

22

KVA

DIESEL POWERED
GENERATING SETS

Standby Power	kVA	22
Prime Power	kVA	20
Voltage	V	230
ISO Certified		Yes
Phase		Single



Features and Benefits

- Maximum 22kva Standby Power at 230v @50hz 1500rpm
- Ideal for home and small business applications
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), Maintenance Free Batteries and Trickle Charger Included
- Long Range diesel tank allows for longer run times (200L)
- High temperature and low oil, water and fuel protection to protect against engine damage
- H Specification Insulation, Brushless alternator with AVR provides stable output
- Powerful 4 cylinder 1500rpm water cooled 490D series diesel engine
- Easy to use Digital Controller with Auto and Manual Start Options
- Peace of Mind of earlier of 1 year / 1000 hour warranty vs.traditional 3000rpm sets at 6 months / 500 hours
- Improved fuel consumption and better reliability / longer lifespan than 3000rpm units

STANDARD GENSET SPECIFICATIONS

ENGINE

- Diesel Engine
- Four Cylinder water cooled
- Electronic fuel pump
- 12 V.D.C starter and charge alternator
- Replaceable fuel filter, oil filter, dry element air filter
- Cooling radiator and fan
- Exhaust silencer
- Maintenance free battery including rack and cables

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
- Screen protected and drip proof
- Automatic Voltage Regulator

CHASSIS

- The complete generator set is mounted as a whole on a heavy duty fabricated, steel base frame.
- 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
- Dial type fuel gauge on the fuel tank

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
- Thermally Insulated engine exhaust system
- Exterior emergency stop push button
- Sound Attenuated

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

- Control with Stromer Automatic Transfer Switch
- 420 Smartgen Electronic Controller
- Emergency stop push button
- Static Battery Charger
- 2 Pole electrically and mechanically interlocked ATS

a) Generating set control module 420 Smartgen 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
- Front panel configuration of timers and alarm trip points
- Provides signal to change over switch panel
- Shutdown alarms
- Easy push button control
- STOP/RESET - MANUAL - AUTO - START
- Operation indicators accessed by the LCD display Scroll push button

b) Metering via LCD Display:

- Mains Volts (L-L / L- N)
- Generator Ampere (L1, L2, L3)
- Generator Frequency ; Generator Cos
- Engine hours run ; Plant battery volts
- Engine oil pressure (PSI & Bar)
- Engine speed RPM
- Engine temperature degrees C



- The equipment meets the following standards:
- ISO 9001:2000
- CE certified



- 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
 - Under / Over generator frequency ; Emergency Stop
 - Start Failure
 - Under / Over mains voltage
 - Charge Failure
 - Low Diesel level ; Low Oil Pressure

ENGINE SPECIFICATIONS

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

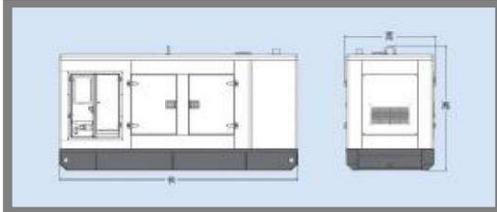
Diesel Generator Model	Y490D
Displacement	2,543L
Cylinder bore / Stroke mm	90mm x 105mm
Fuel system	In line fuel injection Pump
Cylinders	4
Cylinder Arrangement	Vertical In-Line
Engine Output Power at 1500 RPM (kW)	24
Turbo or Normally Aspirated	Normally Aspirated
Cycle	4 Stroke
Combustion system	Direct Injection
Compression ratio	18:1
Direction of rotation	Clockwise viewed from fan
Fuel Tank Capacity	200L
Fuel Consumption 100%	6.3 L/H
Fuel Consumption 75%	5 L/H
Fuel Consumption 50%	3.5 L/H
Fuel Consumption 25%	2.2 L/H
Oil Type	15W40
Oil Capacity	5.5L
Cooling Method	Radiator water-cooled
Coolant capacity (engine only)	12.5L
Starter	12V DC
Starting System and Governor	Electronic
Engine Speed	1500 rpm

ALTERNATOR SPECIFICATIONS

Standby Power Output (kVA)	22
Prime Power Output (kVA)	20
Insulation Class	H
Type	Brushless
Phase and Connection	Single phase, 4 wire
AVR	YES
AVR Model	SX460
Voltage Regulation	± 1%
Voltage	230 volts
Rated Frequency	50HZ
Voltage Regulate Change	≤ ±10% UN
Phase change rate	± 1%
Power Factor	1
Protection Class	IP22
Stator	2 / 3 pitch
Rotor	Single Bearing

GENERAL SPECIFICATIONS

Structure Type: Silent	YES
Dimensions Length x Width x Height	2010mm x 960mm x 1160mm
Dry Weight	829 kg
ISO 9001 and CE Certified	YES
ATS Unit Included	YES
4 way protection system included	YES



Length x Width x Height, (mm)	Weight (Kg)
2010 x 960 x 1160	829

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.