

Features:

- High contact capacity: 75A contact switching capability.
- The coil holding voltage can be reduced to 50~60% of the rated coil voltage to achieve energy saving.
- A set of normally open contacts with contact spacing > 4mm.
- In line with European photovoltaic standards IEC62109、VDE0126.



Approvals

UL (File No.) : E179745

TUV (File No.) : R50632515

CQC (File No.) : CQC24002433093

Contact Data

| | |
|---------------------------------|--|
| Contact arrangement | 1 Form A |
| Contact material | AgSnO ₂ |
| Contact Resistance | 10mΩ MAX.(6VDC 20A) |
| Contact Rating (resistive load) | 75A 1000VAC |
| Max. Contact Voltage | 1000VAC |
| Max. Contact Current | 80A |
| Max. Breaking Capacity | 80,000VA |
| Min. recommended contact load | 100mA 6VDC |
| Operate Time (at nominal volt.) | ≤30ms |
| Release Time (at nominal volt.) | ≤10ms |
| Electrical endurance | (1) Making 30A, Carrying 80A, Breaking 30A, 1000VAC, resistive load, 85°C, 1s on : 9s off, 3×10 ⁴ ops. (2) 60A, 320VAC, resistive load, 85°C, 1s on : 9s off, 6×10 ³ ops. |

Coil Data

| Nominal Voltage VDC | Max. Operate Voltage VDC | Min. Release Voltage VDC | Max. Allowable Voltage VDC | Coil Resistance (1±10%) Ω | Coil Power W | Holding Voltage |
|---------------------|--------------------------|--------------------------|----------------------------|---------------------------|--------------|-----------------------------------|
| 12 | 9 | 0.6 | 13.2 | 75 | 1.92 | 40% to 100% Nomi. Volt. (at 23°C) |
| 24 | 18 | 1.2 | 26.4 | 300 | | 50% to 60% Nomi. Volt. (at 85°C) |

Note:

- (1) The relay applies full coil voltage to maintain 200ms.
- (2) Coil holding voltage is the coil excitation voltage maintained after 200ms, down to 50~60% of the rated coil voltage.
- (3) The relay coil is not allowed to apply more than the upper limit of the holding voltage for a long time to prevent the relay from overheating and burning out.

Insulation Data

| | |
|-----------------------------|------------------------|
| Insulation resistance | 1000MΩ (500VDC) |
| Initial dielectric strength | |
| between contact sets | 2000VAC, 50/60Hz 1min. |
| between contact and coil | 5000VAC, 50/60Hz 1min. |

Other Data

| | |
|----------------------|---|
| Material compliance | EU RoHS/ELV, China RoHS, REACH |
| Temperature rise | < 70K (After the coil is energized with rated voltage for 200ms, set the holding voltage to 60% of rated voltage, load current carrying 75A, @85°C) |
| Shock resistance | Functional 98m/s ² Destructive 980m/s ² |
| Vibration resistance | 10Hz to 55Hz 1.5mm DA |
| Mechanical endurance | 1×10 ⁶ ops |
| Ambient temperature | -40°C to +85°C |
| Humidity | 5% to 85%RH |
| Termination | PCB |
| Weight | Approx. 80g |

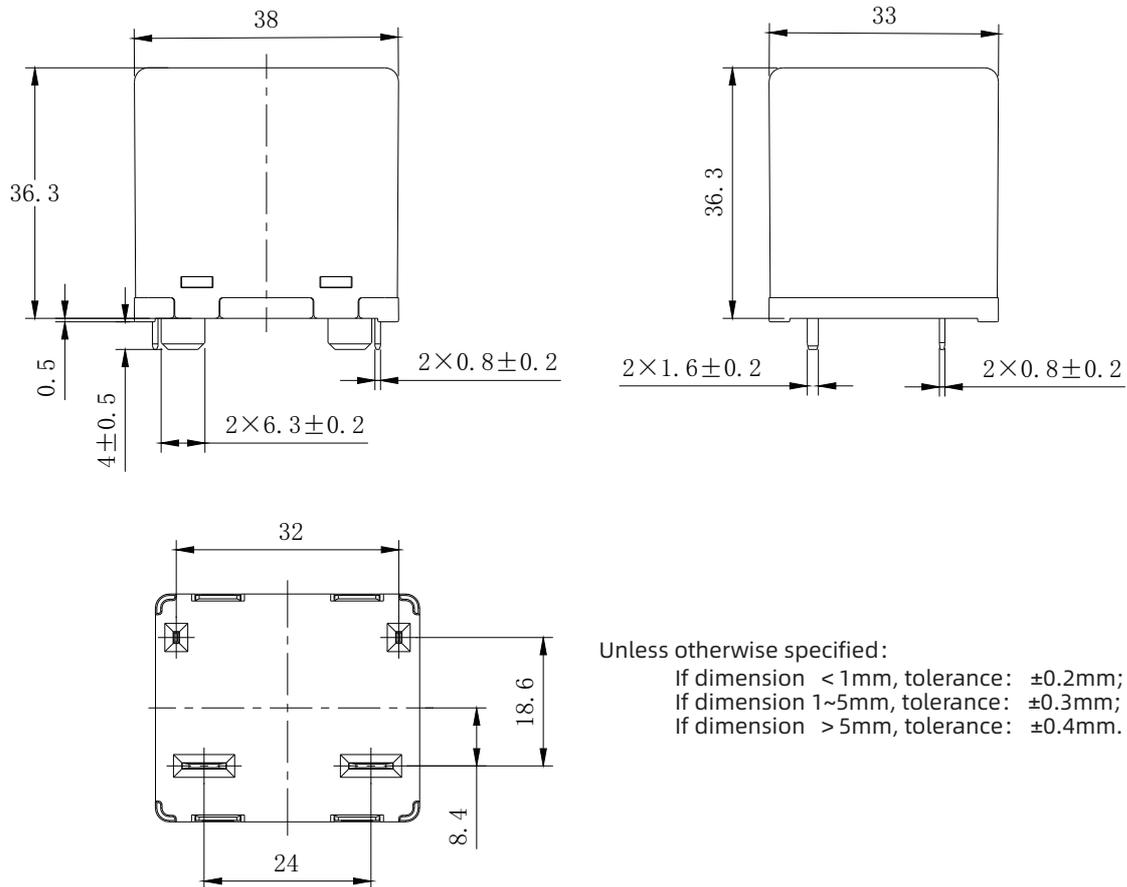
Note:

The above values are initial values

Safety certification load

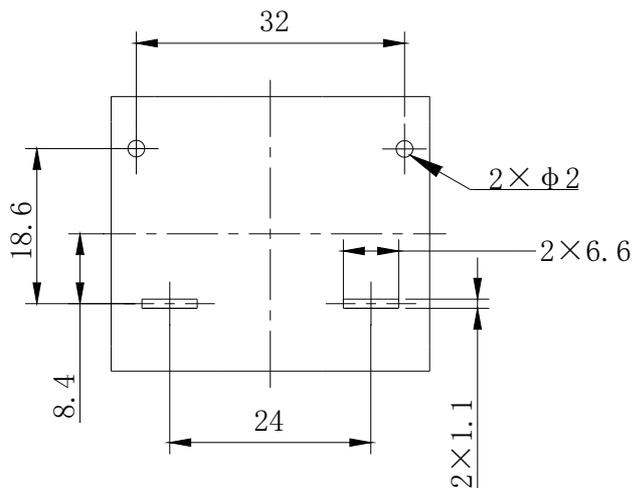
| Certification | File No. | Approved ratings |
|---------------|----------------|-----------------------------------|
| UL | E179745 | 320VAC 60A 1000VAC 30A/80A/30A |
| TUV | R50632515 | |
| CQC | CQC24002433093 | |

Dimensions

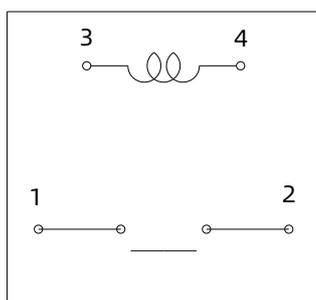


Unless otherwise specified:
 If dimension < 1mm, tolerance: $\pm 0.2\text{mm}$;
 If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$;
 If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$.

Wiring diagram (bottom view)



Wiring Diagrams



Product Code Structure

| | | | | | |
|-----|----|----|----|---|---|
| SPV | 75 | -M | 12 | 1 | |
| | | | | | Special parameters: Nil-Standard type, Letters or digits-Special requirement |
| | | | | | Contact material: 1-AgSnO2 |
| | | | | | Coil specification: 12, 24 (VDC) |
| | | | | | Contact form: M-Form A |
| | | | | | Load current: 75-75A |
| | | | | | Basic model: SPV |

Disclaimer

This product specification is for reference only, subject to change without prior notice. It is not possible for Sanyou to evaluate all the performance parameter requirements of relays in each specific application field, so customers should choose the suitable product according to the specific application conditions. If you have any questions, please contact us for more technical support, but the customer should be responsible for product selection.