



Image for demonstration purposes

Generating Set SUPERSILENT - diesel

GE.YA.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

THANGING

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 External oil drain points Engine liquids (oil and antifreeze) Tropicalized radiator Rotating parts protection

Alternator

Avr automatic voltage regulator Impregnation for marine environment

Panel & connection

Emergency stop button Tamperproof panel ip55 Cable output from the bottom lp44 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

Speed	RPM	1500
Frequency	Hz	50
PRP	KVA	10
Prp - prime power	KW	8,0
Ltp - standby power	KVA	11
Ltp - standby power	KW	8,8
Standard voltage	V	400/230
Current	Α	14,5
Cosfi	0,8	0,8
General electrical protection		
Circuit-breaker rated current	А	16
Туре		Magnetothermal switch on panel board
Circuit-breaker poles	N	4P
Noise level +/- 3dB(A) LWA Sound pressure level @ 7 mt	dB(A) dB(A)	83 58
Sound pressure level @ 1 mt	dB(A)	67
Fuel Consumption		
- Tuci consumption		
		diesel
Туре	lt	diesel
Type Standard fuel tank capacity	lt h	
Type Standard fuel tank capacity Autonomy @ 75% load		110
Type Standard fuel tank capacity Autonomy @ 75% load Fuel consumption at 100% load	h	110 62
Type Standard fuel tank capacity Autonomy @ 75% load Fuel consumption at 100% load Fuel consumption at 75% load	h lt/h	110 62 2,4
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Type Standard fuel tank capacity Autonomy @ 75% load Fuel consumption at 100% load Fuel consumption at 75% load Fuel consumption at 50% load General data Rated capacity Auxiliary voltage	h t/h t/h t/h	110 62 2,4 1,8 1,3
Type Standard fuel tank capacity Autonomy @ 75% load Fuel consumption at 100% load Fuel consumption at 75% load Fuel consumption at 50% load General data Rated capacity Auxiliary voltage	h It/h It/h It/h Ah	110 62 2,4 1,8 1,3
Type Standard fuel tank capacity Autonomy @ 75% load Fuel consumption at 100% load Fuel consumption at 50% load Fuel consumption at 50% load General data Rated capacity Auxiliary voltage Exhaust diameter	h It/h It/h It/h Ah	110 62 2,4 1,8 1,3





Engine

Factory		Yanmar
Model		3TNV76
Emissions stage		Stage 3A
Speed governor		Mechanic +/-5%
Radiator	°C	50
Cooling	Тіро	liquid (water + 50% Paraflu11)
Active net power	Kwm	9
Nominal net power	CV	12,2
Cycle	Тіро	4 strokes
Injection	Тіро	Indirect
Aspiration	Тіро	Natural
Numbers of cylinders	N	3
Cylinders arrangement		L
Bore	mm	76
Stroke	mm	82
Total displacement	lt	1,115
Engine oil features		15W40-API CI-4/CH-4 ACEA E5-E7
Engine oil consumption	%	<0,1% fuel consumption
Total oil capacity	lt	3,5
Total coolant capacity	lt	4

Alternato

* 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 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

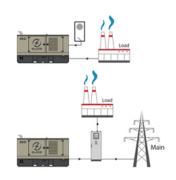




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Control Systems on board QLE-A-OSC-10





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

Battery charger

Model		ELCOS - CB1
Maximum output current	Α	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





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Control Module



ELCOS Brand Model MC2 AMF - MRS Operating mode

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 l1-n, l2-n, l3-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 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 Anti-condensation heater

