

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.

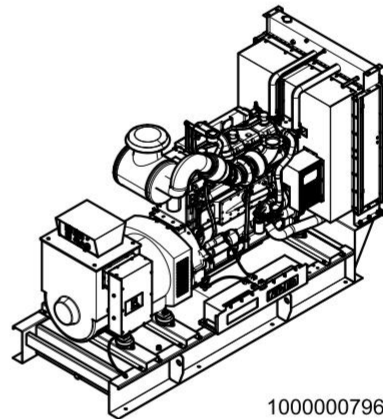
2 General Features

- Cummins engine KTA19G4
- Close coupled to a Stamford alternator HCL544D
- Microprocessor control module PLC-920
- NADER main circuit breaker: 800A
- Rotate speed governor: Electrical governor FP801
- Excitation system: Self excited
- A.V.R model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/150AH 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 9 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 Equipment Specification

General technical data



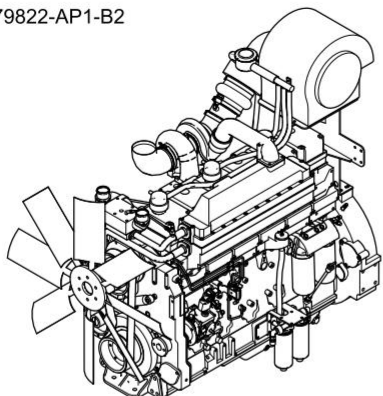
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Model.....HCL500C
 Structure type A
 Tank capacity.....940L
 Dry weigh.....4161kg
 Sound pressure level @1m/ 7m N/A
 Sound power level acc. 2000/14/EC N/A
 Dimensions L×W×H..... 3384x1440x2173mm
 Standby Power 550kVA/440kW
 Prime Power..... 500kVA/400kW

Voltage	380V	400V	415V	440V	
Ampere	759.6	721.7A	695.6A	656A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	30	57	82	107	121

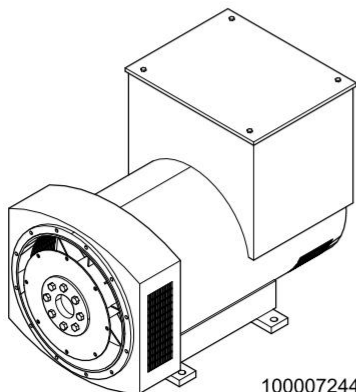
Diesel Engine

1000079822-AP1-B2



Engine Manufacturer/Brand.....	Cummins
Engine Model.....	KTA19G4
Dimensions L×W×H.....	2141.9×879.8×1733.5mm
Dry Weigh (approx.)	1855kg
Number of Cylinders.....	6
Bore.....	159mm
Stroke	159mm
Displacement.....	18.9L
Compression Ratio	14.5
Type of Injection	Direct
Intake System.....	Turbo charged
Intake Resistance.....	≤6.23kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	NO.2 or ASTM D2
Type of Oil	API CD/SE or CCMCD4
Oil Capacity	50L
Type of Coolant	Glycol mixture
Coolant Capacity	250L
Back Pressure	≤10.1kPa
Standby Power	504kW
Prime Power	448kW
Fuel Consumption(100%load).....	107L/h

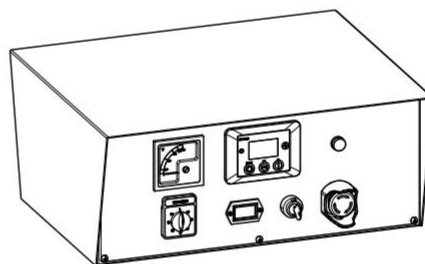
Alternator



1000072447-AP1-A1

Alternator Manufacturer/Brand	Stamford
Alternator Model	HCI544D
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.....	1.035m³/s(50HZ),1.312m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-920 Control System



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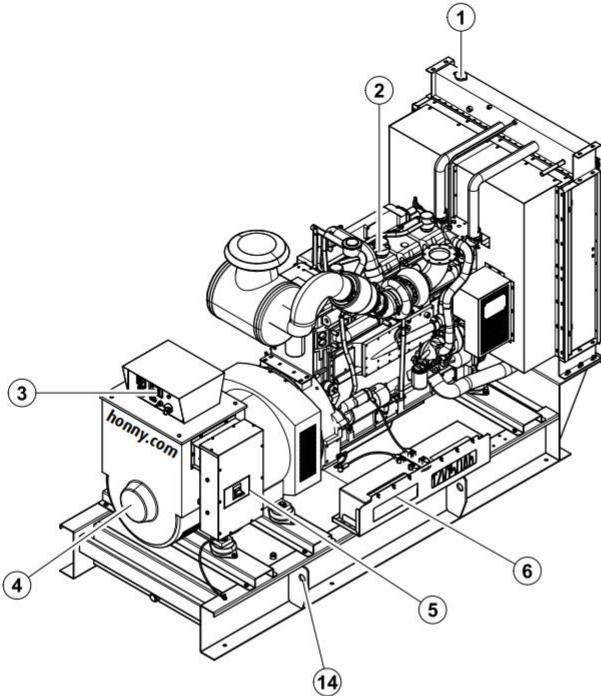
PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition 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

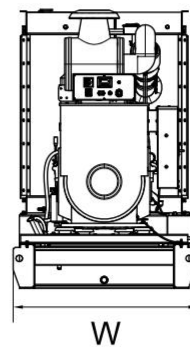
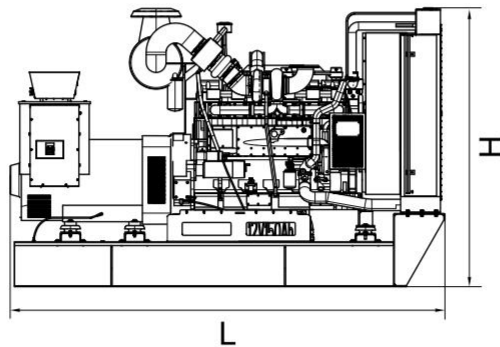
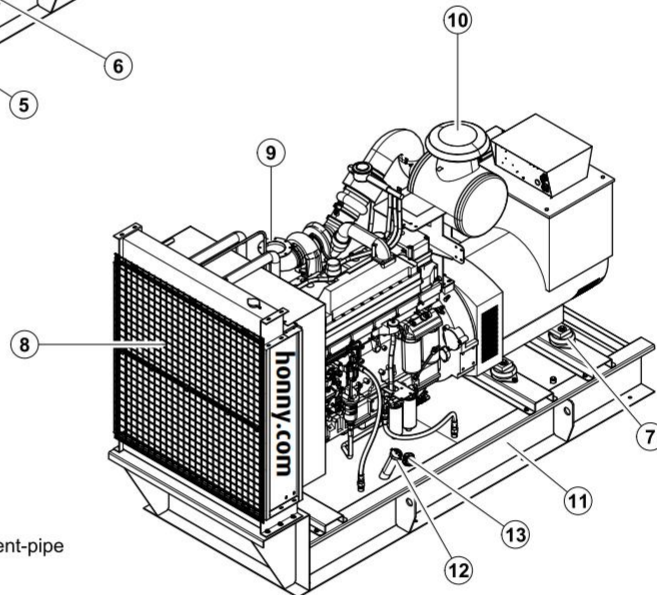
4. Open Type Overall Dimensions

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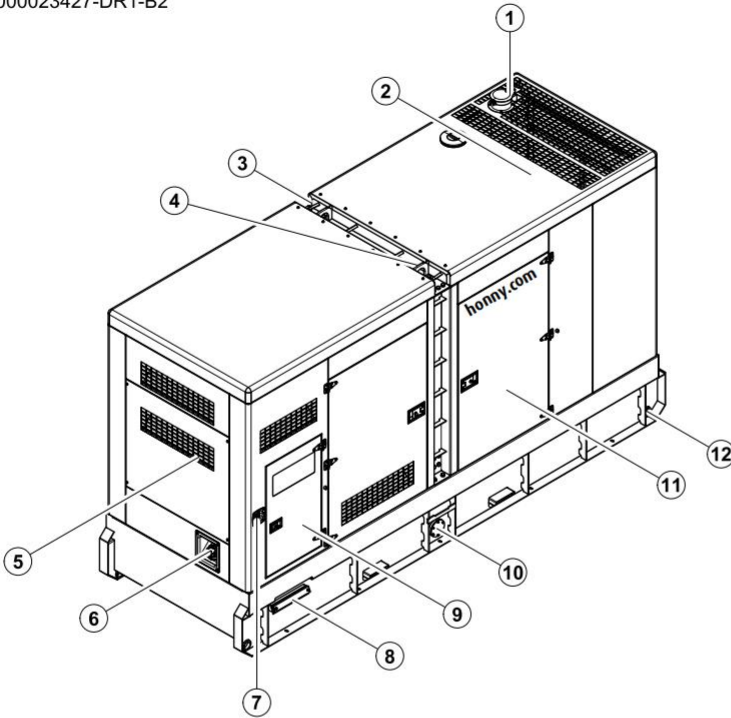
Dry weight	4161kg
Fuel tank capacity	940L
Dimensions L x W x H	3384x1440x2173mm

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



5. Silent Type Overall Dimensions

1000023427-DR1-B2



Dry weight	5937kg
Fuel tank capacity	1650L
Dimensions L x W x H	4512x1523x2566mm

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

