



## 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		V450P5	
	Generator specifications	PRP	ESP
	Power	kW/kVA	360/450 400/500
	Rated speed	r.p.m.	1800
	Available voltages	V	220-480
	Frequency	Hz	60
	Phase	3-PH	
	Power factor	Cos φ	0.8
	Fuel cons 100%	L/H	92.7
	Starting power	kW	7.0
	Recommended battery	Ah	120
	Number of batteries	2	
	Auxiliary voltage	VDC	24V



FREQUENCY



DIESEL FUEL



WATER-COOLED



SOUNDPROOF



CERTIFICATION

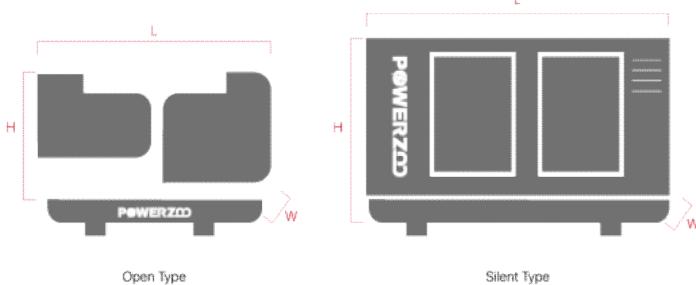


ISO 9001



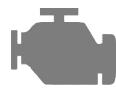
STACKABLE

## Dimension and Weight



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.

	DIMENSION	OPEN TYPE	SILENT TYPE
	Length (L)	mm	TBD
	Width (W)	mm	TBD
	Height (H)	mm	TBD
	Dry weight	kg	TBD
	Fuel tank	L	TBD



## Engine Specifications

ENGINE	VOLVO®	ENGINE	VOLVO®
Engine model	TAD1344GE	Total lubrication system capacity	30 L
Number of cylinders	6	Coolant capacity (with radiator)	24 L
Cylinder arrangement	Vertical in-line	Speed stability (%)	≤5%
Cycle	Four stroke	Start type	Electrical
Aspiration	Turbocharged and air-to-air charge cooled	Maximum exhaust temperature	440°C
Bore x Stroke	131*158 mm	Exhaust gas flow	77 m³/min
Displacement	12.78 L	Maximum allowed back pressure	9 kPa
Compression ratio	18.1:1	Intake air flow	27 m³/min
Prime power/Speed	392/1800 (kW/rpm)	Cooling air flow	8.1 m³/s
Standby power/Speed	431/1800 (kW/rpm)	Consumption @ 100% load ESP	102.4 L/H
Speed governor	ECU	Consumption @ 100% load PRP	92.7 L/H
Cooling system (open type)	40°C tropical radiator	Consumption @ 75% load PRP	92.2 L/H
Cooling system (silent type)	50°C tropical radiator	Consumption @ 50% load PRP	94.5 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	ALTERNATOR
Exciter type	Brushless, self-excited
Power factor	0.8
Voltage adjust range	≥5%

**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

SmartGen

**SmartGen**

ComAp

**ComAp**

Deep Sea



DEIF



Woodward

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