



Image for demonstration purposes

## Generating Set SUPERSILENT - diesel

# GE.PK.011/010.SS+011

1500 rpm - Threephase - 50Hz - 400V  
Automatic Panel with AMF without ATS



## Standard equipment

### ⚙️ Canopy Soundproofing

Removable soundproof canopy  
Painting canopy (ral) in galvanized sheet steel  
Soundproofing with class 1 polyester material  
Handles with key lock and automatic closing  
Special baffles for air intake and air expulsion  
Inspection doors for controls and maintenance

### ⚙️ Exhaust

Exhaust pipe  
Insulated exhaust pipes  
Internal residential muffler - 35dB(A)

### ⚙️ Fuel Supply

Single wall daily tank with bunded base  
Automatic shutdown system for low fuel level  
Fuel gauge

### ⚙️ Handling

Lifting hook integrated into the bearing structure  
Base frame with anti-overturning forklift pockets  
Reinforced base frame and crossbar for mobile use  
Forkliftable on the short side

### ⚙️ Base Frame

Reinforced base frame and crossbar for mobile use  
Bunded base at 110% of fuel tank capacity  
Anti-vibrating mounting pads  
Battery compartment externally accessible for easy service

### ⚙️ Engine

High coolant temperature and low oil pressure shutdown system  
External oil drain points  
Engine liquids (oil and antifreeze)  
Tropicalized radiator  
Rotating parts protection

### ⚙️ Alternator

Avr automatic voltage regulator  
Impregnation for marine environment  
Ip23

### ⚙️ Panel & connection

Emergency stop button  
Tamperproof panel ip55  
Cable output from the bottom  
Ip44 wiring  
Start-up battery (pre-charged)  
Grounding point

### ⚙️ Documentation

Ce conformity declaration  
User and maintenance manual  
Wirings diagrams

### ⚙️ Normatives

All generating sets are compliant to CE marking  
2014/30/UE electromagnetic compatibility  
2000/14/CE noise emission for outdoor use  
Factory-designed systems built according to ISO 9001:2015  
CEI EN 60204-1:2018 - Electrical equipment of machines

## Primary data

### General Information

Speed	RPM	1500
Frequency	Hz	50
PRP	KVA	9
Prp - prime power	KW	7,2
Ltp - standby power	KVA	10
Ltp - standby power	KW	8,0
Standard voltage	V	400/230
Current	A	13,0
Cosfi	0,8	0,8

### General electrical protection

Circuit-breaker rated current	A	16
Type	Magnetothermal switch on panel board	
Circuit-breaker poles	N	4P

### Noise level +/- 3dB(A)

LWA	dB(A)	83
Sound pressure level @ 7 mt	dB(A)	58
Sound pressure level @ 1 mt	dB(A)	67

### Fuel Consumption

Type	diesel	
Standard fuel tank capacity	lt	110
Autonomy @ 75% load	h	48
Fuel consumption at 100% load	lt/h	3
Fuel consumption at 75% load	lt/h	2,3
Fuel consumption at 50% load	lt/h	1,7

### General data

Rated capacity	Ah	1x70
Auxiliary voltage	V	12
Exhaust diameter	mm	50

### Weight and Dimensions

Dimensions (l x w x h)	cm	175x90x140
Weight with liquids (excluding optionals and fuel)	Kg (+/-3%)	650

## Engine

Factory		Perkins
Model		403A-11G1
Emissions stage		Stage 0
Speed governor		Mechanic +/-5%
Radiator	°C	50
Cooling	Tipo	liquid (water + 50% Paraflu11)
Active net power	Kwm	8,4
Nominal net power	CV	11,4
Cycle	Tipo	4 strokes
Injection	Tipo	Indirect
Aspiration	Tipo	Natural
Numbers of cylinders	N	3
Cylinders arrangement		L
Bore	mm	77
Stroke	mm	81
Total displacement	lt	1,131
Engine oil features		15W40-API CI-4/CH-4 ACEA E5-E7
Engine oil consumption	%	<0,15% fuel consumption
Total oil capacity	lt	4,9
Total coolant capacity	lt	5,2

## Alternator

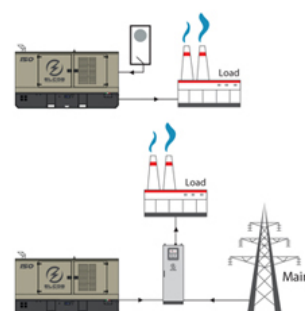
\* May vary based on stock availability. However, a primary brand will be used.

