



## MARINE GENERATORS

# 85 GT/GTC TAC ELECTRONIC GOVERNOR

Three-Phase

### General data

|                       |                    |                 |           |
|-----------------------|--------------------|-----------------|-----------|
| <b>Maximum power*</b> | 74.8 kW (93.5 kVA) | <b>Voltage</b>  | 400/230 V |
| <b>Prime Power**</b>  | 68 kW              | <b>Amperage</b> | 134.96 A  |
| <b>Frequency</b>      | 50 Hz              | <b>Phases</b>   | 3         |

### Dimensions and weights

|                                    |         |                                 |         |
|------------------------------------|---------|---------------------------------|---------|
| <b>Total length without canopy</b> | 1773 mm | <b>Total length with canopy</b> | 2138 mm |
| <b>Total width without canopy</b>  | 899 mm  | <b>Total width with canopy</b>  | 865 mm  |
| <b>Total height without canopy</b> | 970 mm  | <b>Total height with canopy</b> | 1048 mm |
| <b>Dry weight without canopy</b>   | 998 Kg  | <b>Dry weight with canopy</b>   | 1110 Kg |

### Engine

|                                 |                            |                             |                            |
|---------------------------------|----------------------------|-----------------------------|----------------------------|
| <b>Base engine manufacturer</b> | Deutz                      | <b>Diameter</b>             | 108 mm (4.25 in)           |
| <b>Model</b>                    | SDZ-109E                   | <b>Stroke</b>               | 130 mm (5.12 in)           |
| <b>Type</b>                     | Diesel, 4 stroke           | <b>Compression ratio</b>    | 19:1                       |
| <b>Engine RPM</b>               | 1500                       | <b>Injection system</b>     | -                          |
| <b>Number of cylinders</b>      | 4                          | <b>Intake system</b>        | Turbocharged               |
| <b>Total displacement</b>       | 4764 cc                    | <b>SAE Flywheel housing</b> | SAE 2                      |
| <b>Oil</b>                      | SAE 15W40                  | <b>Coolant capacity</b>     | 17.5 L (4.62 gal)          |
| <b>Oil capacity</b>             | 11 L (2.91 gal)            | <b>Flywheel</b>             | SAE 11 1/2                 |
| <b>Power</b>                    | 80.5 kW (109.48 CV)        | <b>Coolant flow rate</b>    | 141.45 l/min (37.37 gal/m) |
| <b>Salt water flow rate</b>     | 107.43 l/min (28.38 gal/m) | <b>Intake air flow rate</b> | 5.5 m3/m                   |
| <b>Exhaust type</b>             | Wet exhaust elbow          | <b>V-Belt Protection</b>    | 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

|                         |                     |                            |                     |
|-------------------------|---------------------|----------------------------|---------------------|
| <b>Consumption 25%</b>  | 6 l/h (1.59 gal)    | <b>Fuel type</b>           | Diesel              |
| <b>Consumption 50%</b>  | 10.5 l/h (2.77 gal) | <b>Fuel standards</b>      | Fueloil diesel ASTM |
| <b>Consumption 75%</b>  | 15.6 l/h (4.12 gal) | <b>Injection pump type</b> | Individual          |
| <b>Consumption 100%</b> | 21.3 l/h (5.63 gal) | <b>Governor type</b>       | Electronical        |

## Electrical system

|                            |          |                             |          |
|----------------------------|----------|-----------------------------|----------|
| <b>Battery voltage</b>     | 24 V     | <b>Stop solenoid type</b>   | ETS      |
| <b>Starter motor</b>       | 4 kW     | <b>Alternator</b>           | 35 A     |
| <b>Earth isolated</b>      | Included | <b>IP 65 box kit</b>        | Optional |
| <b>SCO 11 double panel</b> | Optional | <b>Current transformers</b> | Optional |

## Installation details

|   |                 |                                      |                 |
|---|-----------------|--------------------------------------|-----------------|
| <b>Exhaust hose inner diameter</b>      | 90 mm (3.54 in) | <b>Maximum fuel lift height</b>      | 1.3 m (4.27 ft) |
| <b>Sea water hose inner diameter</b>    | 42 mm (1.65 in) | <b>Maximum raw water lift height</b> | 4 m (157.48 in) |
| <b>Fuel feeding hose inner diameter</b> | G3/8            | <b>Maximum sea water temperature</b> | 32 ° (89.6 °F)  |
| <b>Fuel return hose inner diameter</b>  | G3/8            | <b>Maximum installation angle***</b> | 10 °            |
| <b>Minimum battery capacity</b>         | 24 V 90 Ah      |                                      |                 |

## Alternator details

|                        |              |                                      |                        |
|------------------------|--------------|--------------------------------------|------------------------|
| <b>Brand</b>           | Meccalte     | <b>Cos Phi</b>                       | 0,8                    |
| <b>Model</b>           | ECP34 1S 4 C | <b>Tropicalized</b>                  | Yes                    |
| <b>Regulator type</b>  | DSR          | <b>Excitation system</b>             | Brushless              |
| <b>Number of poles</b> | 4            | <b>Voltage regulation accuracy**</b> | 0,01                   |
| <b>Isolation type*</b> | H            | <b>Alternator type</b>               | Synchronous            |
| <b>IP protection</b>   | 23           | <b>Standards</b>                     | EN60034-1, IEC 60034-1 |

## Standard equipment

|  |   |
|--|---|
| Earth isolated   | V-Belt Protection                       |
| Double wall injection pipes and fuel leak alarm        | Spray stop kit                          |
| Dual fuel filter                                       | Sensors certified by the rating company |
| CO-40 panel for engine/primer mover                    | 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                               | Exhaust System                                  |
| Engine electrical system at 24 V   | Keel Cooling conversion for dry and wet exhaust |
| Service/Cruise Kits: fuel and oil filters, raw water pump, impeller, alternator belt,... | Exhaust Hose                                    |
| Dry Exhaust system   | 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.

