

4 A with power limitation

PULS

SL4.100

- Input: AC 230V / 115V, DC 210-375V
- Output: 24V / 4A
- 100 VA Limited Power Source
- No switch-off at overload
- Quasi-Wide-Range Input
- Robust mechanics and EMC
- NEC Class 2 Power Supply



CB
scheme
IEC60950

UL US

UL508 LISTED
IND. CONT. EQ.
18 WIM, 60°C

UL US
UL60950 E137005
CUL/CSA-C22.2
No 950-M90

CE
EMC and
Low Volt.
Directive

Data sheet

Input

Input voltage AC100-120/220-240 V (switchable), 47-63 Hz (85-132 VAC / 176-264 VAC, 210-375 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 (up to 2 A) at any input voltage between 95 and 264 VAC.

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

Input current < 2.0 A (switch in 115V position)
< 1.1 A (switch in 230V position)

DCin at open output typ. 5 mA (preserves battery sources)

Inrush current typ. < 15 A at 264 V AC and cold start

Unit is internally fused (fuse not accessible). External fuse not necessary, but recommended (common thermomagnetic 10A, B-type 'circuit-breaker' switch used anyway to fuse the input lines).

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

Hold-up time > 20 ms at 196 VAC, 24 V / 4 A (see diagram overleaf)

Efficiency, Reliability etc.*

Efficiency typ. 88 % (230 VAC, 24 V / 4 A)

Losses typ. 13.6 W (230 VAC, 24 V / 4 A)

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

Construction / Mechanics*

Housing dimensions and Weight

- W x H x D 65 mm x 124 mm x 102 mm (+ DIN rail)
- Free space for ventilation above/below 25 mm recommended left/right 15 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“

Order information

Order number	Description
SL4.100	
SLZ01	Screw mounting set, two needed per unit

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 (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}
230V		176-264 V	ACin 4 A
		95-176 V	ACin 3 A
		210-375 V	DCin 4 A
		150-210 V	DCin 3 A
115V		100-150 V	DCin 2 A
		85-132 V	ACin 4 A

Output is protected against short circuit, open circuit and overload.

Derating typ. 3 W/K (at T_{amb}=+60°C...+70°C)

