

Features:

- Miniature relay with high switching capability: 30A.
- Copper terminal products are available.
- Special type of 4000VAC dielectric strength and 6000V surge voltage (1.2/50μS) between coil and contact available.
- IEC60335-1 compliant product is available.
- IEC60079-15 compliant product is available.

Typical applications:

- Home appliances: air conditioner, heater, etc.
- Vending machine.
- Office equipment: computer, fax machine, etc.
- Electric controlled window, car antenna, door lock, etc.

Approvals

UL, c-UL (File No.): E190598

TUV (File No.): R50143450

CQC (File No.): CQC02001002109, CQC10002050461, CQC21002306488

Contact Data

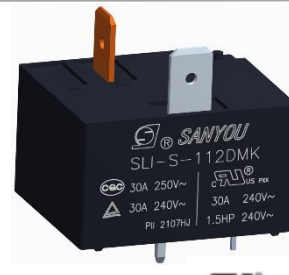
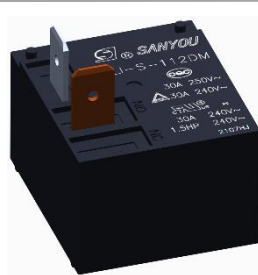
Contact arrangement	1form C(CO)or 1form A(NO)
Contact resistance	100mΩ Max.(at 1A 6VDC)
Rated voltage	250VAC
Max.switching voltage	277VAC
Rated current	1form C(20A)or 1form A(30A)
Min. recommended contact load	1A, 6VDC
Breaking capacity max.	5000VA or 7500VA
Contact material	AgSnO ₂
Frequency of operation	360 ops./h
Operate/release time max.	15ms/10ms
Electrical endurance	See electrical endurance graph

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
SLI	C(NC)	10A,240VAC,85°C	1X10 ⁵
UL 60947-4-1			
SLI	A(NO)	30A,240VAC,85°C	1X10 ⁵
SLI	B(NC)	15A,240VAC,85°C	1X10 ⁵
SLI	C(NO)	20A,240VAC,85°C	1X10 ⁵
SLI	C(NC)	10A,240VAC,85°C	1X10 ⁵
GB/T 21711.1-2023			
SLI	A/C(NO)	30A,250VAC,85°C	2X10 ⁴
SLI	B(NC)	15A,250VAC,85°C	2X10 ⁴
SLI	C(NO)	20A,250VAC,85°C	2X10 ⁴
SLI	C(NC)	10A,250VAC,85°C	2X10 ⁴
EN 60730-1			
SLI	A(NO)	30A,240VAC,85°C	1X10 ⁵
SLI	B(NC)	15A,240VAC,85°C	1X10 ⁵
SLI	C(NO)	20A,240VAC,85°C	1X10 ⁵
Mechanical endurance			≥1x10 ⁷

Coil Data

Coil voltage range:	5 to 110VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F



Coil Data(continued)

Coil versions, DC coil

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (±10%)	Rated coil powers mW
5	≤3.75	≥0.25	27	900
6	≤4.5	≥0.30	40	900
9	≤6.75	≥0.45	90	900
12	≤9	≥0.60	160	900
15	≤11.25	≥0.75	250	900
18	≤13.5	≥0.90	360	900
24	≤18	≥1.20	640	900
48	≤36	≥2.40	2560	900
110	≤82.5	≥5.50	13400	900

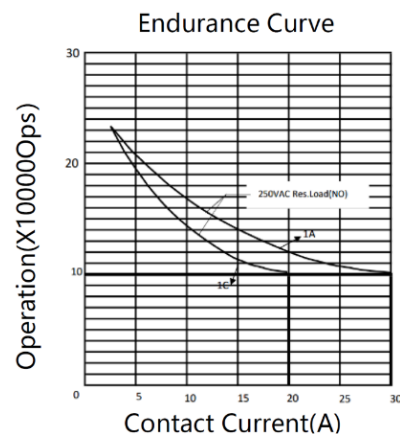
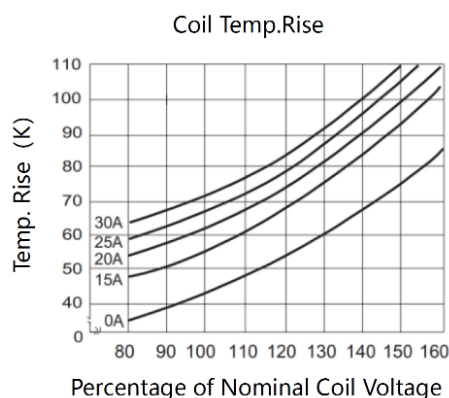
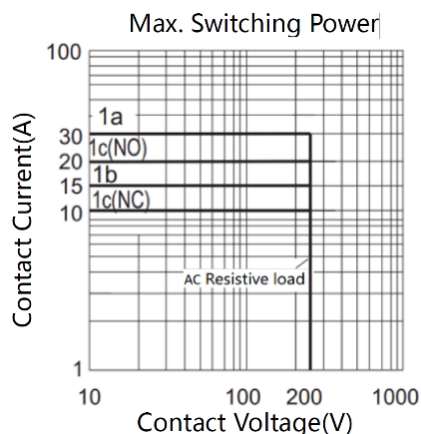
All figures are given for coil without pre-energization, at ambient temperature 20°C

