Cumins series
G350DG
50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

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

Environmental Operating Conditions

- Installation place: Indoors (well ventilated).
- Ambient temperature: -25℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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

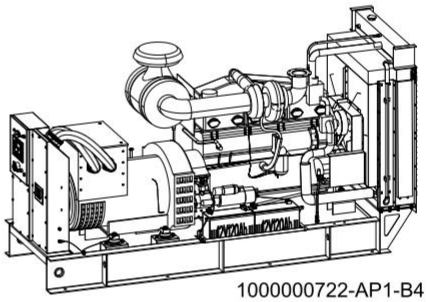
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Cummins engine NTA855-G4
- Coupled to a Leroy-Somer or Stamford alternator
- Microprocessor control module PLC-7420
- MCCB main circuit breaker: 630A
- Rotate speed governor: Electrical governor FP801
- Excitation System: Self Excited,SHUNT
- A.V.R.Model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- 50℃ 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 8 hours running
- Drain points for fuel tank
- Operation Manual / Parts List / Specifications

3 Equipment Specification

General technical data



1000000722-AP1-B4

Model.....G350DG

Structure type ..... A

Tank capacity.....410L

Dry weight.....5758kg

Noise level @7m 97.5dBA

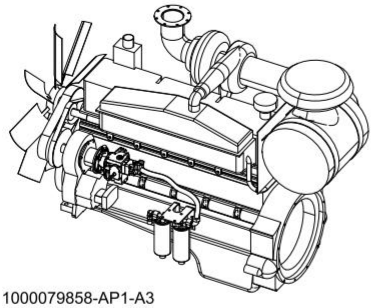
Dimensions L×W×H.....3363×1137×18301mm

Standby Power 385kVA/308kW

Prime Power..... 350kVA/280kW

Voltage	380V	400V	415V	440V
Ampere	532A	505A	487A	459A

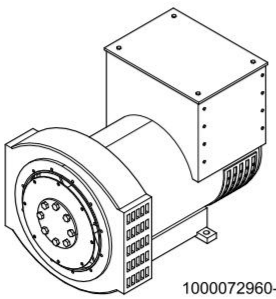
Diesel engine



1000079858-AP1-A3

Engine Manufacturer/Brand.....Cummins
Engine Model..... NTA855–G4
Dimensions L×W×H..... 2055x990x1535mm
Dry Weight (approx.) 1410Kg
Number of Cylinders.....6
Bore 140mm
Stroke 152mm
Displacement.....14L
Compression Ratio 14
Type of injection..... Direct injection
Intake System..... Turbocharged
Intake Resistance .....≤6.25kPa
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 38.6L
Type of Coolant ..... Glycol mixture
Coolant Capacity 60.6L
Heat Rejected To Exhaust System. 198kW(11280BTU/min)
Heat Rejected To Water&Oil..... 238kW(13530BTU/min)
Back Pressure .....≤10kPa
Standby Power 351kW
Prime Power 317kW
Fuel Consumption(100%load).....76L/h

Alternator



1000072960-AP1-A1

Alternator Manufacturer/Brand ..... Stamford
Alternator Model HCI444E
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..... 0.8m³/s(50HZ),0.99m³/s(60HZ)
Voltage Regulation .....±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference..... THF<2%;TIF<50

DSE-7320 Control System

1000246420-AP1-A1

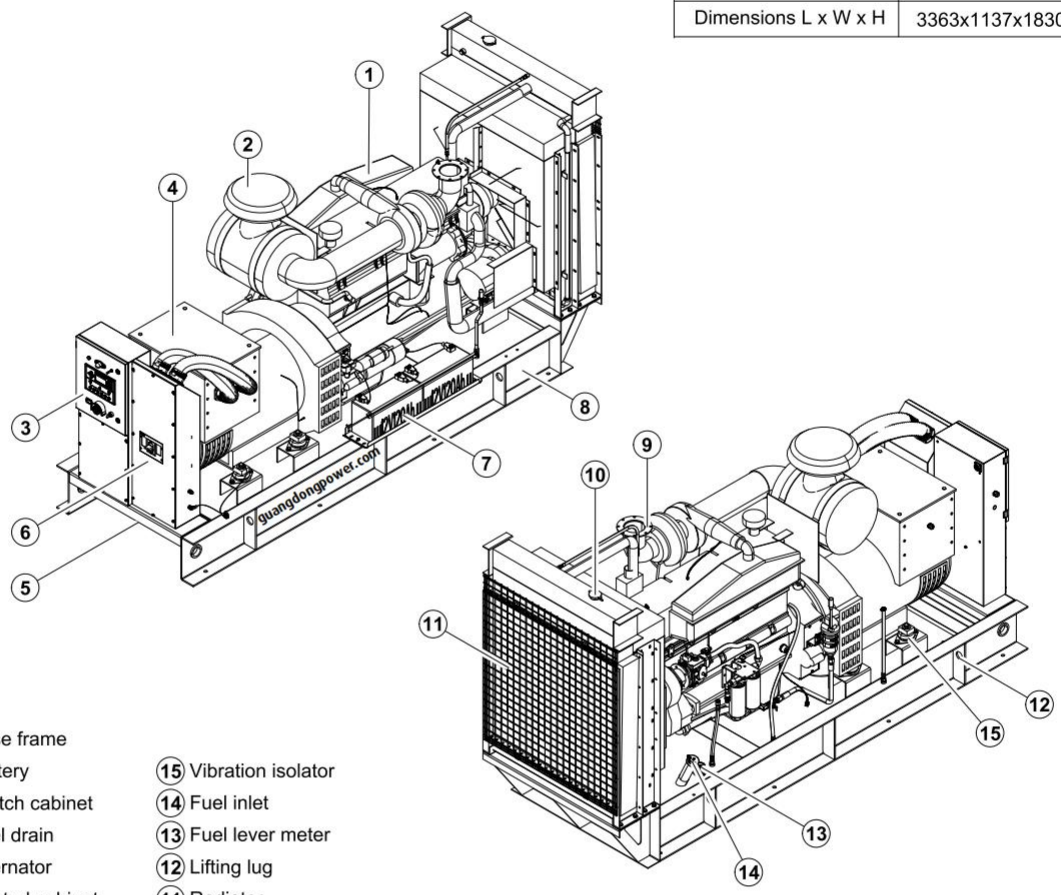
DSE-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

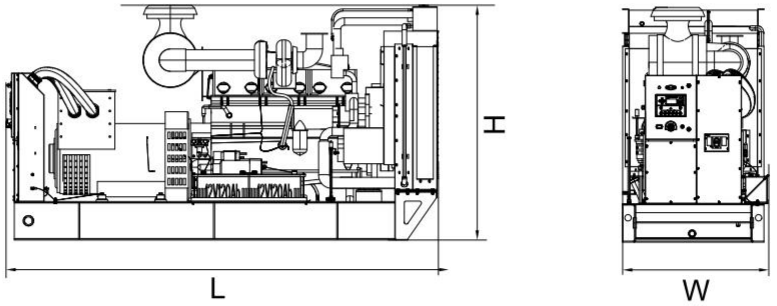
4. Open Type Overall Dimensions

1000000722-DR1-B4

Dry weight	5758kg
Fuel tank capacity	410L
Dimensions L x W x H	3363x1137x1830mm



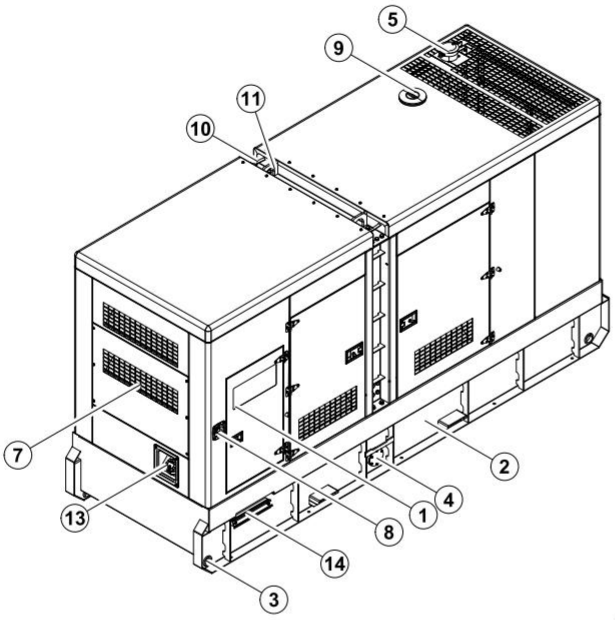
8 Base frame
7 Battery
6 Switch cabinet
5 Fuel drain
4 Alternator
3 Control cabinet
2 Air clearer
1 Engine
15 Vibration isolator
14 Fuel inlet
13 Fuel lever meter
12 Lifting lug
11 Radiator
10 Water inlet
9 Mounting flange of vent-pipe

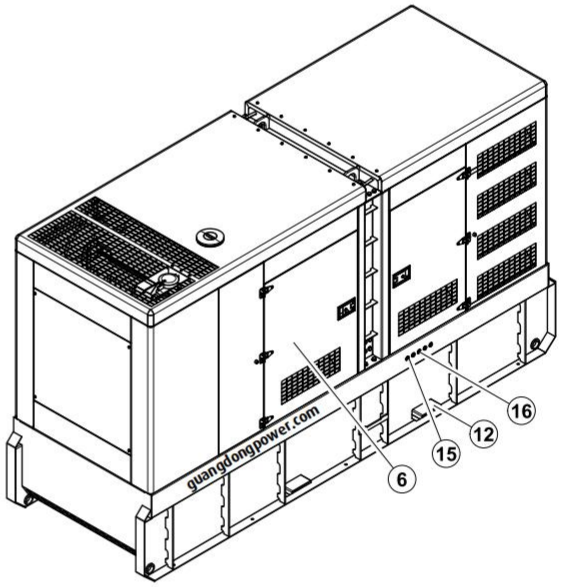


5. Silent Type Overall Dimensions

1000020743-DR1-C6

Dry weight	4807kg
Fuel tank capacity	1650L
Dimensions L x W x H	4245x1465x2425mm





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