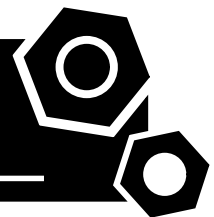


Generator set

Sound-proof type

PK15S

SPECIFICATIONS



SK series

PK15S

50 Hz @ 1500rpm, 1-phase/3-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (CE)
- China Compulsory Certification (CCC)
- TLC Quality Certification (TLC)
- ISO8528-1995
- GB/T2820-1997

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 45°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters above sea Level.

Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

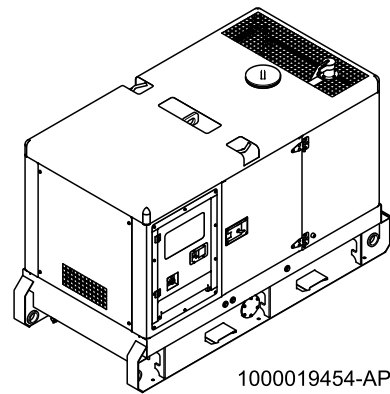
2 General Features

- KUBOTA engine D1703-BG
- Close coupled to a Stamford alternator PI144E
- Microprocessor control module PLC-7320
- NADER main circuit breaker: 1-Phase 80A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited, SHUNT
- A.V.R. model: AS480
- Key switch

- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 8 hours running
- Drain points for fuel tank
- Operation Manual / Parts List/ Specifications

3 Equipment Specification

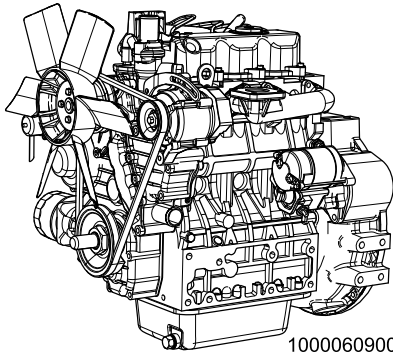
General technical data



Model.....	PK15S
Structure type	R
Tank capacity.....	140L
Dry weigh.....	928kg
Noise level @7m	N/A
Dimensions L×W×H.....	2024x1040x1354mm
Standby Power	16.5kVA/13.2kW
Prime Power	15kVA/12kW

Voltage	220V	230V	240V
Ampere	68.2A	65.2A	62.5A

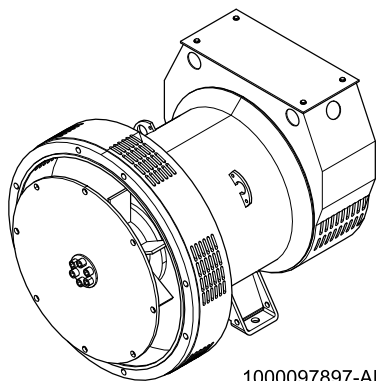
Diesel engine



1000060900-AP1-A7

Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	D1703-BG
Dimensions L×W×H.....	608.4×548.3×642.8mm
Dry Weigh (approx.)	148kg
Number of Cylinders.....	3
Bore.....	87mm
Stroke.....	92.4mm
Displacement.....	1.647L
Compression Ratio.....	23
Type of injection.....	N/A
Intake System.....	Natural aspirated
Intake Resistance.....	1.96kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	No.2-D(ASTMD975)
Type of Oil.....	Class CF lubricating oil
Oil Capacity.....	7.6L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	7.1L
Back Pressure.....	≤7.07kPa
Standby Power.....	15.1kW
Continuous Power.....	12.8kW
Fuel Consumption(100%load).....	219g/kW.h

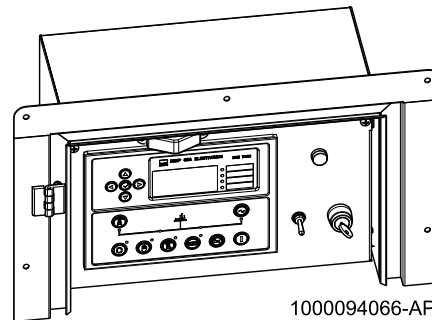
Alternator



1000097897-AP1-A1

Alternator Manufacturer/Brand.....	Stamford
Alternator Model.....	PI144E
Exciter.....	Brushless
Cooling Fan.....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class.....	H
Winding Pitch.....	2/3
Terminals.....	12
Drip Proof.....	IP23
Altitude.....	≤1000m
Overspeed.....	2250rpm
Air Flow.....	0.100 m³/sec(50Hz),0.122 m³/sec(60Hz)
Voltage Regulation.....	± 1.0 %
Total harmonic TGH / THC.....	at no load < 1.5% - on load < 5.0%
Telephone Interference.....	THF<2%;TIF<50

PLC-7320 Control System



1000094066-AP1-A1

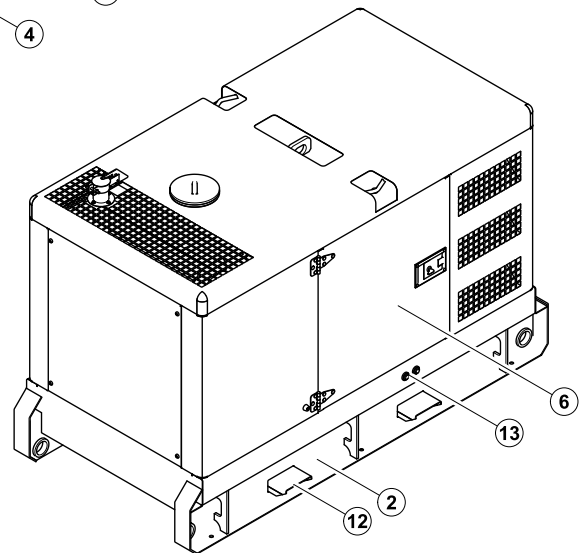
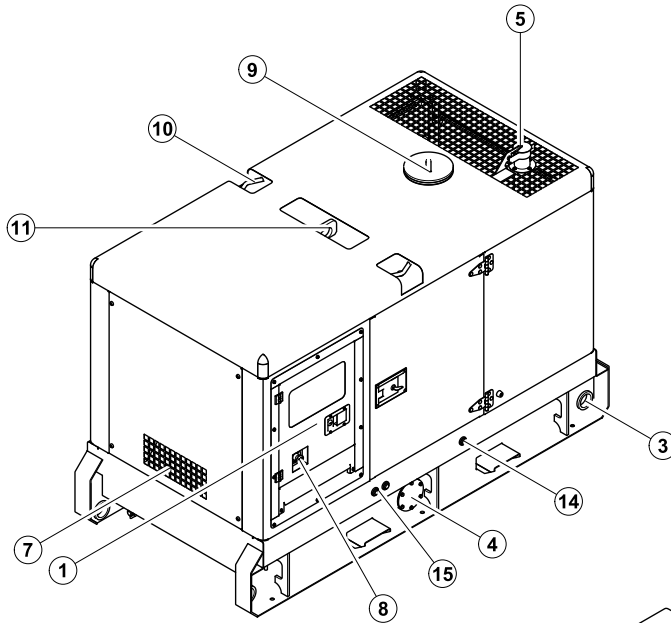
PLC-7320 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

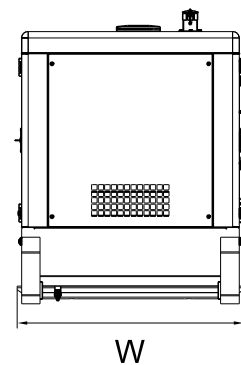
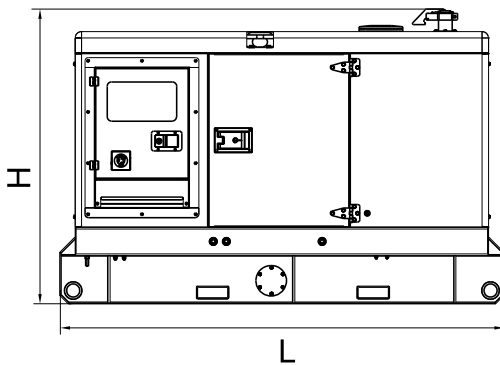
4 Overall Dimensions

1000019454-DR1-B3

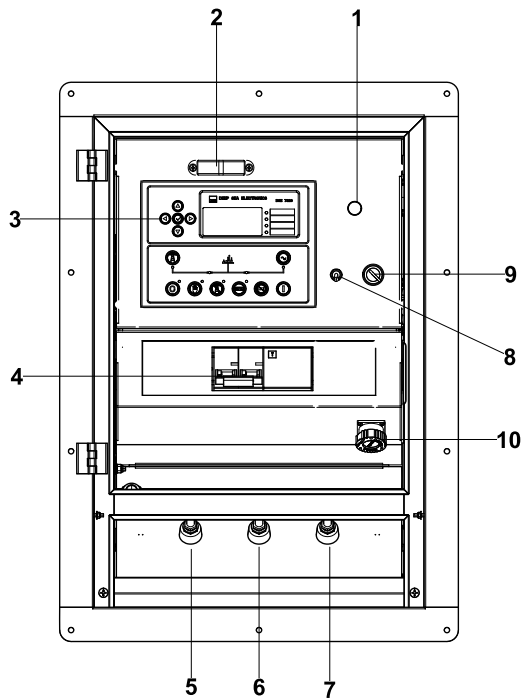
Dry weight	928kg
Fuel tank capacity	140L
Dimensions L x W x H	2042x1040x1354mm



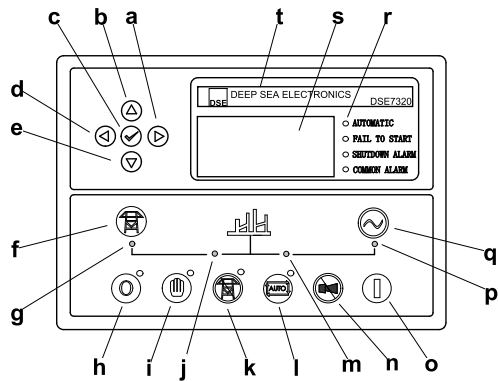
- ⑧ Emergency stop switch
- ⑦ Air inlet
- ⑥ Access door
- ⑤ Exhaust gas outlet
- ④ Fuel drain
- ③ Tie down
- ② Base frame
- ① Control cabinet
- ⑮ Oil drain hose fitting
- ⑭ Coolant drain hose fitting
- ⑬ External fuel inlet/return drain hose fitting
- ⑫ Fork lift channel
- ⑪ Lifting lug
- ⑩ Roping lug
- ⑨ Coolant inlet



5 Control System



Control & Field wiring cabinet



Control Panel

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control module
4	Main circuit breaker
5	Live wire terminal
6	Neutral wire terminal
7	Ground wire terminal
8	Control cabinet lamp switch
9	Key switch
10	ATS communication interface

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	Mains supply available LED
h	Stop / Reset button
i	Manual button (Manual control mode)
j	Mains supply on load LED
k	Test button (Test mode)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	Button (transfer the load to the genset, when in Manual mode only)
r	Alarm LED (4 alarm items)
s	LCD display
t	Control module name