

Selection manual of industrial control relay

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.

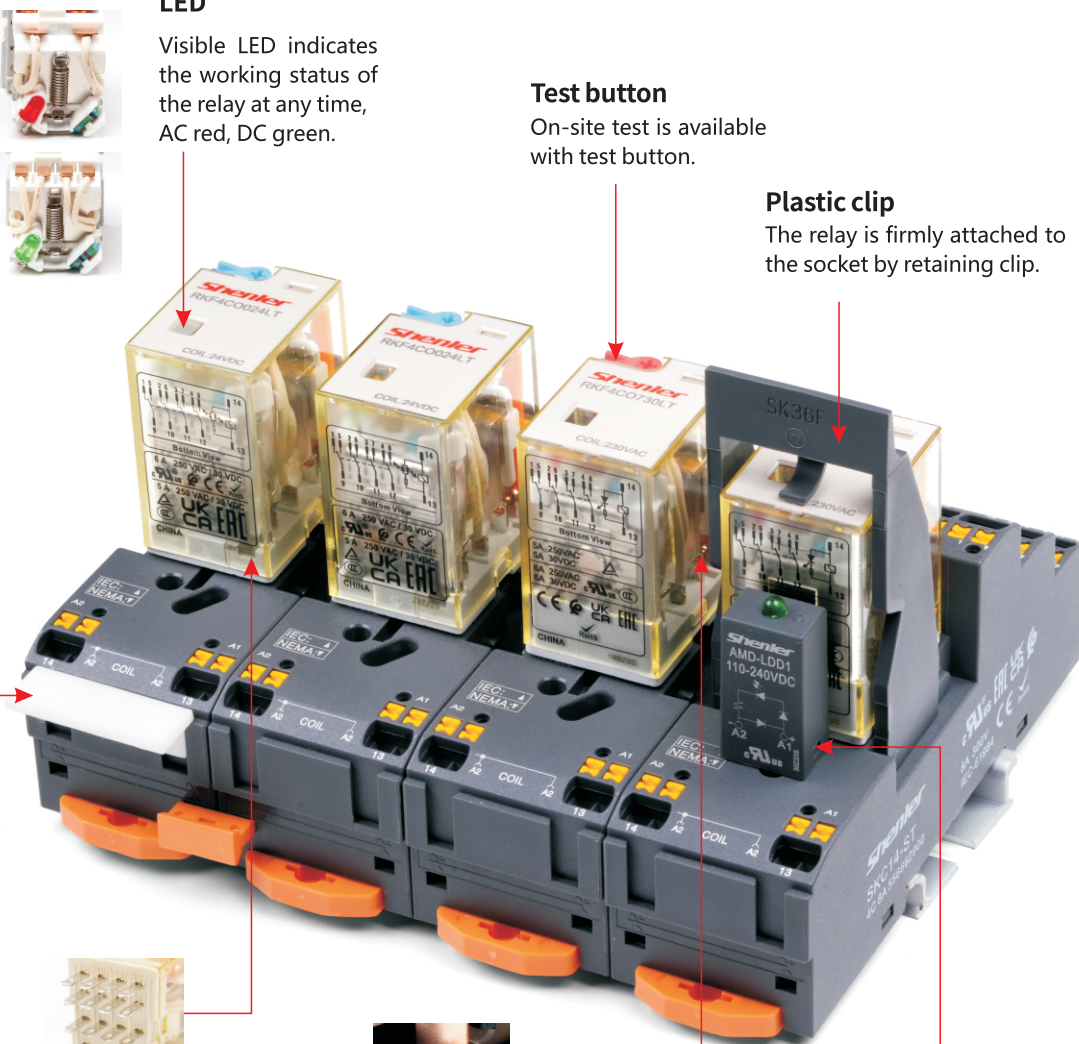
Test button

On-site test is available with test button.

Plastic clip

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

ID tag



High quality alloy pins

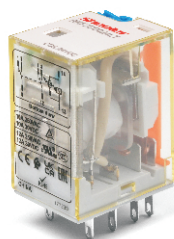
Strong contact, instantaneous conductivity and stable performance.

