

Three-phase transformerless inverter 9 - 12 - 18 Kw



Beghelli Solar DATA Gate FH-DSSS radio transmission system

Integrated interface protection system (IPS)

Complies with the "Guide for connections to the ENEL Distribuzione electricity network"

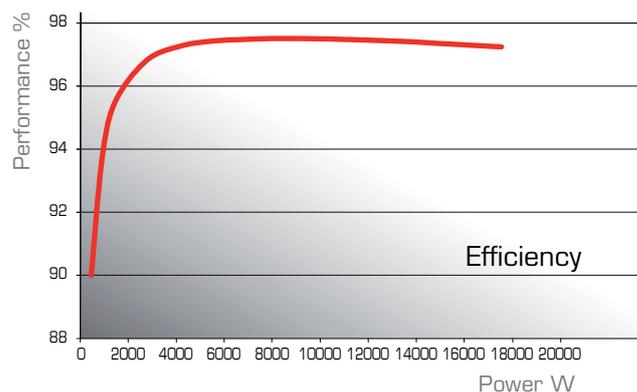
Anti-islanding devices and integrated protection devices sensitive to output DC (CEI 64-8 conforming)

MPPT algorithm optimised for continuous maximum power point tracking

Colour touchscreen display

High conversion efficiency

Three-phase inverter, without isolation transformer (transformerless), suitable for grid connection, with Beghelli Solar DATA Gate FH-DSSS radio transmission system for connection to PianetaSole control panels, with integrated output protection devices. The Beghelli transformerless inverters are equipped with the interface protection system (IPS) that intervenes directly on the interface device (ID) to disconnect the production plant from the ENEL electricity network. Monitoring and remote management are possible with the addition of the GSM module, without requiring any dedicated control panels. According to the instructions of the network manager, the interface protection integrated in the inverter can be used in photovoltaic fields with maximum 3 inverters connected on a single network entry point.



INPUT MODULES CONFIGURATION FOR SINGLE INVERTER

	9.000 W TL - 2MPPT	12.000 W TL - 2MPPT	18.000 W TL - 2MPPT
Total number of strips	2	4	4
280Wp modules for each strip	12 ÷ 19	12 ÷ 19	12 ÷ 19
Maximum number of installable modules	37	49	73

Order Code	Description	Notes
15764	9000 W TL inverter	Anti-theft system and energy production data monitoring
15765	12000 W TL inverter	Anti-theft system and energy production data monitoring
15766	18000 W TL inverter	Anti-theft system and energy production data monitoring

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	9.000 W TL - 2MPPT	12.000 W TL - 2MPPT	18.000 W TL - 2MPPT
Input parameters			
Maximum DC power	10.3 kW	13.8 kW	20.6 kW
MPPT voltage interval	335-530 V (rated 420)	335-530 V (rated 420)	335-530 V (rated 420)
Maximum DC voltage	1.000 V	1.000 V	1.000 V
Activation voltage	360 V	360 V	360 V
Independent MPPTs	2	2	2
Maximum power per MPPT	5.15 kW	6.9 kW	10.3 kW
No. of DC inputs	2 (for each MPPT)	4 (2 for each MPPT)	4 (2 for each MPPT)
Maximum current per MPPT	10 A (12 short-circuit)	20 A (24 short-circuit)	20 A (24 short-circuit)
Input protections			
Inversione polarità	Yes	Yes	Yes
Varistori lato DC	2 + gas arrester to earth	2 + gas arrester to earth	2 + gas arrester to earth
Output parameters			
Rated power up to 50°C	9 kW	12 kW	18 kW
Maximum power	9.9 kW	13.2 kW	19 kW
Connection to the AC network	Three-phase 230VAC 50Hz + PE + N	Three-phase 230VAC 50Hz + PE + N	Three-phase 230VAC 50Hz + PE + N
Rated voltage between phase and neutral	230 V	230 V	230 V
Rated network frequency	50 Hz	50 Hz	50 Hz
Rated current per phase	13 A	17.4 A	26 A
Maximum current per phase	15.6 A	19.1 A	30 A
AC connection	Three-phase terminal board for 4 mm ² cables, Ø 16-18 mm	Three-phase terminal board for 6 mm ² cables, Ø 16-18 mm	
Power factor	1	1	1
Total harmonic distortion (THD%) - AC	< 4.0% at rated power, with sinusoidal mains voltage		
Output protections			
AC-side varistors per phase	2 + gas arrester to earth	2 + gas arrester to earth	2 + gas arrester to earth
Earth leakage measurement	Conforms to VDE 0126-1-1 and CEI 64-8 regulation (type-F RCD as per IEC 60755/A2)		
Conversion efficiency			
Maximum efficiency	97.5 %	97.5 %	97.5 %
European efficiency	97 %	97 %	97 %
Environmental parameters			
Cooling	Forced with dedicated fan	Forced with dedicated fan	Forced with dedicated fan
	-20 / +60 (power derating above 50°)		
Acoustic noise (dBA)	<50 with fan activated	<50 with fan activated	<50 with fan activated
Protection rating	IP65	IP65	IP65
Mechanical parameters			
Dimensions	550 x 580 x 200 mm	550 x 580 x 200 mm	550 x 580 x 200 mm
Weight	45 kg	48 kg	50 kg
Other information			
Night-time consumption	0,3 W	0,3 W	0,3 W
Stand-by mode consumption	8 W	8 W	8 W
Insulation	Not insulated, transformerless	Not insulated, transformerless	Not insulated, transformerless
Display	Yes	Yes	Yes
Transmission	RS485; Radio FH-DSSS	RS485; Radio FH-DSSS	RS485; Radio FH-DSSS
Integrated protection and interface device	See calibrations table	See calibrations table	See calibrations table
Type of converter	Static converter unsuitable for withstanding the voltage and frequency within the rated range (static conversion device that behaves like a current generator)		
Firmware version	1.0	1.0	1.0
Contribution to the short-circuit current	23 A per phase	28.7 A per phase	45 A per phase
Limitation of the DC component entering the network	Integrated protection device against entry of DC component in the network. Limitation of the DC component entering the network through a dedicated control algorithm. Monitoring of the value and variation speed of the DC component introduced into the network, through DC-sensitive sensors.		