



### 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.

### Keypower 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		KP-S50P	
	Generator specifications		PRP    ESP
	Power	kW/kVA	40/50    44/55
	Rated speed	r.p.m.	1500
	Available voltages	V	380~415
	Frequency	Hz	50
	Phase		3-PH
	Power factor	Cosφ	0.8
	Fuel cons 100%	L/H	9.8
	Starting power	kW	3.8
	Recommended battery	Ah	110~120
	Number of batteries		2
	Auxiliary voltage	VDC	12V



## Dimension and Weight



DIMENSION		OPEN TYPE	SILENT TYPE
	Length (L)	mm    1750	2250
	Width (W)	mm    750	960
	Height (H)	mm    1200	1200
	Dry weight	kg    730	1000
	Fuel tank	L    150	100

KEYPOWER 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	SDEC®
Engine model	4ZT3.5-G21
Number of cylinders	4
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	TC
Bore × Stroke	105 × 115mm
Displacement	3.5 L
Compression ratio	18:01
Prime power/Speed	49/1500 (kW/rpm)
Standby power/Speed	54/1500 (kW/rpm)
Speed governor	E
Cooling system (open type)	40°C tropical radiator
Cooling system (silent type)	50°C tropical radiator

ENGINE	SDEC®
Total lubrication system capacity	10 L
Coolant capacity (with radiator)	3.5 L
Speed stability (%)	≤3%
Start type	Electrical
Maximum exhaust temperature	480°C
Exhaust gas flow	193.33 L/S
Maximum allowed back pressure	10 kpa
Intake air flow	85.5 L/S
Cooling air flow	TBD
Consumption @ 100% load ESP	8.94 L/H
Consumption @ 100% load PRP	8.34 L/H
Consumption @ 75% load PRP	6.29 L/H
Consumption @ 50% load PRP	4.46 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 Specifications

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
- Double bearing




## Controller Brands


KEYPOWER



Deep Sea



ComAp



SmartGen



DEIF



Woodward



## 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

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