

# GENERATOR SETS WITH STAGE IIIA ENGINES



**YOU CHOOSE** 



OR





# **ONIS VISA DIESEL GENERATING SETS**

**COMPLIANT WITH EUROPEAN REGULATION AND STANDARDS** 

- NOISE EMISSION STANDARDS 2000/14/CE MOBILE USE
- ENGINES STAGE III 97/68/CE
- ISO 9001/2008 AND ISO 14001/2004 + UPDATE



# **GENERATING SETS FOR HIRE SERVICES**

Visa SpA has over 50 years' experience in design, manufacture and supply of generators for hire markets within Europe, the Middle East and Africa and has used this experience to develop a range of extremely robust generators, specifically designed for Rental Companies.











# **STAGE IIIA ENGINES**

To reach these high standards, a range of stage IIIA engines was introduced according to directive 97/68 / CE currently in force. The units range up to 300 kVA using constructive solutions and different setups depending on the size.

# LOW ACOUSTIC AND CO<sub>2</sub> EMISSIONS

All generators manufactured comply with the latest EU standards for noise and exhaust emissions. All gensets in this range are certified 2000/14/CE for acoustic emissions and have high heat exchange performance.

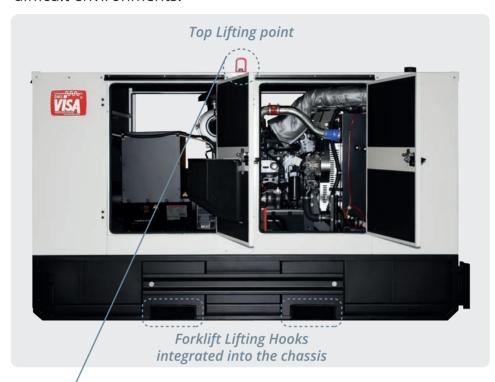
# STANDARD OR CUSTOMIZED: MAKE YOUR CHOICE

Choosing a customized or standard version is one of the first questions to consider when you look for your genset. Both are excellent choices! Our Lean Manufacturing approach allows us to optimize our standard production or customization of our products.



# Strong, accessible and user-friendly under all conditions.

Functionality and robustness are the key ingredients of Onis Visa VM series generating sets. Born to work under the most demanding conditions, guaranteeing high performance in difficult environments.





Easy access to mechanical parts during cleaning and maintenance operations.



Ensuring easy handling for the transport and on-site moving phases. The lifting hook is incorporated in the canopy for the best result in minimal space, they are removable for ease of maintenance and height reduction.





Controls and connection devices at the back of the machines for space optimizing and clear accessibility.





## **HIGH QUALITY SOUND ATTENUATION SYSTEM**

Galvanised sound attenuated enclosures. Long lasting, durable enclosure with excellent sound reduction for residential areas. Sound attenuation using high-density rock wool and synthetic fibers; polyester fiber with low wear and tear and easier maintenance. Moreover, polyester fiber allows a more pleasant aesthetic result.

**Available for: OV045** 



**GV085** 

**GV125** 

**GV175** 



## **CAM LATCHES**

Adjustable cam latches, ensure aligned sealed fitting.





**GV085** 

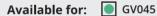
**GV125** 

**GV175** 



# **SEALED JOINTS**

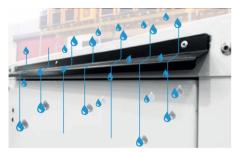
High quality sealed joints to prevent water ingress and reduce noise emission.



**GV085** 

**GV125** 

**GV175** 



## **GUTTERS**

Enclosure roof made with a single steel sheet to prevent water penetration.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



# **AIR INLET WITH RAIN/SAND PROTECTION**

Air inlet is specifically designed to increase intake air and to reduce the sunction pressure inside to minimize the potential rain water or sand penetration.

**Available for: OV045** 

**GV085** 

**GV125** 





#### **HEAT SHIELDED**

High temperature vulnerable parts are heat shielded.

Available for:

**GV045** 

**GV085** 

**GV125** 

**GV175** 



## **EXTERNAL RADIATOR ACCESSIBLE**

The radiator is externally accessible through a dedicated door for easy cleaning and maintenance operations.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



## **INTERNAL SILENCER**

High-performance exhaust muffler with elevated noise-reduction. The VISA SpA design and the manufacturing process, carried out by qualified personnel, guarantee efficiency, reliability and quality of product. The exhaust muffler does not contain neither asbestos nor any other carcinogenic substances, totally complying with the strictest CE regulations.

Available for: OV045

**GV085** 

**GV125** 

**GV175** 



# **OPTIMA®** batteries + battery isolator

The units are equipped with high-performance AGM battery OPTIMA®, anchored firmly inside the canopy for safe handling in mobile use. The starting battery is designed to deliver a powerful burst of ignition power for a reliable start-up under any weather condition. These batteries allow an impressive high-power delivery and extreme resistance. Standard supply includes a battery isolator which allows the battery to be disconnected when the generating set is not in use, avoiding unnecessary discharge.

Available for:

**GV045** 

**GV085** 

**GV125** 

**GV175** 



#### **LUBE OIL DRAIN PUMP**

Lube oil drain pump to manually extract the oil from the engine sump.

**Available for: OV045** 

**GV085** 

**GV125** 





#### 4 POLE BREAKER WITH EARTH LEAKAGE PROTECTION

High quality 4 Pole breaker with earth leakage protection. Accessible inside the power cubicle at the rear of the canopy. Suitably rated with thermal and magnetic overloads.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



## CENTRAL LIFTING POINT + ANTI-THEFT SYSTEM RFID (optional)

Central lifting point to ensure easy handling. This special lifting point is very strong and offers superior wear resistance providing multi-directional load and lift options that maximize safety without compromising its strength. RFID tag chip (optional) is available for anti-theft security, detecting unauthorized lifting attempts.

**Available for:** GV045

**GV085** 

☐ GV125

GV175



# **DOUBLE PLATES LIFTING POINT**

The lifting hook is incorporated in the canopy to get the best result in minimal space. Lifting plates are removable for easy maintenance and height reduction and have multiple hook positions to allow balanced lifting. Lifting points are easy to access.

**Available for:** GV045

GV085

**GV125** 

GV175



## **4 LIFTING POINTS - FOR BIGGEST GENERATORS**

4 point lifting system for easy loading and transport. These special lifting points are very strong and offer superior wear resistance providing multi-directional load and lift options that maximize safety without compromising its strength. RFID tag chip (optional) is available.

Available for:

GV045

GV085

GV125

**GV175** 



# **GUARD TOUCH - DIGITAL CONTROL PANEL**

GUARD TOUCH manual or automatic control panel is the revolutionary controller with touch screen, designed and developed by Visa SpA, which is mounted by default in our gensets. The Guard Touch device is a versatile controller able to satisfy the requests from the end-users, from manual function to totally automatic management. To learn more, visit the "Control Panels" section.

Available for: OV045

**GV085** 







# **HIGH CAPACITY FUEL TANK + INSPECTION POINTS**

The VM Galaxy series is equipped with appropriate-sized tanks for continuous service, as well as fuel tank inspection points for periodic maintenance, allowing constant monitoring and easy tank cleaning operations to prevent the presence of water or other contaminants.

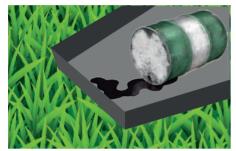
**Available for: OV045** 



**GV085** 

**GV125** 

**GV175** 



# **FUEL TANK RETENTION BASIN + SENSOR**

The baseframes are equipped with a retention basin to prevent any possible oil/fuel/antifreeze leaking. A sensor detects any possible drippings through a dedicated warning.

