

DP500IP
Power Supply
Primary switched IP67 power supply



Abbildung ähnlich / device similar to figure



DP500IP-derivate table

Type	Input voltage	Output voltage	Max. output current	Cat. No.
	Nom.		Nom. / (Boost)	
DP500IP-12	100-240 VAC	12 VDC	40 A / (60 A)	109518
DP500IP-13,8	100-240 VAC	13,8 VDC	35 A / (52 A)	109517
DP500IP-24	100-240 VAC	24 VDC	20 A / (30 A)	109515

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1 Input

Input voltage AC	nom. 100 - 240 VAC	tolerance: 85 - 276 VAC
Input frequency	50 - 60 Hz	tolerance: 45 - 65 Hz
Input voltage DC	195 - 350 VDC	-
Inrush current	-	No Inrush current (active regulated limitation)
Max. current consumption	8 A 3,5 A	(100 VAC 230 VAC
Power factor	> 0,98	@ P _{nom}
No-load power	typ. 2 W	-
Internal input fuse	T10A / 250V	Additional external fuse is not necessary
Transient overvoltage protection	Varistor (4,5 kA / 120 J)	-
Hold up time	> 20 ms	-

2 Output

Output voltage	-	see DP500IP-derivate table
Tolerance	± 1% over all	-
Turn on delay time	< 1s	turn on after mains connection
Boost	150% of I _{nom}	for 5s overload reserve @ U _{in} > 170VAC
Capacitive load start-up	-	unlimited (I-const. characteristic)
Parallel operation	permissible	Equal current partitioning not guaranteed; can be improved by impedance in output line

3 Regulation accuracy

Load regulation static (10-90%)	< 0,5 %	typ. 0,05%
Load regulation dyn. (10-90%)	< 5 %	-
Recovery time	< 1 ms	-
Line regulation	< 0,2 %	typ. 0,02%
Rise time U _{out} U _{out} (10-90%)	< 50 ms	-

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Technische Änderungen und Irrtümer vorbehalten. I Technical modifications and mistakes reserved.

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Ripple & Noise < 150 mVpp -

4 EMC (Electromagnetic Compatibility)

RFI-emission EN55011 Class B

Immunity EN61000-6-2

5 Environment

Operating temperature device	-25°C ... +85°C	55°C ... 85°C: Derating with $1,5 \frac{\%}{C}$ (temperatures at reference point)
Operating temperature connections cables	- 40°C ... + 85°C - 5°C ... + 85°C	fixed laying occasionally movement
Storage temperature	-25°C ... +85°C	(-40°C ... +85°C o.R.)
Over temperature protection	-	Protective shut down, self reset after cool down
Cooling	-	Cooling via contact to mounting surface. For safe operating, a good thermal connection between mounting surface and the heat sink (application) have to be provided.
Humidity	100%	Condensation allowed
Degree of protection	IP67	EN60529
Pollution degree	3	EN60721
Climatic category	3K3	EN60721
Max. altitude	4000 m	(Low air pressure – 61kPa)
Formation of ice	Allowed	-

6 General Data

Electrical safety	EN50178 (IEC62103), EN61204-7	-
Overvoltage category	III	acc. to IEC60664-1
Insulation Voltage	3000 VAC 500 VDC	Input / output output / enclosure
Protective system	Class 1	with PE connection
Efficiency	Typ. 93%	-

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Dimensions (W x H x D)	185 x134 x 56 mm	see fig. 8.1
Weight	approx. 2,6 kg	-

7 Connectors and Signaling

Input	-	able with open ends (length 1 m ± 15 mm), 3-pole (L, N, PE), Ø 1,5 mm ² (AWG16)
Ausgang	12 V	able with open ends (length 1 m ± 15 mm), 2-pole, Ø 6mm ² , red (Output +), black (GND)
	24 V	able with open ends (length 1 m ± 15 mm), 2-pole, Ø 3,3mm ² (AWG 12), white (Output +), black (GND)
LED "DC - O.K."	Continuous green	DC - O.K. ($U_{out} = 90..110\%$ von U_{nom})
	Flashing 300 ms on / 300 ms off	DC - not O.K. ($U_{out} < 90\%$ von U_{nom})

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8 Dimensions

All dimensions are given in millimetres and have a general tolerance according to DIN ISO 2768 - m.

