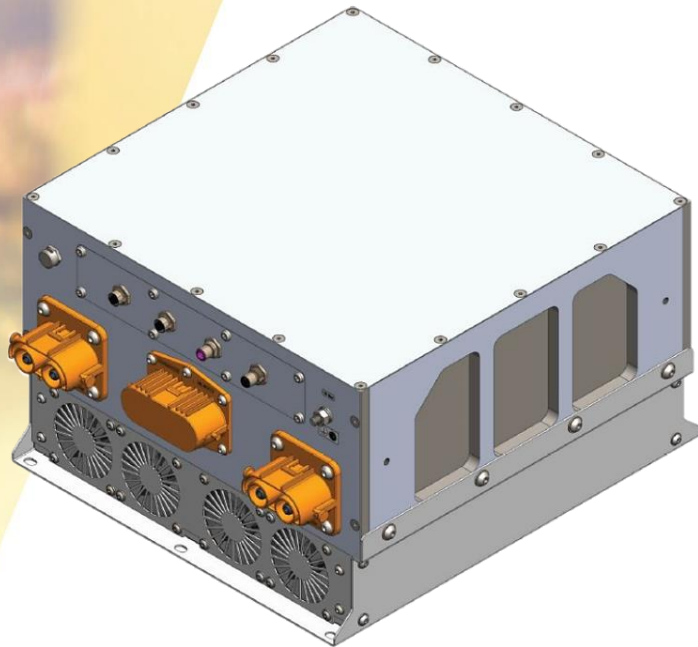


AEP 350

IP65 Bidirectional Converter



- Innovative in energy storage & Power Electronics
- Custom-made solutions
- Complete solution: storage & Power Electronics
- Design and system integration

Features

- High current density
- Low switching losses
- High efficiency (99%) due to SiC (Silicon Carbide) Semiconductors
- Switching frequency inaudible to the human ear
- Integrated current and temperature sensors
- CAN-Bus communication
- Flexible use due to connectable operating area adapted coils

Applications

- 3-phase AC/DC converters
- DC/DC converters
- DC/AC converters
- High frequency switching applications

Mechanical Data

Width x Height x Depth
Approx. 445,5 x 274,5 x 489,5 mm
Approx. 32 kg



Technical Characteristics

Symbol	Parameter	Description	Value	Unit
General				
V_{DC}	DC-Link voltage	@ $I_{ph} \leq 3 \times 150 \text{ A}$	≤ 850	V
I_{DC_max}	Maximum DC current ¹	@ $V_{DC} \leq 400 \text{ V}$	750	A
I_{ph_max}	Maximum current per phase	Per phase @ $V_{DC} \leq 400 \text{ V}$, for other DC-link voltages see <i>Figure 1</i>	3×250	A rms
f_{sw}	Switching frequency	Optional: higher frequency with power derating	≤ 20	kHz
H	Efficiency	@ $V_{ph} > 600 \text{ V}$, $V_{DC} = 850 \text{ V}$, $I_{ph} > 50 \text{ A}$	≥ 99	%
Connections				
	Binary I/O			
	CAN Bus			
	Analog Input			
	Auxiliary voltage		24	V
Environmental conditions				
T_{op}	Operating temperature		-20 ... +40	°C
$T_{storage}$	Storage temperature		-40 ... +60	°C
	Operating altitude		≤ 2000	m above sea level
	Operating humidity	Non condensing	0 ... 85	%
	Degree of protection	Optional: IP20 (open-frame Version)	IP65	
Mechanical data				
	Weight	Approx.	32	kg
	Width		445,5	mm
	Height		274,5	mm
	Depth		489,5	mm
Cooling				
	Coolant	Forced air cooling		

¹At a voltage lower than 400V Output the leakage current can go down to 250A (low internal losses)