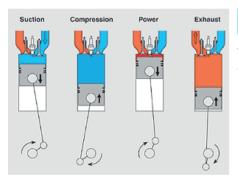
Available for:



**GV085** 

**GV125** 

**GV175** 



# **ELECTRONIC / MECHANIC ENGINE SPEED REGULATOR**

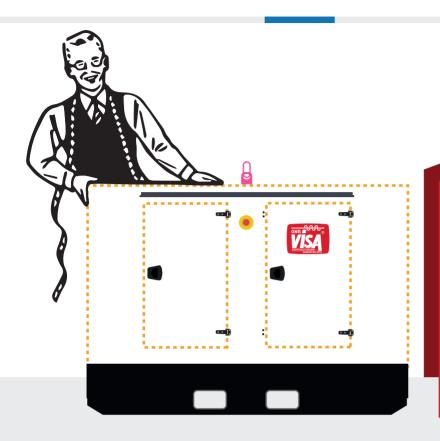
The regulators control the input of fuel to the engine to mantain it at the correct revolutions with different loads.

- ELECTRONIC SPEED REGULATOR 
  F33
- **JD43**
- F63
- F83
- F103

- MECHANIC SPEED REGULATOR
- F133
- F153
- F203
- F253
- F303



# Optional equipment for the TAILOR MADE rental range



VERSATILE
AND RELIABLE
SOLUTIONS
FOR HIGH-LEVEL
POWER
PERFORMANCE

# **TAILOR MADE SOLUTIONS**

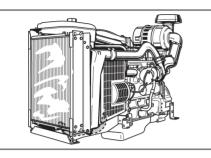
Visa SpA has always focused its attention on the customers' needs, tailoring production to their requests. Onis Visa generators, with their many variants, are among the most versatile and complete in the market.



Customize
your genset,
choosing the
right accessories
in the
optional
equipment list
according to your
specific needs.



# Optional equipment for the TAILOR MADE rental range



#### **DIFFERENT ENGINE / ALTERNATOR**

The standard version of VM series generating sets is usually equipped with FPT-IVECO® or PERKINS® engines and STAMFORD® alternators. We deal with a wide range of brands and parts, including STAGE IIIA VOLVO® or JOHN DEERE®engines, and MARELLI® or MECC ALTE® alternators to meet the specific customers' needs.













**GV085** 

**GV125** 

**GV175** 



#### **PMG - PERMANENT MAGNET GENERATOR**

The PMG (Permanent Magnet Generator) is a system which is used for secondary exciting. The PMG provides stable and reliable electric energy for AVR regardless the generator's terminal voltage. The generator with PMG excitation system can provide 300 % rated current during short-circuit, which occurs for 5-10 seconds.

VERSIONS FOR DIFFERENT ALTERNATOR/ENGINE BRANDS AND MODELS Available for:



# **ALTERNATOR WITH IMPREGNATION**

This impregnation process is perfect for the majority of applications, in order to achieve the same results in insulation reliability when environmental or operating conditions are demanding: high humidity, salty atmosphere, atmosphere polluted with some abrasive or chemical elements.

Available for: VERSIONS FOR DIFFERENT BRANDS, MODELS OR ENVIRONMENTAL CONDITIONS



## **BUS BAR + SINGLE LINE PROTECTION**

Robust and ample bus bars to facilitate cable connection.

Available for:

**GV045** 

**GV085** 

**GV125** 

**GV175** 



## AVR (AUTOMATIC VOLTAGE REGULATORS) ON CONTROL PANEL

AVR is a microprocessor-based electronic device for the set-up and monitoring of alternator's excitation system. The AVR is usually positioned inside the alternator case. We can place it inside the control panel for maintenance easy access.

GV085

**GV125** 



# Optional equipment in the TAILOR MADE rental range



## **DIFFERENT CONTROL MODULES**

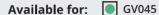
The standard version of VM series generating sets is usually equipped with GUARD TOUCH control panel, produced by VISA SpA. We deal with a wide range of brands and parts, including:



Model: 7320 8610

ComAp

Model: Intellivision5 AMF 25





**GV085** 

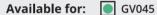
**GV125** 

**GV175** 



# WHITE.. OR DIFFERENT COLOURS AVAILABLE

Galvanized sheet is used to manufacture the canopy: minimum zinc thickness is 20 micron. The powder-coated thermoset paint has a polyester resin base highly resistant to atmospheric agents. The standard colour of VM series is WHITE, but different colours are always available too.







**GV125** 

**GV175** 



# **PRE-HEATER**

The pre-heater is designed to pre-heat diesel engines in generating sets. Particularly suitable where the outside temperature is cold.

**Available for: OV045** 

**GV085** 

**GV125** 

■ GV175



# **BUMPERS**

Reinforced steel baseframe with bumper protection.

Available for:



**GV085** 

**GV125** 

**GV175** 



# **FUEL CAP WITH KEY - COVER WITH KEY FOR FUEL FEED AND RETURNS**

- A quality locking mechanism prevents fuel theft and vandalism;
- Safety standard equipment;
- OEM quality construction and materials.

**Available for: OV045** 

**GV085** 

**GV125** 



# Optional equipment for the TAILOR MADE rental range



#### **RACOR® FUEL / WATER SEPARATOR FILTER**

Fuel filter water separator removes particulates and water from your fuel giving you the reassurance required when engine failure is not an option.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



#### MURPHY® LUBE LEVEL SWICHGAGE

The Murphy Lube Level Swichgage is a combination of a lube level indicating gage and adjustable low and high limit switches. It provides protection against low oil level or high level caused by overfill or fuel or water seepage into the crankcase.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



# 3-WAY VALVES + EXTERNAL DIESEL QUICK FITTINGS

Fuel feed and returns pass through 3-way valves to allow change over from the set base tank to a possible external bulk tank.

Available for:

**GV045** 

**GV085** 

**GV125** 

■ GV175



# 50 Hz / 60 Hz - SWITCH

The electrical output of the generator must be maintained at a fixed frequency, 50 Hz or 60 Hz, to match the output of a standard electrical grid or the frequency rating of your appliances. The variable speed gensets in which varying the speed of the engine changes the speed of the alternator to automatically produce an output of variable frequency. Switch function is avilable only on suitable engines and alternators

Available for:

**GV045** 

**GV085** 

**GV125** 

**GV175** 



#### **TRAILERS**

For applications that require the generating set to be moved quickly and frequently Visa proposes installation on trailers; various technical solutions will satisfy the most different conditions of use. The range of trailers includes certifiable low speed tow trailer models for road use.

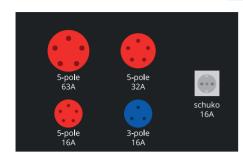
**Available for: OV045** 

**GV085** 

**GV125** 



# Optional equipment for the TAILOR MADE rental range



## **SOCKET KIT**

- 5-pole 63A 3F+N+E socket protected by a 4-pole circuit breaker;
- 5-pole 32A 3F+N+E socket protected by a 4-pole circuit breaker;
- 5-pole 16A 3F+N+E socket protected by a 4-pole circuit breaker;
- 3-pole 16A 1F+E socket protected by a 2-pole circuit breaker;
- schuko socket 16A protected by a 2-pole circuit breaker;

The protection against indirect contact is obtained through the main earth fault relay (sizes GV045 / GV085) or through dedicated 125A breaker equipped with its own earth fault relay (sizes GV125 / GV175). Other types of protection can be agreed before the order.

