When failure is not an option:
40 A Redundancy Module

**SLR01**

- Easy set-up of N+1 redundancies on the DIN-Rail
- Decoupling diode
- Ready relay contact
- For use with 24...28V power supplies up to max. 50A

**Short description**

When failures might cause costly extensive downtimes, a design solution is a redundant power supply that uses several (N+1) identical power supplies. The redundancy module SLR01 is designed to create an N+1 redundancy in combination with the PULS power supply SL40 or other 24...28V power supplies with an output current of up to 40A (max. 50A). One SLR01 is required for each power supply. The module decouples the output of the connected power supply from the others so that in the event of failure one power supply unit cannot overload the other units. A relay-changeover contact, picked up under normal conditions and dropped in the event of failure, indicates the status of the connected power supply unit. A Dual Redundancy Module, SLR02, is available to provide redundancy with two attached power supply units, each with an output current of up to 30A (max. 35A). For smaller current values of 2.5A, 5A and 10A PULS also offers the SLR2, SLR5 and SLR10 power supplies with integrated redundancy modules.

**Decoupling part**

- **Voltage**
  - nominal value: 24 V DC
  - max. rated: 35 V, short-term 45 V
- **Voltage drop**
  - \( V_{in} \rightarrow V_{out} \) typ. 0.6 V
- **Current per in- and output**
  - nominal value: 40 A
  - max. rated: 50 A
- **Protection against polarity reversal**: yes
- **Connection**: via stable screw terminals
  - Connector size range: solid: 0.5 - 16 mm², flexible: 0.5-10 mm²

**Construction/ Mechanics**

- **Housing dimensions and Weight**
  - \( W \times H \times D \): 48 mm x 124 mm x 117 mm (+ DIN Rail)
  - Free space: above/below 10 mm recommended for ventilation, left/right 10 mm recommended
  - Weight: 646 g

**Design advantages:**
- All connection blocks are easy to reach as mounted at the front panel

*For further information see data sheets „The SilverLine“, „SilverLine Family Branches“

**Order information**

<table>
<thead>
<tr>
<th>Order number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLR01</td>
<td>40A Redundancy Modul</td>
</tr>
<tr>
<td>SLZ01</td>
<td>(Screw mounting set, two needed per unit)</td>
</tr>
</tbody>
</table>

**Relay contacts**

- **Relay type**: Changeover contact, picked-up during normal operation
- **Relay picks up („ok“)**
  - when \( V_{in} \) between \( V_{low} \) and \( V_{high} \)
  - when \( V_{in} < V_{low} \) or \( V_{in} > V_{high} \)
- **Relay drops out**
  - \( V_{in} \) < \( V_{low} \) or \( V_{in} > V_{high} \)

- **Upper limit \( V_{high} \)**
  - \( 30 \pm 5\% \) fix
  - \( 30 \pm 5\% \) adjust
- **Lower limit \( V_{low} \)**
  - \( 22 \pm 1\% \) fix
  - \( 22 \pm 1\% \) typ.

- **Contact load**
  - 48 V DC / 1 A
  - 230 V AC / 0.5 A

- **LEDs on the front panel**
  - for input: green LED, when \( V_{in} \) between \( V_{low} \) and \( V_{high} \)
  - for output: green LED, when \( V_{out} > 2.5...3.5 \) V

**Further information**

- **Test voltage**
  - relay cont., \( V_{in}, V_{out} \): 3 kV
  - relay contacts/PE: 2.5 kV
  - \( V_{in}, V_{out}/PE \): 500 V AC

- **Ambient temperature range**
  - Operation: -10°C...+70°C
  - Storage: -25°C...+85°C

- **Efficiency**: > 97%
Power wiring SLR01

- GND
- +24V

Bottom view SLR01

Side view SLR01

Front view SLR01

Further information, especially about EMC, Connections, Safety, Approvals, Mechanics and Mounting, see page 2 of „The SilverLine“ data sheet.

Unless otherwise stated, specifications are valid for AC 230V input voltage, +25°C ambient temperature, and 5 min. run-in time. They are subject to change without prior notice.

Your partner in power supply: