

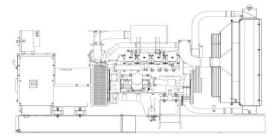
DIESEL GENERATOR **EDG-700E**

POWER RATING

	With 50 Hz of frequency	With 60 Hz of frequency	
Output voltage (Vac), 3Phase	380 ~ 440 Volts (208-220volt option)	380 ~ 480 Volts(208-240volt option)	
Prime power	550 kW, 688 kVA	640 kW, 800 kVA	
Standby power	600 kW, 750 kVA	700 kW, 875 kVA	

Power ratings are made in accordance with ISO8528

Weight and Dimensions

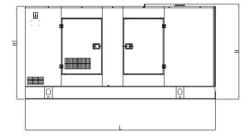


Skid Type

Overall size (L*W*H), mm : 3,396*1,400*2,164

Weight: 3,710 kg





Sound Proof Type

Overall size (L*W*H), mm:

4,800*1,652*2,200 Weight : 5,715 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.
- SIMPLE AND EASY
 OPERATION- With centralized
 controls simplifying generator
 operation and supervision is
 made very simple.
- LOW COST MAINTENANCE & OPERATION- Use the specialized diesel engine for generator set keeps operation costs very low.

- 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).
- VOLTAGE REGULATION ACCURACY- Under varying loads from no load to 100% load at the rated power factor (0.8), voltage regulation is less than ±2.5%.
- VOLTAGE ADJUSTABLE RANGE- Under rated speed and no load condition, voltage adjustable range is less than ±5% of rated voltage.

- Applied the 2/3 pitch winding to reduce the 3rd harmonics.
- Designed by using the latest technologies and the best materials available to guarantee high efficiency value.
- 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 Doosan Infracore

Model------ DP222LB

Prime power

At 50 Hz ······ 580 kWm (788 ps)/ 1500 rpm At 60 Hz ····· 673 kWm (915 ps)/ 1800 rpm

Standby power

At 50 Hz ······ 640 kWm (870 ps)/ 1500 rpm At 60 Hz ····· 744kWm (1012 ps)/1800 rpm

Nos. of cylinder ········ 12 cylinders Block & cycle ······· V-type, 4 cycles Displacement ······ 21.927 liters

Compression ratio 15:1

Fire order 1,12,5,8,3,10,6,7,2,11,4,9

Cylinder type Replaceable wet liner

Bore x stroke 128 x 142 mm

Aspiration Turbo-charged & Inter-cooled Rotation Counter clockwise viewed

from flywheel

NOTE-The Engine performance corresponds to ISO3046,

BS5514 and DIN 6271.

LUBRICATION SYSTEM

Oil filter Full flow cartridge type
Lube method Full forced pressure feed
Oil consumption Gear driven by crankshaft
Max oil temp. 120 Celsius degree
Shutdown setting SAE 15W40CE

FUEL SYSTEM

Fuel filter Full flow cartridge type with

water drain valve

Injection pump ······ Bosch in-line "P" type

Governor Electric Type

Fuel typeLight diesel fuel, DIN51601,

BS2869, ASTM D975

Fuel tank mounted in bed

Fuel consumption at prime operation (liter/hr)

At 50 Hz min 39.2, max 147.1 (lph) At 60 Hz min 46.9, max 172.7 (lph)

NOTE- based on min at 25% loaded, max at 100% loaded

ELECTRICAL SYSTEM

Starting motor 24 Vdc, 7 kW

GENERATOR

Type Revolution Field

Phase & wire 3P4W Power factor 0.8

GENERATOR

Nos. of Pole ····· 4

Speed 1500/50, 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 ······ IP22
Over speed ······· 1800 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

Exhaust gas flow ······ 115 m³/min at 60Hz

Exhaust gas temp ····· 460 degree Celsius at 60Hz

Max permissible restriction (mmH2O)

