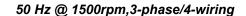


Generator set
Sound-proof type
QSV500CS-AU

# **SPECIFICATIONS**







#### 1 Standards & Conditions

## **Design Standards**

The designs and the productions are in conformity with:

- Conformite Europeenne (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 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.

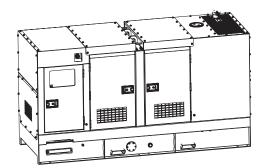
#### 2 General Features

- · Cummins engine QSZ13-G3
- Close coupled to Stamford alternator S5L1D-D4
- Microprocessor control module PLC-920
- Schneider main circuit breaker: 800A
- Rotate speed governor: Electrical governor
- Excitation system: Self excited, SHUNT
- A.V.R model: AS440
- · Key switch
- Emergency stop switch
- ATS(automatic transfer switch)receptacle

- Remote run connector
- 2x12V/150AH 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 12 hours running
- · Drain points for fuel tank
- · Operation Manual / Specifications

# 3 Equipment

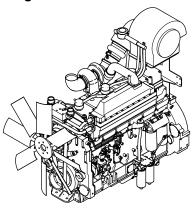
#### General technical data



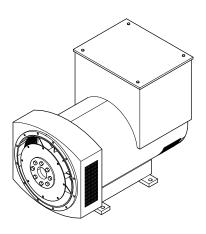
Model	QSV500CS-AU
Fuel tank	1200L
Dry weight	4780kg
Sound pressure level @ 7m	74.0dBA
Dimensions L×W×H	3950x1300x1980mm
Standby Power	550kVA/440kW
Prime Power	500kVA/400kW

Voltage		380V	40	400V		415V	
Ampere	759.7A		72	721.7A		695.6A	
Genset Fuel Consumption							
Frequency/Load		25%	50%	75%	100%	110%	
50Hz (L/h)		26	48.9	74.2	101	105.5	

# Dck Yf 'GmghYa

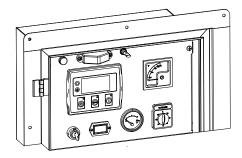


Engine Manufacturer/Brand	Cummins
Engine Model	QSZ13-G3
Dimensions L×W×H	1396×1049×1232mm
Dry Weigh (approx.)	1245kg
Number of Cylinders	6
Bore	130mm
Stroke	163mm
Displacement	13.0L
Compression Ratio	17
Type of Injection	Direct
Intake System	Turbo charged
Intake Resistance	≦6.23kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel	NO.2 or ASTM D2
Type of Oil	API CD/SE or CCMCD4
Oil Capacity	23L
Type of Coolant	Glycol mixture
Coolant Capacity	250L
Back Pressure	≦10.1kPa
Standby Power	470kW
Prime Power	450kW



Alternator Manufacturer/Brand	Stamford
Alternator Model	S5L1D-D4
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	d < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

# **PLC-920 Control System**

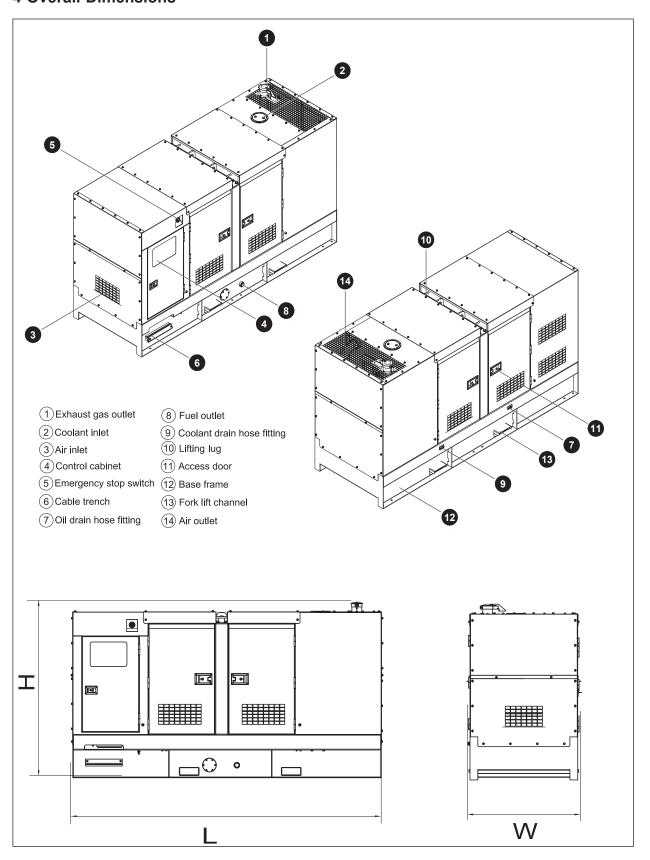


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

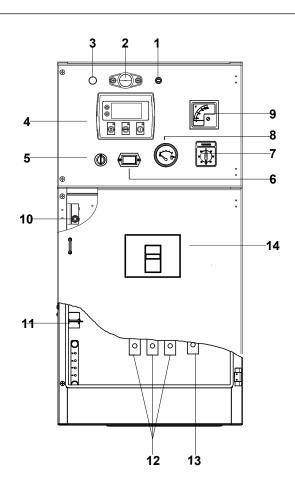
#### **Standard Control Function**

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

# **4 Overall Dimensions**

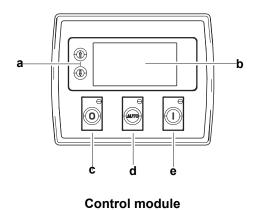


# 5 Control System



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	Main circuit breaker

Control & field wiring cabinet



Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
b	Main status display
С	Stop/reset button£» Next page (Configuration mode only)
d	Auto start button£»  Decrease value/next item (Configuration mode only)
е	Start button£» Increase value/next item (Configuration mode only)

1000033835-A2-E

10.2020