Available for:



**GV085** 

**GV125** 

**GV175** 



# **CUSTOM SOCKET KIT**

Socket choice and position for electrical panel. A wide range of sockets are available to cover all needs regarding plugs.

**Available for: OV045** 

**GV085** 

**GV125** 

**GV175** 



# **SMS ALARMS SYSTEM**

The module will work up to 1 KM from the Guard Touch controller. The GSM-GPRS modem is a flexible tool designed for the remote management of the generating sets and allows to control these via multiple channels. The information sent via SMS includes warnings, alarms, electrical and mechanical measurements.

Available for:

**GV045** 

**GV085** 

**GV125** 

**GV175** 



#### **REMOTE STARTER**

It allows remote wireless starting/stopping of the generating sets.

Available for: 

GV045

**GV085** 

**GV125** 

**GV175** 

# **FULL DOCUMENTATION AVAILABILITY**



**(**) 0422•5091

🗭 visa@visa.it

Visa SpA provides a full range of technical documentation on our current products as well as older products. This documentation includes technical manuals, release notes, tools and catalogues. For further details, additional information or prices, please contact our sales department.



# **Standard and Optional control panels**

## STANDARD CONTROL PANEL



# ONIS VISA® GUARD TOUCH

The ONIS VISA Guard Touch is a configurable single genset controller suitable for manual and automatic control to the Mains (Utility) Failure. Monitoring a large number of engine and alternator parameters, this module displays warnings, shutdowns and engine status information, automatically starting or stopping the engine in accordance to load demand or fault condition. Guard Touch is equipped with a 320x240 touch screen b/w LCD panel able to grant an immediate graphic visualization of information and an easy and user-friendly touch control interaction. The modules can also be easily configured using dedicated desktop software, locally with USB adapter or remotely via LAN or GPRS adapters.

# **OPTIONAL CONTROL PANELS**



# DEEP SEA® 7320

The **DSE7320** is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single gen-set applications powered by either diesel or gas engines. Monitoring an extensive number of engine parameters, this modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem). The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.



#### DEEP SEA® 8610

The **DSE8610** is an easy to use Synchronising Auto Start Control Module suitable for use in a multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines.

The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition. Using the DSE PC Configuration Suite Software allows easy alteration of the operational sequences, timers and alarms. The DSE8610 is ideal for a wide variety of demanding load share applications.



#### COMAP® AMF25

The ComAp InteliLiteNT **AMF25** offers integrated control solutions for gen-sets operating in single standby mode. Based on the field proven InteliLite architecture, AMF25 controller fulfills every requirement from simple to complex and AMF to MRS applications – providing modem and Internet control, user configuration and complete gen-set monitoring and protection. AMF25 controllers are easy to use with an intuitive user interface and graphic display and feature a built-in event and performance log.



# **COMAP® INTELIVISION5**

The ComAp **INTELIVISION 5** family is a comprehensive range of configurable Gen-set controllers suitable for managing simple, everyday or even the most complex CHP application. In addition, all controllers now feature one piece of software making them universally compatible with most of the leading manufacturers of electronic engines. With increased memory, more features and greater processing speed, the 'New Technology' control products have built an enviable reputation for effective system integration, simpler monitoring and more user-friendly remote supervising and servicing.





## **GUARD TOUCH**



## ONIS VISA® GUARD TOUCH MAIN FEATURES

The ONIS VISA Guard Touch is a configurable single genset controller suitable for manual and automatic control to the Mains (Utility) Failure. Monitoring a large number of engine and alternator parameters, this module displays warnings, shutdowns and engine status information, automatically starting or stopping the engine in accordance to load demand or fault condition. Guard Touch is equipped with a touch screen b/w LCD panel able to grant an immediate graphic visualization of information and an easy and user-friendly touch control interaction. The modules can also be easily configured using dedicated desktop software, locally with USB adapter or remotely via LAN or GPRS adapters.

DIMENSIONS AND WEIGHT (manual)255x184x52 mm · 1300 grDIMENSIONS AND WEIGHT (automatic)255x184x75 mm · 1500 grDISPLAY16 gray tones 320x240px touch screenVOLTAGE12 and 24 VDCRANGE OF OPERATIONS> -20°C · < +70°C</td>

## **COMMANDS AND FUNCTIONS**

Genset status: OFF, MAN, AUTO, TEST Fuel refilling pump status: OFF, MAN, AUTO

Start

Stop

Remote start

Manual command opening / closing GCB and MCB

Manual command START ON

Manual command STOP ON

16 programmable time-out (or countdown) for maintenance (per hour and months)

Monitoring output of coil relay continuity outputs

GCB and MCB feedback monitoring

CANbus SAE J1939 communication monitoring

BLACK BOX: 2500 events

4 graphic TREND (choose among 40 measurements)

HELP with descriptions and solutions for recorded problems Acoustic alarm

Date and clock with battery

## **APPLICATIONS**

SPM: single prime mover SSB: single stand-by

#### **COMMUNICATION PORTS**

- 1 CANbus for SAE J1939 opto-isolated for engine communication 1 proprietary CANbus opto-isolated for Guard Touch communications
- 1 RS485 for GSM communications, PC monitoring, MODbus, Ethernet connection
- 1 RS485 for external connection, battery charger, remote alarm card, expansion board I/O.

## **MEASUREMENTS AND PROTECTIONS**

#### MAINS MEASUREMENTS

Voltage VAC mains: L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N; Lx-N  $\leq$  300V (RMS); Lx-N  $\leq$  300V (RMS)

#### **GENSET MEASUREMENTS**

Voltage VAC genset: L1-L2, L2-L3, L3-L1, L1-N, L2-N, L3-N; Lx-N <= 300V (RMS); Lx-N <= 300V (RMS) · Currents: L1, L2, L3, - L4 (RMS) Active power: sum and per each phase · Apparent power: sum and per each phase · Power factor: average and per each phase · Active energy produced: sum and per each phase · Battery voltage VDC · Battery charger current (up to max 2 bc) · Speed · Working hours · Rental hours (for rent applications) · Starting attempts counter · Successful starts in % · ACB MCB manoeuvres counter · Coolant liquid temperature · Oil pressure · Oil temperature · Engine exhaust temperature main bearings 1 · Engine exhaust temperature main bearings 2 · Fuel level in % · Engine power used in % · Air turbo pressure · Air turbo temperature · Immediate fuel consumption · Fuel consumption from the last start up · Total fuel consumption (calculated on engine lifespan) · Alternator windings temperature

#### **ALTERNATOR PROTECTIONS**

Max voltage  $\cdot$  Min voltage  $\cdot$  Max frequency  $\cdot$  Min frequency  $\cdot$  Phase sequence error  $\cdot$  Voltage asymmetry  $\cdot$  Currents asymmetry  $\cdot$  Energy reversal  $\cdot$  Short circuit  $\cdot$  Max temperature alternator windings  $\cdot$  Alternator capability: Max kW, Max kVAr inductive and capacitive

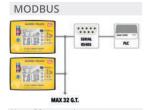
#### MAINS PROTECTION

 $\mbox{Max voltage} \cdot \mbox{Min voltage} \cdot \mbox{Max frequency} \cdot \mbox{Min frequency} \cdot \mbox{Phase sequence error} \cdot \mbox{Voltage asymmetry}$ 

