

# CU450E5

Industrial Range Powered By Cummins

**AGG** Power Solutions



Standards : 2006/42/EC Machinery safety, 2006/95/EC Low voltage, EN 60204-1 : 2006+A1 : 2009, EN ISO 12100 : 2010, EN ISO 8528-13:2016, ENISO 13849-1: 2015, EN 60204-1: 2018

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.

Conditions : 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.

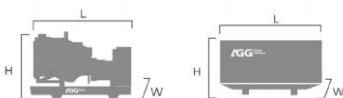
## GENERATOR SPECIFICATION

ITEMS	PRP	EPS
Power	400kVA	450kVA
Power	320kW	360kW
Frequency / Phase / Power factor	50Hz / 3P / PF0.8	
Standard voltage	400/230V	
Available voltage	380/220V · 415/240V	



## GENERAL INSTALLATION

ITEMS	OPEN	SILENT
Dimension(L*W*H)(mm)	3180*1203*2194	4010*1410*2306
Weight(kg)	2820	3216
Fuel tank(L)	700	850
Sound pressure level @75% load&1m dB(A)		TBA
@75% load&7m dB(A)		TBA



NOTE: Weights and dimensions based on standard products. According to 2000/14/CE , sound data is provided at 7m for 75% prime power. For actual installation, please contact the manufacturer.

PERFORMANCE DATA	
Engine brand	CUMMINS
Engine model	QSG12-G4
Fuel	Diesel
Aspiration	Turbocharged and Charge Air Cooled
Cooling	Water-cooled
Governor	ECM
Cyl arrangement	6L
Application	Prime & Standby
Fuel consumption	100% ESP(L/H) 92
	100% PRP(L/H) 82
	75% PRP(L/H) 60
	50% PRP(L/H) 41

## ENGINE SPECIFICATION

### BASIC DATA

Engine brand	CUMMINS
Engine model	QSG12-G4
Displacement	11.8L
No. of cyl / arrangement	6L
Bore x stroke	132x144mm
Compression ratio	17.0 : 1
Engine speed	1500rpm
Engine type	4-stroke diesel

### EXHAUST SYSTEM

Exhaust stack gas temperature (max. )	524 °C
Exhaust gas flow rate (max. )	2179 L/S
Exhaust system backpressure (maximum allowable)	10 kPa

### FUEL SYSTEM

Maximum restriction at lift pump	40.6 kPa
Max. fuel flow	182 L/H

### COOLING SYSTEM

Radiator air flow	8.4 m³/s
Total oil capacity	34.1L
Total coolant capacity	48L

### ELECTRICAL SYSTEM

Starter motor rated voltage	DC24V
Start battery	2x120Ah(850CCA)
Battery charging alternator	DC24V/TBA

### INLET AIR

Air filter	Dry type
Max. combustion air Intake restriction	6.2 kPa
Combustion air inlet flow rate	898 L/S
Max. allowable combustion air inlet temp	50°C

## ALTERNATOR SPECIFICATION

### BASIC DATA









Insulation & temperature rise	Class H/H
Excitation type	Self-excited
Winding leads	12
Winding connections (standard)	Star
Winding pitch	Two thirds
Number of phase	Three phase

