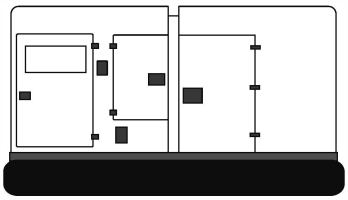
POWERLINK
Power Systems



Generator set
Sound-proof type
A46KS-T3

SPECIFICATIONS

www.powerlinkworld.com

T3 series
A46KS-T3,Tire 3

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

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (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℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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

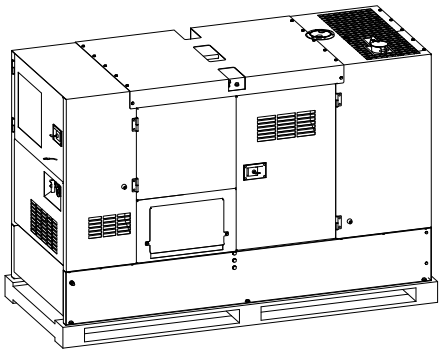
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Kubota engine V3800DI-T-E3-BG
- Close coupled to Leroy Somer alternator LSA42.3M8
- Intelligent control module PLC-920
- ABB main circuit breaker: 163A
- 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℃ 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 31 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data



Model.....A46KS-T3

Structure type ..... R

Tank capacity..... 340L

Dry weight.....1276kg

Sound pressure level @7m 67.5dBA

Dimensions L×W×H.....2300x1050x1450mm

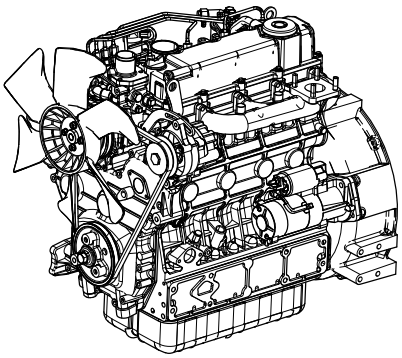
Prime Power 53kVA/42kW

Standby Power 58kVA/46kW

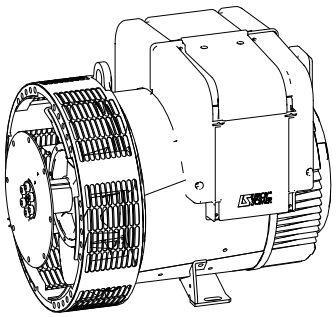
Voltage	208V	220V	230V	240V
Ampere	147.1A	139.1A	133.0A	127.5A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	N/A	5.4	8.2	10.7	11.8

Power System

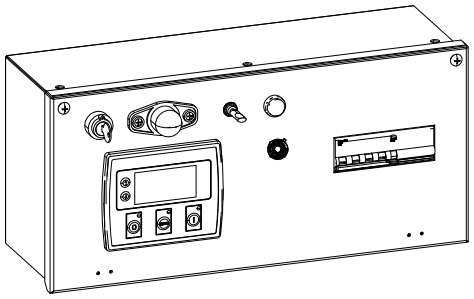


Engine Manufacturer/Brand.....Kubota
Engine Model..... V3800DI-T-E3-BG
Dimensions L×W×H.....775×540×803mm
Dry Weigh (approx.) 310Kg
Number of Cylinders.....4
Bore 100mm
Stroke 120mm
Displacement.....3.769L
Compression Ratio 19.0
Type of injection..... High pressure common rail
Intake System..... Turbocharged
Intake Resistance .....≤3.92kPa
Cooling System .....Water cooled
Fan ..... Pusher
Battery Voltage 12V
Type of Fuel..... No.2-D S15, Ultra Low Sulfur Fuel Only
Type of Oil .....Class CJ-4/CK-4 oil as per API classification
Oil Capacity 13.2L
Type of Coolant ..... Glycol mixture
Coolant Capacity 8.2L
Back Pressure .....≤13.3kPa
Prime Power.....39.2kW
Fuel Consumption(100%load).....10.7L/h



Alternator Manufacturer/Brand ..... Leroy Somer
Alternator Model LSA42.3M8
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

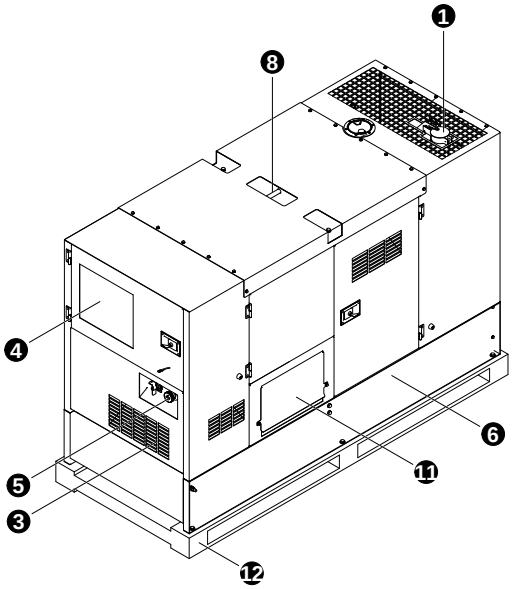


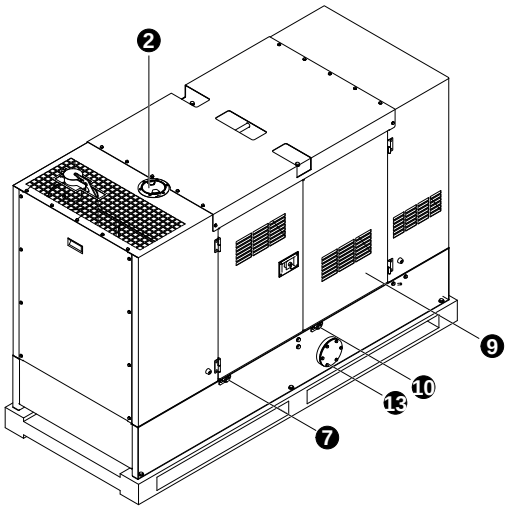
PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

Standard Control Function

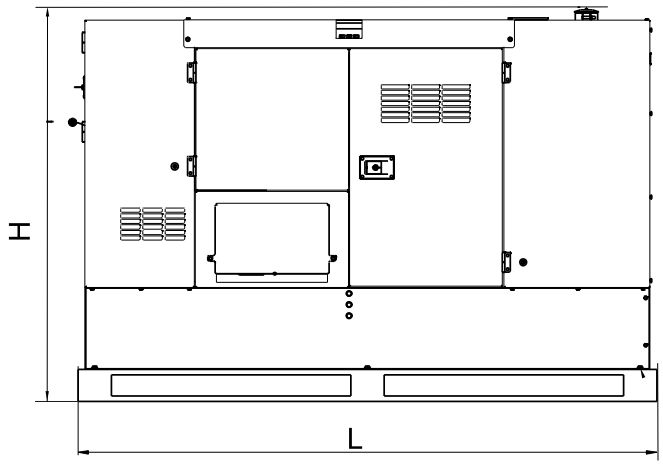
- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

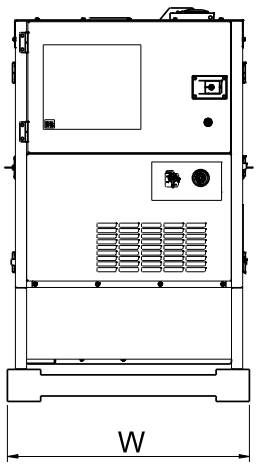
4 Overall Dimensions



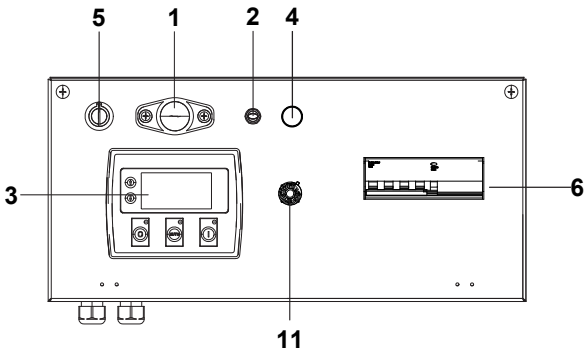


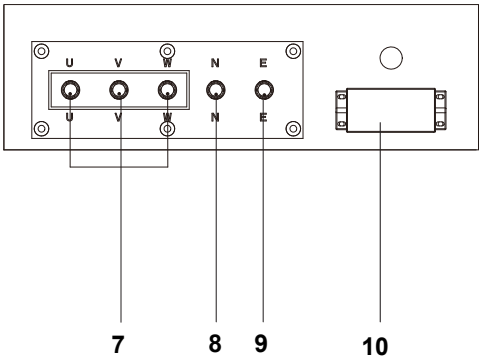
⑧ Lifting lug
⑦ Coolant drain hose fitting
⑥ Base frame
⑤ Emergency stop switch
④ Control cabinet
③ Air inlet
② Coolant inlet
① Exhaust gas outlet
⑬ Fuel drain
⑫ Wooden tray
⑪ Cable trench
⑩ Oil drain hose fitting
⑨ Access door





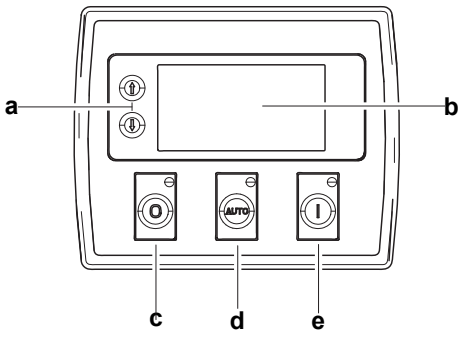
5 Control System





Control & field wiring cabinet

Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Control module
4	Charge indicator
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
11	Voltage adjusting knob



Control module

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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