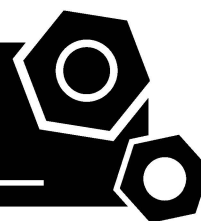


**Generator set**  
**Sound-proof type**  
**QSV60CS**

**SPECIFICATIONS**



# QS series QSV60CS

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
- GB/T2820.5-2009

### 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 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.

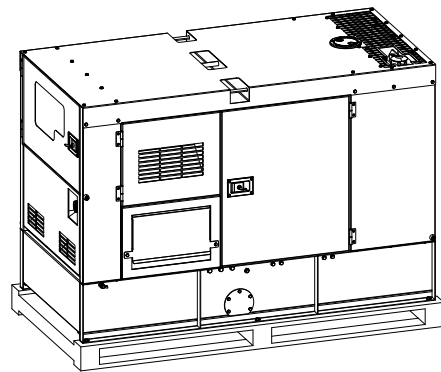
## 2 General Features

- Cummins engine 4BTA3.9-G2
- Close coupled to Stamford alternator S1L2-Y1
- Microprocessor control module PLC-920
- Main circuit breaker: 125A
- Rotate speed governor: Electrical governor
- Excitation system: Self excited,SHUNT
- A.V.R model: AS480
- 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
- 45°C radiator
- Steel base frame
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 9 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment

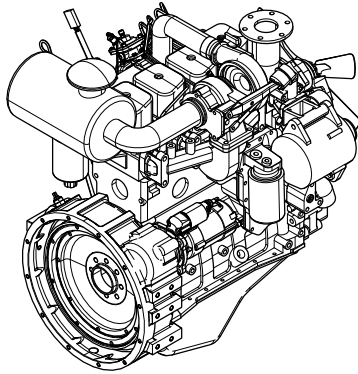
### General technical data



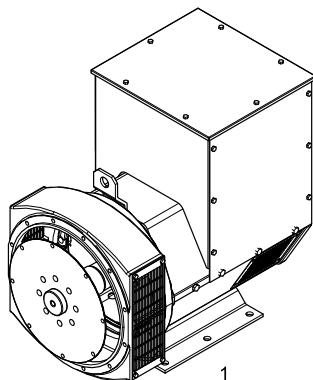
Model..... QSV60CS  
 Fuel tank..... 120L  
 Dry weight..... 1400kg  
 Sound pressure level @ 7m ..... 62.0dBA  
 Dimensions L×W×H.....2300x970x1500mm  
 Standby Power ..... 66kVA/53kW  
 Prime Power ..... 60kVA/48kW

Voltage	380V	400V	415V		
Ampere	91.2A	86.6A	83.5A		
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	3.3	6.5	10	12.9	14.2

## Power System



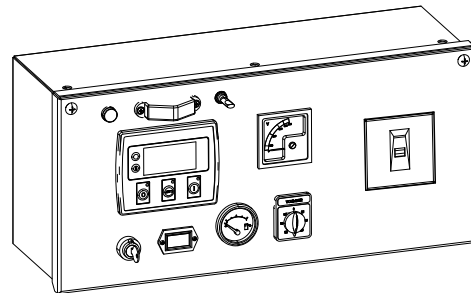
Engine Manufacturer/Brand .....	Cummins
Engine Model .....	4BTA3.9-G2
Dimensions L×W×H.....	884.9*748.4*985.6
Dry Weigh (approx.) .....	350kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke .....	120mm
Displacement.....	3.9L
Compression Ratio .....	16.5
Type of injection.....	Direct injection
Intake System.....	Turbocharged,water-to-air charge cooled
Intake Resistance .....	≤ 6.28kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	12/24V
Type of Fuel.....	Diesel
Type of Oil .....	15W40-CF4
Oil Capacity .....	10.9L
Type of Coolant .....	Glycol mixture
Coolant Capacity .....	8.3L
Back Pressure .....	≤10.1kPa
Standby Power .....	55kW
Prime Power .....	50kW



1

Alternator Manufacturer/Brand .....	Stamford
Alternator Model .....	S1L2-Y1
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

