



AEP 200 Cabinet

Dual Bidirectional converter



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

Features

- Dual converter (DC/DC or AC/DC versions possible)
- Complete cabinet including:
 - Chokes
 - Pre-charge
 - Switches
 - Fuses
 - Voltage measurement
- Easy installation
- Various control and operation modes

Applications

- DC-link battery chargers
- Combined ESS with batteries and ultracapacitors
- Battery charger
- DC-grid
- Photovoltaic
- Battery system

Mechanical Data

Width x Depth x Height
800 x 500 x 1400 mm
Approx. 215 kg

aephybridpower.com
sales@aephybridpower.com
+31 (0)78 692 2100



Electrical Characteristics

(e.g. 1 converter, AEP100 DC/DC)

Symbol	Parameter	Description	Value	Unit
	General			
P_R	Rated power	@ U_{out} 600V, 160A, 5 kHz	100	kW
P_{MAX}	Max. power	@ U_{out} 600V, 180A, 5 kHz only for 10 minutes	125	kW
F_r	Switching frequency		≤ 16	kHz
	Efficiency		> 95	%
	Auxiliary voltage			
	Control power supply	Supplied by the customer	24	VDC
	-	-	200	W
	Field Bus and Input Control Signals			
	Field bus	CAN	-	-
	Switch ON	Input, activate DC-link switches and output switches	24	V
	Enable	Input, activate DC/DC converter	24	V
	E-stop	Input, emergency stop	24	V
	Input			
U_{in}	Input voltage range	DC-link voltage	≤ 800	VDC
I_{max}	Max. current	Per connector	100	A
	Output			
U_{out}	Output voltage range		0 - 750	VDC
I_{nom}	Nominal current	@ U_{out} 600V, 5 kHz	160	A
I_{max}	Max. output current	@ U_{out} 600V, 5 kHz only for 10 minutes	180	A
I_{max_phase}	Max. phase current	@ U_{out} 600V, 180A, 5 kHz only for 10 minutes	60	A



Examples of Cabinet configurations

With 1 Converter

General
Rated Power (max)
Switching frequency (max)
Input
Input voltage range
Output
Output voltage range

DC/DC

1x100 kW

≤16 kHz

≤800 V_{DC}

0 – 750 V_{DC}



With 2 Converters

DC/DC

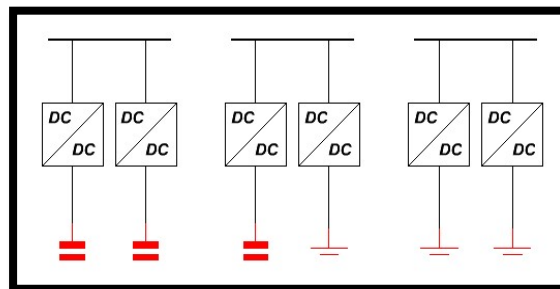
2 x 100 kW

≤16 kHz

≤800 V_{DC}

0 – 750 V_{DC}

The cabinet and the converter setup is very flexible. This means, that the DC/DC converters can be connected to an Ucap ESS, Battery ESS or a combination of both. (See examples below).



Mechanical data

Parameter	Description	Value	Unit
Width		800	mm
Height		1400	mm
Depth		500	mm
Weight	Equipped with one converter	215	kg

Dimensions

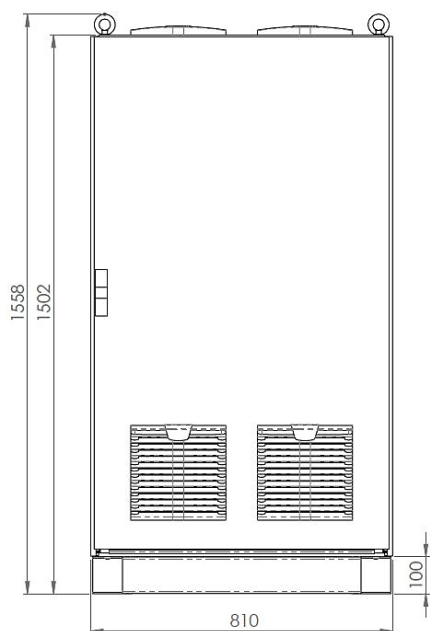


Figure 1: Front view

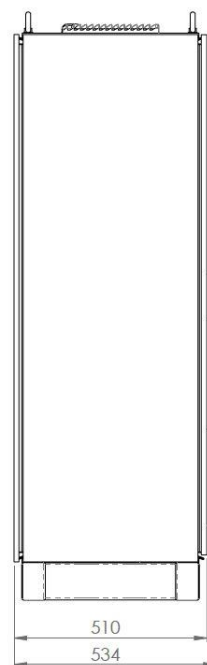


Figure 2: Side view

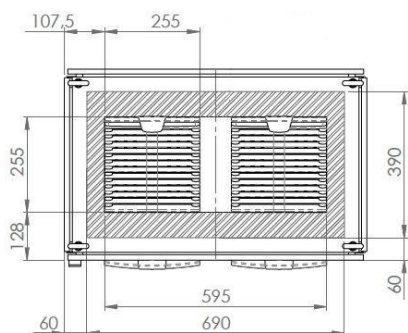


Figure 3: Top view

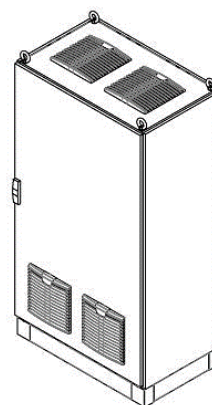


Figure 4: Perspective view