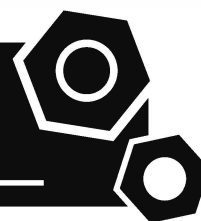


Generator set
Sound-proof type
A31KS-T3

SPECIFICATIONS



T3 series A31KS-T3

60 Hz @ 1800rpm,3-phase/5-wiring



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

Electrical devices have obtained the certification of:

- CSA
- UL

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

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.

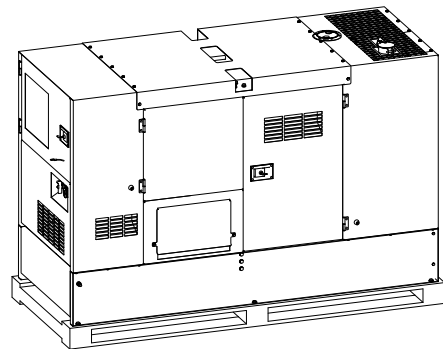
2 General Features

- S[®] à engine V3300-E3BG-CHN-1
- Close coupled to S[®] à alternator LSA42.3VS3
- Q[®] à control module PLC-920
- ABB main circuit breaker: 100A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited, SHUNT
- Key switch

- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/72AH battery and charger
- Lockable battery isolator switch
- Power coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 18 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

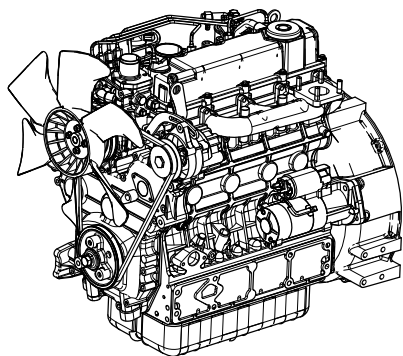
General technical data



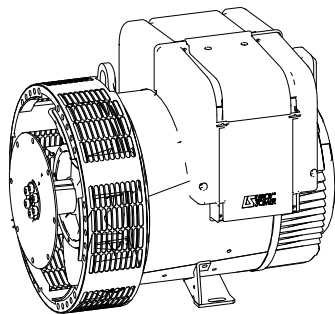
Model.....A31KS-T3
Structure type R
Tank capacity..... 165L
Dry weight..... 1276kg
Sound pressure level @7m66.4dBA
Dimensions L×W×H.....2300x1115x1553mm
Prime Power 35kVA/28kW
Standby Power 39kVA/31kW

Voltage	208V	220V	230V	240V	
Ampere	86.0A	81.4A	77.8A	74.5A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	N/A	4.6	5.9	9.1	10.0

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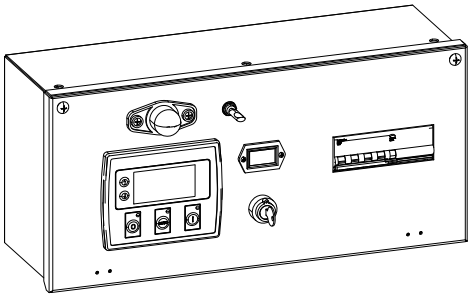


Engine Manufacturer/Brand.....	Kubota
Engine Model.....	V3300-E3BG-CHN-1
Dimensions L×W×H.....	769.2×536×745.9mm
Dry Weigh (approx.)	281Kg
Number of Cylinders.....	4
Bore.....	98mm
Stroke	110mm
Displacement.....	3.318L
Compression Ratio	22.6
Type of injection.....	Direct injection
Intake System.....	Natural aspirated
Intake Resistance	≤1.96kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	No.2-DS500 or S15.
Type of Oil	Class CF lubricating oil
Oil Capacity	13.2L
Type of Coolant	Glycol mixture
Coolant Capacity	N/A
Back Pressure	≤7.07kPa
Prime Power.....	30.6kW
Fuel Consumption(100%load).....	9.1L/h



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA42.3VS3
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	2250 rpm
Air Flow.....	0.514m³/s(50HZ),0.617m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-920 Control System

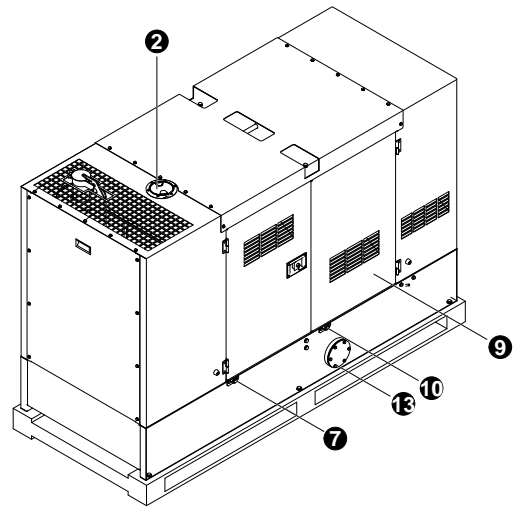
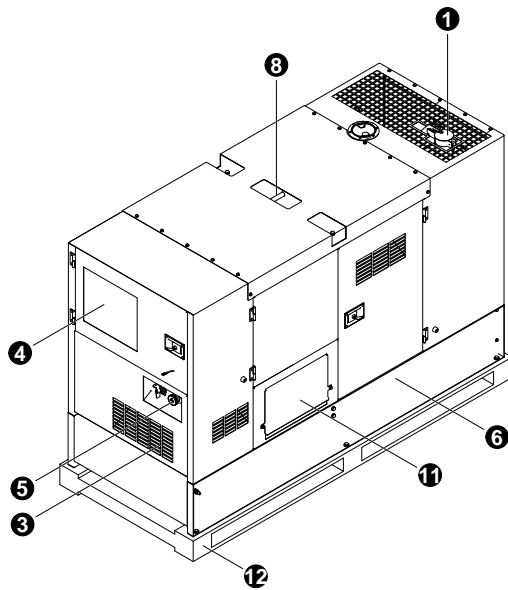


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

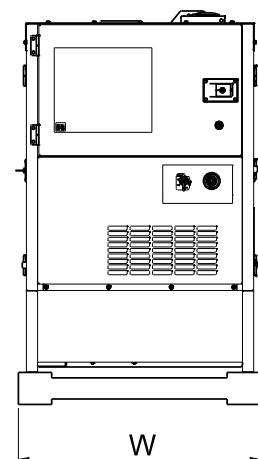
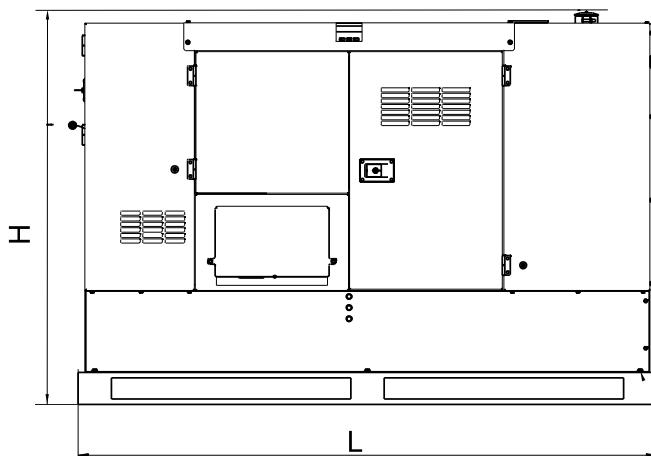
Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

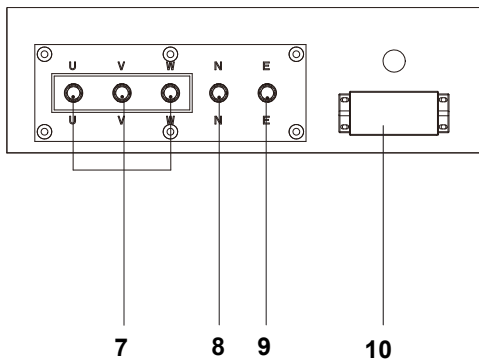
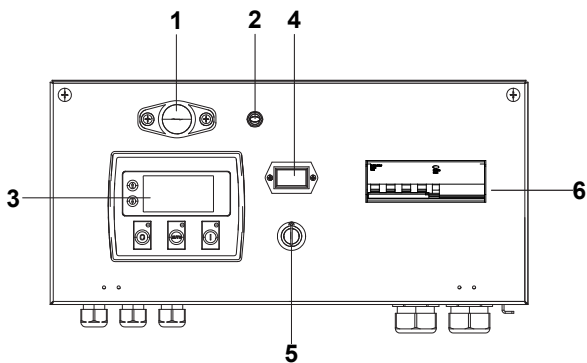
4 Overall Dimensions



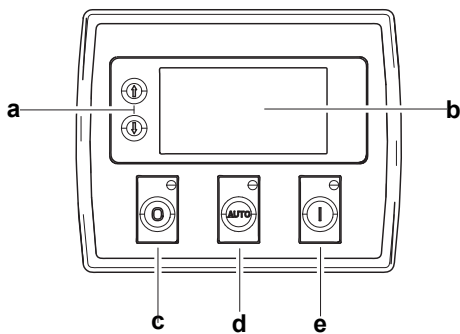
- | | |
|------------------------------|--------------------------|
| ⑧ Lifting lug | ⑬ Fuel drain |
| ⑦ Coolant drain hose fitting | ⑫ Wooden tray |
| ⑥ Base frame | ⑪ Cable trench |
| ⑤ Emergency stop switch | ⑩ Oil drain hose fitting |
| ④ Control cabinet | ⑨ Access door |
| ③ Air inlet | |
| ② Coolant inlet | |
| ① Exhaust gas outlet | |



5 Control System



Control & field wiring cabinet



Control module

Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Control module
4	Time counter
5	Key switch
6	Main circuit breaker
7	Live wire terminals
8	Neutral wire terminal
9	Ground wire terminal
10	Mains input/remote communication connector

Ref.	Description
a	Navigation button«» Accept (Configuration mode only)
b	Main status display
c	Stop/reset button«» Next page (Configuration mode only)
d	Auto start button«» Decrease value/next item (Configuration mode only)
e	Start button«» Increase value/next item (Configuration mode only)

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