



### CBU control panel (Mod-Bus transmission Unit)

New design, latest technology, big display and soft touch buttons for quick menu navigation, start and stop procedure, IP54 protection grade. Very compact 86x124mm (3.84x4.9 in) with a shielded connecting cable 10mts (32.8 ft) long, CBU has many functions for an easy monitoring of the generator:

- ON/OFF/START/STOP/MENU controls.
- Digital hour-meter, Output voltage, Generator Battery voltage, external battery pack voltage, Frequency, Service time, Event list of last 10 alarms and time.
- 13 different alarms icons displayed.
- 485 Mod-Bus connector for monitoring generator by boat main control monitor.

### 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 epoxy resin coated against external agents.
- Rotor dynamically balanced.
- Insulation class H.

### Engine

Model	Perkins 1103A 33 TG1
Type	Diesel 4 stroke
Cylinders (nr.)	3
Cylinder block material	Cast iron
Bore (mm - in.)	105 - 4,13
Stroke (mm - in.)	127 - 5,00
Displacement (cc - cu.in.)	3300 - 201,4
Power (hp)	72.3
Rated rpm	1800
Aspiration	Turbo
Combustion system	Direct
Engine head material	Cast iron
Speed governor	Centrifugal mechanical
Lubrication system	Forced
Oil sump capacity (L - qt.)	7,9 - 8,3
Engine stop system	Stop solenoid
Fuel pump	Electric
Fuel pump discharge (cm - in.)	160 - 63,0
Full load consumption (L/h - gal/h)	11 - 2,9
Starting battery (Ah-V)	80 - 12
Battery charger (Ah-V)	40 - 12
Starter (V)	12
Max. inclination	30°
Water pump flow (L/min - gal/min)	86 - 22,7

### Alternator

Type	3 phase, synchronous, 4-poles, self-excited
Cooling	Air
Voltage (V)	240-480
Frequency (Hz)	60
Max current (A)	130-65
Max. power (kVA)	54
Continuous power (kVA)	48
Power factor (cos $\phi$ )	0,8
Insulating class	H
Voltage regulator	Electronic
Ripple	$\pm 2\%$
Frequency stability	$\pm 5\%$

### Cooling system

The cooling of the engine is based on a closed inner flow of coolant.

The system is based on a heat exchanger seawater/coolant type, of cupronickel, where the thermal exchange occurs between the two liquids.

Two separate pumps contribute to the flow of the coolant and the sea water.

