





### **MARINE GENERATORS**

# **45 GT/GTC ELECTRONIC GOVERNOR**

Three-Phase

### **General data**

Maximum power*	36 kW (45 kVA)	Voltage	400/230 V
Prime Power**	32.7 kW	Amperage	65 A
Frequency	50 Hz	Phases	3

# **Dimensions and weights**

Total length without canopy	1428 mm	Total length with canopy	1605 mm
Total width without canopy	740 mm	Total width with canopy	740 mm
Total height without canopy	785 mm	Total height with canopy	841 mm
Dry weight without canopy	560 Kg	Dry weight with canopy	598 Kg

#### **Engine**

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Base engine manufacturer	Mitsubishi	Diameter	94 mm (3.7 in)
Model	SM-56	Stroke	120 mm (4.72 in)
Туре	Diesel, 4 stroke	Compression ratio	17:1
Engine RPM	1500	Injection system	Mechanical and direct
Number of cylinders	4	Intake system	Turbocharged
Total displacement	3331 cc	SAE Flywheel housing	SAE 3
Oil	SAE 15W40	Coolant capacity	13 L (3.43 gal)
Oil capacity	10 L (2.64 gal)	Flywheel	SAE 11 1/2
Power	40.5 kW (55.08 CV)	Coolant flow rate	105 l/min (27.74 gal/m)
Salt water flow rate	38 l/min (10.04 gal/m)	Intake air flow rate	2.9 m3/m
Exhaust type	Wet exhaust elbow	V-Belt Protection	Optional

Rating conditions according to ISO 3046 (100 kPa barometric pressure, 30 % relative humidity abd 25 °C (77 °F)) \* Maximum output power: maximum power supplied by the genset at full load

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

**Fuel system details** 

Consumption 25%	3.2 l/h (0.85 gal)	Fuel type	Diesel
Consumption 50%	5.2 l/h (1.37 gal)	Fuel standards	Fueloil diesel ASTM
Consumption 75%	7.4 l/h (1.95 gal)	Injection pump type	In line
Consumption 100%	9.7 l/h (2.56 gal)	Governor type	Mechanical

**Electrical system** 

Battery voltage	12 V	Stop solenoid type	ETR
Starter motor	2.2 kW	Alternator	50 A
Earth isolated	Included	IP 65 box kit	Optional
SCO 11 double panel	Optional	Current transformers	Optional

**Installation details** 

Installation acturis			
Exhaust hose inner diameter	75 mm (2.95 in)	Maximum fuel lift height	0.3 m (0.98 ft)
Sea water hose inner diameter	32 mm (1.26 in)	Maximum raw water lift height	2.5 m (98.43 in)
Fuel feeding hose inner diameter	8 mm (0.31 in)	Maximum sea water temperature	32 ° (89.6 °F)
Fuel return hose inner diameter	8 mm (0.31 in)	Maximum installation angle***	15 °
Minimum battery capacity	12 V 95 Ah		

**Alternator details** 

Brand	Meccalte	Cos Phi	0,8
Model	ECP32 1M 4 C	Tropicalized	Yes
Regulator type	DSR	Excitation system	Brushless
Number of poles	4	Voltage regulation accuracy**	0,01
Isolation type*	Н	Alternator type	Synchronous
IP protection	23	Standards	EN60034-1, IEC 60034-1

Standard equipment

Wire earth isolated	SCO11 Control Panel
Silent Blocks	Electronic governor wiring 6 m
Oil extraction pump	User manual
Electronic governor	Packing

# **Optional accessories**

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

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<sup>\*</sup> Other protections available

<sup>\*\*</sup> 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.

# Kit parallel generators control/power



#### **General Description**

Control and Power box for parallel operation

COMAP Inteligen200 Panel (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 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** 

#### **Alarm Management**

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

#### **Power Supply**

**Current transformers** 

Allows the following readings:

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

Earth isolated transformers

#### **Operating Conditions**

Control wiring. Box-Group (6/12/24 m)

Mitsubishi / Deutz

60974209 / 60994210P - 6 m

60974212 / 60994212P - 12 m

60974213 / 60994213P - 24 m

Wiring for communication between boxes (3/6/12 m)

60994503 - 3 m

60994522 - 6 m

60994521 - 12 m

Remote panel extension (12/24/36 m)

60972104 - 12 m

60972105 - 24 m

60972110 - 36 m

# **Display Information**

**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

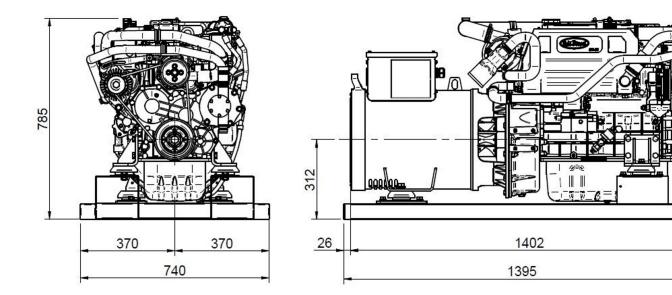
4G/LTE communication standard

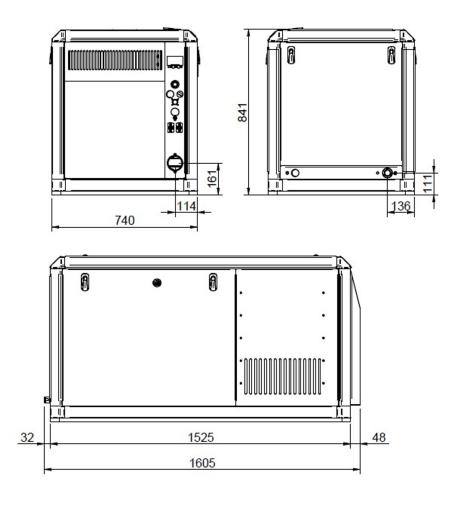
GPS

# **Operating modes**

Inteligen200 Remote Double Panel	Remote panel extension (12/24/36 m)
It allows the same operation and functionality as main Inteligen200	Binary and Communication Input/Output Extension Module
They are connected with an RS485 port	

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