Recommended operating range

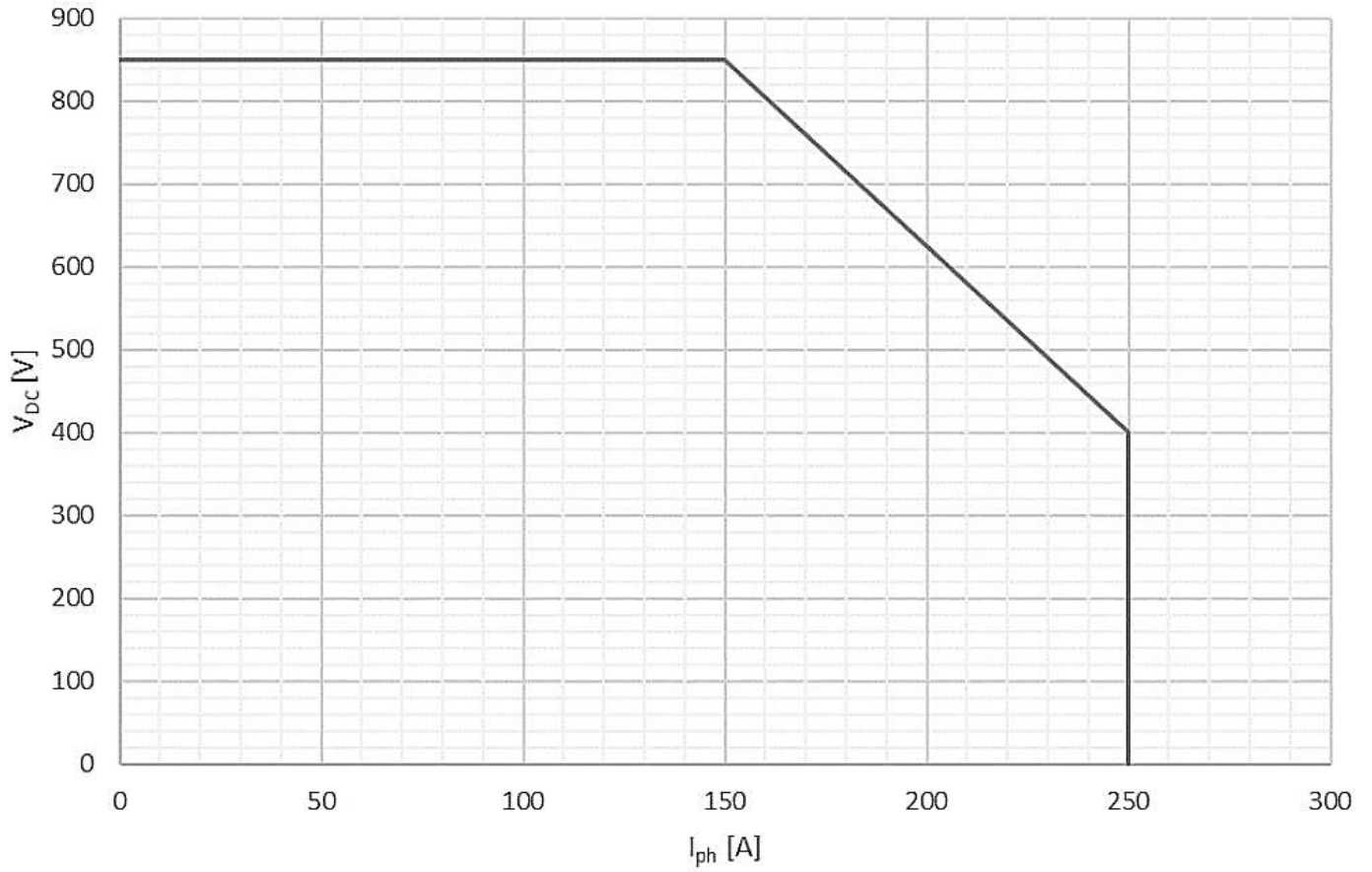


Figure 1: Operating voltage / current range of the AEP350



Mechanical Data

Width x Height x Depth: 445,5 x 274,5 x 489,5 mm

Weight converter: Approx. 32 kg

