

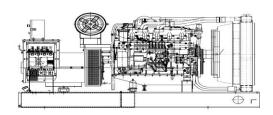
DIESEL GENERATOR EDG-300E

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	235 kW, 294 kVA	275 kW, 344 kVA	
Standby power	260 kW, 325 kVA	300 kW, 375 kVA	

Power ratings are made in accordance with ISO8528

Weight and Dimensions

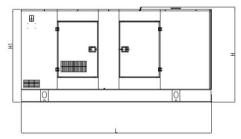


Skid Type

Overall size (L*W*H), mm: 2,825*1,000*1,635

Weight: 2,130 kg





Sound Proof Type

Overall size (L*W*H), mm : 3,950*1,112*2,243

Weight: 3,051 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......P126TI-2

Prime power

At 50 Hz 265 kWm (360 ps)/ 1500 rpm At 60 Hz 307 kWm (418 ps)/ 1800 rpm

Standby power

At 50 Hz 294 kWm (400 ps)/ 1500 rpm At 60 Hz 342 kWm (465 ps)/ 1800 rpm

Nos. of cylinder 6 cylinders

Block & cycle In-line 4 cycle Displacement 11.051 liters

Compression ratio 17:1

Fire order 1,5,3,6,2 to 4

Cylinder type Replaceable dry liner

Bore x stroke 123 x 155 mm

Aspiration Turbo charged & Intercooled Rotation Anti-clockwise (view from

flvwheel)

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

LUBRICATION SYSTEM

Oil filter Cartridge type

Lube method Full forced pressure feed Oil consumption 0.5 grams per ps and hour Oil pump type Gear driven by crankshaft Max oil temp. 120 Celsius degree Shutdown setting ····· 0.5 to 0.7 kg/cm²

FUEL SYSTEM

Fuel filter Cartridge type

Oil Type SAE15W40CE

Injection pump Zexel 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 16.9, max 63.1 (lph)

At 60 Hz min 20.6, max 73.8 (lph) NOTE- based on min at 25% loaded, max at 100% loaded

ELECTRICAL SYSTEM

Battery Nos. 2 x 150 AH

Alternator 24 Vdc, 45 A

Starting motor 24 Vdc, 6 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 ······ 64.2 m³/min at 60Hz

Exhaust gas temp..... 580 degree Celsius at 60Hz

Max permissible restriction (mmH2O)

Intake system initial 220, end 635

Exhaust system ... 600

Silencer/muffler Nos.1 x Dry type

Exhaust outlet Nos.1 x 5 inches (125A),

Based on 10meter

COOLING SYSTEM (Standard Radiator)

Type Water cooled

Pump capacity I/min 320@60Hz

Thermostat operating temp (Celsius degree)

Opening 71 Full open 85

Shutdown set ····· 103±3

Radiator grill size 995 x 1,010 (L x H, mm)

AIR SYSTEM

Air cleaner type Dry, paper element

Radiator duct area

Air inlet duct ······ 1.206 m²

Air outlet duct ····· 1.005 m²

SERVICE REFILL CAPACITY

Fuel tank Skid: 220 liters

Sound Proof 400 liters

Engine oil 23 liters Coolant 60 liters

CONTROL PANEL mounted





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

SWITCH& PUSH BUTTON	
Manual/Remote/Auto button	0
Stop button	0
GCB Close/Trip button	0
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	
Dry Contact (Extension Module)	A
Dry Contact (Extension Module) Battery Charger	_

O: Equipped as standard

 \blacktriangle : 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, AC 120V/240V Fuel heater, DC 24V Air heater, DC 12V * 2EA

Spare parts

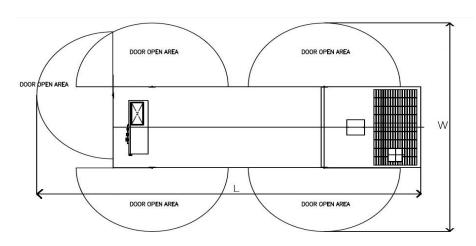
PM (preventive maintenance) parts; filters & oils RSP (recommended spare parts)

Fuel Options

Fuel Water Separator Free Standing Fuel Tank

Tropical Cooling System

SOUND PROOF CANOPY (Option)



L: 4750mm, W: 2710mm

NOISE LEVEL						
TYPE -	NO LOAD		FULL LOAD			
	1m	7m	1m	7m		
SOUND PROOF	82 dB	71 dB	84 dB	73 dB		