



Powered by Cummins<sup>®</sup>

C40P5



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

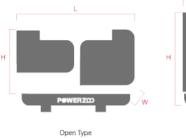
•2014/30/EU Electromagnetic compatibility

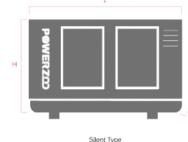
•Power according to ISO 8528 and ISO 3046

•Ambient reference conditions 1000 mbar, 25° C, 30% relative humidity. Information based on standard specification equipment unless otherwise stated.

GENERATOR MODEL		C40P5			
	Generator specificationsl		PRP	ESP	
9	Power	kW/kVA	32/40	35.2/44	
0	Rated speed	r.p.m.	1500		
V	Available voltages	V	380~415		
50 60 HZ	Frequency	Hz	50		
3#	Phase		3-PH		
	Power factor	$\cos \phi$	0.8		
٦	Fuel cons 100%	L/H	9.3		
ŝ	Starting power	kW	3.7		
	Recommended battery	Ah		60	
	Number of batteries			2	

## **Dimension and Weight**





	DIMENSION		OPEN TYPE	SILENT TYPE
	Length (L)	mm	1680	2602
0°	Width (W)	mm	950	1100
	Height (H)	mm	1400	1525
Kg	Dry weight	kg	1100	1600
	Fuel tank	L	100	100

VDC

NC

ISO 9001

24V

STACKABLE

Auxiliary voltage

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.







# PØWERZOD

# **Engine Specifications**

ENGINE	Cummins®	ENGINE	Cummins®
Engine model	4BT3.9-G2	Total lubrication system capacity	10.9 L
Number of cylinders	4	Coolant capacity (with radiator)	19 L
Cylinder arrangement	Vertical in-line	Speed stability (%)	≤3%
Cycle	Four stroke	Start type	Electrical
Aspiration	Turbocharged	Maximum exhaust temperature	<b>487</b> ℃
Bore × Stroke	102 × 120 mm	Exhaust gas flow	108 L/S
Displacement	3.9 L	Maximum allowed back pressure	10 kPa
Compression ratio	18:01	Intake air flow	44.9 L/S
Prime power/Speed	36/1500 (kW/rpm)	Water flow to engine	2.2 L/S
Standby power/Speed	40/1500 (kW/rpm)	Consumption @ 100% load ESP	10.3 L/H
Speed governor	Electronic	Consumption @ 100% load PRP	9.3 L/H
Cooling system (open type)	$40^\circ\!\!\mathrm{C}$ tropical radiator	Consumption @ 75% load PRP	7.3 L/H
Cooling system (silent type)	$50^\circ\!\!C$ tropical radiator	Consumption @ 50% load PRP	5.3 L/H

### Features:

Diesel engine4-stroke cycleWater-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	Voltage regulation NL-FL	≤±1.0%
Power factor	0.8	Insulation grade	н
Voltage adjust range	≥5%	Protection grade	IP23



### Options:

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

•Stator sensor •PT100

- Digital AVR
- •Severe environmental impregnation
- Drip proof coverTerminal box IP44

•Rotor sensor

•Double bearing

PØWERZOD





# P%WERZOD

# SmartGen CamAp SmartGen DEF Woodward DEF Woodward Datakorn Woodward Datakorn

# **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	•	٠	•	•
Stop failure/Start failure	•	•	•	•
Overspeed/Underspeed	•	•	•	•

● Standard ○ Optional







# P%WERZOD

High/Low frequencyIIIIIHigh/Low voltageIIIIIIShort-circuitIIIIIIIIncorrect phase sequenceIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OPTIONAL CONFIGURATION	Stand-alone Basic	Stand-alone Advanced	Synchronization Basic	Synchronization Advanced
Hgh/Low voltageImage: Short-circuitImage: Short-circuitImage	Emergency stop	•	•	•	•
Non-circuitIncorrect phase sequenceInInInInIncorrect phase sequenceInIncorrect phase sequenceInInInInverse powerInInInInInInDerloadInInInInInInDerloadInInInInInInDerloadInInInInInInDerloadInInInInInInDerloadInInInInInInStarts valid countersInInInInInInStarts valid countersInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInInIn	High/Low frequency	•	•	•	•
Incorrect phase sequence••••Inverse power•••••Overload••••••Total hour counter••••••Klowatt meter•••••••Starts valid counters•••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••• <td>High/Low voltage</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td>	High/Low voltage	•	•	•	•
Inverse powerInverse powerInvers	Short-circuit	•	•	•	•
DverloadImage: starts valid counterImage: starts valid countersImage: starts va	Incorrect phase sequence	•	•	•	•
Tatal hour countarImage: starts valid countarsImage: starts valid countarsImage	Inverse power	•	•	•	•
Kilowatt meterIIIIStarts valid countersIIIIMaintenanceIIIIIUSBIIIIIISoftware for PCIIIIIIAlarn historyIIIIIIIExternal startIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII<	Overload	•	•	•	•
Starts valid countersImage: starts valid countersIm	Total hour counter	•	•	•	•
MaintenanceImage: startImage: start <td>Kilowatt meter</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td>	Kilowatt meter	•	•	•	•
USBImage: state of the state of	Starts valid counters	•	•	•	•
Software for PCImage: start start startImage: start star	Maintenance	•	•	•	•
Alarm historyImage: start start startImage: start	USB	•	•	•	•
External startImage: start	Software for PC	•	•	•	•
Start inhibitionImage: start inhibiti	Alarm history	•	•	•	•
Mains failure startImage:	External start	•	•	•	•
Pre-heating engine controlImage: state of the	Start inhibition	•	•	•	•
Fuel transfer controlImage: second controlImage: second controlImage: second controlImage: second controlEngine temperature controlImage: second controlImage: second controlImage: second controlProgrammable alarmsImage: second controlImage: second controlImage: second controlGenset start function in test modeImage: second controlImage: second controlImage: second controlProgrammable outputsImage: second controlImage: second controlImage: second controlMultilingualImage: second controlImage: second controlImage: second controlMultilingual <td< td=""><td>Mains failure start</td><td>•</td><td>•</td><td>•</td><td>•</td></td<>	Mains failure start	•	•	•	•
Engine temperature controlImage: start space sp	Pre-heating engine control	•	•	•	•
Programmable alarms••••••Genset start function in test mode••••••Programmable outputs••••••Multilingual••••••RS485••••••••Modbus IP••••••••J1939••••••••Synchronization••••••••Fuel level (%)••••••••Low water level••••••GSM/GPRS modem••••••••	Fuel transfer control	•	•	•	•
Genset start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeProgrammable outputsImage: start function in test modeImage: start function in test modeImage: start function in test modeMultilingualImage: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeRS485Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeMains synchronizationImage: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test modeImage: start function in test modeImage: start function in test modeImage: start function in test modeFuel level (%)Image: start function in test m	Engine temperature control	•	•	•	•
Programmable outputsImage: state outputsImage: state outputsMultilingualImage: state outputsImage: state outputsRS485Image: state outputsImage: state outputsModbus IPImage: state outputsImage: state outputsJ1939Image: state outputsImage: state outputsSynchronizationImage: state outputsImage: state outputsMains synchronizationImage: state outputsImage: state outputsFuel level (%)Image: state outputsImage: state outputsLow water levelImage: state outputsImage: state outputsGSM/GPRS modemImage: state outputsImage: state outputs	Programmable alarms	•	•	•	•
MultilingualImage: state of the	Genset start function in test mode	•	•	•	•
RS485Image: state of the state o	Programmable outputs	•	•	•	•
Modbus IPImage: Marcine and ComparisonImage: Marcine and Comparison <t< td=""><td>Multilingual</td><td>•</td><td>•</td><td>•</td><td>•</td></t<>	Multilingual	•	•	•	•
J1939••••SynchronizationII•••Mains synchronizationIII••Fuel level (%)000000SSM/GPRS modem000000	RS485		•	•	•
SynchronizationImage: Synchronization	Modbus IP		•	•	•
Mains synchronizationImage: Synchroni	J1939		•	•	•
Fuel level (%)000Low water level0000GSM/GPRS modem0000	Synchronization			•	•
Low water levelOOOGSM/GPRS modemOOO	Mains synchronization				•
GSM/GPRS modem 0 0 0	Fuel level (%)	0	0	0	0
	Low water level	Ο	0	0	0
	GSM/GPRS modem	0	0	0	0
Remote screen 0 0 0 0	Remote screen	0	0	0	0

• Standard O Optional

