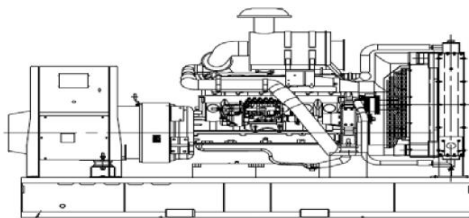


## POWER RATING

	With 60 Hz of frequency
Output voltage (Vac), 3Phase	380 ~ 480 Volts(208-240volt option), 380VOLT consulted by EVERDIGM.
Prime power	420 kW, 525 kVA
Standby power	462 kW, 577 kVA

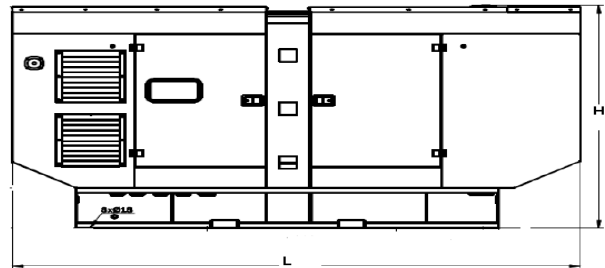
Power ratings are made in accordance with ISO8528

## Weight and Dimensions



### Skid Type

Overall size (L\*W\*H), mm :  
3377\*1550\*2103  
Weight : 4035 kg



### Sound Proof Type

Overall size (L\*W\*H), mm :  
4810\*1610\*2620  
Weight : 5035 kg

## Generator Set Performance and Feature

- **RELIABLE HIGH QUALITY SYSTEM-** To improve the performance of Products, high quality auxiliaries equipment applied and optimized protection device built in the digital controller against malfunctioning and abnormal conditions.
- **FREQUENCY REGULATION ACCURACY-** Under varying loads from no load to 100% load at the rated power factor(0.8), frequency regulation is 5%(mechanical type governor), 1%(electric type governor).
- Applied the 2/3 pitch winding to reduce the 3rd harmonics.
- **SIMPLE AND EASY OPERATION-** With centralized controls simplifying generator operation and supervision is made very simple.
- **VOLTAGE REGULATION ACCURACY-** Under varying loads from no load to 100% load at the rated power factor (0.8), voltage regulation is less than  $\pm 2.5\%$ .
- Designed by using the latest technologies and the best materials available to guarantee high efficiency value.
- **LOW COST MAINTENANCE & OPERATION-** Use the specialized diesel engine for generator set keeps operation costs very low.
- **VOLTAGE ADJUSTABLE RANGE-** Under rated speed and no load condition, voltage adjustable range is less than  $\pm 5\%$  of rated voltage.
- Impregnated with high-grade resin and protection against hostile environment is provided as standard.
- Supplied with over exciting current and under frequency protection built in the AVR.
- Suitable for parallel operation with other generator or mains power. (Parallel kit is available on request.)

## ENGINE

Manufacturer ..... Cummins  
Model..... QSX15-G9

### Prime power (Gross)

At 60 Hz .....507 kWm (680bhp) / 1800rpm

### Standby power (Gross)

At 60 Hz .....563 kWm (755 bhp) / 1800 rpm

Nos. of cylinder ..... 6 cylinders  
Block & cycle ..... In-line 4 cycle  
Displacement..... 15 liters  
Compression ratio..... 17.0:1  
Cylinder block ..... Cast iron  
Bore x stroke ..... 137 x 169 mm  
Aspiration ..... Turbocharged , Air cooled  
Rotation ..... Anti-clockwise (view from flywheel)

*NOTE-The Engine performance corresponds to ISO3046, BS5514 and DIN 6271.*

## LUBRICATION SYSTEM

Oil filter..... Spin-on full flow filter

Lube method ..... Full forced pressure feed  
Oil pump type ..... Gear driven by crankshaft  
Max oil temp. .... 120 Celsius degree  
Oil Type..... SAE15W40CE

## FUEL SYSTEM

Fuel filter ..... Spin-on fuel filter with water Separator  
Injection..... Direct injection  
Governor ..... Electronic  
Fuel type ..... Light diesel fuel, DIN51601, BS2869, ASTM D975  
Fuel tank ..... mounted in bed  
Fuel consumption at prime operation (liter/hr)  
At 60 Hz ..... max 97.6 (lph)  
*NOTE- based on max at 100%prime loaded*