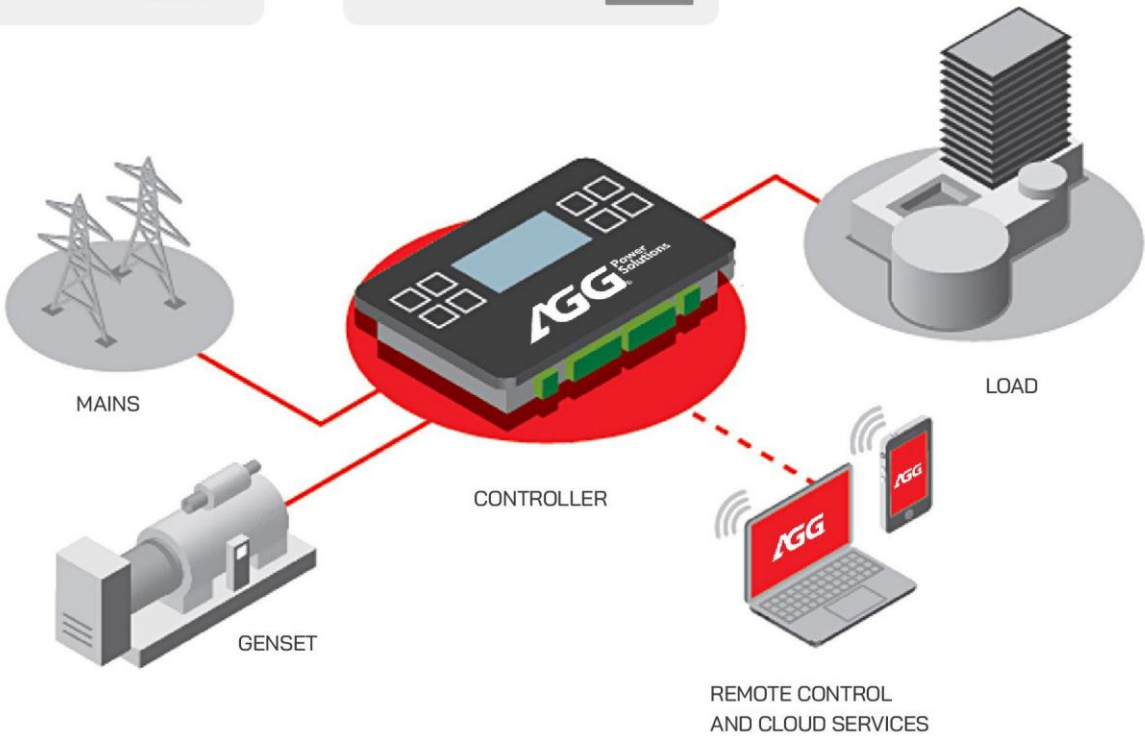
### BASIC DATA

Type	Brushless
No. of bearings	Single bearing
Coupling system	Flexible disc
Maximum over speed	2250 RPM
Coating type	Vacuum impregnation
IP rating	IP23

# CONTROL SYSTEM

## Key features

- Single generator set controller can be used in prime or standby scenarios 
- Manual and remote start, MRS application 
- Auto mains failure, AMF application 
- Genset power/frequency/factor /voltage/current detection 
- Engine / alternator / generator protections, emergency stop 
- Event log / running hours history / maintenance warning, LCD screen 
- User access management, software and tools are easy to use 
- Input or output configuration, USB communication port 



## GENSET VERSION

### STANDARD FEATURES

- ◆ Diesel engine, 50 degrees radiator, brushless alternator
- ◆ Intelligent controller
- ◆ Output circuit breaker (up to 1250A)
- ◆ Maintenance-free start battery, battery charge, battery switch
- ◆ Steel industrial silencer, exhaust bellows and elbows
- ◆ Steel chasis and anti-vibration shock absorbers
- ◆ Lifting and moving structure, expansion of oil and coolant discharge
- ◆ Moving parts protection, hot parts protection
- ◆ Special toolbox, delivery attached documentation



### OPTIONAL FEATURES

#### ENGINE

- ◆ Water jacket preheater
- ◆ Oil Preheater, oil level maintainer, oil manual pump
- ◆ Heavy air filtration
- ◆ Residential silencer
- ◆ Remote radiator, heat exchanger

#### ALTERNATOR

- ◆ PMG/AREP excitation system
- ◆ Anti-condensation heater
- ◆ Winding/bearing RTD
- ◆ Double bearing structure
- ◆ IP44 protection class

#### CONTROL SYSTEM

- ◆ Synchronizing panel, remote control panel
- ◆ RS232/485, 4G & GPS wireless, ethernet communication card
- ◆ Additional digital/analog input/output
- ◆ Monitoring software, mobile APP
- ◆ Ni-Cad batteries

#### GENERATING SET

- ◆ External fuel tank, automatic fuel feeding
- ◆ ATS/output /combining/distribution cabinet
- ◆ Load test cabinet
- ◆ Mobile trailer
- ◆ Customized design

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