

FAW 33 standby diesel generator



KEY SPECIFICATIONS

STANDBY POWER	44kVA
PRIME POWER	40kVA
PHASE	Three
DRY WEIGHT	945kg
LENGTH	2250mm
WIDTH	950mm
HEIGHT	1200mm
FUEL TANK CAPACITY	220l

FEATURES & BENEFITS

- Maximum 44kVA standby power at 230/400v @ 50Hz 1500rpm
- Powerful four-cylinder 1500rpm water cooled 4DX21-53D series diesel engine
- Ideal for home and small business applications
- Silent canopy which can stand outside with lockable doors
- Long range diesel tank allows for longer run times (220l)
- Automatic changeover (ATS), maintenance free batteries and trickle charger included
- Four-way protection system included
- H-specification insulation, brushless alternator with AVR provides stable output
- Easy to use digital controller with auto and manual start options
- Peace of mind of earlier of one year/1000 hour warranty

STANDARD GENSET SPECIFICATIONS

ENGINE

FAW diesel engine
Four cylinder water cooled
Electronic fuel pump
24v DC 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, four poles
Insulation class H with circuit breaker protection
Standard degree of protection IP21 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 anti-vibration 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

*All ratings are quoted at maximum ratings at sea level and derating will be applicable for altitude and power factor.

CONTROL SYSTEM

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

AUTO MAINS FAILURE CONTROL PANEL

Control with Smartgen automatic transfer switch
420 Smartgen electronic controller Emergency stop push button Static battery charger

Four-pole electrically and mechanically interlocked ATS

GENERATING SET CONTROL MODULE 420 SMARTGEN FEATURES

This module is used to monitor a mains supply and automatically start a standby generating set
Shutdown alarms
STOP/RESET-MANUAL-AUTO-START

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 (°C)

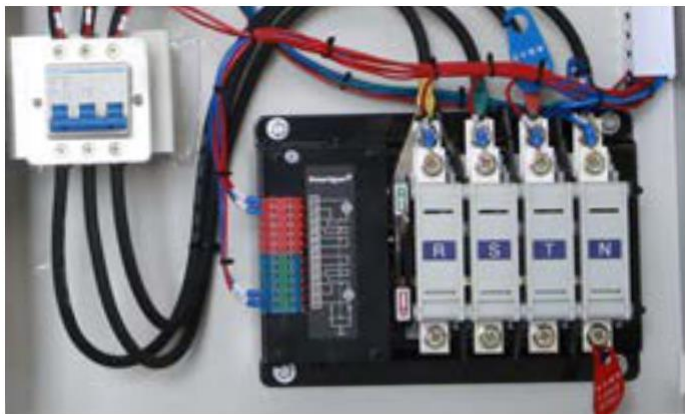
AUTOMATIC SHUTDOWN AND FAULT CONDITIONS

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
Start failure
Under/over mains voltage
Charge failure



SPECIFICATIONS TABLE

ENGINE SPECIFICATIONS	
Engine make	FAW
Diesel generator model	4DX21-53D
Displacement	3.86l
Cylinder bore/stroke	102mm x 118mm
Fuel system	Electronic governor
Cylinders	4
Cylinder arrangement	Vertical in-line
Engine output power	39kW
Turbocharged or normally aspirated	Normally aspirated
Cycle	Four stroke
Combustion system	Direct injection
Compression ratio	17.5:1
Fuel tank capacity	220l
Fuel consumption 100%	10.32 l/h
Fuel consumption 75%	7.74 l/h
Fuel consumption 50%	5.16 l/h
Fuel consumption 25%	2.58 l/h
Oil type	15W40
Oil capacity	12.5l
Cooling method	Radiator water-cooled
Coolant capacity (including radiator)	11.26l
Starter	24v DC
Governor system	Electronic
Engine speed	1500rpm



ALTERNATOR SPECIFICATIONS	
Standby power output	44kVA
Prime power output	40kVA
Insulation class	H
Type	Brushless
Phase and connection	Three phase, four wire
AVR	Yes
AVR model	SX460
Voltage regulation	± 1%
Voltage	230/400v
Rated frequency	50Hz
Voltage regulate change	≤ ±10% UN
Phase change rate	± 1%
Power factor	0.8
Protection class	IP21
Stator	2/3 pitch
Rotor	Single bearing

GENERAL SPECIFICATIONS	
Structure type	Silent weather resistant enclosure
Dimensions	
Length x Width x Height	2250mm x 950mm x 1200mm
Dry weight	945kg
ATS unit included	Yes