

20 GTA/GTAC TAC PARALLEL**Three-Phase****General data**

Maximum power*:	14,96 kW (18,7 kVA)	Voltage:	480 V
Prime Power**:	13,6 kW	Amperage:	22,49 A
Frequency:	60 Hz	Phases:	3

Dimensions and weights

Total length without canopy:	1036 mm	Total length with canopy:	1181 mm
Total width without canopy:	580 mm	Total width with canopy:	580 mm
Total height without canopy:	612 mm	Total height with canopy:	668 mm
Dry weight without canopy:	282 Kg	Dry weight with canopy:	344 Kg

Engine

Base engine manufacturer:	Mitsubishi	Diameter:	78 mm (3,07 in)
Model Solé Diesel:	MINI-44	Stroke:	92 mm (3,62 in)
Type:	4 No. of Strokes	Compression ratio:	22:1
Engine RPM:	1800	Injection system:	Mechanical and indirect
Number of cylinders:	4	Intake system:	Naturally aspirated
Total displacement:	1758 cc	SAE Flywheel housing:	SAE 5
Oil:	SAE 15W40	Coolant capacity:	8 L (2,11 gal)
Oil capacity:	6 L (1,59 gal)	Flywheel:	SAE 7 1/2
Power:	17,7 kW (24,07 CV)	Coolant flow rate:	100 l/min (26,42 gal/m)
Salt water flow rate:	33 l/min (8,72 gal/m)	Intake air flow rate:	2,2 m3/m

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.

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

Fuel system details

Consumption 25%:	2,1 L/H (0,55 Gal/H)	Fuel type:	Diesel
Consumption 50%:	2,9 L/H (0,77 Gal/H)	Fuel standards:	Fueloil diesel ASTM
Consumption 75%:	3,9 L/H (1,03 Gal/H)	Injection pump type:	In line
Consumption 100%:	5,2 L/H (1,37 Gal/H)		

Electrical system

Battery voltage:	12 V	Stop solenoid type:	ETR
Starter motor:	1,7 kW	Alternator:	120 A
Earth isolated:	No		

Installation details

Exhaust hose inner diameter:	50 mm (1,97 in)	Maximum fuel lift height:	0,3 m (0,98 ft)
Sea water hose inner diameter:	20 mm (0,79 in)	Maximum raw water lift height:	3 m (118,11 in)
Fuel feeding hose inner diameter:	G3/8	Maximum sea water temperature:	32 °C (89,6 °F)
Fuel return hose inner diameter:	1/4 BSPT	Maximum installation angle***:	15 °
Minimum battery capacity:	12 V 80 Ah		

Alternator details

Brand:	Sincro	Cos φ:	0,8
Model:	SK 160 MB	Tropicalized:	Yes
Regulator type:	BL4	Excitation system:	BRUSHLESS
Number of poles:	4	Voltage regulation accuracy**:	1%
Isolation type*:	H	Standards:	EN 60034-1, IEC 60034-1, ISO 8528-3
IP protection*:	23	Alternator type:	Synchronous

Standard equipment

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

Optional accessories

Siphon break kit mandatory if generator is below waterline	Sea water cock
Engine electrical system at 24 V	Welcome Kit
Service/Cruise Kits: fuel and oil filters, raw water pump, impeller, alternator belt,...	Fuel filter/water separator
Dry Exhaust system	Gas/Water Separator
Exhaust System	Raw water hose
Keel Cooling conversion for dry and wet exhaust	Paralel system
Exhaust Hose	TAC certificate by serial number for generator set
Water Filters	

* 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.



COMAP PANEL CO 40



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

ID – RPU Redundant Protection Unit

- 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

Technical data

- Power supply: Nominal power supply 24 VDC
- Power supply range 6 - 36 VDC
- Current consumption (depends on supply voltage)
0,34 A at 8 VDC 0,12 A at 24 VDC 0,09 A at 36 VDC
- Battery voltage measurement tolerance 2% at 24 V
- RTC battery life-cycle 10 year
- Operating temperature -10 to +70 °C
- Storage temperature -30 to +80 °C
- Humidity 95% Without condensation
- Flash memory data retention time 10 years

Standard Conformity

- Low Voltage Directive
EN 61010-1:95 +A1:97
- Electromagnetic Compatibility
EN 61000-6-2, October 2001
EN 61000-6-4, October 2001
IEC 60533, Ed. 2; 1999-11

Physical

- 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

Display information

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

Alarm Management

- 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)

Opcional: TAC Parallel Kit Electrical Cabinet



General Description

- Control and Power TAC box for parallel operation
- Comap Intelligen NTC BB + IntelliVision 5 (See Panel Features)
- Current Transformers (See Alternator Measurements)
- Power Isolating Switch
- Automatic Synchronism
- Marine Generator Set Protections (See Alarm Management)
- Power and Control Electrical Protection
- Communication TAC Control Cable Extensions (See Extensions)
- Power inputs and outputs
- Automatic or manual control switch
- Audible and visual alarm
- Can BUS communication with the control unit and the parallel box
- Emergency Stop button
- IP 65 Protection

Hälytysten järjestely

Shut-down (SD)

- High engine coolant temperature
- Low oil pressure
- Over speed
- Overload
- Short circuit
- Battery charge failure
- High/low voltage
- High/Low Frequency
- Emergency stop button
- Remote alarms

Warnings (WRN)

- High engine coolant temperature
- Low oil pressure
- High/low battery voltage
- Maintenance warning

Lisävarusteet

Remote Double Panel

- It allows the same operation and functionality as main IntelliDrive
- They are connected with an RS485 port
- Remote panel extension (12/24/36 m)

Binary and Communication Input/Output Extension Module

Alternator Measurements

Current transformers

Allows the following readings:

- Current (A), Active Power (kW), Apparent Power (kVA) and PF

Earth isolated transformers

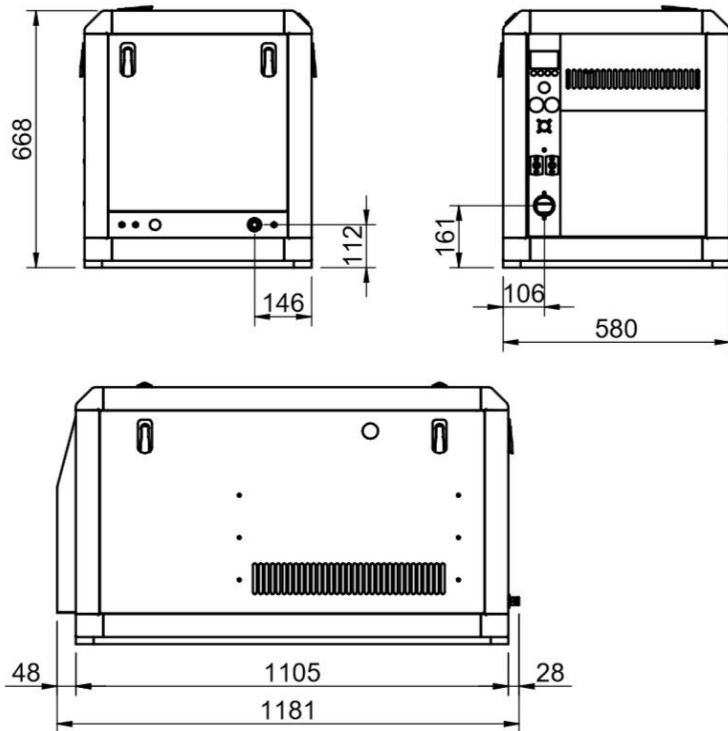
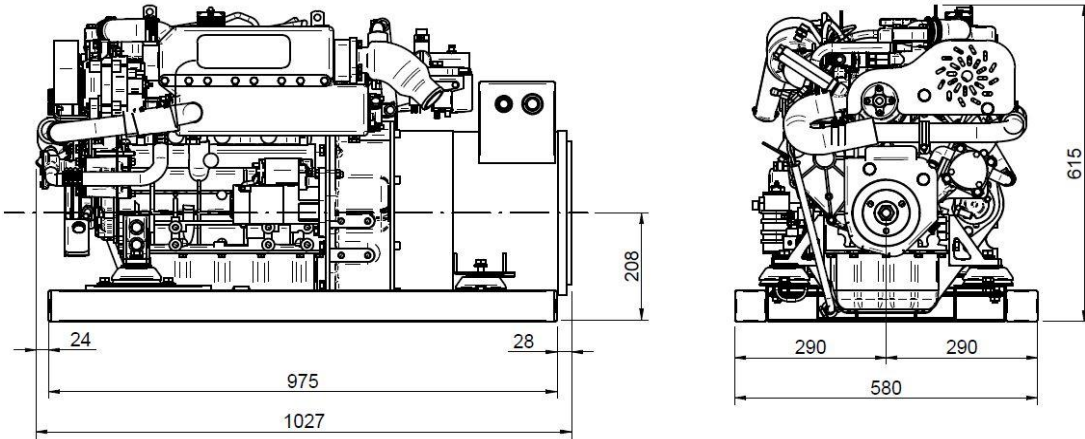
Extension

- Control wiring. TAC Box-Group (6/12/24 m)
- Wiring for communication between boxes (3/6/12 m)
- Remote panel extension (12/24/36 m)

Intelligen NTC BB + IntelliVision 5 Panel Features

- Group and load Synchronization
- Marine generator set measures
- L1-L3 Voltage (V), frequency (Hz), Oil pressure (bar)
- Coolant temperature (°C), battery voltage (V), RPM
- Power* (kW), Apparent Power* (kVA), Current* (A), PF*
- Remote panel
- 2 x 10 A Binary outputs
- History log
- Running hour indicator
- Multilanguage
- Configuration protected by password
- Integrated PLC
- Communication and Extension Module Plug-in
- 4G/LTE communication standard
- GPS

Dimensions



Authorized dealer

www.solediesel.com

info@solediesel.com

Detailed drawings, brochures and manuals are available on the web [solediesel.com](http://www.solediesel.com). All rights reserved. Technical specifications, data and presentation are subjected to variations, changes and updates without prior notice. Non-contractual information.