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





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

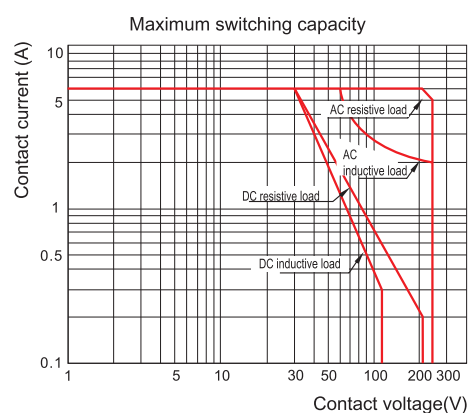
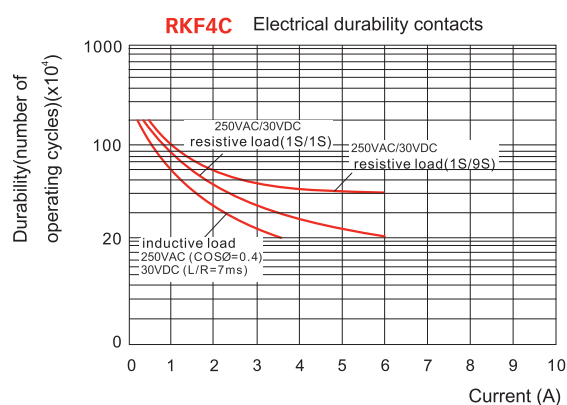
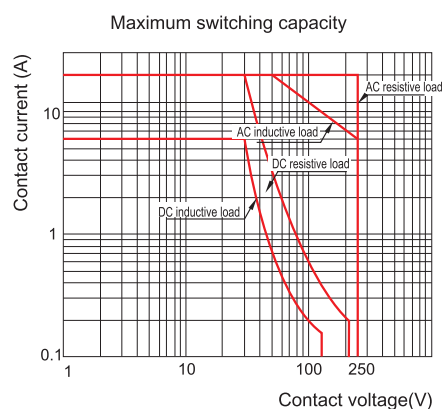
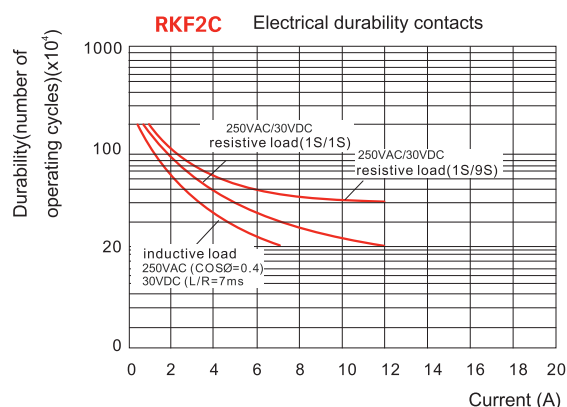
Configuration		2C	4C
Load	Resistance	12A/250VAC, 30VDC	6A/250VAC, 30VDC
	Motor load	1/3HP, 240VAC	1/6HP, 240VAC
Max. switching capacity (resistive)		3000VA, 360W	1500VA, 180W
Contact	Min. switching capacity	170mW(17V/10mA); LTA: 500mW(5V/10mA)	
	Initial contact resistance	≤50mΩ	
	Material	Ag alloy	
	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		≥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	Rated voltage	250VAC	
	Pollution level	3	2
	IEC 60664 UL840 Overvoltage level	III	II
Impulse withstand voltage (waveform: 1.2/50μs)		4000V(Altitude 2000m)	
Protection level		IP20	
Storage temperature/ humidity		-55~+85°C/ ≤85%RH (18 months)	
Working temperature/ humidity		-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

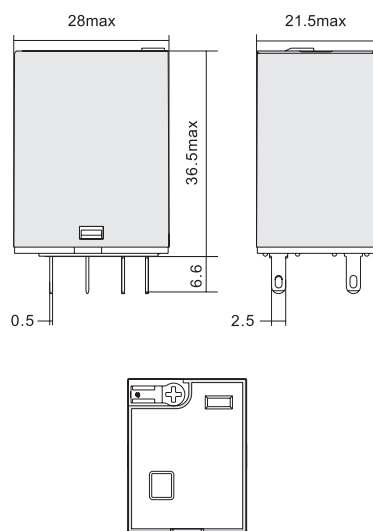
Coil resistance: under coil voltage 110V are measured with tolerance of $\pm 10\% \Omega$, above 110V with tolerance of $\pm 15\% \Omega$.

Contact Specification

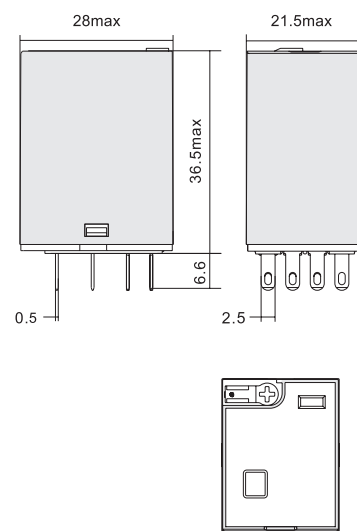


Dimensions (mm)

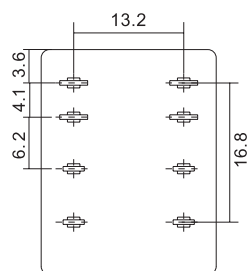
RKF2CO



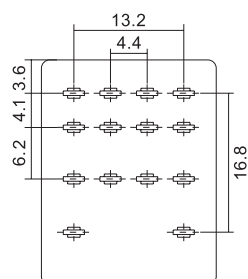
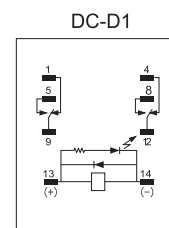
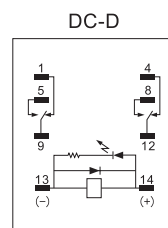
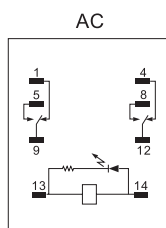
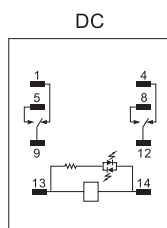
RKF4CO



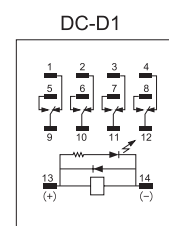
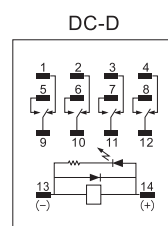
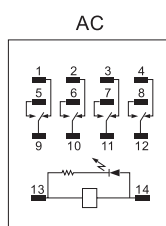
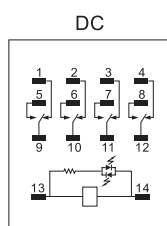
Wiring Diagrams



RKF2CO



RKF4CO



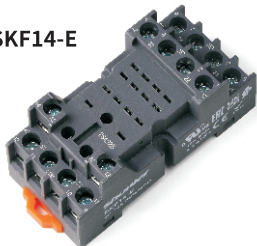
Characteristics



SKF08-E



SKF14-E

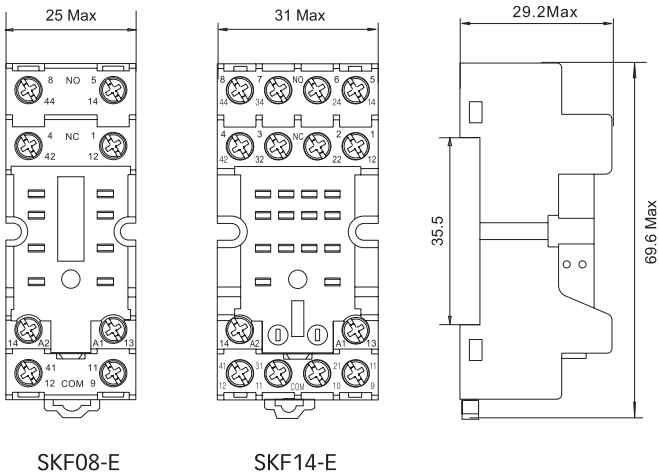


Type		SKF08-E	SKF14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2000
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	35	45

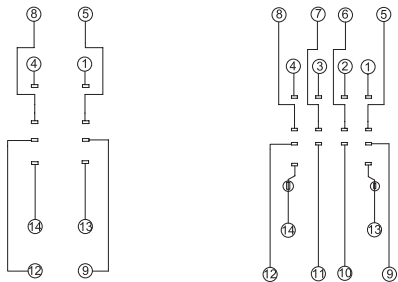
Accessories

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

Dimensions (mm)



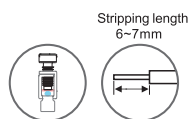
Connection Diagrams



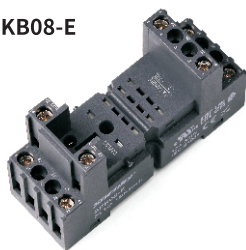
SKF08-E
⑬ ⑭ : A1 A2
① ④ : NC
⑤ ⑧ : NO
⑨ ⑫ : COM

SKF14-E
⑬ ⑭ : A1 A2
① ② ③ ④ : NC
⑤ ⑥ ⑦ ⑧ : NO
⑨ ⑩ ⑪ ⑫ : COM

Characteristics



SKB08-E



SKB14-E

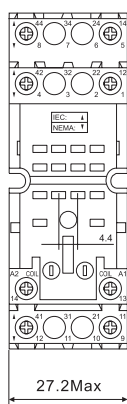


Type		SKB08-E	SKB14-E
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	1.0	
Wire size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	50	56

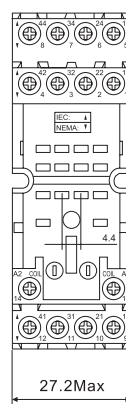
Accessories

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

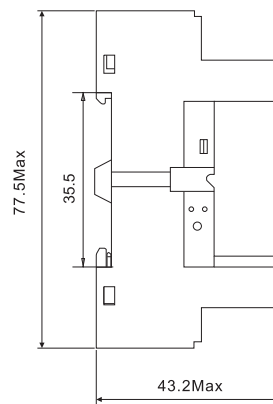
Dimensions (mm)



SKB08-E



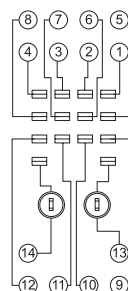
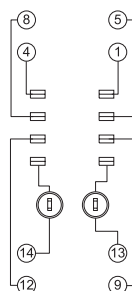
SKB14-E



Connection Diagrams

SKB08-E

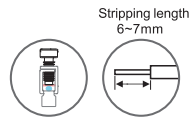
⑬ ⑭ : A1 A2
 ① ④ : NC
 ⑤ ⑧ : NO
 ⑨ ⑫ : COM



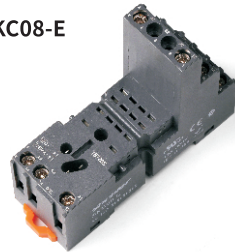
SKB14-E

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

Characteristics



SKC08-E



SKC14-E

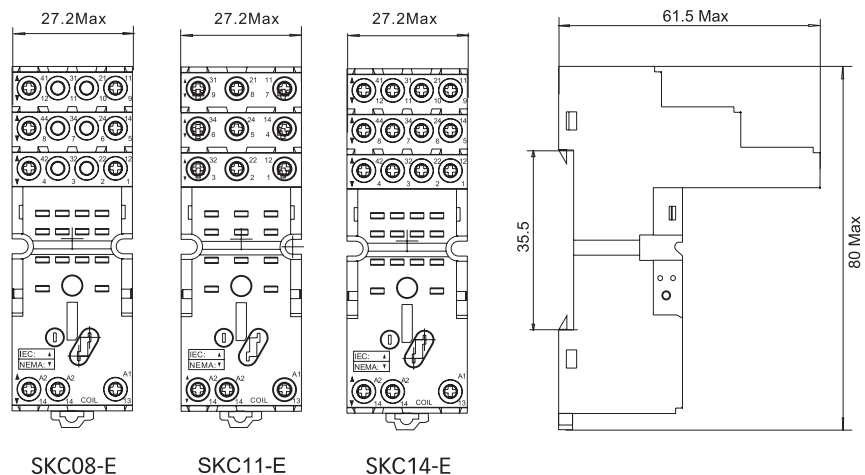


Type		SKC08-E	SKC11-E	SKC14-E
Nominal load	Current	A	12	10
	Voltage	V	300	
Dielectric strength	Between coil and contact	V/min	4000	
	Between contacts	V/min	2500	
Max. tightening torque	Nm	1.0		
Wire size	AWG/mm ²	20-14/0.5-2.5		
Ambient temperature	°C	-40~+85		
Unit weight	g	50	56	62

Accessories

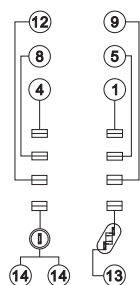
Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E				
SKC11-E				
SKC14-E	SK36F	SK36M	SK4P	AMD

Dimensions (mm)