Panel & connection

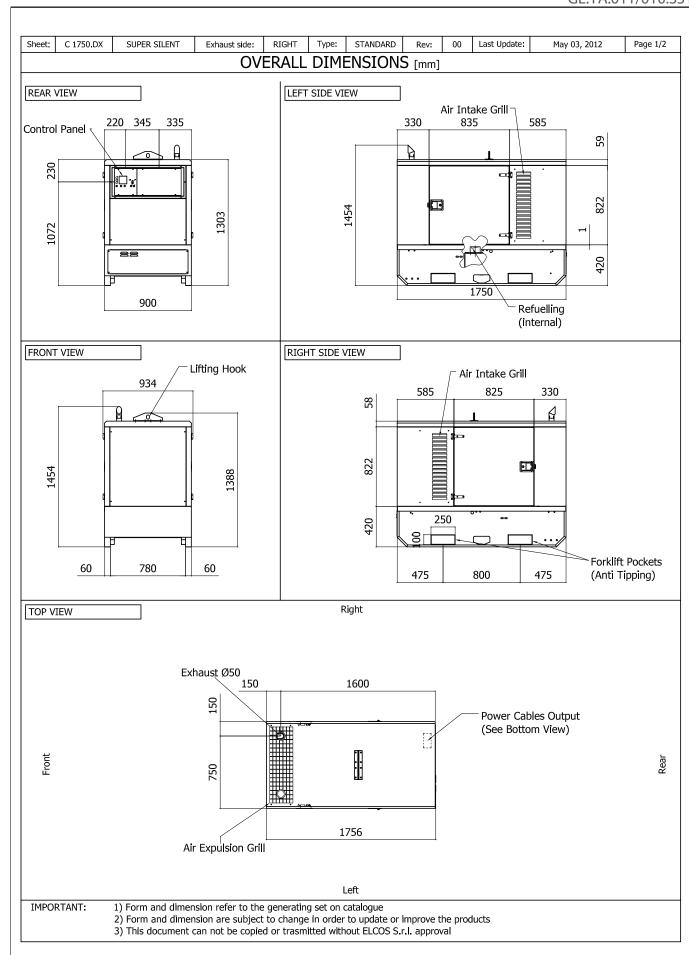
Rcd block Automatic transfer switch (qc) Elcos polivalent panel (qpe)

PRP

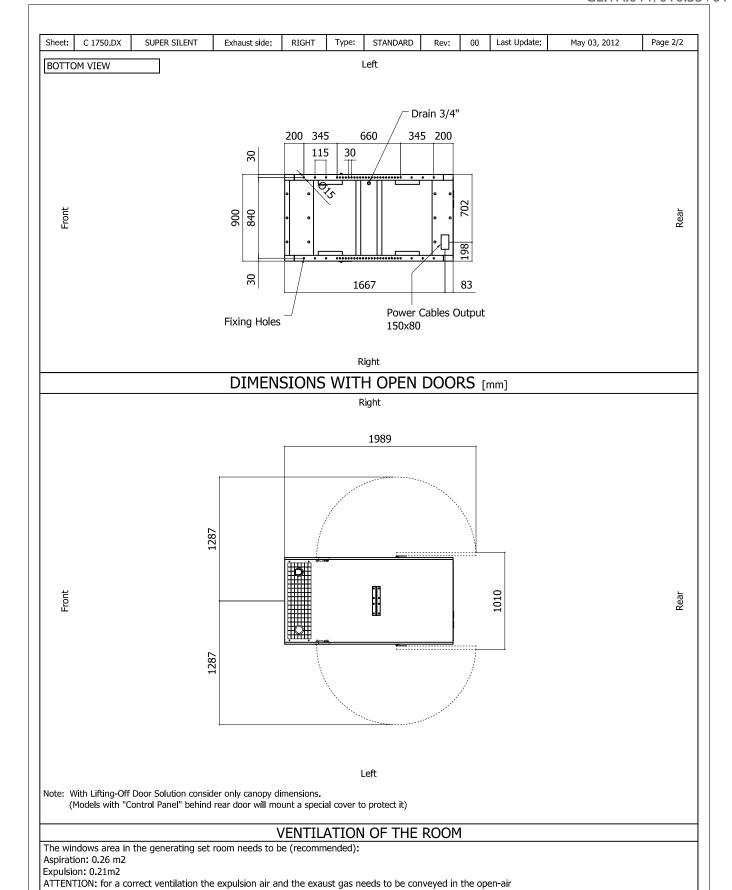
Engines of this rating provide unlimited hours of usage in a variable load application. The average load factor should not exceed 70% of the engine's prime power rating with a maximum number of 500 operational hours at 100% prime power rating. An overload capability of 10% is available, however, is limited 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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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 3) This document can not be copied or trasmitted without ELCOS S.r.l. approval

IMPORTANT: