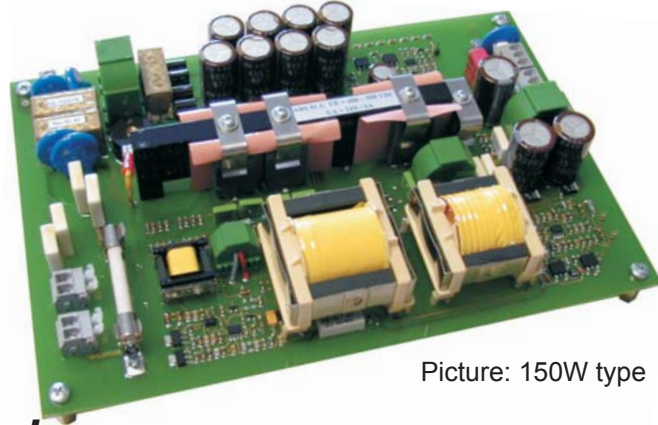


- Input voltage 220 - 750 V nom.
- Burst/Surge EN 61000-4-4/5 level X
- Over voltages acc. to EN50121-3-2 up to 1950 V / 2 ms for traction line
- Input noise suppression EN 55022.B
- 12 mm air and creepage distances
- LES-DB / Railway EN 50155 / 121
- Power failure bridging (passive)

for railway / car applications / high voltage batteries



Picture: 150W type

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Series ABS01.U Traction line- / Start-up supply

Main points:

Output:

- Regulation $\Sigma (U_{in} + I_{out} + T_U) < \pm 2\%$
- Accuracy absolute $\pm 2\%$
- Ripple $< 200 \text{ mV}_{pp}$ (over T_U)
- Spikes $< 300 \text{ mV}_{pp}$ (T 1:1/50MHz)
- Response time $\Delta I = 50\% \leq 2 \text{ ms}$
- Constant current limitation $< 1,2 I_{o \text{ max}}$
- Output spike filter (C - L² - C)
- No-load, over load, short circuit proof
- Output length diode (bridgeabel)
- The output diode can be bridged to reduce power loss (KV2)
- Switchable $U_{out} / 1,2 U_{out}$ with KV1 for battery charging / charging end voltage
- Wago plug clamp Type 255-401

Input:

- No-load power approx. 2,5 Watt
- Input filter acc. to EN 55022.B
- Disturbances
EN 61000-4-4 level 4
EN 61000-4-5 level X
Surge 6 kV on 2Ω 50μs
- Over voltages acc. EN50163
- Input fuse 1,2kV 8x50 mm with adapted melt flow characteristic
- Inrush current + run-up current limitation
- Reverse pol. protection with bridge rectifier (surge proof)
- Over and under voltage switch off with hysteresis and delayed restart
- Wago plug clamp Type 255-401
- Input sided voltage ripples of $> 10\%$ must be announced

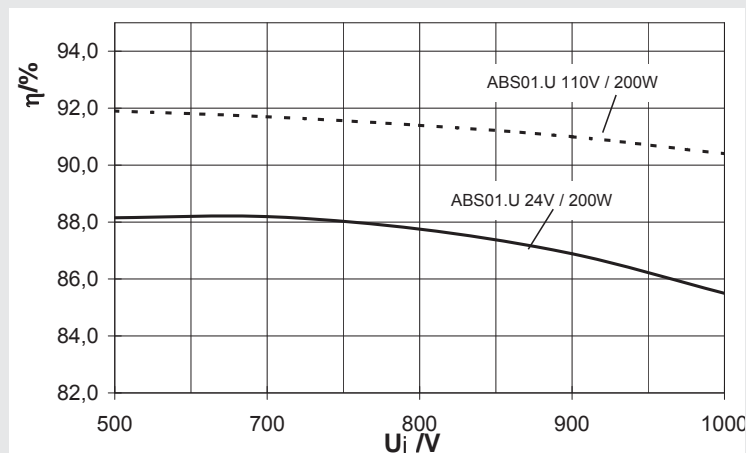
In general:

- Efficiency typ. 88% (24V) / 92% (110V)
- Clock frequency $> 80 \text{ kHz}$
- Triple voltage cascaded topology
- Isolation test voltage 4 KV_{AC} 1 min
- $\geq 12 \text{ mm}$ air, creepage distances (PCB / transformer)
- Ambient temperature $-25^\circ\text{C} / +70^\circ\text{C}$
- Option: $-40^\circ\text{C} / +85^\circ\text{C}$ (LES-DB)
- Derating: 1,0%/°C $> 60^\circ\text{C}$
- with base plate: 1,0%/°C $> 70^\circ\text{C}$
- MTBF on request
- Shock/vibration acc. to EN61373
- Weight: approx. 850g (no base plate)
approx. 1400g (with base plate)
- Dimension:
ABS 01/02 up to 150W: 250x170x54 mm³
ABS 01 with 200 Watt: 250x170x52 mm³
- CE-conformity certificate on request
- Power failure bridging at nominal voltage
- Option: extended hold-up time
Power good (relay contact)

<u>U_{in}</u> V	<u>P_{out}</u> W	<u>U_{out}</u> V	<u>I_{out}</u> A	Model number
154 - 310 550V / 2ms	150	24	6	ABS 01.U220.24.060
		48	3	ABS 01.U220.24.060
450 - 850 950V / 20ms	240	24	10	ABS 01.U600.24.100
		48	5	ABS 01.U600.48.050
460 - 1050 1270V / 20ms 1950V / 2ms	150	24	6	ABS 01.U750.24.060
		48	3	ABS 01.U750.48.030
		110	1,4	ABS 01.U750.10.014
460 - 1050 1270V / 20ms 1950V / 2ms	200	24	8	ABS 01.U750.24.080
		48	4	ABS 01.U750.48.040
		110	1,8	ABS 01.U750.10.018
Version H	-40°C up to 85°C			on request

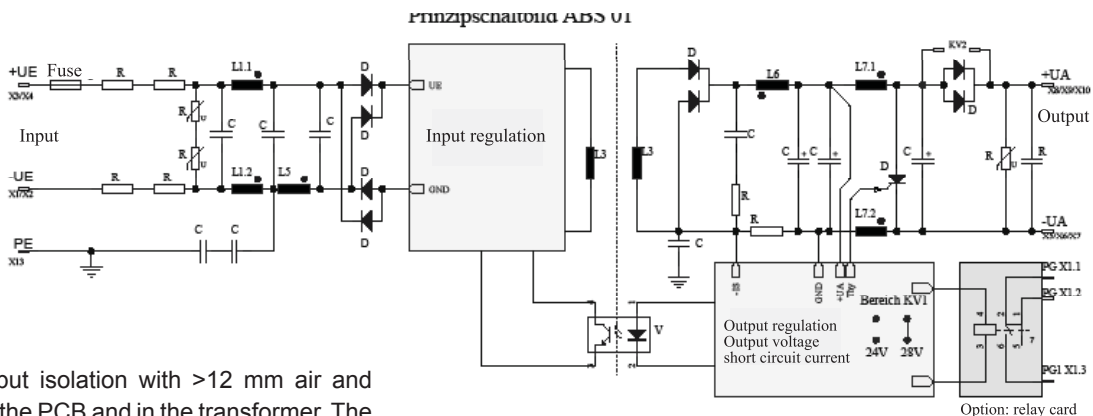
Modification costs for possible changes above values: on request

Efficiency:



The **ABS01.U** series up to 240W and the is designed for the mobile and stationary use especially for traction line and high voltage battery applications.