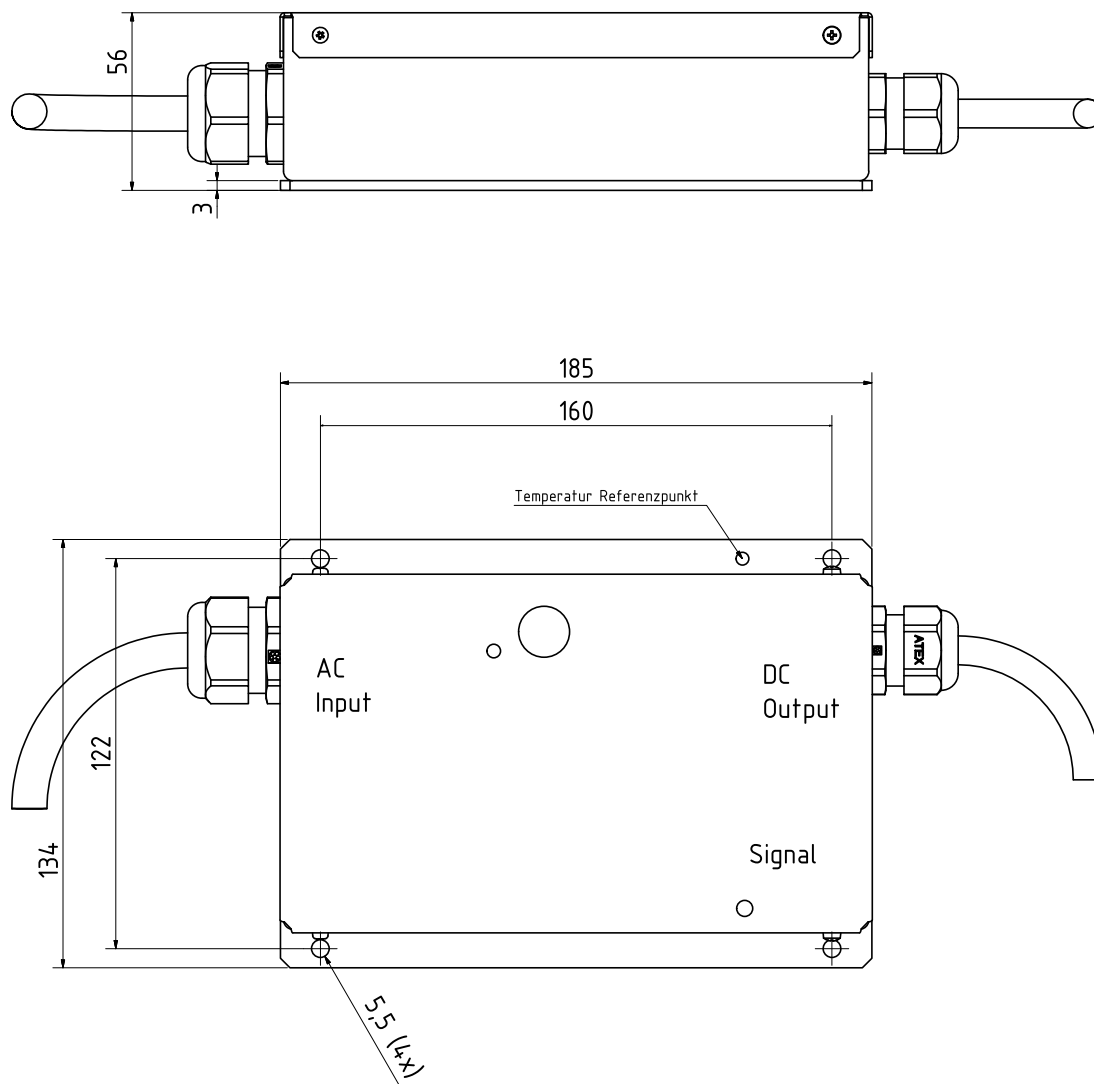


Figure 8.1: Dimensions

9 Installation and safety instructions

Generally it is recommended to use by Deutronic released equipment, only. Because only in this way an appropriate technical suitability and an adequate dimensioning can be ensured for professional use. Equipment and accessories have to be selected and installed in accordance with the requirements and under attention of the existing safety guidelines. Moreover pay attention of a safety interlocksystem at the respective device to ensure the operational safety and to avoid damages. If worn, the cables must be replaced immediately!

Please observe the safety instructions in the manual for this device. You can find these under: www.deutronic.com

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