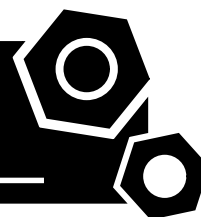# POWERlink
Power Systems

Generator set

Open type

GMS900C

SPECIFICATIONS

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- China Compulsory Certification (CCC)
- TLC Quality Certification (TLC)
- ISO8528-1995
- GB/T2820-1997

Environmental Operating Conditions

- Installation place: Indoors (well ventilated).
- Ambient temperature: -25℃ to 45℃. The coolant heater is needed when the temperature is below 5℃
- Humidity: Less than 80%.
- 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 KTA38G2A
- Close coupled to a Stamford alternator LVI634D
- Microprocessor control module PLC-702
- ABB main circuit breaker:3-Phase 1600A
- Rotate speed governor: Electrical governor FP801
- Excitation system: Self excited

- A.V.R model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V sealed for life maintenance free battery
- Lockable battery isolator switch
- 50℃ radiator
- Oil pump on the engine
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Operation Manual / Parts List/ Specifications

3 Equipment Specification

General technical data
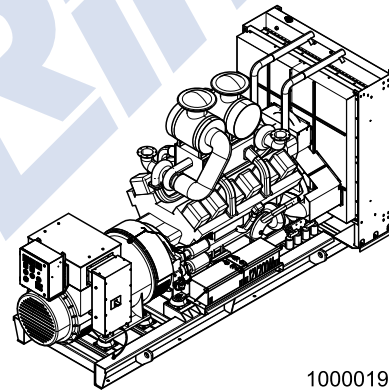
1000019903-AP1-C6

Model	GMS900C
Structure type	A
Dry weigh	6627kg
Noise level @7m	99.3dBA
Dimensions L×W×H	4344x2030x2425mm
Standby Power	990kVA/792kW
Prime Power	900kVA/720kW

Voltage	380V	400V	415V
Ampere	1368A	1300A	1252A

Diesel engine
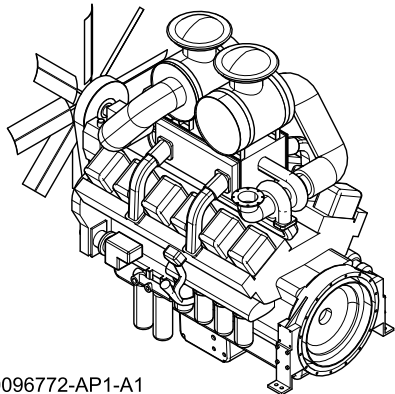
1000096772-AP1-A1

Engine Manufacturer/Brand..................................Cummins
Engine Model...KTA38-G2A
Dimensions L×W×H...N/A
Dry Weigh (approx.) 3723kg
Number of Cylinders...12
Bore..159mm
Stroke 159mm
Displacement..37.5L
Compression Ratio...14.5
Type of injection... Direct injection
Intake System... Turbo charged
Intake Resistance 6.23kPa
Cooling System ....Water cooled
Fan .... Pusher
Battery Voltage 24V
Type of Fuel...................................... No.2 or ASTM D975
Type of Oil CF4/SG15W-40
Oil Capacity 135L
Type of Coolant ....Glycol mixture
Coolant Capacity 194L
Back Pressure ....$\leqq$10kPa
Standby Power 895kW
Continuous Power 813kW
Fuel Consumption(100%load)..................................191L/h

Alternator
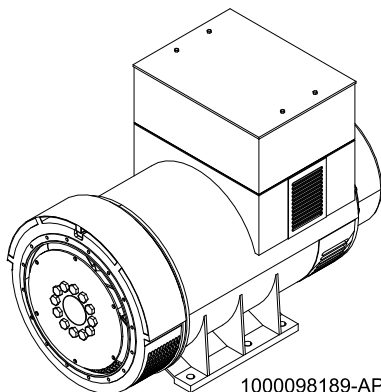
1000098189-AP1-A1

Alternator Manufacturer/Brand .... Stamford
Alternator Model LVI634D
Exciter...Brushless
Cooling Fan .... Cast alloy aluminum
Windings...100% copper
Insulation Class .... H
Winding Pitch...2/3
Terminals 12
Drip Proof IP23
Altitude...≤1000m
Overspeed...2250rpm
Air Flow.............................. 2.18m³/s(50Hz),2.63m³/s(60Hz)
Voltage Regulation ....±0.5%
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference............................. THF<2%;TIF<50