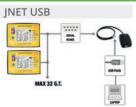
#### **ENGINE PROTECTIONS**

Coolant liquid temperature  $\cdot$  Oil pressure  $\cdot$  Oil temperature  $\cdot$  Oil level  $\cdot$  Low fuel level  $\cdot$  Max power  $\cdot$  Over-speed  $\cdot$  Broken belt  $\cdot$  Missed start  $\cdot$  Missed stop  $\cdot$  Min coolant level  $\cdot$  Visualisation of engine error codes via CANbus SAE J1939

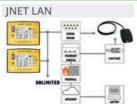
#### LOCAL AND REMOTE MONITORING AND SETTINGS



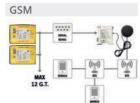
Up to 32 generating sets Monitoring of measurements Warnings and Alarms Start and stop genset and ATS



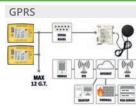
Up to 32 generating sets Send commands Change working mode Receive warnings and alarms



Unlimited local or remote Send commands Change working mode Receive warnings and alarms



Up to 12 generating sets Monitoring up to 120 parameters Control genset and ATS Password protected



Up to 12 generating sets Monitoring of measurements Control genset and ATS Highly configurable management





## **DEEP SEA® 7320**



## **DEEP SEA® 7320 MAIN FEATURES**

The **DSE7320** is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single gen-set applications powered by either diesel or gas engines. Monitoring an extensive number of engine parameters, this modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC and via SMS text alerts (with external modem). The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

DIMENSIONS AND WEIGHT	240x181x42 mm · 860 gr
DISPLAY	132x64px LCD display
VOLTAGE SUPPLY	from 8 to 35 VDC
RANGE OF OPERATIONS	> -30°C · < +70°C

#### **KEY FEATURES**

4-Line back-lit LCD text display

Five key menu navigation

Front panel editing with PIN protection

Customisable status screens

Power save mode

Support for up to three remote display units

9 configurable inputs, 8 configurable outputs

Flexible sender inputs

Configurable timers and alarms, 3 configurable maintenance alarms

Multiple date and time scheduler

Configurable event log (250) Tier 4 CAN engine support

Integral PLC editor
Easy access diagnostic page

CAN and Magnetic Pick-up/Alt. sensing

Fuel usage monitor and low fuel alarms

Charge alternator failure alarm

Manual speed control (on compatible CAN engines)

Manual fuel pump control

Engine exerciser

"Protections disabled" feature

kW & kV Ar protection

Reverse power (kW & kV Ar) protection

LED and LCD alarm indication

Power monitoring (kW h, kV Ar,kV A h, kV Ar h)

Load switching (load shedding and dummy load outputs)

Automatic load transfer (DSE7320)

Unbalanced load protection

#### **KEY FEATURES**

Independent Earth Fault trip

Backed up real time clock

Remote SCADA monitoring via DSE Configuration Suite PC software

User selectable RS232 and RS485 communications, USB connectivity

Configurable Gencomm pages

Advanced SMS messaging(additional external modem required)
Start & stop capability via SMS messaging

Additional display screens to help with modem diagnostics

Idle control for starting & stopping.

DSENet® expansion compatible

Heated display option available

# **KEY BENEFITS**

132 x 64 pixel ratio display forclarity

Real-time clock provides accurate event logging Multiple date and time scheduler

Set maintenance periods can be configured to maintain optimum engine performance

Ethernet communications (via DSE855 module), provides advanced remote monitoring

Modules can be integrated into building management systems (BMS)

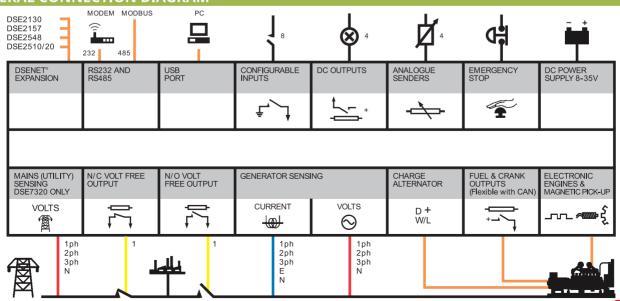
Increased input and output expansion capability via DSENet®

Licence-free PC software

IP65 rating (with supplied gasket) offers increased resistance to water

PLC editor allows user configurable functions to meet specific application requirements

# **GENERAL CONNECTION DIAGRAM**





## **DEEP SEA® 8610**



## **DEEP SEA® 8610 MAIN FEATURES**

The DSE8610 is an easy to use Synchronising Auto Start Control Module suitable for use in a multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines.

The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition. Using the DSE PC Configuration Suite Software allows easy alteration of the operational sequences, timers and alarms. The DSE8610 is ideal for a wide variety of demanding load share applications.

DIMENSIONS AND WEIGHT	240x181x42 mm · 880 gr
DISPLAY	132x64px LCD display
VOLTAGE SUPPLY	from 8 to 35 VDC
RANGE OF OPERATIONS	> -30°C · < +70°C

#### **KEY FEATURES**

Comprehensive synchronising & loadsharing capabilities

Built-in governor and AVR control

Base load (kW export) functionality

Positive & negative kVAr export control

Mains (utility) de-coupling protection

Generator power (kW, kV Ar, kV A & pf) monitoring

Overload (kW & kV Ar) protection

Reverse power (kW & kV Ar) protection

Unbalanced load protection

Independent earth fault protection

Advanced integral PLC editor

11 Configurable inputs, 8 Configurable outputs

Configurable flexible sensor inputs

DSENet® expansion compatibility

User configurable RS232, RS485 and Ethernet communications

Remote SCADA monitoring via various DSE software applications

MODBUS RTU & TCP support

User configurable MODBUS pages

Advanced SMS control and fault messaging (additional GSM modem

Easy access diagnostic pages including modem diagnostic pages

Data logging and trending

CAN, MPU and Frequency speed sensing

Tier 4 CAN engine support

"Protections disabled" feature

Front panel editing with PIN protection

Fully configurable using DSE

Configuration Suite PC software via USB

4 Line back-lit LCD text display, LED and LCD alarm indication

## **KEY FEATURES**

Configurable display languages

USB connectivity

Customisable status screens

Five key menu navigation

3 Configurable maintenance alarms

Multiple date and time run scheduler

Manual fuel pump control

Fuel usage monitor and low fuel level protection Charge alternator failure protection Load switching (load shedding and dummy load control)

Configurable event log (250)

#### **KEY BENEFITS**

Compatible in load share systems containing DSE5500, DSE7500 and DSE8600 series. Contact DSE for further details

132 x 64 pixel ratio display for clarity

Real-time clock provides accurate event logging

Ethernet communication, provides built in advanced remote monitoring Can be integrated into building management systems (BMS) and programmable logic control (PLC)

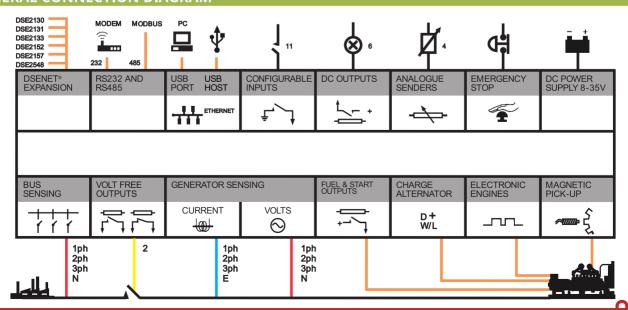
Increased input and output expansion capability via DSENet®

Licence-free PC software

IP65 rating (with supplied gasket) offers increased resistance to water

Advanced Internal PLC editor allows user configurable functions to meet specific application requirements

## **GENERAL CONNECTION DIAGRAM**





# **COMAP® InteliLiteNT AMF25**



# **COMAP® InteliLiteNT AMF25 MAIN FEATURES**

The ComAp InteliLiteNT AMF25 offers integrated control solutions for gen-sets operating in single standby mode. Based on the field proven InteliLite architecture, AMF25 controller fulfills every requirement from simple to complex and AMF to MRS applications - providing modem and Internet control, user configuration and complete gen-set monitoring and protection. AMF25 controllers are easy to use with an intuitive user interface and graphic display and feature a built-in event and performance log.

