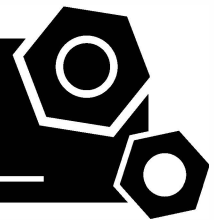


Generator set
Sound-proof type
WCS350S

SPECIFICATIONS



SCS series

WCS350S

50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (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 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.

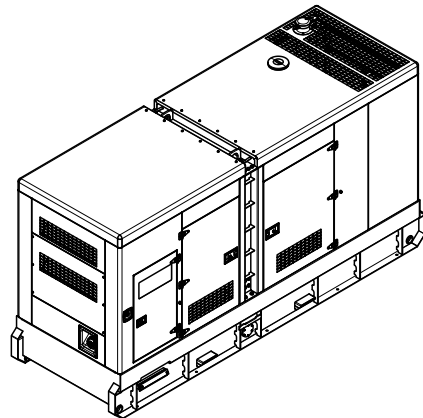
2 General Features

- Cummins engine 6LTAA9.5-G1
- Close coupled to Stamford alternator S4L1D-E4
- Microprocessor control module PLC-920
- ABB Main circuit breaker: 500A
- Rotate speed governor: Electronic
- Excitation System: Self excited, SHUNT
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/120AH sealed for life maintenance free battery

- Lockable battery isolator switch
- 50°C radiator
- Oil pump on the engine
- Steel base frame with lifting lug
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 10 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

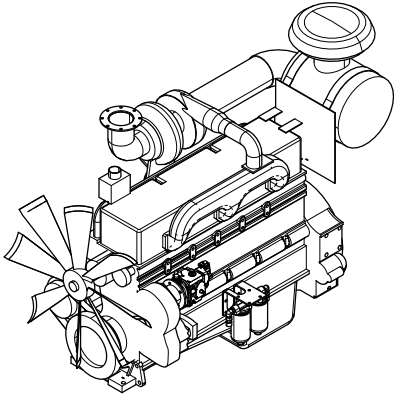
General technical data



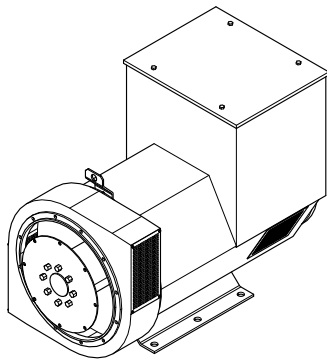
Model.....WCS350S
 Structure type R
 Tank capacity.....700L
 Dry weight.....3860kg
 Sound pressure level @7m74.0dBA
 Dimensions L×W×H.....3900×1473×2186mm
 Standby Power 350kVA/280kW
 Prime Power..... 320kVA/256kW

Voltage	380V	400V	415V	440V	
Ampere	486.2A	461.9A	445.2A	419.0A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	18	35	52	70	78

Power System

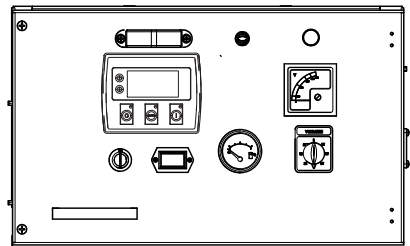


Engine Manufacturer/Brand	Cummins
Engine Model	6LTAA9.5-G1
Dry Weigh (approx.)	791Kg
Number of Cylinders	6
Bore	116.5mm
Stroke	148mm
Displacement	9.5L
Type of injection	Direct injection
Intake System	Turbocharged
Intake Resistance	≤6.22kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel	No.2-D per ASTM D975.
Type of Oil	API CD/SE or CCMCD4
Oil Capacity	32.4L
Type of Coolant	Glycol mixture
Coolant Capacity	11.1L
Back Pressure	≤10kPa
Standby Power	320kW
Prime Power	290kW



Alternator Manufacturer/Brand	Stamford
Alternator Model	S4L1D-E4
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	0.58m³/s(50Hz), 0.69m³/s(60Hz)
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

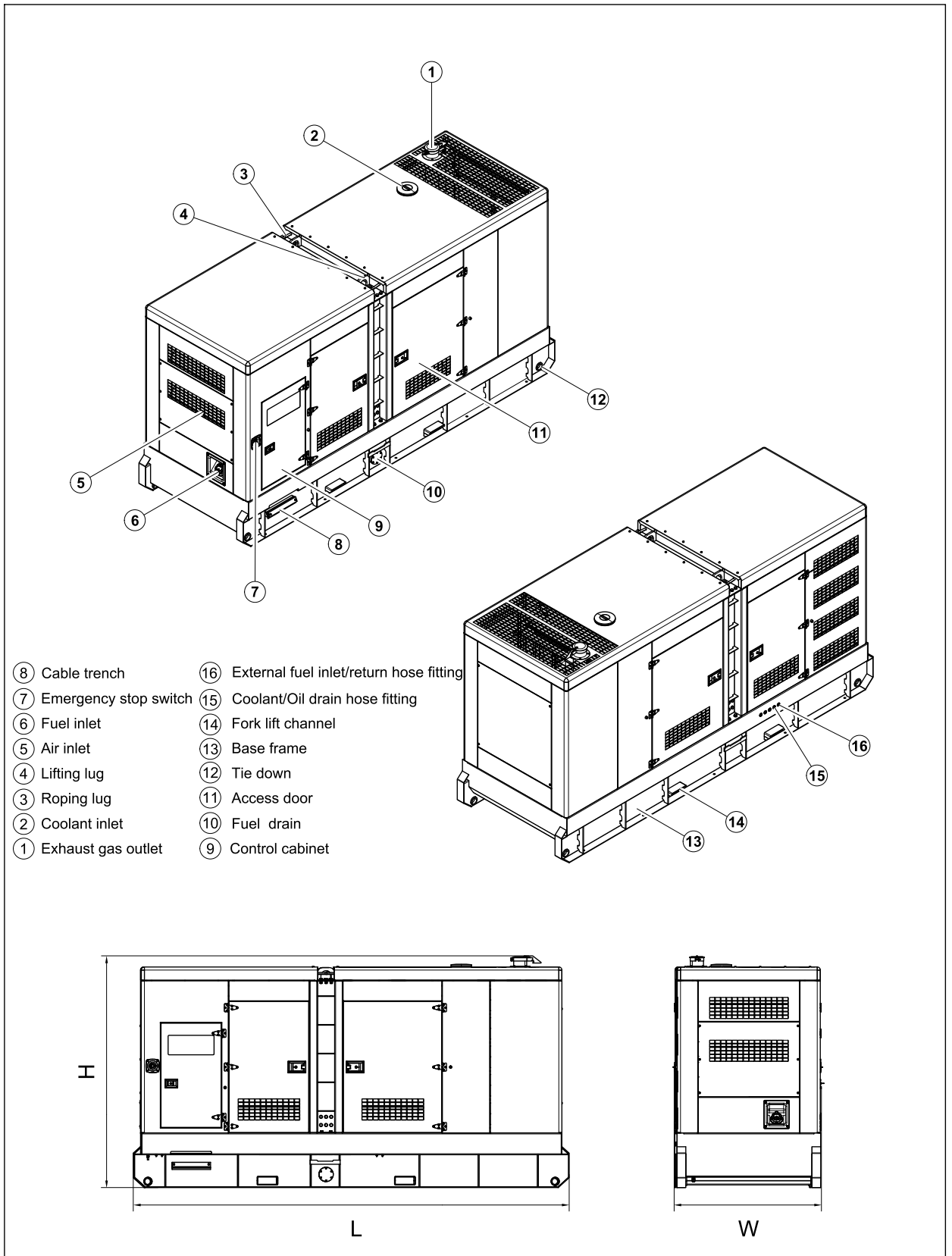


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

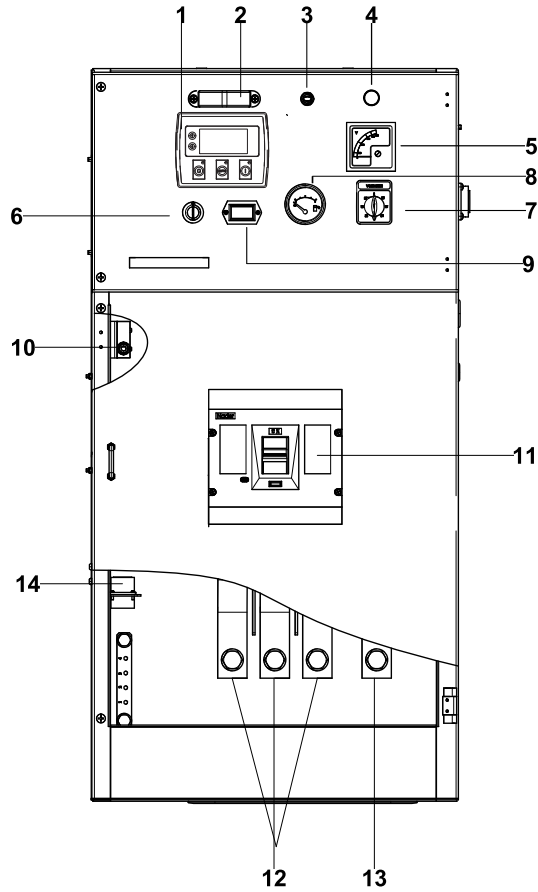
Standard Control Function

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

4 Overall Dimensions

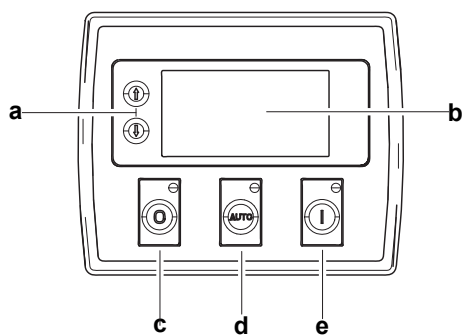


5 Control System



Control & field wiring cabinet

Ref.	Description
1	PLC-920 control module
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Charge indicator
5	Voltage meter
6	Key switch
7	Voltage changer-over switch
8	Fuel level meter
9	Time counter
10	Limit switch
11	Main circuit breaker
12	Live wire terminal
13	Neutral wire terminal
14	Mains input/Remote control/ATS 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)