

440**KVA****DIESEL POWERED
GENERATING SETS**

Standby Power	kVA	440
Prime Power	kVA	400
Voltage	V	230/400
ISO Certified		Yes
Phase		Three

Features and Benefits

- **Maximum 440kva Standby Power at 230/400v @50hz 1500rpm**
- **High quality and reliable 6 cylinder 12.7 litre Scania turbo diesel engine**
- **Ideal for business applications**
- **Silent canopy which can stand outside with lockable doors**
- **Automatic changeover (ATS), Maintenance Free Batteries and Trickle Charger Included**
- **H Specification Insulation, Brushless alternator with AVR provides stable output**
- **High temperature and low oil, water and fuel protection to protect against engine damage**
- **Easy to use Digital Controller with Auto and Manual Start Options**
- **All sets undergo a comprehensive testing / pre delivery inspection prior to delivery**
- **Peace of Mind of earlier of 1 year / 1000 hour warranty**

STANDARD GENSET SPECIFICATIONS**ENGINE**

- Scania heavy duty diesel engine
- Six cylinder equipped with wet cylinder liners
- Engine Management System
- Replaceable wet type cylinder liners
- 24 V.D.C starter and charge alternator
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Fuel connection hoses and manual sump oil drain valve
- Exhaust silencer
- Maintenance free battery including rack and cables
- Jacket water heater (as option)
- Scania Engine Manual

ALTERNATOR

- Brushless, single bearing system, 4 poles
- Insulation class H with circuit breaker protection
- Standard degree of protection IP 22
- Self-exciting and self-regulating
- AVR SX460 Included
- Screen protected and drip proof
- Stator winding with 2/3 pitch for improved harmonics
- Close voltage regulation

CHASSIS

- Steel chassis and antivibration pads
- Base frame design incorporates an integral fuel tank
- The generator can be lifted or carefully pushed/pulled by the base frame
- Includes diesel level sensor information to the controller

CONTROL SYSTEM

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

1) Auto Mains Failure Control Panel

Panel equipments:

- Smartgen series automatic transfer switch module
- HGM7220 electronic controller
- Emergency stop push button
- Static Battery Charger
- Electrically and mechanically interlocked

a) Generating set control module HGM7220 features

- This module is used to monitor a mains supply and automatically start a standby generating set
- Micro processor based design
- Monitors engine performance and AC power output
- LCD and LED alarm indication ; GSM sms input slot (as optional extra)
- Front panel configuration of timers and alarm trip points
- Provides signal to change over switch panel
- Event logging and shutdown alarms
- Remote communication via RS232 port or RS485 output
- Easy push button control
- STOP/RESET - MANUAL - AUTO - TEST - START
- Operation indicators accessed by the LCD display Scroll push button

b) Metering via LCD Display:

- Generator volts (L-L / L- N) ; Mains Volts (L-L / L- N)
- Generator Ampere (L1, L2, L3) ; Generator KVA & KW

CANOPY

- Ventilation parts are designed with modular principles
- Weather resistant and lined with sound reducing foam
- All metal canopy parts are painted by powder paint
- Panel window
- Lockable doors on each side
- Easy maintenance and operation
- Easy lifting and moving
- Insulated engine exhaust system
- Exterior emergency stop push button

- Generator Frequency
- Engine hours run ; Plant battery volts
- Engine oil pressure (PSI & Bar)
- Engine speed RPM
- Engine temperature degrees C
- GSM sms signal
- Phase rotation

QUALITY STDS

- The equipment meets the following standards:
- EU Stage 2 exhaust emission regulations
- ISO 3744-1981



c) Automatic shutdown and fault conditions

- Under / Over Speed ; Fail to Start
- High engine temperature ; Fail to Stop
- Low Oil Pressure ; Charge Fail
- Under / Over generator volts ; Over current
- Under / Over generator frequency ; Emergency Stop
- Under / Over mains frequency
- Under / Over mains voltage
- Low / High battery volts
- Low Diesel level ; Low Oil level



ENGINE SPECIFICATIONS

* All ratings are quoted at maximum ratings at sea level and de rating will be applicable at altitude

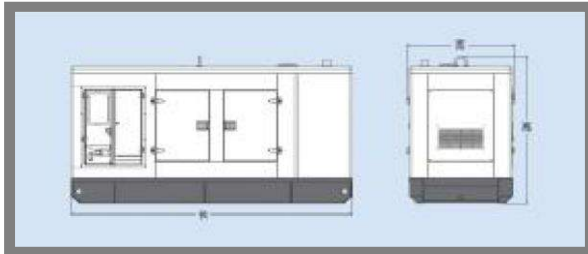
Diesel Generator Model	DC13 072A.326-406 - Ref 02-12
Engine Make	Scania
Displacement	12.7L
Cylinder bore / Stroke mm	130mm x 160mm
Working Principle	4 Stroke
Cylinders	6
Standby Power at 1500 RPM (kW)	356
Base Output Power at 1500 RPM (kW)	326
Compression Ratio	16.3:1
Diesel Tank Capacity	800L
Fuel Consumption 100%	70.6 L/H
Fuel Consumption 75%	53.3 L/H
Fuel Consumption 50%	36.5 L/H
Fuel Consumption 25%	17.7 L/H
Oil Type	15W40
Piston speed m/s	8
Camshaft	High position alloy steel
Pistons	Steel Pistons
Starting System and Governor	Electronic
Engine Speed	1500 rpm
Connection Rod	I section press forgings of alloy steel
Crankshaft	Alloy Steel with hardened and polished bearing surfaces
Oil Capacity	34-38
Firing Order	1-5-3-6-2-4
Electrical System	1 Pole - 24V
Weight of engine	1050kg

ALTERNATOR SPECIFICATIONS

Standby Power Output (kVA)	440
Prime Power Output (kVA)	400
Insulation Class	H
Type	Brushless
Phase and Connection	3 phase, 4 wire
AVR	YES
AVR Model	SX 460
Voltage Regulation	± 1%
Voltage	400/230V
Rated Frequency	50HZ
Voltage Regulate Change	≤ ±10% UN
Phase change rate	± 1%
Power Factor	0,8
Protection Class	IP22
Stator	2 / 3 pitch
Rotor	Single Bearing

GENERAL SPECIFICATIONS

Structure Type: Silent	YES
Dimensions Length x Width x Height	4200mm x 1405mm x 2362mm
Dry Weight	4500kg
ISO 9001 Certified	YES
ATS Unit Included	YES
4 way protection system included	YES



Length x Width x Height, (mm)	Weight (Kg)
4200 x 1405 x 2362	4500

We reserve the right to change generator information without prior notice . Information is double checked to ensure that it is correct, however We will not be held responsible for clerical errors.