## ELECTRICAL SYSTEM

Battery ..... Nos. 2 x 150 AH  
Alternator..... 24 Vdc, 35 A  
Starting voltage ..... 24 Vdc, Negative ground

## GENERATOR

Type ..... Revolution Field  
Phase & wire ..... 3P4W  
Power factor ..... 0.8  
Nos. of Pole ..... 4  
Speed ..... 1800/60 (rpm/Hz)  
Insulation Class..... H  
Excitation..... Self-Excited, Brushless  
Method of cooling ..... Self ventilation  
Winding Pitch ..... 2/3  
One-step load ..... 100% (NFPA110)  
Coupling..... Flexible Disc  
Bearing ..... Single, Ball Bearing  
Connection ..... Star (Wye)  
Insulation grade ..... IP21  
Over speed ..... 2070 rpm  
Overload ..... 110% for 1 hr of rated power

*NOTE- Generator is in compliance with IEC 60034-1, CEI 2-3, BS4999-5000, VDE 0530, NF 51-100, 111, OVE M-10, NEMA MG 1.22*

## EXHAUST SYSTEM

Silencer/muffler ..... Nos.1 x Dry type

## COOLING SYSTEM (Standard Radiator)

Type ..... Water cooled  
Fan power ..... 16 kWm  
Cooling system air Flow ..... 11.8 m3/s

## AIR SYSTEM

Air cleaner type ..... Dry, paper element

## SERVICE REFILL CAPACITY

Fuel tank ..... Skid : 850 liters  
Sound Proof : 850 liters  
Engine oil ..... 91 liters  
Coolant ..... 66 liters

**CONTROL PANEL mounted**



Dimension (W x H x D): 450 x 600 x 200 (mm)

SPECIFICATION		
<b>SWITCH&amp; PUSH BUTTON</b>		
Manual/Remote/Auto button		O
Stop button		O
GCB Close/Trip button		O
Alarm button		O
Direction/Enter/ESC button		O
Emergency stop push button		O
Main Power Switch		O
Voltage Adjuster		O
<b>DISPLAY</b>		
Digital Volt./Current/Power/PF/Hz		O
Running Hours/Kilowatt hour		O
RPM/DC Voltage		O
Oil press./Coolant temp		O
Cooldown time/Mains power live/Failure sensing time		O
<b>BREAKER</b>		
Main molded case circuit breaker (MCCB 4P)		O (3P as option)
Circuit protector for DC source		O
Breaker for main power/coolant heater		O
<b>INDICATOR &amp; PROTECTION SYSTEM</b>		
Main power lamp		O
Manual/Remote/Auto, LED		O
Running, LED		O
GCB close/trip, LED		O
Emergency stop, LCD		O
Over voltage/Under voltage/Over Current, LCD		O
High coolant temperature, LCD		O
Low lub. oil pressure, LCD		O
Fail to start, LCD		O
Over speed, LCD		O
<b>REMOTE SYSTEM</b>		
PC Monitoring program		▲
Dry Contact (Mains Power, Running, Fault)		O
<b>CONTROL SYSTEM</b>		
SPEED CONTROL UNIT		O
<b>OTHERS</b>		
Dry Contact (Extension Module)		▲
Battery Charger		O

O: Equipped as standard      ▲: To be equipped as option      X: not applicable

## STANDARD EQUIPMENT

### Engine

Fuel oil filter  
Lub. oil filter and drain valve  
Air cleaner  
Lubricate oil  
Fan Belt

### Control panel

Digital control panel (EDGC10)

### Exhaust

Industrial Silencer (Sound attenuation up to 20db)  
Bellows

### Voltage Connection

440V/254V

### Electrical System

Battery and Battery cable  
Charging Alternator

### Manual

Operation & Maintenance manual  
Generator part book

## OPTIONAL EQUIPMENT

### Engine

Battery auto charger (For Standby Power usage)

### Control panel

Self-standing panel

### Enclosed Unit

Sound Proof Canopy

### Cold climate heater

Coolant heater, 120V/240V

### Spare parts

PM (preventive maintenance) parts; filters & oils  
RSP (recommended spare parts)

### Fuel Options

Fuel Water Separator  
Free Standing Fuel Tank