

## Diesel Generating Set

| MODEL                | HHC (S) 63 |
|----------------------|------------|
| Prime Power (50Hz)   | 50kW/63kVA |
| Standby Power (50Hz) | 55kW/69kVA |





#### Standard Features



- Cummins diesel engine made by DCEC China, Model:4BTA3.9-G . With radiator at ambient temperature 40°C, fans are driven by belt, with safety guard, With DC 24V charge alternator.
- Stamford Alternator Model:STAMFORD UCI 224F1, single bearing alternator; IP23 Protection, Insulation class H.
- Stand type control panel with many kinds of Display and Protection function is equipped.
- Two 12V starter maintenance free battery.
- Power output MCCB is equipped.
- Accessory: A suit of ripple flex exhaust pipe; exhaust siphon, muffler; and a set of spare parts & Tools & Documents.



- The structure is built-up, the built-in residential muffler makes the noise lower.
- Exhaust guide plate and air channel for air intake&noise reduction are mounted within soundproof canopies.
- Outside Emergency Stop Button.
- Inside power Cathode switch.
- Outside Fuel Inlet.
- Base Fuel tank is equipped, With lifting ear and forklift slots. Outside fuel inlet/return, outside lub oil and coolant drain.

## Generator Ratings

| Voltage | Frequency                               | - Phases | Power Factor | Standby Current | Prime Current | Standby Power | Prime Power |
|---------|---|----------|--------------|-----------------|---------------|---------------|-------------|
| (V)     | (Hz)                                    |          | (COS¢)       | (A)             | (A)           | (kW/kVA)      | (kW/kVA)    |
| 440/254 | 50                                      | 3        | 0.8          | 90.2            | 82.0          | 55/69         | 50/63       |
| 400/230 | 50                                      | 3        | 0.8          | 99.0            | 90.0          | 55/69         | 50/63       |
| 380/220 | 50                                      | 3        | 0.8          | 104.0           | 94.5          | 55/69         | 50/63       |
| Other   | Customizing for Different Specification |          |              |                 |               |               |             |

Prime Power (PRP): Prime power is available for continuous 12-hours running, in accordance with GB/T2828,ISO8528; A 10% overload capability is available for a period of 1 hour within a 12-hours period of

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power. No overload, soundproof gensets only run under rating power.

#### Sales Promises

- World-famous high-quality engines and alterntors are adopted by HUIHE.
- All the gensets are tested on load before they leave factory, various kinds of functions are tested . and test reports are provided.
- Warranty for all of our gensets and accessories is according to our standard conditions since testing: 12 months or 1,000 running hours accumutively, subject to the earlier, kindly refer to our service terms.
- Service and parts are available from HUIHE or distributors in your location.



## **Engine Data**

| Manufacturer / Model:                | DCEC/4BTA3.9-G                               |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| Air Intake System:                   | 4-Cycle,turbocharger,Water-to-Air afercooled |  |  |  |  |
| Fuel System:                         | Direct Injection Fuel System                 |  |  |  |  |
| Cylinder Arrangement                 | 4 in Line                                    |  |  |  |  |
| Displacement:                        | 3.9L   |  |  |  |  |
| Bore×Stroke:                         | 102×120 (mm)                                 |  |  |  |  |
| Compression Ratio:                   | 16.5   |  |  |  |  |
| Rated RPM:                           | 1500rpm                                      |  |  |  |  |
| Max. Standby Power at Rated RPM:     | 65KW   |  |  |  |  |
| Governor Type:                       | High-precision Electronic Speed Governer     |  |  |  |  |
| Steady State Frequency Regulation:   | ±0.5%  |  |  |  |  |
| Piston Speed:                        | 6.0m/s                                       |  |  |  |  |
| Exhaust System                       |  |  |  |  |  |
| Exhaust Flow:                        | 14.8m³/min                                   |  |  |  |  |
| Exhaust Temperature:                 | 497℃   |  |  |  |  |
| Max Back Pressure:                   | 10kPa  |  |  |  |  |
| Air Intake System                    |  |  |  |  |  |
| Max Intake Restriction:              | 6.2kPa                                       |  |  |  |  |
| Intake Flow:                         | 5.1m³/min                                    |  |  |  |  |
| Fuel System                          |  |  |  |  |  |
| Fuel Tank Capacity:                  | 155L   |  |  |  |  |
| 100% Standby Power Load:             | 15.4L/h                                      |  |  |  |  |
| 100% Prime Power Load:               | 14.2L/h                                      |  |  |  |  |
| 75% Prime Power Load:                | 9.9L/h                                       |  |  |  |  |
| 50% Prime Power Load:                | 7.4L/h                                       |  |  |  |  |
| Oil Sys                              | stem   |  |  |  |  |
| Total Oil Capacity:                  | 16.4L  |  |  |  |  |
| Engine Oil Tank Capacity:            | 14.3L  |  |  |  |  |
| Oil Pressure at Rated RPM:           | 345kpa                                       |  |  |  |  |
| Cooling S                            | System                                       |  |  |  |  |
| Total Coolant Capacity:              | 21L  |  |  |  |  |
| Max. Water Temperature:              | 100℃   |  |  |  |  |
| Coolant Flow:                        | 110L/min                                     |  |  |  |  |
| Electrical                           | System                                       |  |  |  |  |
| System Voltage:                      | DC 24 V                                      |  |  |  |  |
| Rated Current for Charge Alternator: | 40 A   |  |  |  |  |
| ř                                    |  |  |  |  |  |



## Alternator Data

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards

| Manufacturer / Type:               | STAMFORD/ UCI224F1                       |
|------------------------------------|--|
| Number of Phase:                   | 3  |
| Connecting Method:                 | 3 Phase and 4 Wires, "Y" type connecting |
| Number of Bearing:                 | 1  |
| Power Factor:                      | 0.8                                      |
| Protection Grade:                  | IP23                                     |
| Altitude Requirement:              | ≤1000m                                   |
| Exciter Type:                      | Brushless, Self-exciting                 |
| Insulation Class/Temperature Rise: | H/H                                      |
| Telephone Influence Factor (TIF):  | < 50                                     |
| THF:                               | <2%                                      |
| Voltage Regulation, Steady State : | ≤±1%                                     |
| Alternator Capacity:               | 72.5KVA                                  |
| Alternator Efficiencies:           | 89.9%                                    |
| Air Cooling Flow:                  | 12.96m³/min                              |

# **Generating Set Data**

| Frequency Reduce:                             | ≤3%          |
|---|--------------|
| Frequency Regulation, Stead State:            | ≤0.5%        |
| Waveform Distortion(no load):                 | <1.5%        |
| Sudden Frequency Warp (100% Sudden Reduce):   | <b>≤+10%</b> |
| Sudden Frequency Warp (Sudden Increase):      | ≤-7%         |
| Frequency Recovery Time (100% Sudden Reduce): | ≤3S          |
| Frequency Recovery Time (Sudden Increase):    | ≤3S          |
| Voltage Regulation:                           | ≥±5%         |
| Voltage Regulation, Stead State:              | ≤±1%         |
| Voltage Modulation:                           | 0.30%        |
| Sudden Voltage Warp (100% Sudden Reduce):     | <b>≤+20%</b> |
| Sudden Voltage Warp (100% Sudden Increase):   | <-15%        |
| Voltage Stable Time (100% Sudden Reduce):     | <b>≤4</b> \$ |
| Voltage Stable Time (100% Sudden Increase):   | <4S          |
| Voltage Unbalance:                            | 1%           |
| Soundproof Type Decibel Rating(at 7 m):       | 69dB         |



## Standard Control Panel



HKY-501 control panel is fit for backpack structure and standing structure, and applied for whole genset assembling. This control panel is a panel which holds an 501K made by British Deep Sea Company as its core control module combined with correlative displaying meters of engine and alternator, it is able to examine genset running parameter and protect the genset, has the virtue of easy operation, fully function & reliable protection. The MCCB can be added to the standing structure panel according to special requirements, in order to satisfy the power output.

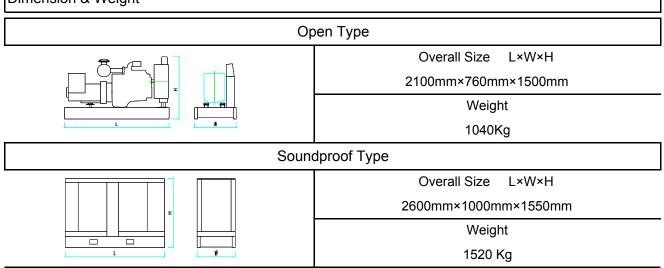


HKY-C10 control panel is fit for backpack structure and standing structure. This control panel is a panel which holds a IL-NT MRS10 made by EU Comap company as its core intelligent control module. It has plenty friendly operation interface with many functions such as running parameter detecting, stastic, record, pre-alarm & protection. The MCCB can be added to the standing structure panel according to special requirements for genset, in order to satisfy the power output. Remote control, monitor, communication, mains/generator power inspection & switch control (AMF) function can be selected by users.

### **Options**

#### Control and Power **Engine** Alternator Others Distribution System 50<sup>°</sup>C High Temperature Permanent Magnet Gen Auto Control Panel Daily Fuel Tank -erator (PMG) Auto Transfer Switch(ATS) ● Base Fuel Tank Radiator Water Separator Anti Condensation Heater Battery Charge Trailer Type Drop CT(For Paralleling) Manual Paralleling System Water Jacket Heater Automatic Input System For Oil Heater Auto Paralleling System Fuel Electronic Indicator For Oil Discharging Pump Maintenance Tools Fuel Level Accesory Bag Wind Scooper for Soundproof Canopy

#### Dimension & Weight



Wuxi Huihe Technology Co., Ltd.

Http://www.huihepower.com