

ZGR PCS

BIDIRECTIONAL INVERTER



ZGR PCS has advanced grid stabilization and regulation functions.

ZGR PCS is a three-phase inverter with the latest bidirectional technology. The objective of the equipment is to convert the energy of the grid into energy in batteries and return it when there is energy demand.

This system facilitates the integration of renewable energies and allows reducing investments in the grid to improve its stability or demand growth.

Thanks to its different operating modes, ZGR PCS offers grid operators and other grid agents an integral tool for a more flexible energy distribution by regulating power, voltage and frequency, guaranteeing the availability of the electrical grid; it also has Black-Start function, increasing the manageability of the energy within the installation. In addition, Outdoor solutions are a perfect solution for large-scale storage projects.



CHARACTERISTICS

✓ Automatic operation modes

- Frequency control
- Black-Start (island mode)
- Active energy reserve
- Voltage control
- Active / Reactive power control

✓ Quick response to set point changes

✓ Wide range of working temperatures, from 0 °C to +50 °C

✓ Scalable, parallel equipments

✓ AC protections:

- Short-circuits and overcharges
- Overvoltages and low voltages

✓ DC protections

- Overvoltage

✓ AC and DC isolator integrated

✓ Galvanic isolation*

✓ Local monitoring via LCD screen

✓ Remote monitoring via Web Server

✓ Supports various communications standards: SNMP, TPC/IP

✓ Other communication standard on demand: IEC 104, etc.

ZGR PCS BIDIRECTIONAL INVERTER

TECHNICAL SPECIFICATIONS

Model	ZGR PCS 3,2MVA 1500V
-------	----------------------

DC ELECTRICAL CHARACTERISTICS

DC Maximum Voltage	1500 V
Battery Voltage Range	975 ~ 1350 V @50°C 975 ~ 1450 V @35°C
Battery Maximum Current	3280 A
Battery Charging Current Limitation	Configurable
Number of Battery Connection	1

AC ELECTRICAL CHARACTERISTICS

AC Nominal Power	3200 kW / kVA
AC Nominal Voltage	690 V
AC Nominal Voltage Range	621 ~ 759 V
AC Maximum Current	2677 A
Frequency Range	47 ~ 62 Hz
Power Factor	1 adjustable (without exceeding the apparent power)
AC Current Distorsion	<3% at Nominal Power
Peak Efficiency	98,5%

GENERAL CHARACTERISTICS

Monitoring	Web interface, LED signalling
Protections	AC Current, AC surge, AC Low Voltage, AC Over and Under Frequency. DC Current, DC Surge.
Monitoring	Web interface, LED signalling
Cooling	Forced Ventilation
Operating Temperature	-10°C ~ +50°C
Degree of Environmental Protection	IP55
Relative Humidity	< 95% without condensation
Dimensions (H*W*D)	2800 x 2300 x 1900 mm
Approx. Weigth	5250 Kg

STANDARS

Marks and General Directives	CE IEC 62909-1:2017 IEC 62477-1:2012+AMD1:2016 CISPR 11 UNE 217002:2020
------------------------------	---

ZGR PCS BIDIRECTIONAL INVERTER