



### General Description

|                                                  |                                                        |                           |
|--------------------------------------------------|--------------------------------------------------------|---------------------------|
| <b>Max Power<sup>1</sup></b><br>28 kW ( 35 kVA ) | <b>Prime Power<sup>2</sup></b><br>25,5 kW ( 31,8 kVA ) | <b>Frequency</b><br>50 Hz |
| <b>Voltage</b><br>400 V / 230 V<br>230 V         | <b>Current intensity</b><br>50,5 A.<br>87,9 A.         | <b>Phases</b><br>3+N<br>3 |

### Dimensions and Weights

|                       | Length               | Width              | Height              | Weights             |
|-----------------------|----------------------|--------------------|---------------------|---------------------|
| <b>With canopy</b>    | 1445 mm ( 56,89 in ) | 630 mm ( 24,8 in ) | 788 mm ( 31,02 in ) | 525 Kg ( 1157 Lbs ) |
| <b>Without canopy</b> | 1308 mm ( 51,5 in )  | 630 mm ( 24,8 in ) | 732 mm ( 28,83 in ) | 449 Kg ( 991 Lbs )  |

### Engine

|                                 |                              |                              |                               |
|---------------------------------|------------------------------|------------------------------|-------------------------------|
| <b>Engine base</b>              | Mitsubishi                   | <b>Bore</b>                  | 94 mm ( 3,7 in )              |
| <b>Solé Diesel engine model</b> | MINI - 74                    | <b>Stroke</b>                | 120 mm ( 4,72 in )            |
| <b>Type</b>                     | 4 cycle                      | <b>Compression ratio</b>     | 22:1                          |
| <b>RPM Engine</b>               | 1500                         | <b>Combustion system</b>     | Indirect mechanical injection |
| <b>Number of cylinders</b>      | 4                            | <b>Intake system</b>         | Naturally aspirated           |
| <b>Displacement</b>             | 3331 cc                      | <b>Flywheel housing size</b> | SAE 3                         |
| <b>Oil type</b>                 | SAE 15W40                    | <b>Coolant capacity</b>      | 13 L ( 3,43 Gal )             |
| <b>Oil capacity</b>             | 10 L ( 2,64 Gal )            | <b>Flywheel size</b>         | SAE 11 1/2                    |
| <b>Rated power</b>              | 30,8 kW ( 41,3 HP )          | <b>Coolant flow</b>          | 105 L/Min.( 27,74 Gal/Min. )  |
| <b>Raw water flow</b>           | 37,5 L/Min.( 9,91 Gal/Min. ) | <b>Intake air flow</b>       | 2,25 m <sup>3</sup> /min      |
| <b>Cooling air flow</b>         | 105 m <sup>3</sup> /min.     |                              |                               |

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

\* 1 Maximum Output Power: maximum power supplied by the genset at full load.

\* 2 Prime Power: Rated Power according to ISO 3046 and ISO 8528-1. 10 % overload capacity one hour in twelve hours.

## Fuel system

### Typical Fuel Consumption

|       |                            |
|-------|----------------------------|
| 25 %  | 2,4 L/Hs. ( 0,63 Gal/Hs. ) |
| 50 %  | 4,1 L/Hs. ( 1,08 Gal/Hs. ) |
| 75 %  | 6 L/Hs. ( 1,59 Gal/Hs. )   |
| 100 % | 8,3 L/Hs. ( 2,19 Gal/Hs. ) |

|                               |             |
|-------------------------------|-------------|
| <b>Fuel type</b>              | Diesel      |
| <b>Fuel quality</b>           | Diesel ASTM |
| <b>Type of Injection Pump</b> | In line     |
| <b>Pump Regulator Type</b>    | Centrifugal |

## Engine electrical

|                        |        |                         |      |
|------------------------|--------|-------------------------|------|
| <b>Battery voltage</b> | 12 V   | <b>Shutoff solenoid</b> | ETR  |
| <b>Starter motor</b>   | 2,2 kW | <b>Alternator</b>       | 50 A |

## Installation

|                                     |                   |                                           |                     |
|-------------------------------------|-------------------|-------------------------------------------|---------------------|
| <b>Ø int. Exhaust Hose (mm)</b>     | 76 mm ( 2,99 in ) | <b>Maximum recommended fuel lift</b>      | 0,6 m ( 1,97 ft )   |
| <b>Ø int. Raw Water Hose (mm)</b>   | 32 mm ( 1,26 in ) | <b>Maximum recommended raw water lift</b> | 2,5 m ( 98,43 in )  |
| <b>Ø int. Fuel supply hose (mm)</b> | 8 mm ( 0,31 in )  | <b>Raw water maximum temperature</b>      | 32 ° C ( 89,6 ° F ) |
| <b>Ø int. Fuel return hose (mm)</b> | 0 mm ( 0 in )     | <b>Maximum operating angle (°)***</b>     | 15 °                |
| <b>Min. Battery capacity (Ah)</b>   | 12 V 92 Amps/h    |                                           |                     |

## Alternator

|                         |         |                                      |                          |
|-------------------------|---------|--------------------------------------|--------------------------|
| <b>Brand</b>            | Sincro  | <b>Cos φ</b>                         | 0,8                      |
| <b>Model</b>            | SK160WA | <b>Tropicalized</b>                  | yes                      |
| <b>Regulator type</b>   | BL4     | <b>Excitation system</b>             | Brushless                |
| <b>Number of poles</b>  | 4       | <b>Voltage regulation Accuracy**</b> | ±1%                      |
| <b>Insulation Type*</b> | H       | <b>Standards</b>                     | EN 60034-1, IEC 60034-1, |
| <b>IP protection*</b>   | 23      | <b>Frequency Regulation</b>          | Synchronous              |

## Optional Equipment

- 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
- Exhaust System
- Water Filters
- Welcome Kit
- 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
- Sea cock

For other requirements please contact the Sales Dept.

