

NetGrid

Isolated microgrid rectifier

36kW power shelf

9x4kW Modbus® controlled rectifiers

Black start capabilities



Description

The Isolated microgrid rectifier is part of the Netpower DC system and can be equipped with up to 9 hot-swappable power modules.

The rectifiers are based on SiC electronics combined with a new Dual Converter™ design.

The Dual Converter™ technology increases energy efficiency at low loads and exceed the new 80 PLUS "Ruby" certification.

Features

- Dual Converter™ for highest energy efficiency
- SW settable Droop control
- Thermal control and shutdown
- Hot-swappable
- LEDs for status indication
- Remote monitoring via Modbus
- Black start capabilities
- +350Vdc -350Vdc or 700Vdc (+/-350)

NetGrid Microgrid rectifier	
Input	
Input voltage, nominal	3x 230 Vac (5 wire)
Input voltage range	195-264 Vac
Input frequency	47-63 Hz
Power Factor	0.99
Output	
Output power	9x 4.000W
Output voltage, nominal	350 Vdc (SW settable 300 - 400)
"Battery test" voltage	280 Vdc (SW settable 200 - 350)
Output polarity	+350V or -350V (or 700V +/-350)
Minimum load	20W / module
Output current control	SW settable 1-14 A /module
Short circuit protection	SW controlled current + In- & Output fuses
Other technical data	
Efficiency	97% (exceeding 80 PLUS Ruby)
Fan cooled (front to back)	2x redundant fans
Thermal reduction	Yes
Short circuit, over current protection	SW controlled current + In- & Output fuses
Visual fault indication	Dual LEDs
Alarm output	Digital alarm to NetManager™ SW Modbus
Audible noise	<30 dBA
Safety	EN/IEC 60950, class 1
EMC	EN 61000-6-8
Operation temperature	-10°C => +55°C (Thermal reduction)
Mechanical data	
Weight, power shelf	40 kg (9 modules installed)
Width	19 Inch
Height	4U
Depth	400 mm
Enclosure	IP 20

*All data preliminary, subject to change