Enclosure (with Fans): IP65

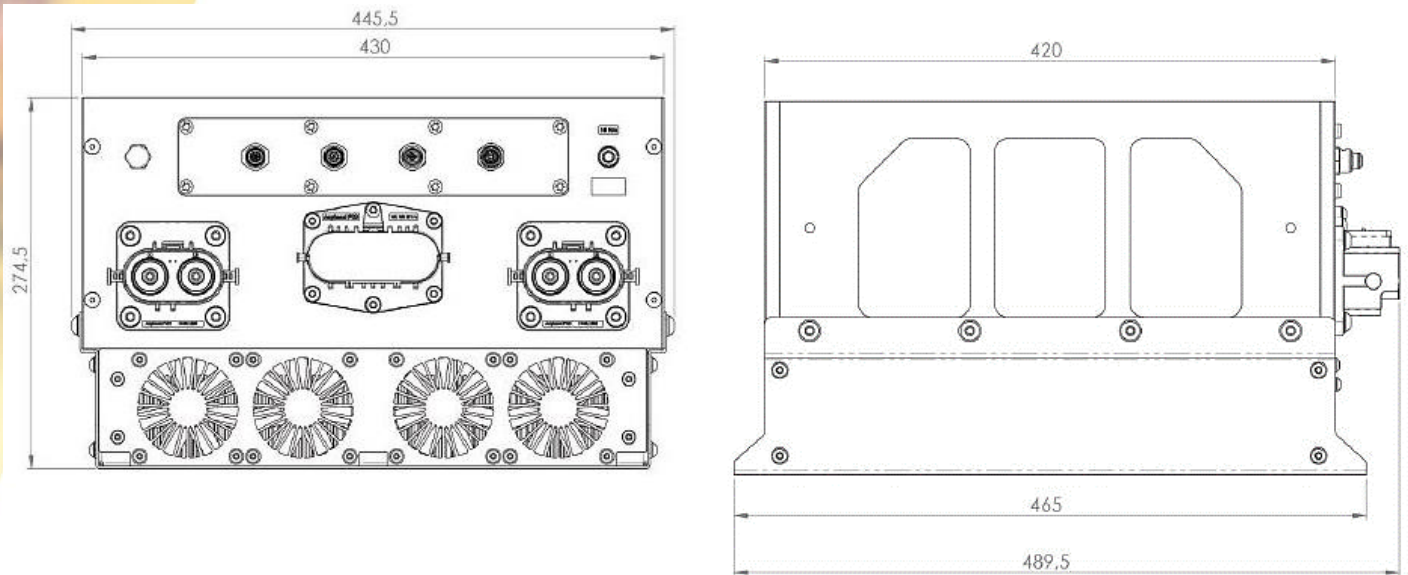


Figure 2: Front view (left) and Side view (right) of the AEP350

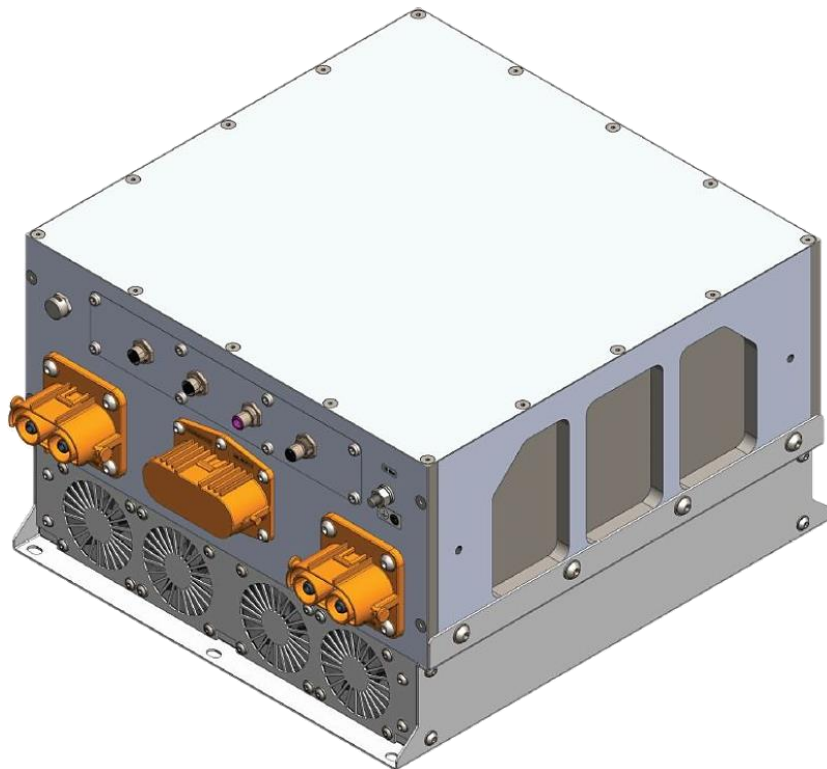


Figure 3: Perspective view of the AEP350