Insulation Data

Initial dielectric strength	
between open contacts	1500VAC
between contact and coil	2500VAC
Clearance/Creepage	
between contact and coil (Clearance)	≥3.5mm(actual)
between contact and coil (Creepage)	≥5.0mm(actual)
Material group of insulation parts	IIIa
Tracking index of relay	PTI 175V/PTI 250V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH	
Ambient temperature	-40°C to +85°C
Category of environmental protection	
IEC 61810	RTII - flux proof RTIII - Sealed type washable
Weight	Approx. 27.0g
Resistance to soldering heat THT (IEC 60068-2-20)	260°C/5s
Packaging/unit	tube, tray

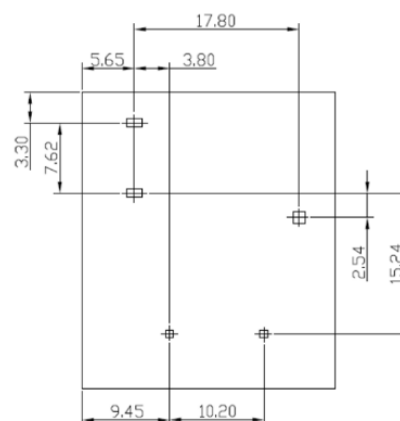
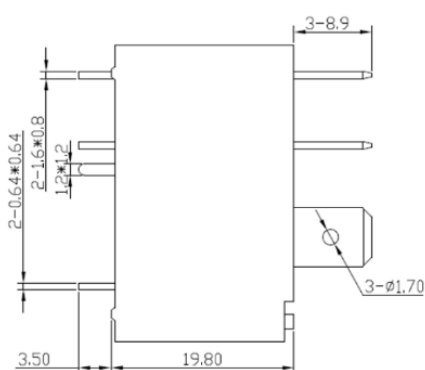
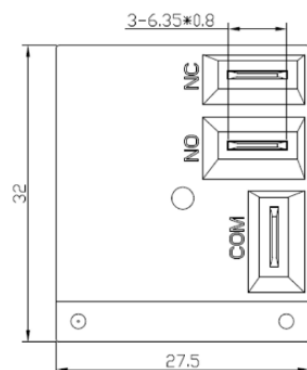


Note:

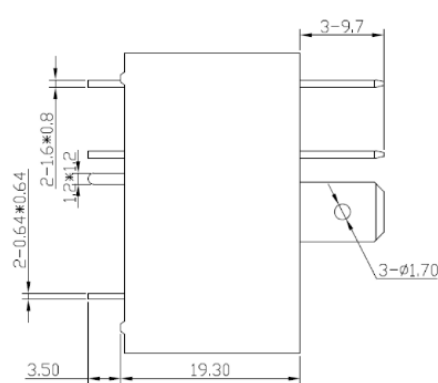
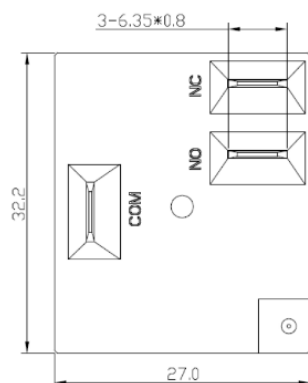
- (1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.
- (2) The above curves are for reference only, and the final result is subject to the experiment.

Dimensions

SLI

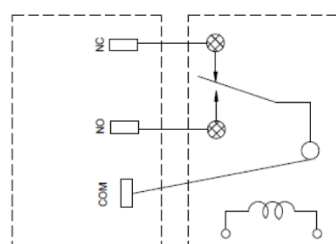


SLI-K

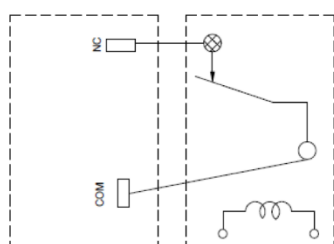


In case of no tolerance shown on outline dimension
 If dimension < 1 mm, tolerance: $\pm 0.2\text{mm}$
 If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$
 If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$