DIMENSIONS	180x120 mm
DISPLAY	b/n LCD 128x64 pixels
VOLTAGE SUPPLY	from 8 to 36 VDC
RANGE OF OPERATIONS	> -20°C · < +70°C

#### **KEY FEATURES**

- 3 phase AMF function: Over/Under frequency, Over/Under voltage, Voltage asymmetry
- 3 phase generator protections: Over/Under frequency, Over/Under voltage, Current/Voltage asymmetry, Overcurrent/Overload
  True RMS voltage measurement, 3 phase generator and mains: Voltage
- range 277 V p-n, 480 V p-p, Maximal measured voltage 300 V p-n, PT ratio range 0.1–500
- True RMS current measurements: 3 generator phase currents, Current range 5 A, Maximal measured current 10 A, CT ratio range 1–5000
- Power measurements: Active/Reactive Power and Power Factor per phase Gen-set Active and Reactive, Energy counter, Mains Active and Reactive Energy counter, Apparent power
- Event and performance log + RTC: Flexible event based history with up to 119 events, Reason, running hours + all important values are stored, Reason, date and time + all important values are stored, Battery backed-up RTC. Test run scheduler
- User interface: Graphic 128 × 64 pixels display, 2 languages, user change-able from PC, Wide range of languages in package, Setpoints adjustable via controller buttons or PC, Large font in user interface, Buttons with mechanical feedback, Customized front facia on request
- Inputs and outputs: 6/7 or up to 14/15 (with IL-NT BIO8) binary inputs 6/7 or up to 14/15 (with IL-NT BIO8) binary outputs, 3 confi gurable analog inputs with wide list of predefined senders, Additional inputs/outputs available via IG-IOM or IGS-PTM, Magnetic pickup input, D+ pre-excitation terminal, Optional 8 analog gauge drive outputs, compatible with VDO-style gauges
- EFI engine support: Cummins Modbus, Engine specific J1939 for all major manufacturers, Diagnostic messages in plain text
- SMS/Emails: SMS commands, Emails, Alarm and event SMS

## **KEY FEATURES**

Miscellaneous features: Support of telecom applications with special firmware, Integrates with UPS systems, Fuel theft protection, Mutual stand-by system, Automatic temperature based cooling/heating, Load shedding, dummy load, Customer logo screen, Two multipurpose timers, Alternative configuration (50Hz/60Hz)

Communication interfaces: Optional RS232, RS485 (including Modem support) or USB plug-in interface, Modbus RTU/ TCP (requires RS485 interface/IB-Lite), SNMP (requires IB-Lite), Optional Internet connection with Ethernet via IB-Lite, Online control and monitoring over web pages (embedded web server) via IB-Lite, Optional GSM modem/wireless Internet via IL-NT GPRS

#### **KEY BENEFITS**

Less wiring and components

Less engineering and programming

Remote monitoring helps reduce call-out costs of service engineers

Optional additional 8 binary inputs/outputs

Optional Internet with control and monitoring over web pages

Support of wireless Internet

Active SMS / emails

Direct communication with EFI engines

Perfect price / performance ratio

History log – easy troubleshooting and warranty claim handling

#### **TYPICAL SOLUTIONS**

#### RENTAL PRIME POWER SYSTEM MUTUAL STD.BY AC GESETS



Manual and remote start for gen-sets. AMF 25 starts, controls and monitors the gen-set and controls the circuit breaker to supply the load.



Dual AMF applicaion for improved performance, fuel efficiency and service maintenance scheduling.

Failsafe standby system provides high system reliability and OPEX savings.

#### STD.BY SYSTEM



Stand-by gen-sets. InteliLite NT AMF 25 continuously monitors a mains supply and automatically starts an engine and switches load to a standby generator set in case of mains failure.





## **COMAP® INTELIVISION5**



## **COMAP® INTELIVISION5 MAIN FEATURES**

The ComAp **INTELIVISION 5** family is a comprehensive range of configurable Gen-set controllers suitable for managing simple, everyday or even the most complex CHP application. In addition, all controllers now feature one piece of software making them universally compatible with most of the leading manufacturers of electronic engines. With increased memory, more features and greater processing speed, the 'New Technology' control products have built an enviable reputation for effective system integration, simpler monitoring and more user-friendly remote supervising and servicing.

DIMENSIONS	245x165x135 mm
DISPLAY	5,7" Colour TFT 320 × 240 pixels
VOLTAGE SUPPLY	from 8 to 35 VDC
RANGE OF OPERATIONS	> -30°C · < +70°C

## **KEY FEATURES**

5,7" Colour TFT display with resolution 320 × 240 pixels

Local display intended for shorter distances (up to 2 meters)

Remote display intended for longer distances (up to 1000 meters) Direct connection to the controller (converters are not needed)

Communication connection via RS-485

Communication connection via galvanic separation of RS-485

Backlit buttons

Equipped with internal buzzer

Binary output for external horn/buzzer control

Analog input to control backlit intensity

Operating temperature: -40 to +70°C

Face is sealed to IP65

EMC, climatic and mechanical tests

Support of engines with ECU (Electronic Control Unit)

Complete integrated gen-set solution and signal sharing via CAN bus – minimum external components needed

Many communication options – easy remote supervising and servicing: AirGate support, Ethernet connection (RJ45), USB 2.0 slave interface, 1× RS232 / 2× RS485 interface with Modbus protocol support; Analog / GSM / ISDN / CDMA modem communication support; SMS messages; ECU Modbus interface; secondary RS485 converter is isolated

Automatic synchronizing and power control (via speed governor or ECU) AMF function, Baseload, Import / Export, Peak shaving, Voltage and PF control (AVR)

Generator measurement: U, I, Hz, kW, kVAr, kVA, PF, kWh, kVAhr

Mains measurement: U, I, Hz, kW, kVAr, PF

Selectable measurement ranges for AC voltages and currents – 120 / 277 V, 0–1 / 0–5 A

Inputs and outputs configurable for various customer needs

Bipolar binary outputs - possibility to use BO as High or Low side switch

## **KEY FEATURES**

Controller redundancy

Event-based history (up to 1000 records) with customer-selectable list of stored values; RTC; statistic values

Integrated PLC programmable functions

Integrated fixed and configurable protections

DIN-Rail mount

Customized firmware solution

#### **KEY BENEFITS**

Plug and play operation (auto configuration based on controller application)

Simple, fast and intuitive control

Easy drag and drop screen configuration in graphical editor

Fast access to important data

Five configurable soft keys

Excellent configurability to match customers' needs exactly

Complete integrated gen-set solution and signal sharing via CAN bus – minimum external components needed

Many communication options – easy remote supervising and servicing Gen-set performance log for easy problem tracing

#### **TYPICAL SOLUTIONS**

#### **POWER STATIONS**



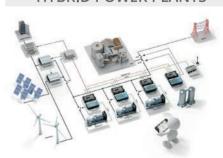
Full support for standard power management. Automatic start and stop of gen-sets is based on the gen-set priority customizable algorithm.

