Cumins series
G1250DG
50 Hz @ 1500rpm

A Guangdong Power Company

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

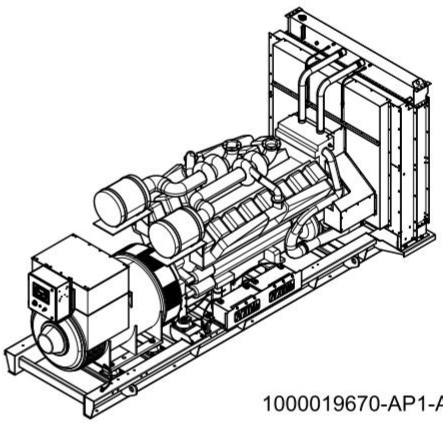
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Cummins engine KTA50-G3
- Coupled to a Leroy-Somer or Stamford alternator
- Microprocessor control module PLC-7420
- Rotate speed governor: Electronic governor FP801
- Excitation System: PMG
- A.V.R.Model: MX341
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V/200AH 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
- Operation Manual / Specifications

3 Equipment Specification

General technical data



1000019670-AP1-A4

Model.....G1250DG

Structure type ..... A

Dry weight.....9661kg

Noise level @7m .....N/A

Sound power level acc. 2000/14/EC .....N/A

Dimensions L×W×H..... 5081x2110x2295mm

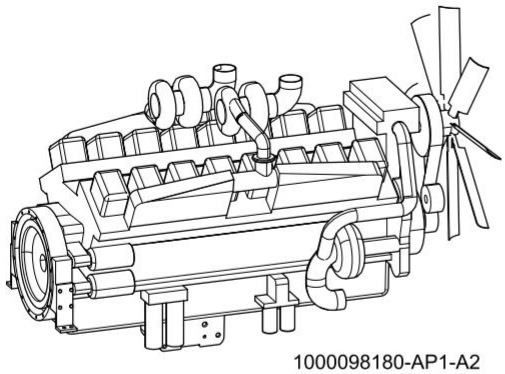
Standby Power 1375kVA/1100kW

Prime Power..... 1250kVA/1000kW

Voltage	380V	400V	415V	440V
Ampere	1899A	1804A	1739A	1640A

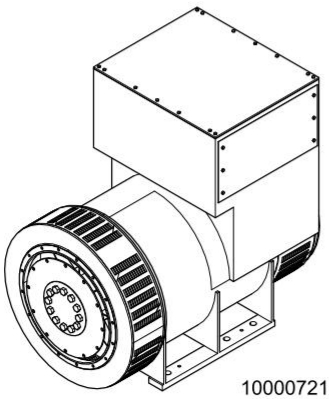
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	72.2	132	189	248.9	278.3

Power System



1000098180-AP1-A2

Engine Manufacturer/Brand	Cummins
Engine Model	KTA50-G3
Dimensions L×W×H	2885*1518.9*2005
Dry Weigh (approx.)	5058kg
Number of Cylinders	16
Bore	159mm
Stroke	159mm
Displacement	50.3L
Compression Ratio	13.9
Type of injection	Direct injection
Intake System	Turbocharged and aftercooled
Intake Resistance	6.23kPa
Cooling System	Water cooled
Fan	Push
Battery Voltage	24V
Type of Fuel	NO.2 or ASTMD975
Type of Oil	CF4/SG15W-40
Oil Capacity	177L
Type of Coolant	Glycol mixture
Coolant Capacity engine only	161L
Back Pressure	≦10kPa
Standby Power	1227kW
Prime Power	1097kW
Fuel Consumption(100%load)	261L/h

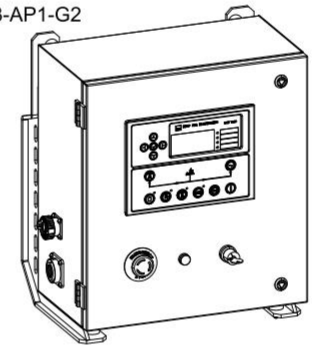


1000072165-AP1-A1

Alternator Manufacturer/Brand	Stamford
Alternator Model	PI734A
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	6
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250 rpm
Air Flow	2.69m³/s(50HZ),3.45m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic	TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

PLC-7420 Control System

1000089903-AP1-G2



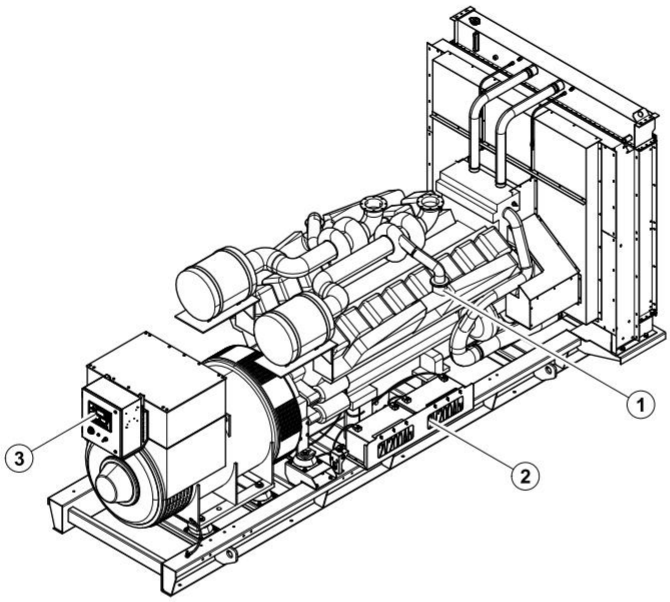
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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.

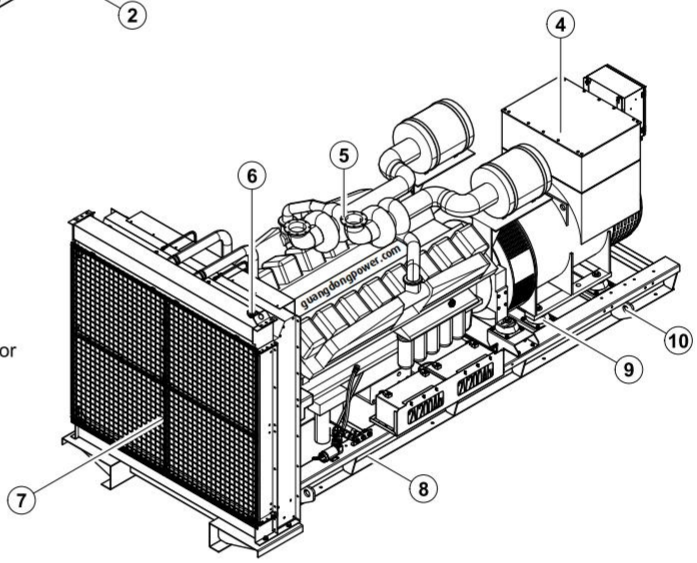
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, 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

1000019670-DR1-A4

Dry weight	9661kg
Dimensions L x W x H	5081x2110x2295mm





(5) Mounting flange of ven-pipe
(4) Alternator
(3) Control cabinet
(2) Battery
(1) Engine
(10) Lifting lug
(9) Vibration isolator
(8) Base frame
(7) Radiator
(6) Coolant inlet