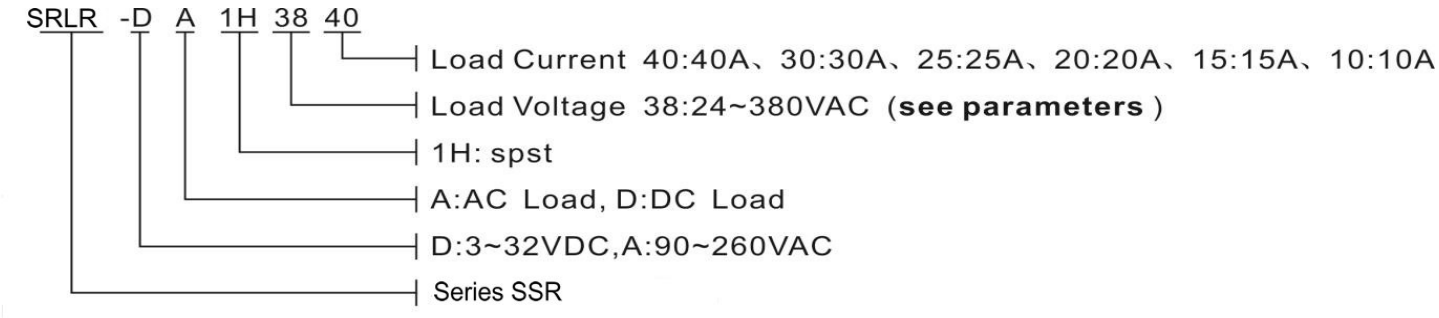
SRLR -DA1H,AA1H,DD1H series Din Rail Type SSR

SRLR-DA1H,AA1H,DD1H SSR series uses semiconductor switching elements to replace the non-contact on-off electronic switch of the original mechanical switch. Two of the small terminals are input control terminals, The other two bigger terminals are output controlled terminal. Photo coupler isolation or magnetic isolation is used between input and output. To add a DC or AC control signal to the input, and the output can change from off state to on state (blocking state when there is no signal), so as to control a large load The whole device has no moving parts and contacts, it can get the same functions as common mechanical electromagnetic relays. The series of products integrate the heat sink and the switch together, and din rails are installed at the bottom of the product, which is very convenient for users to install and use. They are widely used in automatic control fields such as electric furnace heating constant temperature system, numerical control machinery, plastic machinery, food machinery, packaging machinery, textile machinery, petrochemical equipment, entertainment facilities etc. suitable for various resistive, inductive and capacitive loads.

Descriptions:

1. There is photo coupler isolation or magnetic isolation between the control circuit and the load circuit, and the isolation voltage meets the 3C standard.
2. Standardized guide rail installation, the size is equivalent to ordinary DZ47 single circuit breaker.
3. LED indicator.
4. Protection circuit installed, with strong anti-interference.
5. With big size of conductive copper leads to the output terminal, the contact resistance is small, and it is suitable for various U-shaped terminals. (attached in the box)
6. Epoxy resin potting, with strong anti-corrosion and anti-explosion.

Model:



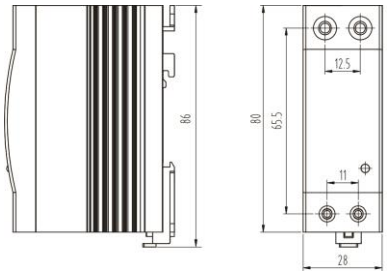
Parameters:

<table>
<tr><td rowspan="3">SRLR</td><td>Control method</td><td>load voltage</td><td>Uimp</td><td>Us</td><td>Ie (Ie=Ith)</td><td colspan="2">Input</td><td>Load</td></tr>
<tr><td rowspan="2">D:3~32VDC
A:90~260VAC</td><td rowspan="2">A</td><td rowspan="3">2.5kV</td><td rowspan="2">24:12~240VAC
38:24~380VAC
44:24~440VAC
48:48~480VAC</td><td rowspan="3">AC-12
DC-12

