

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 WM, 60°C

UL
US
UL60950 E127006
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

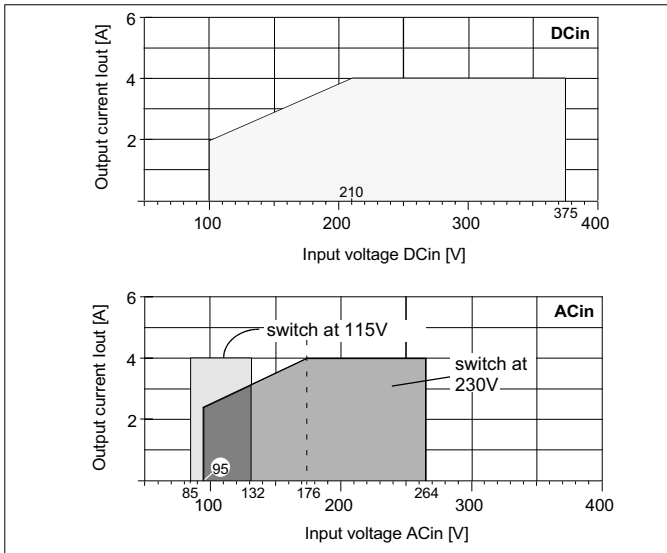
Output

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	Switch AC/DCin I _{out}
(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.	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

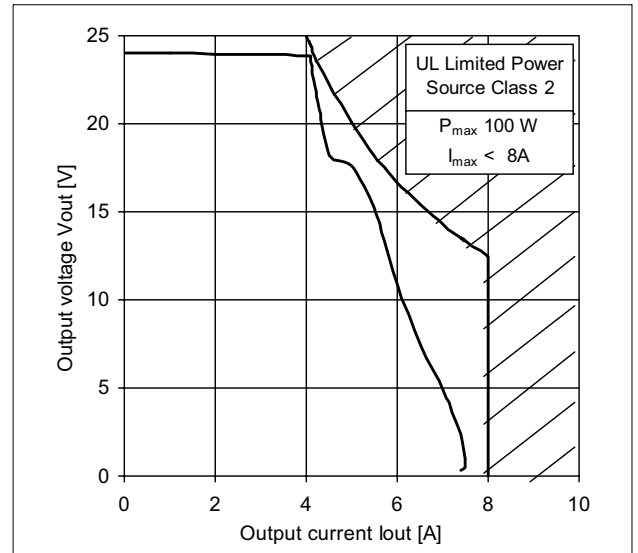
Start / Overload Behaviour

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

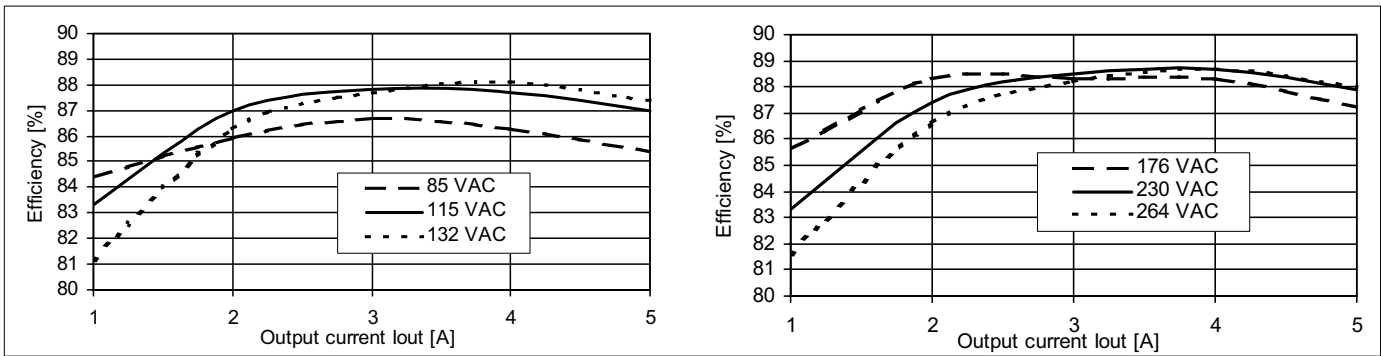
Output Current over Input Voltage (min.)



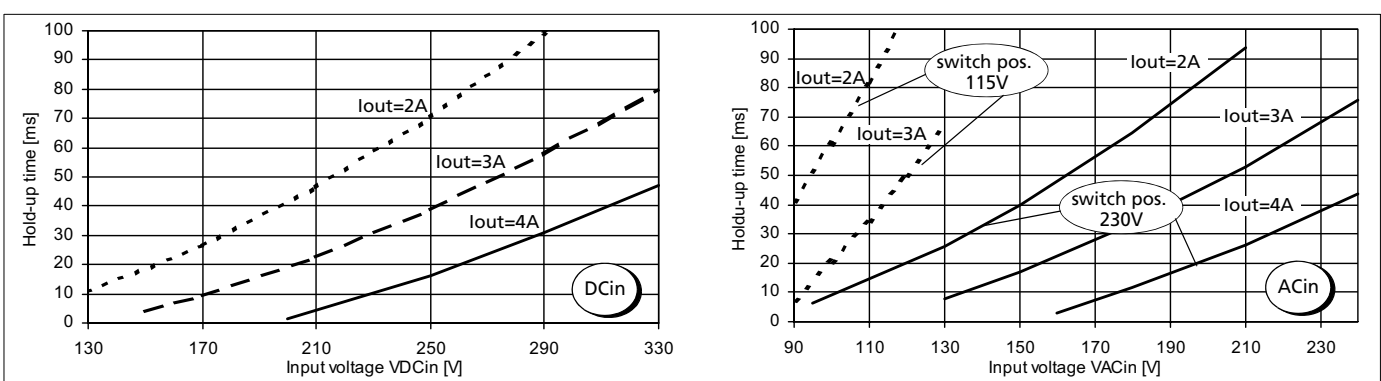
Output characteristic (typ.)



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.