

- **Wide voltage range input**

17...34Vdc

34...67Vdc

67...155Vdc

250... 1500Vdc

- **Output : 12V, 24V, 48V, adjustable**

- **Power : 120W ; 240W ; 480W**

peak power 150% during 5 seconds

- **Fully protected**

- short circuits

- overload

- thermal

- **High efficiency up to 93%**

- **Input / output isolation**

- 2500V or 4000Vac



The WRDIN series is a range of DC-DC converters mounted in DIN rail. These high density switching modules are suitable for a stable and isolated power supply.

**Description:**

DIN rail mounting

32mm width case for 120W to 85mm width for 480W

Shield on 6 faces, Conformal coating in option

Highly resistant to vibration and shocks

Wiring on screw terminal: 2.5mm<sup>2</sup> / 4mm<sup>2</sup>

Overload protected

Continuous short circuit protected

Thermal protection (output power limitation)

Natural convection cooling

Built-in EMI filter (EN55022 class A)

Parallel coupling with current sharing is possible.

(specific manufacturing on request)

Input voltage : from 9Vdc to 1500Vdc wide range

inrush current internally limited

Output voltage : 12, 24, 48Vdc

**Technical specifications:**

Output voltage accuracy: +/-1% typical

Line voltage regulation (input variation) : +/-0.5%

Load voltage regulation (output current variation) : +/-1%

Noise and ripple : < 100mV pp (20MHz bandwidth)

Temperature coefficient : +/- 0.02% / °C

Operating temperature : -20 to +55°C

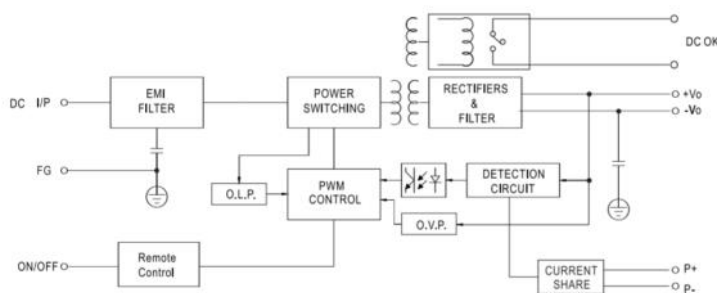
Derating : 2.5% / °C above 55°C

Output current limitation : 150% peak

Current regulation above the nominal power

Switching frequency : 800KHz typical

**Internal synoptic :**



Version and order code:

[Request a quote](#)

**WRDIN120 in / out** 120 watts

**WRDIN240 in / out** 240 watts

**WRDIN480 in / out** 480 watts

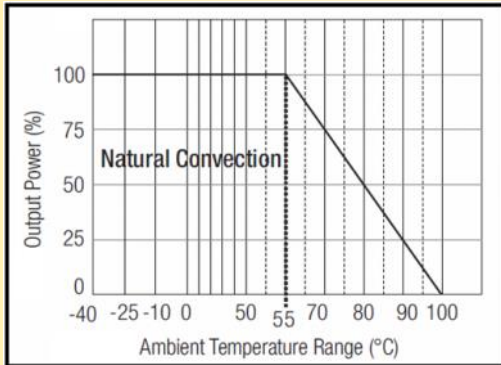
The WRDIN480 allows a parallel wiring of 4 modules max (see page 4)

**in** : rating input voltage  
**out** : DC voltage output

**ENVIRONMENT**

Operating temperature: -20 to 55 °C (without derating)  
 Storage temperature: -40 to 85 °C  
 Humidity: 95 % (not condensed)  
 Protection rating: IP20 (enclosure and connectors)  
 Dielectric strength: 1500 Vrms continuous  
 Insulation resistance: > 100 Mohms at 1000Vdc  
 input/output capacity: 1200pf typical  
 Safety standards: EN 60950-1  
 Maxi efficiency: between 81 and 92%.  
 Vibration: 10-55Hz, 1G, 30 minutes X,Y,Z.  
 Weight: 0.25 to 1Kg depend of model  
 MTBF (MIL-HDBK-217F): 400 000 hours @ 25°C

