

Features

DC/DC Converter

- Converter for high level DC-input
- Traction battery 320VDC / 450VDC / 600VDC
- High efficiency
- Robust, compact design
- For trucks, material handling, container lifter



POWER CONTROL SYSTEMS
RECOM GROUP

SD4000 Series

4kW On-board DC-Power Supply on High Voltage Battery



Module Features Table

Input Voltage Range [VDC]	Output Voltage [VDC]	Output Current [A]	Output Power [kW]	Output Tolerance [%Vin]	Ripple and Noise [mV]	Efficiency typ. [%]
230-460	24 48	160	4	±3	200	93
300-580		83				95
400-800						



Input voltage

Vin = 320VDC (230 - 460VDC)
450VDC (300 - 580VDC)
600VDC (400 - 800VDC)

Input current

18.5A @ 230VDC
14.5A @ 400VDC
11A @ 400VDC

Efficiency

up to 95% at full load

Input protections

- Inrush current protection
- RFI filter
- Fuses

See table for

- Output voltages and currents
- Tolerance
- Ripple and noise

Output protections

- Overvoltage protection (to switch off)
- Overcurrent protection (1.05-1.2 In)
- Short circuit protection
- Overtemperature protection (Tmax 90°C)

Output power

4kW

Output signals

- Vout relay contact

Inhibit input

- Active signal high (OFF)
- Active signal low (ON)

Operating indicators

- Green LEDS - Vin OK, Vout OK

Operating temperature

-20°C to +55°C

Storage temperature

-40°C to +85°C

Cooling

Force ventilation

Dielectric withstand voltage

- Input - Output: Comply to EN 62368-1

Isolation

- Output - P.E.: 500VAC
- Input-Output: 3000VAC

Comply with

- EN 62368-1
- EN 61000-6-2
- EN 61000-6-4
- CE

Weight

7.5kg

Connectors:

K2-K5 Molex Microfit Connector 16 Circuits
K3-K6 Omnimate BVZ 7.62 IT/04 180MFZ

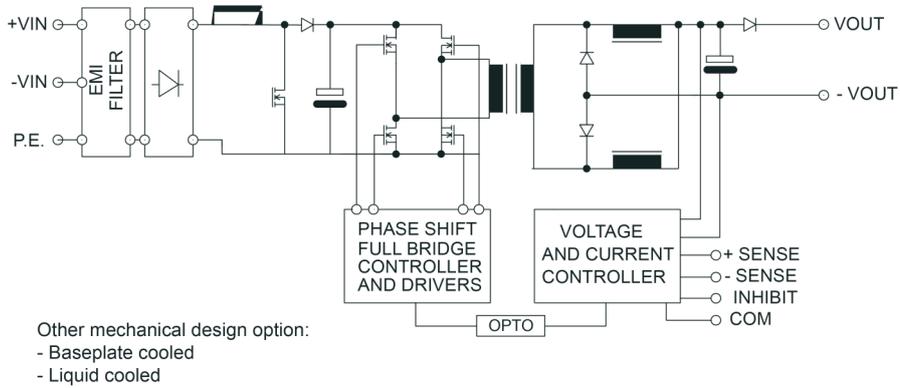
Options/on request:

- Base plate cooling (without fans)
- Liquid cooled

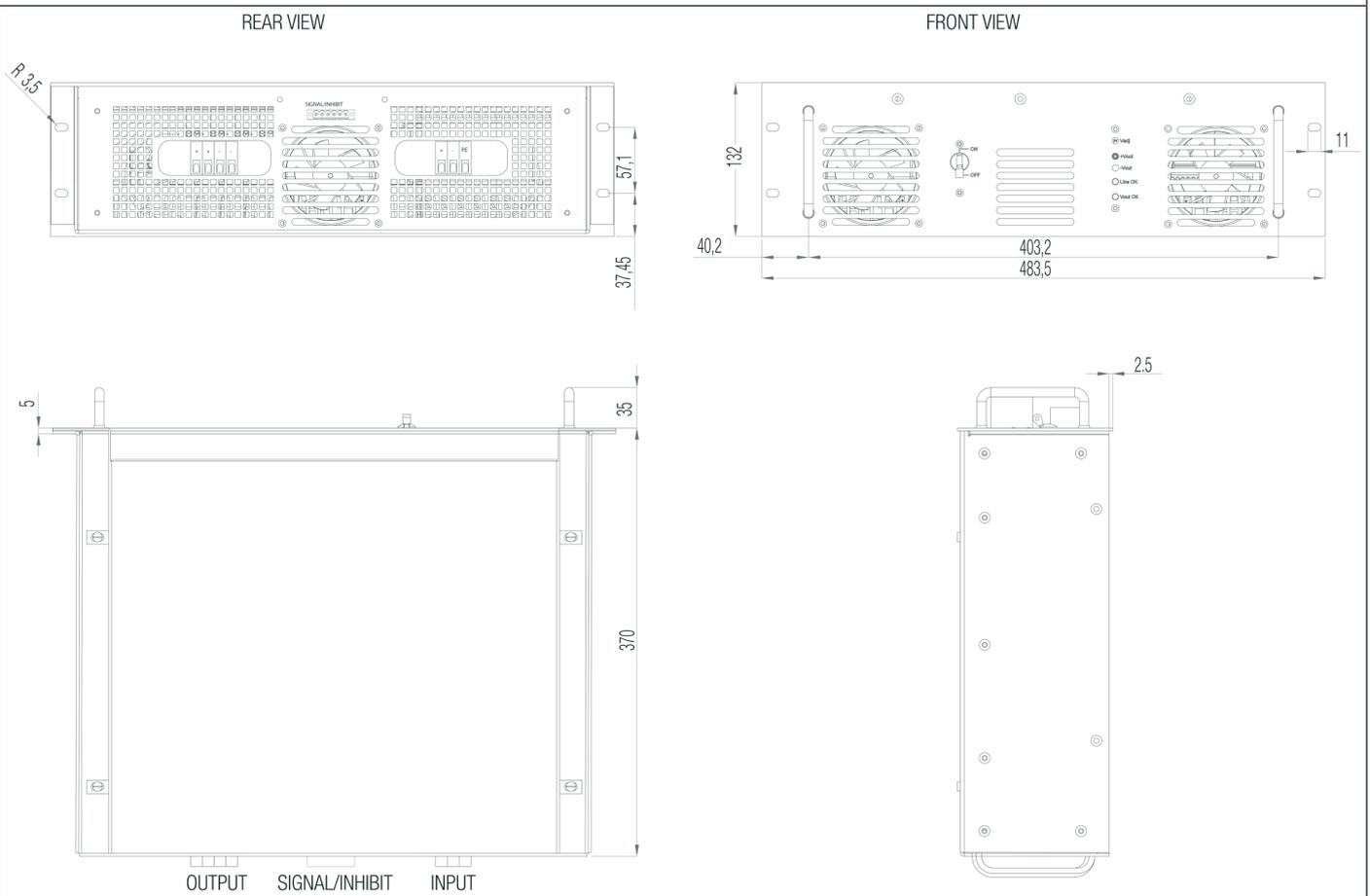


Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

BLOCK DIAGRAM



DIMENSION AND PHYSICAL CHARACTERISTICS



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