

Cummins Series

Product introduction



Model AC700 Generator set

700KVA/560KW - STD



General Performance Data

Prime Power	625KVA/500KW
Stand by Power	700KVA560KW
Frequency/Speed	50Hz/1500rpm
Rated Power Factor(cosφ)	0.8
Standard Voltage	230V/400V
Phases	3

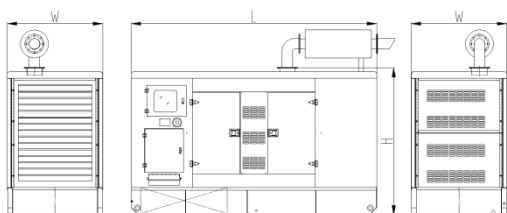
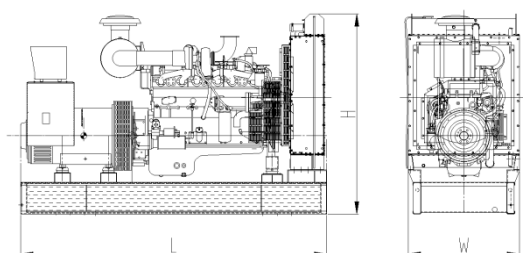
Engine	Brand	Cummins
	Model	VTA28-G5
Control module	Deepsea 6120	
Rated Current	992A	
Capacity of Breaker	1250A	
Starting Voltage	DC24V	

Fuel consumption

Rated output	Fuel consumption rate
100%Standby	157L/h
100%Prime	143L/h
75%Prime	108L/h
50%Prime	72L/h
25%Prime	36L/h

Standards followed

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



Dimensions and Weights

Type	Open	Silent
Length(mm)	3580	4200
Width(mm)	1450	1900
Height(mm)	2270	2480
Weight(kg)	4600	5600
Base fuel tank volume (L)	1050	1050

Engine specification

Basic parameter

Manufacturer	Cummins
Model	VTA28-G5
No. of cylinder	6
Type	4 cycle, Vertical In-line
Prime Power	500kw670HP
Standby Power	560kw/750HP
Induction system	Turbocharged & Aftercooled
Governor	Electronic speed
Bore x Stroke	159x159mm
Displacement	18.9L
Compression ratio	13.9:1
Oil Capacity(Total)	50L
Coolant Capacity(Engine only)	26.5L
Cranking Motor Voltage	DC24V

Fuel System

Type Injection system	Cummins MCERS
Min. Allowable flow of fuel to fuel pump	169L/h

Lubrication system

Oil Pressure	
---Idle speed	138kPa
---Rated speed	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	107.5L
---With heat exchanger	199L
Standard thermostat(modulating) range	82-95°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	600
--- 0°C(32°F) to 10°C(50°F)- 0°F CCA	640
---18°C(0°F) to 0°C(32°F)- 0°F CCA	900
Max. allowable resistance of Starting circuit	0.002ohm
Starter(heave,Anode)	DC24V
Battery recharge system, negative ground	35ampere

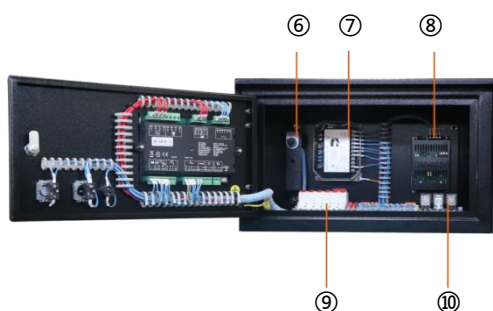
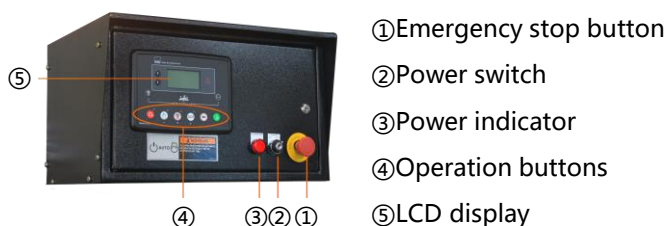
Alternator specification Leroysoner TAL0473F

Phases	3	Coating	Vacuum impregnation
Poles	4	Insulation class	H
Power factor(cosφ)	0.8	Protection	IP23
Winding connection	Star	Excitation system	Self-excited
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:

