

CUMMINS SERIES



MODEL AC400 KAN GENSET **400KVA/320KW**



General Performance Data

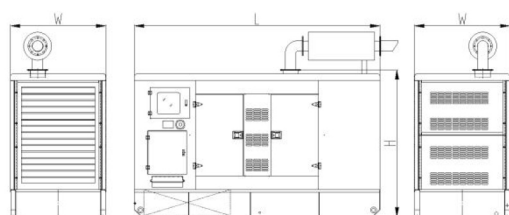
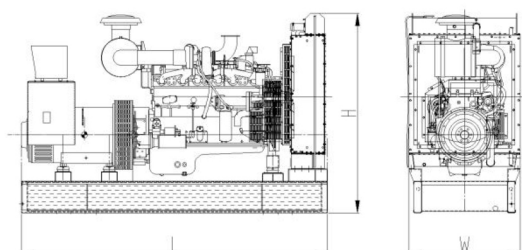
Prime Power	363KVA/290KW	Engine	Brand	Cummins
Stand by Power	400KVA/320KW		Model	NTA855-G3
Frequency/Speed	60Hz/1800rpm	Control module	Deepsea 6120	
Rated Power Factor(cosφ)	0.8	Rated Current	951A	
Standard Voltage	127V/220V	Capacity of Breaker	1250A	
Phases	3	Starting Voltage	DC24V	

Fuel consumption

Rated output	Fuel consumption rate	
100%Standby	204g/KW.h	96.1 L/h
100%Prime	206g/KW.h	87.1 L/h
75%Prime	209g/KW.h	66.0L/h
50%Prime	222g/KW.h	46.9L/h
25%Prime	254g/KW.h	26.8L/h

Standards followed

ISO9001	ISO14001
ISO8528	ISO12100
ISO13849	EN12601
GB12786	GB/T2820
IEC60034	IEC60204
CE	RETIE



Dimensions and Weights

Type	Open	Silent
Length(mm)	2980	3600
Width(mm)	1100	1400
Height(mm)	1980	2140
Weight(kg)	3200	3950
Base fuel tank volume (L)	660	660

Engine specification

Basic parameter

Manufacturer	Chongqing Cummins
Model	NTA855-G3
No. of cylinder	6
Type	4 cycle, Vertical In-line
Prime Power	358kw /480HP
Standby Power	399kw /535HP
Induction system	Turbocharged
Governor	Electrical
Bore x Stroke	140x152mm
Displacement	14L
Compression ratio	14.0:1
Oil Capacity(Total)	38.6L
Coolant Capacity(Engine only)	20.8L
Cranking Motor Voltage	DC24V

Fuel System

Type Injection system	Direct injection Cummins F
Min. Allowable flow of fuel to fuel pump	96.1 L/h

Lubrication system

Oil Pressure	
---Idle speed	103kPa
---Rated speed	241-345kPa
Max. allowable oil temperature	121°C
Oil Pan capacity - Low/High	28.4 /36.0L
Total system capacity	38.6L
Angularity of oil pan-Front Down	38°

Air induction system

Maximum allowable intake air restriction	
---with clean filter element	3.74kPa
---with dirty filter element	6.22kPa
Intake Air alarm temperature	17°C

Exhaust system

Max. allowable back pressure	10kPa
Standard exhaust pipe diameter	127mm

Cooling system

Coolant capacity	
---Engine only	20.8L
---Total system	68.5 L
---With heat exchanger	49.2L
Standard thermostat(modulating) range	82-94 °C
Max. coolant temerature	96 °C
Max. allowable top tank temerature for stand by/prime power	104/100 °C

Electric system

Min. recommended battery capacity (24V)	
---10°C(50°F) & above- 0°F CCA	600A
--- 0°C(32°F) to 10°C(50°F)- 0°F CCA	640A
---18°C(0°F) to 0°C(32°F)- 0°F CCA	900A
Max. allowable resistance of Starting circuit	0.002ohm
Starter(heave,Anode)	DC24V
Battery recharge system, negative ground	35ampere

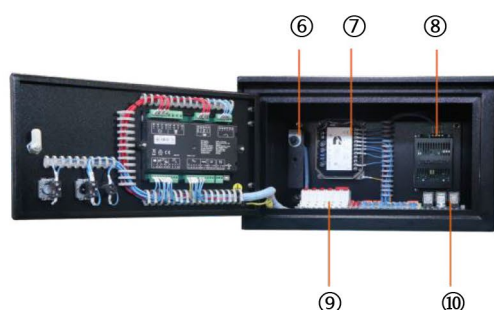
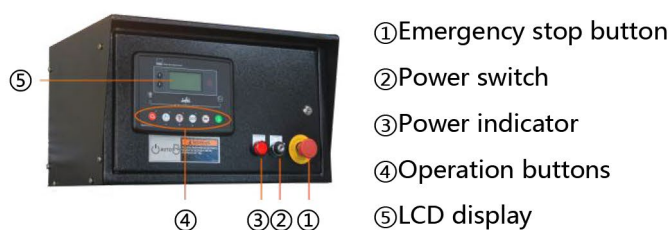
Alternator specification

Phases	3	Coating	Vacuum impregnation
Poles	4	Insulation class	H
Power factor(cosφ)	0.8	Protection	IP23
Winding connection	Star	Excitation system	Self-excited/Shunt
Winding pitch	2/3	Bearing	Single Bearing
Voltage regulator type	AVR	Coupling	Flexible disc

Control system Introduction

Deepsea 6120 Auto start & auto mains failure control panel

Deepsea 6120 is an auto mains failure controller for single generator, it can monitor and protect the generator working all the time. it has a LCD display which clearly shows the status of the engine. this controller include seven inputs and six outputs. This controller can also be programmed using the front panel or by using DSE configuration Suite PC software



Key Features:

- Auto start/stop, load transfer and alarming of generator
- Remote start on or off load
- With hierarchical loading function
- Multiple start/stop cycles can be preset
- 3 phase generator and mains voltage monitoring.
- Generator/load power detection(kW, kVA, kVA_r PF)
- Overload protection (kW)
- Load current monitoring and protection
- Engine speed protection
- Engine pre-heat
- Engine start idle & stop idle
- Battery voltage monitoring
- Start under the low battery
- 4 active outputs
- 4 digital inputs and 3 analogue inputs.
- 6 Custom digital input
- 6 outputs(4 configurable on magnetic pick-up, 6 configurable on Canbus version)
- DSE2130,DSE2157,DSE2548 expansion module can be connected
- Support 0-10V or 4-20mA oil pressure sensor

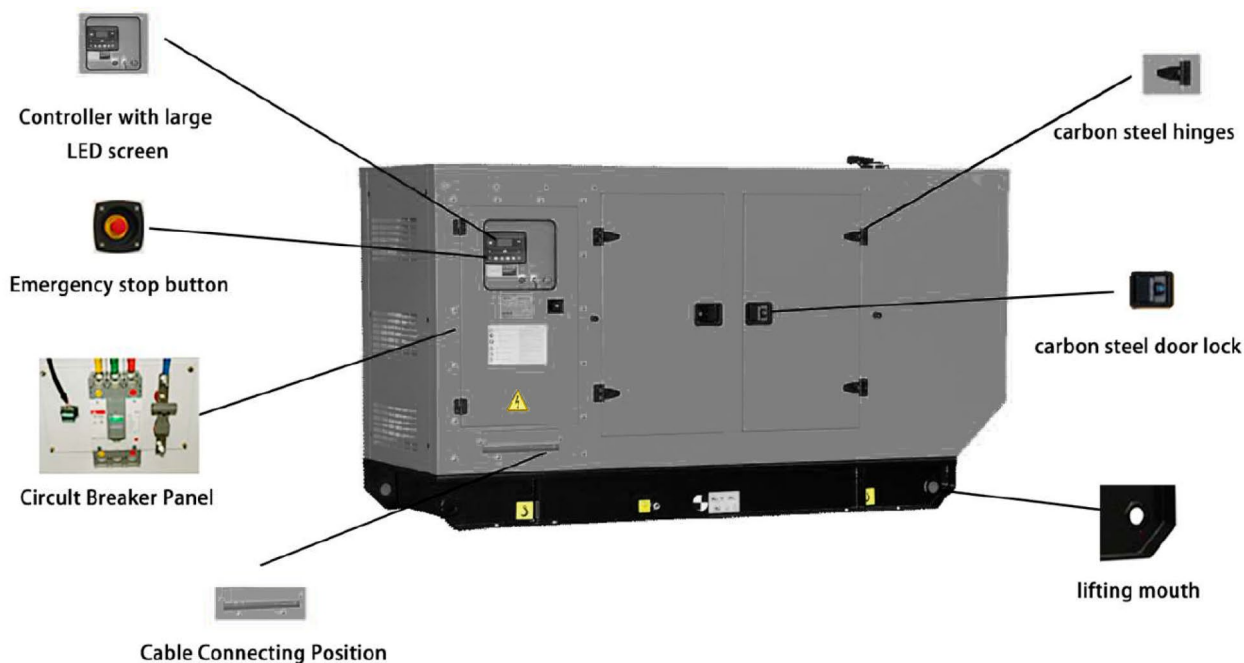
Main features:

- Multi language display
- Mains failure self starting
- The running time of the engine can be recorded to facilitate the maintenance and repair of the unit
- User-friendly set-up and button layout
- LCD display can display multiple parameters at the same time
- Support EFI engine
- IP65 rating (with optional gasket)
- PC and front panel configuration
- 100 event records
- Data recording and trend analysis

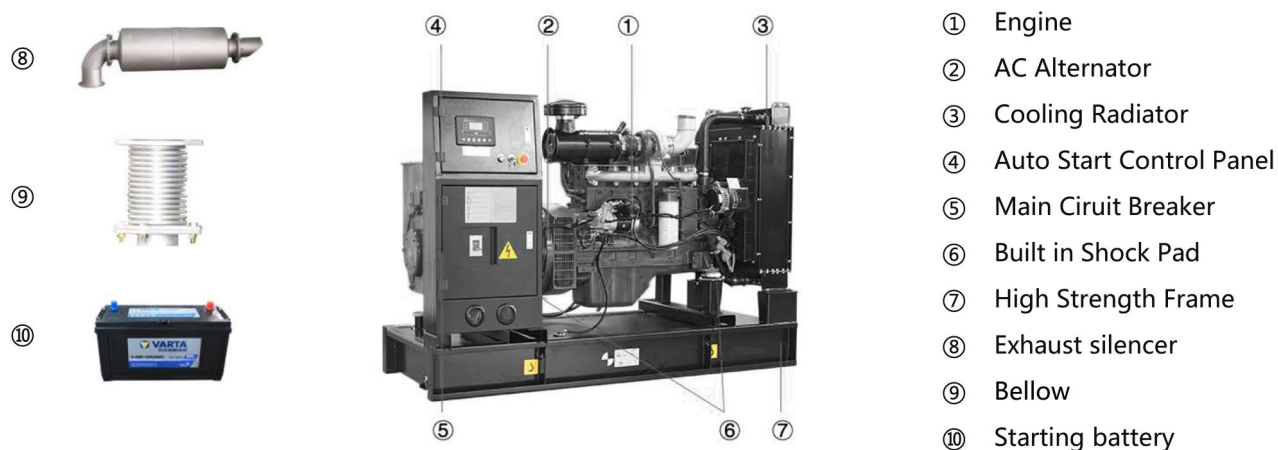
Protection:

- Two sets of protection parameters can be preset
- Normal alarm, electrical trip and shutdown alarm can be set to effectively monitor the engine speed,oil pressure, water temperature and oil level, as well as the frequency, voltage, current and power of the alternator, for complete engine/alternator protection
- Low Oil Pressure
- High water Temperature
- High voltage and low voltage
- Overspeed
- Emergency stop
- Fail to start

Decomposition diagram introduction of Typical Canopy



Standard supply scope:



Optional supply scope:

Genset	Engine	Alternator	Control system
• Tool box • Base fuel tank • External daily fuel tank • Trailer	• Fuel heater • Fuel and water separator	• Temp. detector for winding and bearing • PMG • Antirust, mildew and salt fog treatment • Anti condensation heater	• ATS • Synchronization System • Adjustable earth relay
Breaker	Fuel system	Lub-oil system	Cooling system
• ABB • Schneider	• Low fuel level alarm • Auto Fuel Pump • T Valve	• Lub oil heater • Temp.-sensor • Oil drain Pump	• Elec.coolant Heater