\* 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



Welcome Kit



### General Description

- Graphic LCD with light, 128 x 64 pixels display
- 85 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
- Dos temporizadores multiuso
- Dimensions 180 x 120 x 55 mm
- Weight 450g

### 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
- Over/Under voltage
- Maintenance request

#### Sensor Fails (FLS)

### Function Description

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



IP 65 Box Kit

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

### Power Supply

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

### Operating Conditions

- Operating temperature -20+70°C
- Humidity 95% Without condensation
- Front Panel Protection IP65

### Standard Conformity

- Low Voltage Directive EN 61010-1:95 +A1:180 EN 61010-1:95 +A1:97
- Electromagnetic EN 50081-1:94, EN 50081-2:179 EN 50081-1:94, EN 50081-2:96
- Compatibility EN 50082-1:99, EN 50082-2:180 EN 50082-1:99, EN 50082-2:97

### Display Information

#### Measurement

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

#### History log

### 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.

#### IP65 Box Kit

- Electrical Box for SCO 10 panel with an IP65 protection code. In addition, it includes an emergency stop button and an on/off panel power switch.

#### Binary Input/Output extension module

#### IG-IB Internet communication bridge

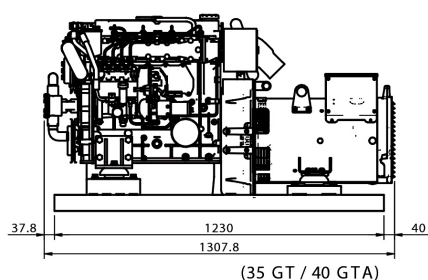
- For Ethernet/Internet communications

#### Current transformers

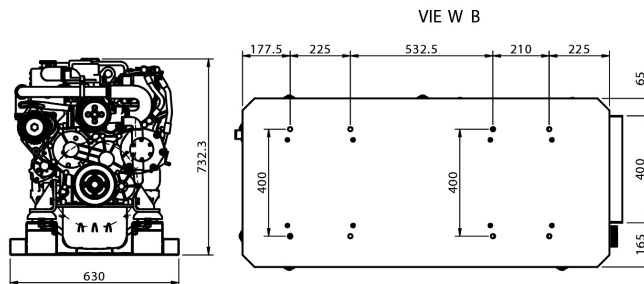
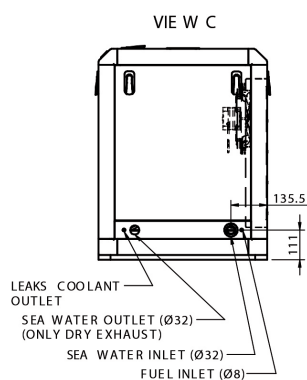
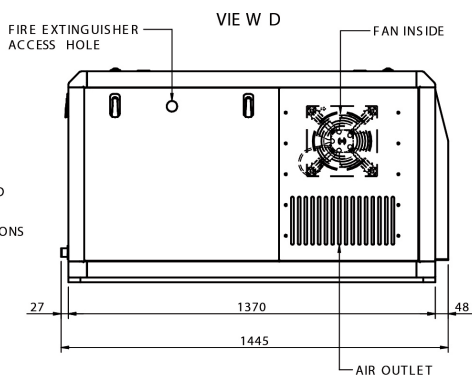
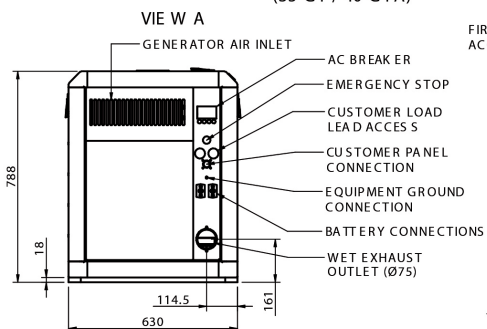
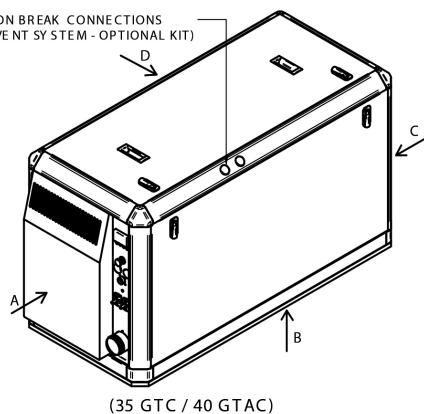
- Current (A), Active Power (kW), Apparent power (kVA) and PF genset measures

## Dimensions

35 GT/GTC - 40 GTA/GTAC



SIPHON BREAK CONNECTIONS  
(AIR VENT SYSTEM - OPTIONAL KIT)



Dimensions in millimetres  
This drawing is provided for reference only.



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