



|                    |                    |
|--------------------|--------------------|
| <b>MARINER 900</b> | <b>MARINER 901</b> |
| <b>9 kW</b>        | <b>10 kW</b>       |
| <b>50 Hz</b>       | <b>60 Hz</b>       |

### 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.

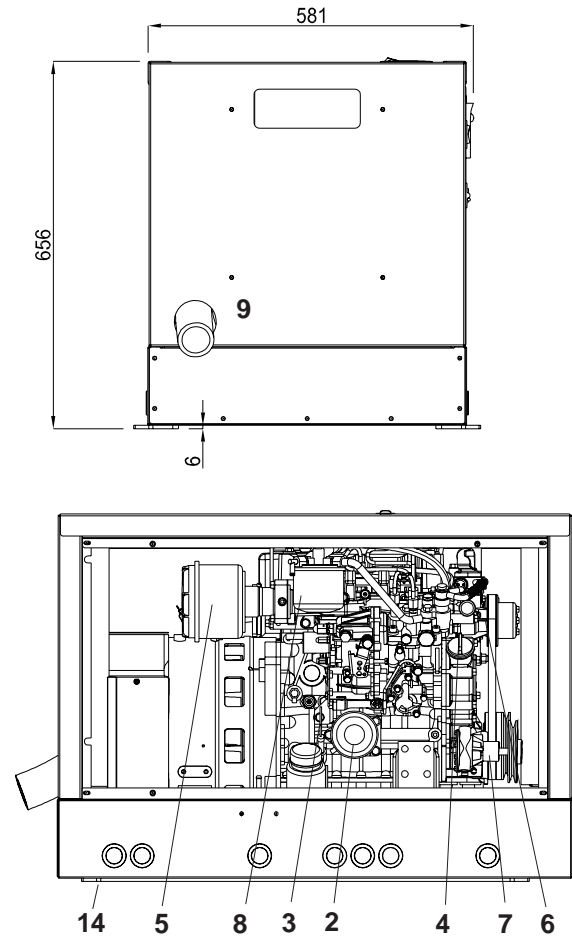
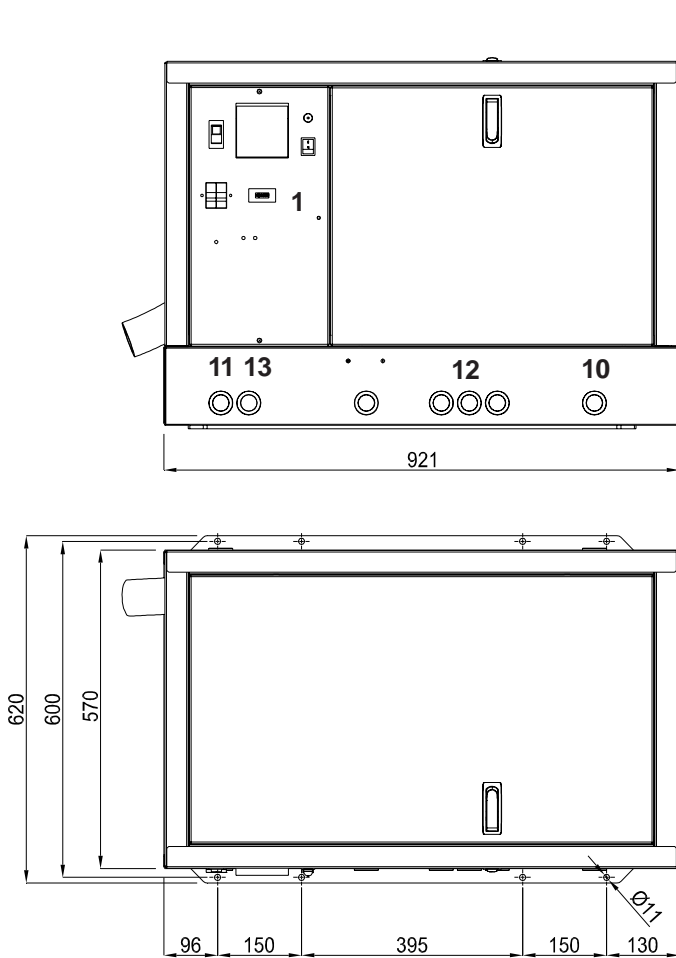
| Engine                      | 50 Hz                  | 60Hz |
|-----------------------------|------------------------|------|
| Model                       | Yanmar 3TNV82          |      |
| Type                        | Diesel 4 stroke        |      |
| Cylinders (nr.)             | 3                      |      |
| Cylinder block material     | Cast iron              |      |
| Bore (mm)                   | 82                     |      |
| Stroke (mm)                 | 84                     |      |
| Displacement (cc)           | 1330                   |      |
| Power (hp)                  | 15,4                   | 18,7 |
| RPM                         | 1500                   | 1800 |
| Combustion system           | Indirect               |      |
| Engine head material        | Cast iron              |      |
| Speed governor              | Centrifugal mechanical |      |
| Lubrication system          | Forced                 |      |
| Oil sump capacity           | 5,5                    |      |
| Engine stop system          | Stop solenoid          |      |
| Fuel pump                   | Electric               |      |
| Fuel pump discharge (cm)    | 70                     |      |
| Full load consumption (l/h) | 3,2                    | 3,6  |
| Starting battery (Ah-V)     | 70 - 12                |      |
| Battery charger (Ah-V)      | 40 - 12                |      |
| Starter (kW-V)              | 1,4 - 12               |      |
| Max. inclination            | 30°                    |      |
| Water pump flow (l/min)     | 25                     | 28   |

| Alternator                  | 50 Hz                              | 60Hz        |
|-----------------------------|------------------------------------|-------------|
| Type                        | Synchronous, 4-poles, self-excited |             |
| Cooling                     | Air                                |             |
| Voltage (V)                 | 115 - 230                          | 120 - 240   |
| Frequency (Hz)              | 50                                 | 60          |
| Amps                        | 78,2 - 39,1                        | 83,3 - 41,6 |
| Max. power (kW)             | 9                                  | 10          |
| Continuous power (kW)       | 8,2                                | 9,5         |
| Power factor ( cos $\phi$ ) | 1                                  |             |
| Insulating class            | H                                  |             |
| Voltage stability           | ±2%                                |             |
| Frequency stability         | ±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                            | 60Hz                      |
|-------------------------------------|----------------------------------|---------------------------|
| Dimensions (Leng. x Width x Height) | 921 x 581 x 656 mm (with canopy) |                           |
| Weight                              | 295 Kg.(with canopy)             |                           |
| Noise power level                   | 51 dB <sub>A</sub> at 7mt        | 53 dB <sub>A</sub> at 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 50mm)
- 10 - Seawater inlet (ø 16mm)
- 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

*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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Dealer: