

48-56V adjustable

PULS

SL10.101

- Input: AC 230/115V, DC 240...375V
- Output: 48-56V/240W
- Power boost up to 288W
- High overload current, no switch-off
- Robust mechanics and EMC



CB
scheme
IEC60950

UL
US

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

UL
US
UL60950 E137006
CUL/CSA-C22.2
No 60950

CE

EMC and
Low Volt.
Directive

Data sheet

Input

Input voltage AC 100-120/220-240V (switchable), 47-63Hz
(AC 85...132/176...264V, DC 240...375V)

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

Input current <6A (switch in 115V position)
<2.8A (switch in 230V position)

DCin at open output 8mA (preserves battery sources)

Inrush current typ. <30A at AC 264V 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.

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

Hold up time >25ms at AC 196V, 48V/5A
(see diagram overleaf)

Efficiency, Construction / Mechanics*

Housing dimensions and Weight

- W x H x D 120mm x 124mm x 102mm (+ DIN rail)
- Free space for above/below 25mm recommended
- ventilation left/right 15mm recommended
- Weight 980g

Design advantages:

- All connection blocks are easy to reach as mounted at the front panel.

Reliability etc.*

Efficiency typ. >90% (AC 230V, 48V/5A)

Losses typ. 26.7W (AC 230V, 48V/5A)

MTBF 425.000h acc. to Siemensnorm 5N 29500
(48V/5A, AC 230V, 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 DC 48-56V, adjustable by (covered) front panel
potentiometer; preset: 48 V ±0.5%
Adj. range guaranteed

Ambient temperature range T_{amb} Operation: 0°C...+70°C (>60°C: Derating)
Storage: -25°C...+85°C

Rated continuous loading with convection cooling

- T_{amb}=0°C - 60°C 48V/5A (240W) resp. 56V/4.3A (240W)
- T_{amb}=0°C - 45°C 48V/6A (288W) resp. 56V/5.1A (288W)
short-term also at 60°C

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

Derating typ. 6W/K (at T_{amb} = +60°C...+70°C)

Voltage regulation better than 2% V_{out} overall

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

Overvolt. protection typ. 59V

Parallel operation yes, load sharing available on request

Power back immunity 60V

Front panel indicator Green LED on front panel

Start / Overload Behaviour

Startup delay typ. 0.1s

Rise time ca. 5-20ms, depending on load

Overload Behaviour

- Special PULS Overload Design (see diagram overleaf)
 - no disconnection, no hiccup if overloaded
 - high overload current (up to 1.6 I_{Nom}), V_{out} is gradually reduced with increasing current.
- 20% power boost
 - 6A short-term, at 45°C or forced cooling even continuous

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 more reliably

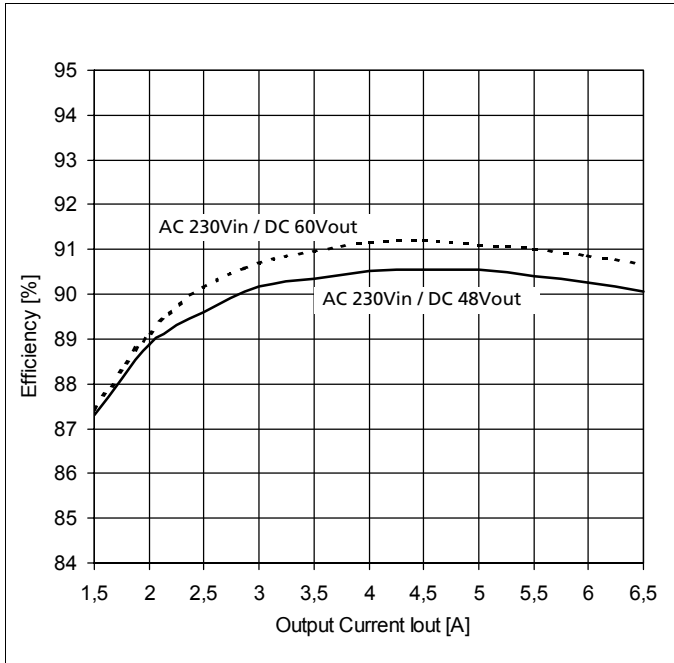
* For further information see data sheets „The SilverLine“, „SilverLine Family Branches“ and mechanics data sheet

Order information

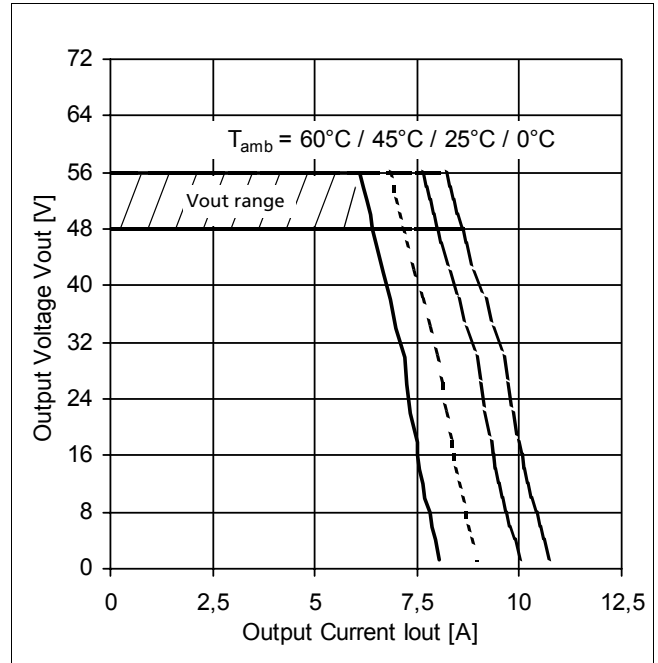
Order number	Description
SL10.101	
SLZ02	Screw mounting set, two needed per unit

Functional diagrams

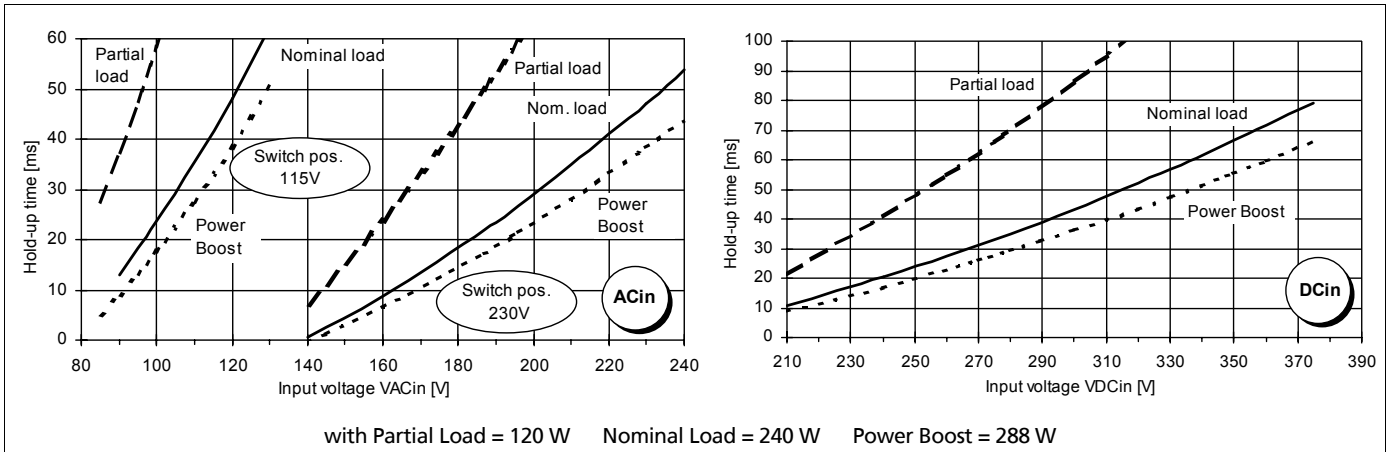
Efficiency (typ.)



Output characteristic (min.)



Hold-up time (typ., at Vout=48V)



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 SL2.5/ SL5/ SL10

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
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PULS GmbH
Arabellastraße 15
D-81925 München
Tel.: +49 89 9278-0
Fax: +49 89 9278-199
www.puls-power.com