

THREE-PHASE INVERTERS

BAT GEN

3 Phase battery Charger/Discharge On-Grid inverters range

Description



The BAT GEN range of Reversible Battery Charger 3 phase on-grid inverters is designed to cover the needs of all mains-connected solar battery base plants. The BAT GEN 30/50/100 KW combines design and versatility with ease of operation and modularity that allows multiple MVA installations and it's compatible most available battery technologies (Lead-acid, Ni-cd, Li-ion, Redox)



BAT GEN

Features

- > Range of DC battery voltage (300-700 VDC)
- > High energy efficiency 97%
- > Very low harmonic distortion, THD < 3%
- > Selectable power factor
- > Direct connection to distribution Network
- > Unlimited parallel connection
- > Anti-islanding protection with automatic shut down
- > Monitoring from the unit with LCD
- > Galvanic isolation through the transformer (T model)
- > IP21 protection level
- > Protection against: inverse polarity, short-circuits, overvoltages, insulation failure with relay signalling
- > Service life of more than 20 years
- > Automatic reactive energy regulation
- > PC-based Web server programme for full access to BATGEN data
- > Maximum efficiency
- > Modularity
- > Output voltage 220/480 V
- > No Data logger is required for monitoring system parameters
- > DC and AC surge protections included
- > ETHERNET and RS-485 communications ports for monitoring
- > Ride through complying with most countries grid code
- > Optional Dump Load for V/F control
- > Lead-acid, Ni-cd, Li-ion, Redox compatible

on-grid solar plants

mid voltage solar plants

hybrid generation

energy saving

telecom back up

wind energy



NON - STOP POWER

ELECTRICAL CHARACTERISTICS			
Models	Bat Gen 30 KVA (3 phase) T	Bat Gen 50 KVA (3 phase) T	Bat Gen 100 KVA (3 phase) T
Continuous output power	20/25/30 KW AC	50 KW AC	75/100 KW AC
Nominal DC power	21/27/31 KW	52 KW	78/105 KW
Nominal AC voltage	T 380-400 V Threephase		
Nominal frequency	50/60 Hz		
Power factor	1 adjustable \pm 0.8		
Maximum line current AC	36/45/54 A	89 A	135/180 A
Current distortion AC	<3% THD of nominal power ⁽¹⁾		
Maximum DC voltage	800 V		
Maximum input current DC	60/75/90 A	150 A DC	225/300 A
Maximum number of parallel units	Nx25 KW	Nx 50 KW	Nx100 KW (mains limitation)
Maximum efficiency	96% (with transformer) T model		
Battery Capacity ⁽²⁾	from 50 Ah to 1500 Ah		
ENVIRONMENTAL AND MECHANICAL FEATURES			
Range of ambient temperatures	-10°C to +50°C ⁽³⁾		
Type and grade of environmental protection	IP21		
Estimated weight	T 500 Kg	T 600 Kg	T 1020 kg
Dimensions (H x W x D)	2150 x 800 x 600 mm	2150 x 800 x 600 mm	T 2150 x 1200 x 600
Operating height	<1000 m without power loss		
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 screen	Standard LCD		
Breakers (AC and DC)	Integrated in the system		
Communication software	Software for communication		
Equipment supervision SELF DIAGNOSTIC	Yes		
External communication	Ethernet-SNMP-Web server		
Monitoring options	GSM modem (option) Data logger (option)		
STANDARDS AND SAFETY			
Certificates	CE Marking, VDE, ENEL		
Directives	2004/108/CE (UNE-EN 61000-6-2 / UNE-EN 61000-6-4) 2006/95/CE (EN 50178)		
Standards	IEC 62116 (2008) - Anti-islanding protection		
Countries standards			
Germany	VDE 0126-1-1		

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

(2) Battery charger current. Adjustable from 1 Amp to 150 Amp

(3) Under 40°C, the system operates with nominal values, at 50°C nominal values are maintained for two hours

These specifications may be changed without notice.