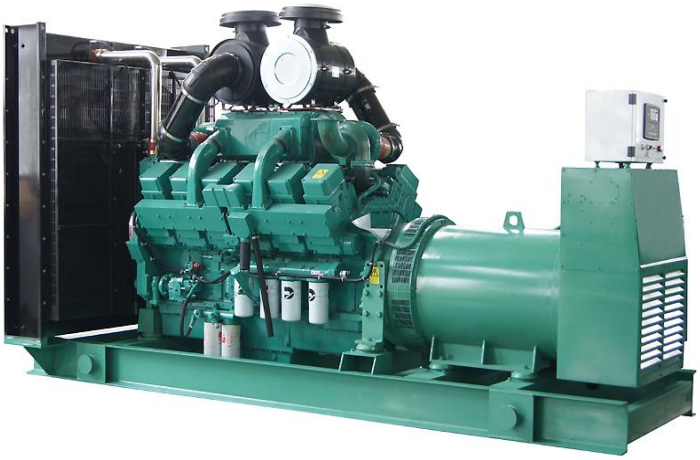
800KVA Cummins Diesel Generator Set Datasheet



Model:KH-640GF
Engine: CUMMINS
Alternator: STAMFORD
Control Panel: UK DEEPSEA
Prime Power:800KVA/640KW
Standby Power:880KVA/704KW

PRP ●Prime power is available for an unlimited number of annual hours in variable load application,in accordance with GB/T2820-97; A 10% overload capability is available for a period of 1 hour within a 12-hour of operation.

ESP ●The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption.No overload,utility parallel or negotiated outage operation capability is available at this rating.

1.Standard Specification

Genset model	Voltage	Frequency	Phase	Power Factory	Protection Class	Insulation Grade
KH-640GF	240/415V	50HZ	3	0.8(lagging)	IP23	H

2.Engine and genset output radting

Engine model	Engine Speed (RPM)	Prime (KW/HP)	Standby (KW/HP)	Genset Model	Prime (KVA/KW)	Standby (KVA/KW)
KTA38-G2B	1500	711/953	789/1057	KH-640GF	800/640	880/704

3.Scope of standard supply

●Engine: CUMMINS brand new

●.Alternator: STAMFORD brand new

●Controller: Automatic controller DSE7320MKII with AMF function

●Breaker: Manual circuit breaker 3-pole, China CHNT

●Radiator: Cummins Brand new 50°C

●Vibration: Vibration damper between engine/alternator and base frame

●Base: Heavy duty steel channel base frame

●Silencer: Heavy duty industrial type silencer with flexible bellow,elbow

●Battery: High capacity sealed free maintenance battery C/W battery cables

●Manuals: Standard tools, operator's manual of engine ,alternator , controller, breaker

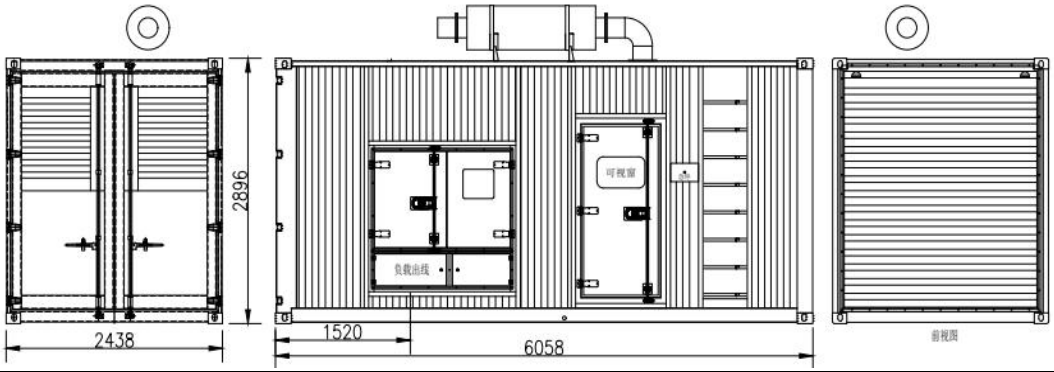
4.Optionals

●Soundproof Cabinet	●Oil/ Water/Fuel Heating system	●Anticondensation heater
●Heater Preservation Cabinet	●Automatic Transfer Switch (ATS)	●Daily Fuel Tank
●Rainproof Cabinet	●Remote Control System	●Output Cable
●Standdard Container cabinet(20GP/20HC/40HC)	●Synchronization System	●Maintainance Spare Parts
●Trailer (10-500KVA)	●Breaker brand (ABB,Simens,Schneider)	●Plywood Case Packing

4.DIMENSIONS(L*W*H) And Weight

PROCESS FLOW:Drawing→Cutting→Bending→Welding→Spraying→Assembling→Testing

Open Type	9600kG		Silent Type	12400KG
	5000*2000*2450mm			6058*2438*2896mm



5.Silent cabinet Features

● The whole container genset can be shipped as an international standard container, which can reduce the transportation cost sharply (certificate can be provided);

● Diese genset, power switch cabinet, control systerm and 6~8 hours fuel tank are fixed insided the container;

●There're two explosive-proof lamps inside the roof of the container and one explosive-proof lamp above the control panel for user friendly;

●Both the front and back doors of the container can be opened. Both sides also equips with doors for users operation and maintenance; there're ladders outside the container;

●All the hinges, locks and bolts are made of stainless steel. There're installations against sea waves and rain waters inside the container;

●The control panel and the output cabinet are on the same side of the container for user's daily operaiton and connecting power cables conveniently;

●Highly effective shock absorbers are adapted between engine and base frame to reduce noise and vibration during gensets running;

●The scientific ventilation system can make the heat energy generated during gensets running escape out of canopy effectively;

●Reasonable control space design to make the operation inside canopy easy and comfortable;

●Impedance professional silencer make the noise come from the exhaust reduce sharply;

●The output terminal is inside an output box fixed with the contaner. User can connect the cables from outside the container directly.

● For the soundproof container type power generator, the container adapts the most advanced sound absorbing technology. The polymer materials combines the sound waves reflecting and absorbing technology, transfers the sound energy to heat energy, then expel the heat out of container through the ventilation system. Besides, the soundproofing doors applies double-layered glasses window, with perfect sealing along side the doors and windows so that the sound won't escape from the doors and windows

5.Warranty

Warranty is according to our standard conditions:12 months or 1,000 running hours, subject to the earlier one (artificial damage to be an exception).

6.Criterion

●European Safety Standard: CE Certificate

●ISO9001:2015 Quality Control System

●**CUMMINS OEM CERTIFICATE**

●**STAMFORD OEM CERTIFICATE**

7. CUMMINS Diesel Engine

Engine Brand	**Cummins**
Engine Manufacturer	**Chongqing Cummins Engine Company Ltd**

Engine Model	**KTA38-G2B**
Engine Rated Power	**711KW @1500RPM**
Cylinder Arrangement	12 in line
Cycle	Four stroke
Aspiration	Turbocharged , Aftercooled
Fuel System	Cummins PT
Bore×Stroke (mm×mm)	159x159
Displacement(L)	37.8
Compression Ratio	14.5:1
Speed Governor	Electronic
Cooling System	Forced Water Cooling Cycle
Starter Motor	DC24V electrical starting
Exhaust System	
Exhaust Gas Flow (l/s)	2251
Exhaust Temperature(℃)	
●Standby Power	470
●Prime Power	477
Max Back Pressure(kPa)	10
Air Intake System	
Max Intake Restriction(kPa)	
●Clean Element	2.49
Air Flow(l/s)	926
Fuel System	
Type Injection System	Cummins PT
100%(Prime Power) Load(L/H)	164.4L/H
Oil System	
Maximum Oil Temperature(℃)	121
Oil Pressure at Rated RPM(kPA)	296-483
Total System Capacity (L)	35.7
Cooling System	
Coolant Capacity - Engine Only(L)	118
Thermostat range(℃)	82-94
Max Water Temperature Standby/Prime(℃)	104/100
8. Specification of STAMFPRD alternator	
Alternator Brand	**Stamford**
Engine Manufacturer	**Cummins GeneratorTechnologies (China) Co., Ltd**
Alternator Model	**S6L1D-C4**
Alternator Rated Power	**810KVA/648KW**
Rated Voltage	415V
Rated frequency	50HZ
Connecting Type	3 Phase and 4 Wires
Number of Bearing	1
Protection Grade	IP23