Voltage regulation better 2% V_{out} over all

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

Overvolt. protection typ. 29 V

Parallel operation yes

Power back immunity 26 V

Front panel indicator Green LED on front panel, goes out at V_{out} < 12 V

Start / Overload Behaviour

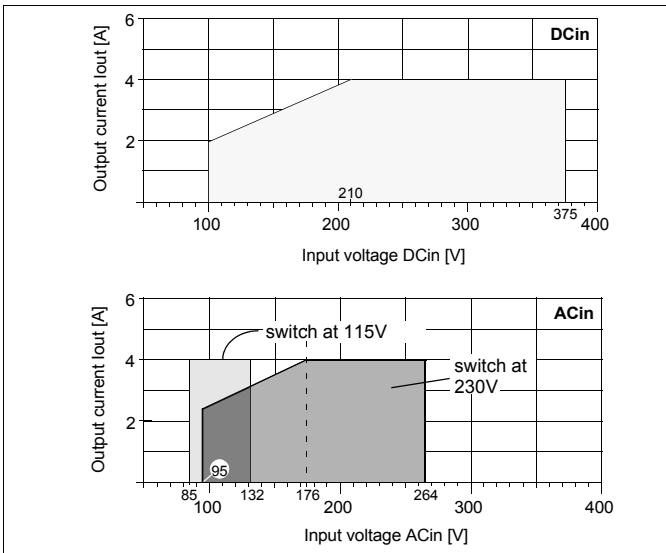
Start-up delay typ. 0.1 s

Rise time appr. 5-30 ms, depending on load

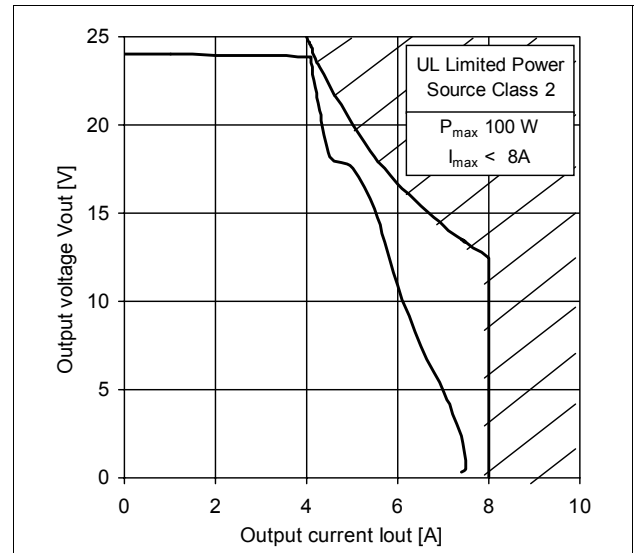
Overload behaviour Unit fulfills the requirements under Ltd. Power Source acc. to EN60950, para. 2.11, as follows:

- P_{out} < 100 VA at all load conditions
- I_{out} < 8 A at all load conditions

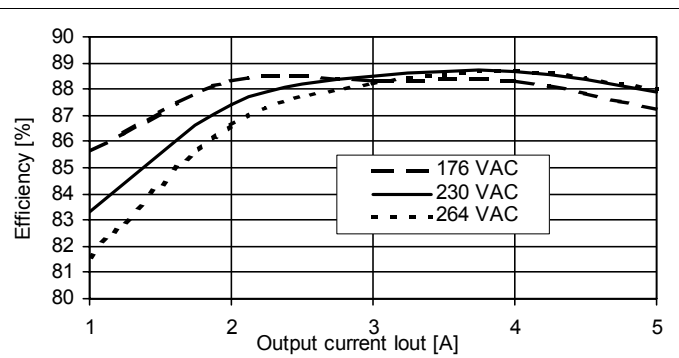
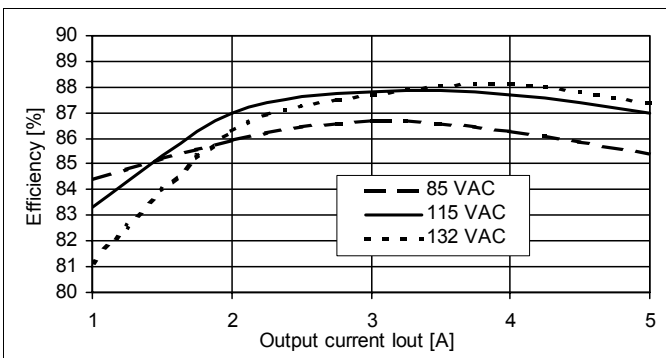
Output Current over Input Voltage (min.)



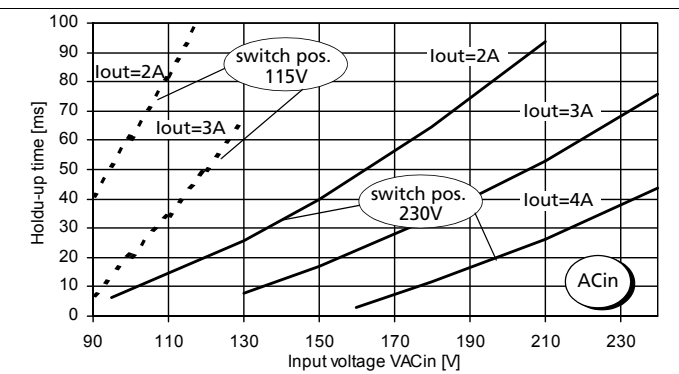
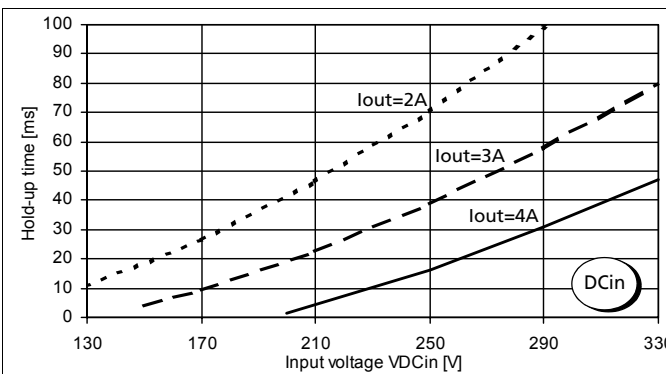
Output characteristic (typ.)



Efficiency (min.)



Hold-up time (min.)



For further information, especially about

- EMC
- Connections
- Safety, Approvals
- Mechanics and Mounting,

see page 2 of the „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:



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