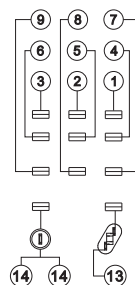


Connection Diagrams

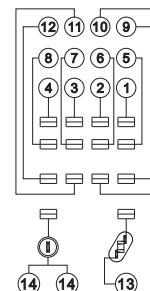
SKC08-E



SKC11-E



SKC14-E



Characteristics



SKC08-ST



SKC14-ST

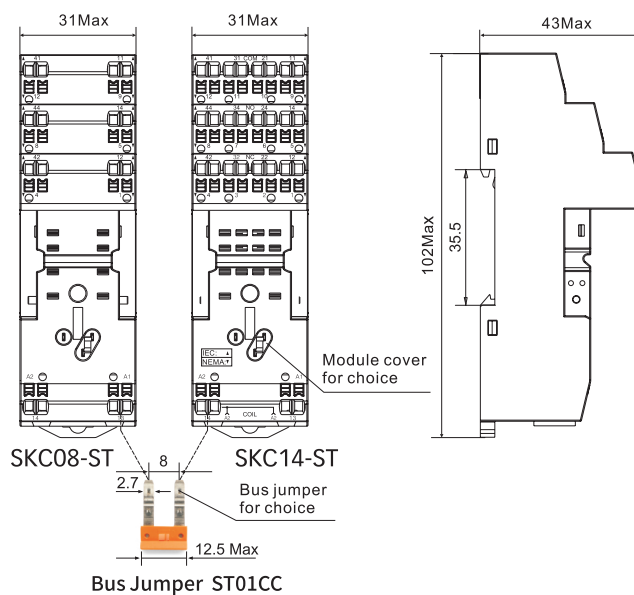


Type		SKC08-ST	SKC14-ST
Nominal load	Current	A	12
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	4000
	Between contacts	V/min	2500
Max. tightening torque	Nm	-	
Wire size	AWG/mm ²	20-16/0.5-1.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	80	80

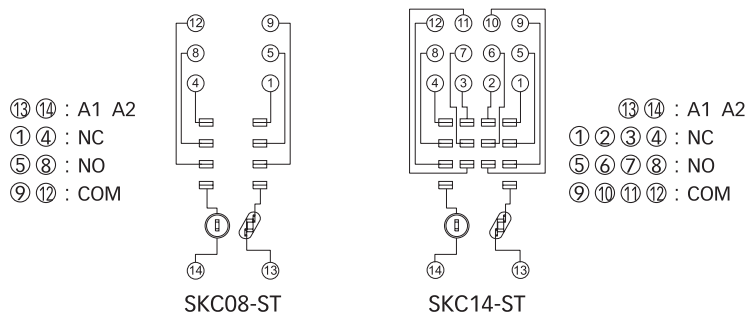
Accessories

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

Dimensions (mm)

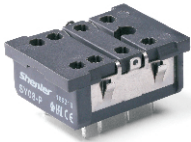


Connection Diagrams



Characteristics

SY08-P



SY14-P

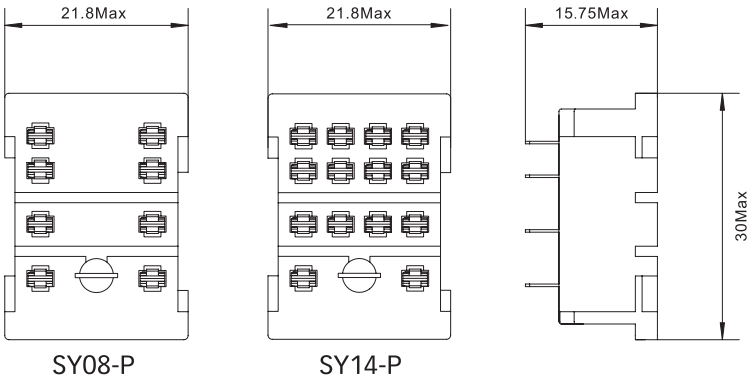


Type		SY08-P	SY14-P
Nominal Current	A	10	6
load Voltage	V	300	
Dielectric strength	V/min	2000	
Wire size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40~+85	
Unit weight	g	7	7

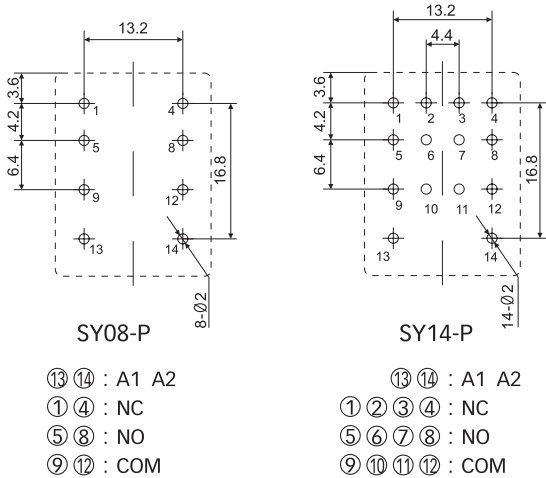
Accessories

Socket	Metal clip
SY08-P	 SY36M
SY14-P	

Dimensions (mm)



