

# (Sole Diesel) MARINE GENERATOR SET

**25 GT/GTC** 24,3 kVA (19,5 kW) 50 Hz

30 GTA/GTAC 30 kVA (24 kW) 60 Hz

#### 3 - Phase



Solé Diesel Gensets offer compactness, extremely low noise and vibration levels coupled with a high level of build quality.

The aluminium canopy provides the best power to weight ratio possible whilst giving the optimum user friendly operating characteristics possible.

The latest COMAP digital panel that incorporates the CAN system. This protocol, simplifies and economizes the communication between terminals.



All Solé products comply with the latest European Emission Levels and additional certification such as CE, RRR, RMRS, EPA Tier II and BV is available on request.

Solé Diesels now has a market presence in over 50 countries worldwide, which gives a comprehensive after sales service when ever and where ever needed.

The close relationship with global engine suppliers such as Deutz and Mitsubishi ensures that extra level of reliability and support.

#### **Models and Ratings**

Model	kW	kVA	Voltage	Amps	Phase	Hz	Engine RPM
25 GT/GTC	19,5	24,3	400/230	28,2	3	50	1500
			230	49,0	3	50	1500
30 GTA/GTAC	24	30	480/277	28,9	3	60	1800
			277	50,1	3	60	1800

#### Sound Level, Size and Weight

	Sound level (dB) <sup>1</sup>		Dimensions (mm)			Weight (Dry) (kg)
	50 Hz	60 Hz	Lenght	Width	Height	
With Canopy	56	58	1310	610	698	412
Without Canopy			1139	610	662	

<sup>1</sup> Full Load at 7 meters

Ratings: Marine ratings per ISO 3046 (100 kPa barometric pressure, 30% relativity and 25 °C temperature)

<sup>&</sup>lt;sup>2</sup> Not Available. Please contact the Sales Dept.



# - Engine

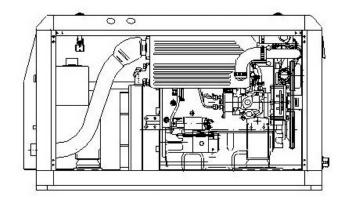
<b>Engine Specification</b>	ns		
Base		MITSUBISH	I
Solé Engine Model		MINI-63	
Туре		4 stroke	
Cylinder		4	
Displacement		2.505 cc	
Bore and Stroke		88x103 mm	
Compression ratio		22:1	
Injection		Indirect	
Aspiration type		Naturally as	oirated
Lube Oil capacity (L)		6,5	
Oil Type	ACEA E5,	API CH-4/SJ,	15W40
Coolant capacity (L)		9,5	
Housing		SAE 5	
Flywheel		SAE 8	
		50 Hz	60 Hz
RPM		1.500	1.800
Power (Hp / kW)		29.8 / 22.2	36.5 / 27.2
Coolant flow rate (L/min)		51	63
Raw water flow (L/min)		37,5	45
Engine/generator Air cool requirements (m3/min)	ing	4,6	5,6

Typical fuel Consumption		
	50 Hz	60 Hz
25%	2,5	3,1
50%	3,6	4,4
75%	5,0	6,0
100%	6,6	8,0
Diesel Liters/h at % load		

Alternator

Engine Electrical	
Electrical System (V)	12
Starter Motor (kW)	2
Alternator (A)	50
Shutdown system	Electrical
Stop Solenoid Type	ETR

Installation Details (Without Cand	ору)
Ø int. Exhaust Hose (mm)	60
Ø int. Raw Water Hose (mm)	32
Ø int. Fuel supply hose (mm)	8
Ø int. Fuel return hose (mm)	6,5
Max. Fuel lift (m)	1
Max. Raw water lift (m)	2,5
Max. Raw water temperature (°C)	35
Maximun instalation angle (°)***	15
Min. Battery capacity (Ah)	12V / 90 A



