

ZIGOR SOLAR HIT3C

Three-phase hybrid inverter (for solar or wind generation, batteries and grid or emergency)

Description



The range of ZIGOR SOLAR HIT3C hybrid inverters is designed to meet power requirements in locations not covered by the grid, as well as hybrid rural electrification and/or distributed generation.

The main feature of hybrid ZIGOR SOLAR HIT3C inverters is that they are capable of generating electricity from Solar or Wind resources, from Batteries, from the Grid or Genset.

Zigor three-phase ZIGOR SOLAR HIT3C hybrid inverters have been designed to add energy from several different sources while controlling all of them from a unique management system.



ZIGOR SOLAR HIT3C

Features

- > Grid or Genset
- > Wind Turbine or PV field input through internal regulator
- > Back-up battery
- > Range of input DC voltages (450-700 VDC) for solar panels
- > Maximum power point tracking (MPPT) for solar panels
- > High energy efficiency MPPT > 99%
- > Very low harmonic distortion THD < 3%
- > Monitoring from the unit with LCD
- > Galvanic isolation via transformer
- > Strings Currents monitoring for solar panels (option)
- > IP21 protection level
- > Protection against: Inverse polarity, short circuits, overvoltages, isolation failure with relay output
- > Hybrid mains connection consumption points with limited power capacity or in which energy saving is a necessity
- > Web server through Ethernet communication port
- > Easy access through any web browser
- > Remote monitoring system ZIGOR SOLAR SWS2000: communications system, parameter display, inverter records control, production, data storage etc, (optional)

Connectivity and options

- > Web server integrated
PC-based Web server exclusive programme for full access to inverter data by Zigor to monitor and communicate with ZIGOR SOLAR HIT3C inverters (integrated).
- > ZIGOR SOLAR SWS2000
The ZIGOR SOLAR SWS2000 monitoring system is a platform for monitoring and register variables, check and modify the settings as well as customise all parameters from the hybrid inverters ZIGOR SOLAR HIT3C (optional).

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



NON STOP POWER

ELECTRICAL CHARACTERISTICS

Model	ZIGOR SOLAR HIT3C 30	ZIGOR SOLAR HIT3C 50	ZIGOR SOLAR HIT3C 100	ZIGOR SOLAR HIT3C 150
Reference	016288 (400V) 016289 (220V)	300552 (400V) 300553 (220V)	016290 (400V) 016291 (220V)	303675 (400V)
Maximum Continuous output power	30 KW	50 KW	100 KW	150 KW
Recommended PV for rated power	≥ 31 Kw	≥ 52 Kw	≥105 Kw	≥157 kWp
Nominal output frequency	50 / 60 Hz			
Power factor at full load	>0,99			
Maximum output current per phase	83/45 A	139/76 A	278/152 A	228 A
Voltage distortion AC	<3% at full load (2,5%)			
Nominal output voltage	208/220/240 or 380/400/440 Vac (3F+N)			380/400/440 Vac
Maximum power efficiency	>96% (including transformer)			
MPPT efficiency	99%			
Internal consumption in operation	<1% at full load			
Isolation transformer	Internal			
AC / DC Switches	Internal			
Monitoring and supervision	Autochecking / Data and event log / Graphics software for communications			
User interface	2-line display, keyboard and 3 leds			
External interface	Standard: Ethernet, SNMP / Option: GSM modem			

INPUT GENERATOR SET

Nominal power	≥ 30 KW	≥ 50 KW	≥ 100 KW	≥ 150 kW
Nominal voltage	208/220/240/380/400/440 Vac (3F+N)			
Nominal frequency	50 / 60 Hz			
Maximum current per phase	139/76 A	194/106 A	389/213 A	289 A

BATTERY

Nominal voltage	350 Vdc			
Voltage range	300 / 420 Vdc			
Charge maximum current	50 A	50 A	100 A	100 A
Discharge maximum current	103 A	173 A	350 A	500 A

INPUT PV

MPPT voltage range	420 / 700 Vdc			
Maximum current	74 A	125 A	250 A	375 A
Maximum voltage ⁽¹⁾	880 Vdc			
Number of inputs	1			

GENERAL INFORMATION

Operating ambient temperature range	-10°C to +50°C			
Cooling	Forced Air and external fan control (6 A)			
Relative Humidity	0% to 95% Non condensing			
Operating altitude	<1000 m without loss of power			
Enclosure rating	IP21 - standard			
Cabinet dimensions (HxWxD) (mm)	1950x1200x630 (400 Vac model) 1950x1200x730 (220 Vac model)	2150 x 1600 x 630		
Cabinet Weight	830 Kg	850 Kg	1320 Kg	1450 kg

STANDARDS

Certificates	CE Marking			
Directives	2006/95/CEE-93/68/CEE 2004/108/CEE			
Standards	IEC-62109-1			

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

These specifications may be changed without notice.