

# P20P5

Powered by Perkins®

Perkins®

**POWERZOO**



#### 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			P20P5	
	Generator specifications		PRP	ESP
	Power	kW/kVA	16/20	18/22
	Rated speed	r.p.m.	1500	
	Available voltages	V	380~415	
	Frequency	Hz	50	
	Phase		3-PH	
	Power factor	Cos φ	0.8	
	Fuel cons 100%	L/H	5.3	
	Starting power	kW	2	
	Recommended battery	Ah	60	
	Number of batteries		1	
	Auxiliary voltage	VDC	12V	



FREQUENCY



DIESEL FUEL



WATER-COOLED



SOUNDPROOF



CERTIFICATION

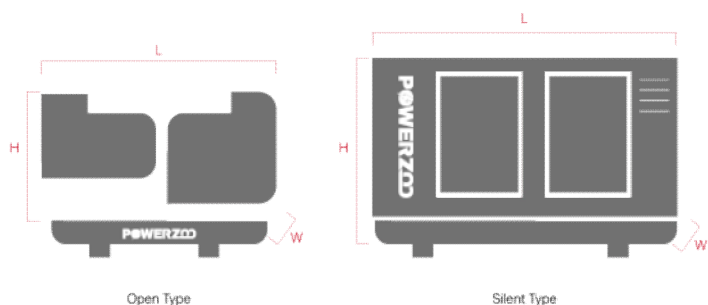


ISO 9001



STACKABLE

## Dimension and Weight



DIMENSION			OPEN TYPE	SILENT TYPE
	Length (L)	mm	1620	2602
	Width (W)	mm	950	1100
	Height (H)	mm	1400	1525
	Dry weight	kg	950	1500
	Fuel tank	L	100	100

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.

**POWERZOO**

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## Engine Specifications

ENGINE	Perkins®
Engine model	404A-22G1
Number of cylinders	4
Cylinder arrangement	Vertical inline
Cycle	Four stroke
Aspiration	Naturally aspirated
Bore × Stroke	84*100 mm
Displacement	2.216 L
Compression ratio	23.3:01
Prime power/Speed	18.7/1500 (kW/rpm)
Standby power/Speed	20.6/1500 (kW/rpm)
Speed governor	Mechanical
Cooling system (open type)	40°C tropical radiator
Cooling system (silent type)	50°C tropical radiator

ENGINE	Perkins®
Total lubrication system capacity	10.6 L
Coolant capacity (with radiator)	7.0 L
Speed stability (%)	≤5%
Start type	Electrical
Maximum exhaust temperature	445°C
Exhaust gas flow	3.64 m³/min
Maximum allowed back pressure	10.2 kPa
Intake air flow	TBA
Cooling air flow	TBA
Consumption @ 100% load ESP	6.1 L/H
Consumption @ 100% load PRP	5.3 L/H
Consumption @ 75% load PRP	4.0 L/H
Consumption @ 50% load PRP	2.9 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	≥5%

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



### Options:

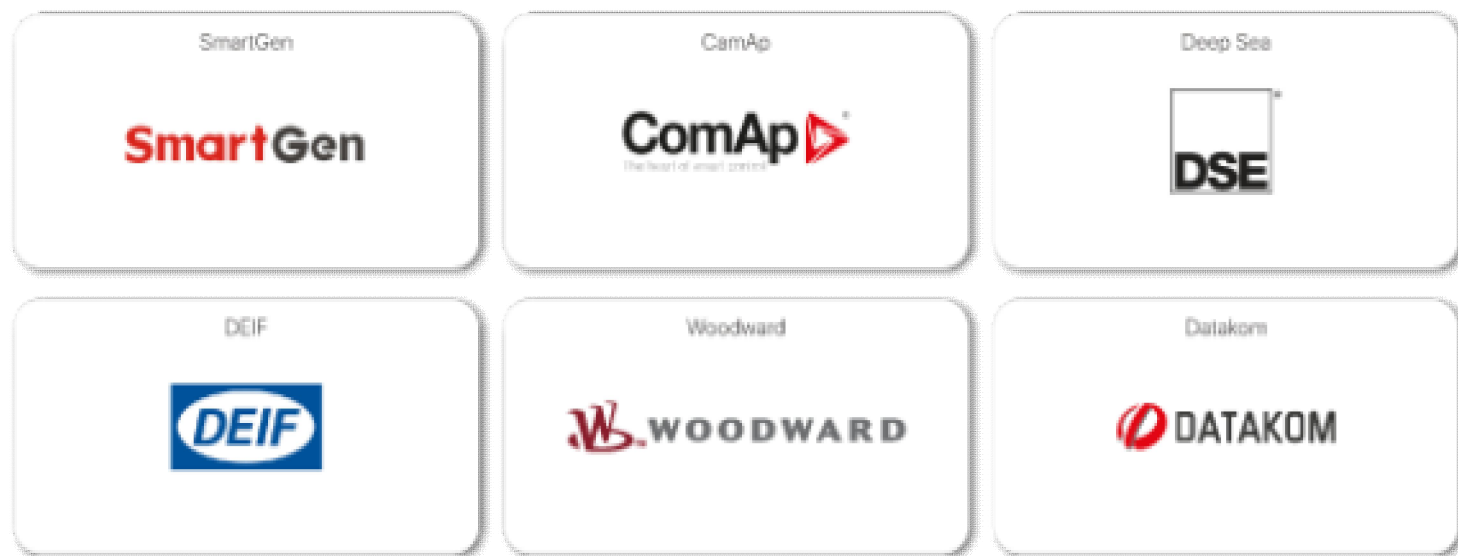
- AREP/PMG/EBS
- Air inlet filter (5% deration)
- louver (5% deration)

- Space heater
- Digital AVR
- Severe environmental impregnation
- Stator sensor
- PT100

- Rotor sensor
- Double bearing
- Drip proof cover
- Terminal box IP44



## Controller Brands



## 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