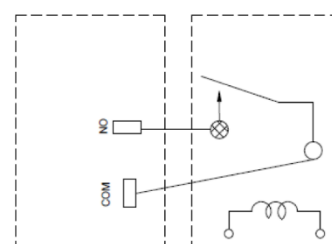
Wiring Diagrams



top view bottom view
1c

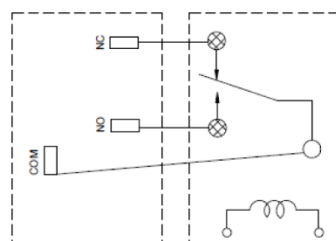


top view bottom view
1b

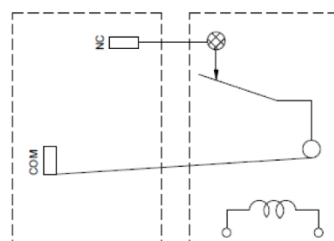


top view bottom view
1a

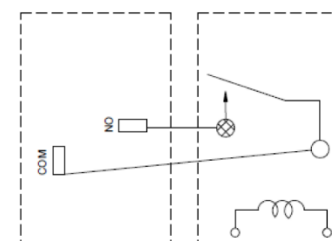
SLI Wiring Diagram



top view bottom view
1c

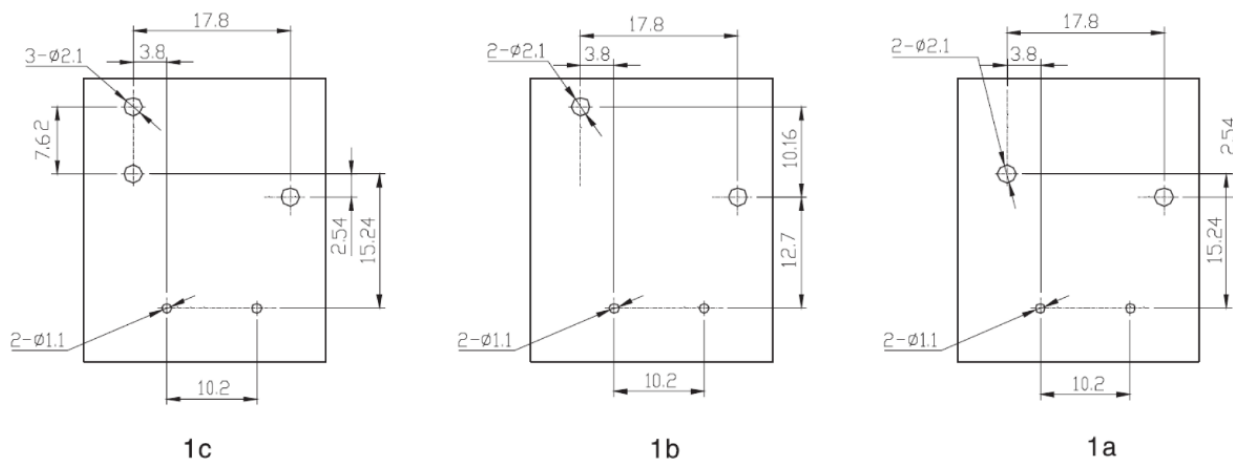


top view bottom view
1b



top view bottom view
1a

SLI-K Wiring Diagram

PCB Layouts (bottom view)

Product Code Structure

SLI -S -1 12 D M K 2 -G -P -F -XX

Special Parameter:

Nil - Standard type

Letter or number - Special requirement

Insulation System:

Nil - Standard

B - Class B

F - Class F

COM Flat quick-connect terminals:

Nil - Yoke, flat quick-connect terminal integration

P - Rivet yoke with quick-connect terminal (only for SLI-K)

Parameter sign:

Nil - Standard type

G - High contact load(40A)

Contact Material:

Nil - AgSnO₂

2 - AgNi + AgSnO₂
Terminal position:

Nil - COM terminal and NC/NO terminal on the same side.

K - COM terminal and NC/NO terminal on the opposite side.

Contact Arrangement:

Nil - Form C

B - Form B

M - Form A

Coil Power:

D - 0.9W

Rated Coil Voltage(VDC):

05, 06, 09, 12, 15, 18, 24, 48, 110

Number of Poles:

1 - 1Pole

Protective Construction

S - Flux-proof

SH - Sealed type washable

Type: SLI

- (1) Flux-proof relays can not be used in the environment with pollutants like H_2S , SO_2 , NO_2 , dust, etc.
- (2) Water cleaning or surface process is not suggested after the flux-proof relays are assembled on PCB.
- (3) Customized special suffix is available after being evaluated by Sanyou.
- (4) C1 suffix stands for product in accordance to IEC60335-1(GWT) & CTI250V.
- (5) Ex suffix stands for product compliant with IEC60079-15.

Examples of Ordering Codes

SLI-S-112DM relay SLI, Flux-proof, rated DC voltage 12V, coil power 0.9W, 1NO, and contact material AgSnO₂.
SLI-S-112D relay SLI, Flux-proof, rated DC voltage 12V, coil power 0.9W, 1CO, and contact material AgSnO₂.

Disclaimer

The specification is for reference only. Specifications are subject to change without prior notice.

We could not evaluate all the performance and all the parameters for every possible applications. Thus the users should in a right position to choose suitable product for their own application. For sealed relays, after installation and cleaning, please open the ventilation hole in the case before use. If there is any query, please contact Sanyou for technical services. However it is the user's responsibility to determine which product should be used.