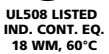


SL2.100

- Input: AC 230V / 115V
- Output: 24V / 2.5A
- High overload current, no switch-off
- Quasi-Wide-Range Input
- Robust mechanics and EMC
- NEC Class 2 Power Supply



Data sheet

Input

Input voltage AC100-120/220-240 V (switchable), 47-63 Hz (85-132 VAC / 176-264 VAC, 160-375 VDC, see also „Output: Continuous Loading“)

Quasi-Wide-Range Input: With the switch in the 230V position the power-supply unit operates at low and moderate loads at any input voltage between 95 and 264 V AC (see 'Output' at the right side).

Note: At DC input, always leave the switch in the 230V position

Input current < 1.3 A (switch in 115V position)
< 0.7 A (switch in 230V position)

DC input current at open output typ. 5.3 mA at 110 VDC, 3.9 mA at 300 VDC (preserves battery sources)

Inrush current typ. 25 A at 264 V AC 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.

EN 61000-3-2 (harmonic current emissions) is fulfilled

Transient handling Transient resistance acc. to VDE 0160 / W2 (750 V / 1.3 ms), for all load conditions.

Hold up time > 20 ms at 196 VAC, 24 V / 2.5 A (see Diagram overleaf)

Efficiency, Reliability etc.*

Efficiency typ. 87.5 % (230 VAC, 24 V / 2.5 A)

Losses typ. 8.6 W (230 VAC, 24 V / 2.5 A)

MTBF 740,000 h acc. to Siemensnorm SN 29500 (24 V/2.5 A, 230 VAC, T_{amb} = +40 °C)

Life cycle (electrolytics) The unit exclusively uses longlife electrolytics, specified for +105°C (cf. 'The SilverLine', p.2).

Output

Output voltage 24 V DC +5% -1% (12V on request)

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. For start at T _{amb} <0°C and low input voltage, please contact PULS.	Switch	AC/DCin	I _{out}
* For start with DC input > 95 V DC needed	230V	176-264 V	ACin 2,5 A
		95-176 V	ACin 1,5 A
		160-375 V	DCin 2,5 A
		120-160 V	DCin 2,0 A
	115V	85-132 V	ACin 1,5 A

Output protected against short circuit, open circuit and overload

Derating typ. 1.5 W/K (at T_{amb}=+60°C...+70°C)

Voltage regulation better than 2% V_{out} overall

Ripple / Noise < 25 mV_{pp}, (20 MHz bandw., 50 Ω measurem.)

Overvolt. protection typ. 32 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

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)
 - no disconnection, no hiccup if overloaded
 - high overload current (up to 1.5 I_{Nom}), V_{out} is gradually reduced with increasing current.

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

Order information

Order number

SL2.100
SLR2.100
SLZ02

Description

(Basic version*)
(N+1 redundancy*)
(Screw mounting set, two needed per unit)

Construction / Mechanics*

Housing dimensions and Weight

- W x H x D 49 mm x 124 mm x 102 mm (+ DIN rail)
- Free space for ventilation above/below 25 mm recommended right 10 mm recommended (front view)
- Weight 460 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

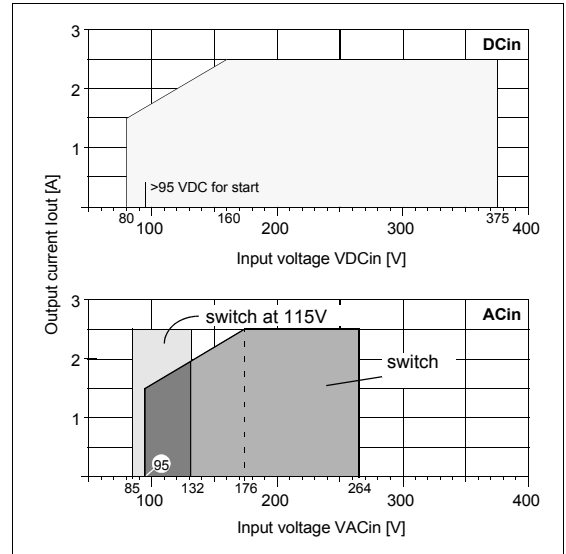
For further information, especially about

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

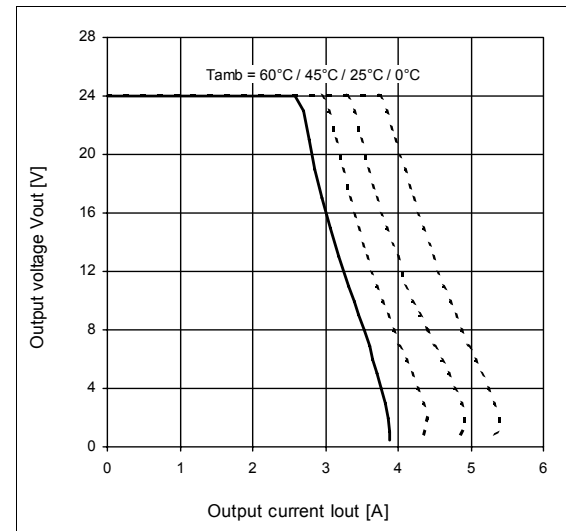
For detailed dimensions

see SilverLine mechanics data sheet SL2/ SL5/ SL10

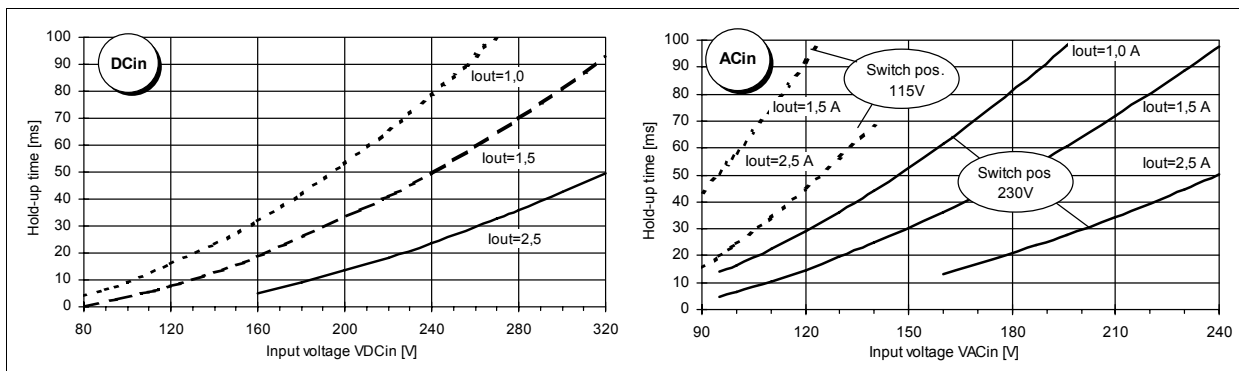
Output Current over Input Voltage (min.)



Output characteristic (min.)



Hold-up time (min.)



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:



European Power Supply Manufacturers Association



Bayerns Best 50
Czech 100 Best
Europe's 500

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