PLC-702 Control System
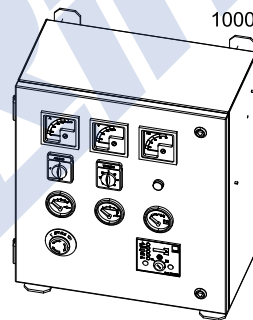
1000113108-AP1-C6

PLC-702 key manual start module is a manual engine control module designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.
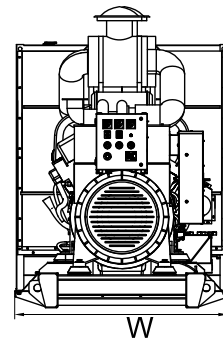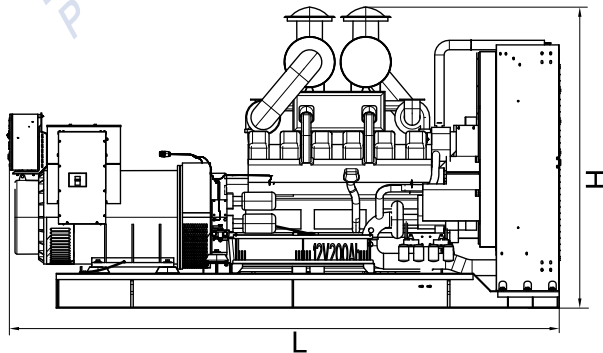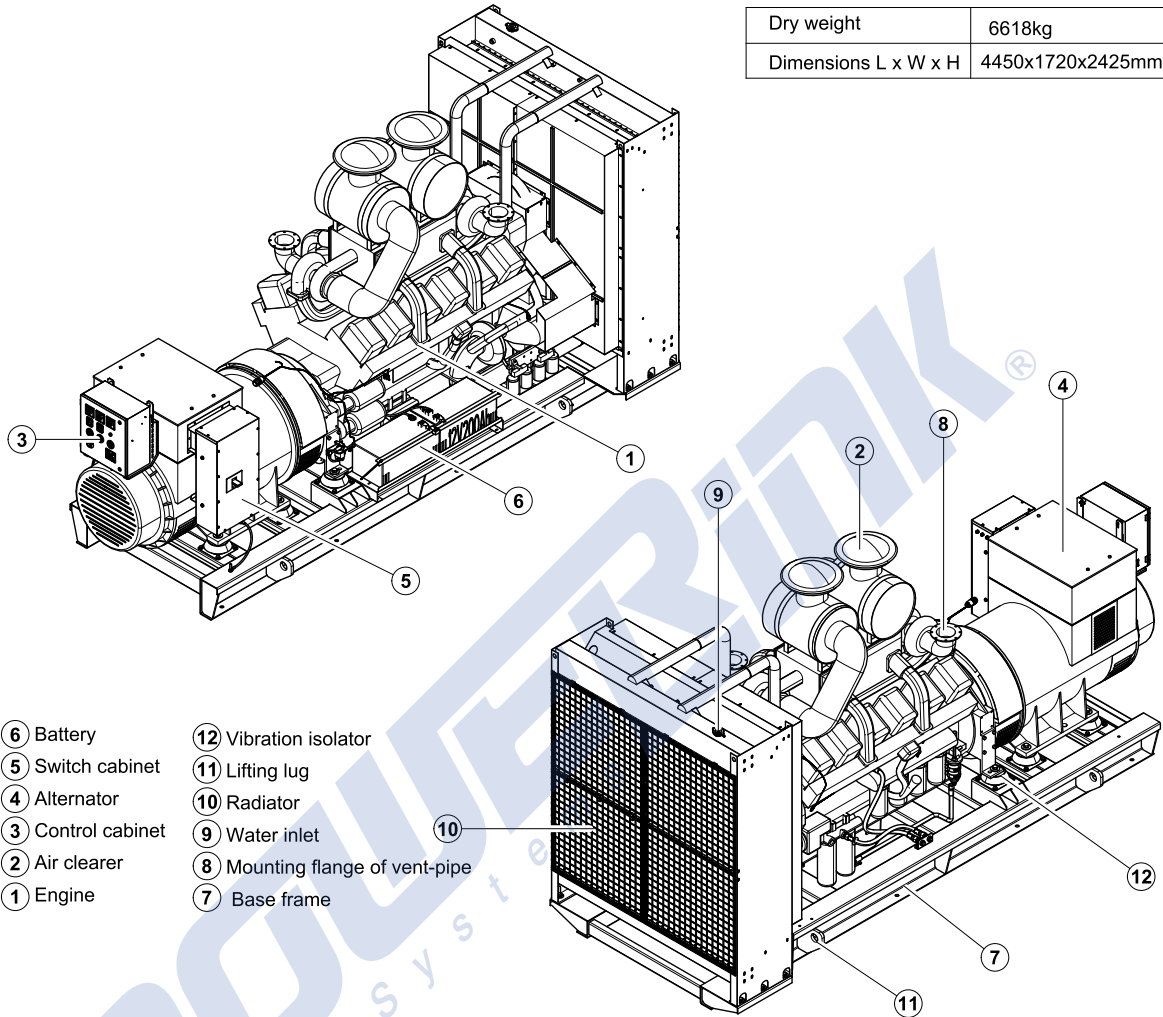
Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
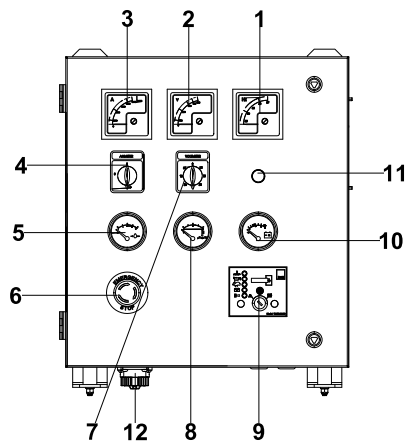- Protection hold-off timer
- Charge Failure warning
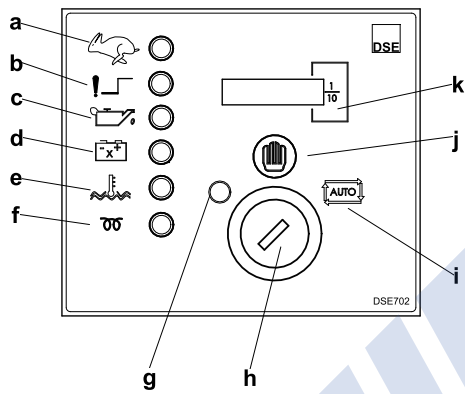
4 Overall Dimensions