**Output power function of temperature**



To ensure the technical specifications, we recommend a spacing of at least 10mm between each device

**POWER SUPPLY** (must be defined)

DC input voltage: 9...18Vdc; 17...34Vdc; 34...67Vdc; 67...155Vdc  
 Wide range, with under voltage lockout and reverse polarity protection.  
 Rating inrush current : 30A



**OUT-**

**PUTS**

(Number and voltage to be defined)

Voltage output : 12 Vdc, 24 Vdc, 48Vdc, adjustable 15%

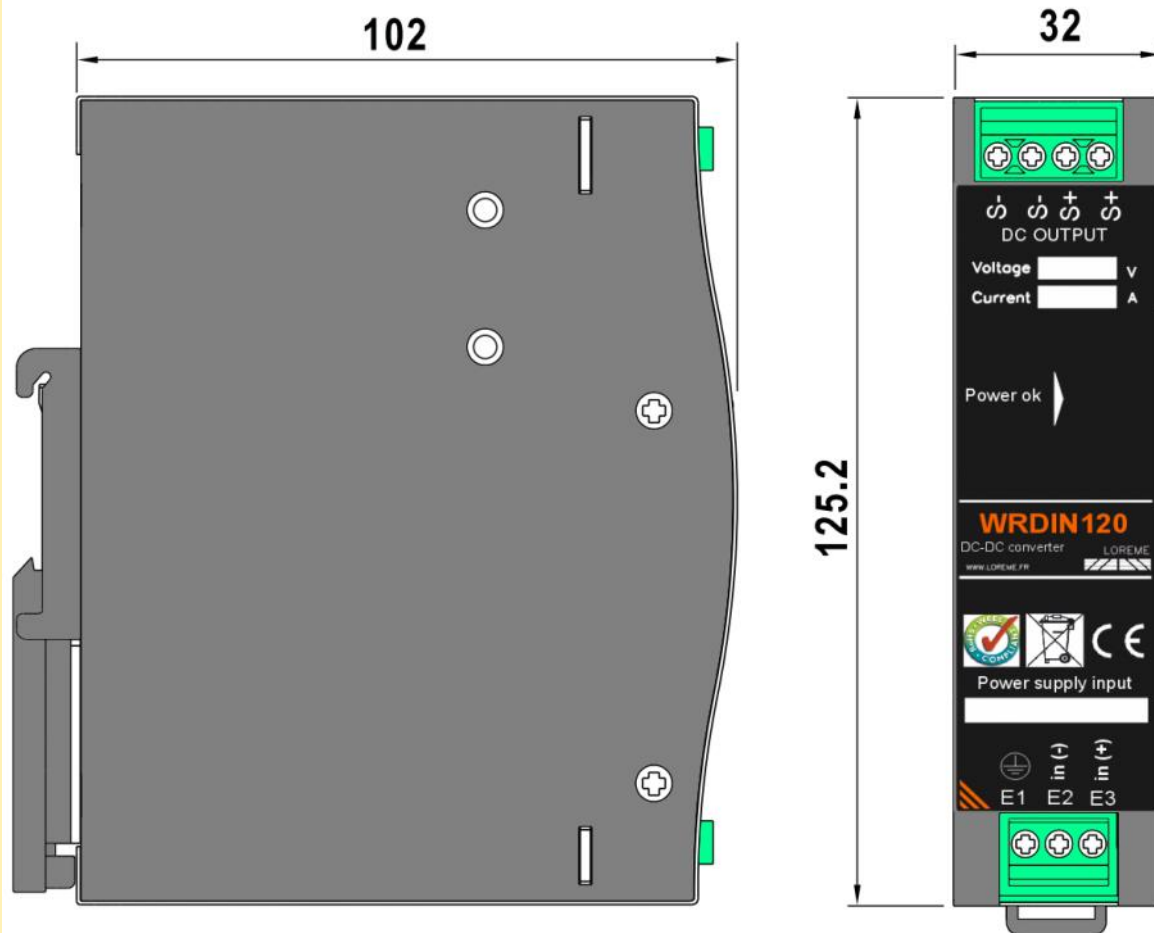
Transient response : 1ms (typical)  
 (25% output load change)

**Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE**

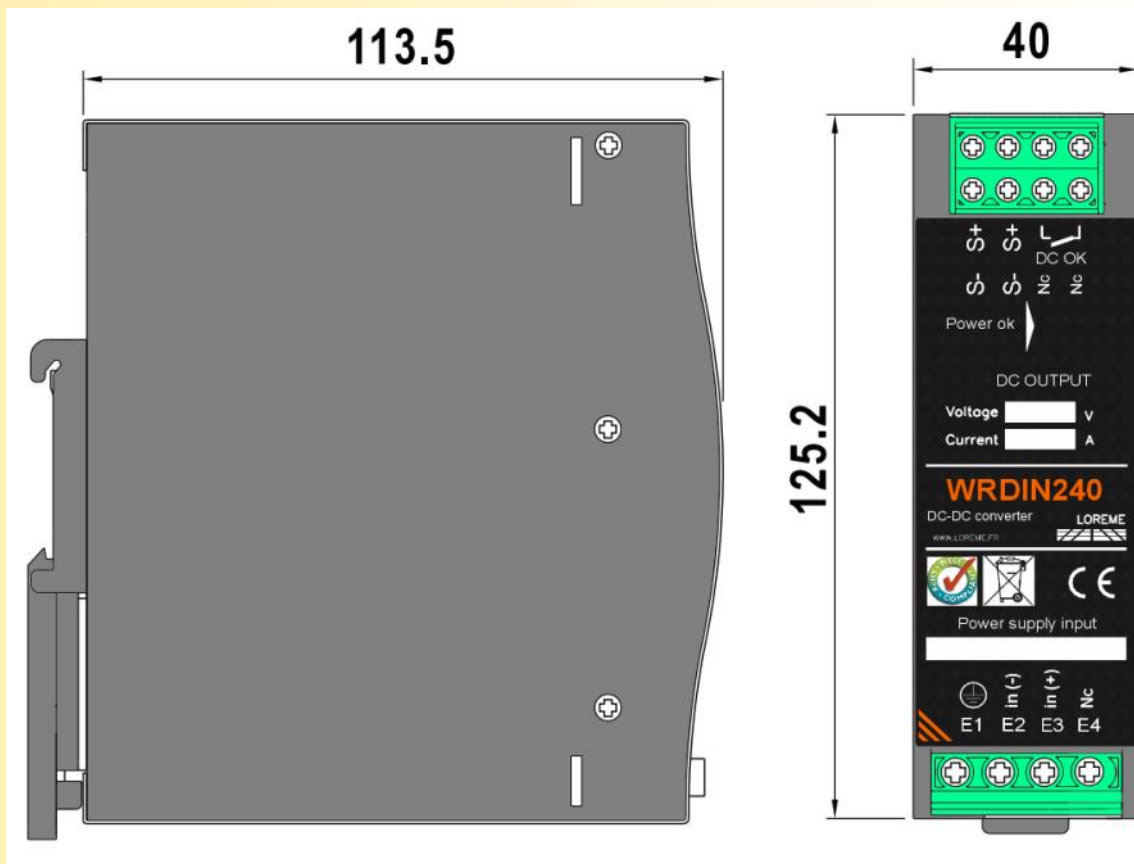
Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