# CO 40 panel



## General Description

|   |
|---|
| Control, monitoring and protection for marine engines<br>(signal alternator not included) |
| For Emergency, Auxiliary, Harbor and Propulsion engines                                   |
| Redundant module ID-RPU with hardwired safety<br>functions activated in backup mode       |
| Switching between primary and secondary battery<br>(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)<br>0,34 A at 8 VDC 0,12 A at 24 VDC 0,09 A at 36 VDC | Low Voltage Directive<br>EN 61010-1:95 +A1:97               |
| Battery voltage measurement tolerance 2% at 24 V   | Electromagnetic Compatibility<br>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<br>and bar graphs |
| LED status indicators / Lamp test  |
| Protection front panel IP65  |

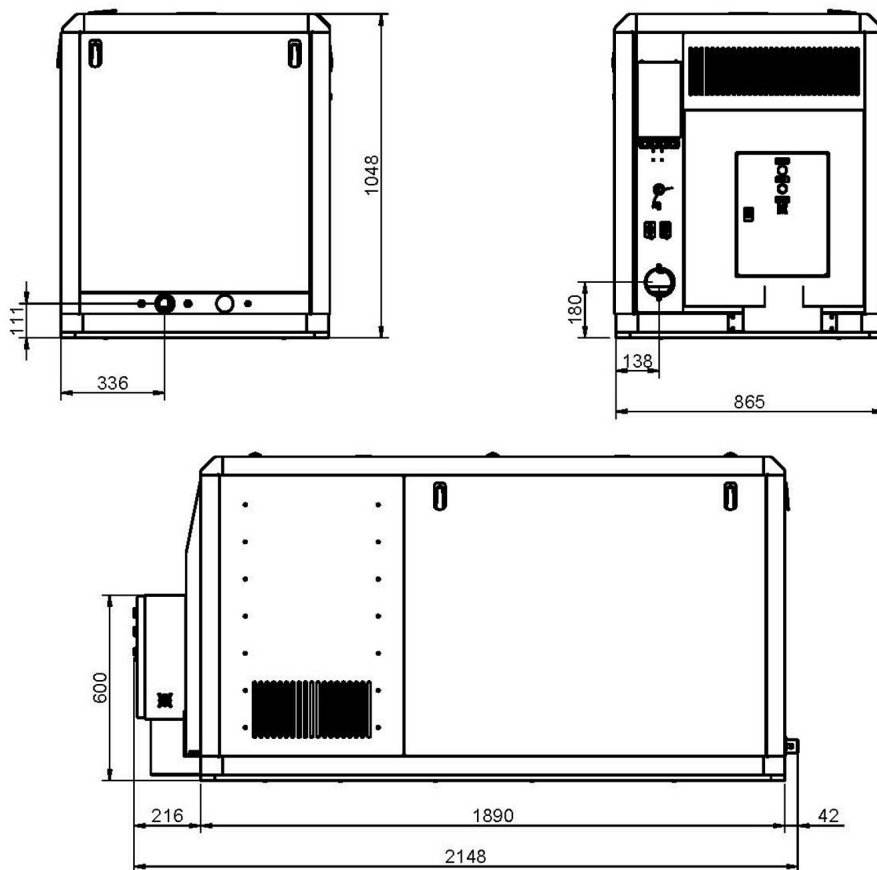
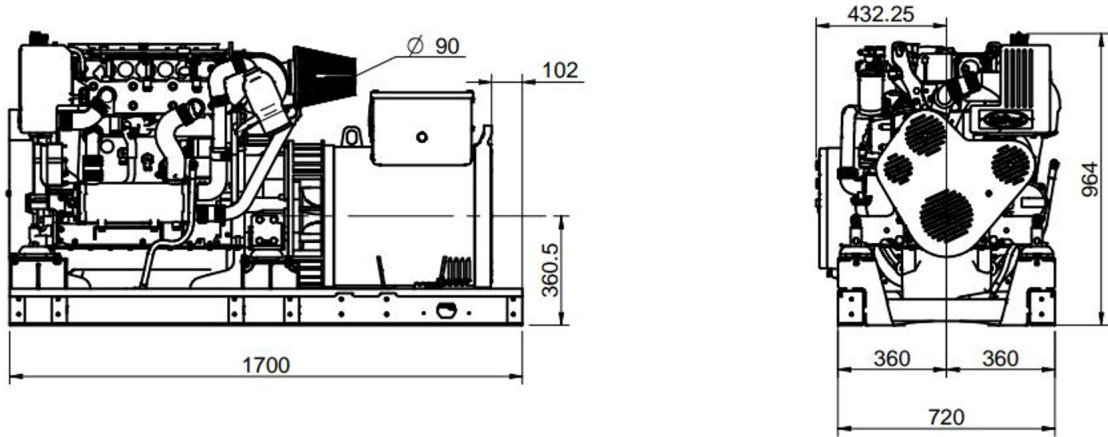
## Operating Conditions

|                          |
|--------------------------|
| 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



Authorized dealer



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