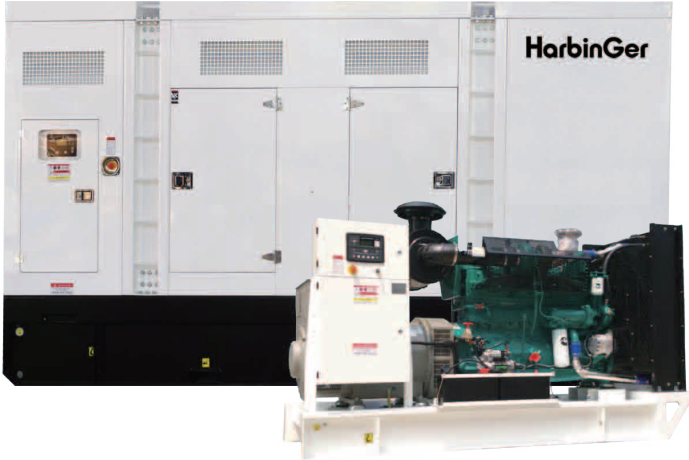


## Diesel Generator Set - HC500E3/S3



### Features

- » Brand new Cummins water cooled diesel engine
- » Brand Original Stamford alternator, Ratings:230/400v, 3Ph, 50Hz, 1500Rpm, 0.8PF, IP23, H insulation class
- » 50 °C ambient temperature Copper Radiator with engine driven fan mounted on skid
- » At least 8 hours running fuel tank with fuel gauge integrated in the base frame of generating set
- » Equipped with Industrial silencers with flexible connects and elbow
- » Anti-vibration mountings between the engine/alternator and base frame
- » Excitation system: self-excited
- » Top lifting and steel base frame with forklift holes
- » Simulating oil pressure, water temperature, oil level, battery voltage, engine speed
- » Adjust parameter in the controller directly or by connected by PC
- » Circuit breaker controlling
- » **Optional:** water jacket preheater,oil heater, double air cleaner, ATS and trailer, etc.

Generator Data		
Engine Make	Cummins	
Engine Model	KTA19-G3A	
Alternator Make	Stamford	
Alternator Model	HCI544C	
Controller System	DSE6020	
Standby Power:	KW	440
	KVA	550
Prime Power:	KW	400
	KVA	500
Voltage	V	400/230
Frequency	HZ	50
Fuel Consumption 100% load (L)	8Houre(Standard)	880.0
	24Houre(Optional)	2640.0
Noise Level at 7 meters(dBA)	Open Type	/
	Silent Type	75

Note:

(1) Prime Power: Prime power is available for an unlimited number of annual operating hours in variable load applications; in accordance with ISO8528-1. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation, in accordance with ISO3046-1.

(2) Standby Power: Standby power 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.

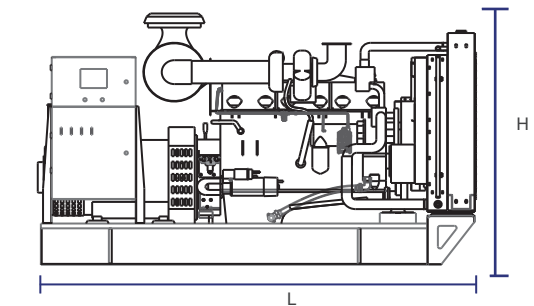
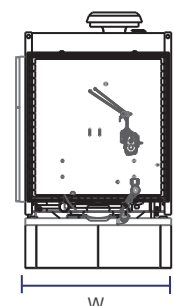
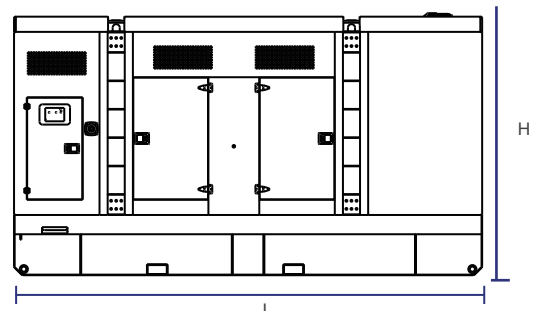
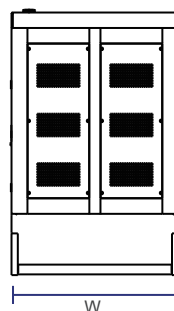
(3) Ambient reference condition: 100kPa, 25 °C , 30% relative humidity. Rating according to ISO3046.

(4) The following voltages can be customized on requirement:  
single phase - 220V/230V/240V;  
three phase - 380/220V, 400/230V, 415/240V, 440/254V.

(5) 60HZ can be customized on requirement.

(6) HarbinGer reserves the right to modify the specifications without prior notice. All ratings are for guidance only, please refer to the final specific generator information from the HarbinGer.

