

Features

DC/DC Converter

- Plug & play converter
- For railway applications
- EN 50155 type tested
- High efficiency
- Compact design



POWER CONTROL SYSTEMS
RECOM GROUP

SD1200 Series

1200 Watt DC/DC Converter with Flexible Input-Output Voltage Levels



Module Features Table

Model	Input Voltage Range [VDC]	Output Voltage Range [VDC]	Output Current [A]	Voltage Accuracy [%]	Line Reg. [%]	Load Reg. [%]	Ripple and Noise [mV]	Efficiency typ. [%]
SD1206	16.8-34 21-51 28-67 43-101 66-170	20-28	40	±0.5	±0.5	±1	<200	90
SD1208		40-55	20					
SD1209		93-126	10					



Input voltage

Nominal: 24VDC / 36VDC / 48VDC / 72VDC / 110VDC

Efficiency

>90% @ Pnom. - Vin nom.

Switching operating frequency

100kHz typ.

Input protections

- Inrush current limitation
- EMI filter
- Input voltage polarity inversion

See table for

- Output voltage and current
- Line and load regulation
- Output ripple and noise

Output protections

- Short circuit protection with automatic restart
- Overcurrent protection: 1.1 In
- Overvoltage protection: 1.25-1.40 Vout max.

Start up time

<0.5s

Output power

1200W max (110VDC, 10A)

Operating indicators

- Led Vout OK

Operating temperature

-40°C to +70°C

Storage temperature

-55°C to +125°C

Temperature drift

0.01%/°C typ.

Long term stability

Better than 1% after 24 hours typ.

Cooling

Natural convection

Dielectric withstand voltage

- Conform to EN 62368-1

Isolation

- Output - P.E.: 500VDC

Comply with

- EN 50124-1
- EN 50121-3-2
- EN 50155-2
- EN 45545-2
- CE
- EN 61373 (1B)
- EN 62368-1

Weight

<5kg

MTBF

- 90 x 10³ hours at +30°C

DD - Output decoupling diode for parallel connection

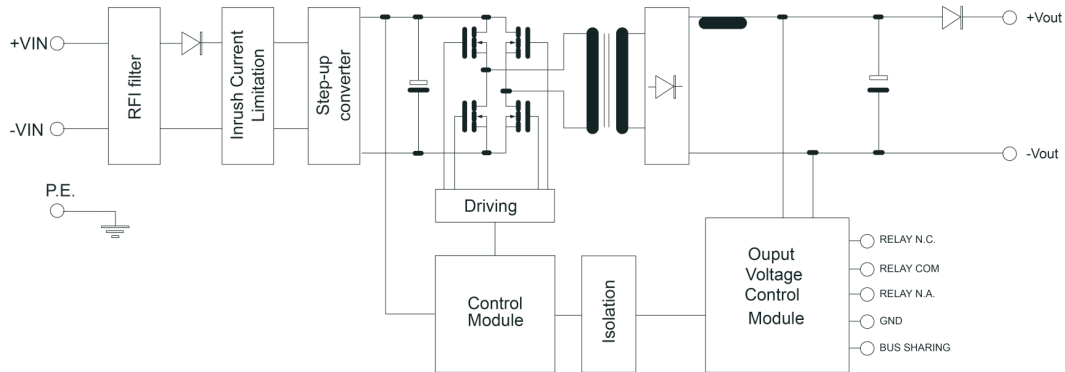
Bus Sharing Manufacture comply with:

- IPC-A-610D Level 3
- RoHs

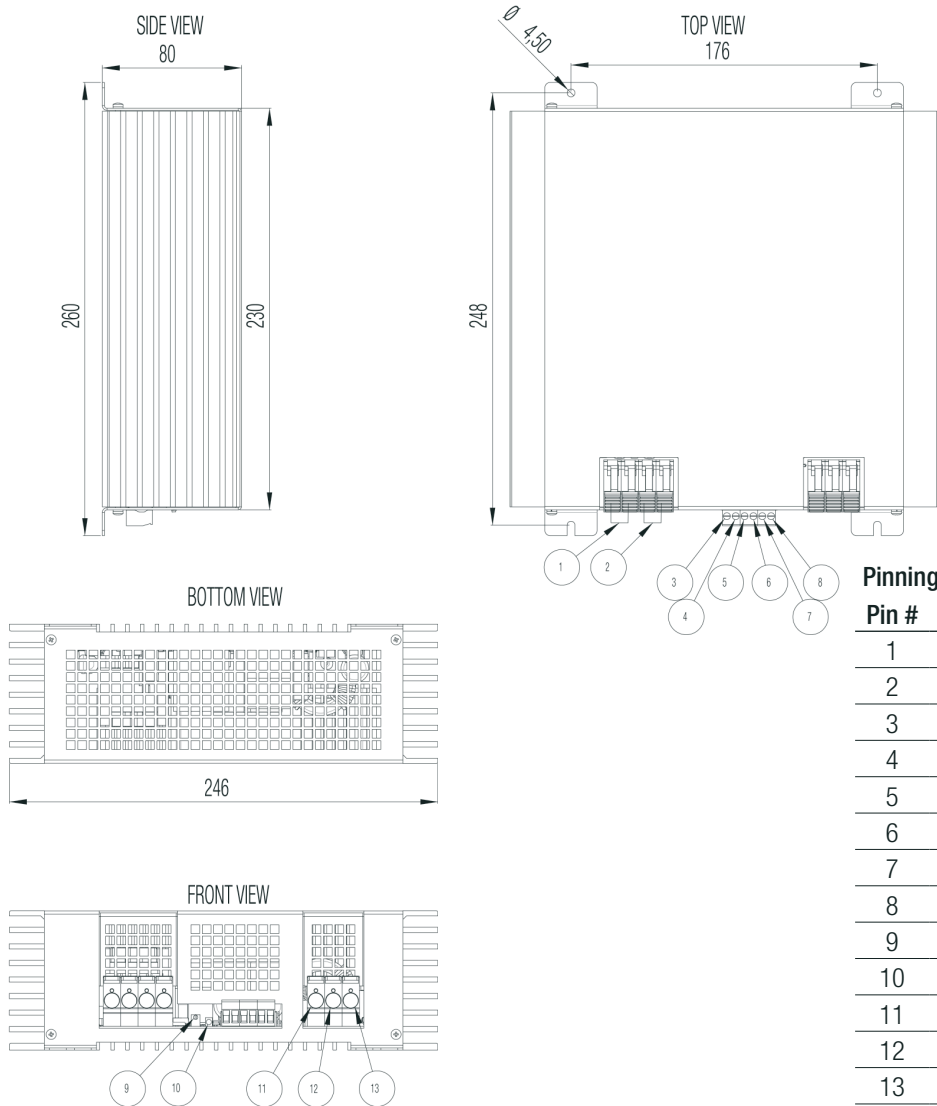
Optional features

- TRP - Tropicalized PCB coating
- VBR - Vibration-proof

BLOCK DIAGRAM



DIMENSION AND PHYSICAL CHARACTERISTICS



The product information and specifications may be subject to changes even without prior written notice. The product has been designed for various applications; its suitability lies in the responsibility of each customer. The products are not authorized for use in safety-critical applications without RECOM's explicit written consent. A safety-critical application is an application where a failure may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The applicant shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.