

FAW 22kVA standby diesel generator



KEY SPECIFICATIONS

STANDBY POWER	22kVA
PRIME POWER	20kVA
PHASE	Single
DRY WEIGHT	766kg
LENGTH	2055mm
WIDTH	930mm
HEIGHT	1130mm
FUEL TANK CAPACITY	180l

FEATURES & 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 (180l)
- Four-way protection system included
- Powerful four-cylinder 1500rpm water cooled 4DW91-29D series diesel engine
- 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 vs traditional 3000rpm sets at six months/500 hours
- Improved fuel consumption and better reliability/longer lifespan than 3000rpm units

STANDARD GENSET SPECIFICATIONS

ENGINE

FAW diesel engine
Four cylinder water cooled
Electronic fuel pump
12v 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, two 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
Sound attenuated

*All ratings are quoted at maximum ratings at sea level and de rating 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
Three-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

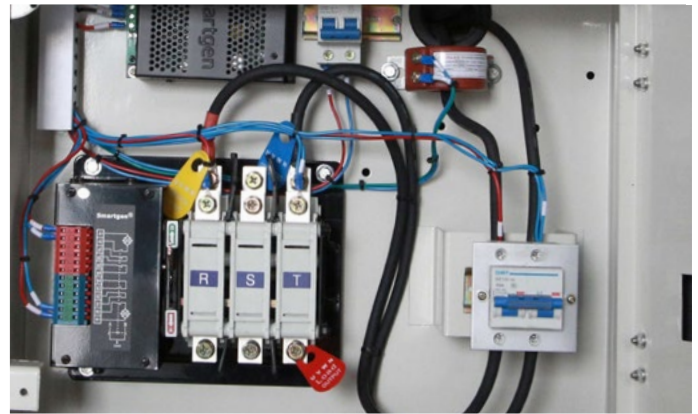
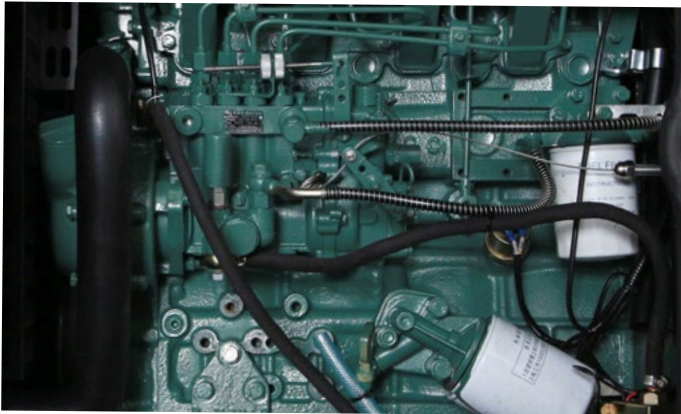
METERING VIA LCD DISPLAY

Mains volts (L-L/L-N)
Generator amps (L1, L2, L3)
Generator frequency; generator (cos)
Engine hours run; plant battery (volts)
Engine oil pressure (psi and bar)
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
Under/over generator frequency
Emergency stop; start failure
Under/over mains voltage
Charge failure

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SPECIFICATIONS TABLE

ENGINE SPECIFICATIONS

Engine make	FAW
Diesel generator model	4DW91-29D
Displacement	2.54l
Cylinder bore/Stroke	90mm x 100mm
Fuel system	In-line fuel injection pump
Cylinders	4
Cylinder arrangement	Vertical in-line
Engine output power	21kW
Turbo or normally aspirated	Normally aspirated
Cycle	Four stroke
Combustion system	Direct injection
Fuel tank capacity	180l
Fuel consumption 100%	6 l/h
Fuel consumption 75%	4.5 l/h
Fuel consumption 50%	3 l/h
Fuel consumption 25%	1.5 l/h
Oil type	15W40
Oil capacity	8l
Cooling method	Radiator water-cooled
Coolant capacity (including radiator)	12.5l
Starter	12v DC
Governor system	Mechanical
Engine speed	1500rpm

ALTERNATOR SPECIFICATIONS

Standby power output	22kVA
Prime power output	20kVA
Insulation class	H
Type	Brushless
Phase and connection	Single phase, two wire
AVR	Yes
AVR model	SX460
Voltage regulation	± 1%
Voltage	230v
Rated frequency	50Hz
Voltage regulate change	≤ ±10% UN
Phase change rate	± 1%
Power factor	1
Protection class	IP21
Stator	2/3 pitch
Rotor	Single bearing

GENERAL SPECIFICATIONS

Structure type	Silent weather resistant enclosure
Dimensions Length x Width x Height	2055mm x 930mm x 1130mm
Dry weight	766kg
ATS unit included	Yes