

ZIGOR SOLAR CTR3

Modular three-phase central inverter for utility scale solar plants

Description



The ZIGOR SOLAR CTR3 range has been specially designed for improving the efficiency at utility scale of solar generation plants. This three-phase solar inverters range from 100 to 300 kW stands out by their efficiency of their MPPT, higher than 98,5%. The ZIGOR SOLAR CTR3 inverters provide high reliability and guaranteed operation.

One of the features from these inverters to highlight is their unbeatable power density per volume, enabling a significant space reduction in medium-large size Solar Plants.

Another important feature is its automatic regulation of reactive power and communications tools between it and the centralised supervision and control system. All their parameters are configurable both locally and remotely. The ZIGOR SOLAR CTR3 inverters operate with an output voltage of 3x400 V and are adapted to meet with all international grid codes.



ZIGOR SOLAR CTR3

Features

- > Range of input DC voltage (590-1000 VDC)
- > Maximum power point tracking (MPPT)
- > High energy efficiency MPPT > 99%
- > Very low harmonic distortion THD < 3%
- > Selectable power factor
- > Unlimited parallel connection
- > Anti-islanding protection with automatic shut down
- > Monitoring from the unit with LCD
- > Strings currents monitoring:
(with option ZIGOR SOLAR SB16)
- > IP21 protection level
- > Protection against: inverse polarity, short-circuits, over voltages, insulation failure with output to relay
- > Automatic reactive energy regulation
- > PC-based Web server programme for full access to inverter data
- > Maximum efficiency 98.5%
- > Modularity
- > DC and AC surge protections included
- > Compatible with thin film modules
- > ETHERNET communication ports
- > Easy access through any web browser
- > Remote monitoring system ZIGOR SWS1000: communications system, parameter display, inverter records control, production, data storage etc, (optional)

Connectivity and accessories

> Built-in & integrated Web Server

This is a PC-based Web server programme to provide full access to the inverter data and to monitor and communicate with ZIGOR SOLAR CTR3 inverters. The Web server let the user to communicate with the inverters in different languages and records the following data: status, parameters, events, event log, production.

See more information about connectivity and options on page 44

on-grid solar plants

mid voltage solar plants

hybrid generation

energy saving

telecom back up

wind energy



ELECTRICAL CHARACTERISTICS

Model	ZIGOR SOLAR CTR3 100	ZIGOR SOLAR CTR3 150	ZIGOR SOLAR CTR3 300
Continuous output power	100 kW	150 kW	300 kW
Recommended PV power		+5% to +20%	
Nominal AC voltage		3x400 V	
Nominal frequency		50/60 Hz	
Power factor		1 adjustable \pm 0,8	
Nominal line current AC	145 A	217 A	435 A
Current distortion AC ⁽¹⁾		< 3% THD of nominal power	
Maximum open circuit voltage DC ⁽²⁾		1000 V	
Power tracking range (MPPT) DC		590 to 850 Vdc	
Maximum input current DC	137 A	260 A	521 A
Maximum efficiency	98,3%	98,5%	98,5%
European efficiency	97,5%	97,9%	98,2%

ENVIRONMENTAL AND MECHANICAL FEATURES

Range of ambient temperatures		-10°C to +50°C	
Type and grade of environmental protection		IP21	
Approximate Weight kg	350	350	450
Dimensions (HxWxD) mm	1600x800x600	1600x800x600	2150x800x600
Operating height ⁽³⁾		1000 m	
Relative humidity		0 to 95% without condensation	

GENERAL FEATURES

Refrigerating method		Internal forced ventilation External fan control (6 Amax.)	
Protection functions		Inverse polarity, Over/Sub-voltage AC Over/Sub-frequency, Overvoltage DC	
User interface		LCD screen	
Breakers (AC and DC)		Integrated in the system	
Communication software		Web server through Ethernet connection	
Equipment supervision: self diagnostic		Yes	

STANDARDS

Certificates		CE, VDE, ENEL	
Directives		2004/108/CE (UNE-EN 61000-6-2 / UNE-EN 61000-6-4) 2006/95/CE (IEC 62109-1 / IEC 62109-2)	
Standards		IEEE 1547	

Countries standards

Spain		P.O. 12.3	
Germany		BDEWTG	
Italy		CEI 0-16	
UK		G83/1-1 +G59/2	

(1) For THDV < 1% and Nominal Power.

(2) This voltage must not be exceeded under any circumstances.

(3) No power derating for ambient temperatures up to 44° C.

These specifications may be changed without notice.