Intake system ····· initial 220, end 635

Exhaust system ··· 600

Silencer/muffler ······ Nos. 2 x Dry type

Exhaust outlet Nos. 2 x 6 inches (150A),

Based on 10meter

COOLING SYSTEM (Standard Radiator)

Type Water cooled Pump capacity I/min 660@60Hz

Thermostat operating temp (Celsius degree)

Radiator grill size 1,310 x 1,525 (L x H, mm)

AIR SYSTEM

Air cleaner type Dry, paper element

Radiator duct area

Air inlet duct ······ 2.728 m² Air outlet duct ····· 2.274 m²

SERVICE REFILL CAPACITY

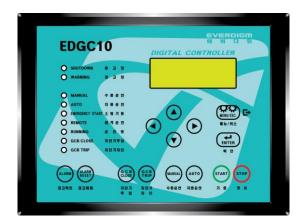
Fuel tank Skid: 275 liters

Sound Proof 1000 liters

Engine oil 40 liters Coolant 113 liters

CONTROL PANEL mounted





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

CWITCHS DUCH DUTTON	
SWITCH& PUSH BUTTON Manual/Remote/Auto button	0
	0
Stop button	0
GCB Close/Trip button	
Alarm button	0
Direction/Enter/ESC button	0
Emergency stop push button	0
Main Power Switch	0
Voltage Adjuster	0
DISPLAY	
Digital Volt./Current/Power/PF/Hz	0
Running Hours/Kilowatt hour	0
RPM/DC Voltage	0
Oil press./Coolant temp	0
Cooldown time/Mains power live/Failure sensing time	0
BREAKER	
Main molded case circuit breaker (MCCB 4P)	O (3P as option)
Circuit protector for DC source	0
Breaker for main power/coolant heater	0
INDICATOR & PROTECTION SYSTEM	
Main power lamp	0
Manual/Remote/Auto, LED	0
Running, LED	0
GCB close/trip, LED	0
Emergency stop, LCD	0
Over voltage/Under voltage/Over Current, LCD	0
High coolant temperature, LCD	0
Low lub. oil pressure, LCD	0
Fail to start, LCD	0
Over speed, LCD	0
REMOTE SYSTEM	
PC Monitoring program	A
Dry Contact (Mains Power, Running, Fault)	0
CONTROL SYSTEM	
SPEED CONTROL UNIT	0
OTHERS	
OTHERS Dry Contact (Extension Module)	A
Dry Contact (Extension Module) Battery Charger	A

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

Silencer (Sound attenuation up to 20db) Bellows

Voltage Connection

- 50Hz: 400V/230V - 60Hz: 380V/220V

Electrical System

Battery and Battery cable Charging Alternator

Manual

Operation & Maintenance manual Generator part book Engine part book

OPTIONAL EQUIPMENT

Engine

Battery auto charger (For Standby Power usage)

Control panel

Analog control panel Self-standing panel

Parallel control panel: Island or Grid Mode

Enclosed Unit

Weather Proof Enclosure Sound Proof Enclosure Containerized Enclosure

Cold climate heater

Coolant heater, 120V/240V Fuel heater, 120V/240V Air heater, 120V/240V

Spare parts

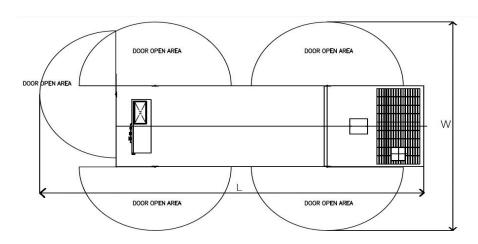
PM (preventive maintenance) parts; filters & oils RSP (recommended spare parts)

Fuel Options

Fuel Water Separator Free Standing Fuel Tank

Tropical Cooling System

SOUND PROOF CANOPY (Option)



L: 6400mm, W: 3650mm

NOISE LEVEL						
TYPE -	NO LOAD		FULL LOAD			
	1m	7m	1m	7m		
SOUND PROOF	85 dB	74 dB	86 dB	75 dB		