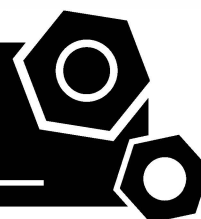


**Generator set**  
**Sound-proof type**  
**QSV100BS**

# **SPECIFICATIONS**



# QSV MB series QSV100BS



50 Hz @ 1500rpm, 3-phase/5-wiring

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

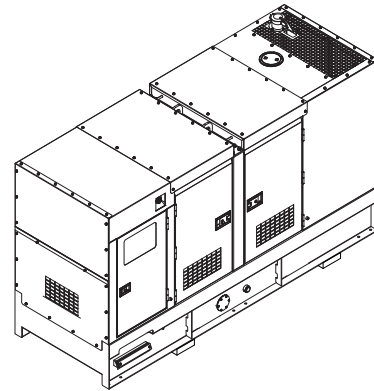
## 2 General Features

- Baudouin engine 4M10G110/5
- Close coupled to PowerLink alternator PL3A
- Microprocessor control module PLC-920
- Main circuit breaker: 160A,
- Rotate speed governor: EFC
- Excitation System: Self Excited, SHUNT
- A.V.R. Model: SX440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector
- 1x12V/120AH 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
- Drain points for fuel tank
- Breather valve for fuel tank
- Operator's Manual / Specifications

## 3 Equipment Specification

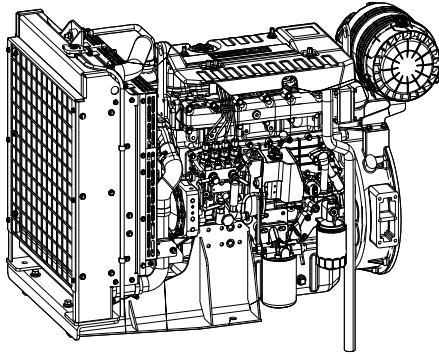
### General technical data



Model..... QSV100BS  
 Structure type ..... R  
 Tank capacity.....280L  
 Dry weight..... 1979kg  
 Noise level @7m ..... 70.1dBA  
 Dimensions L×W×H.....2700x1150x1850mm  
 Standby Power .....110kVA/88kW  
 Prime Power .....100kVA/80kW

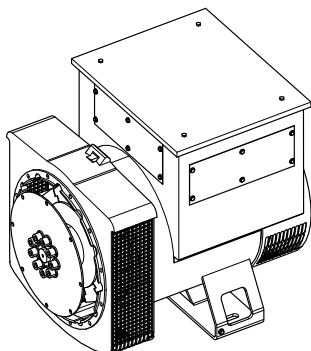
Voltage	380V	400V	415V		
Ampere	152A	144A	139A		
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	6.0	11.0	16.0	21.3	24.4

## Diesel Engine



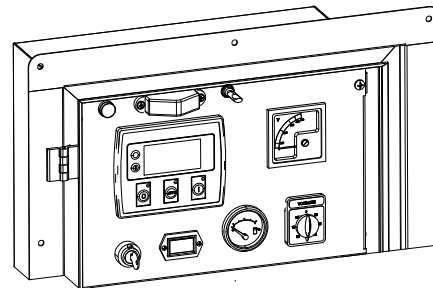
Engine Manufacturer/Brand.....	Baudouin
Engine Model.....	4M10G110/5
Dimensions L×W×H.....	1330×741×995mm
Dry Weigh (approx.).....	525kg
Number of Cylinders.....	4
Bore.....	105mm
Stroke.....	118mm
Displacement.....	4.1L
Compression Ratio.....	17.5
Type of Injection.....	Direct
Intake System.....	Turbocharged and Aftercooled
Intake Resistance.....	≤6.0kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	BS2869 class A2 or BS EN590
Type of Oil.....	API CH4 15W/40
Oil Capacity.....	14L
Type of Coolant.....	Glycol Mixture
Coolant capacity.....	22.4L
Back Pressure.....	≤5kPa
Standby Power.....	100kW
Prime Power.....	90kW
Fuel Consumption(100%load).....	21.3L/h

## Alternator



Alternator Manufacturer/Brand.....	PowerLink
Alternator Model.....	PL3A
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.....	N/A
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

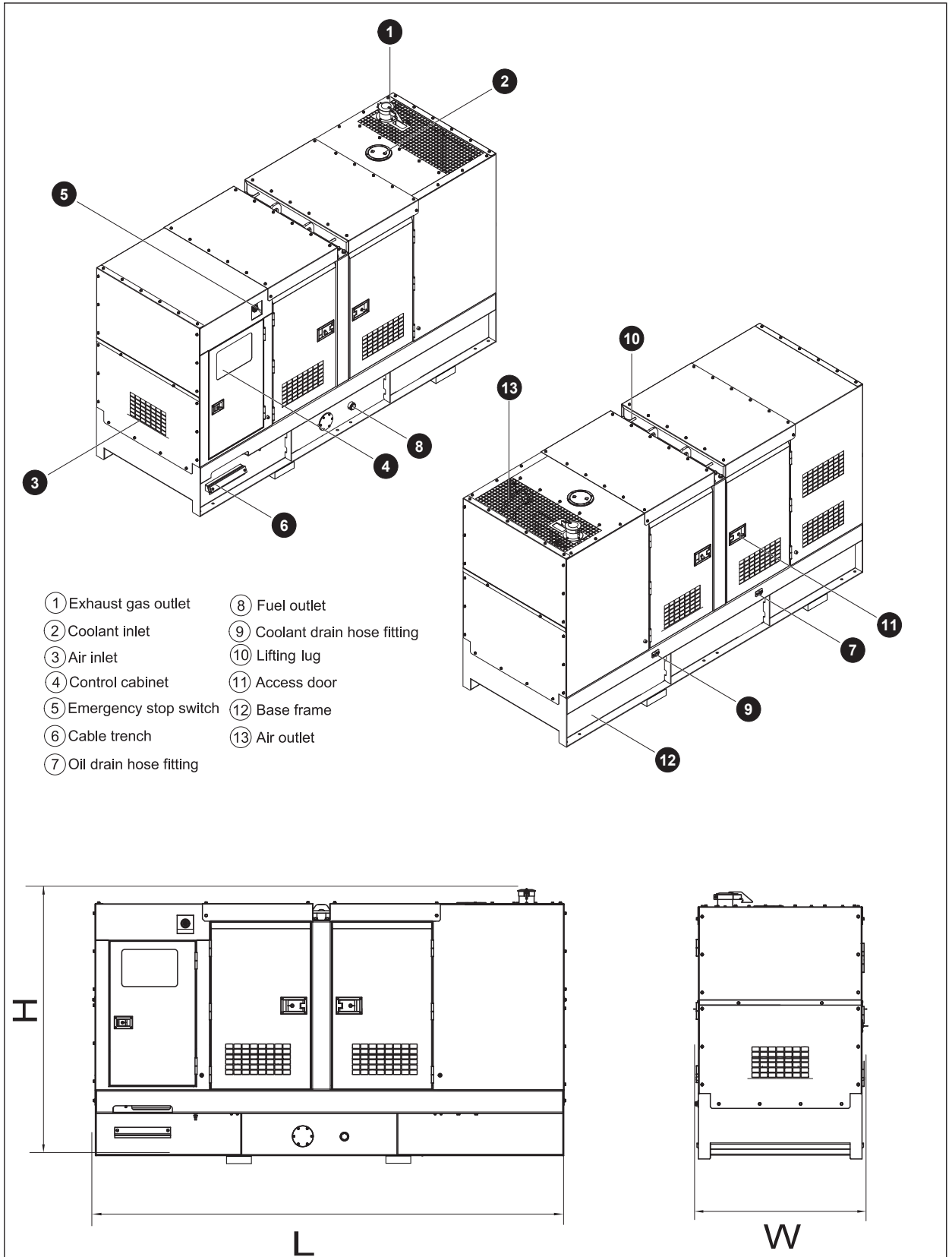


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

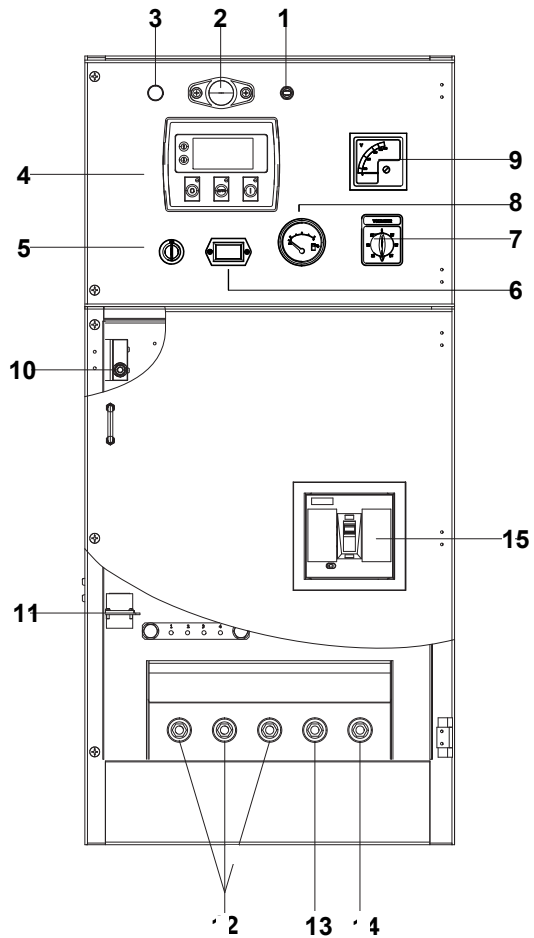
### Standard Control Function

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

## 4 Overall Dimensions

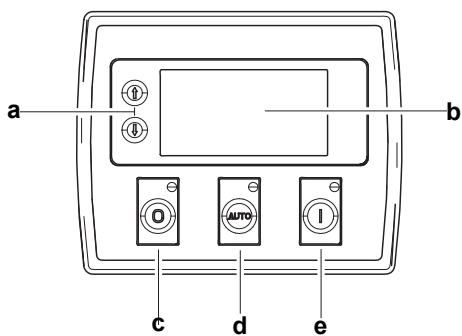


## 5 Control System



**Control & field wiring cabinet**

Ref.	Description
1	Control cabinet lamp switch
2	Control cabinet lamp
3	Charge indicator
4	Control module
5	Key switch
6	Time counter
7	Voltage changer-over switch
8	Fuel level meter
9	Voltage meter
10	Limit switch
11	Mains input/Remote control/ATS connector
12	Live wire terminal
13	Neutral wire terminal
14	Ground wire terminal
15	Main circuit breaker



**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)

QSV100BS
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02.2023
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