SECOM

AFE - DC/DC Converter

Your Needs.

Our Design.

Tailored Premium Products.

We are not just a supplier.

We are your development partner.

Our custom power electronics solutions are built around your needs, from first concept to final product.



Design and develop fully tailored power electronic solutions - from converter to integrated systems - with total control over the entire power electronics value chain, ensuring

quality and innovation at every step.



High Performance & Reliability

Our products are engineered to meet demanding industrial standards, with proven stability even in the most challenging environments.



Flexible & Modular Approach.

Agile development - our modular and scalable design process is shaped around your technical and operational needs.

APPLICATION SCENARIOS

- ✓ AFE & DC/DC
- **ఆ** H2 fine-tuned power conversion
- **⋖** Fuel Cell power generation
- **⊘** Compact size, high efficiency

KEY FACTS

- Singular & Multi-parallel
- **U** Liquid cooling
- ✓ IEC compliant



DATASHEET

AS ACTIVE FRONT END

INPUT ELECTRICAL DATA

Input Frequency 50/60 Hz

Input Nominal Voltage Configurable up to 690 Vac

Input Nominal Current 1000 A

Power factor 0.99

THDi Configurable by external LC Filter

OUTPUT ELECTRICAL DATA

Maximum DC Voltage 1200Vdc

Current Ripple Configurable by external L

LC Filter External

AS DC/DC CONVERTER

INPUT ELECTRICAL DATA

Max Input Current 1150

Input Nominal Voltage (Vin) configurable up to 1200 Vdc

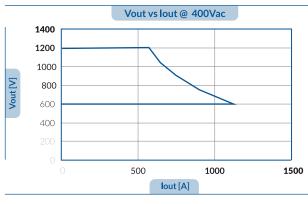
OUTPUT ELECTRICAL DATA

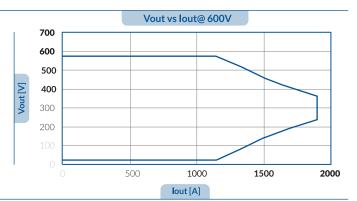
DC Voltage Range 0... Vin V

Max Output Current 1600 A

Current Ripple Configurable by external L

Interleaving filter External





MECHANICAL DATA

Dimension (W x D x H) 490 x 594 x 1038 mm

Weight ~100 kg

IP rating IP20
Instal lation type Wall mounted

DC-AC connection Bare Bars

ENVIRONMENTAL CONDITIONS

Operational -20 °C to +55 °C

Humidity < 95%

Altitude Up to 1000

COOLING

Cooling Water + Air

Air power losses<1 kW</th>Tmax water40 °C higher w deratingTmax air40 °C higher w derating

Water flow <25 l/h

ΔP water@rated water flow 0,8 bar

Maximum operating pressure 6 bar

Water con nection By mean of quick coupling ½"

OTHER

Max. Efficiency 98,6

Auxiliary Voltage 24V

Heatsink material AL

Auxiliary Supply 24Vdc

SD-MCU connection By fiber optic couple

Standards IEC 61800-5-1, IEC 61800-3