

Block PSU for application in railway equipment JETDB500



Features

- Ultra-wide input voltage range
- Surge&drops protection at the input
- Operating temperature range -50°C...+115°C
- Output power 500 W
- Input voltage ranges: 58...168 VDC, 43...150 VDC
- Metal case
- Complete unit with mounting and plug and socket units

Description

Power supply blocks with a full protection against transient overvoltages and drops at the input are the best for application in power supply systems in the railway industry, as well as in on-site facilities, supplied by power generators. The units are designed on a customized element base, and contain all possible elements, which enable them to operate in a wide temperature range -50...+115°C.

The blocks are produced in a metal case with mounting flanges. The case and the mounting type can be changed according to the customer's preferences.

JETDB 500 - 110 S 110 - P

1 2 3 4 5 6

- 1** - «JETDB» block series
- 2** - Max output power, W
- 3** - Input voltages
 - 110** - 110 VDC (58...168 VDC)
 - 75** - 24 VDC (18...36 VDC)
- 4** - Index of output channels quantity
 - S** - one
- 5** - Nominal output voltage, VDC
- 6** - Index of operating case temperature range
 - P** -50°C...+115°C

Technical parameters

Standard models with one output channel

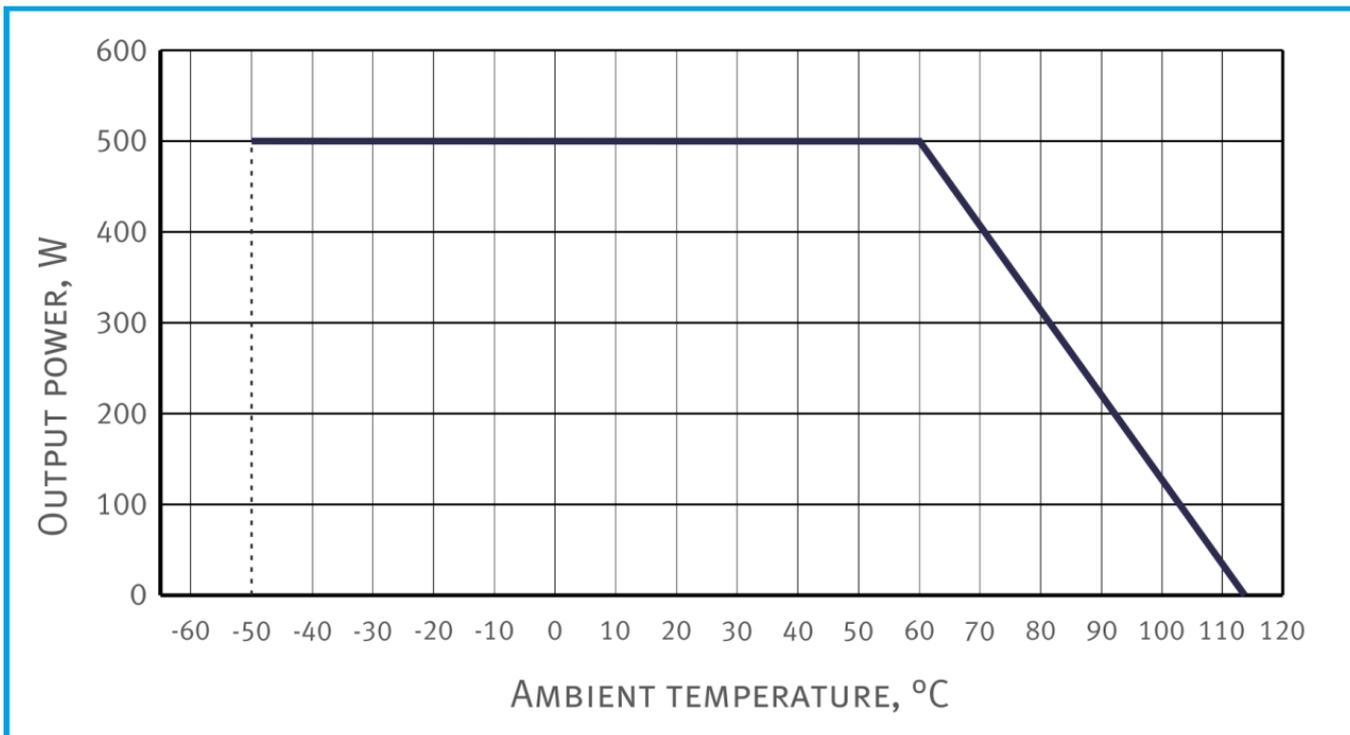
Name of PSU	Input voltage range	Transient input voltage deviation	Output power	Output voltage / output current nom.
JETDB500-110S110-P	58...168 V	40...200 V	500 W	110 V / 4,5 A
JETDB500-75S75-P	43...125 V	30...150 V	500 W	75 V / 6.6 A

Specifications for JETAB500-110S110-P*

Input voltage range	58...168VDC
Surge of the input voltage, 1 sec	до 200VDC
Drop of the input voltage, 8 sec	до 40VDC
Limiting input voltage with a metal oxide varistor, @1mA	240VDC (Wmax=81J, 10/1000µs)
Limiting input voltage with a semiconductor suppressor, @1mA	400VDC (Wmax=600W)
Instability of output voltage, in accordance to change of output current	±1%
Instability of output voltage, accordance to instability of input voltage	±0,5%
Overvoltage protection	<150% Uout nom
Output ripple	<2% Uout nom
Short circuit protection	Self-recovery
Over current protection level	Pout ...1,3*Pout
Thermal protection sensor turn-off level	+118...125°C
Ambient temperature (operating), see the graph	-50°C...+115°C
Ambient temperature (storage)	-60°C...+125°C
Thermal resistance case-environment	0,57°C/W
Conversion frequency	140kHz
Isolation resistance input - output	1500VAC
Isolation resistance input - case	1500VAC
Isolation resistance output - case	1500VAC
Isolation resistance, @500VDC	>20MΩ

* All specifications are valid for normal climate conditions, Uin.nom., Iout.nom., unless otherwise stated.

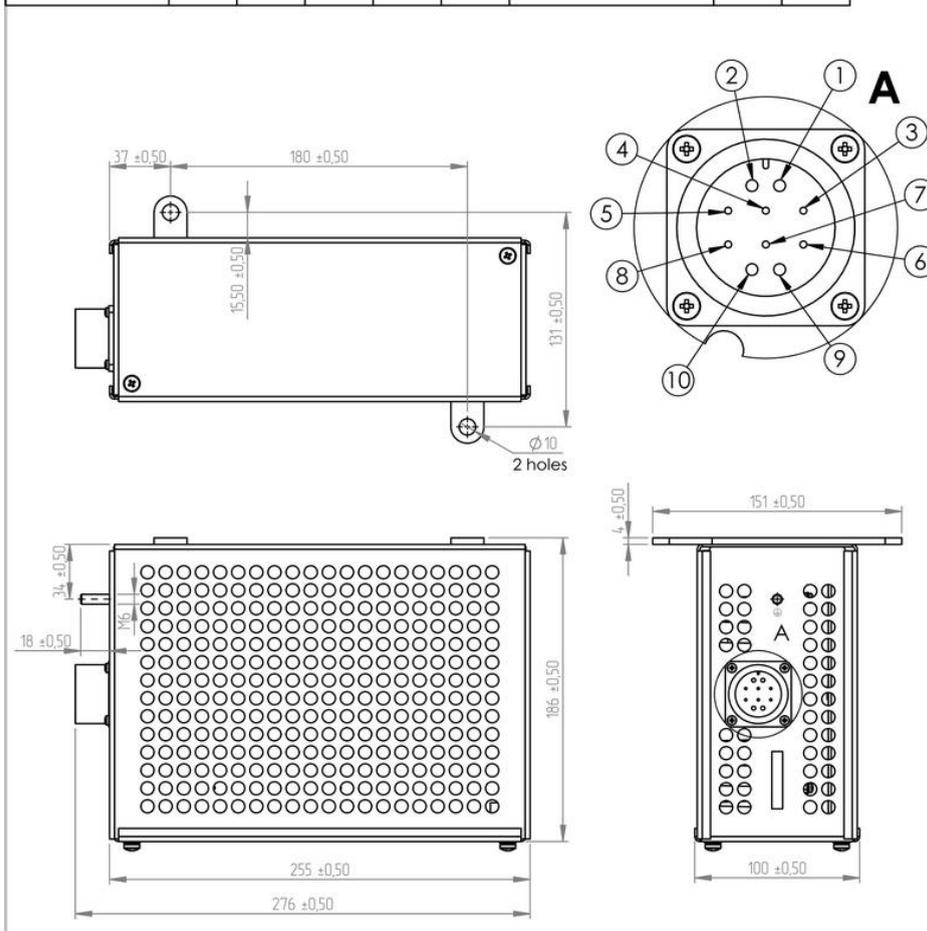
Output power vs ambient temperature



* Dropping part of the graph is in accordance with the maximum temperature of the case, which is why the output power must not exceed the values, limited by corresponding curve for a given ambient temperature. Continuous operation of the PSU at these points should be avoided.

Pin out

N Pin	1	2	3	4	5	6	7	8	9	10
Single output	+OUT	+OUT	+IN	+IN	+IN	not use			-OUT	-IN



Contacts

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