#### **RENTAL SETS**



Temporary and mobile power generation units providing essential energy for subsystems and construction machinery.

#### **HYBRID POWER PLANTS**



Hybrid applications combine gen-sets (burning mostly fossil fuels) and renewable energy sources to reduce the amount of fuel burned.





# GALAXY · F33 GX "VM"

# GV045 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	30.0 kVA
Continuous Power (PRP)	24.0 kW
Stand-by Power (LTP)	33.0 kVA
Stand-by Power (LTP)	26.4 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	91.0 dBA
LwA Guaranteed sound power level	94.0 dBA
Sound pressure 7 metres	63.0 dBA
DIMENSIONS AND WEIGHT	
Width	1130 mm*
Length	2420 mm*,**
Height	1600 mm
Weight	1450 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	F32SM1F	
Cylinders	4	nr
Speed	1500	r.p.m.
Cubic capacity	3.20	- 1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	720	kPa
Cooling	Water	
Flywheel P.R.P. Power	28.6	kW
Flywheel Stand-by Power	31.5	kW
Fuel Cons. at 100% (L.T.P.)	8.4	l/h
Fuel Cons. at 100% (P.R.P)	7.9	l/h
Fuel Cons. at 75% (P.R.P.)	6.09	l/h
Fuel Cons. at 50% (P.R.P.)	4.6	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	mechanical	
Precision class	-	+/-%
Oil quantity	8.5	I
Engine Antifreeze capacity	19.27	1
Heat from radiator	-	kW
Heat from exhaust	-	kW
Heat from radiation	-	kW
Exhaust temperature	-	°C
Cooling air flow	84.00	m³/min
Combustion air flow	-	kg/h
Exhaust gas flow	-	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	PI144G	
P.R.P. Power	30.0	kVA
L.T.P. Power	33.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	AS480	
Precision	1.0	+/-%

BASEFRAME		
Model	GV045	
Long range fuel tank	250	I
Hours of operation at 75% of load	38	h
	_	

CANOPY & SILENCER		
Canopy model	GV045	
Silencer model	-	
Silencer outlet diameter	_	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

\*=without optional bumper, \*\*=sidewise load on standard trucks, \*\*\*=arranged side by side on the long side
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# GALAXY · JD43 GX "VM"

# GV045 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	40.0 kVA
Continuous Power (PRP)	32.0 kW
Stand-by Power (LTP)	44.0 kVA
Stand-by Power (LTP)	35.2 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	91.0 dBA
LwA Guaranteed sound power level	94.0 dBA
Sound pressure 7 metres	63.0 dBA
DIMENSIONS AND WEIGHT	
Width	1130 mm*
Length	2420 mm*,**
Height	1600 mm
Weight	1560 kg

# **GENERAL DATA**

ENGINE		
Engine brand	JOHN DEERE	
Engine model	3029HFU89	
Cylinders	3	nr
Speed	1500	r.p.m.
Cubic capacity	2.90	- 1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	1030	kPa
Cooling	Water	
Flywheel P.R.P. Power	37.5	kW
Flywheel Stand-by Power	41.5	kW
Fuel Cons. at 100% (L.T.P.)	12.2	l/h
Fuel Cons. at 100% (P.R.P)	10.2	l/h
Fuel Cons. at 75% (P.R.P.)	8.7	l/h
Fuel Cons. at 50% (P.R.P.)	6.0	l/h
Fuel Cons. at 25% (P.R.P.)	3.4	l/h
Engine speed regulator	mechanical	
Precision class	-	+/-%
Oil quantity	-	I
Engine Antifreeze capacity	-	- 1
Heat from radiator	21.3	kW
Heat from exhaust	-	kW
Heat from radiation	4.0	kW
Exhaust temperature	440	°C
Cooling air flow	84.00	m³/min
Combustion air flow	-	kg/h
Exhaust gas flow	-	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	PI144J	
P.R.P. Power	40.0	kVA
L.T.P. Power	45.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	AS480	
Precision	1.0	+/-%

BASEFRAME		
Model	GV045	
Long range fuel tank	250	ı
Hours of operation at 75% of load	28	h

CANOPY & SILENCER		
Canopy model	GV045	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

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# GALAXY · F63 GX "VM"

# GV085 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	60.0 kVA
Continuous Power (PRP)	48.0 kW
Stand-by Power (LTP)	66.0 kVA
Stand-by Power (LTP)	52.8 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	92.7 dBA
LwA Guaranteed sound power level	96.0 dBA
Sound pressure 7 metres	62.0 dBA
DIMENSIONS AND WEIGHT	
Width	1130 mm*
Length	2970 mm*,***
Height	1870 mm
Weight	1810 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N45 SM1F	
Cylinders	4	nr
Speed	1500	r.p.m.
Cubic capacity	4.50	l
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	1102	kPa
Cooling	Water	
Flywheel P.R.P. Power	54.5	kW
Flywheel Stand-by Power	60.0	kW
Fuel Cons. at 100% (L.T.P.)	18.0	l/h
Fuel Cons. at 100% (P.R.P)	16.7	l/h
Fuel Cons. at 75% (P.R.P.)	12,18	l/h
Fuel Cons. at 50% (P.R.P.)	9.5	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	mechanical	
Precision class	-	+/-%
Oil quantity	8.5	- 1
Engine Antifreeze capacity	18.5	1
Heat from radiator	38.0	kW
Heat from exhaust	34.0	kW
Heat from radiation	-	kW
Exhaust temperature	492.0	°C
Cooling air flow	132.0	m³/min
Combustion air flow	327.0	kg/h
Exhaust gas flow	340.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCI224E	
P.R.P. Power	60.0	kVA
L.T.P. Power	63.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV085	
Long range fuel tank	480	I
Hours of operation at 75% of load	36	h
	_	

CANOPY & SILENCER		
Canopy model	GV085	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

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# GALAXY · F83 GX "VM"

# GV085 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	83.0 kVA
Continuous Power (PRP)	66.4 kW
Stand-by Power (LTP)	91.3 kVA
Stand-by Power (LTP)	73.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	92.7 dBA
LwA Guaranteed sound power level	96.0 dBA
Sound pressure 7 metres	64.0 dBA
DIMENSIONS AND WEIGHT	
Width	1130 mm*
Length	2970 mm*,***
Height	1870 mm
Weight	1990 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N45 TE1F	
Cylinders	4	nr
Speed	1500	r.p.m.
Cubic capacity	4.50	- 1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	1777	kPa
Cooling	Water	
Flywheel P.R.P. Power	72.5	kW
Flywheel Stand-by Power	80.0	kW
Fuel Cons. at 100% (L.T.P.)	20.5	l/h
Fuel Cons. at 100% (P.R.P)	18.8	l/h
Fuel Cons. at 75% (P.R.P.)	14.7	l/h
Fuel Cons. at 50% (P.R.P.)	11.5	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	Electronic	
Precision class	-	+/-%
Oil quantity	8.5	I
Engine Antifreeze capacity	18.5	I
Heat from radiator	38.0	kW
Heat from exhaust	57.4	kW
Heat from radiation	7.7	kW
Exhaust temperature	430.0	°C
Cooling air flow	132.0	m³/min
Combustion air flow	500.0	kg/h
Exhaust gas flow	517.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCI224G	
P.R.P. Power	85.0	kVA
L.T.P. Power	90.8	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV085	
Long range fuel tank	480	ı
Hours of operation at 75% of load	30	h
	_	