Altitude	≤1000m
Exciter Type	Brushless ,Self-exciting, AVR automatic voltage regulating,100% Copper winding wire
Insulation Class	H
Telephone Influence Factor (TIF)	≤50
THF	≤2%
Voltage Regulation, Steady State	≤±1%
Transient State Voltage	≤-15%～+20%

9. Specification of control System (Deepsea DSE7320MKII Module)

DSE7320 controller is an advanced control module based on micro-processor, It is an Auto Mains (Utility) Failure Control Module (AMF), have been designed to start and stop generating sets that include electronic And non-electronic engines. Include the additional capability of being able to monitor a mains (utility) supply. when main is not available，It can automatically start the engine and close generating sets breaker automatically, Accurately measure various operational parameters and display all values and alarms information on the LCD. In additional, it can automatically open breaker, and shutdown the engine after the main supply recovers.

Main Features

- AMF and ATS and communication and expansion function.
- Designed to work with electronic or non-electronic or gas engine simultaneously. (support many kinds of engines ECU).
- Manual, Automatic, Test and remote control mode selectable.
- Monitoring and measuring operational parameters of the mains supply and genset.
- Indicating operation status, fault conditions, all parameters and alarms.
- Multiple protections and multiple parameters display.
- Includes 12 inputs and eight outputs. 8 inputs are configurable and 4 outputs are configurable.
- 4 analog inputs for kinds of optional sensors that can be used for measuring oil pressure, coolant temperature, fuel level and so on; parameters can be configured by user.
- Can be programmed using the front panel or by using the PC software.
- Support twelve languages. The language was edited by customer.
- Graded protection: pre-alarm, shutdown and electrical trip, flexible setting.
- The module can be pre-set for four operating modes and protecting parameters.
- The firmware can be updated automatically, so customer can have the latest version.

Key Features

- 4-Line back-lit LCD text display
- Multiple Display Languages
- Five key menu navigation
- LCD alarm indication
- Heated display option available
- Customisable power-up text and images
- DSENet expansion compatibility
- Data logging facility • Internal PLC editor
- Protections disable feature • Fully configurable via PC using USB, RS232 & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3 phase generator sensing and protection

3 phase mains (utility) sensing and protection (DSE7320 MKII only)

- Automatic load transfer control (DSE7320 MKII only)
- Generator current and power monitoring (kW, kvar, kVA, pf)

• Mains current and power monitoring (kW, kvar, kVA, pf) (DSE7320 MKII only)
• kW and kvar overload and reverse power alarms
• Over current protection
• Unbalanced load protection
• Independent earth fault protection • Breaker control via fascia buttons
• Fuel and start outputs configurable when using CAN
• 6 configurable DC outputs
• 2 configurable volt-free relay outputs
• 6 configurable analogue/digital inputs
• Support for 0 V to 10 V & 4 mA to 20 mA sensors
• 8 configurable digital inputs
• Configurable 5 stage dummy load and load shedding outputs
• CAN, MPU and alternator frequency speed sensing in one variant
• CAN, MPU and alternator frequency speed sensing in one variant
• Manual and automatic fuel pump control
• Engine pre-heat and post-heat functions
• Engine run-time scheduler
• Engine idle control for starting & stopping
• Fuel usage monitor and low fuel level alarms
• Simultaneous use of RS232 and RS485 communication ports
• True dual mutual standby using RS232 or RS485 for accurate engine hours balancing.
• MODBUS RTU support with configurable MODBUS pages.
• Advanced SMS messaging (additional external modem required)
• Start & stop capability via SMS messaging
• 3 configurable maintenance alarms
• Compatible with a wide range of CAN engines, including tier 4 engine support
• Uses DSE Configuration Suite PC Software for simplified configuration
• Licence-free PC software
• IP65 rating (with supplied gasket) offers increased resistance to water ingress
• Modules can be integrated into building management systems (BMS) using MODBUS RTU
Key Benefits
• Automatically transfers between mains (utility) and generator (DSE7320 MKII only) for convenience.
• Hours counter provides accurate information for monitoring and maintenance periods
• User-friendly set-up and button layout for ease of use
• Multiple parameters are monitored & displayed simultaneously for full visibility
• The module can be configured to suit a wide range of applications for user flexibility
• PLC editor allows user configurable functions to meet user specific application requirements.