

# Marine Generator Set G-15T-3

Type 3 phas.+neutr.



# General Description

Max Power<sup>1</sup> 12 kW (15 kVA)

Prime Power<sup>2</sup> 10,9 kW ( 14 kVA )

Frequency

50 Hz

Voltage

400 V / 230 V 230 V

**Current intensity** 

22 Amps. 38,1 Amps. Fase

3 phas.+neutr. 3 phas.

# Dimensions and Weights

	Length	Width	Height	Weights
With canopy	930 mm ( 36,61 in )	485 mm ( 19,09 in )	549 mm ( 21,61 in )	
Without canopy	1022 mm ( 40,24 in )	485 mm ( 19,09 in )	549 mm ( 21,61 in )	209 Kg ( 461 Lbs )

# Engine

Engine base	Mitsubishi	Bore	76 mm ( 2,99 in )
Solé Diesel engine model	MINI - 26	Stroke	70 mm (2,76 in)
Туре	4 Type	Compression ratio	23:1
RPM Engine	3000	Combustion system	Indirect mechanical injection
Number of cylinders	3	Aspiration	Naturally aspirated
Displacement	952 cc	Flywheel housing size	SAE 5
Oil type	SAE 15W40	Coolant capacity	3 L (0,79 Gal)
Oil capacity	4 L (1,06 Gal)	Flywheel size	SAE 6 1/2
Output power	16,3 kW (21,86 HP)	Coolant flow rate	43 L/Min.( 11,36 Gal/Min. )
Raw water flow rate	29,5 L/Min.( 7,79 Gal/Min. )	Engine combustion air requirements	1,32 m <sup>3</sup> /min
Requirements	43 m <sup>3</sup> /min.		

Rating conditions according to ISO 3046 (100 kPa barometric pressure, 30 % relative humidity abd 25  $^{\circ}$ C (77 $^{\circ}$  F))





<sup>\* 1</sup> 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**

25 % 1,7 L/Hs. ( 0,45 Gal/Hs. ) 50 % 3 L/Hs. ( 0,79 Gal/Hs. ) 75 % 4,1 L/Hs. ( 1,08 Gal/Hs. ) 100 % 5 L/Hs. ( 1,32 Gal/Hs. ) **Tipo de Combustible** Diesel

 Calidad de Combustible
 Diesel ASTM

 Type of Injection Pump
 In line(Bosch)

 Pump Regulator Type
 Centrifugal

# Engine electrical

Battery voltage 12 V
Starter motor 1,2 kW

Fuel shutoff solenoid ETR
Alternator 40 A

# Installation details

Ø int. Exhaust Hose (mm)51 mm ( 2,01 in )Ø int. Raw Water Hose (mm)20 mm ( 0,79 in )Ø int. Fuel supply hose (mm)8 mm ( 0,31 in )Ø int. Fuel return hose (mm)6 mm ( 0,24 in )Min. Battery capacity (Ah)12 V 60 Amps/h

Maximum recommended fuel lift $0.3 \,\mathrm{m}$  (  $0.98 \,\mathrm{ft}$  )Maximum recommended raw water lift $2.5 \,\mathrm{m}$  (  $98.43 \,\mathrm{in}$  )Raw water maximum temperature $32 \,\mathrm{^{\circ}\,C}$  (  $89.6 \,\mathrm{^{\circ}\,F}$  )

Maximun instalation angle (°)\*\*\* 25 °

# Alternator Details

**Brand** Meccalte 0,8 Cos o Model ECP3-1L/2 **Tropical Version** Standard Regulator type DSR **Brushless Excitation system** # of poles 2 Voltage regulation Accuracy\*\* ±1% Insulation Type\* Н EN60034-1, IEC 60034-1 **Standards** 

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



<sup>\*\*</sup> With load from 0 to 100%, speed variation from -2% up to +5%, power factor 0,8 linear and balanced load.







<sup>\*\*\*</sup> In all directions



# **Control Panel SCO 10**



#### General Description

- Graphic LCD with light, 128 x 64 pixels display
- 47 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 +A1:142 EN 61010-1:95 +A1:97
- Electromagnetic EN 50081-1:94, EN 50081-2:141 EN 50081-1:94, EN 50081-2:96
- Compatibility EN 50082-1:99, EN 50082-2:142 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

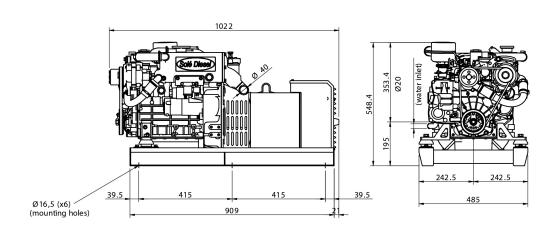
<sup>\*</sup>The specified function needs the current transformers (Optional Equipment) for showing the information in SCO 10 panel display







# Dimensions



G-15T-3

Dimensions in millimetres
This drawing is provided for reference only.







