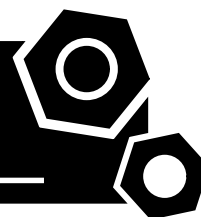


Generator set
Sound-proof type
GMS42CS-AU

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Europeenne (CE)
- China Compulsory Certification (CCC)
- TLC Quality Certification (TLC)
- ISO8528-1995
- GB/T2820-1997
- AS 3000-1997
- AS 3010.1-1988

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 90%.
- Altitude: Below one thousand (1000) meters above sea Level.

Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

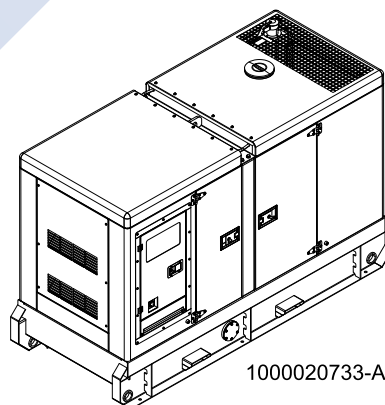
2 General Features

- Cummins engine 4BT3.9G1
- Close coupled to a Stamford alternator PI144K
- Microprocessor control module PLC-7320
- SCHENIDER main circuit breaker: 3-Phase 80A
- Rotate speed governor: Mechanical governor
- Excitation System: Self Excited SHUNT
- A.V.R. Model: AS480
- Key switch

- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connextor
- 2x12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 24 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Parts List / Specifications

3 Equipment Specification

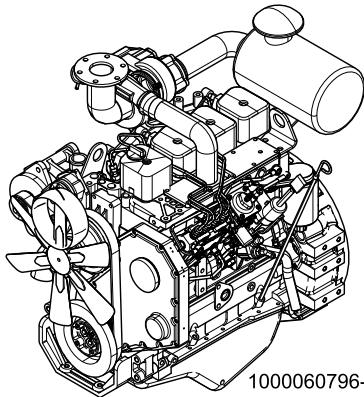
General technical data



1000020733-AP1-A6

Model.....	GMS42CS-AU
Structure type	R
Tank capacity.....	270L
Dry weight.....	1416.4kg
Noise level @7m	61.5dBA
Dimensions L×W×H.....	2588x1101x1707.6mm
Standby Power	46kVA/37kW
Prime Power	42kVA/34kW
Voltage/Ampere	415V/58A

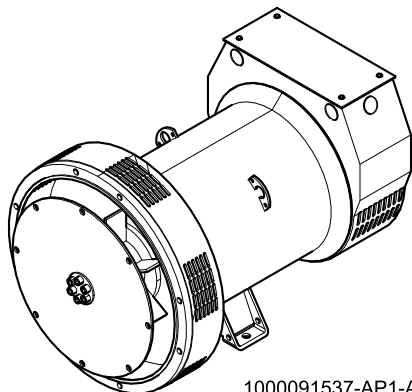
Diesel Engine



1000060796-S-AP1-B7

Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BT3.9G1
Dimensions L×W×H.....	N/A
Dry Weigh (approx.).....	321kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke.....	120mm
Displacement.....	3.9L
Compression Ratio.....	N/A
Type of injection.....	Direct injection
Intake System.....	Turbo charged
Intake Resistance.....	6.2kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12/24V
Type of Fuel.....	No.2 or ASTM D2
Type of Oil.....	API CD/SE or CCMCD4
Oil Capacity.....	10.9L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	20.8L
Back Pressure.....	≤10.1kPa
Standby Power.....	40kW
Continuous Power.....	36kW
Fuel Consumption(100%load).....	214g/kW.h

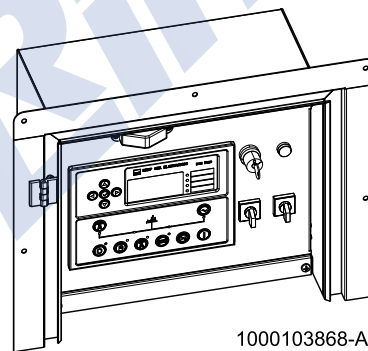
Alternator



1000091537-AP1-A1

Alternator Manufacturer/Brand.....	Stamford
Alternator Model.....	PI144K
Exciter.....	Brushless
Cooling Fan.....	Plastic
Windings.....	100% copper
Insulation Class.....	H
Winding Pitch.....	2/3
Terminals.....	12
Drip Proof.....	IP23
Altitude.....	≤1000m
Overspeed.....	2250rpm
Air Flow.....	0.135m³/s(50HZ),0.165m³/s(60HZ)
Voltage Regulation.....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-7320 Control System



1000103868-AP1-A1

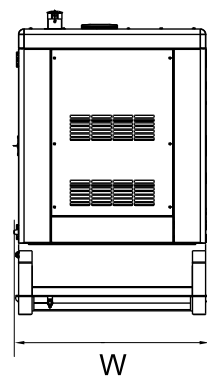
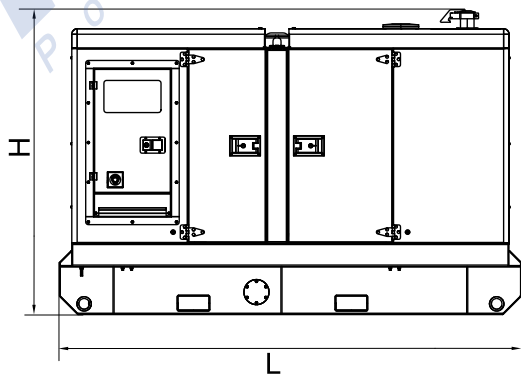
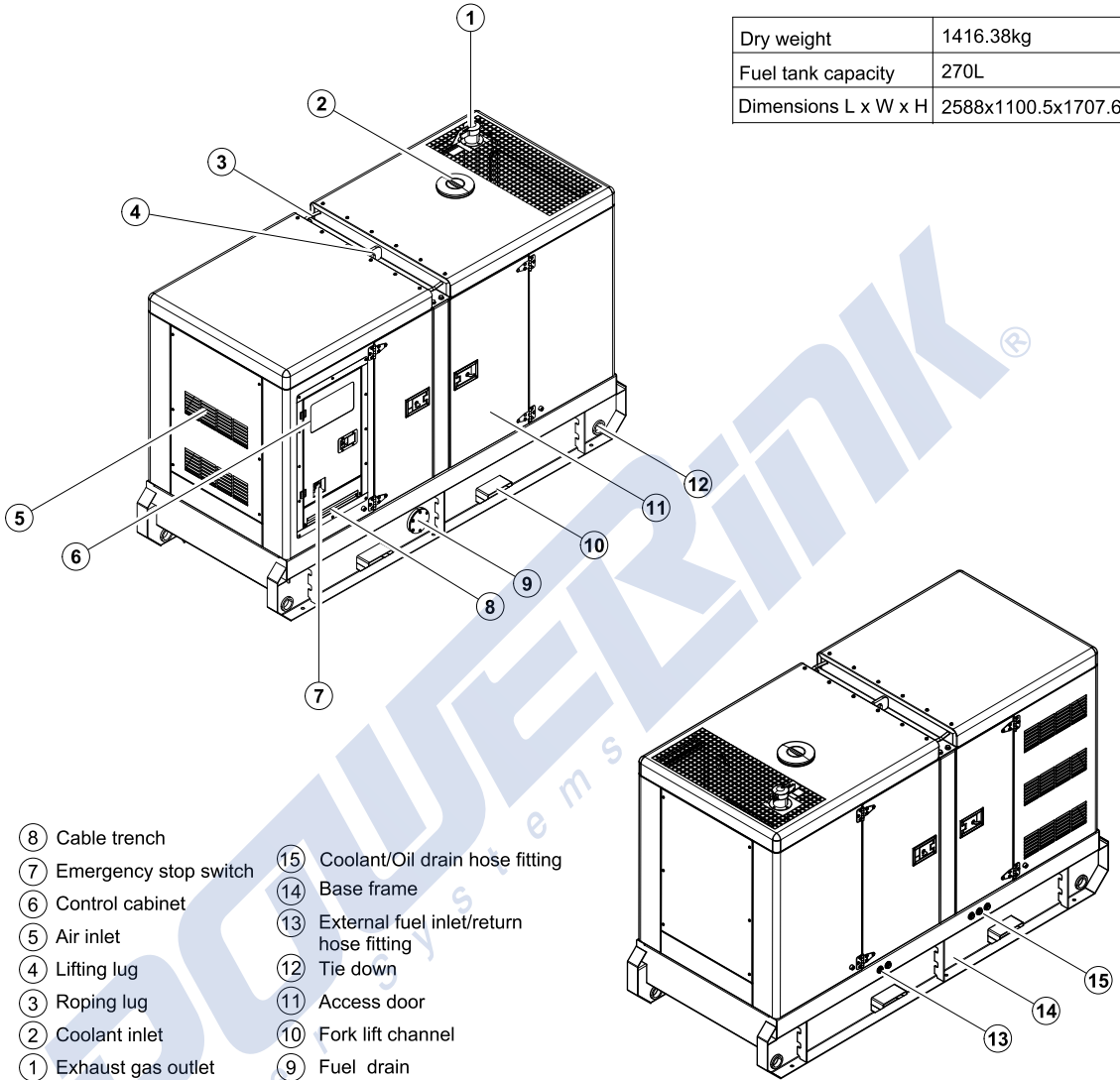
PLC-7320 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

