

PDE100KVA

INDUSTRIAL RANGE
POWERED BY CUMMINS



POWER DEFINITION

PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed

TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25 ° C Air Inlet Temperature, of a barometric pressure of 100 kPA (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

TERMS OF USE

For the generating sets used indoor, where the acoustic pressure levels depends on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions.

You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

SERVICE		PRP	EPS
POWER	kVA	90	100
POWER	kW	72	80
RATED SPEED	r.p.m	1800	
STANDARD VOLTAGE	V	220/127	
AVAILABLE VOLTAGES	V	208/120 · 240/138	
RATED AT POWER FACTOR	Cos Phi	0,8	

Generator Specification



WATER-COOLED



THREE PHASE



60 HZ

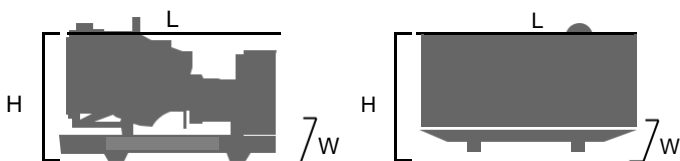


DIESEL



STACKABLE CANOPY

Weight And Dimensions



Dimension		Open	Silent
Length(L)	mm	1800	2517
Width(W)	mm	902	1055
Height(H)	mm	1465	1250
Net Weight	Kg	930	1310
Fuel Tank	L	140	100





Engine Specifications

General Engine Data	
Engine brand	CUMMINS
Engine ref.	4BTA3.9G11
Engine type	4-stroke diesel
Governor type	Electronic
Injection	Direct
Aspiration	Turbocharged & Aftercooled
Number of cylinders and arrangement	4-L
Bore and stroke	mm 102*120
Displacement	L 3.9
Cooling system	Water-cooled

General Engine Data	
Lube oil consumption with full load	0.5%-1% of fuel consumption
Compression Ratio	17.3:1
Engine oil capacity	L 10.9
Total coolant capacity	L 21.9
Air Filter	Type Dry

Fuel	
Consumption @ 100% load ESP	L/H 22.5
Consumption @ 100% load PRP	L/H 20.1
Consumption @ 75% load PRP	L/H 15.3
Consumption @ 50% load PRP	L/H 10.8

4-stroke cycle	Dry air filter	Water jacked heater (Optional)
Water-cooled	Radiator with pusher fan	Radiator water level sensor (Optional)
12V electrical system	Electronic governor	Oil heater (Optional)
Water separator filter	Hot parts protection	Heavy duty air filter (Optional)
	Moving parts protection	

Alternator Specifications

Alternator Specifications	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Insulation	H class
Enclosure(according IEC-34-5)	IP23

Alternator Specifications	
Excitation system	Self-excited, brushless
Voltage regulator	AVR (Electronic)
No. of bearings	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)

Self-excited and self-regulated	Alternator pre-heater (Optional)
IP23 protection	Winding temp. measuring instrument (Optional)
H class insulation	PMG/AREP/MAUX (Optional)

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Application Data

Fuel system

Fuel oil specifications		Diesel
Standard fuel tank capacity (Open)	L	140
Standard fuel tank capacity (Silent)	L	100

Air system

Intake air flow	L/s	101
Cooling air flow	m ³ /s	2.462

Exhaust system

Maximum exhaust temperature	°C	405
Exhaust gas flow	L/s	210
Maximum allowed back pressure	kPa	10

Starting System

Starting power	kW	3.7
Recommended batter	Ah	60
Number of Batteries		2
Auxiliary voltage	Vdc	24V

Genset version

Steel chasis	Chassis with integrated fuel tank	Fuel tank drain plug
Emergency stop button	Fuel level gauge	Steel residential silencer - 20dbA attenuation
Anti-vibration shock absorbers	High mechanical strength	Battery charger
Trailer type (Optional)	Epoxy polyester powder coating	Stackable canopy design

This document is not contractual - The company reserves the right to modify any of the characteristics stated in this document without notice, in a constant effort to improve the quality of its products. *ISO 8528. .

Power gensets are compliant with ISO 9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery safety.
- 2006/95/EC Low voltage
- EN 60204-1: 2006+A1: 2009, EN ISO 12100: 2010, EN ISO 13849-1: 2008, EN 12601 : 2010

Standard reference Conditions

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25°C, 30% relative humidity.

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.

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Control Panel Data

Features of the Control Panel	Basic Model (Standard)	Advanced Model (Optional)
• Voltage between phases	○	○
• Voltage between neutral and phase	○	○
• Current intensities	○	○
• Frequency	○	○
• Apparent power (Kva)	○	○
• Active power (Kw)	○	○
• Reactive power (kVAr)	○	○
• Power factor	○	○
• Voltage between phases	○	○
• Emergency stop	○	○
• Binary inputs	6/6	7/7
• Analog inputs	3	3
• 2x10A Current outputs	○	—
• I/O Configuration	○/○	○/○
• D+ Function	○	○
• Speed sensor	○	○
• Amf/Mrs	○/○	○/○
• GCB/MCB	○/○	○/○
• 3ph voltage measurement Gen./Mains	○/○	○/○
• 3ph current measurement	○	○
• kW/kWh/Kva	○	○
• Engine reading	○	○
• Engine protection	○	○
• Alternator protection	○	○
• Earth current protection	—	★
• History file	150	350
• RTC/Battery	○/—	○/○
• PLC	—	—
• 4G	★	—
• Airgate	—	★
• ECU CAN	○	○
• MODBUS	★	★
• MODBUS IP	★	★
• SNMP	—	★
• SNMP TRAPS	—	—
• RS232	★	★
• RS485	★	★
• GSM/GPRS modem	★	★
• Remote screen	★	★
• Software for PC	★	★
Standard: ○	Optional: ★	Not Available: —