



CBU INTELLI LITE 9 Evo device controls and drives the genset. A large display and control pushbuttons allow an easy use and monitoring of the unit. Manual start, Vac Voltage, Frequency Hz, Power and Amperage, Engine rpm, Hour meter, Genset Battery voltage, Engine oil pressure, Low oil pressure alarm, Engine temperature, Engine preheating, High engine and alternator temperature, warning and shutdown alarm, Alternator battery charger failure alarm, Protection alarm for Overload, short circuit, high and low voltage, frequency and rpm, Alarms history, Maintenance warning, Zero power mode Inlets / Outlets controls available CAN inlet by J1939 protocol, General alarm outlet, RUN outlet, Ready outlet, Programmable AUX outlet.

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.
- Double vibration dumping system.
- Oil and fuel filters of easy access.
- Oil drain pump.

Alternator

- Synchronous, 4 poles, brush less self-excited, electronic voltage regulator (AVR).
- Rotor and stator epoxy resin coated 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. Of limited weight and easy accessibility to the inner cabin in case of maintenance services.

IS (Intercooler system)

The cooling system used on IS series generators is based on **double cooling system**.

Heat exchangers type sea water/air and sea water/coolant able to assure the perfect functioning of the generator independently from the external ambient temperatures.

Engine

| Engine | 50 Hz | 60Hz |
|--|------------------------|------------|
| Model | Yanmar 3TNV80F | |
| Type | Diesel 4 stroke | |
| Cylinders (nr.) | 3 | |
| Cylinder block material | Cast iron | |
| Bore (mm. - in.) | 80 - 3.15 | |
| Stroke (mm. - in.) | 84 - 3.31 | |
| Displacement (cc. - CID) | 1.267 - 77.32 | |
| Power (hp) | 12.74 | 14.35 |
| RPM | 1500 | 1800 |
| Compression ratio | 23:1 | |
| Combustion system | Direct injection | |
| Engine head material | Cast iron | |
| Speed governor | Centrifugal mechanical | |
| Lubrication system | Forced | |
| Oil sump capacity with filter(l - gal) | 3.4- 0.9 | |
| Engine stop system | Stop solenoid | |
| Fuel pump | Electric | |
| Fuel pump discharge (cm. - ft) | 70 - 2.3 | |
| Fuel consumption (l/h - gal/h) | 2.9 - 0.76 | 3.3 - 0.87 |
| Air intake (l/min. - gal/min.) | 790 - 173 | 948 - 208 |
| 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. - gal/min.) | 25 - 6.6 | 28 - 6.1 |

