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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 4 A with power limitation

# 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





## 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 <i>all</i> 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)		lusively uses longlife electrolytics, +105°C (cf. 'The SilverLine', p.2).

#### **Construction / Mechanics\***

Housing dimensions and Weight

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

#### 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"

## **Output**

Output voltage	24 V D	C +5% -1%		
Output noise suppression		Radiated EMI values below EN 61000-6-3, even when using long, unscreened output cables.		
Ambient temperature range T <sub>amb</sub>	•	ion: -10°C+7 e: -25°C+85°	•	0°C Derating)
Continuous loading (T <sub>amb</sub> = -10°C+60°C, convection cooling), see also diagram overleaf For start at T <sub>amb</sub> <0°C and low input voltage, please contact PULS.	Switch 230V	AC/DCin 176-264 V 95-176 V 210-375 V 150-210 V 100-150 V	ACin ACin DCin DCin DCin	lout 4 A 3 A 4 A 3 A 2 A
	115V	85-132 V	ACin	4 A

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

Derating	typ. 3 W/K (at T <sub>amb</sub> =+60°C+70°C)
Voltage regulation	better 2% Vout over all
Ripple / Noise	< 25 mV $_{\mbox{\footnotesize{PP}}}$ (20 MHz bandw., 50 $\Omega$ 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 <sub>out</sub> < 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:
<ul><li>P<sub>out</sub></li><li>I<sub>out</sub></li></ul>	< 100 VA at all load conditions < 8 A at all load conditions

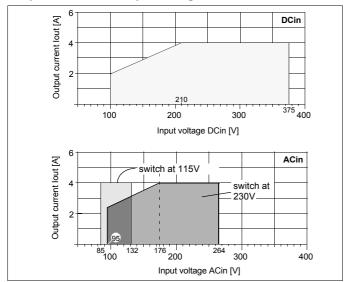
#### Order information

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

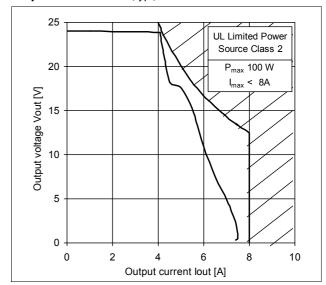
sl4e100 / 040121 1/2

# **PULS**

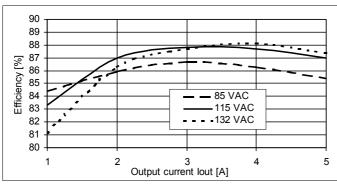
#### Output Current over Input Voltage (min.)

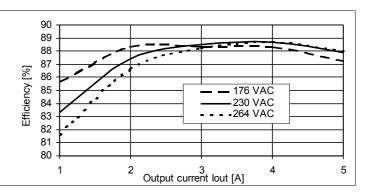


#### Output characteristic (typ.)

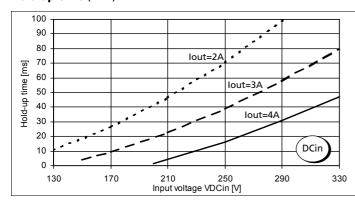


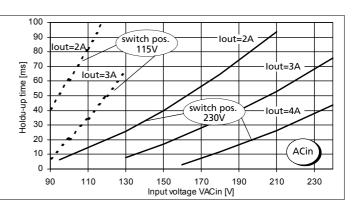
### Efficiency (min.)





#### 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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