

F20P6

Powered by FAWDE®



Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

Continuous Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

POWERZOO generators are CE certified and conform to the following Directives:

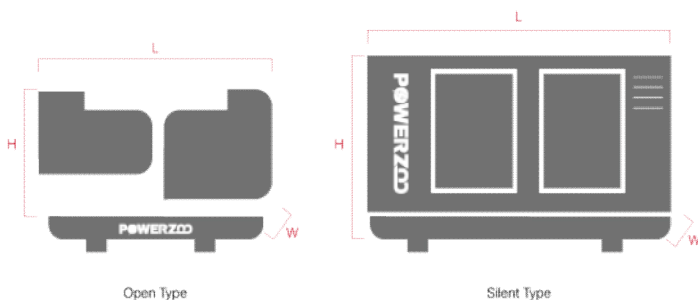
- EN 12100: 2010, EN ISO 8528-13: 2016, EN 60204-1: 2018,
- EN 61000-6-2: 2019, 2006/42/CE Machinery safety
- 2014/35/EU Low voltage
- 2014/30/EU Electromagnetic compatibility
- Power according to ISO 8528 and ISO 3046
- Ambient reference conditions 1000 mbar, 25° C, 30% relative humidity.

Information based on standard specification equipment unless otherwise stated.

GENERATOR MODEL			F20P6	
	Generator specifications		PRP	ESP
	Power	kW/kVA	16/20	17.6/22
	Rated speed	r.p.m.	1800	
	Available voltages	V	220~415	
	Frequency	Hz	60	
	Phase		3-PH	
	Power factor	Cos ϕ	0.8	
	Fuel cons 100%	L/H	5.6	
	Starting power	kW	3.5	
	Recommended battery	Ah	100	
	Number of batteries		2	
	Auxiliary voltage	VDC	12V	



Dimension and Weight



DIMENSION		OPEN TYPE	SILENT TYPE	
	Length (L)	mm	1400	1800
	Width (W)	mm	680	750
	Height (H)	mm	1000	850
	Dry Weight	kg	400	610
	Fuel tank	L	100	50

POWERZOO has the right to modify any feature without prior notice. Weights and dimensions based on standard products. Illustrations may include optional equipment. Technical data described in this catalogue correspond to the available information at the moment of printing. The illustrations and images are indicative and may not coincide in their entirety with the product. Industrial design under patent.



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Engine Specifications

ENGINE	FAWDE®
Engine model	4DW81-28D
Number of cylinders	4
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	Naturally aspirated
Bore × Stroke	85 × 95 mm
Displacement	2.16 L
Compression ratio	17:01
Prime power/Speed	20/1500 (kW/rpm)
Standby power/Speed	22/1500 (kW/rpm)
Speed governor	Mechanical
Cooling system (open type)	40°C tropical radiator
Cooling system (silent type)	50°C tropical radiator

ENGINE	FAWDE®
Total lubrication system capacity	8 L
Coolant capacity (with radiator)	6 L
Speed stability (%)	≤5%
Start type	Electrical
Maximum exhaust temperature	500°C
Exhaust gas flow	75 L/S
Maximum allowed back pressure	6.7 kPa
Intake air flow	30 L/S
Cooling air flow	TBD
Consumption @ 100% load ESP	6.082 L/H
Consumption @ 100% load PRP	5.459 L/H
Consumption @ 75% load PRP	4.094 L/H
Consumption @ 50% load PRP	2.882 L/H



Features:

- Diesel engine
- 4-stroke cycle
- Water-cooled
- Dry air filter
- Radiator with pusher fan
- Moving parts protection
- Radiator water level sensor (Optional)
- 55 degree radiator (Optional)
- Jacket coolant heater (Optional)
- Lube oil heater (Optional)
- Engine filter heater (Optional)
- Fuel inlet line heater (Optional)
- Heavy duty air filter (Optional)



Alternator Specification

ALTERNATOR	
Exciter type	Brushless, self-excited
Power factor	0.8
Voltage adjust range	

ALTERNATOR	
Voltage regulation NL-FL	≤±1.0%
Insulation grade	H
Protection grade	IP23



Options:

- AREP/PMG/EBS
- Air inlet filter (5% deration)
- Louver (5% deration)
- Space heater
- Digital AVR
- Severe environmental impregnation
- Stator sensor
- PT100
- Rotor sensor
- Double bearing
- Drip proof cover
- Terminal box IP44
- Double bearing



Controller Brands

SmartGen

SmartGen

ComAp

ComAp
The heart of smart control

Deep Sea



DEIF



Woodward

WOODWARD

Datakom

DATAKOM

Controller Functions

OPTIONAL CONFIGURATION	Stand-alone Basic	Stand-alone Advanced	Synchronization Basic	Synchronization Advanced
Voltage between phases	●	●	●	●
Voltage between neutral and phase	●	●	●	●
Current intensities	●	●	●	●
Frequency	●	●	●	●
Apparent power (kVA)	●	●	●	●
Active power (kW)	●	●	●	●
Reactive power (kVAr)	●	●	●	●
Power factor	●	●	●	●
Coolant temperature	●	●	●	●
Oil pressure	●	●	●	●
Battery voltage	●	●	●	●
R.P.M.	●	●	●	●
Battery charge alternator voltage	●	●	●	●
High water temperature by sensor	●	●	●	●
Low oil pressure by sensor	●	●	●	●
Unexpected shutdown	●	●	●	●
Fuel storage by sensor	●	●	●	●
Stop failure/Start failure	●	●	●	●
Overspeed/Underspeed	●	●	●	●

● Standard ○ Optional



OPTIONAL CONFIGURATION	Stand-alone Basic	Stand-alone Advanced	Synchronization Basic	Synchronization Advanced
Emergency stop	●	●	●	●
High/Low frequency	●	●	●	●
High/Low voltage	●	●	●	●
Short-circuit	●	●	●	●
Incorrect phase sequence	●	●	●	●
Inverse power	●	●	●	●
Overload	●	●	●	●
Total hour counter	●	●	●	●
Kilowatt meter	●	●	●	●
Starts valid counters	●	●	●	●
Maintenance	●	●	●	●
USB	●	●	●	●
Software for PC	●	●	●	●
Alarm history	●	●	●	●
External start	●	●	●	●
Start inhibition	●	●	●	●
Mains failure start	●	●	●	●
Pre-heating engine control	●	●	●	●
Fuel transfer control	●	●	●	●
Engine temperature control	●	●	●	●
Programmable alarms	●	●	●	●
Genset start function in test mode	●	●	●	●
Programmable outputs	●	●	●	●
Multilingual	●	●	●	●
RS485		●	●	●
Modbus IP		●	●	●
J1939		●	●	●
Synchronization			●	●
Mains synchronization				●
Fuel level [%]	○	○	○	○
Low water level	○	○	○	○
GSM/GPRS modem	○	○	○	○
Remote screen	○	○	○	○

● Standard ○ Optional