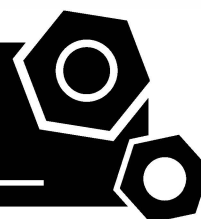


**Generator set**  
**Sound-proof type**  
**B650SE3-AU**

# **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

### 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 90%.
- 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.

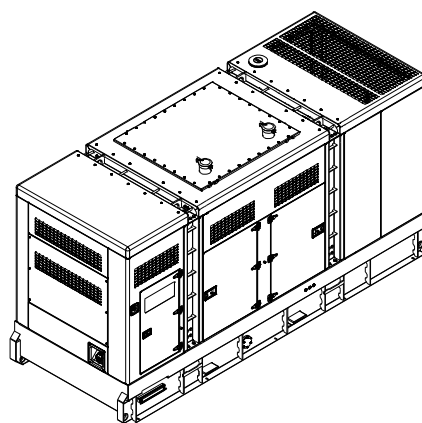
## 2 General Features

- Baudouin engine 6M33G6D3/5
- Close coupled to Leroy Somer alternator LSA49.3S4
- Microprocessor control module PLC-500
- ABB main circuit breaker: 1000A, 4P
- Rotate speed governor: ECU
- Excitation System: AREP
- A.V.R.Model: D350
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector
- 2x12V sealed for life maintenance free battery

- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank with 12 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operator's Manual / Specifications

## 3 Equipment Specification

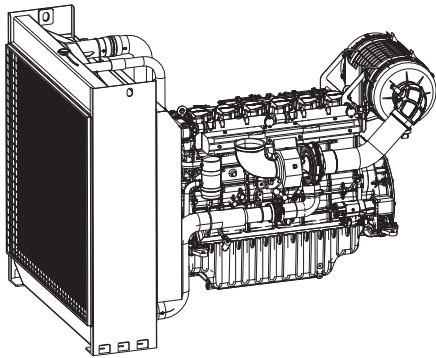
### General technical data



Model.....	B650SE3-AU
Structure type .....	R
Tank capacity.....	1650L
Dry weight.....	6720kg
Noise level @7m .....	77.8dBA
Dimensions L×W×H.....	4701×1749×2617mm
Standby Power .....	725kVA/580kW
Prime Power .....	650kVA/520kW

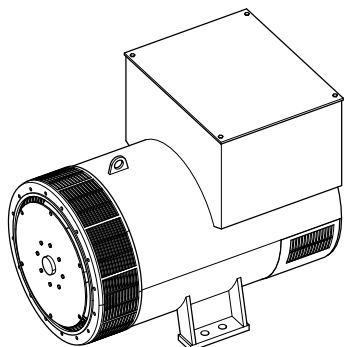
Voltage	380V	400V	415V		
Ampere	988A	938A	904A		
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	40.8	77.8	110.4	139.9	154.2

## Diesel Engine



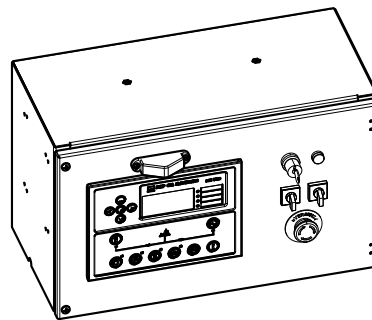
Engine Manufacturer/Brand.....	Baudouin
Engine Model.....	6M33G6D3/5
Dimensions L×W×H.....	2798x1680x1954mm
Dry Weigh (approx.) .....	2472kg
Number of Cylinders.....	6
Bore.....	150mm
Stroke .....	185mm
Displacement.....	19.6L
Compression Ratio .....	15.0
Type of Injection .....	High Pressure Common Rail
Intake System.....	Turbocharged and aftercooled
Intake Resistance .....	≤6.5kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	24V
Type of Fuel.....	BS2869 class A2 or BS EN590
Type of Oil .....	API CH4 15W/40
Oil Capacity .....	64L
Type of Coolant .....	Glycol Mixture
Coolant capacity .....	159L
Back Pressure .....	≤7.5kPa
Standby Power .....	633kW
Prime Power .....	575kW
Fuel Consumption(100%load).....	139.9L/h

## Alternator



Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA49.3S4
Exciter.....	Brushless
Cooling Fan .....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class .....	H
Winding Pitch .....	2/3
Terminals .....	6
Drip Proof .....	IP23
Altitude.....	≤1000m
Overspeed .....	2250rpm
Air Flow.....	1m³/s(50Hz),1.2m³/s(60Hz)
Voltage Regulation .....	±0.5%
Total harmonic TGH / THC at no load < 4 % - on load < 4%	
Telephone Interference.....	THF<2%;TIF<50

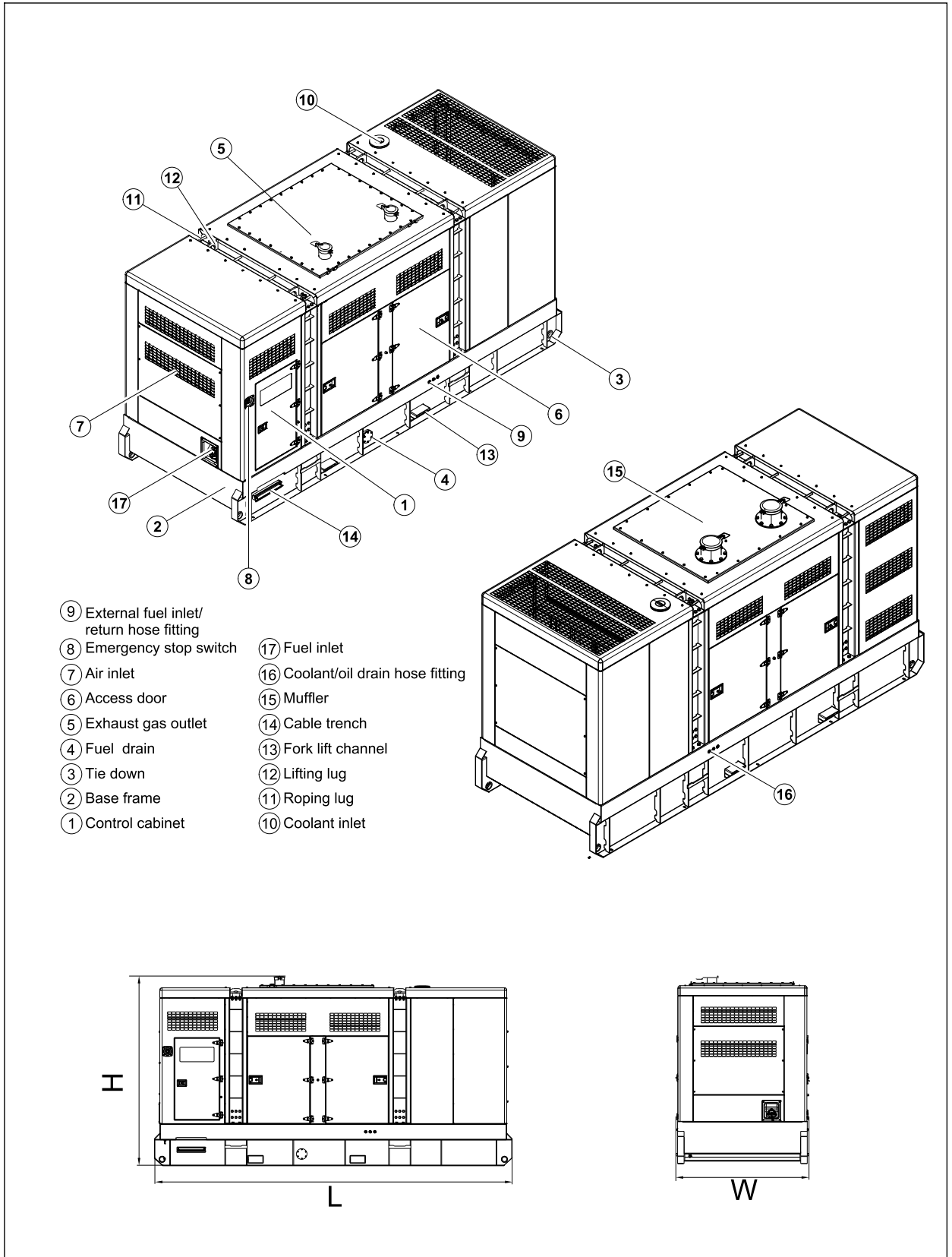
## PLC-500 Control System



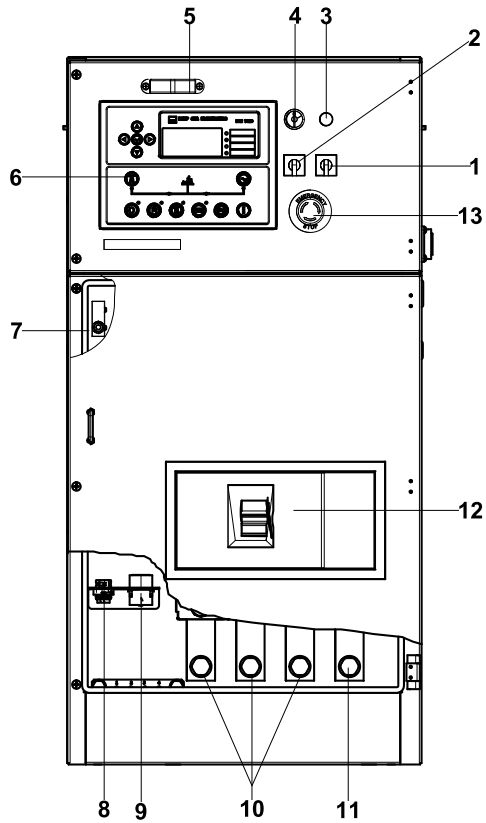
PLC-500 is a microprocessor based control unit containing all necessary functions for protection of the genset and the breaker control. Furthermore, it contains all necessary three-phase measuring circuits and presents all values and alarms on the LCD display. The module has the function of load sharing which enables the module to share the active load (kW) equally when operating in parallel with other gensets. The load sharing is performed so each genset takes a portion of the load that is calculated in percent according to the nominal power.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the genset
