

SPECIFICATION

POWERLINK
Power Systems

Power Link the World

MODEL QSV45PS **QSV SERIES** **(FOR 50Hz DIESEL GENSET)**

Revision: A2 (12/21)

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QSV series QSV45PS

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 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.

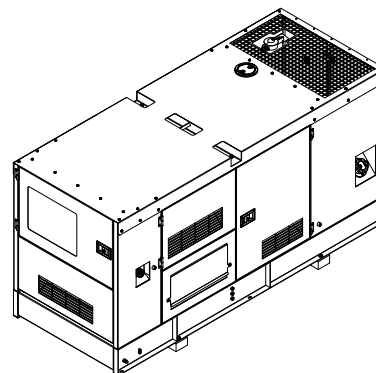
2 General Features

- Perkins engine 1103A-33TG1
- Close coupled to a Stamford alternator S1L2-N1
- Microprocessor control module PLC-920
- NADER main circuit breaker: 80A
- 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/70AH sealed for life maintenance free battery

- Lockable battery isolator switch
- Power coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forklifts
- 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

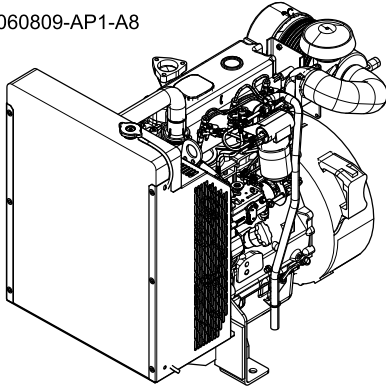


Model.....QSV45PS
 Structure type R
 Tank capacity.....90L
 Dry weigh.....1137.5kg
 Sound pressure level @ 7m 60dB(A)
 Dimensions L×W×H.....2300x940x1213.5mm
 Standby Power 49kVA/39kW
 Prime Power 45VA/36kW

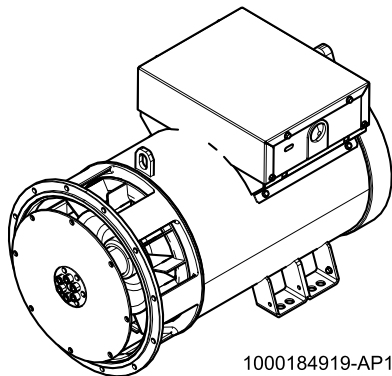
Voltage	380V	400V	415V	440V	
Ampere	45.6A	43.3A	41.7A	39.4A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	3.4	5.7	8.2	10.7	12.0

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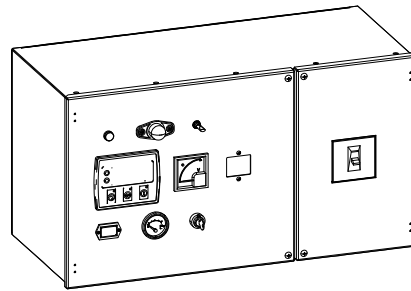
Engine Manufacturer/Brand	Perkins
Engine Model	1103A-33TG1
Dimensions L×W×H.....	1049×634×951mm
Dry Weigh (approx.)	420kg
Number of Cylinders.....	3
Bore.....	105mm
Stroke	127mm
Displacement.....	3.3L
Compression Ratio	17.25
Type of Injection	Direct injection
Intake System.....	Turbocharged
Intake Resistance.....	≤8kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	RF75-T-96 / DIN EN590 / BS2869 class A2
Type of Oil	API-CG4/ CH4
Oil Capacity	8.31L
Type of Coolant	Glycol mixture
Coolant Capacity	10.2L
Back Pressure	≤10kPa
Standby Power	46.5kW
Prime Power	42.2kW
Fuel Consumption(100%load).....	10.7L/h



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Alternator Manufacturer/Brand	Stamford
Alternator Model	S1L2-N1
Exciter.....	Brushless
Cooling Fan	Cast alloy aluminum
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Terminals	12
Drip Proof	IP21
Altitude.....	≤1000m
Overspeed	2250rpm
Air Flow.....	11.8m ³ /min(50Hz), 14.5m ³ /min(60Hz)
Voltage Regulation	±1.5%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<45

PLC-920 Control System

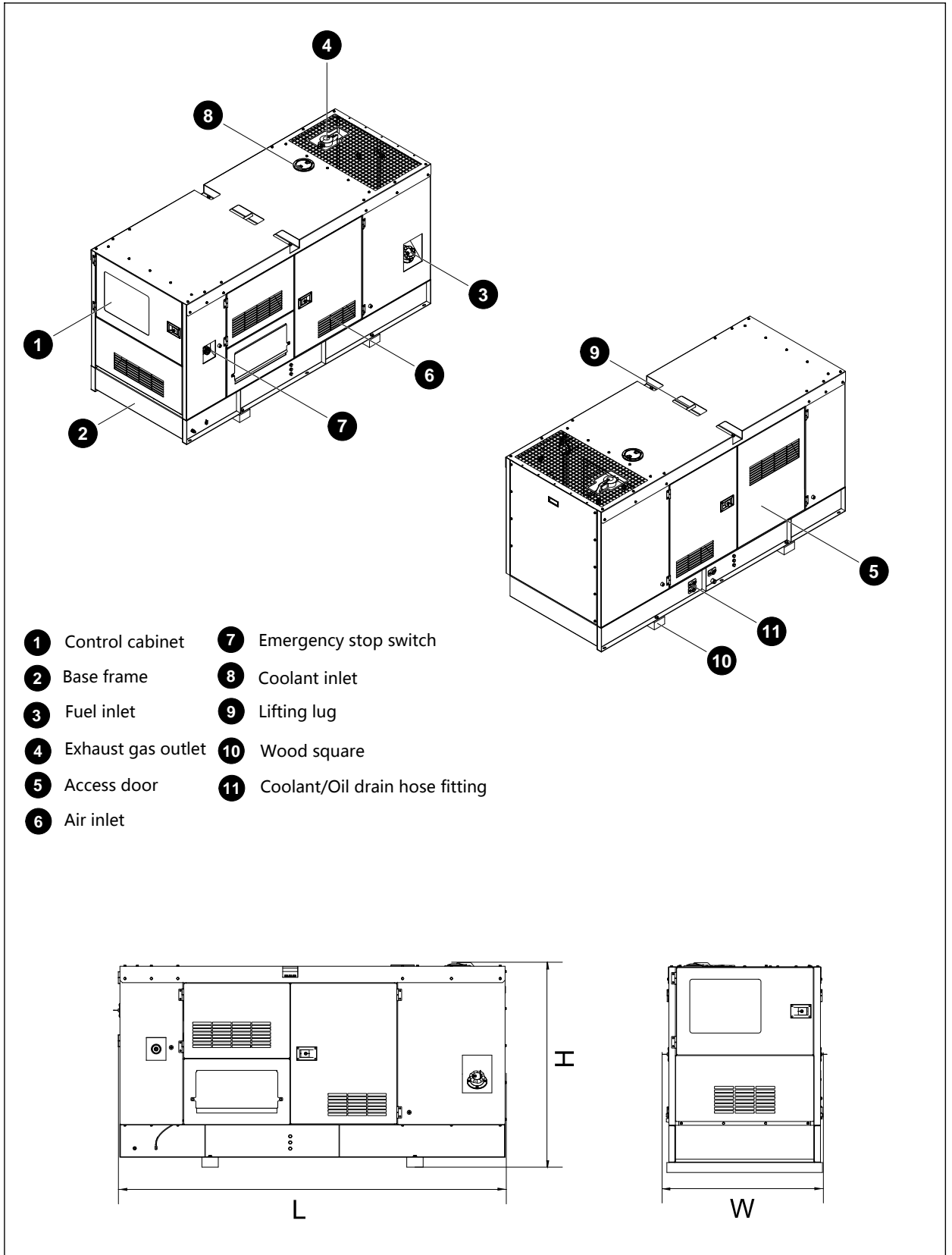


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

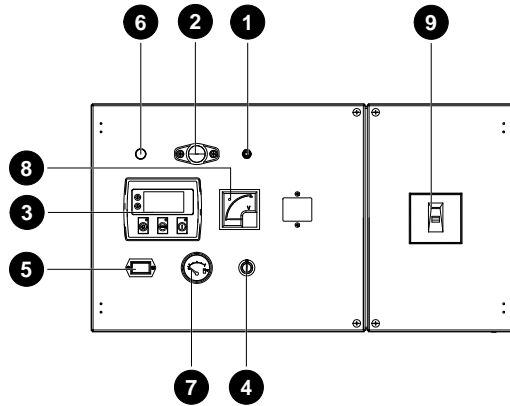
Standard Control Function

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

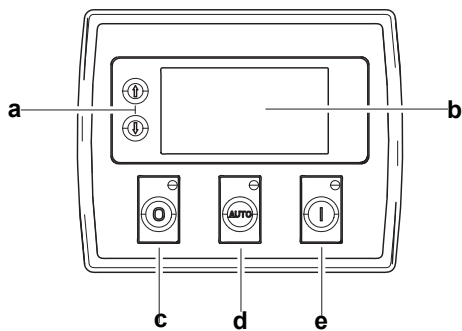
4 Overall Dimensions



5 Control System



Ref.	Description
1	Control cabinet lamp switch
2	Control cabinet lamp
3	Control module
4	Key switch
5	Time counter
6	Charge indicator
7	Fuel level meter
8	Voltage meter
9	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)

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