

E-Facts

Creating local grids & supply from public grids

We drive new energy for a greener future

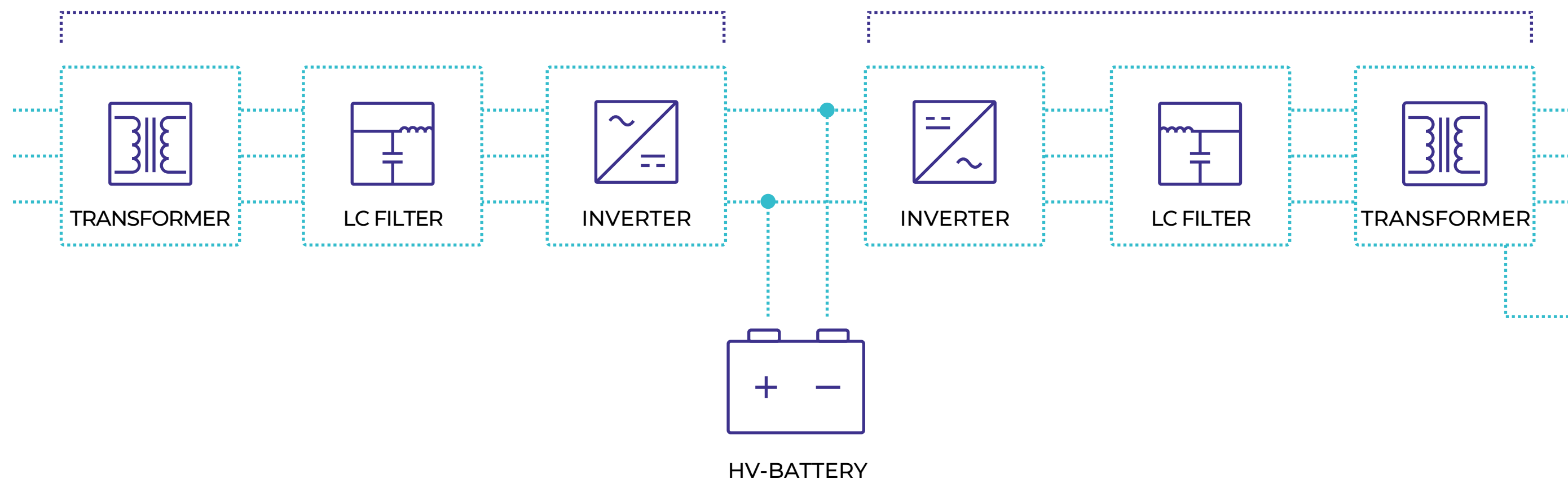


/ Grid supply & local grids

We offer complete subsystems

Supply from public grid

Create local grid



Water cooled: Filter & transformer

We offer complete subsystems to supply a working machine from public grid or to create local grids from (battery) DC voltage. The filters and transformers are in one water-cooled box and prepared to be connected to VECTOPOWER inverter.

/ Local & public grids

Inverter + filter + transformer

To connect to public grids
& for creating local grids:
Transformer + filters - water cooled
housing.

- Similar housing for grid connection and for local grid
- Shown in diagram: 44 kVA solution
- Integrated components are dependent on voltage and function.
- The Inverter is connected externally

Dimensions 86kVA:

1200 mm * 800 mm * 460 mm

Dimensions 44kVA:

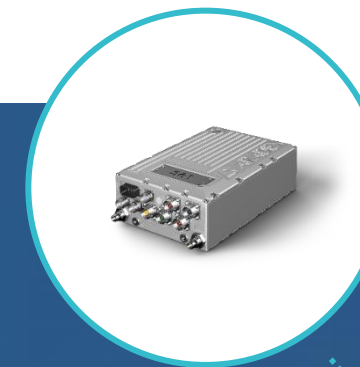
1000 mm * 800 mm * 460 mm

Dimensions 22kVA:

800 mm * 800 mm * 360 mm

Filter & transformer:

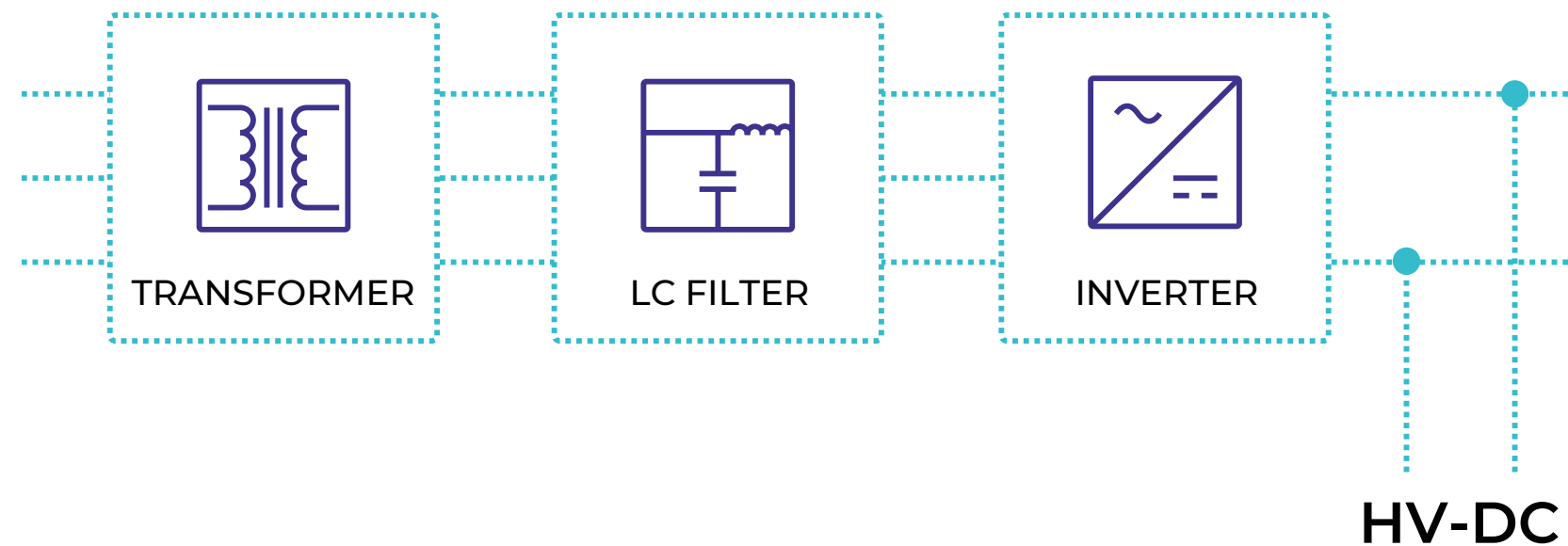
Steel housing IP55



/ To connect to public grids

Functions, packages and options

3 phase public grid



Elements and functions

- 3-phase AC Grid is connected by a transformer
- Transformer acts as electric isolation and if required as step-down converter
- LC filter works to smoothen the switched voltages
- Inverter works as active rectifier and as a step-up converter to the DC system (for example HV battery)

Available versions and options

- 11, 22, 44, 86 kVA continuous power (versions with higher power on demand)
- For higher power, blocks can be switched and operated parallel
- VECTOPOWER inverter “Series 2” (marine) and “Series 3” (mobile and stationary applications)
- HV-voltages (battery voltages) optionally higher than 350 VDC, higher than 480 VDC, higher than 600 VDC. Versions for batteries below 350 VDC on request.
- Examples for use: cable-supplied working machines or for high power charging of batteries in maritime applications.

/ To connect to public grids

Available versions

Continuous power	DC-voltage	Width * Depth * Height [mm*mm*mm]	Weight [kg]	Item number	Matching VP inverterVP600 series3 / series2
11 kVA	≥ 350 VDC	800*600*360	104	VPGC_1.AFE.1100350	VP600-18W361 / 18W130HP
11 kVA	≥ 480 VDC	800*600*360	97	VPGC_1.AFE.1100480	VP600-18W361 / 18W130HP
11 kVA	≥ 600 VDC	800*600*360	95	VPGC_1.AFE.1100600	VP600-18W361 / 18W130HP
22 kVA	≥ 350 VDC	800*800*360	160	VPGC_1.AFE.2200350	VP600-18W361 / 18W130HP
22 kVA	≥ 480 VDC	800*800*360	150	VPGC_1.AFE.2200480	VP600-18W361 / 18W130HP
22 kVA	≥ 600 VDC	800*800*360	150	VPGC_1.AFE.2200600	VP600-18W361 / 18W130HP

REMARKS:

- As DC-voltage the lowest value must be taken into account. If a battery for example works from 550 VDC to 700 VDC the correct version is “≥ 480 VDC”.
- Ask our sales team for further information