## **Alternator Details**

Brand	SINCRO
Model	SK 160LA
Regulator type:	AVR BL4 electronic
# of poles	4
Insulation Type*	Н
IP protection*	23
Cos phi	0,8
Tropicalización	Standard
Excitation system	Brushless
Voltage regulation Accuracy**	± 1%
Standars	EN 60034-1, IEC 60034-

Synchronous

Frequency Regulation

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



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#### Control Panel SCO 10

## General Description

- · Graphic LCD with light, 128 x 64 pixels display
- · 2 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
- · Two multipurpose timers

#### **Power Supply**

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

### **Operating Conditions**

· Operating temperature -20+70°C

· Humidity 95% Without condensation

· Protection front panel IP65

· Standard Conformity

EN 61010-1:95 +A1:97 Low Voltage Directive

Electromagnetic EN 50081-1:94, EN 50081-2:96 Compatibility EN 50082-1:99, EN 50082-2:97

#### **Function Description**

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

#### **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

· Current transformers

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



Solé Diesel Digital Display - SCO 10

· Dimensions 180 x 120 x 55 mm

· Weight 450a

#### **Display Information**

· Measurement

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

· History log

#### **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

High/Low battery voltage

Maintenance request

· Sensor Fails (FLS)

· Isolated transformers

Voltage transformer unit to separate mains voltage and controller with voltage ratio 1:1.

- · Binary Input/Output extension module
- · IG-IB Internet communication bridge

For Ethernet/Internet communications

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

#### Genset Accesories



- · 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
- · Earth isolated system
- · Exhaust System
- · Keel Cooling conversion for dry and wet exhaust
- · Double walled pipes and alarm kit
- · Low coolant level shut down switch

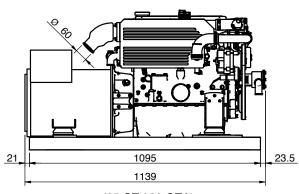
- · Fuel filter/water separator
- · Gas/Water Separator
- · Fuel Hose
  - · Exhaust Hose
- · Raw water hose
- · Water Filters
- · Sea cok

For other requirements please contact the Sales Dept.

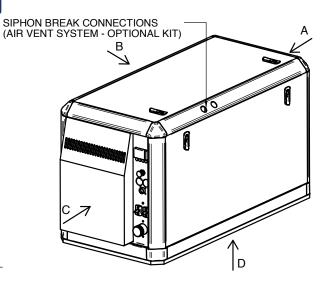


#### **Dimensions**

### 25 GT/GTC - 30 GTA/GTAC



(25 GT / 30 GTA)



(25 GTC / 30 GTAC)

# GENERATOR AIR INLET AC BREAKER #000000fb0000000000000 LEAD ACCESS

VIEW C

**CUSTOMER PANEL** CONNECTION QÇ EQUIPMENT GROUND CONNECTION 

VIEW A

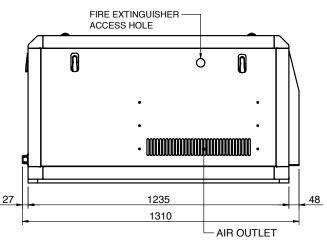
698

48

WET EXHAUST OUTLET (Ø50)

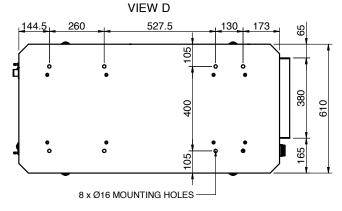
**EMERGENCY STOP** CUSTOMER LOAD BATTERY CONNECTIONS

VIEW B



610 135.5 SEA WATER INLET (Ø32) FUEL INLET (Ø8) FUEL OUTLET (Ø8)

SEA WATER OUTLET (Ø32) (ONLY DRY EXHAUST) LEAKS COOLANT OUTLET



Dimensions in millimetres

This drawing is provided for reference only.

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