Image for demonstration purposes

Generating Set
SUPERSILENT - diesel

GE.DZ.044/040.SS+011

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

.SS

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 rain cap
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
Forkliftable on the short side

Base Frame
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)
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*	**40**
Prp - prime power	*KW*	**32,0**
Ltp - standby power	*KVA*	**44**
Ltp - standby power	*KW*	**35,2**
Standard voltage	*V*	**400/230**
Current	*A*	**57,8**
Cosfi	*0,8*	**0,8**

General electrical protection

Circuit-breaker rated current	*A*	**63**
Type		**Magnetothermal switch on panel board**
Circuit-breaker poles	*N*	**4P**

Noise level +/- 3dB(A)

LWA	*dB(A)*	**89**
Sound pressure level @ 7 mt	*dB(A)*	**64**
Sound pressure level @ 1 mt	*dB(A)*	**73**

Fuel Consumption

Type		**diesel**
Standard fuel tank capacity	*lt*	**110**
Autonomy @ 75% load	*h*	**18**
Fuel consumption at 100% load	*lt/h*	**8,7**
Fuel consumption at 75% load	*lt/h*	**6,4**
Fuel consumption at 50% load	*lt/h*	**4,6**

General data

Rated capacity	*Ah*	**1x100**
Auxiliary voltage	*V*	**12**
Exhaust gas temperature	*°C*	**580**
Exhaust gas flow	*l/s*	**120**
Combustion air flow	*l/s*	**42**
Cooling fan airflow	*mc/s*	**0,7**
Exhaust diameter	*mm*	**60**

Weight and Dimensions

Dimensions (l x w x h)	*cm*	**190x90x150**
Weight with liquids (excluding optionals and fuel)	*Kg (+/-3%)*	**945**

Engine

Factory		**Deutz**
Model		**BF4M 2011**
Emissions stage		**Stage 2**
Speed governor		**Mechanic +/-4%**
Cooling	*Tipo*	**Oil**
Active net power	*Kwm*	**36,4**
Nominal net power	*CV*	**49,5**
Cycle	*Tipo*	**4 strokes**
Injection	*Tipo*	**Indirect**
Aspiration	*Tipo*	**Turbo**
Numbers of cylinders	*N*	**4**
Cylinders arrangement		**L**
Bore	*mm*	**94**
Stroke	*mm*	**112**
Total displacement	*lt*	**3,107**
Engine oil features		**15W40-API CI-4/CH-4 ACEA E5-E7**
Engine oil consumption	*%*	**<0,3% fuel consumption**
Total oil capacity	*lt*	**13**
Total coolant capacity	*lt*	**13**
Iso 8528-5 class		**G2**

Alternator

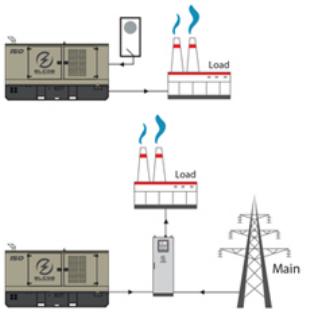
*** May vary based on stock availability. However, a primary brand will be used.**

Factory		**Stamford**
Model		**S1L2-K1**
Prime power prp 3ph+n	*KVA*	**40**
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	*%*	**87,8**
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-40



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**

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

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 l1, l2, l3
Generator voltage l1-n, l2-n, l3-n
Generator frequency

MAINS MEASURES
Mains voltage l1, l2, l3
Mains voltage l1-n, l2-n, l3-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 pipe
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 trestle

Engine
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 disconnector
Automatic refilling oil system
1000 working hours spare parts kit
Cyclone air filter
Redundant start-up battery kit

Alternator
Avr pre-arranged for parallel
Stator windings thermistors - pt100 - in the alternator box (not managed)
Anti-condensation heater

Panel & connection
Rcd block
Automatic transfer switch (qc)
Elcos polivalent 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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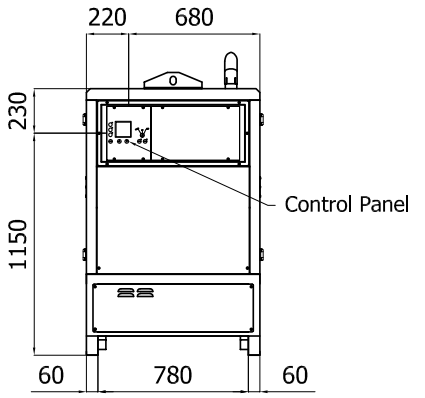
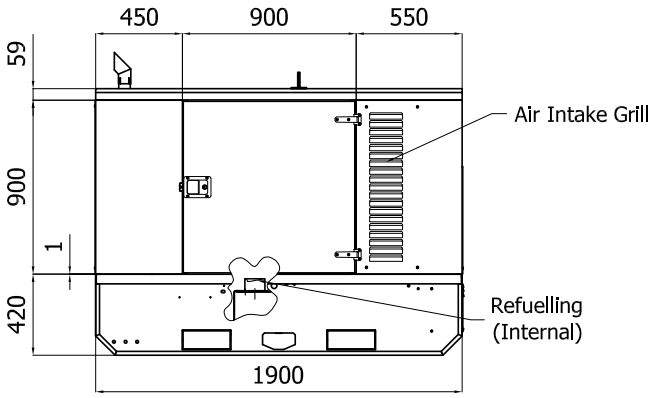
OVERALL DIMENSIONS [mm]

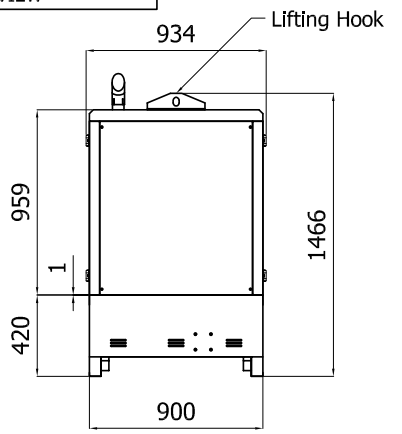
REAR VIEW



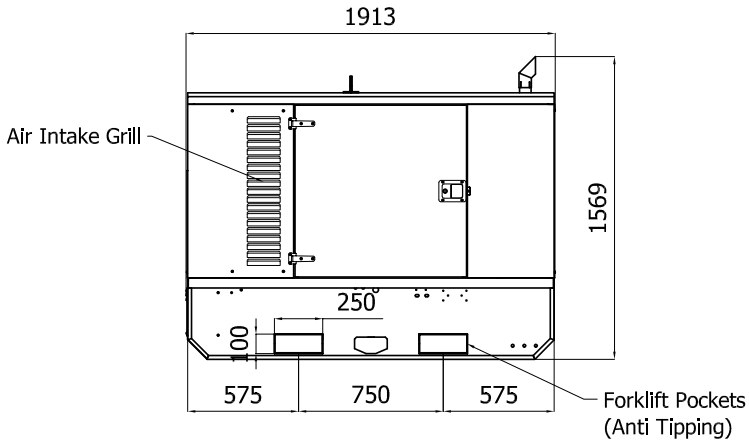
LEFT SIDE VIEW



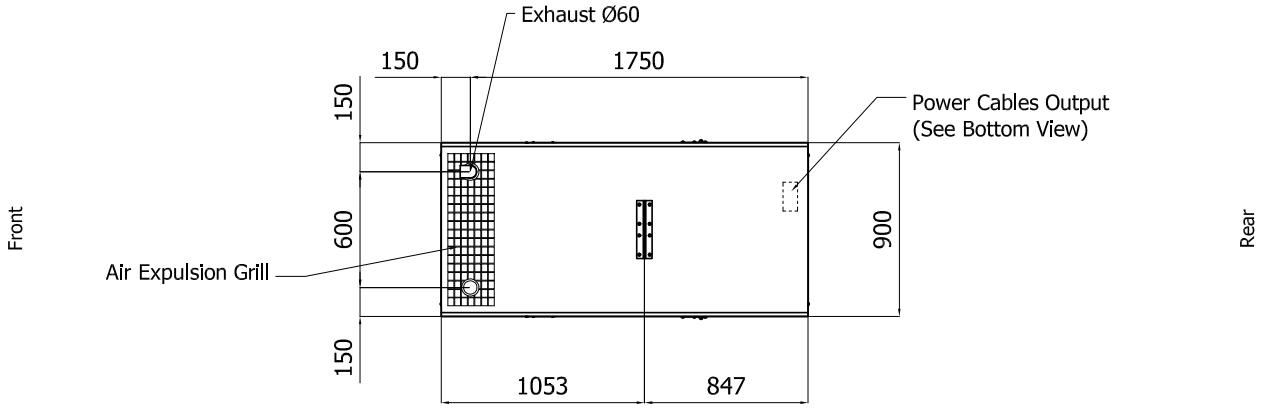
FRONT VIEW



RIGHT SIDE VIEW



TOP VIEW



IMPORTANT:
1) Form and dimension refer to the generating set on catalogue
2) Form and dimension are subject to change in order to update or improve the products
