**5 A with power boost**

**SL5.100**

- Input: AC 230V / 115V
- Output: 24V / 5A
- Power boost up to 6A
- High overload current, no switch-off
- Quasi-Wide-Range Input
- Robust mechanics and EMC

**Data sheet**

**Input**

- **Input voltage**: AC100-120/200-240 V (switchable), 47-63 Hz
- **Output**: 24V / 5A
- **Power boost up to 6A**
- **High overload current, no switch-off**
- **Quasi-Wide-Range Input**
- **Robust mechanics and EMC**

**Output**

- **Output voltage**: 24 V DC +5% –1%
- **Output noise suppression**: Radiated EMI values below EN 61000-6-3, even when using long, unscreened output cables.
- **Ambient temperature range T_{amb}**: Operation: -10°C...+70°C (>60°C: Derating)  
  Storage: -25°C...+85°C
- **Continuous loading** (at T_{amb}=+10°C...+60°C, convection cooling), see also diagram overleaf.
- **Overvolt. protection**: typ. 29 V
- **Parallel operation**: yes; current sharing available on request
- **Power back immunity**: 26 V
- **Front panel indicator**: Green LED, goes out at V_{out}<18V

**Efficiency, Reliability etc.*

- **Efficiency**: typ. 90 % (230 VAC, 24 V / 5 A)
- **Losses**: typ. 13.3 W (230 VAC, 24 V / 5 A)
- **MTBF**: 520,000 h acc. to Siemensnorm SN 29500 (24 V/5 A, 230 VAC, T_{amb}=+40 °C)
- **Life cycle (electrolitics)**: The unit exclusively uses longlife electrolitics, specified for +105°C (cf. 'The SilverLine', p.2).

**Construction / Mechanics**

- **Housing dimensions and Weight**
  - W x H x D: 64 mm x 124 mm x 102 mm (+ DIN rail)
  - Free space for ventilation: above/below 25 mm recommended
  - Weight: 620 g

- **Design advantages**
  - 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 (Input below, output above).

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

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**Order information**

<table>
<thead>
<tr>
<th>Order number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL5.100</td>
<td>(Basic version*)</td>
</tr>
<tr>
<td>SLRS5.100</td>
<td>(N+1 redundancy*)</td>
</tr>
<tr>
<td>SLSS5.100</td>
<td>(Safety Cover*)</td>
</tr>
<tr>
<td>SLZ01</td>
<td>Screw mounting set, two needed per unit</td>
</tr>
</tbody>
</table>

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**Start / Overload Behaviour**

- **Startup delay**: typ. 0.1 s
- **Rise time**: ca. 5-20 ms, 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 1.9 I_{Nom}), Vout is gradually reduced with increasing current.
    - 6A short-term, at 45°C or forced cooling even continuous

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**Advantages**

- High short-circuit current, giving large ‘start-up window’: unit starts reliably even with awkward loads (DC-DC converters, motors).
- No ‘sticking’ such as can occur with fold-back characteristics
- Secondary fuses operate reliably

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</tr>
</tbody>
</table>
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.

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

For detailed dimensions
see SilverLine mechanics data sheet SL2.5/ SL5/ SL10

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 ventilating grid

Order information

<table>
<thead>
<tr>
<th>Order number</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<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</td>
</tr>
<tr>
<td>SL5.300</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>SLZ01</td>
<td>Screw mounting set, two needed per unit</td>
</tr>
</tbody>
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Connections

- Input/Output
- Current handling capacity
- Grid

Design advantages:
- 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

Construction / Mechanics

Housing dimensions and Weight

<table>
<thead>
<tr>
<th>Unit</th>
<th>W x H x D [mm]</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL2.5</td>
<td>49 x 124 x 102</td>
<td>460 g</td>
</tr>
<tr>
<td>SL5.10x</td>
<td>64 x 124 x 102</td>
<td>620 g</td>
</tr>
<tr>
<td>SL5.300</td>
<td>73 x 124 x 117</td>
<td>730 g</td>
</tr>
<tr>
<td>SL10</td>
<td>120 x 124 x 102</td>
<td>980 g</td>
</tr>
</tbody>
</table>

Overall depth = depth value as mentioned + DIN rail depth

Connections

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

Mounting

on DIN-Rail (TS35/7.5 or TS35/15, 1...1.5 mm thick), thus
- Simple snap-on system
- Sits safely and firmly on the DIN-Rail
- No tools required to remove
  or backplane-mounted
  (two optional screw mounting sets SLZ01 required)

Front view SL2.5

Bottom view SL2.5

Side view SL2.5
Your partner in power supply:

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.