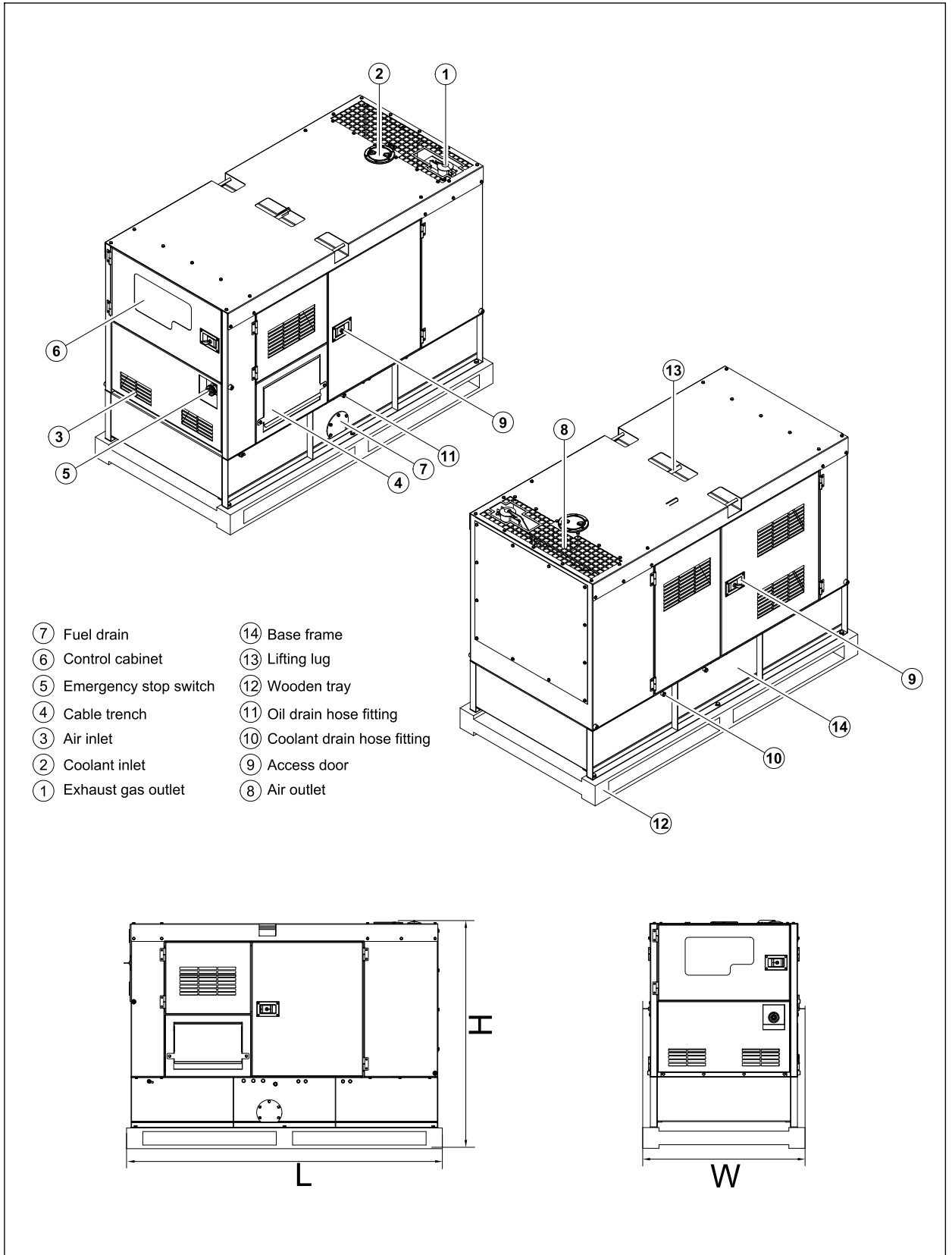


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

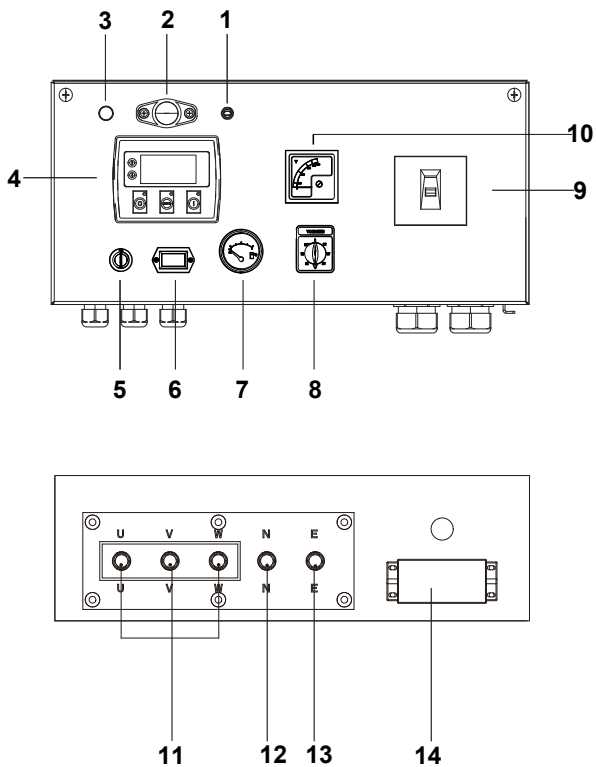
### Standard Control Function

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

## 4 Overall Dimensions

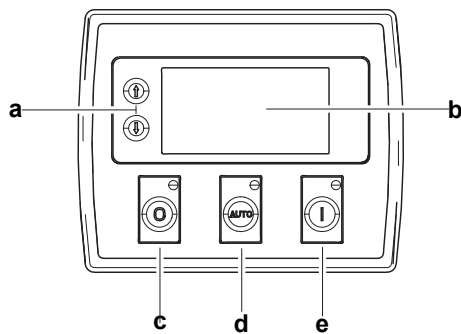


## 5 Control System



**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	Fuel level meter
8	Voltage change-over switch
9	Main circuit breaker
10	Voltage meter
11	Live wire terminals
12	Neutral wire terminal
13	Ground wire terminal
14	Mains input/remote communication connector



**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)