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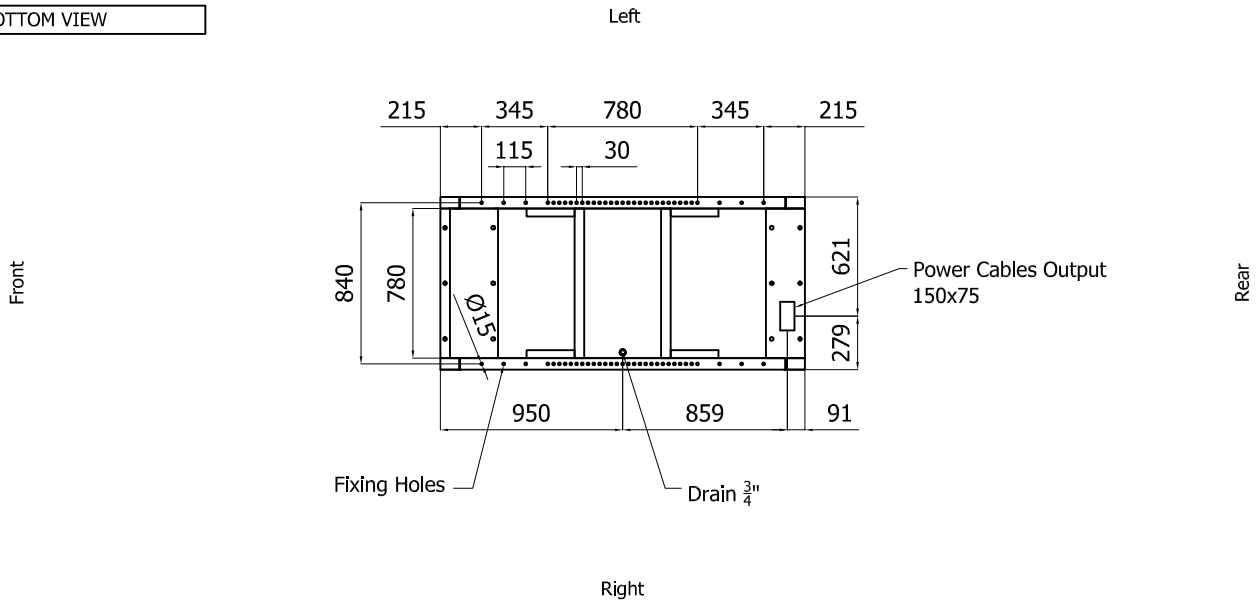
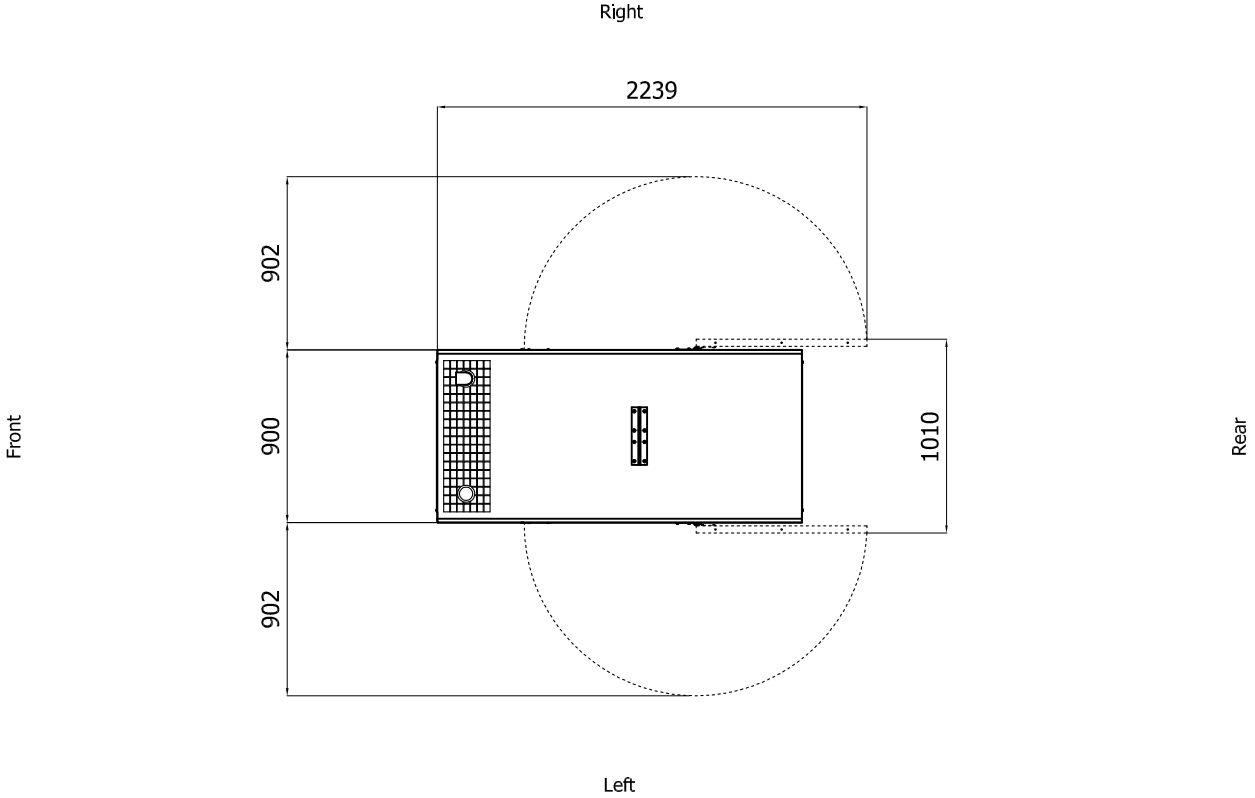
BOTTOM VIEW



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: 0.35 m2
Expulsion: 0.25 m2
ATTENTION: for a correct ventilation the expulsion air and the exaust gas needs to be conveyed in the open-air

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