Factory		Stamford
Model		S0L1-H1
Prime power prp 3ph+n	KVA	10
Voltage regulator (voltage accuracy)	+/- %	1
Poles	N°	4
Phases	N°	3+N
Standard windings connection		Star Series
Stator/rotor impregnation		H (Outdoor Temp 40°C)
Efficiency	%	81,2
Engine coupling		Elastic disk
Short circuit current		>= 300% (3In)
Protection degree	IP	23
Cooling system		Self ventilating
Maxium overspeed	rpm	2250
Waveform distortion	%	<5
Exciter		Diode bridge

## Standard operating environmental conditions

Ambient temperature	°C	25
Relative humidity	%	30
Max altitude	mt	1000

## Control Systems on board QLE-A-OSC-10



operating scheme - schema di funzionamento

### QLE Multifunction panel without switching on board

The QLE command and control panel offers outstanding protection, monitoring and control for small and middle size generator sets. Elcos's control module MC2 offers advanced features to meet the most demanding on-site application. Elcos's control module MC2 is designed for offer an easy user interface. Variant without transfer switch on board. ATS panel type QC as optional. The panel manages the QC panels directly or any other ATS panel. The output line is protected by a breaker which protects from overload, short circuit.

#### Mechanical features

Protection degree	IP	55
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#### Battery charger

Model	ELCOS - CB1	
Maximum output current	A	2,5
Output dc voltage (selectable)	Vdc	12-24
Input ac voltage (selectable)	Vac	220-260
Frequency	Hz	50-60

#### Remotable functions in terminal box

Gs start	Gs lock
Genset contactor close/open command	Mains contactor close/open command
Common alarm - volt free output	Common alarm - dc output
Gs test without load	

## Control Module



Brand	ELCOS
Model	MC2
Operating mode	AMF - MRS

## Specifics

### Applications

Emergency to the mains  
Stand-alone

### ENGINE MEASURES

Fuel tank level %  
Total run time  
Battery voltage  
Battery charging voltage  
Start-ups counter  
Engine speed

### ALTERNATOR MEASURES

Generator voltage I1, I2, I3  
Generator voltage I1-n, I2-n, I3-n  
Generator frequency

### MAINS MEASURES

Mains voltage I1, I2, I3  
Mains voltage I1-n, I2-n, I3-n  
Mains frequency

### COMMUNICATION PORTS

Configurable via pc using usb port

### EQUIPMENT

Microprocessor logic  
Back-lit display  
Programmable by pc software  
10 event log  
Icons management  
Stop button  
Start button  
Aut mode button  
Reset alarm button

### PRE-ALARMS/ ALARMS

Common alarm  
Fuel reserve (pre-alarm)  
Low fuel level (alarm)  
Charge alternator failed (dinamo)  
Low oil pressure (alarm)  
High coolant temperature (alarm)  
Battery undervoltage  
Gs failure to start  
Gs failure to stop  
Genset overvoltage  
Genset undervoltage  
Genset high frequency  
Genset low frequency  
Maintenance request  
Emergency button pressed  
Genset negative phase sequence

### VISUALIZATIONS ON CONTROL MODULE/DISPLAY

Pre-alarms  
Alarms  
Engine measures  
Alternator measures  
Mains measures  
Operating mode  
Genset status  
Mains status  
Mains contactor status  
Genset contactor status

### CONTROL MODULE FUNCTIONS

Automatic start and stop when the mains fails (7)  
Remote start and stop  
Manual start and stop  
Emergency stop button on panel board  
Remote emergency stop  
Remote lock

## OPTIONAL

### ⚙️ Canopy Soundproofing

Canopy customized painting (ral)  
Double soundproofing -2 dB(A) @ 7 mt  
Lift-off doors kit  
Ip 43 conveyors

### ⚙️ Exhaust

Exhaust rain cap  
Exhaust manifold protection  
Exhaust flexible expansion joint  
Exhaust flexible pipe  
(fap) anti-particulate filter  
Exhaust catalyst (cat)

### ⚙️ Fuel Supply

Oversized tank  
Fuel connections  
Bulk tank connections with 3 way valve  
Automatic fuel refilling system on board  
Automatic fuel refilling system on board - easy type  
Automatic fuel refilling system on trestle

### ⚙️ Engine

Engine pre-heater 230vsuper hot  
Engine pre-heater 230v  
Oil pressure and coolant temperature gauge (only with qpe or +14 variant)  
Oil change pump  
Engine liquids + 50°C, - 40°C (oil and antifreeze)  
Electronic speed governor  
Battery disconnecter  
Automatic refilling oil system  
1000 working hours spare parts kit  
Cyclone air filter  
Redundant start-up battery kit

### ⚙️ Alternator

Avr pre-arranged for parallel  
Anti-condensation heater

### ⚙️ Panel & connection

Rcd block  
Automatic transfer switch (qc)  
Elcos polyvalent panel (qpe)

## PRP

Engines of this rating provide unlimited hours of usage in a variable load application. The average load factor should not exceed 70% of the engine's prime power rating with a maximum number of 500 operational hours at 100% prime power rating. An overload capability of 10% is available, however, is limited to a period of 1 in every 12 hours

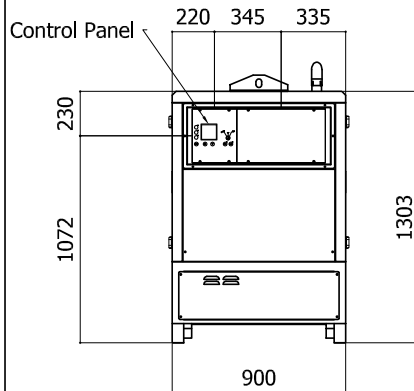
## LTP

Limited-time running power is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500h of operation per year with the maintenance intervals. The overload is not allowed.

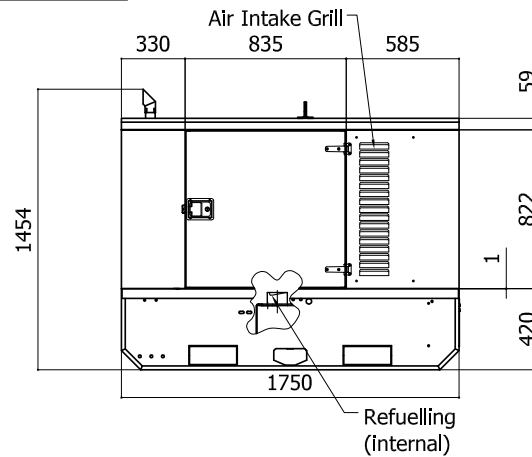
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## OVERALL DIMENSIONS [mm]