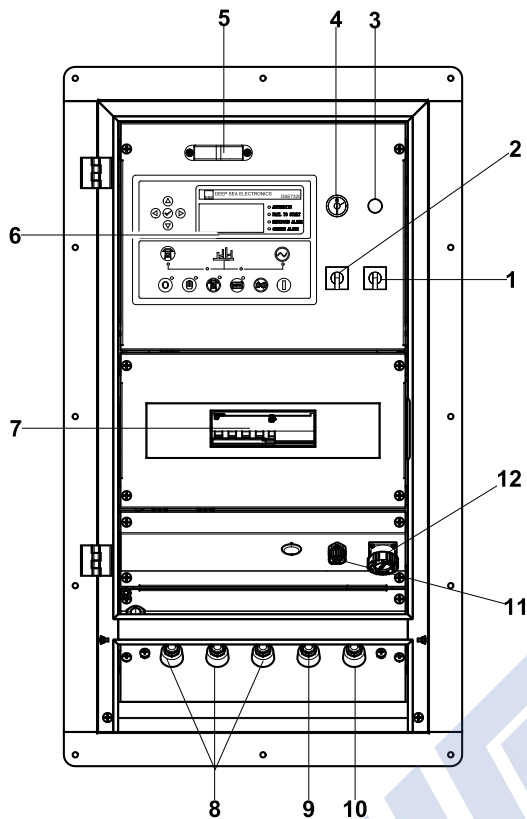
4 Overall Dimensions

1000020733-DR1-A6

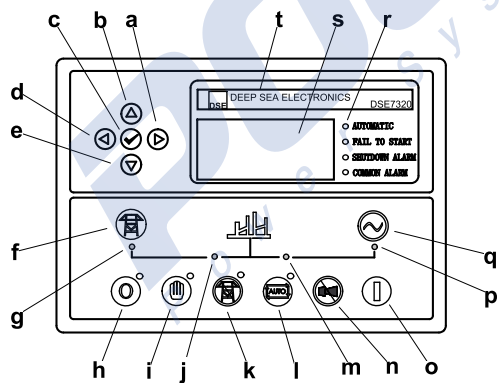
Dry weight	1416.38kg
Fuel tank capacity	270L
Dimensions L x W x H	2588x1100.5x1707.6mm



5 Control System



Control & Field wiring cabinet



Control Panel

Ref.	Description
1	Control cabinet lamp switch
2	Mains input changeover switch
3	Charge indicator
4	Key switch
5	Control cabinet lamp
6	Control module
7	Main circuit breaker
8	Live wire terminals
9	Neutral wire terminal
10	Ground wire terminal
11	Remote communication interface
12	ATS communication interface

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	Mains supply available LED
h	Stop / Reset button
i	Manual button (Manual control mode)
j	Mains supply on load LED
k	Test button (Test mode)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	Button (transfer the load to the genset, when in Manual mode only)
r	Alarm LED (4 alarm items)
s	LCD display
t	Control module name

1000020733-A6-E

03.2011

POWERLINK[®]
Power Systems

<http://www.powerlinkgenset.com>

E-mail: info@powerlinkgenset.com

*Specification may change without prior notice. For more info.,
contact Power Link or your local distributors please.*