



SPARTAN Power
Solutions



Industrial Range Powered by Cummins Model SC605 Generator set



General Performance Data

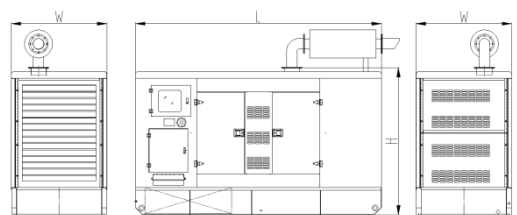
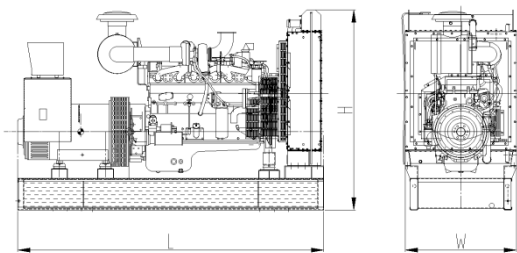
Prime Power	550KVA/440KW	Engine	Brand	Cummins
Stand by Power	605KVA/484KW		Model	KTAA19-G6
Frequency/Speed	50Hz/1500rpm	Control module	Deepsea 8610	
Rated Power Factor(cosφ)	0.8	Rated Current	765A	
Standard Voltage	240V/415V	Capacity of Breaker	1000A	
Phases	3	Starting Voltage	DC24V	

Fuel consumption

Rated output	Fuel consumption rate	
100%Standby	214g/KW.h	145L/h
100%Prime	215g/KW.h	133L/h
75%Prime	213g/KW.h	98.8L/h
50%Prime	191g/KW.h	66.6L/h
25%Prime	145g/KW.h	38.0L/h

Standards followed

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



Dimensions and Weights

Type	Open	Silent
Length(mm)	3500	4200
Width(mm)	1450	1900
Height(mm)	2230	2480
Weight(kg)	4650	5550
Base fuel tank volume (L)	970	970

Engine specification

Basic parameter

Manufacturer	Cummins
Model	KTAA19-G6
No. of cylinder	6
Type	4 cycle, Vertical In-line
Prime Power	520kw /697HP
Standby Power	570kw /764HP
Induction system	Turbocharged ,Air-to-air Cooled
Governor	Electrical
Bore x Stroke	159x159mm
Displacement	19L
Compression ratio	13.9:1
Oil Capacity(Total)	50L
Coolant Capacity(Engine only)	26.5L
Cranking Motor Voltage	DC24V

Fuel System

Type Injection system	Direct injection Cummins PT
Min. Allowable flow of fuel to fuel pump	145 L/h

Lubrication system

Oil Pressure	
---Idle speed	138kPa
---Rated speed	345-483kPa
Max. allowable oil temperature	121°C
Oil Pan capacity - Low/High	32.2 /37.9L
Total system capacity	50.0L

Air induction system

Maximum allowable intake air restriction	
---with clean filter element	3.73kPa
---with dirty filter element	6.23kPa

Intake Air alarm temperature	82°C
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Exhaust system

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

Cooling system

Coolant capacity	
---Engine only	26.5L
---Total system	107.5 L
---With heat exchanger	199L
Standard thermostat(modulating) range	82-93 °C
Max. coolant temerature	96.1 °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

Alternator Brand Leroysoner

Phases 3

Poles 4

Power factor(cosφ) 0.8

Winding connection Star

Winding pitch 2/3

Alternator Model TAL-A473-C

Coating Vacuum impregnation

Insulation class H

Protection IP23

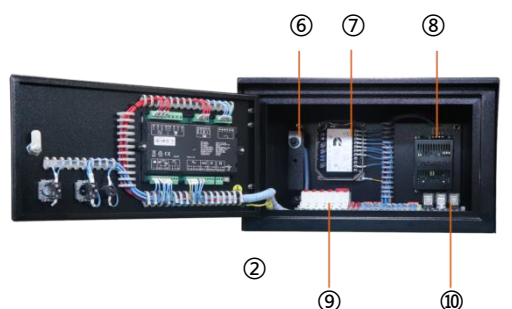
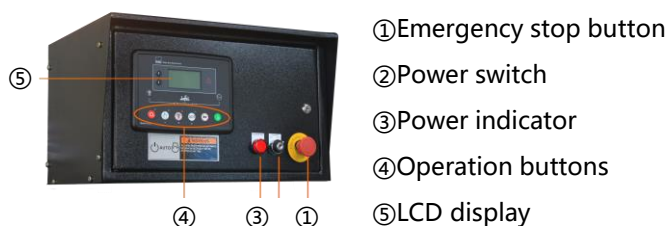
Excitation system AREP

Bearing Single Bearing

Coupling Flexible disc

Control system Introduction

Deepsea 8610 Auto start & auto mains failure control panel



KEY FEATURES

- Comprehensive synchronising & loadsharing capabilities
- Built in governor and AVR control
- Base load (kW export) control
- Positive & negative kVar export control
- Mains (Utility) decoupling protection
- 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 & trending facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB, RS232, RS485 & Ethernet communication
- Front panel configuration with PIN protection
- Power save mode
- 3 phase generator sensing and protection
- Generator current and power monitoring (kW, kvar, kVA, pf)
- kW and kvar overload alarms
- 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
- 8 configurable DC outputs

- 2 configurable volt-free relay outputs
- 4 configurable analogue/digital inputs
- Built in sensors to support 0 V to 10 V & 4 mA to 20 mA
- 12 configurable digital inputs
- Configurable 5 stage dummy load and load shedding outputs
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Manual and automatic fuel pump control
- Engine run-time scheduler
- Fuel usage monitor and low fuel level alarms
- Simultaneous use of all communication ports
- Remote SCADA monitoring via various DSE software applications
- MODBUS RTU & TCP support with configurable MODBUS pages for integration into building management systems (BMS)
- 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

KEY BENEFITS

- Compatible in load share systems containing DSE5500, DSE7500, DSE8000 and DSE8600 MKII series. Contact DSE for further details
- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Ethernet communication, provides built in advanced remote monitoring.
- Can be integrated into building management systems (BMS) and programmable logic control (PLC)
- Increased input and output expansion capability via DSENet®
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- Advanced Internal PLC editor allows user configurable functions to meet specific application requirements.

Soundproof Canopy Introduction:

Standard Type :

- The arc angle structure makes the appearance beautiful and not easy to bump
- High quality coating powder, chemical surface treatment & 100-120um coating thickness greatly improving the anti-corrosion and anti rust level
- Stainless steel hinge & door lock are beautiful and anti-rust
- 2.0mm cold rolled plate used makes the body more solid
- The bottom forklift and loading port design enables easy loading and unloading
- The drainage outlets are all connected to the outside for easy operation
- The sufficient air in & out design ensure long-term and stable operation of the unit
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- High density foam used inside effectively reduces noise
- Ceiling Lighting is equipped for easy operation
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Models above medium power range are designed with top hoisting mechanism to facilitate transportation of the unit.

Imitated container type :

- The shell is made of 3.0mm hot rolled steel plate so as to withstand the lifting capacity of 15-ton without deformation
- The switch cabinet and control panel are respectively set on both sides of the shell for easy maintenance & operation
- The shell looks similar to standard container, and can be loaded into 40HQ container for transportation, which is convenient for shipping
- The lifting eye holes are designed on the top same as the standard container for easy handling
- High density foam used inside effectively reduces noise
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Double emergency stop button set on different surfaces enables quick response to operation requirements
- The shell base is independent from the unit with 3mm thick checkered steel plate floor, which is beautiful & antiskid, and is convenient for overhaul & maintenance of the unit
- The door handle, lock and hinge are all made of stainless steel to avoid rusting
- The air out louver made of the mesh plate with powder coating and pasted with high-density glass fiber is beautiful and not easy to rust, and can further reduce the noise
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- The sufficient air in & out design ensure long-term and stable operation of the unit
- The drainage outlets are all connected to the outside for easy operation
- Ceiling Lighting is equipped for easy operation

Classics Economic series :

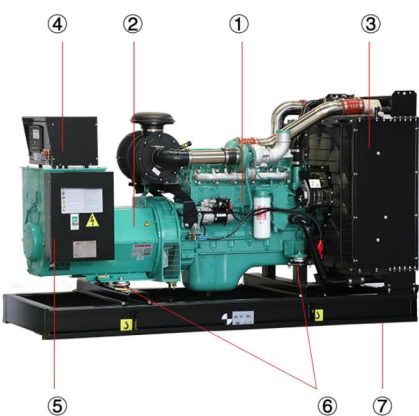
- Right angle around the canopy
- Carbon spray hinges and lock with rust proof
- The drainage & lubricating oil outlets are all connected to the outside for easy to maintain
- The air inlet and outlet are designed with grid structure of to prevent big objects from entering the canopy
- The lifting lug on the top for medium range genset makes easily and convenient transportation
- High-quality powder coated, chemical surface treatment & 80-120um coating thickness is highly durable against erosion and scratch
- The bottom forklift is built-in base frame for small range genset, with over stow capacity
- The fuel inlet on the canopy is for easy to fuel filling
- High-density sponge to effectively reduce noise



Classics Economic Canopy Sample Picture



Standard supply scope:



- ① Engine
- ② AC Alternator
- ③ Cooling Radiator
- ④ Auto Start Control Panel
- ⑤ Main Circuit Breaker
- ⑥ Built in Shock Pad
- ⑦ High Strength Frame
- ⑧ Exhaust silencer
- ⑨ Bellow
- ⑩ Starting battery

Optional supply scope:

Genset	Engine	Alternator	Control system
<ul style="list-style-type: none">• Tool box• Base fuel tank• External daily fuel tank• Trailer	<ul style="list-style-type: none">• Fuel heater• Fuel and water separator	<ul style="list-style-type: none">• Temp. detector for winding and bearing• PMG• Antirust, mildew and salt fog treatment• Anti condensation heater	<ul style="list-style-type: none">• ATS• Synchronization System• Adjustable earth relay
Breaker	Fuel system	Lub-oil system	Cooling system
<ul style="list-style-type: none">• ABB• Schneider	<ul style="list-style-type: none">• Low fuel level alarm• Auto Fuel Pump• T Valve	<ul style="list-style-type: none">• Lub oil heater• Temp.-sensor• Oil drain Pump	<ul style="list-style-type: none">• Elec.coolant Heater



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