C645P5 Powered by Cummins®







Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utili ty 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 capabili ty is avai lable 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 unlimi ted hours. Continuous Power (COP) in accordance wi th ISO 8528, ISO 3046, AS 2789, DIN6271 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
- $\mbox{^{\circ}}\mbox{Ambient}$ reference conditions 1000 mbar, 25 $\mbox{^{\circ}}\mbox{^{\circ}}\mbox{^{\circ}}$ C, 30% relative humidity. Information based on standard specification equipment unless otherwise stated.

	GENERATOR MODEL			C645P5	
	Generator specificationsl		PRP	ESP	
•	Power	kW/kVA	516/645	560/700	
(2)	Rated speed	r.p.m.	1500		
v	Available voltages	V	380~415		
50 60 HZ	Frequency	Hz	50		
3	Phase		3-PH		
	Power factor	Cos Φ	0.8		
	Fuel cons 100%	L/H	140		
	Starting power	kW	24V		
âñ	Recommended battery	Ah	120		
_	Number of batteries		2		
	Auxiliary voltage	VDC	35		







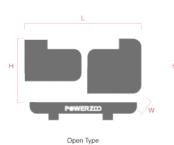


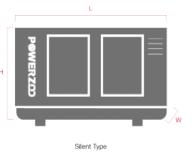






Dimension and Weight





	DIMENSION		OPEN TYPE	SILENT TYPE
砂盟	Length (L)	mm	3800	5812
Ø.₩	Width (W)	mm	1494	2090
	Height (H)	mm	2383	2520
Kg	Dry weight	kg	5675	9780
	Fuel tank	L	1000	1000

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.









Engine Specifications

ENGINE	Cummins [®]	
Engine model	VTA28-G5	
Number of cylinders	12	
Cylinder arrangement	Vertical in-line	
Cycle	Four stroke	
Aspiration	Turbocharged, and aftercooled	
Bore × Stroke	140 × 152 mm	
Displacement	28 L	
Fuel system	Direct injection Cummins PT	
Prime power/Speed	560/1500 (kW/rpm)	
Standby power/Speed	615/1500 (kW/rpm)	
Speed governor	Electronic	
Cooling system (open type)	40°C tropical radiator	
Cooling system (silent type)	50°C tropical radiator	

ENGINE	Cummins [®]
Total lubrication system capacity	83 L
Coolant capacity (with radiator)	83 L
Speed stability (%)	≤3%
Start type	Electrical
Cooling system design	Jacket water after cooled
Coolant ratio	50% ethylene glycol; 50% water
limiting ambient temp.	50℃
Fan power	19.6 kWm
Cooling system air flow	12.5 m ³ /S
Consumption @ 100% load ESP	154 L/H
Consumption @ 100% load PRP	140 L/H
Consumption @ 75% load PRP	104 L/H
Consumption @ 50% load PRP	73 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	Н
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



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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



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OPTIONAL CONFIGURATION	Stand-alone	Stand-alone	Synchronization	Synchronization
	Basic	Advanced	Basic	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 (%)	0	0	0	0
Low water level	0	0	0	0
GSM/GPRS modem	0	0	0	0
Remote screen	0	0	0	0

● Standard ○ Optional



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