

Marine Generator Set 68 GT/GTC

Type 3 phas.+neutr.



General Description

Max Power¹ 54,688 kW (68,36 kVA)

Prime Power² 49,72 kW (62 kVA) Frequency 50 Hz

Voltage

400 V / 230 V 230 V

Current intensity

98,7 Amps. 171,0 Amps. Fase

3 phas.+neutr. 3 phas.

Dimensions and Weights

	Length	Width	Height	Weights
With canopy	1903 mm (74,92 in)	840 mm (33,07 in)	848 mm (33,39 in)	869 Kg (1915 Lbs)
Without canopy	1722 mm (67,78 in)	722 mm (28,42 in)	800 mm (31,5 in)	759 Kg (1672 Lbs)

Engine

Engine base	Mitsubishi	Bore	94 mm (3,7 in)
Solé Diesel engine model	SM - 81	Stroke	120 mm (4,72 in)
Туре	4 Type	Compression ratio	17:1
RPM Engine	1500	Combustion system	Direct injection pipe
Number of cylinders	6	Aspiration	Turbocharged
Displacement	4996 cc	Flywheel housing size	SAE 3
Oil type	SAE 15W40	Coolant capacity	8 L (2,11 Gal)
Oil capacity	11 L (2,91 Gal)	Flywheel size	SAE 11 1/2
Output power	59,6 kW (79,92 HP)	Coolant flow rate	70 L/Min.(18,49 Gal/Min.)
Raw water flow rate	38 L/Min.(10,04 Gal/Min.)	Engine combustion air requirements	4,2 m ³ /min
Requirements	70 m ³ /min.		

Rating conditions according to ISO 3046 (100 kPa barometric pressure, 30 % relative humidity abd 25 °C (77° F)) * 1 Maximum Output Power: maximum power supplied by the genset at full load. * 2 Prime Power: Rated Power according to ISO 3046 and ISO 8528-1. 10 % overload capacity one hour in twelve hours.





Fuel system

Typical Fuel Consumption

4,8 L/Hs. (1,27 Gal/Hs.)
7,8 L/Hs. (2,06 Gal/Hs.)
11 L/Hs. (2,91 Gal/Hs.)
14,5 L/Hs. (3,83 Gal/Hs.)

Tipo de Combustible Diesel

Calidad de CombustibleDiesel ASTMType of Injection PumpIn line typePump Regulator TypeCentrifugal

Engine electrical

Battery voltage12 VFuel shutoff solenoidETRStarter motor3 kWAlternator50 AEarth IsolatedYesCurrent TransformersYes,

Installation details

Ø int. Exhaust Hose (mm)90 mm (3,54 in)Ø int. Raw Water Hose (mm)32 mm (1,26 in)Ø int. Fuel supply hose (mm)10 mm (0,39 in)Ø int. Fuel return hose (mm)10 mm (0,39 in)Min. Battery capacity (Ah)12 V 99 Amps/h

Maximum recommended fuel lift 0.6 m (1.97 ft)Maximum recommended raw water lift 2.5 m (98.43 in)Raw water maximum temperature 32 °C (89.6 °F)

Maximun instalation angle (°)*** 15°

Alternator Details

BrandMECCALTECos φ0,8ModelECP32-3L/4BTropical VersionStandardRegulator typeDSRExcitation systemBrushless# of poles4Voltage regulation Accuracy**±1%

Insulation Type* H Standards EN 60034-1, IEC 34-1, ISO

IP protection* 23 Frequency Regulation Synchronous

Optional Equipment

- Siphon break kit mandatory if generator is below waterline
- Engine electrical system at 24V
- Service/Cruise Kits: fuel and oil filters, raw water pump, impeller, alternator belt
- Dry Exhaust system
- Exhaust System
- Water Filters
- Welcome Kit

- Keel Cooling conversion for dry and wet exhaust
- Double walled pipes and alarm kit
- Low coolant level shut down switch
- Fuel filter/water separator
- Gas/Water Separator
- Fuel Hose
- Exhaust Hose
- Raw water hose
- Sea cok

For other requirements please contact the Sales Dept.



Welcome Kit



^{**} With load from 0 to 100%, speed variation from -2% up to +5%, power factor 0,8 linear and balanced load.

^{***} In all directions



Control Panel SCO 10



General Description

- Graphic LCD with light, 128 x 64 pixels display
- 187 LED indicators
- Genset Measures (see Display Information)
- Configuration protected by password
- Running hour indication
- Multilanguage
- Genset protections (see Alarm Management)
- Preheating function
- D+ pre-excitation Terminal
- CAN bus information output with SAE J1939 protocol
- Dos temporizadores multiuso
- Dimensions 180 x 120 x 55 mm
- Weight 450g

Alarm Management

Shut Downs (SD)

- High coolant temperature
- Low oil pressure
- Overspeed
- Overload*
- Short circuit*
- Overcurrent*
- Over/Under voltage
- Over/Under frequency
- Emergency stop

Warnings (WRN)

- High coolant temperature
- Low oil pressure
- Over/Under voltage
- Maintenance request

Sensor Fails (FLS)

Function Description

- OFF Mode
- MAN Mode (manual start/stop engine)
- AUT Mode (auto start/stop engine)



IP 65 Box Kit

Power Supply

- Voltage supply 12/24V DC with fuse protection
- Consumption 80/51mA

Operating Conditions

- Operating temperature -20+70°C
- Humidity 95% Without condensation
- Front Panel Protection IP65

Standard Conformity

- Low Voltage Directive EN 61010-1:95 +A1:282 EN 61010-1:95 +A1:97
- Electromagnetic EN 50081-1:94, EN 50081-2:281 EN 50081-1:94, EN 50081-2:96
- Compatibility EN 50082-1:99, EN 50082-2:282 EN 50082-1:99, EN 50082-2:97

Display Information

Measurement

L1-L3 Voltage (V), Frequency (Hz), Oil Pressure, (bar), Coolant Temperature (°C), Battery, Voltage (V), rpm, Active Power* (kW), Apparent, Voltage (V), rpm, Active Power* (kW), Apparent, Power* (kVA), Current* (A), PF*.

History log

Optional Equipment

SCO 10 Double panel

• SCO 10 Double panel allows the same operation and functionality as Main SCO 10. They are connected by RS485 port with a communication wire, available in 12/24/36 m.

IP65 Box Kit

• Electrical Box for SCO 10 panel with an IP65 protection code. In addition, it includes an emergency stop button and an on/off panel power switch.

Binary Input/Output extension module

IG-IB Internet communication bridge

• For Ethernet/Internet communications

Current transformers

 Current (A), Active Power (kW), Apparent power (kVA) and PF genset measures

^{*}The specified function needs the current transformers (Optional Equipment) for showing the information in SCO 10 panel display





Dimensions