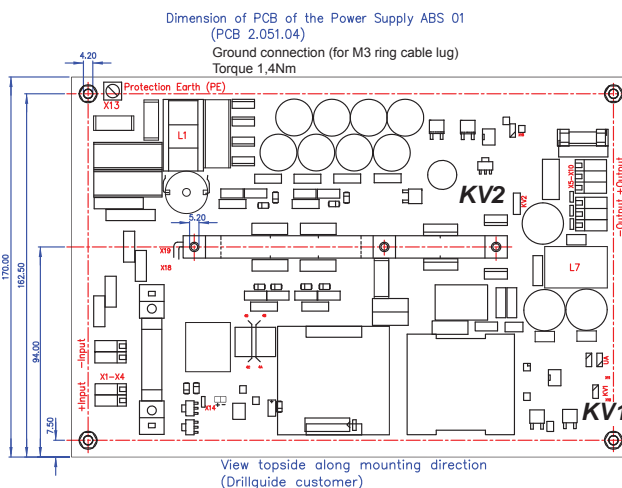
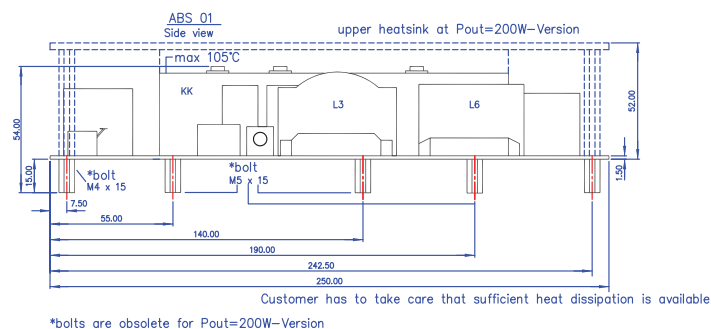
The special switching topology allows extremely high input-output isolation with >12 mm air and creepage distances on the PCB and in the transformer. The robust and stable mechanical build-up for extreme shock and vibration demands is ideal for traffic applications e.g. trolley-cars, busses and on the fuel cell. For higher climatic requirements this series cab be integrated in a special IP65 level housing.



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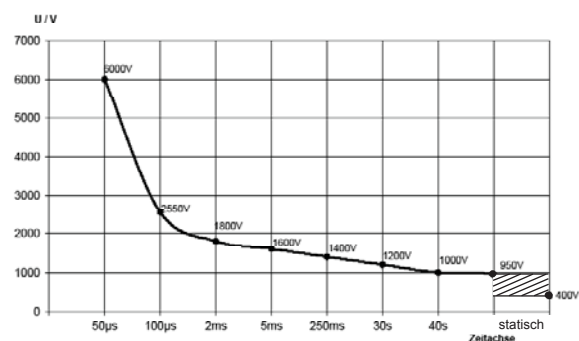
This standard power supply is protected and filtered against over voltages and disturbances at the input and output side. The power supply produces a regulated, short circuit proof, no-load proof and isolated low voltage with the according maximum dynamical power directly out of the high voltage network. This low voltage can be used for system supplies or battery charging. The output voltage can be switched-over from the nominal voltage to the maximum charging end voltage (customs demand) for batteries. The output length diode prevents the energy re-flow and allows the parallel connection for security reasons.

Mechanics ABS 01 150 Watt

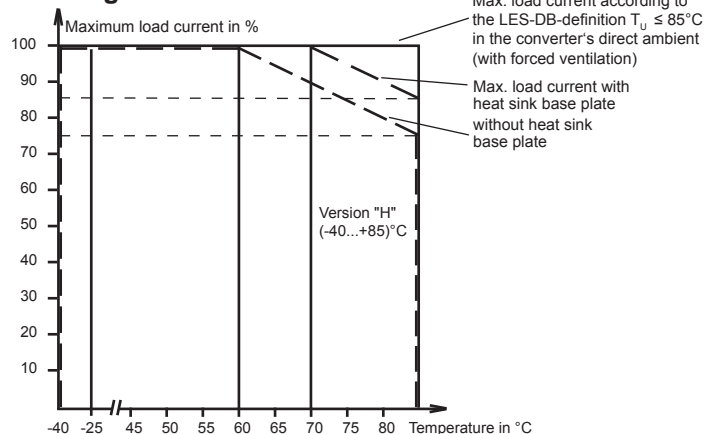


Fastening:
7 x distant bolts size 7
Inside thread M4 x 8mm
Torque 2 Nm

Dynamical over voltages



Derating curve



Measurement of radio interferences

