

Features:

- Miniature relay with high switching capability: 30A.
- Contact form: Form A, Form B or Form C.
- Special type of 4000VAC dielectric strength and 6000V surge voltage (1.2/50μs) between coil and contact available.
- Satisfy IEC60335-1 /IEC60079-15 compliance 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) |
| 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 | | | |
| SLA | C(NC) | 10A,240VAC,85°C | 1X10 ⁵ |
| SLA | A(NO) | 30A,250VAC,105°C | 1X10 ⁵ |
| UL 60947-4-1 | | | |
| SLA | A/C(NO) | 30A,240VAC,85°C | 1X10 ⁵ |
| SLA | B(NC) | 15A,240VAC,85°C | 1X10 ⁵ |
| SLA | C(NO) | 20A,240VAC,85°C | 1X10 ⁵ |
| SLA | C(NC) | 10A,240VAC,85°C | 1X10 ⁵ |
| SLA | A(NO) | 30A,250VAC,105°C | 1X10 ⁵ |
| GB/T 21711.1-2023 | | | |
| SLA | A/C(NO) | 30A,250VAC,85°C | 2X10 ⁴ |
| SLA | B(NC) | 15A,250VAC,85°C | 2X10 ⁴ |
| SLA | C(NO) | 20A,250VAC,85°C | 2X10 ⁴ |
| SLA | C(NC) | 10A,250VAC,85°C | 2X10 ⁴ |
| SLA | A(NO) | 30A,250VAC,105°C | 1X10 ⁵ |
| EN 60730-1 | | | |
| SLA | A(NO) | 30A,240VAC,85°C | 1X10 ⁵ |
| SLA | B(NC) | 15A,240VAC,85°C | 1X10 ⁵ |
| SLA | 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)

| Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω (1±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 |

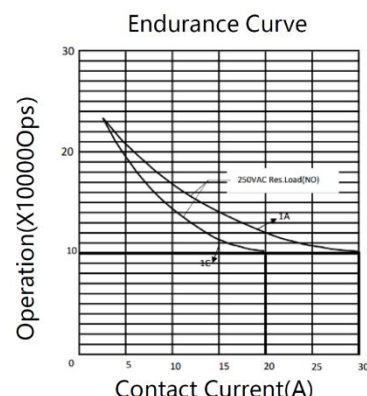
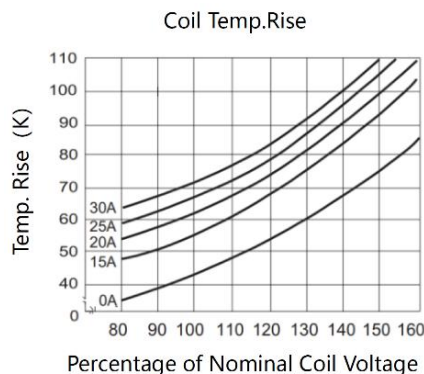
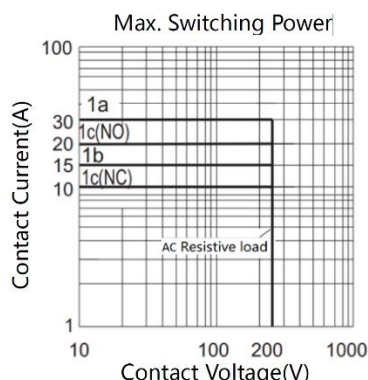
All figures are given for coil without pre-energization, at ambient temperature 20°C

