

Genverter 50 kW- Power System



Datasheet

Sailing Yachts • Motor yachts • Commercial craft • Back-up Power



Unique high efficient variable speed diesel generator

- 0-50 kW output power rating
- 4 or 6 cyl. diesel engine by choice
- Fully watercooled PM technology
- 1000-3000 RPM range
- Extremely silent
- Ultra compact and light weight (400 kg)
- Fuel - and maintenance costs reduction
- DC output for hybrid battery charging
- 400 VAC / 50 Hz output by 3-phase inverter
- 60 Hz also available



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Hy-Gen Genverter GV50 variable speed generator

Main specifications (preliminary)	
Nominal Power	50 kW at 3200 RPM 20 kW at 1800 RPM
Rated Output voltage	up to 750 VDC
Product technology	variable speed, light weight high speed diesel generator with water cooled compact 3-phase permanent magnet flywheel integrated alternator
RPM window	1250-3200 RPM
Sound level	58 dBA at 1500 RPM at 7 m
Specifications diesel engine	
Engine model	MO114M38
Engine technology	4-stroke, turbo charged, intercooled, direct-injection, fresh water cooling, mono block, high speed combustion diesel engine
Output at Crankshaft	83 kW (114 HP) at 3200 rpm
Number of cylinders	4 inline
Injection system	two stage unit injectors, mechanically driven but electronic injection pressure controlled up to 2000 bar
Displacement	3200 cm ³ (195 cid)
Bore	85 mm (3.35")
Stroke	94 mm (3.7")
Compression ratio	17.0
Max. torque	255 Nm at 2500 RPM
Fuel consumption	220 g/kWh
Exhaust emissions	EPA Tier II, RCD/2003/44
Ø Sea water inlet, outlet	25 mm (1"), 89 mm (3 1/2")
Electrical system	12 VDC system plug in solution; 14 VDC / 80 A Alternator; 2 pole installation as standard; engine diagnostic as standard
Generator back-end specifications	
Model PM	Synchronous Permanent Magnet, Maintenance free, water cooled alternator
Rated Power	50 kW at 3200 RPM Rated output voltage max 750 VDC
Number of phases	3
Frequency	up to 400 Hz
Efficiency	> 92 %
Accessoires	
Up to 200 kVA: modulaire switch mode bi-directional DC/DC converter for high voltage battery charging. Up to 200 kVA: modulaire switch mode bi-directional DC/AC inverter for hotel load and stable 230/400 VAC 50/60 Hz. Power management control centre HY-Control, multipurpose display and load management control functions. Up to 80 kWh of high voltage Lithium ION battery-pack for silent mode, E-propulsion and hybrid functionality.	

Also available: Integrated Flywheel generator



Clutch for 50kW integrated flywheel generator

Integrated Flywheel alternator PM-motor/shaft generator of 50 kW



WhisperPower fully-watercooled variable speed PM alternator

4 or 6 cyl. compact turbo diesel (Steyr or other brands)

INSTALLATION HY-GEN GENVERTER GV50

