

# QGS - 50 | INDUSTRIAL RANGE POWER 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 indoors, where the acoustic pressure level depends on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions.

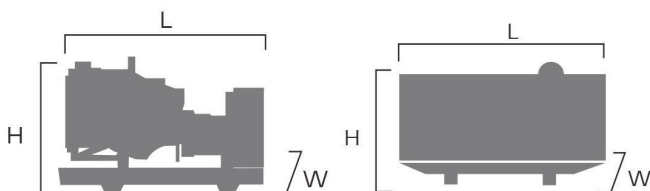
You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

SERVICE		PRP	EPS
POWER	kVA	50	55
POWER	kW	40	44
RATED SPEED	r.p.m	1500	
STANDARD VOLTAGE	V	400/230	
AVAILABLE VOLTAGES	V	380/220 · 415/240	
RATED AT POWER FACTOR	Cos Phi	0,8	

## Generator Specification



## Weight And Dimensions



Dimension		Open	Silent
Length(L)	mm	1750	2517
Width(W)	mm	980	1055
Height(H)	mm	1480	1250
Net Weight	Kg	858	1220
Fuel Tank	L	140	70

## Engine Specifications

General Engine Data	
Engine brand	CUMMINS
Engine ref.	4BTA3.9G2
Engine type	4-stroke diesel
Governor type	Electronic
Injection	Direct
Aspiration	Turbocharged & Aftercooler
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 14.1
Consumption @ 100% load PRP	L/H 12.9
Consumption @ 75% load PRP	L/H 10.0
Consumption @ 50% load PRP	L/H 7.0



- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Water separator filter
- Dry air filter
- Radiator with pusher fan
- Electronic governor
- 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)



### Application Data

#### Fuel system

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

#### Exhaust system

Maximum exhaust temperature	°C	548
Exhaust gas flow	L/s	134
Maximum allowed back pressure	kPa	10

#### Air system

Intake air flow	L/s	52
Cooling air flow	L/s	2.101

#### Starting System

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

### 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
- Stackable canopy design

This document is not contractual - The QNG 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. .

QNG 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.



## Control Panel Data

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