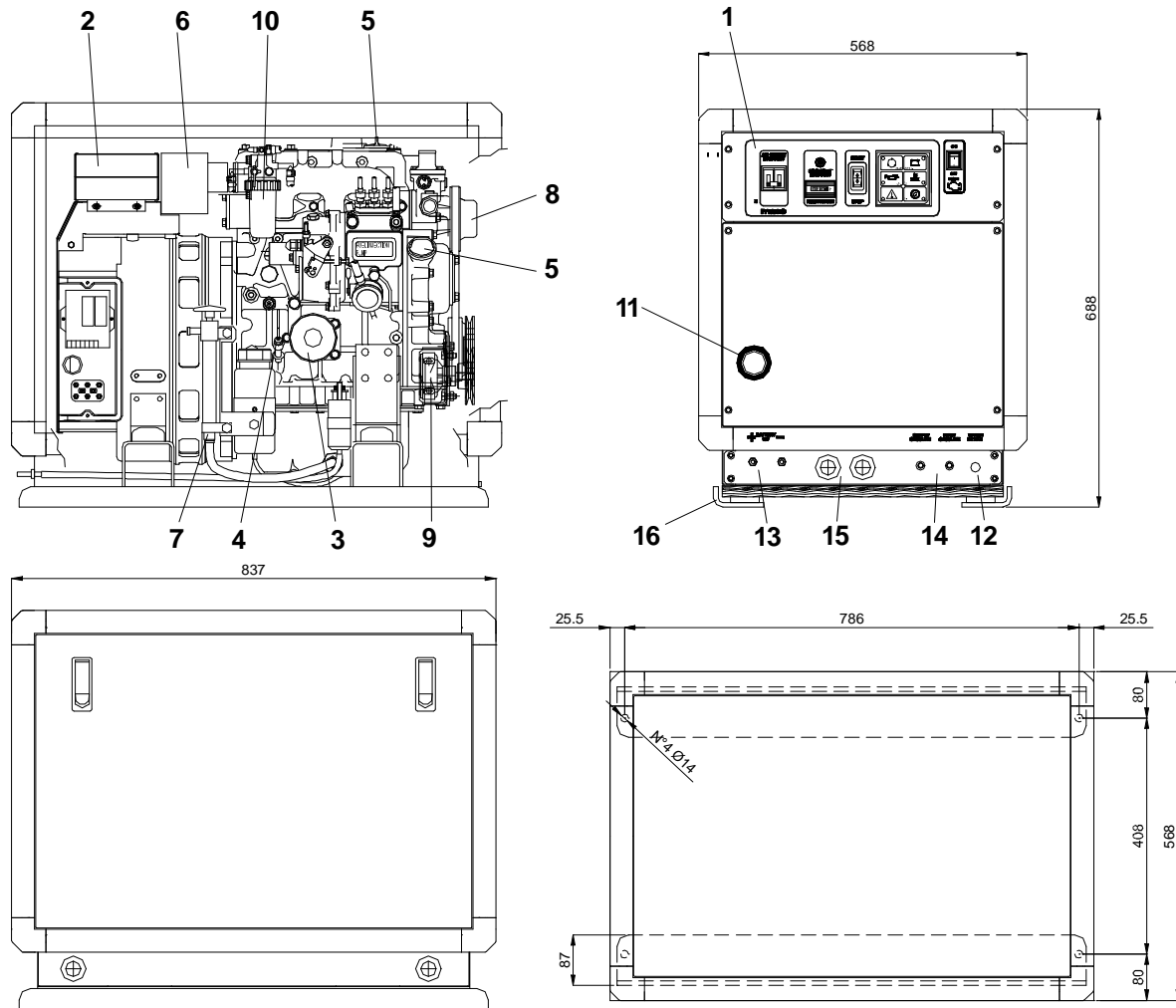
Alternator

| Alternator | 50 Hz | 60Hz |
|-----------------------------|---|-------------|
| Type | Synchronous, 4-poles, brush less self-excited | |
| Regulation | Electronic | |
| Cooling | Air/water (Intercooler W/A) | |
| Voltage (V) | 115 - 230 | 120 - 240 |
| Frequency (Hz) | 50 | 60 |
| Amps | 69.5 - 34.8 | 78.2 - 37.5 |
| Max. power (kW) | 8 | 9 |
| Continuous power (kW) | 7.5 | 8.5 |
| Power factor (cos ϕ) | 1 | |
| Insulating class | H | |
| Voltage stability | ±2% | |
| Frequency stability | ±5% | |

IS advantages

- The generator may be installed in any room on the vessel without the need to install ventilation blowers.
- Engine and alternator operate in ideal temperature conditions.
- Extremely compact and quiet.
- Maximum generator efficiency.
- Simplified generator installation.
- The generator does not heat the environment where it is installed.
- The first shock-absorber system absorbs vibrations from engine-alternator to the frame
- The second system absorbs residual micro-vibrations from frame to vessel.

| | 50 Hz | 60Hz |
|--------------------------------------|--|-----------------------------------|
| Dimension (Lenght x Width x Height.) | 837x568x688mm - 32.95x22x27.08 (in.) (with soundproof box) | |
| Weight | 295 Kg. - 555 (lb) (with soundproof box) | |
| Noise Level | 49 dB _A at 7mt (23 ft) | 51 dB _A at 7mt (23 ft) |



- | | |
|--------------------------|------------------------------------|
| 1- Control panel | 9 - Sea water pump |
| 2- Air / water exchanger | 10 - Fuel filter |
| 3 - Oil filter cartridge | 11 - Exhaust manifold (ø 50mm) |
| 4 - Oil dipstick | 12 - Sea water intake (ø 16mm) |
| 5 - Engine oil filler | 13 - Battery connections |
| 6 - Air filter | 14 - Fuel tank connections (ø 8mm) |
| 7 - Oil drump pump | 15 - Cable outlets |
| 8 - Fresh water pump | 16 - Genset base brackets |

FITTINGS

- EXHAUST COMPONENTS KIT**
- SIPHON BREAK**
- W.G. SEPARATOR KIT**
- REMOTE CONTROL PANEL COMPLETED OF INSTRUMENTS**

*This drawing is only a reference and is indicatly for the installation. For more information, you may contact your local dealer or **mase generators S.p.A***

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Dealer: