

GLOBAL POWER SOLUTIONS

DELIVERING POWER, DELIVERING CONFIDENCE

TOWNSVILLE - BRISBANE - PERTH

FAW 20KVA GP2-20kVa

20kVA Prime / 21kVA Standby- 83Amps

Comprehensive Specification Sheet
Electrical and Mechanical Data



FAW

1ph

FAW 20KVA

20kVA Prime / 21kVA Standby / Single Phase

FEATURES & BENEFITS

- 21kVA standby power at 240/ @ 50Hz 1500rpm
- High-quality and reliable four-cylinder 2.54l Turbocharged FAWDE diesel engine
- Ideal for home and business applications
- 2 x 32amp 240v and 2 x 15 amp 240v outlets
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger OPTIONAL
- H-specification insulation, brushless alternator with AVR provides stable output
- High-temperature and oil pressure sensor to protect against engine damage
- Easy to use digital controller with auto/manual start options
- All sets undergo a comprehensive testing/pre-delivery inspection prior to delivery
- Peace of mind - 18 Month/1000 hour warranty



CANOPY

- Ventilation parts are designed with modular principles
- Weather resistant and lined with sound reducing foam
- Galvanised steel canopy - painted with 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

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
- Digital fuel gauge on the display

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

- Controller with Smartgen automatic transfer switch
- Smartgen HGM420N electronic controller
- Emergency stop push button
- Option - Four-pole electrically and mechanically interlocked ATS

GENERATING SET CONTROL MODULE

SMARTGEN HGM420N FEATURES

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

Overview

Standby power	21kVA - 21KW
Prime power	20kVA - 20KW
Phase	Single
Dry weight	785kg
Length	1800mm
Width	850mm
Height	1100mm
Fuel tank capacity	96L

- Engine speed (rpm)
- Engine temperature (degrees 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

FAW 20KVA

20kVA Prime / 21kVA Standby / Single Phase

TECHNICAL SPECIFICATIONS

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

Engine

Engine make	FAW/FAWDE
Engine model	4DW81-23D
Displacement	2.54L
Cylinder bore/Stroke	85mm x 100mm
Fuel system	In-line fuel injection pump
Governor	Electrical
Cylinders	Four cylinders water cooled
Engine output power (1500rpm)	29kW
Turbocharged/normally aspirated	Turbocharged
Cycle	Four Cylinder
Combustion system	Direct injection
Compression ratio	17:1
Fuel tank capacity	96l
Fuel consumption 100%	5.8 l/h *
Fuel consumption 75%	4.7 l/h *
Fuel consumption 50%	4.1 l/h *
Fuel consumption 25%	3.9 l/h *
Oil type	15W40
Engine oil capacity	7.8l
Cooling method	Water-cooled radiator/fan
Coolant capacity	11l
Starter	12v DC starter charge alternator
Engine speed	1500rpm
Filters	Replaceable fuel filter/oil filter/dry element air filter
Battery	Maintenance-free battery including rack and cables
Silencer	Exhaust silencer

Alternator

Alternator	Dingol
Standby power output	21kVA
Prime power output	20kVA
Insulation class	Class-H with circuit breaker protection
Type	Brushless
Phase and connection	Single phase
AVR	Included
AVR model	SX460
Voltage regulation	± 1%
Voltage	240
Rated frequency	50Hz
Voltage regulate change	≤ ±10% UN
Phase change rate	± 1%
Power factor	1φ
Protection class	IP23 standard/screen protected/drip-proof
Stator	2/3 pitch
Rotor	Single bearing
Excitation	Self-exciting
Regulation	Self-regulating

General

Structure type	Silent weather resistant enclosure
Dimensions Length x Width x Height	1800mm x 850mm x 1100mm
Dry weight	715kg
ATS unit included	Optional
Four-way protection system included	Included