

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (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.

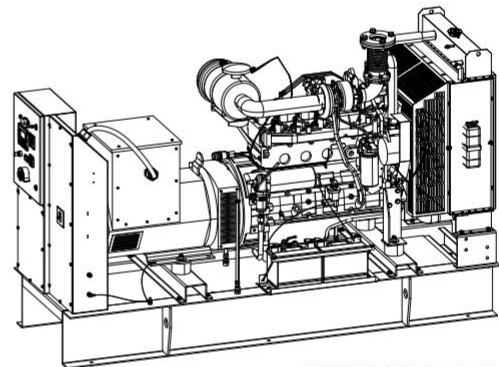
2 General Features

- Cummins engine 6BT5.9-G1
- Coupled to a Leroy-Somer or Stamford alternator
- Microprocessor control module PLC-702
- MCCB main circuit breaker: 125A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited
- A.V.R model: AS440
- Key switch
- Emergency stop 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 11 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 Equipment Specification

General technical data

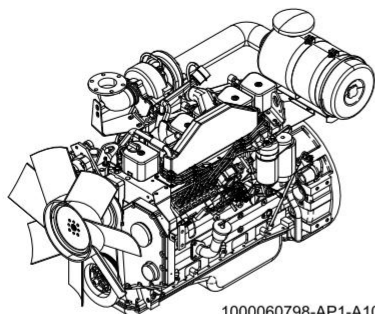


1000020123-AP1-C3

Model.....G80DG
 Structure type..... A
 Tank capacity.....236L
 Dry weight..... 1198kg
 Noise level @7m 90.8dBA
 Dimensions L×W×H.....2485×883×1495mm
 Standby Power 88kVA/70kW
 Prime Power..... 80kVA/64kW

Voltage	380V	400V	415V	440V	
Ampere	121.6A	115.5A	111.3A	104.9A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	7.0	11.0	17.0	22.0	25.0

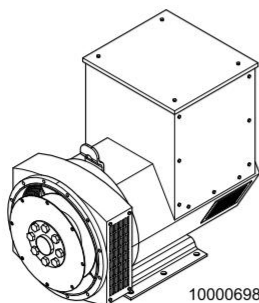
Diesel Engine



1000060798-AP1-A10

Engine Manufacturer/Brand.....	Cummins
Engine Model.....	6BT5.9G1
Dimensions L×W×H.....	N/A
Dry Weigh (approx.)	411kg
Number of Cylinders.....	6
Bore.....	102mm
Stroke	120mm
Displacement.....	5.9L
Compression Ratio	16.8
Type of injection.....	Direct injection
Intake System.....	Turbo charged
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	14.2L
Type of Coolant	Glycol mixture
Coolant Capacity	29.7L
Heat Rejected To Exhaust System.....	N/A
Heat Rejected To Water&Oil.....	49kW(2744BTU/min)
Back Pressure	≤10.1kPa
Standby Power	92kW
Prime Power	86kW
Fuel Consumption(100%load).....	214g/kW.h

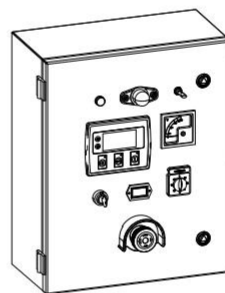
Alternator



1000069871-AP1-A1

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	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



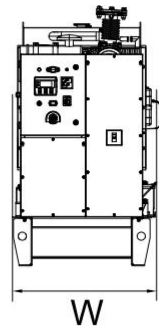
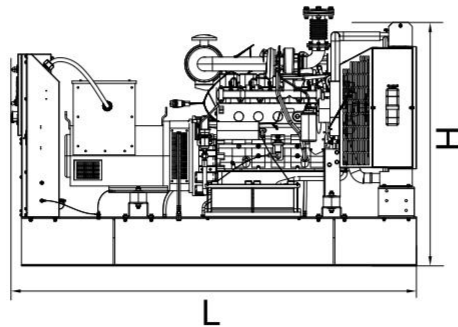
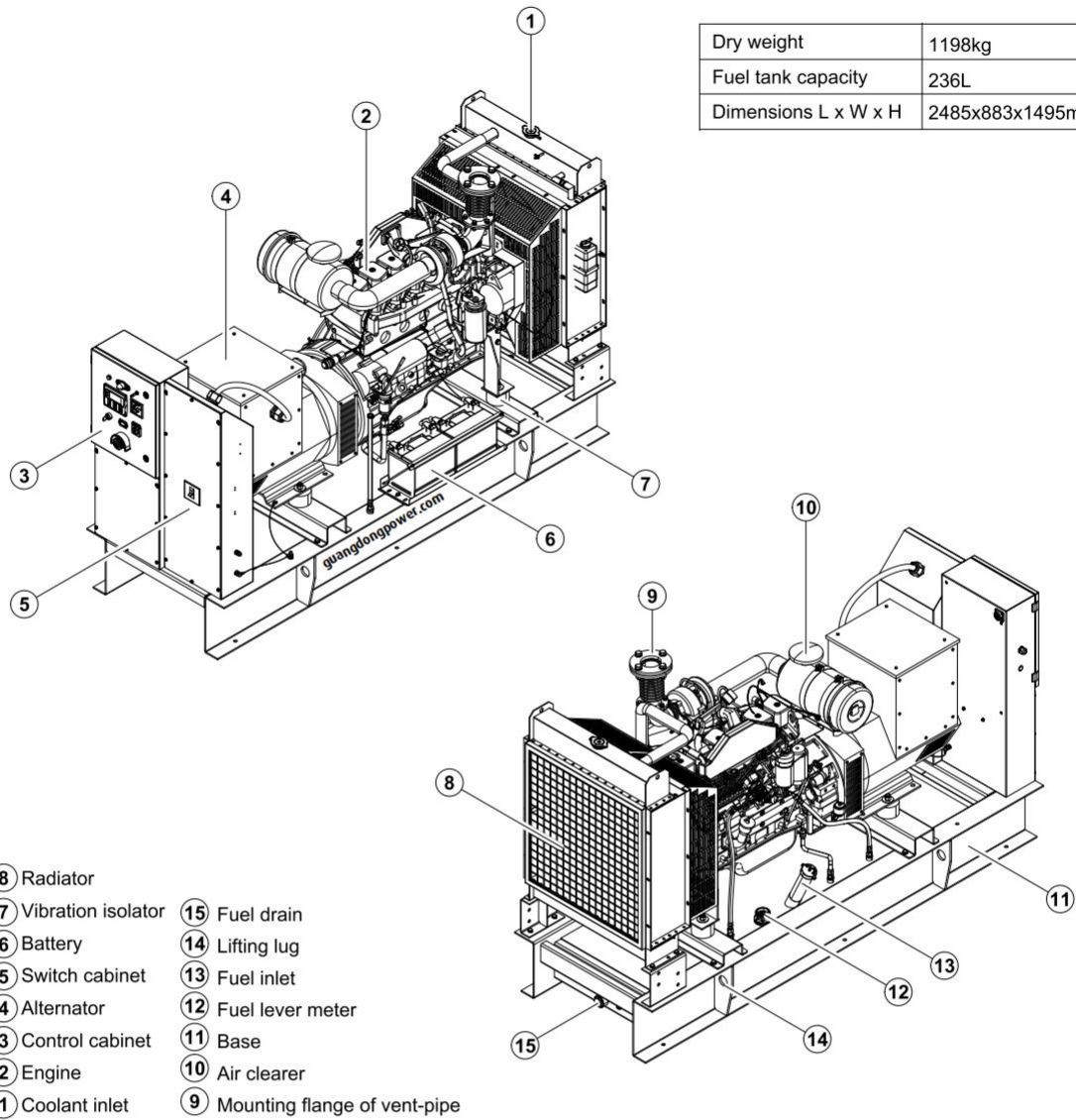
1000262115-AP1-A1

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

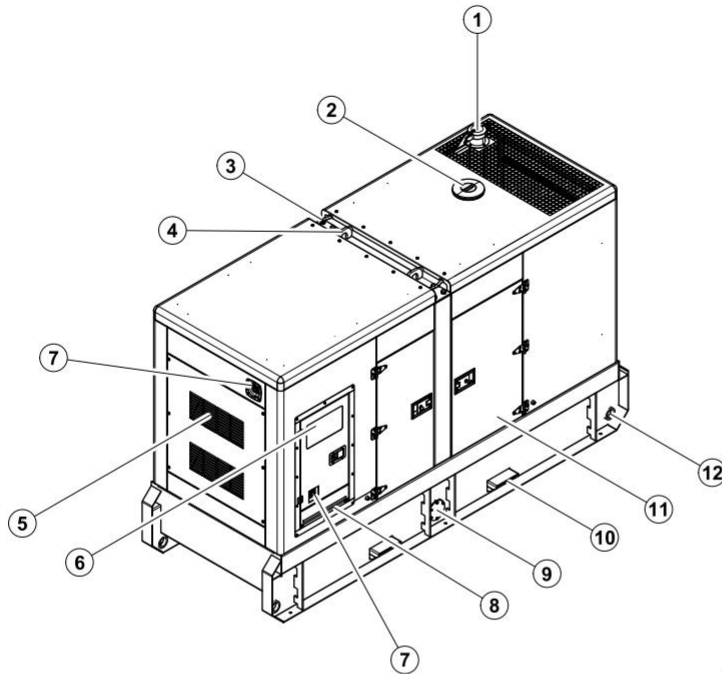
- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

1000020123-DR1-C3



1000023415-DR1-B5

Dry weight	2100kg
Fuel tank capacity	540L
Dimensions L x W x H	3162x1174x1974mm



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

