

# SPECIFICATION

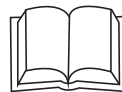


*Power Link the World*

## **MODEL QSV80PS QSV SERIES (FOR 50Hz DIESEL GENSET)**

Revision: A2 (12/21)

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## 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 45°C. The coolant heater is needed when the temperature is below 5°C
- 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.

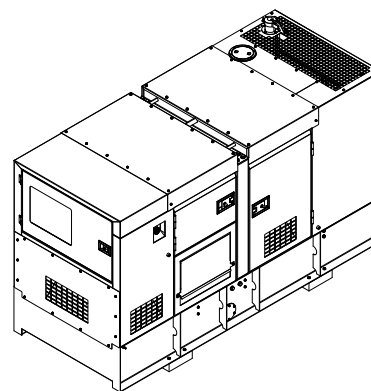
## 2 General Features

- Perkins engine 1104A-44TG2
- Close coupled to a Stamford alternator UCI224G
- Microprocessor control module PLC-920
- NADER main circuit breaker: 125A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited , SHUNT
- A.V.R.Model: SX440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/120AH sealed for life maintenance free battery

- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 8 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

### General technical data

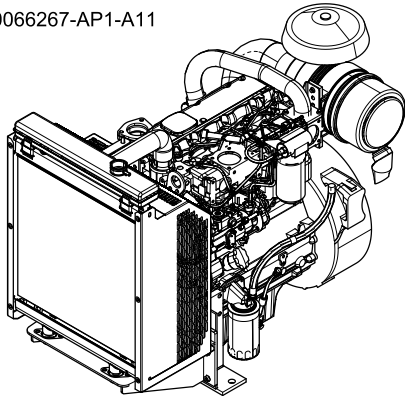


Model.....QSV80PS  
 Structure type ..... R  
 Tank capacity.....160L  
 Dry weight.....2064kg  
 Noise level @7m ..... 60dB(A)  
 Dimensions L×W×H.....2850x1130x1781mm  
 Standby Power ..... 83.75kVA/67kW  
 Prime Power ..... 80kVA/64kW

Voltage	380V	400V	415V	440V	
Ampere	121.6A	115.5A	111.3A	104.9A	
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.2	9.7	14.0	18.7	20.5

## Diesel Engine

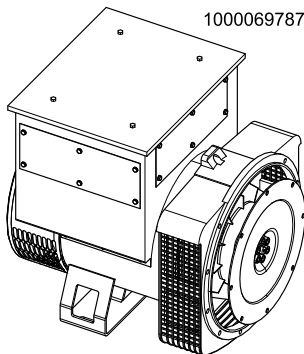
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Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1104A-44TG2
Dimensions L×W×H.....	1241×629×951mm
Dry Weigh (approx.) .....	463kg
Number of Cylinders.....	4
Bore.....	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	17.25
Type of Injection .....	Direct
Intake System.....	Turbocharged
Intake Resistance.....	≤8.0kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	12V
Type of Fuel.....	Part 2 1998 Class A2 or DIN EN 590
Type of Oil .....	API-CG4/ CH4
Oil Capacity .....	8.0L
Type of Coolant .....	Glycol mixture
Coolant Capacity.....	13L
Back Pressure.....	≤10kPa
Standby Powe .....	80.7kW
Prime Power.....	73.4kW
Fuel Consumption(100%load).....	18.7L/h

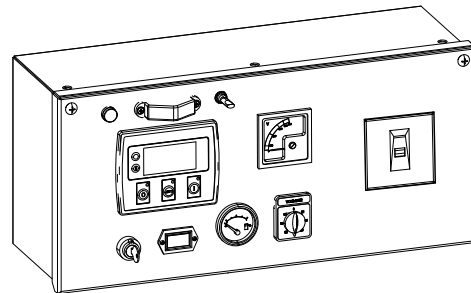
## Alternator

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Alternator Manufacturer/Brand .....	Stamford
Alternator Model .....	UCI224G
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.....	0.27m³/s(50Hz),0.32m³/s(60Hz)
Voltage Regulation .....	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 2%	
Telephone Interference.....	THF<2%;TIF<50

## PLC-920 Control System

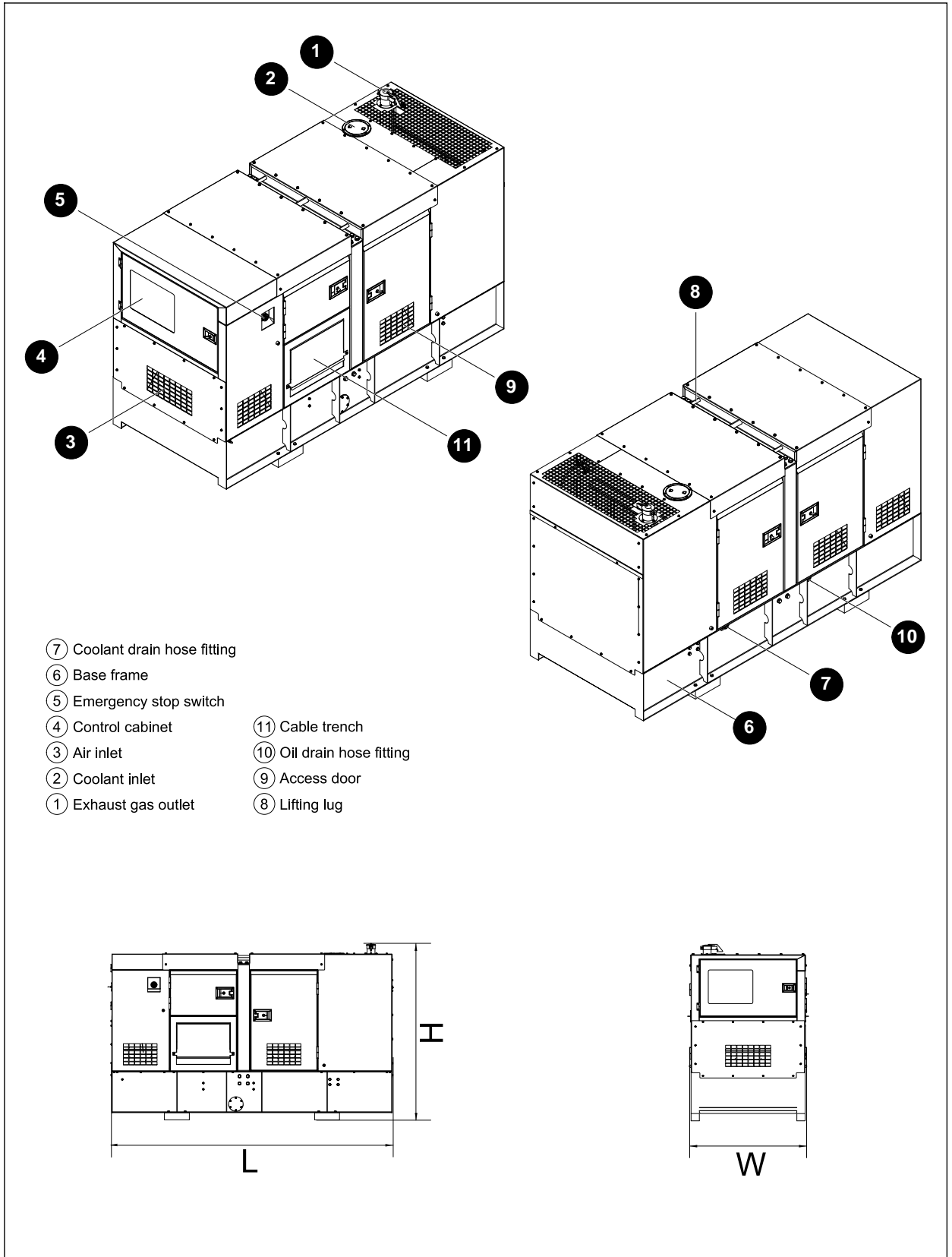


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

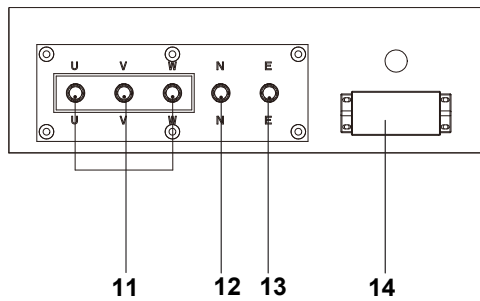
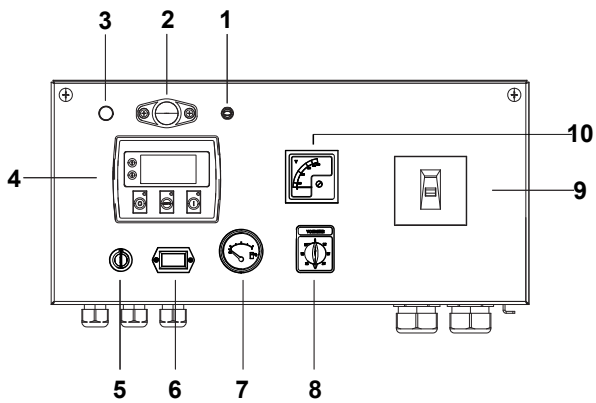
### Standard Control Function

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

## 4 Overall Dimensions

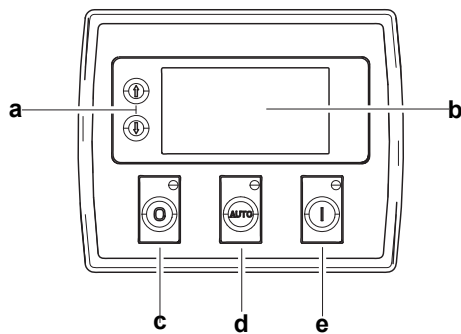


## 5 Control System



**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)

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**QSV80PS**

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