

VENCON PV

The All-rounder among
the Converters

Photovoltaic converter

Specially engineered as a modular central converter, it features high design flexibility for the complete PV system through three MPP trackers and a broad voltage range.

- ▼ **Modular:** Expandability in steps of 150 kW means total power can be reached for all sizes.
- ▼ **Versatile:** Three different strings with an output of 120 kW each can be operated in a broad voltage range, making the most diverse module configurations possible.
- ▼ **Easy to maintain:** The modular design, air cooling and the ability to control the system remotely (Web Interface) make sure VENCON requires only a minimum amount of maintenance.
- ▼ **Low noise level:** Hybrid silicon carbide semiconductors allow for virtually soundless clocking.
- ▼ **Flexible:** Thanks to its compact design and an outdoor capable housing, VENCON is suitable for use in any location.



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VENSYS HYBRID CONVERTER



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SYSTEM COMPONENT

CONTROL CABINET WITH 3 POWER MODULES

Dimensions	1213 x 656 x 2351 (height) mm
Weight	< 980 kg
Indoor housing	IP20
Temperature range, operation	-20 to +40 °C
Cable entry	at the bottom
Cooling	Air Cooling
Place of installation	< 2000 m
Humidity	< 95% non-condensing

POWER MODULES

Three power modules can be housed in each VENCON. Individual DC or AC configuration for each module. For optimal operation, VENCON is equipped with one DC* and two AC** power modules.

* DC power module 3 x 120 kW | ** AC power module 1 x 150 kW

OPERATION AS AN AC POWER MODULE

bi-directional and grid-synchronized

Rated voltage	400 V
Mains frequency	50 or 60 Hz
Switching frequency	4 kHz
Nominal power	300 kW (2x150 kW)
Power factor	0,9 cap to 0,9 ind
Mains protection	U<<, U<, U>, U>>, f<, f>

(performance figures based on the use of two AC power modules)

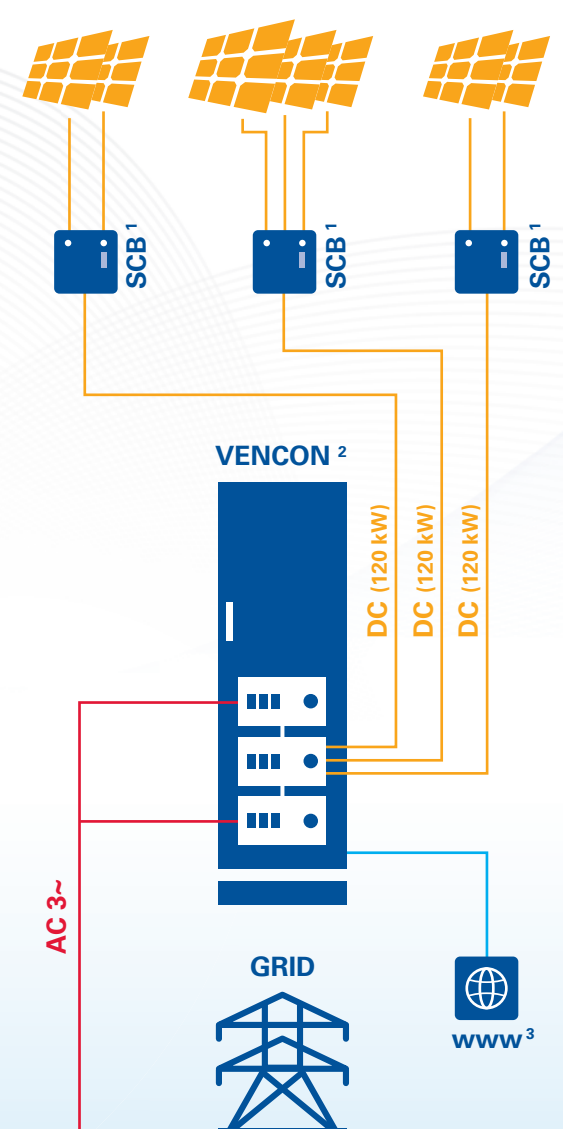
OPERATION AS A DC POWER MODULE

DC/DC converter and bi-directional

MPP voltage range	100 V - 720 V DC
Rated voltage	600 V DC
Max. open circuit voltage	850 V DC
Number of MPP inputs	3
Max. input current per MPP	200 A
Switching frequency	4 kHz

CIRCUIT DIAGRAM

PV modules PV modules PV modules



- 1) String Combiner Box
- 2) DC parallel connection possible with any number of devices
- 3) Web Interface