CANOPY & SILENCER		
Canopy model	GV085	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

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# GALAXY · F103 GX "VM"

# GV085 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	100.0 kVA
Continuous Power (PRP)	80.0 kW
Stand-by Power (LTP)	110.0 kVA
Stand-by Power (LTP)	88.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	92.7 dBA
LwA Guaranteed sound power level	96.0 dBA
Sound pressure 7 metres	64.0 dBA
DIMENSIONS AND WEIGHT	
Width	1130 mm*
Length	2970 mm*,***
Height	1870 mm
Weight	2010 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N45 TE2F	
Cylinders	4	nr
Speed	1500	r.p.m.
Cubic capacity	4.50	- 1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	1777	kPa
Cooling	Water	
Flywheel P.R.P. Power	89.0	kW
Flywheel Stand-by Power	98.0	kW
Fuel Cons. at 100% (L.T.P.)	24.8	l/h
Fuel Cons. at 100% (P.R.P)	22.8	l/h
Fuel Cons. at 75% (P.R.P.)	17.5	l/h
Fuel Cons. at 50% (P.R.P.)	13.4	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	electronic	
Precision class	_	+/-%
Oil quantity	8.5	1
Engine Antifreeze capacity	18.5	1
Heat from radiator	38.0	kW
Heat from exhaust	67.6	kW
Heat from radiation	19.4	kW
Exhaust temperature	460.0	°C
Cooling air flow	132.0	m³/min
Combustion air flow	525.0	kg/h
Exhaust gas flow	546.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCI224C	
P.R.P. Power	100.0	kVA
L.T.P. Power	110.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV085	
Long range fuel tank	480	I
Hours of operation at 75% of load	25	h
	_	

CANOPY & SILENCER		
Canopy model	GV085	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted. not permitted

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# GALAXY · F133 GX "VM"

# GV125 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	130.0 kVA
Continuous Power (PRP)	104.0 kW
Stand-by Power (LTP)	140.0 kVA
Stand-by Power (LTP)	112.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	90.7 dBA
LwA Guaranteed sound power level	94.0 dBA
Sound pressure 7 metres	65.0 dBA
DIMENSIONS AND WEIGHT	
Width	1140 mm*
Length	3680 mm*,***
Height	2320 mm
Weight	2760 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N67TM1F	
Cylinders	6	nr
Speed	1500	r.p.m.
Cubic capacity	6.70	1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	-	
BMEP	1411	kPa
Cooling	Water	
Flywheel P.R.P. Power	113.5	kW
Flywheel Stand-by Power	125.0	kW
Fuel Cons. at 100% (L.T.P.)	33.3	l/h
Fuel Cons. at 100% (P.R.P)	30.5	I/h
Fuel Cons. at 75% (P.R.P.)	23.4	l/h
Fuel Cons. at 50% (P.R.P.)	17.7	I/h
Fuel Cons. at 25% (P.R.P.)	_	l/h
Engine speed regulator	Mechanical	
Precision class	-	+/-%
Oil quantity	12.0	1
Engine Antifreeze capacity	25.5	I
Heat from radiator	68.5	kW
Heat from exhaust	80.3	kW
Heat from radiation	44.4	kW
Exhaust temperature	498.0	°C
Cooling air flow	192.0	m³/min
Combustion air flow	564.7	kg/h
Exhaust gas flow	593.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCI274E	
P.R.P. Power	140.0	kVA
L.T.P. Power	150.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV125	
Long range fuel tank	850	I
Hours of operation at 75% of load	34	h
	_	

CANOPY & SILENCER		
Canopy model	GV125	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted. not permitted.

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# GALAXY · F153 GX "VM"

# GV125 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	150.0 kVA
Continuous Power (PRP)	120.0 kW
Stand-by Power (LTP)	165.0 kVA
Stand-by Power (LTP)	132.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	90.7 dBA
LwA Guaranteed sound power level	94.0 dBA
Sound pressure 7 metres	65.0 dBA
DIMENSIONS AND WEIGHT	
Width	1140 mm*
Length	3680 mm*,***
Height	2320 mm
Weight	2980 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N67TE1F	
Cylinders	6	nr
Speed	1500	r.p.m.
Cubic capacity	6.70	- 1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	-	Vdc
Sae	3-111/2	
BMEP	1629	kPa
Cooling	Water	
Flywheel P.R.P. Power	131.5	kW
Flywheel Stand-by Power	145.0	kW
Fuel Cons. at 100% (L.T.P.)	36.5	l/h
Fuel Cons. at 100% (P.R.P)	34.0	l/h
Fuel Cons. at 75% (P.R.P.)	26.4	l/h
Fuel Cons. at 50% (P.R.P.)	20.0	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	Electronic	
Precision class	-	+/-%
Oil quantity	12.0	1
Engine Antifreeze capacity	25.5	1
Heat from radiator	79.2	kW
Heat from exhaust	102.3	kW
Heat from radiation	26.7	kW
Exhaust temperature	600.0	°C
Cooling air flow	228.00	m³/min
Combustion air flow	752.5	kg/h
Exhaust gas flow	782.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCI274F	
P.R.P. Power	160.0	kVA
L.T.P. Power	175.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV125	
Long range fuel tank	850	I
Hours of operation at 75% of load	30	h
	_	

CANOPY & SILENCER		
Canopy model	GV125	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted. not permitted

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# GALAXY · F203 GX "VM"

# GV125 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	200.0 kVA
Continuous Power (PRP)	160.0 kW
Stand-by Power (LTP)	220.0 kVA
Stand-by Power (LTP)	176.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	92.0 dBA
LwA Guaranteed sound power level	95.0 dBA
Sound pressure 7 metres	64.0 dBA
DIMENSIONS AND WEIGHT	
Width	1140 mm*
Length	3680 mm*,***
Height	2320 mm
Weight	3010 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	N67TE3F	
Cylinders	6	nr
Speed	1500	r.p.m.
Cubic capacity	6.70	1
Air intake	Turbocharged	
Standard voltage	12	Vdc
Optional voltage	_	Vdc
Sae	-	
BMEP	2089	kPa
Cooling	Water	
Flywheel P.R.P. Power	175.0	kW
Flywheel Stand-by Power	195.0	kW
Fuel Cons. at 100% (L.T.P.)	49.0	l/h
Fuel Cons. at 100% (P.R.P)	45.5	l/h
Fuel Cons. at 75% (P.R.P.)	39.3	l/h
Fuel Cons. at 50% (P.R.P.)	29.9	l/h
Fuel Cons. at 25% (P.R.P.)	_	l/h
Engine speed regulator	Electronic	
Precision class	_	+/-%
Oil quantity	23.0	1
Engine Antifreeze capacity	25.5	1
Heat from radiator	-	kW
Heat from exhaust	-	kW
Heat from radiation	-	kW
Exhaust temperature	580.0	°C
Cooling air flow	228.0	m³/min
Combustion air flow	794.0	kg/h
Exhaust gas flow	844.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	MECC ALTE	
Alternator model	ECO38-2SN/4	
P.R.P. Power	200.0	kVA
L.T.P. Power	220.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term.	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	DSR	
Precision	1.0	+/-%

BASEFRAME		
Model	GV125	
Long range fuel tank	850	1
Hours of operation at 75% of load	20	h
	-	

