



Control Panel

The gen-set control panel was designed to include, in one single panel, the switches, control devices and the protection devices

The components are the following:

- Engine cut-off module for automatic stop of engine in case of high water temperature, low oil pressure, high alternator temperature.
- Hour-meter.
- Start-stop button.
- Breaker for protection against of overload or short circuit.
- Thermal switch for D.C. electric circuit.

Engine

- Easy access in case of maintenance to the feeding system and lubrication, of the sea/water pump and the air filter.
- Safety stop in case of low oil pressure.
- Safety stop in case high water/exhaust gas temperature.
- Oil and fuel filters of easy access.

Alternator

- Synchronous, 4 poles, brush less self-excited, electronic voltage regulator (AVR).
- Rotor and stator coated with epoxy resin against external agents.
- Rotor dynamically balanced.
- Insulation class H.

Soundproof cabin

A new project engineering design with a structure of a draw piece of aluminum supporting, painted aluminum panels type 5754 of high resistance to external agents.

Good accessibility inside canopy, makes maintenance services more easy.

MARINER MARINER 2010 2310

20.1 kW 50 Hz 23.1 kW 60 Hz

Engine	50 Hz	60 Hz	
Model	Yanmar 4TNV84 TURBO		
Туре	Diesel 4 stroke		
Cylinders (nr.)	4		
Cylinder block material	Cast iron		
Bore (mm - in.)	84 - 3,3		
Stroke (mm - in.)	90 - 3,5		
Displacement (cc - cu.in.)	1995 - 121,7		
Power (hp)	29,3	37,1	
Rated rpm	1500	1800	
Combustion system	Indirect		
Engine head material	Cast iron		
Speed governor	Centrifugal mechanical		
Lubrication system	Forced		
Oil sump capacity (L - qt.)	7,1 - 7,5		
Engine stop system	Stop solenoid		
Fuel pump	Electric		
Fuel pump discharge (cm - in.)	70 - 27,6		
Full load consumption (L/h -	5,6 - 1,48	7,3 - 1,93	
Starting battery (Ah-V)	80 - 12		
Battery charger (Ah-V)	40 - 12		
Starter (kW-V)	1,2 - 12		
Max. inclination	30°		
Water pump flow	40 10 6	48 - 12,7	
(L/min - gal/min)	40 - 10,6	40-12,7	

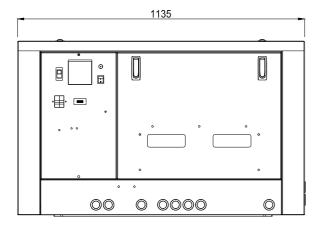
Alternator	50 Hz	60 Hz		
T. m.a	Synchronou	Synchronous, 4-poles,		
Туре	self-e	self-excited		
Cooling	A	Air		
Voltage (V)	115 - 230	115 - 240		
Frequency (Hz)	50	60		
Current (A)	175 - 87,4	201 - 96,3		
Max. power (kW)	20,1	20,1 23,1		
Continuous power (kW)	18,7	22,2		
Power factor (cos ø)	1	1		
Insulating class	H	Н		
Voltage stability	±2	±2%		
Frequency stability	±5	±5%		

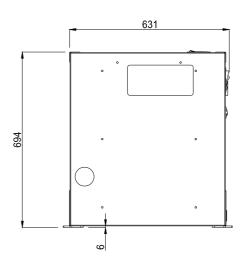
Cooling system

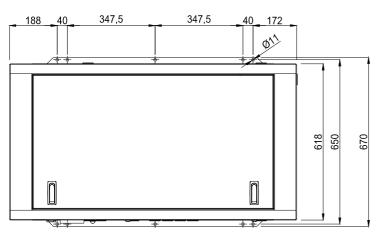
The cooling of the engine is based on a closed inner flow of coolant. The system is based on a cupronickel heat exchanger seawater/ coolant type, where the thermal exchange occurs between coolant and seawater. Two separate pumps contribute to the flow of the coolant and the sea water.

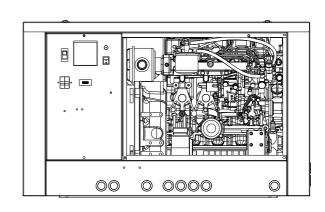


	50 Hz	60 Hz		
Dimensions (Leng. x Width x Height)	1135 x 631	x 694 mm	(with canopy)	
Differsions (Leng. X Width X Height)	44,7 x 24,8	x 27,3 in.	(with canopy)	
Weight	410 kg	, 902 lb	(with canopy)	
Noise power level	54 dBA @ 7mt	56 dBA @ 7mt		









- 1 Control panel
- 2 Engine oil filter cartridge
- 3 Oil dipstick
- 4 Engine oil cap
- 5 Air filter
- 6 Closed circuit water pump
- 7 Seawater pump

- 8 Fuel filter
- 9 Seawater exhaust connection (ø 75mm)
- 10 Seawater inlet (ø 25mm)
- 11 Battery connection
- 12 Fuel tank connection (ø 8mm)
- 13 Electric cables outlet
- 14 Fixing stirrups

FITTINGS

EXHAUST COMPONENTS KIT SIPHON BREAK WATER-GAS SEPARATOR KIT STARTING REMOTE CONTROL PANEL WITH INSTRUMENTS

Dealer:

This drawing is only a reference and is not indicatly for the installation. For more information, you may contact your local dealer or **mase** generators S.p.A..

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