

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.

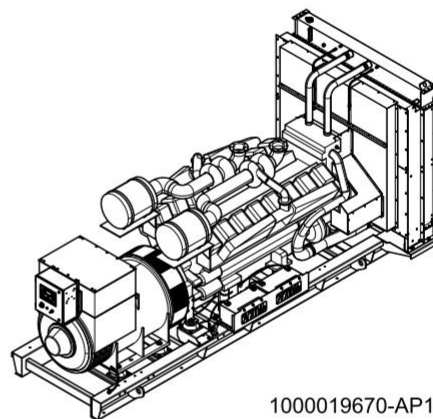
2 General Features

- Cummins engine KTA50-G3
- Close coupled to a Stamford alternator PI734A
- 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°C 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

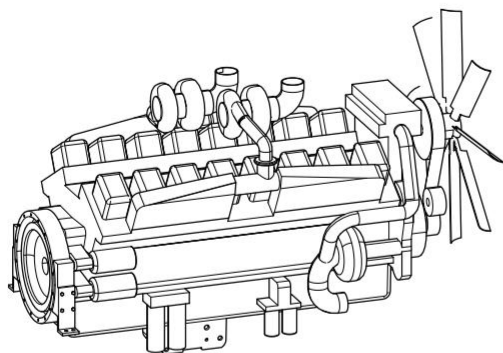


1000019670-AP1-A4

Model.....HCL1250C
 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

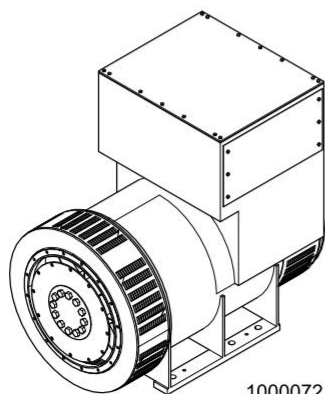
Voltage	380V	400V	415V	440V	
Ampere	1899A	1804A	1739A	1640A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	72.2	132	189	248.9	278.3

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