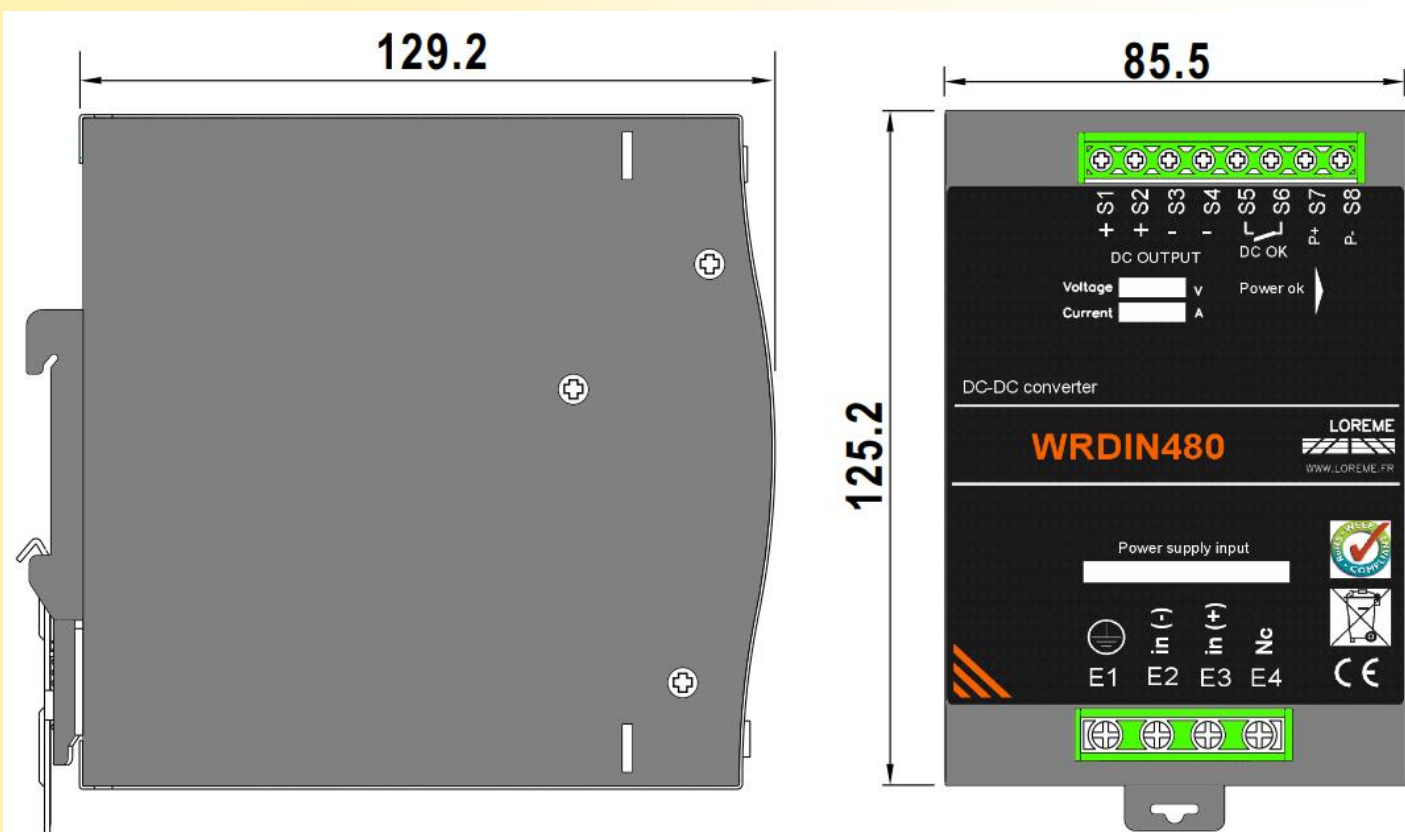
**WIRING AND OUTLINE DIMENSIONS: WRDIN 120**



## WIRING AND OUTLINE DIMENTIONS: WRDIN240



## WIRING AND OUTLINE DIMENTIONS : WRDIN480



## Wiring for parallel coupling of 2 to 4 modules WRDIN480 ( 1800W total power )

