ZIGOR SOLAR XTR3

Three-phase string inverter range

Description



The ZIGOR SOLAR XTR3 string inverters are easy operation devices that have been designed to cover the needs of all mains connected solar generation plants. In an effort to improve the yield of solar plants, these inverters offers a very high efficiency, exceeding 97%.

The ZIGOR SOLAR XTR3 inverters stand out due to its new web server application, accessible through its SNMP connection. In addition to this the new string inverters range provides a LCD display, where the customer is able to access all inverter information, including production data.

This new family of string inverters can work at input DC voltages between 300 to 800 VDC and their housing has IP54.



Features

- > Maximum power point tracking (MPPT)
- > High energy efficiency, higher than 97%
- > Very low harmonic distortion, THD <3%
- > Direct mains connection
- > Unlimited parallel connection arrangements
- > Anti-islanding protection with automatic shut down
- > Monitoring from the unit with LCD
- > Protection against: inverse polarity, short-circuits, over voltages, isolation failure
- > SNMP connection: Web server included
- > Range of input DC voltages (300-800 VDC)
- > Compact size, light weight, easy installation
- > Built-in production log capacity

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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 XTR3 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





| ELECTRICAL CHARACTERISTICS | | | | | |
|---|--|--|------------------------|------------------------|--|
| Model | ZIGOR SOLAR XTR3 10 | ZIGOR SOLAR XTR3 13 | ZIGOR SOLAR XTR3 15 | ZIGOR SOLAR XTR3 20 | |
| Reference | 301763 | 301764 | 301765 | 301766 | |
| Nominal output power | 10 kW | 13 kW | 15 kW | 20 kW | |
| SYSTEM | | | | | |
| Conversion mode | High frequency PWM | | | | |
| Electromechanical method | Low loss transformer (optional) | | | | |
| DC INPUT | | | | | |
| Nominal DC voltage | 640 V | | | | |
| Maximum DC voltage (1) | 1000 V | | | | |
| Operating range DC | 300-800 V | | | | |
| No. Independent MPPT | 3(12 A Max) | 3(15,6 A Max) | 3(18 A Max) | 3(25 A Max) | |
| AC OUTPUT | | | | | |
| No. Phases/No. Wires | 3- phase/3- wires or 3 – phase/ 4 – wires | | | | |
| Nominal voltage AC | 3x400V | | | | |
| Nominal frequency | 50/60 Hz | | | | |
| Nominal output current AC | 14,5 A | 19 A | 22 A | 29 A | |
| Harmonic distortion range for nominal current (2) | <3% | | | | |
| Power factor | Over 0.99 (at nominal output current) | | | | |
| Maximum efficiency | 97,7% | | | | |
| European efficiency | 96,8% | | | | |
| PROTECTION | | | | | |
| Input | | Ground fault / D | C isolation fault | | |
| Output | Over-under voltage/ Over-under frequency / Islanding | | | | |
| Protection class | IP 65 (electronics) / IP 54 (others) | | | | |
| COMMUNICATIONS | | | | | |
| Protocol | MODBUS (RTU, TCP/IP, ASCII) y SNMP | | | | |
| Standard | TCP/IP Ethernet,RJ11, USB | | | | |
| Optional | RS 485 | | | | |
| ENVIRONMENTAL CHARACTERIST | ics | | | | |
| Temperature | -20°C to +50°C/ -4°F to +122°F | | | | |
| Relative humidity | 0-90% without condensation | | | | |
| Altitude | < 2000m | | | | |
| MECHANICAL CHARACTERISTICS | | | | | |
| Dimensions mm (WxHxD) | 480 x 665 x 220 | | | | |
| Estimated weight kg | 39 | | | | |
| Cooling | Optimized refrigeration | | | | |
| STANDARDS | | | | | |
| Certificates | CE Marking | | | | |
| Directives | 2004/108/CE 2006/95/CE | | | | |
| | IEC 60146, IEC 62116 | | | | |
| Standards | EN 62109-1 | EN 62109-1, EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3 | | | |
| Countries standards | | | | | |
| USA | UL 1741, IEEE 1547 | | | | |
| Italy | CEI 0-21 | | | | |
| Germany | VDE 4105 | | | | |
| England | G83/1-1, G59/2 | | | | |

These specifications may be changed without notice.

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

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