CANOPY & SILENCER		
Canopy model	GV125	
Silencer model	-	
Silencer outlet diameter	-	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted. not permitted

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# GALAXY · F253 GX "VM"

# GV175 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	250.0 kVA
Continuous Power (PRP)	200.0 kW
Stand-by Power (LTP)	275.0 kVA
Stand-by Power (LTP)	220.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	94.1 dBA
LwA Guaranteed sound power level	97.0 dBA
Sound pressure 7 metres	69.0 dBA
DIMENSIONS AND WEIGHT	
Width	1200 mm*
Length	4340 mm*,***
Height	2500 mm
Weight	4200 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	C87 TE3F	
Cylinders	6	nr
Speed	1500	r.p.m.
Cubic capacity	8.70	- 1
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage	_	Vdc
Sae	-	
BMEP	2197	kPa
Cooling	Water	
Flywheel P.R.P. Power	232.0	kW
Flywheel Stand-by Power	256.0	kW
Fuel Cons. at 100% (L.T.P.)	65.5	l/h
Fuel Cons. at 100% (P.R.P)	61.0	l/h
Fuel Cons. at 75% (P.R.P.)	51.5	l/h
Fuel Cons. at 50% (P.R.P.)	35.7	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	Electronic	
Precision class	-	+/-%
Oil quantity	23.0	- 1
Engine Antifreeze capacity	63.0	I
Heat from radiator	92.3	kW
Heat from exhaust	190.0	kW
Heat from radiation	39.0	kW
Exhaust temperature	488.0	°C
Cooling air flow	308.4	m³/min
Combustion air flow	1025.0	kg/h
Exhaust gas flow	1285.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	UCDI274K	
P.R.P. Power	250.0	kVA
L.T.P. Power	275.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX460	
Precision	1.5	+/-%

BASEFRAME		
Model	GV175	
Long range fuel tank	850	ı
Hours of operation at 75% of load	15	h
	_	

CANOPY & SILENCER		
Canopy model	GV175	
Silencer model	-	
Silencer outlet diameter	_	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted.

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# GALAXY · F303 GX "VM"

# GV175 "VM" ENCLOSURE



MAIN DATA	
Continuous Power (PRP)	300.0 kVA
Continuous Power (PRP)	240.0 kW
Stand-by Power (LTP)	330.0 kVA
Stand-by Power (LTP)	264.0 kW
Voltage · Frequency · Power Factor	400V·50Hz·0.8cosφ
LwA Measured sound power level	94.1 dBA
LwA Guaranteed sound power level	97.0 dBA
Sound pressure 7 metres	69.0 dBA
DIMENSIONS AND WEIGHT	
Width	1200 mm*
Length	4340 mm*,***
Height	2500 mm
Weight	4350 kg

# **GENERAL DATA**

ENGINE		
Engine brand	FPT-IVECO	
Engine model	C10 TE1F	
Cylinders	6	nr
Speed	1500	r.p.m.
Cubic capacity	10.30	1
Air intake	Turbocharged	
Standard voltage	24	Vdc
Optional voltage	-	Vdc
Sae	1-14	
ВМЕР	2128	kPa
Cooling	Water	
Flywheel P.R.P. Power	263.0	kW
Flywheel Stand-by Power	290.0	kW
Fuel Cons. at 100% (L.T.P.)	74.8	l/h
Fuel Cons. at 100% (P.R.P)	64.3	l/h
Fuel Cons. at 75% (P.R.P.)	49.1	l/h
Fuel Cons. at 50% (P.R.P.)	32.1	l/h
Fuel Cons. at 25% (P.R.P.)	-	l/h
Engine speed regulator	Electronic	
Precision class	_	+/-%
Oil quantity	23.5	1
Engine Antifreeze capacity	63.0	ı
Heat from radiator	135.3	kW
Heat from exhaust	205.0	kW
Heat from radiation	25.0	kW
Exhaust temperature	520.0	°C
Cooling air flow	390.0	m³/min
Combustion air flow	1280.0	kg/h
Exhaust gas flow	1343.0	kg/h
Emissions	STAGEIIIA	EU

ALTERNATOR		
Alternator brand	STAMFORD	
Alternator model	HCl4D	
P.R.P. Power	300.0	kVA
L.T.P. Power	330.0	kVA
Connection	Series Star	
Phases	3F+N	
Winding	12 term. W 311	
Terminal Number	12	nr
IP Protection	23	
Electronic regulator	SX440	
Precision	1.0	+/-%

BASEFRAME		
Model	GV175	
Long range fuel tank	850	I
Hours of operation at 75% of load	16	h
	_	

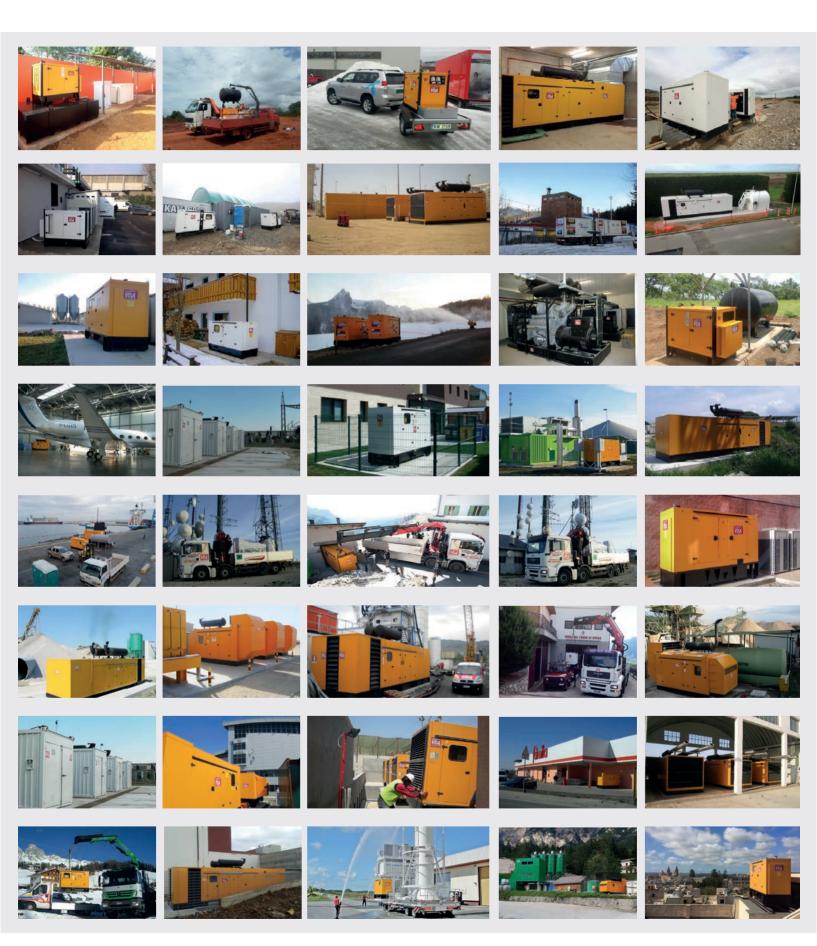
CANOPY & SILENCER		
Canopy model	GV175	
Silencer model	-	
Silencer outlet diameter	_	mm

Standard reference conditions: temperature 25°C, altitude 100m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0,850kg/l. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance. P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer. L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1. The number of hours per year is stated by the Manufacturer. Overload is not permitted. not permitted

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# **INSTALLATIONS WORLDWIDE EXEMPLE**







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