**SL10.100**

- **Input:** AC 230/115V, DC 240...375V
- **Output:** 24-28V/240W
- **Power boost up to 288W**
- **High overload current, no switch-off**
- **Robust mechanics and EMC**

### Input

- **Input voltage:** AC 100-120/220-240V (switchable), 47-63Hz (AC 85...132/176...264V, DC 240...375V)
- **Note:** At DC input, always leave the switch in the 230V position
- **Input current:** <6A (switch in 115V position) <2.6A (switch in 230V position)
- **DCin at open output:** 8mA (preserves battery sources)
- **Inrush current:** typ. <30A at AC 264V and cold start
- **Unit is internally fused (fuse not accessible). For external fusing of unit and for input line protection, use circuit breaker with B-characteristic 10A or slower action, or alternatively T10A HBC fuse.
- **Transient handling:** Transient resistance acc. to VDE 0160 / W2 (750V/1.3ms), for all load conditions.
- **Hold up time:** >25ms at AC 196V, 24V/10A (see diagram overleaf)

### Efficiency, Reliability etc.*

- **Efficiency** typ. 90% (AC 230V, 24V/10A)
- **Losses** typ. 26.7W (AC 230V, 24V/10A)
- **MTBF** 425.000h acc. to Siemensnorm SN 29500 (24V/10A, AC 230V, Tamb = +40°C)
- **Life cycle (electrolytics)** The unit exclusively uses longlife electrolytics, specified for +105°C (cf. ‘The SilverLine’, p.2).

### Start / Overload Behaviour

- **Startup delay** typ. 0.1s
- **Rise time** ca. 5-20ms, depending on load
- **Overload Behaviour**
  - Special PULS Overload Design (see diagram overleaf)
  - 20% power boost
    - no disconnection, no hiccup if overloaded
    - high overload current (up to 1.6 INom), Vout is gradually reduced with increasing current.
    - 12A short-term, at 45°C or forced cooling even continuous

### Output

- **Output voltage** DC 24-28V, adjustable by (covered) front panel potentiometer; preset: 24.5V ±0.5%
- **Output noise suppression** Radiated EMI values below EN 61000-6-3, even when using long, unscreened output cables.
- **Ambient temperature range Tamb** Operation: 0°C...+70°C (>60°C: Derating)
  - Storage: -25°C...+85°C
- **Rated continuous loading with convection cooling**
  - Tamb=0°C - 60°C: 24V/10A (240W) resp. 28V/8.6A (240W)
  - Tamb=0°C - 45°C: 24V/12A (288W) resp. 28V/10.3A (288W)
  - short-term also at 60°C
- **Output is protected against short-circuit, open circuit and overload**
- **Overvolt. protection** typ. 35V
- **Parallel operation** yes, load sharing available on request
- **Power back immunity** 34V
- **Front panel indicator** Green LED on front panel

### Construction / Mechanics*

- **Housing dimensions and Weight**
  - W x H x D: 120mm x 124mm x 102mm (+ DIN rail)
  - Free space for ventilation: above/below 25mm recommended left/right 15mm recommended
  - **Weight** 980g
- **Design advantages:**
  - All connection blocks are easy to reach as mounted at the front panel.

### Order information

<table>
<thead>
<tr>
<th>Order number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL10.100</td>
<td>Basic version*</td>
</tr>
<tr>
<td>SLR10.100</td>
<td>N+1 redundancy*</td>
</tr>
<tr>
<td>SLS10.100</td>
<td>Safety Cover*</td>
</tr>
<tr>
<td>SL202</td>
<td>Screw mounting set, two needed per unit</td>
</tr>
</tbody>
</table>

* For further information see data sheets „The SilverLine“, „SilverLine Family Branches“ and mechanics data sheet
Functional diagrams

**Efficiency (typ.)**

![Efficiency diagram](image1)

**Output characteristic (min.)**

![Output characteristic diagram](image2)

**Hold-up time (typ., at V\text{out}=24V)**

![Hold-up time diagram](image3)

For further information, especially about
- EMC
- Connections
- Safety, Approvals
- Mechanics und Mounting,
  see page 2 of the „The SilverLine“ data sheet.

For detailed dimensions
see SilverLine mechanics data sheet SL2.5/ SLS/ SL10

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:
Mechanics

SL2.5/ SL5/ SL10

- Innovative DIN-Rail mount, unit holds even at vibration or lateral pressure
- Clearly arranged and user oriented
- Large, robust screw terminals
- Sealed metal housing
- Fine venting grid

Order information

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<td>SL2.100</td>
<td>24V/2.5A</td>
</tr>
<tr>
<td>SL2.103</td>
<td>12-15V/40W</td>
</tr>
<tr>
<td>SL5.100</td>
<td>24V/5A</td>
</tr>
<tr>
<td>SL5.102</td>
<td>24-28V/120W</td>
</tr>
<tr>
<td>SL5.105</td>
<td>24-28V/120W, 3AC400-500V input</td>
</tr>
<tr>
<td>SL10.100 and SL10.105</td>
<td>24-28V/240W</td>
</tr>
<tr>
<td>SL10.101</td>
<td>48-56V/240W</td>
</tr>
<tr>
<td>SL201</td>
<td>Screw mounting set, two needed per unit</td>
</tr>
</tbody>
</table>

Construction / Mechanics

- Housing dimensions and Weight:
  - SL2.5: 49 x 124 x 102 460 g 0 mm 25 mm each 10 mm
  - SL5.10x: 64 x 124 x 102 620 g 15 mm 25 mm each 15 mm
  - SL5.300: 73 x 124 x 117 730 g 15 mm 50 mm each 15 mm
  - SL10: 120 x 124 x 102 980 g 15 mm 25 mm each 15 mm
- Overall depth = depth value as mentioned + DIN rail depth

Connections

- Input/Output
- Current handling capacity
- Grid
- Screw terminals, connector size range: solid 0.5-6 mm² / flexible 0.5-4 mm²
- 30 A per output
- Two connectors per output, 9 mm distance between adjacent connectors
- All connection blocks are easy to reach as mounted at the front panel.
- Input and output are strictly apart from each other and so cannot be mixed up

Order number Description
SL2.100 24V/2.5A
SL2.103 12-15V/40W
SL5.100 24V/5A
SL5.102 24-28V/120W
SL5.105 24-28V/120W
SL5.300 24-28V/120W, 3AC400-500V input
SL10.100 and SL10.105 24-28V/240W
SL10.101 48-56V/240W
SL201 Screw mounting set, two needed per unit
his mechanics data sheet exclusively deals with the mechanical properties of the product. For further information (especially concerning electrical properties), please refer to the generic data sheet of the SL2.5, SL5 and SL10 and to the basic data sheet „The SilverLine“ dealing with common features of all SilverLine units. This data sheet is subject to change without prior notice.

Your partner in power supply: