

Features:

- Miniature relay with high switching capability: 35A.
- Contact form: Form A, contact Gap>1.8mm.
- 4000VAC dielectric strength high and 6000V surge voltage (1.2/50 μS) between coil and contact.
- Compliant with IEC60335-1(GWT) & CTI250V
- 85°C compliant product is available.

Typical applications:

- Photovoltaic controller.
- Charging pile.
- New energy automobile.

Approvals

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

VDE (File No.): 40036707

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

Contact Data

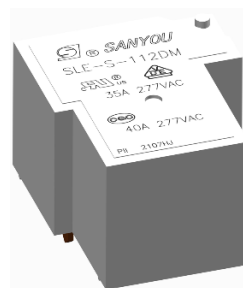
Contact arrangement	1Form A(NO)
Contact resistance	100m Ω Max.(at 1A 6VDC)
Rated voltage	277VAC
Max.switching voltage	277VAC
Rated current	40A
Min. recommended contact load	1A, 6VDC
Breaking capacity max.	9695VA
Contact material	AgSnO ₂ , AgNi
Frequency of operation	360 ops./h
Operate/release time max.	18ms/15ms
Electrical endurance	See electrical endurance graph

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
SLE	A(NO)	35A,277VAC,65°C	3X10 ⁴
UL 60947-4-1			
SLE	A(NO)	35A,277VAC,85°C	3X10 ⁴
GB/T 21711.1-2023			
SLE	A(NO)	35A,277VAC,65°C	2X10 ⁴
SLE	A(NO)	40A,277VAC,85°C	2X10 ⁴
Mechanical endurance			≥5x10 ⁶

Coil Data

Coil voltage range:	5 to 24VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F/Class H


Coil Data(continued)

Coil versions, DC coil

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (1±10%)	Rated coil powers mW
5	≤3.75	≥0.25	11.1	2250
6	≤4.5	≥0.30	16	2250
9	≤6.75	≥0.45	36	2250
12	≤9	≥0.60	64	2250
24	≤18	≥1.20	256	2250

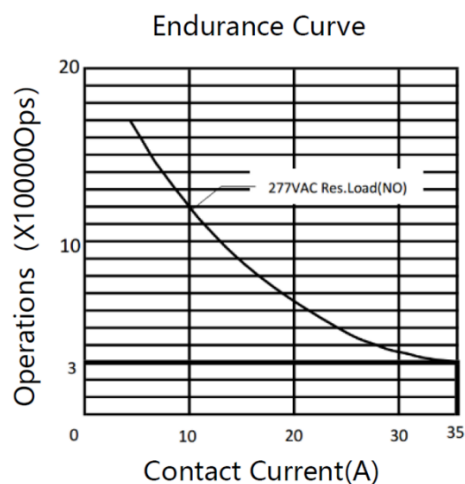
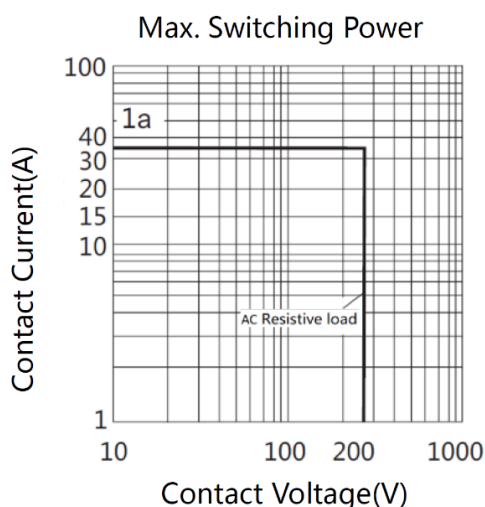
All figures are given for coil without pre-energization, at ambient temperature 20°C

Insulation Data

Initial dielectric strength	
between open contacts	2500VAC
between contact and coil	4000VAC
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 250V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH	
Ambient temperature	-40°C to +65°C
Category of environmental protection	
IEC 61810	RTII - flux proof RTIII - Sealed type washable
Weight	Approx. 25.0g
Resistance to soldering heat THT (IEC 60068-2-20)	260°C/5s
Packaging/unit	tray

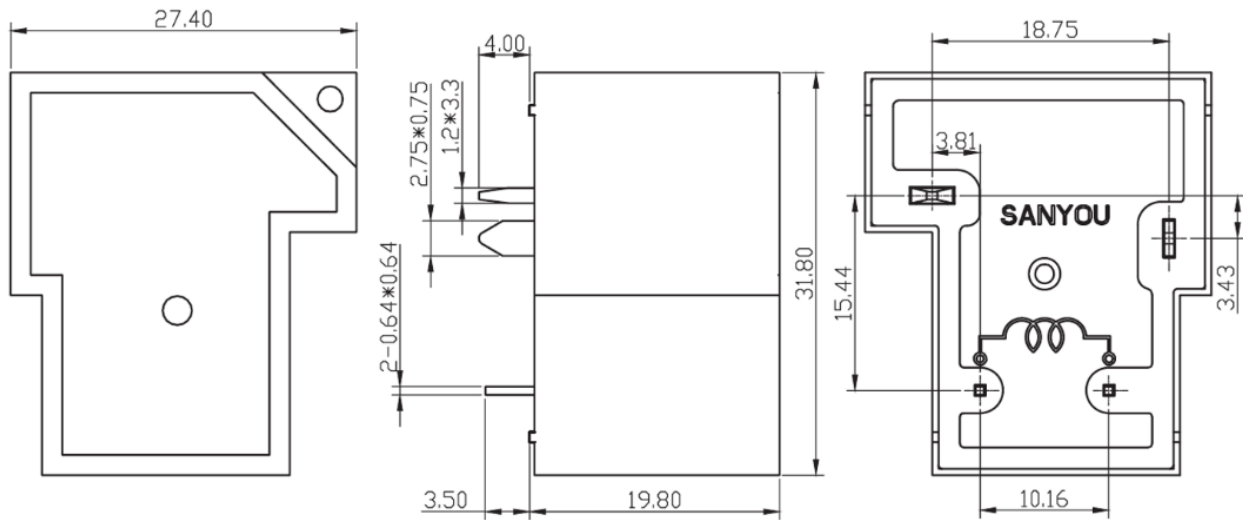


Note:

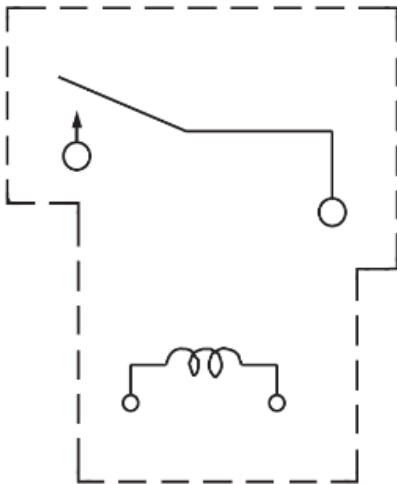
(1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.

(2) The above curves are for reference only, and the final result is subject to the experiment.

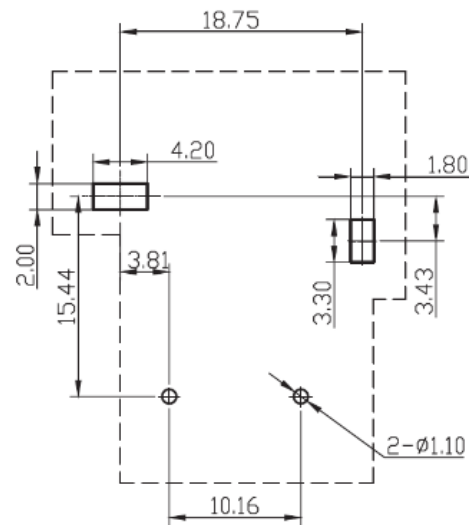
Dimensions



Wiring Diagrams



PCB Layouts (bottom view)



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: $\pm 0.4\text{mm}$

Notes:

1.The dimension of pin is the size before tinning

2.Tolerance of PCB layout: $\pm 0.1\text{ mm}$.

Product Code Structure

SLE	-S	-1	12	D	M		-F	-XX	
									Special Parameter :
									Nil - Standard type
									Letter or number - Special requirement
									Insulation System :
									Nil-Standard
									F - Class F
									H - Class H
									Contact Material :
									Nil-AgSnO ₂ , 1-AgNi
									Contact Arrangement:
									M - Form A
									Coil Power:
									D – 2.25W
									Rated Coil Voltage(VDC):
									05, 06, 09, 12, 24
									Number of Poles:
									1 - 1Pole
									Protective Construction
									S - Flux-proof SH - Sealed type washable
									Type: SLE

- (1) Flux-proof relays can not be used in the environment with pollutants like H₂S, SO₂, NO₂, 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.

Examples of Ordering Codes

SLE-S-112DM relay SLE, Flux-proof, rated DC voltage 12V, coil power 2.25W, 1NO, 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.