



# **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.







### **SYSTEM COMPONENT**

#### **CONTROL CABINET WITH 3 POWER MODULES**

Dimensions 1213 x 656 x 2351 (height) mm Weight < 980 kgIndoor housing IP20 Temperature range, operation  $-20 \text{ to } +40 \,^{\circ}\text{C}$ Cable entry at the bottom Cooling Air Cooling < 2000 m Place of installation 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**