- Indicating lights and alarms operation status, fault conditions, all parameters and alarms
- Manual, automatic and remote work mode selectable
- RS232 & RS485 can be used at the same time
- Real time clock for time and date display, overall runtime display, 250 log entries

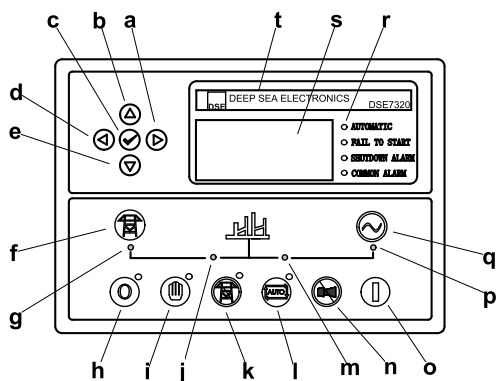
## 4 Overall Dimensions



## 5 Control System



**Control & Field wiring cabinet**



**Control Panel**

Ref.	Description
1	Control cabinet lamp switch
2	Mains input changeover switch
3	Charge indicator
4	Key switch
5	Control cabinet lamp
6	Control module
7	Limit switch
8	Remote run connector
9	ATS connector
10	Live wire terminals
11	Neutral wire terminal
12	Main circuit breaker
13	Emergency stop switch

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

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07.2021
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<http://www.powerlinkworld.com>

*Specification may change without prior notice. For more info.,  
contact Power Link or your local distributors please.*