/ To connect to public grids

Available versions

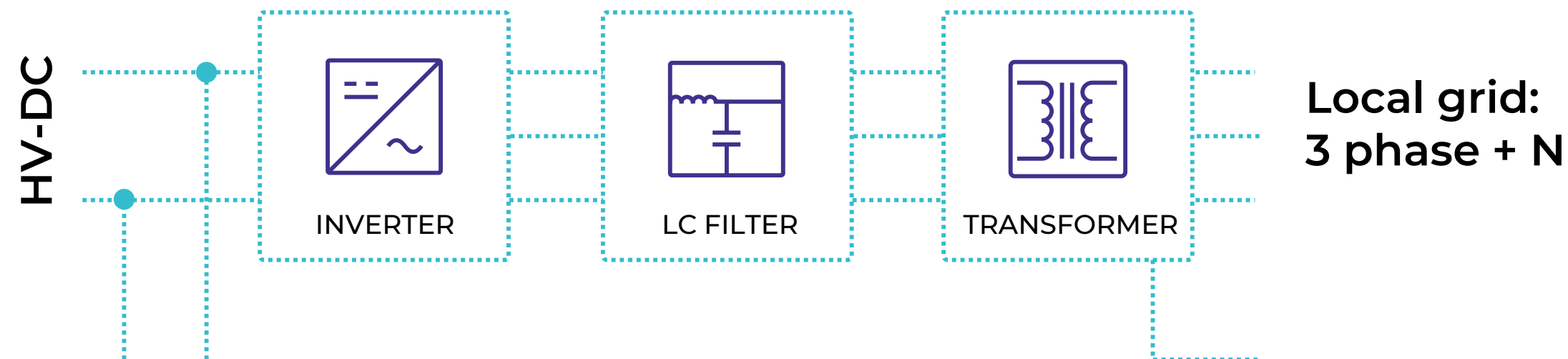
Continuous power	DC-voltage	Width * Depth * Height [mm*mm*mm]	Weight [kg]	Item number	Matching VP inverterVP600 series3 / series2
44 kVA	≥ 350 VDC	1000*800*460	283	VPGC_1.AFE.4400350	VP600-18W361 / 18W140HP
44 kVA	≥ 480 VDC	1000*800*460	274	VPGC_1.AFE.4400480	VP600-18W361 / 18W140HP
44 kVA	≥ 600 VDC	1000*800*460	274	VPGC_1.AFE.4400600	VP600-18W361 / 18W140HP
86 kVA	≥ 350 VDC	1400*800*460	427	VPGC_1.AFE.8600350	VP600-18W361 / 18W140HP
86 kVA	≥ 480 VDC	1200*800*460	426	VPGC_1.AFE.8600480	VP600-18W361 / 18W140HP
86 kVA	≥ 600 VDC	1200*800*460	396	VPGC_1.AFE.8600600	VP600-18W361 / 18W140HP

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/ Create local grids

Functions, packages and options



Elements and functions

- Inverter works as alternator and as step-down converter
- LC filter works to smoothen the switched voltages
- Transformer works as electric isolation and if required as a step-up converter
- Transformer output is 3-phase AC + N = neutral phase for asymmetric load situation
- Integrated fuses

Available versions and options

- 11, 22, 44, 86 kVA continuous power (versions with higher power on demand)
- High overload capability for short time.
- For higher power, blocks can be switched and operated parallel
- VECTOPOWER inverter “Series 2” (marine) and “Series 3” (mobile and stationary applications)
- HV-voltages (battery voltages) optionally higher than 350 VDC, higher than 480 VDC, higher than 600 VDC.
- Made for example for local grids on ships or to create AC power supplies in stationary or mobile applications
- Possible synchronization to existing local grids! For example, to boost generators.

/ Create local grids

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/ Highlights at a glance

Scalable power

We can offer versions with higher power, and we can parallel the blocks.

In applications already implemented we covered grid connections up to 600 kVA and local grids up to 300 kVA.

Made for systems

Our subsystems for power supply by public grids or to create local grids can perfectly be combined with other ARADEx HV devices such as inverters and drives to realize systems. In the design we paid particular attention to emc-compatibility and low harmonic distortion of the AC grid.

Contact us for more information

For further information, please contact our sales team and let us know your requirements for your application. We look forward to your enquiry and will be happy to provide you with a non-binding offer.

Thanks for your attention!

**Optimized usability
and performance
for the best e-mobility**



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