

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.

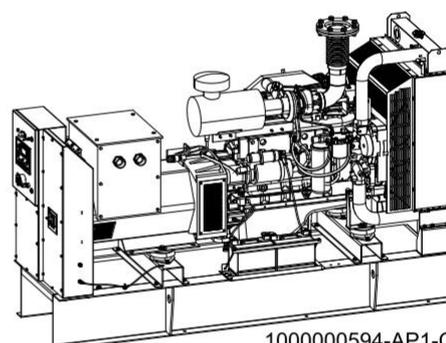
2 General Features

- Cummins engine 6CTA8.3G2
- Close coupled to a Stamford alternator UCI274G
- Microprocessor control module PLC-7420
- MCCB main circuit breaker: 3-Phase 315A
- Rotate speed governor: Electrical governor S6700E
- Excitation System: Self Excited, SHUNT
- A.V.R. Model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 2x12V 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 8 hours running
- Drain points for fuel tank
- Operation Manual / Parts List / Specifications

3 Equipment Specification

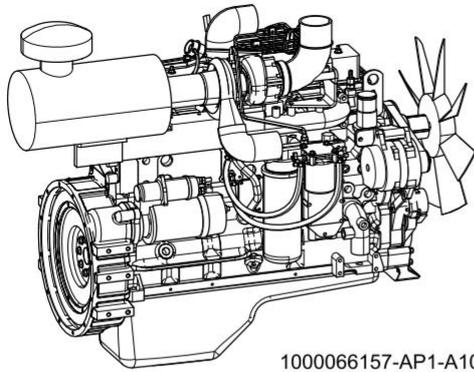
General technical data



Model.....HCL175C
 Structure type A
 Tank capacity.....334L
 Dry weigh..... 1740kg
 Noise level @7m 63.1dBA
 Dimensions L×W×H..... 2667x839x1675mm
 Standby Power 193kVA/154kW
 Prime Power..... 175kVA/140kW

| Voltage | 380V | 400V | 415V | 440V | |
|-------------------------|------|------|------|------|------|
| Ampere | 266A | 253A | 243A | 230A | |
| Genset Fuel Consumption | | | | | |
| Frequency/Load | 25% | 50% | 75% | 100% | 110% |
| 50Hz (L/h) | 11 | 20 | 30 | 40 | 45 |

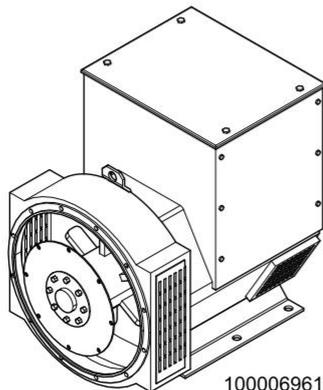
Diesel Engine



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| | |
|---------------------------------|---|
| Engine Manufacturer/Brand..... | Cummins |
| Engine Model..... | 6CTA8.3G2 |
| Dimensions L×W×H..... | 1128x740x1084mm |
| Dry Weigh (approx.) | 629kg |
| Number of Cylinders..... | 6 |
| Bore..... | 114mm |
| Stroke | 135mm |
| Displacement..... | 8.3L |
| 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..... | 0# or -10# light diesel |
| Type of Oil | 15W40-CF4 |
| Oil Capacity | 24L |
| Type of Coolant | Glycol mixture |
| Coolant Capacity..... | 38L |
| Back Pressure | ≤10.1kPa |
| Standby Power | 180kW |
| Prime Power | 163kW |
| Fuel Consumption(100%load)..... | 210g/kW.h |

Alternator



1000069615-AP1-A1

| | |
|---|---------------------------------|
| Alternator Manufacturer/Brand..... | Stamford |
| Alternator Model..... | UCI274G |
| 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..... | 0.514m³/s(50Hz),0.617m³/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



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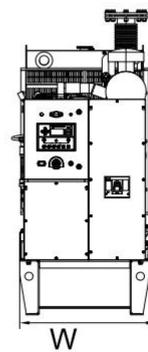
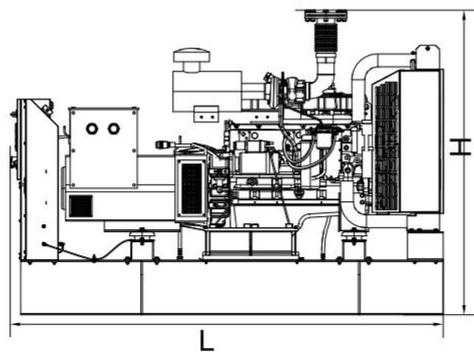
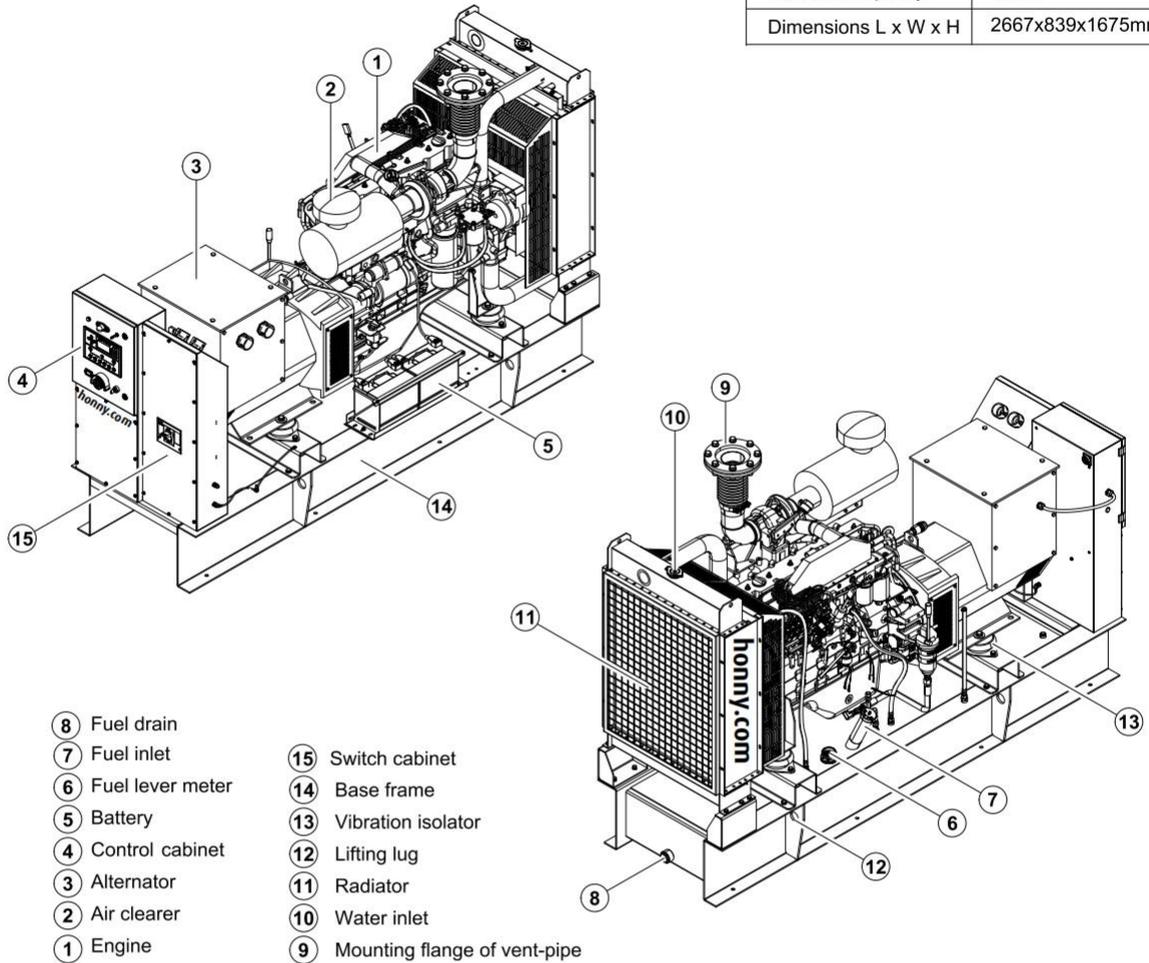
DSE-7320 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

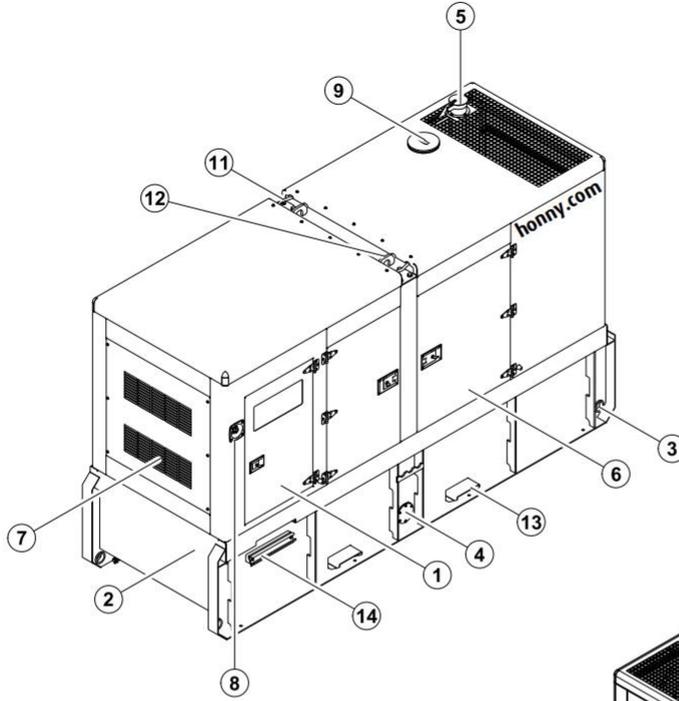
100000594-DR1-C3

| | |
|----------------------|-----------------|
| Dry weight | 1740kg |
| Fuel tank capacity | 334L |
| Dimensions L x W x H | 2667x839x1675mm |

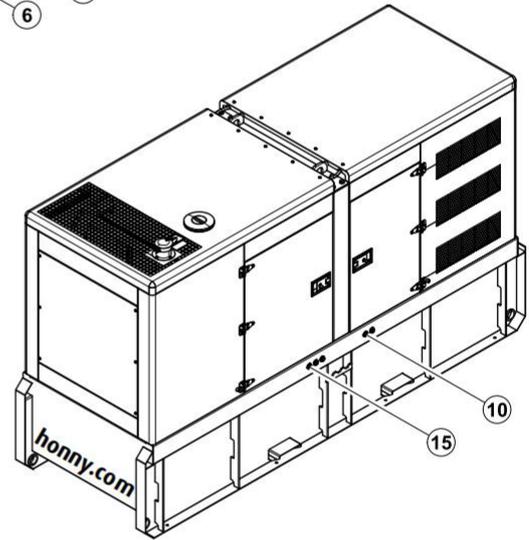


5. Silent Type Overall Dimensions

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| | |
|----------------------|--------------------|
| Dry weight | 2805.5kg |
| Fuel tank capacity | 1200L |
| Dimensions L x W x H | 3500x1255x2148.6mm |



- 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
- ⑮ Coolant/Oil drain hose fitting
- ⑭ Cable trench
- ⑬ Fork lift channel
- ⑫ Lifting lug
- ⑪ Roping lug
- ⑩ External fuel inlet/return hose fitting
- ⑨ Coolant inlet