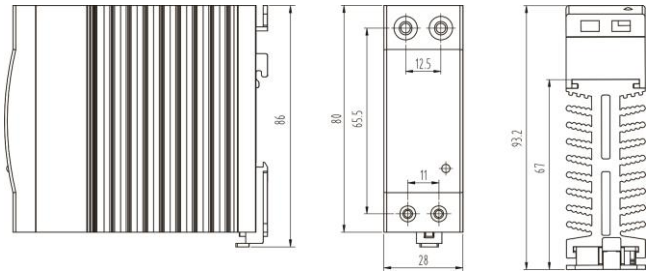
10A
15A
20A
25A
30A
40A</td><td>D</td><td>A</td><td rowspan="2">On/Off time:
1/2 Cycle
Peak Current:
More than Ie*10
On state Voltage:
≤2VAC</td></tr>
<tr><td>Min ON Voltge:
3VDC
Min OFF Voltge:
≤1VDC
Input Current:
≤15mA</td><td>Min ON Voltge:
90VAC
Min OFF Voltge:
≤30VAC
Input Current:
≤15mA</td></tr>
<tr><td>D:3~32VDC</td><td>D</td><td>05:2~50VDC
11:5~110VDC
22:5~220VDC
38:12~380VDC</td><td>Min ON Voltge:
3VDC
Min OFFVoltge:
≤1VDC
Input Current:
≤30mA</td><td>Non</td><td>On/Off time:
≤1mS
Peak Current:
More than Ie*10
On Resistance:
≤50mΩ</td></tr>
</table>

Dimensions:

10A、15A、20A：

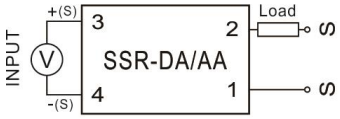


25A、30A、40A：



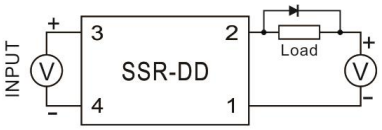
Wiring Diagram:

LRSSR-DA1H、AA1H



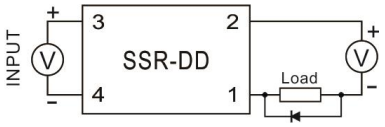
LRSSR-DD1H

1



LRSSR-DD1H

2



Picture 1 is apply to all DD1H series, picture 2 is only apply to DD1H those the load voltage below 220VDC.

Notice:

1. Great efforts has been made on product quality and reliability, but if the semiconductor power device used in the solid state relay by Improper selection or improper use can still cause irreversible damage In addition, due to the fluctuation of grid voltage (usually ±10%) and the difference of inductive reactance and capacitive reactance, a certain safety factor must be considered in the selection, e.g. the long-term working current of electric heating should not exceed 60% of the rated current of the SSR, and the working current of the motor should not exceed 1/4 of the rated current of the SSR.
2. When the long-term working current is ≥25A, air cooling must be adopted to accelerate the air flow for better heat dissipation.
3. The recommended tightening torque for M3 screws at the control end is 0.8~1Nm, and the recommended tightening torque for M5 screws at the load end is 1.9~2.1Nm.
4. In order to prevent the breakdown damage of the solid state relay caused by the short circuit of the load during use or the overload of current and voltage, it is strongly recommended to install and use a matching special fast fuse (our company can provide supporting services). For inductive loads, piezoresistors and RC absorption circuits need to be installed at the solid-state output terminals.For DC solid-state relays, if they are inductive loads, freewheeling diodes must be installed for protection.
5. Enough but non exceed the nominal trigger voltage and current value must be ensured to the SSR, e.g: input 3-32VDC. The lowest input voltage should be not less than 3VDC, and 32VDC maximum. therefore, in series or parallel use, special attention should be paid to satisfy the solid state Relay triggering requirements.
6. SSR should be stored in a ventilated, dry and non-corrosive place, which the humidity should be less than 80%.