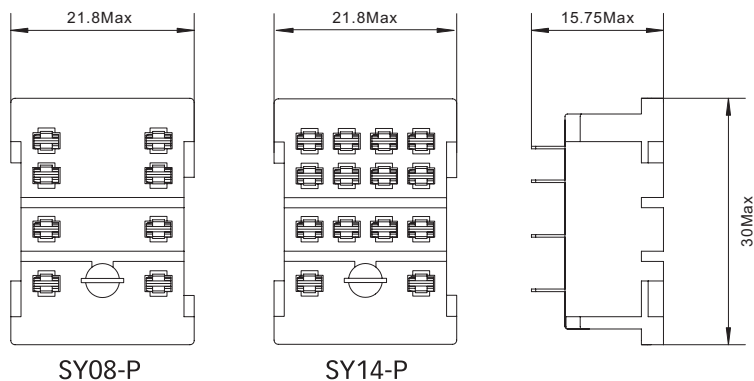


SY14-P

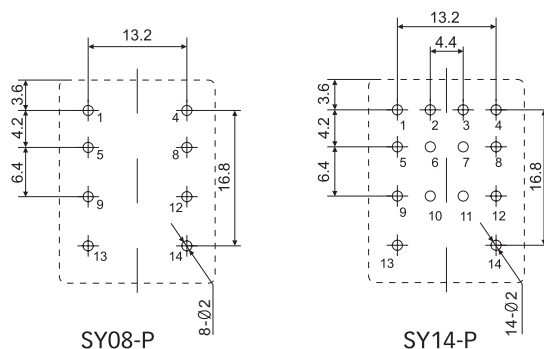


Type		SY08-P	SY14-P
Nominal load	Current	A	10
	Voltage	V	300
Dielectric strength	V/min	2000	
Ambient temperature	°C	-40~+85	
Unit weight	g	7	7
Accessories			
Socket	Metal clip		
SY08-P	 SY36M		
SY14-P			

Dimensions (mm)



Connection Diagrams



⑬ ⑩ : A1 A2
 ① ④ : NC
 ⑤ ⑧ : NO
 ⑨ ⑫ : COM

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