Connection Diagrams



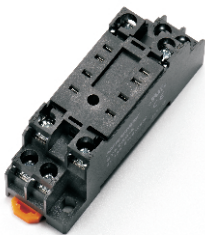
SYF08A-E S
RKF-S Magnetic Blow-out
Power Relay Socket



Characteristics



SYF08A-E S

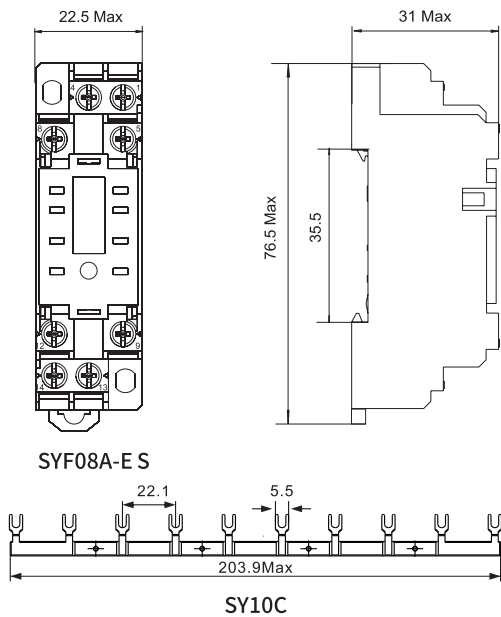


Type			SYF08A-E S
Nominal load	Current	A	15
	Voltage	V	300
Dielectric strength	Between coil and contact	V/min	3000
	Between contacts	V/min	2000
Max. tightening torque		Nm	1.0
Wire size		AWG/mm ²	20-14/0.5-2.5
Ambient temperature		°C	-40~+65
Unit weight		g	37

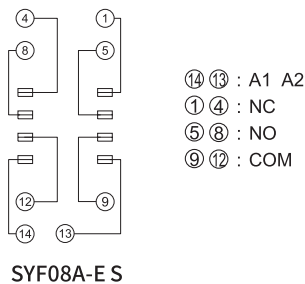
Accessories

Socket	Bus jumper	Metal clip
SYF08A-E S	 SY10C	 SY36S

Dimensions (mm)



Connection Diagrams

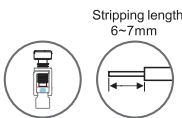


SKC08-E S

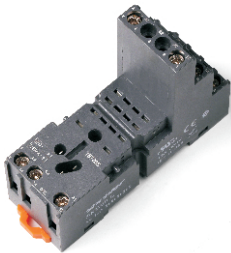
RKF-S Magnetic Blow-out
Power Relay Socket



Characteristics



SKC08-E S

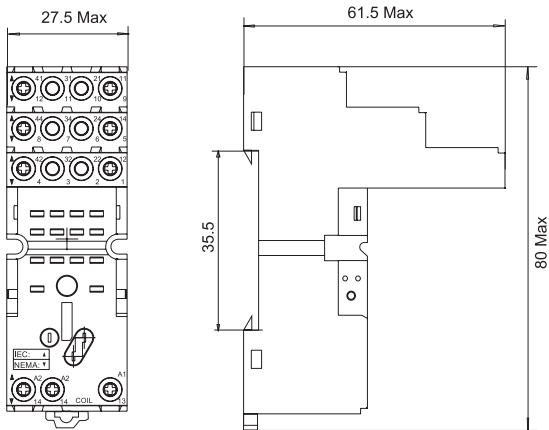


Type		SKC08-E S
Nominal load	Current	A 15
	Voltage	V 300
Dielectric strength	Between coil and contact	V/min 4000
	Between contacts	V/min 2500
Max. tightening torque	Nm	-
Wire size	AWG/mm ²	20-16/0.5-1.5
Ambient temperature	°C	-40~+85
Unit weight	g	50

Accessories

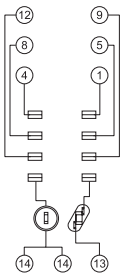
Socket	Plastic clip	Metal clip	ID tag	Module
SKC08-E S	 SK36F	 SK36M	 SK4P	 AMD

Dimensions (mm)



SKC08-E S

Connection Diagrams



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

SKC08-E S