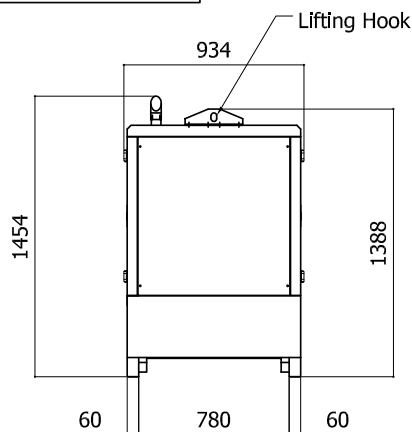
REAR VIEW



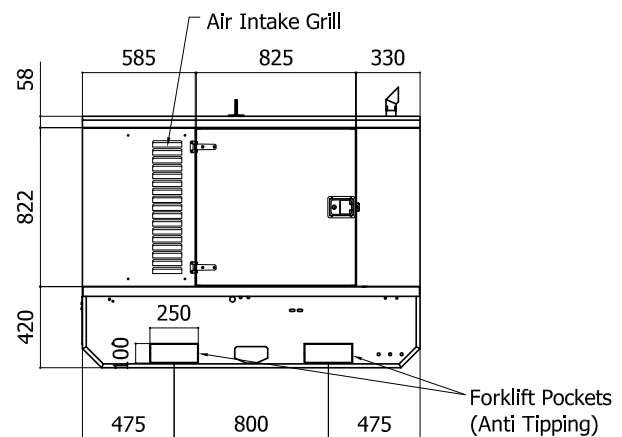
LEFT SIDE VIEW



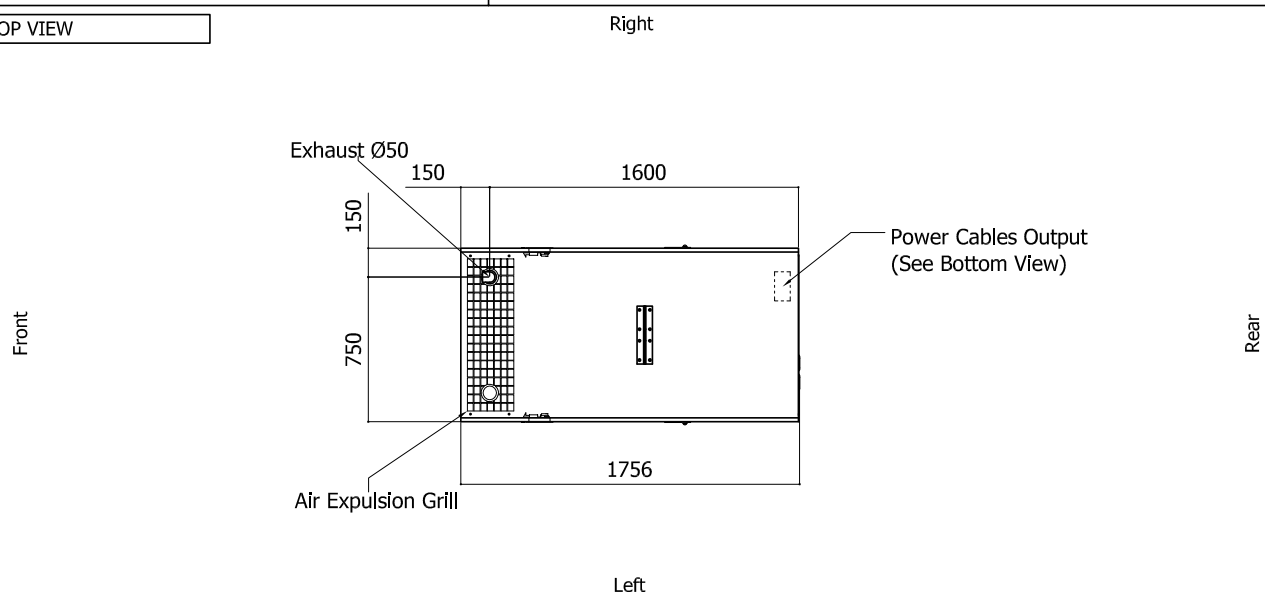
FRONT VIEW



RIGHT SIDE VIEW



TOP VIEW

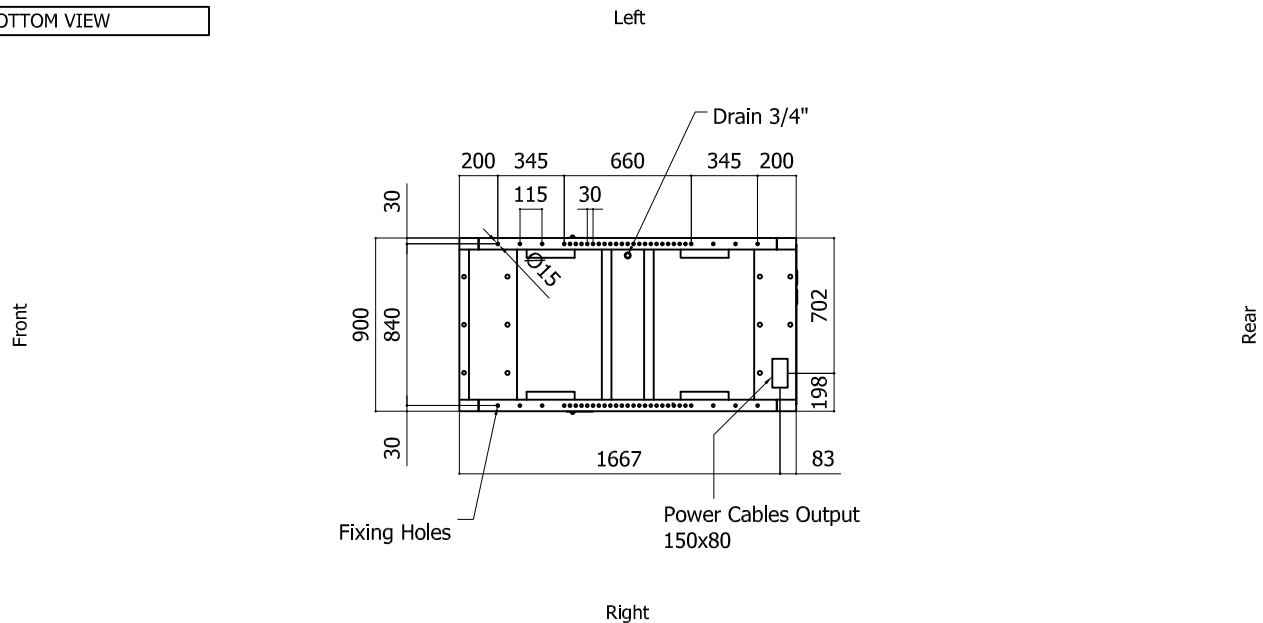


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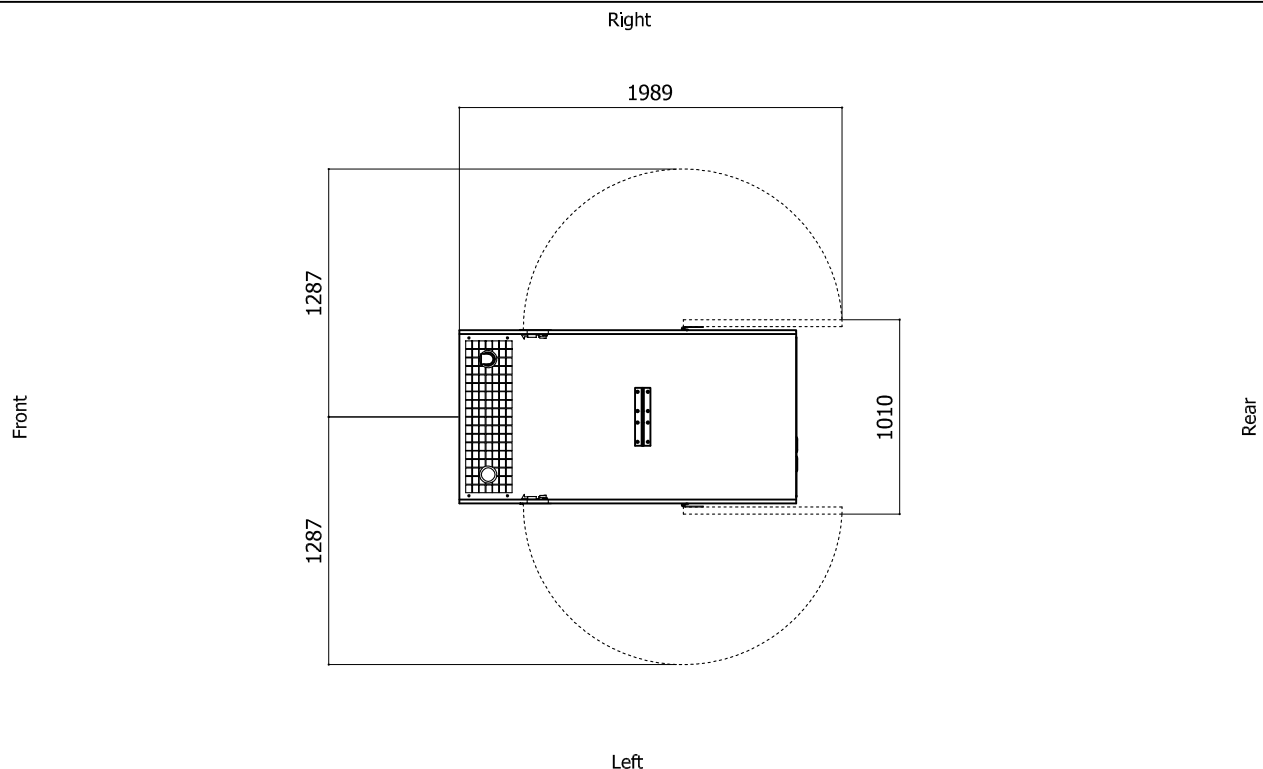
- 1) Form and dimension refer to the generating set on catalogue
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### BOTTOM VIEW



### DIMENSIONS WITH OPEN DOORS [mm]



Note: With Lifting-Off Door Solution consider only canopy dimensions.  
(Models with "Control Panel" behind rear door will mount a special cover to protect it)

### VENTILATION OF THE ROOM

The windows area in the generating set room needs to be (recommended):

Aspiration: 0.26 m<sup>2</sup>

Expulsion: 0.21m<sup>2</sup>

ATTENTION: for a correct ventilation the expulsion air and the exhaust gas needs to be conveyed in the open-air

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