

40 KVA

**DIESEL POWERED GENERATING SETS**



Standby Power	kVA	37
Prime Power	kVA	34
Voltage	V	230/400
ISO Certified		Yes
Phase		Three

**Features and Benefits**

- **Maximum 37kva Standby Power at 230/400v @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 (230L)**
- **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 4102D 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**

**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
- Insulated engine exhaust system
- Exterior emergency stop push button

**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 LS series transfer contactors
- 420 Smartgen Electronic Controller
- Emergency stop push button
- Static Battery Charger
- 4 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 speed RPM
- Engine temperature degrees C



**QUALITY STDS**

- 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 ; 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

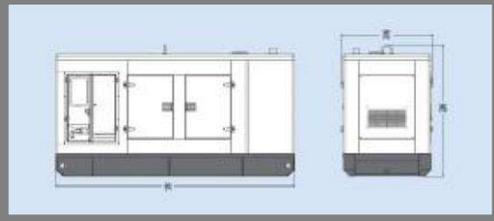
Diesel Generator Model	Y4102D
Displacement	3,857L
Cylinder bore / Stroke mm	102mm x 118mm
Fuel system	In line fuel injection Pump
Cylinders	4
Cylinder Arrangement	Vertical In-Line
Engine Output Power at 1500 RPM (kW)	33
Turbo or Normally Aspirated	Normally Aspirated
Cycle	4 Stroke
Combustion system	Direct Injection
Compression ratio	18:1
Direction of rotation	Clockwise viewed from fan
Fuel Tank Capacity	230L
Fuel Consumption 100%	8.5 L/H
Fuel Consumption 75%	6.9 L/H
Fuel Consumption 50%	4.9 L/H
Fuel Consumption 25%	2.7 L/H
Oil Type	15W40
Oil Capacity	10L
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)	37
Prime Power Output (kVA)	34
Insulation Class	H
Type	Brushless
Phase and Connection	3 phase, 4 wire
AVR	YES
AVR Model	SX460
Voltage Regulation	± 1%
Voltage	230/400 volts
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	2160mm x 1010mm x 1160mm
Dry Weight	967 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)  
2160 x 1010 x 1160 967

*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.*