Model	Dimension (L*W*H mm)	Weight(kg)
HC500E3	3300*1450*2120	4245
HC500S3	4600*2000*2550	6210



### Technical Parameters

Engine Specifications		Alternator Specification	
Model	KTA19-G3A	Model	HCI544C
Manufacturer	CUMMINS	Frequency and Speed	50Hz/1500rpm
Number of cylinders	6	Manufacturer	STAMFORD
Cylinder arrangement	In-line	Prime capacity(kVA)	500
Cycle	Four stroke	Exciter type	Brushless
Induction system	Turbocharged	Insulation	Class H
Compression ratio	14.5:1	Protection	IP23
Bore x Stroke	159 x 159 mm	Rated power factor	0.8
Displacement L	18.9	Stator winding	Double layer concentric
Estimated total weight (dry) kg	1855	Winding pitch	two thirds
Rated power KW/HP	448/600	Winding leads	12
Lubrication oil capacity L	50	Maximum over speed	2250Rev/min
Coolant capacity L	66	THF (Wave Form IEC)	<2%
Governer method	Electronic	TIF (Wave Form NEMA)	<50
Starting system	Electric	Voltage regulation	1.00%
Exhaust System		Lubrication system	
Silence Type	Industrial	Total System Capacity	50litre
Exhaust gas flow (max)	1604	Normal oil pressure	345-483kPa
Exhaust gas temperature (max)	557℃	Normal oil temperature	≤121℃
Engine Electrical System		Fuel system	
Battery charging alternator		Type of injection model	Direct Injection Cummins
Ground (negative/positive)	Negative	110% Fuel Consumption (prime) L/H	124
Starter motor rated voltage (DC)	24 V	100% Fuel Consumption (prime) L/H	109
Battery voltage	12 V	75% Fuel Consumption (prime) L/H	96
Volts (DC)	24 V	50% Fuel Consumption (prime) L/H	88
Cooling System			
Coolant capacity (engine Only) L	30	Maximum coolant temperature	100℃
Thermostat operation range	82 - 93℃	Minimum Pressure Cap	69kPa
Minimum Top Tank Temperature(Prime)	100℃	Maximum Top Tank Temperature(Standby)	104℃

## Diesel Generator Set - HC500E3/S3

### Standard and Optional Configuration

System	Standard	Optional
Engine		Oil Preheater Jacket water heater
Alternator	AVR Brushless Excitation H insulation class	Anti-condensation heater Permanent excitation Winding temperature measurement device Anti-damp and anti corrosion treatment
Control Panel	DSE6020	DSE7310/20, ComAP 20/25 etc ATS
Canopy	Control cabinet installed in the generating-set base frame Installed at the high strength steel base frame Integrated vibration amount between engine/alternator & base Transportation holes for forklift designed	Trailer Galvanised and powder coated User-specified color for generator set
Cooling System	Radiator (50°C) Cooling fluid draining pipe with valve Electrical motor driving cooling fan Coolant Level Sensor, Coolant temperature sensor Radiator ducts	Water jacket water heater Radiator integrated belt driving cooling fan
Exhaust System	Dry Manifold Industrial muffler	Stainless steel exhaust pipe Residential silencer
Fuel System	Fuel-water separator Fuel Filter, Fuel hose, Fuel cooler High-pressure oil pump 8 hour running fuel tank	Fuel T-valves Low fuel level alarm Automatic fuel feeding system 12 hour, 24hour and so on
Lubrication System	Oil filter, Oil Pump With a discharge valve of the discharge pipe	Oil with the machine
Voltages		Single phase: 110V, 220V, 230V Three phase: 415/240V ; 400/230V; 380/220V

### Control Panel: DSE6010/20

#### AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

The DSE6010 is an Auto Start Control Module and DSE6020 is an Auto Mains(Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications. Both modules offer electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engine versions and offer a number of flexible inputs, outputs and engine protections so the system can be easily adapted to suit a wide range of application demands. The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.



DSE6010



DSE6020

#### KEY FEATURES

- Back-lit icon LCD display
- Front panel editing
- LED and LCD alarm indication
- Power Save mode
- CAN and Magnetic Pick-up/Alt. versions available (specify on ordering)
- PC and front panel configuration
- 4 Digital inputs
- 3 Analogue inputs
- 6 Outputs (4 configurable on Magnetic Pick-up/Alt., 6 configurable on CAN version)
- Configurable timers and alarms
- Alternative configuration
- Event Log (5)
- Remote Start input
- 3 Phase generator monitoring

- Current monitoring and protection
- Power monitoring (kW, kV A, kV Ar)
- 3 Phase Mains (Utility) monitoring (DSE6020 only)
- Test button (DSE6020 only)
- Battery Voltage monitoring
- Engine pre-heat
- Hours counter
- Comprehensive shutdown or warning on fault condition

#### KEY BENEFITS

- ★ Automatically transfers between mains (utility) and generator power (DSE6020 only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout

- Multiple engine parameters are monitored simultaneously
- Module can be configured to suit individual applications
- Compatible with a wide range of CAN engines
- Uses DSE Configuration Suite PC software for simplified configuration
- IP65 rating (with optional gasket) offers increased resistance to water ingress
- Licence-free PC software

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