## C513E5 | INDUSTRIAL RANGE POWERED BY CUMMINS







#### POWER DEFINITION

PRP: Prime Power is abailanle 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 8528-1.0verload is not allowed

#### TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25  $^{\circ}$  C Air Intlet 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	500	513
POWER	kW	400	410
RATED SPEED	r.p.m	15	00
STANDARD VOLTAGE	V	400,	/230
AVAILABLE VOLTAGES	V	380/220	· 415/240
RATED AT POWER FACTOR	Cos Phi	0	,8

#### **Generator Specification**





THREE PHASE



50 HZ

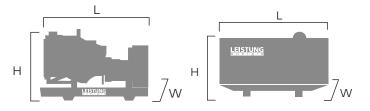


DIESEL



DUAL-WALL FUEL TANK (Optional)

### Weight And Dimensions



Dimension		Open	Silent
Length(L)	mm	3190	4365
Width(W)	mm	1390	1650
Height(H)	mm	2135	2465
Net Weight	Kg	3410	4464
Fuel Tank	L	800	900





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### **Engine Specifications**

General Engine Data	
Engine brand	CUMMINS
Engine ref.	QSZ13G5
Engine type	4-stroke diesel
Governor type	ECU
Injection	Direct
Aspiration	Furbocharged and Charge Air Cooled
Number of cylinders and arrange	ment 6-L
Bore and stroke	mm 130*163
Displacement	L 13.0
Cooling system	Water-cooled

General Engine Data		
Lube oil consumption with full load	o.5%-1% of fuel consumption	
Compression Ratio		17.0:1
Engine oil capacity	L	45.42
Total coolant capacity	L	73.1
Air Filter	Type	Dry
Fuel		
Consumption @ 100% load ESP	L/H	105.5
Consumption @ 100% load PRP	L/H	101.0
Consumption @ 75% load PRP	L/H	74.2
Consumption @ 50% load PRP	L/H	48.9



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

#### **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
- IP23 protection
- H class insulation
- Alternator pre-heater (Optional)
- Winding temp. measuring instrument (Optional)
- PMG/AREP/MAUX (Optional)

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### **Application Data**

Fuel system		
Fuel oil specifications		Diesel
Standard fuel tank capacity (Open)	L	800
Standard fuel tank capacity (Silent)	L	900

Exhaust system		
Maximum exhaust temperature	°C	547
Exhaust gas flow	L/s	481
Maximum allowed back pressure	kPa	13

Air system		
Intake air flow	L/s	505
Cooling air flow	L/s	TBD

Starting System		
Starting power	kW	TBD
Recommended batter	Ah	TBD
Number of Batteries		2
Auxiliary voltage	Vdc	24V

#### **Genset version**

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

This document is not contractual - The Leistung Energie Limited 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. .

Leistung Energie 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	0	0
Voltage between neutral and phase	0	0
Current intensities	0	0
Frequency	0	0
Apparent power (Kva)	0	0
Active power (Kw)	0	0
Reactive power (kVAr)	0	0
Power factor	0	0
Voltage between phases	0	0
Emergency stop	0	0
Binary inputs	6/6	7/7
Analog inputs	3	3
2x10A Current outputs	0	-
I/O Configuration	0/0	0/0
D+ Function	0	0
Speed sensor	0	0
• Amf/Mrs	0/0	0/0
• GCB/MCB	0/0	0/0
3ph voltage measurement Gen./Mains	0/0	0/0
3ph current measurement	0	0
• kW/kWh/Kva	0	0
Engine reading	0	0
Engine protection	0	0
Alternator protection	0	0
Earth current protection	_	*
History file	150	350
RTC/Battery	0/—	0/0
• PLC	_	_
• 4G	*	_
• Airgate	_	*
• ECU CAN	0	0
• MODBUS	*	*
MODBUS IP	*	*
• SNMP	_	*
SNMP TRAPS	_	_
• RS232	*	*
• RS485	*	*
GSM/GPRS modem	*	*
Remote screen	*	*
Software for PC	*	*
Standard: O Op	tional: * Not Av	ailable: —