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 |

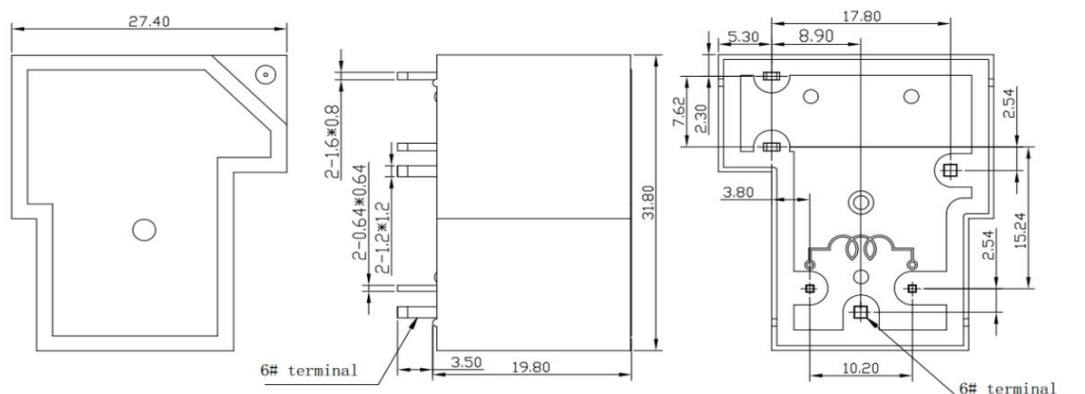
Other Data

| | |
|---|---|
| Material compliance: | EU RoHS/ELV, China RoHS, REACH |
| Ambient temperature | -40°C to +85°C, -40°C to +105°C |
| Category of environmental protection | |
| IEC 61810 | RTII - flux proof RTIII - Sealed type washable |
| Weight | Approx. 24.0g |
| Resistance to soldering heat THT (IEC 60068-2-20) | 260°C/5s |
| Packaging/unit | tube, tray |



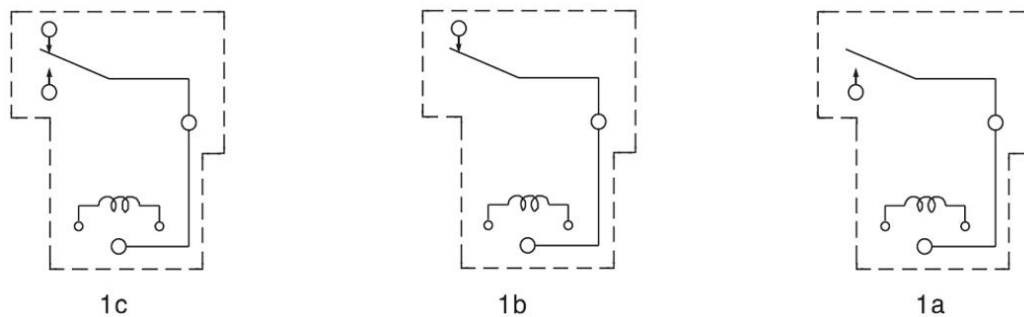
Note:
(1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.
(2) The above curves are for reference only, and the final result is subject to the experiment.

Dimensions

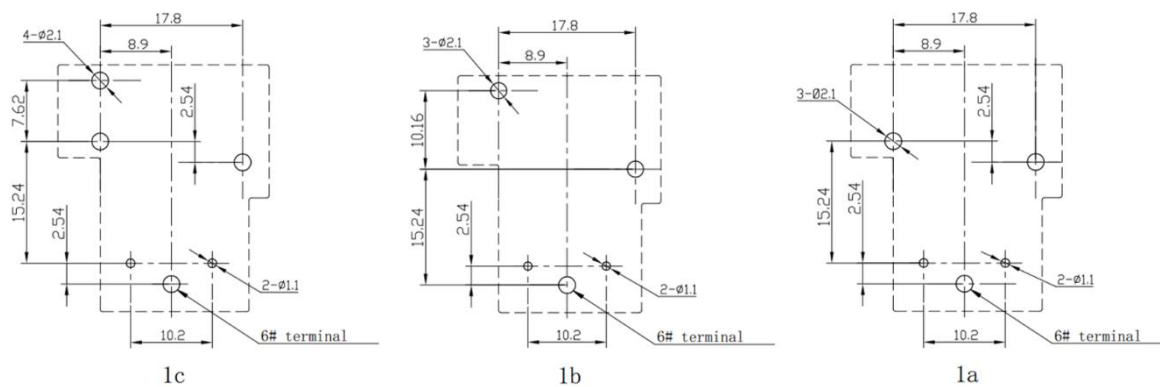


bottom view

Wiring Diagrams (bottom view)



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

SLA -S -1 12 D M J 2 -F -XX

Special Parameter:

Nil - Standard type

Letter or number - Special requirement

Insulation System:

Nil - Standard

B - Class B

F - Class F

Contact Material:

Nil - AgSnO₂

2 - AgNi + AgSnO₂

Terminal Type:

Nil - Standard type

J - Without 6# terminal

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: SLA

- (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.
- (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

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

SLA-S-112DJ relay SLA, Flux-proof, rated DC voltage 12V, coil power 0.9, 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.