

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (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.

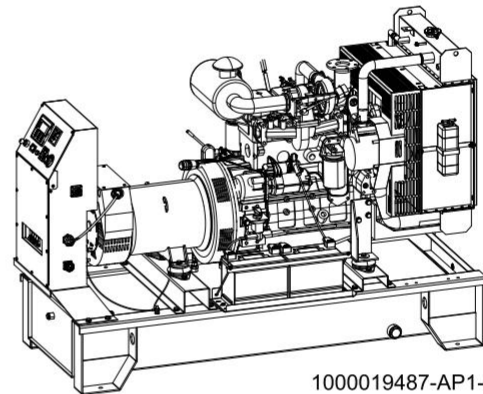
2 General Features

- Cummins engine 4BT3.9G1
- Close coupled to a Stamford alternator PI144K
- Microprocessor control module AMF-20
- MCCB genset circuit breaker: 80A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited SHUNT
- A.V.R model: AS480
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 2x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch
- 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 19 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

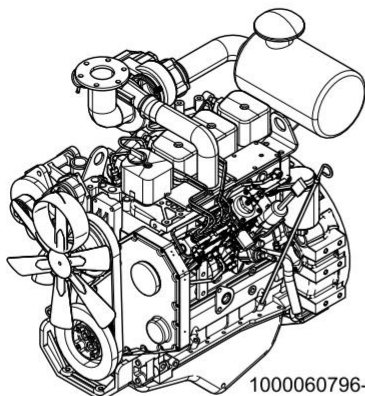
General technical data



Model.....HCL40C
 Structure type.....Open
 Tank capacity.....250L
 Dry weight.....806kg
 Noise level @7m.....N/A
 Dimensions L×W×H.....2002x798x1365mm
 Standby Power.....45kVA/36kW
 Prime Power.....40kVA/32kW

Voltage	380V	400V	415V	440V	
Ampere	65.3A	62A	59.8A	56.4A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.0	7.5	10.0	13.0	14.0

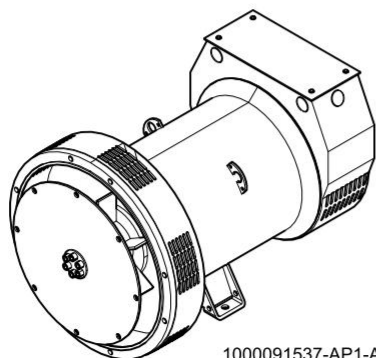
Diesel Engine



1000060796-S-AP1-B7

Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BT3.9G1
Dimensions L×W×H.....	N/A
Dry Weigh (approx.)	321kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke	120mm
Displacement.....	3.9L
Compression Ratio.....	N/A
Type of injection.....	Direct injection
Intake System.....	Turbo charged
Intake Resistance.....	6.2kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12/24V
Type of Fuel.....	No.2 or ASTM D2
Type of Oil	API CD/SE or CCMCD4
Oil Capacity	10.9L
Type of Coolant	Glycol mixture
Coolant Capacity	20.8L
Back Pressure	≤10.1kPa
Standby Power	40kW
Prime Power	36kW
Fuel Consumption(100%load).....	214g/kW.h

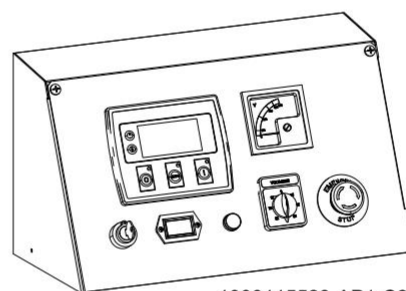
Alternator



1000091537-AP1-A1

Alternator Manufacturer/Brand	Stamford
Alternator Model	PI144K
Exciter.....	Brushless
Cooling Fan	Plastic
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Terminals	12
Drip Proof	IP23
Altitude.....	≤1000m
Overspeed	2250rpm
Air Flow.....	0.135m³/s(50HZ),0.165m³/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



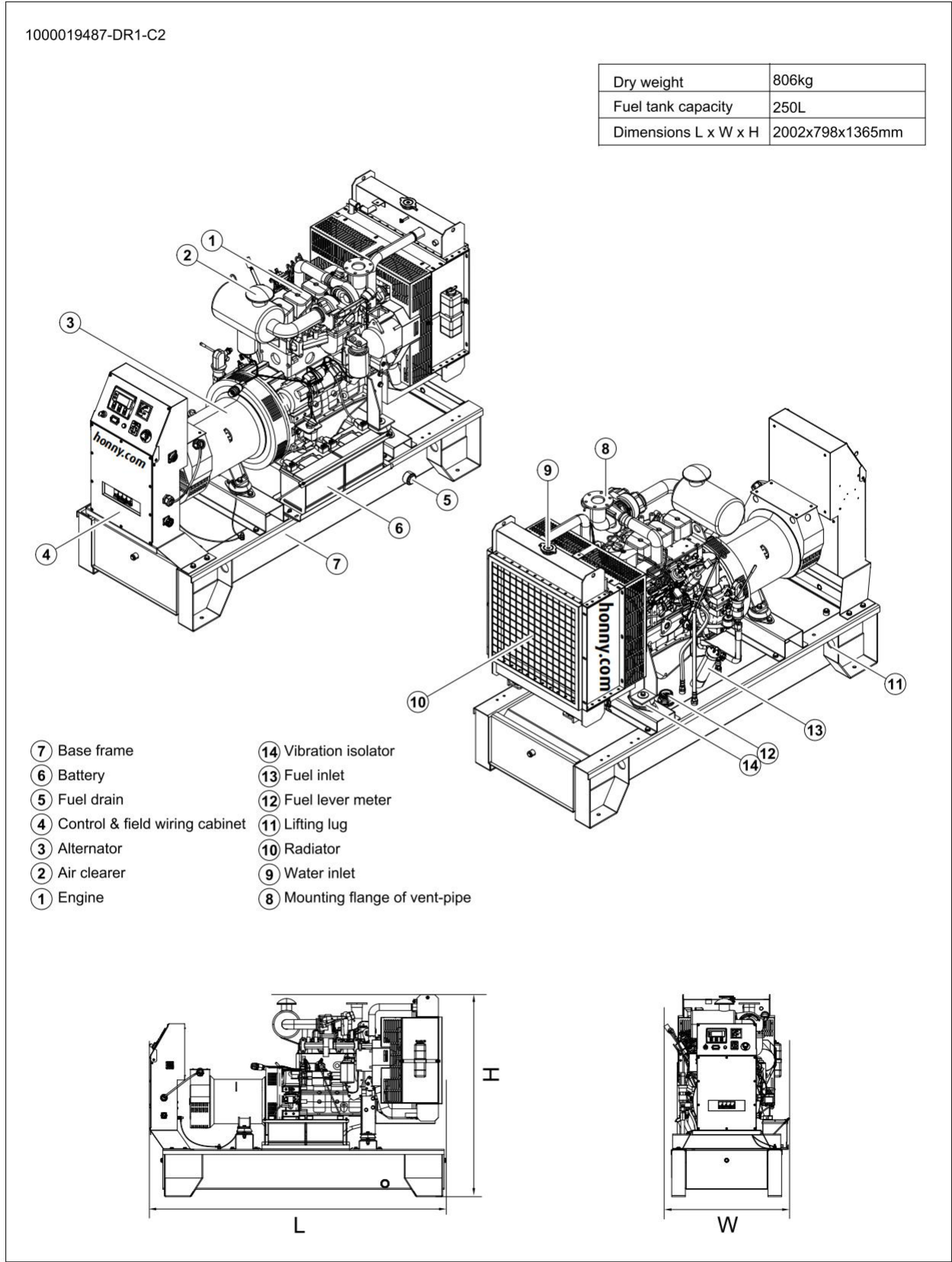
1000115523-AP1-C2

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



5. Silent Type Overall Dimensions

