



MARINE GENERATORS

20 GS/GSC 230 V TAC

Single-Phase

General data

Maximum power*	19.25 kW (19.25 kVA)	Voltage	230 V
Prime Power**	17.5 kW	Amperage	83.7 A
Frequency	50 Hz	Phases	1

Dimensions and weights

Total length without canopy	1140 mm	Total length with canopy	1310 mm
Total width without canopy	610 mm	Total width with canopy	610 mm
Total height without canopy	662 mm	Total height with canopy	698 mm
Dry weight without canopy	402 Kg	Dry weight with canopy	426 Kg

Engine

Base engine manufacturer	Mitsubishi	Diameter	88 mm (3.46 in)
Model	MINI-63	Stroke	103 mm (4.06 in)
Type	Diesel, 4 stroke	Compression ratio	22:1
Engine RPM	1500	Injection system	Mechanical and indirect
Number of cylinders	4	Intake system	Naturally aspirated
Total displacement	2505 cc	SAE Flywheel housing	SAE 4
Oil	SAE 15W40	Coolant capacity	9.5 L (2.51 gal)
Oil capacity	6.5 L (1.72 gal)	Flywheel	SAE 7 1/2
Power	20.8 kW (28.29 CV)	Coolant flow rate	52 l/min (13.74 gal/m)
Salt water flow rate	38 l/min (10.04 gal/m)	Intake air flow rate	1.65 m3/m
Exhaust type	Wet exhaust elbow	V-Belt Protection	Included

Rating conditions according to ISO 3046 (100 kPa barometric pressure, 30 % relative humidity and 25 °C (77 ° F))

* Maximum output power: maximum power supplied by the genset at full load

** Prime Power: rated power according to ISO 3046 and ISO 8528-1. 10 % overload capacity one hour in twelve hours.

Fuel system details

1 kW 1,36 CV 1 kW 1,36 HP (metric) 1 kW 1,36 CH

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Fuel system details

Consumption 25%	2.3 l/h (0.61 gal)	Fuel type	Diesel
Consumption 50%	3.4 l/h (0.9 gal)	Fuel standards	Fueloil diesel ASTM
Consumption 75%	4.6 l/h (1.22 gal)	Injection pump type	In line
Consumption 100%	6.1 l/h (1.61 gal)	Governor type	Mechanical

Electrical system

Battery voltage	12 V	Stop solenoid type	ETR
Starter motor	2 kW	Alternator	50 A
Earth isolated	Included	IP 65 box kit	Optional
SCO 11 double panel	Optional	Current transformers	Optional

Installation details

Exhaust hose inner diameter	60 mm (2.36 in)	Maximum fuel lift height	0.6 m (1.97 ft)
Sea water hose inner diameter	32 mm (1.26 in)	Maximum raw water lift height	3 m (118.11 in)
Fuel feeding hose inner diameter	G1/8	Maximum sea water temperature	32 ° (89.6 °F)
Fuel return hose inner diameter	-	Maximum installation angle***	15 °
Minimum battery capacity	12 V 95 Ah		

Alternator details

Brand	Sincro	Cos Phi	1
Model	SK 160 LA 1	Tropicalized	Yes
Regulator type	BL4	Excitation system	Brushless
Number of poles	4	Voltage regulation accuracy**	1%
Isolation type*	H	Alternator type	Synchronous
IP protection	23	Standards	EN 60034-1, IEC 60034-1, ISO 8528-3

Standard equipment

Earth isolated	Spray stop kit
Double wall injection pipes and fuel leak alarm	Sensors certified by the rating company
Dual fuel filter kit	Reinforced bed and silentblocks
CO-40 panel for engine/prime mover	6 m wiring extension
Documentation: manual, test, declaration of conformity	Packaging
V-Belt Protection	Oil extraction pump

Optional accessories

Siphon break kit mandatory if generator is below waterline	Keel Cooling conversion for dry and wet exhaust
Engine electrical system at 24 V	Electronic regulator
Service/Cruise Kits: fuel and oil filters, raw water pump, impeller, alternator belt,...	Electronic actuator
Dry Exhaust system	Exhaust Hose
Exhaust System	

* 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

For other requirements please contact the Sales Dept.

CO 40 panel



General Description

Control, monitoring and protection for marine engines (signal alternator not included)
For Emergency, Auxiliary, Harbor and Propulsion engines
Redundant module ID-RPU with hardwired safety functions activated in backup mode
Switching between primary and secondary battery (with ID-RPU module)
Connection to engine via primary J1939 and backup J1587 buses
Event driven History record
14 binary inputs, 14 binary outputs, 8 analog inputs
Slave panels for remote control
Type approval from major certification societies
Configuration protected by password
Running hour indication
Multilanguage
D+ pre-excitation Terminal

Alarm Management

1 Emergency stop input
5 Shutdown inputs
1 RPM input
Common warning and common shutdown output terminals
Stop solenoid, fuel solenoid outputs
Redundant power supply
I/O broken wire detection

Operating modes

Power supply: Nominal power supply 24 VDC	Flash memory data retention time 10 years
Power supply range 6 - 36 VDC	Standard Conformity
Current consumption (depends on supply voltage) 0,34 A at 8 VDC 0,12 A at 24 VDC 0,09 A at 36 VDC	Low Voltage Directive EN 61010-1:95 +A1:97
Battery voltage measurement tolerance 2% at 24 V	Electromagnetic Compatibility EN 61000-6-2, October 2001
RTC battery life-cycle 10 year	EN 61000-6-4, October 2001
Operating temperature -10 to +70 °C	IEC 60533, Ed. 2; 1999-11
Storage temperature -30 to +80 °C	
Humidity 95% Without condensation	

Power Supply

180 x 120 mm front panel mounted case
Weight 800g
Graphic black-lit LCD display 128x64 pixel resolution with icons and bar graphs
LED status indicators / Lamp test
Protection front panel IP65

Operating Conditions

Oil Pressure (bar)
Oil Temperature (°C)
Coolant Temperature (°C)
Coolant Pressure (bar)
Battery Voltage (V)
RPM
History log

Display Information

High coolant temperature
High oil temperature
Fuel leakages
Low oil pressure
Low coolant pressure
Overspeed
Emergency stop
Low battery voltage
Maintenance request
Sensor Fails (FLS)

Dimensions