1000019903-DR1-C6

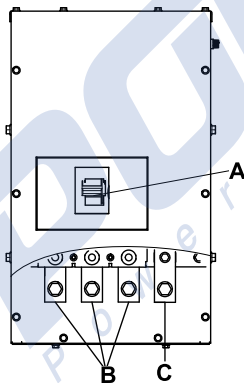| Dry weight	6618kg
Dimensions L x W x H	4450x1720x2425mm

6 Battery	12 Vibration isolator
5 Switch cabinet	11 Lifting lug
4 Alternator	10 Radiator
3 Control cabinet	9 Water inlet
2 Air clearer	8 Mounting flange of vent-pipe
1 Engine	7 Base frame

5 Control System

Control cabinet

Control panel

Field wiring cabinet

Ref.	Description
1	Frequency meter
2	Voltage meter
3	Current meter
4	Ammeter change-over switch
5	Oil pressure meter
6	Emergency stop switch
7	Voltmeter change-over switch
8	Water temperature meter
9	PLC-702 control module
10	Battery voltage meter
11	Charge indicator
12	ATS communication interface

a	Over speed protection LED
b	Alarm LED
c	Low oil pressure protection LED
d	Charge failure warning LED
e	High engine temperature protection LED
f	Pre-heat LED
g	Stop model position
h	Control module key switch
i	Auto start position
j	Manual start button
k	Time counter

A	Main circuit breaker
B	Live wire terminals
C	Neutral wire terminal

1000113108-IT1-C6