

Standby Generator 1100kVA



DESIGN SPECIFICATIONS

- High quality, reliable and complete power unit.
- Compact design
- Easy Start and maintenance possibility
- Every generating set is subject to a comprehensive test programme which includes full load testing and checking and proving of all control and safety shut down functions testing

Standard Genset Specification Engine

- Cummins heavy - duty diesel engine
- Four cycle, water cooled, turbo charged
- Electronic Governor Control System
- Direct injection fuel system
- Replaceable wet type cylinder liners
- 4 Valves per cylinder (for AC 400 and AC 440)
- 24 Volt D.C. starter and charge alternator
- Replaceable fuel filters, oil filters and dry element air filters
- Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables
- Flexible fuel connection hose and manual sump oil drain valve
- Industrial capacity silencer and steel bellows
- Jacket water heater (automatic models)
- Operation manuals and diagram documents

Alternator

- Brushless, single bearing system, 4 poles
- Insulation class H
- Standard degree of protection IP21 or IP23
- Self-exciting and self-regulating
- Stator winding with 2/3 pitch
- Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator

Chassis

- The complete generating set is mounted as whole on a heavy - duty fabricated, steel base frame. Antivibration pads are fixed between the engine / alternator feet and the base frame
- The generating set can be lifted or carefully pushed / pulled by base frame
- Base frame design incorporates an integral fuel tank

- The generating set can be lifted or carefully pushed / pulled by the base frame
- Lifting eyes allow easy transportation

Canopy

- 30' Container
- Sandwich mineral wool attenuation
- Large lockable doors
- Acoustic baffles for the air inlet and outlet
- Steel internal floor
- Residential silencer
- White paint finishing (RAL 9010)
- 2000 litres fuel tank with retention bund

Quality Standards

- The equipment meets the following standards: ISO 3046, VDE 0530, BS 5000, IEC 34. The generating set manufactured by a fully accredited NQA ISO 9001

Control System

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

Control Modules Common Features

- Automatic controls generating set, start and shutdown
- Front panel programming of the module settings
- Remote communication via RS 232 port or RS 485 "modbus" output.
- Scrolling digital LCD display
- Event logging of shutdown alarms
- Control Modules Common Features
- Generator Volts(F-F/F-N)
- Generator Amperes(L1,L2,L3)
- Generator Frequency (Hz)
- Generator kVA
- Generator kW
- Generator Cos j
- Engine Temperature
- Engine Speed RPM
- Engine hours run
- Plant battery volts

Common Alarms

- Under / over generator volts
- Under / over generator frequency
- Over current
- Low oil pressure
- High engine temperature
- Under / over speed
- Low coolant level
- Fail to start
- Fail to stop
- Emergency stop
- Charge fail
- Low / High battery volts

Auto Mains Failure Control System P2020

- Control with DSE model 5220
- Static battery charger
- Emergency stop push button

Additional Features

- Monitoring AC mains supply
- Provides signal to change over switch gear
- Easy push button control
- Stop / Reset-Auto-Manual-Test-Start

Additional Metering

- Mains volts (F-F / F-N)
- Mains frequency (Hz)

Additional Alarms

- Under / over mains volts
- Under / over mains frequency
- Can data fail
- Can ECU fail

Auto Start Control System P2010

- Control with DSE model 5210 module
- Emergency stop push button

Additional Features

- Provides signal to load transfer
- Easy pushbutton control
- Stop / Reset-Auto-Manual-Test-Start

Standby Generator 1100kVA

230 / 400V - 50 Hz

Output Rating

Power Pf. 0.8

STANDBY 1130 kVA
904 kW

Prime 1030 kVA
824 kW

Diesel Engine

Engine Make Cummins
Model KTA 38 G5
Gross engine power output at rated rpm 970kWm
1300hp
Aspiration and Cooling Turbo Charged After Cooled
Cylinders Capacity 37.8Lt
Cylinders and Build 12-60°V
Engine Speed 1500 rpm
Bore and Stroke 159 x 159mm
Compression Ratio 13.1 : 1
Governor Electronic

| Fuel Consumption | Load | 1/2 | 3/4 | Full |
|------------------|------|-----|-----|------|
| L/hr | 113 | 161 | 209 | |

Fuel Tank Capacity 1250 L
Oil Capacity 135 L
Water Capacity 280 L

Air Intake - Engine 69 mm³/min
Exhaust Gas Flow 183 m³/min

Alternator Voltage Regulation ± %1

OPEN TYPE

Dimensions (length x width x height) 4320 x 1760 x 2350
Dry weight 7720 KG

SOUND ATTENUATED TYPE

Dimensions (length x width x height) 9125 x 2438 x 2591mm
Dry weight 14700KG

UPSPEC OPTIONS

Diesel Engine

- Remote Radiator
- Engine oil heater

Accessories

- Bulk Fuel Tank
- Residential silencer
- Sound Proof Canopy
- Manual fuel filling system
- Low fuel alarm
- 4 Pole contactor
- Electrical oil drain pump

GO CUSTOMISED

- Skid Mount Options
- External Switches
- Lifting Frames & Fabrication
- Custom Paint