

Potential applications:

Widely used in lighting control, heating control, office appliances,

Fire protection system and other automation fields are suitable for chemical, coal, ceramics

For explosion - proof, dust - proof, corrosion - proof and other extreme harsh environment.

- Input 4 to 32 VDC or 90 to 250 VAC
- Clamshell bolt protection for easier maintenance
- LED input status indicator light
- Ac/dc control optional
- Compliance with CE RoHS


The product selection


Specific models listed in the table below shall prevail

| describe | model | Load voltage | Load current |
|-----------------|--------------|--------------|--------------|
| random | BSD1044D032 | 40—440VAC | 10A |
| zero conduction | BSD1044D032Z | 40—440VAC | 10A |
| random | BSD1044A250 | 40—440VAC | 10A |
| zero conduction | BSD1044A250Z | 40—440VAC | 10A |

Technical parameters
input parameters:

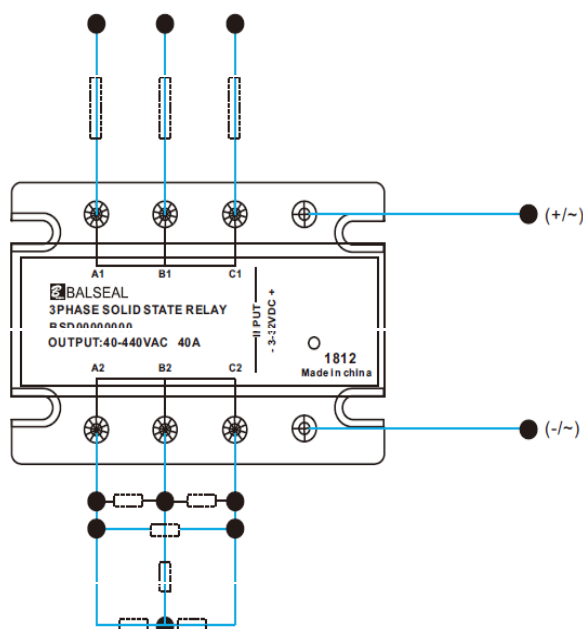
| | | |
|-----------------------------------|------------|--------------|
| Input voltage range | DC 3~32VDC | AC 90~250VAC |
| Input current range | DC 32VDC | |
| Make sure the voltage is on | DC 6~25mA | AC 5~30mA |
| Make sure to turn off the voltage | DC 3VD C | AC 90VAC |
| Reverse voltage | DC 1.5VDC | AC 10VAC |

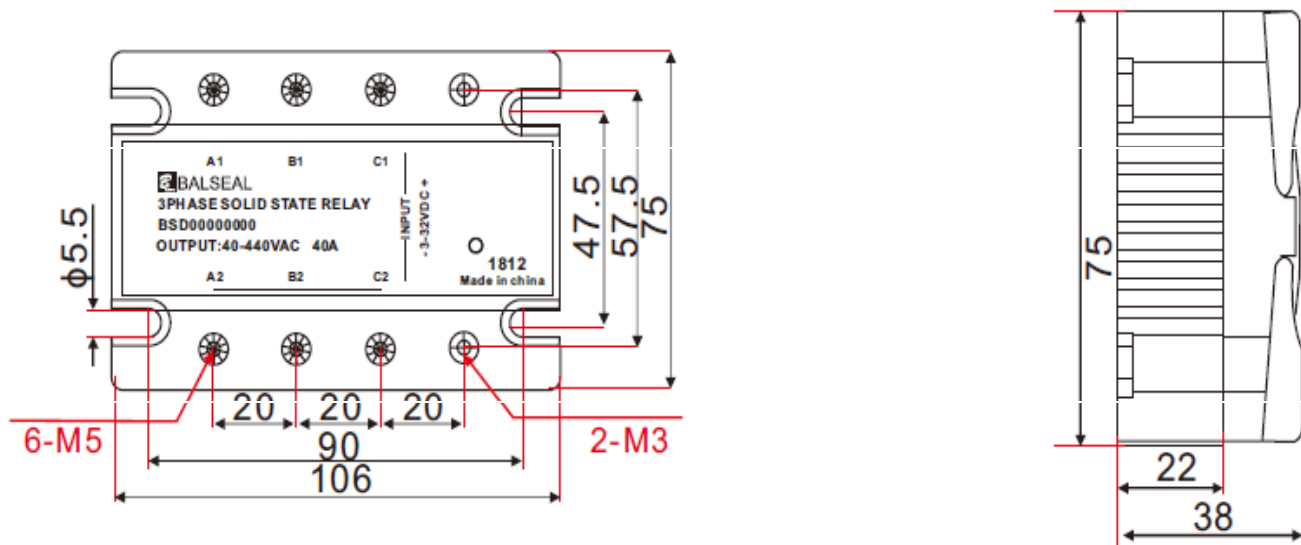
Output parameters:

| | |
|---------------------------|------------------------------|
| Rated load voltage | 24:24~240VAC 44:40~440VAC |
| Rated load current | 10A |
| Transient peak withstand | 24:600VAC 44:900VAC |
| Off state leakage current | AC $\leq 10\text{mA}$ |
| State pressure drop | AC $\leq 1.5\text{VAC}$ |
| On and off time | $\leq 10\text{ms}$ |

other parameters:

| | |
|-------------------------------|---|
| Medium pressure | $\geq 2500\text{VAC}$ |
| Insulation resistance | 500M Ω 500VDC |
| Housing material safety gauge | UL94-V0 |
| Substrate materials | aluminum |
| Working temperature | - 30 $^{\circ}\text{C}$ ~80 $^{\circ}\text{C}$ |
| Storage temperature | - 30 $^{\circ}\text{C}$ ~125 $^{\circ}\text{C}$ |
| Maximum operating humidity | 85% no condensation |
| installation | Panel bolt mounting |
| weight of the | 360~400g |

BSD AC output Series


BSD AC output Series

Selection Guide

1. There is a RC circuit inside the output end of solid state relay, which will have a small load with leakage current $\leq 10\text{mA}$. It is normal to have conduction or output voltage phenomenon.
2. The solid state is caused by the pressure drop of the output thyristor $\leq 1.5\text{v}$ during conduction. Relay heating, need to add a radiator, at the same time in the cabinet installation to leave enough space.
3. The output voltage and current identified by the solid state relay are rated voltage and rated current. In the selection to reduce the use of the amount. Different load reduction coefficient is different, especially sensibility. The load should also be voltage-sensitive in parallel with the output cathode protection.

table

| Load current | Radiator type |
|--------------------|---------------|
| BSA 20A following | HH0034 |
| BSA 40A following | HH0061 |
| BSA 60A following | HH0062 |
| BSA 80A following | HH0063 |
| BSD 20A following | HH0035 |
| BSD 30A following | HH0034 |
| BSD 40A following | HH0036 |
| BSD 80A following | HH0037 |
| BSD 100A following | HH0038 |
| BSD 200A following | HH0039 |

Load derating

| The load type | Pure resistance | Heating wire | Incandescent lamp | transformer |
|----------------------|-----------------|--------------|-------------------|-------------|
| Power factor | 1.0 | 0.7 | 0.5 | 0.4 |
| magnification | 1.5/ times | 2.0/ times | 2.5/ times | 4.0/ times |

| The load type | electromagnet | Single phase motor | three-phase motor | Capacitance for |
|----------------------|---------------|--------------------|-------------------|-----------------|
| Power factor | 0.5 | 0.2 | 0.3 | surge |
| magnification | 4.0/ times | 7.0/ times | 6.0/ times | 10.0/ times |

Attention

Input working condition

1. Pay attention to the working voltage range and the anode and cathode.
2. In order to ensure the normal operation of the solid state relay, the input current should be increased when the ambient temperature is low. The input current should be reduced when the temperature is high.
3. When driving SSR directly with integrated circuit, there should be enough carrying capacity and as low as possible 0 level output.

Output working condition

1. to ensure the reliable operation of SSR, the limit parameters of SSR must be correctly used and taken Necessary protective measures.
2. Peak voltage selection: inductance load: 2-3 times of line voltage (effective value), Pure resistance load: 1-2 times of line voltage (effective value)
3. Selection of piezoresistor: the nominal working voltage of piezoresistor is based on SSR 1.8-2 times of the effective value is selected.
- 4 products with operating current below 5A should be installed beside the cooling window with good ventilation as far as possible. Or where cool winds blow.
5. Products with working current of more than 10A must be equipped with radiators, relays and radiators
Add thermal conductive silicon grease to good heat dissipation, radiator surface temperature close to 60°C forced air cooling.
6. In order to avoid the temperature rise of solid-state relay exceeding the allowable value, heat dissipation effect and installation position should be fully considered in the design and application. When two or more solid-state relays are installed side by side, proper large spacing should be kept.

Matters needing attention

- all parameters at 25 C, unless otherwise specified.
- radiators must be installed for loads above 10A.
- fan or water cooling must be applied above 80 C

For more information, please contact us

Product certification

