Product specification for passive PDUFPHN1PXXX.

# TRACTION VOLTAGE POWER DISTRIBUTION UNIT FOR ELECTRIC VEHICLES / MACHINES TRACTION AND AUXLIARY HIGH VOLTAGE SYSTEMS:

- Passive unit enables safe connection of the machine high voltage component
- Fuse protection for high and low current component conduits
- Hazardous voltage interlock loop (HVIL) for connectors and cover
- PDU can be equipped optionally with system insulation measurement unit
- Water cooling for reaching high performance
- Robust unit which is configurable for different circuit demands

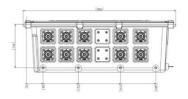
## MAIN DIMENSIONS:

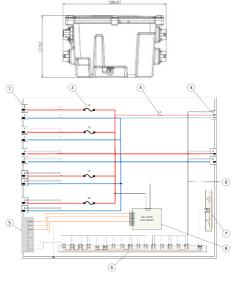
- Overall dimensions: 506 x 290 x 172 mm
- Weight: 16 kg
- Mounting to vehicle: all other orientation allowed than cables upside
- Mounting by customer designed brackets

## SCHEMATIC DIAGRAM

Simple high voltage circuit control block diagram for passive PDU

- Powerlock HC IPxxB complient connector
- Main fuses high current (HC)
- Low current auxiliary fuses (LC)
- ePowerlite IPXXB compliant connectors
- Signal connector
- **HVIL PWB**
- Sensor PWB
- Insulation monitoring unit (optional)





## TECHNICAL DATA

TECHNICAL DATA		
FEATURE	VALUE	NOTE
Thermal management	Liquid cooling option	Water / glycol mix
Operating current	350 A (RMS)	Continous current
Current peak	500 A	10 s
Input / output	5x High current connections (500 A RMS) 3x Low current connections (50 A RMS)	Components and connection types can be varied based on customer need
Safety	All connections IPXXB and with HVIL	
HVIL circuit	Covers and connectors included	Safety lid included (min 10 s safety time from cover opening) redundant cover opening circuit.
Insulation monitoring	Full HV-system monitoring	Optional, Alarming limit: min 500 kΩ
Fuses	High current up to 400 A /800 VDC Low current up to 50 A /800 VDC	Fuse sizing shall be done at integration project with customer
Operating condition	In operation -40 °C to +60 °C IP67 and IP69K Max 2000 m	Designed for harsh environment
Output power (continuous)	100- 270 kW	
Size	506 x 290 x 172 mm	



**PDU Product Page** 

YOUR CHALLENGE, OUR INSPIRATION.





https://epec.fi/systems/epec-flow/i