

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Europeenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental Operating Conditions

- Installation place: 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 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.

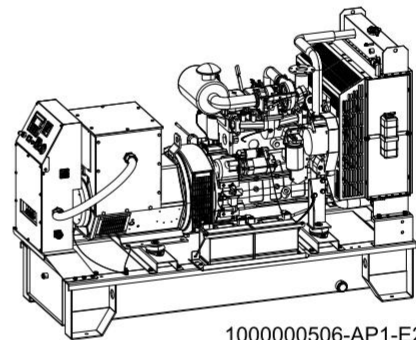
2 General Features

- Cummins engine 4BTA3.9-G2
- Close coupled to a Stamford alternator UCI224E
- Microprocessor control module PLC-920
- MCCB main circuit breaker: 100A
- Rotate speed governor: Electrical governor S6700E
- Excitation system: Self excited
- A.V.R model: AS440
- Key switch
- ATS (automatic transfer switch) receptacle
- 2x12V/70AH sealed for life maintenance free battery

- Lockable battery isolator switch
- 50°C radiator
- Oil pump on the engine
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank with 19 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 Equipment Specification

General technical data

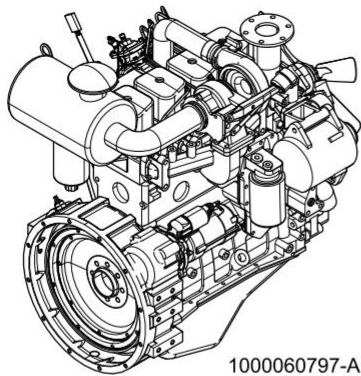


1000000506-AP1-E2

Model.....	HCL60C
Structure type	A
Tank capacity.....	254L
Dry weight.....	1561kg
Noise level @7m	N/A
Dimensions L×W×H.....	2110x790x1436mm
Standby Power	66kVA/53kW
Prime Power	60kVA/48kW

Voltage	380V	400V	415V	440	
Ampere	91.2A	86.6A	83.5A	78.7A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	3.8	6.7	9.8	13.1	14.7

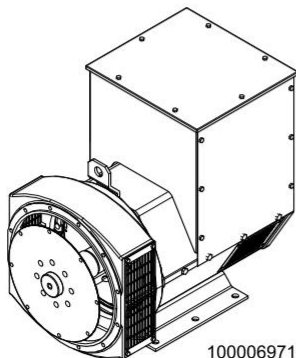
Diesel Engine



1000060797-AP1-B4

Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BTA3.9G2
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	9.5L
Type of Coolant	Glycol mixture
Coolant Capacity	20.8L
Back Pressure	≤10.1kPa
Standby Power	55kW
Prime Power	50kW
Fuel Consumption(100%load).....	216g/kW.h

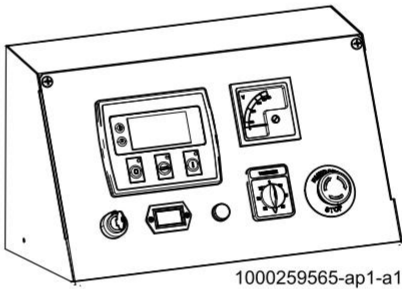
Alternator



1000069716-AP1-A4

Alternator Manufacturer/Brand	Stamford
Alternator Model	UC1224E
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	2250 rpm
Air Flow.....	0.216m³/s(50HZ),0.281m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

DSE Control System



1000259565-ap1-a1

DSE-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.

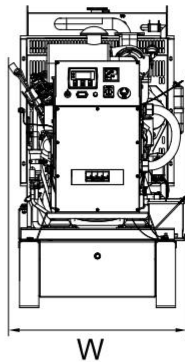
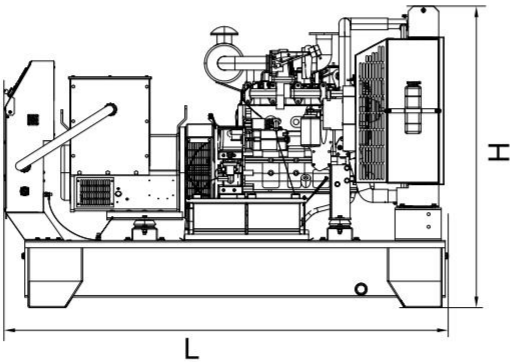
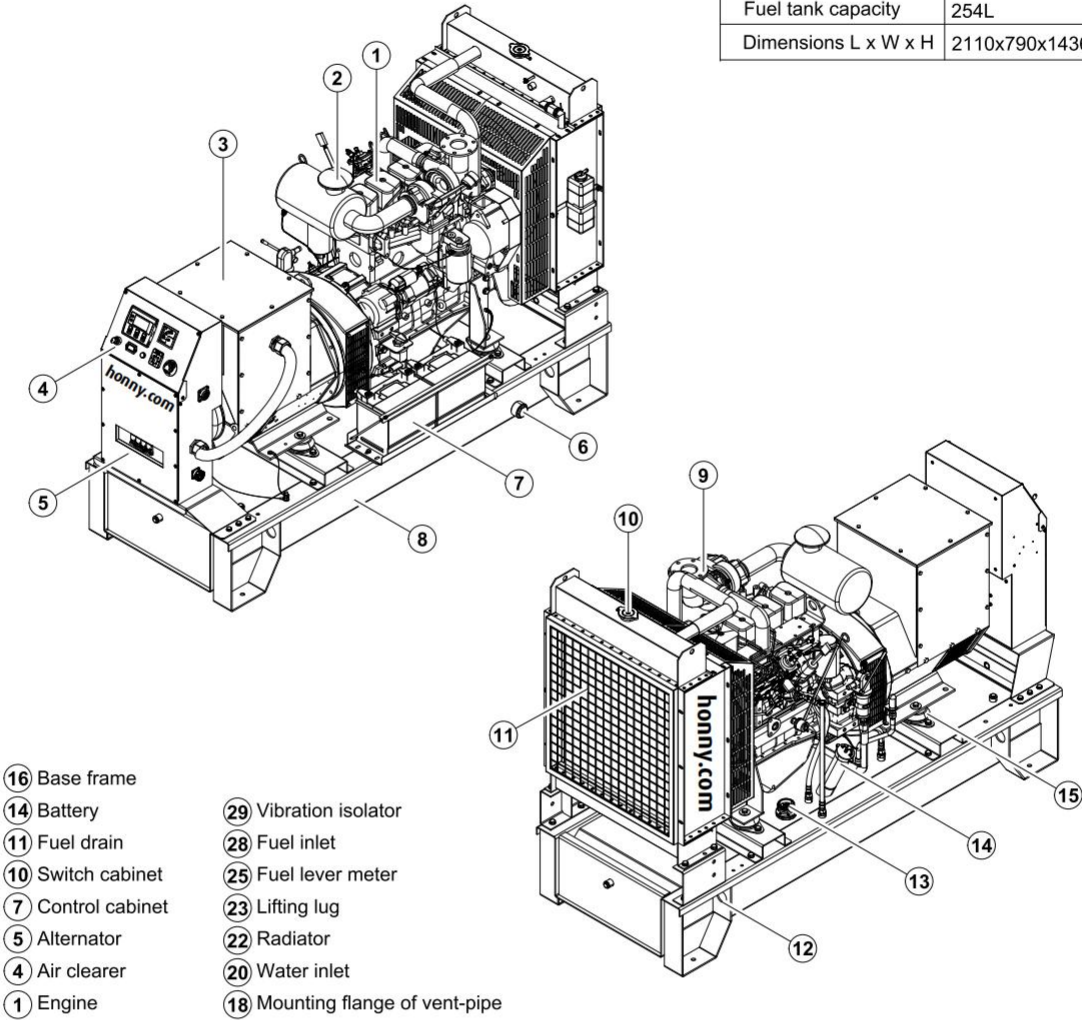
Standard Control Function

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

4 Open Type Overall Dimensions

1000000506-DR1-E2

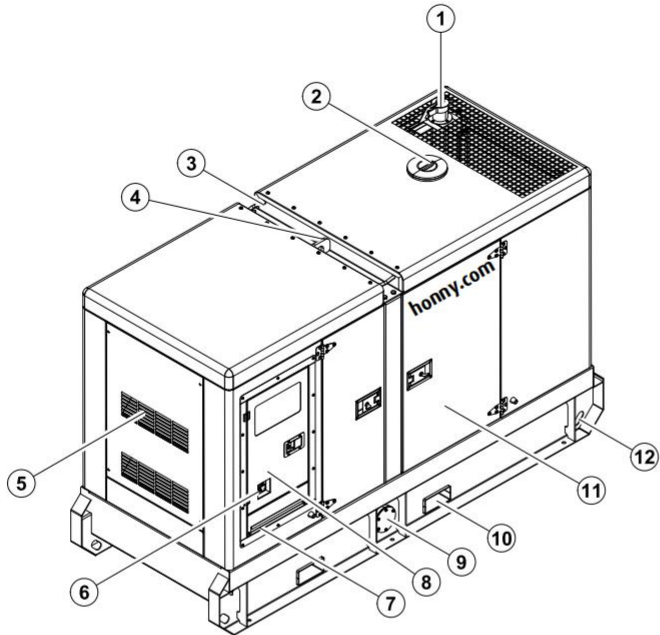
Dry weight	1561kg
Fuel tank capacity	254L
Dimensions L x W x H	2110x790x1436mm



5 Silent Type Overall Dimensions

1000008749-DR1-B6

Dry weight	1548kg
Fuel tank capacity	280L
Dimensions L x W x H	2688x1112x1708mm



- ⑧ Control cabinet
- ⑦ Cable trench
- ⑥ Emergency stop switch
- ⑤ Air inlet
- ④ Lifting lug
- ③ Roping lug
- ② Coolant inlet
- ① Exhaust gas outlet
- ⑮ Base frame
- ⑭ Coolant/Oil drain hose fitting
- ⑬ External fuel inlet/return hose fitting
- ⑫ Tie down
- ⑪ Access door
- ⑩ Fork lift channel
- ⑨ Fuel drain

