

# AF44D5

Industrial Range Powered By AGG



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	40kVA	44kVA
Power	32kW	35kW
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)	2020*750*1190	2298*1054*1250
Weight(kg)	800	1100
Fuel tank(L)	180	100
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	AGG	
Engine model	AF3860-53D	
Fuel	Diesel	
Aspiration	Natural	
Cooling	Water-cooled	
Governor	Electronic	
Cyl arrangement	4L	
Application	Prime & Standby	
Fuel consumption	100% ESP(L/H)	9.4
	100% PRP(L/H)	8.52
	75% PRP(L/H)	6.48
	50% PRP(L/H)	4.6

## ENGINE SPECIFICATION

### BASIC DATA

Engine brand	AGG
Engine model	AF3860-53D
Displacement	3.86L
No. of cyl / arrangement	4L
Bore x stroke	102x118mm
Compression ratio	17.0 : 1
Engine speed	1500rpm
Engine type	4-stroke diesel

### EXHAUST SYSTEM

Exhaust stack gas temperature (max. )	550°C
Exhaust gas flow rate (max. )	7.3 m <sup>3</sup> /min
Exhaust system backpressure (maximum allowable)	6.7 kPa

### FUEL SYSTEM

Maximum restriction at lift pump	TBA
Max. fuel flow	TBA

### COOLING SYSTEM

Radiator air flow	66 m <sup>3</sup> /min
Total oil capacity	13L
Total coolant capacity	20 L

### ELECTRICAL SYSTEM

Starter motor rated voltage	DC24V
Start battery	2x60Ah(580CCA)
Battery charging alternator	DC24V/35A

### INLET AIR

Air filter	Dry type
Max. combustion air Intake restriction	6.3kPa
Combustion air inlet flow rate	2.66 m <sup>3</sup> /min
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 control-  
ler can be used in prime or  
standby scenarios



Manual and remote start,  
MRS application



Auto mains failure, AMF  
application



Genset power/frequency/fac-  
tor /voltage/current detection



Engine / alternator / genera-  
tor protections, emergency  
stop



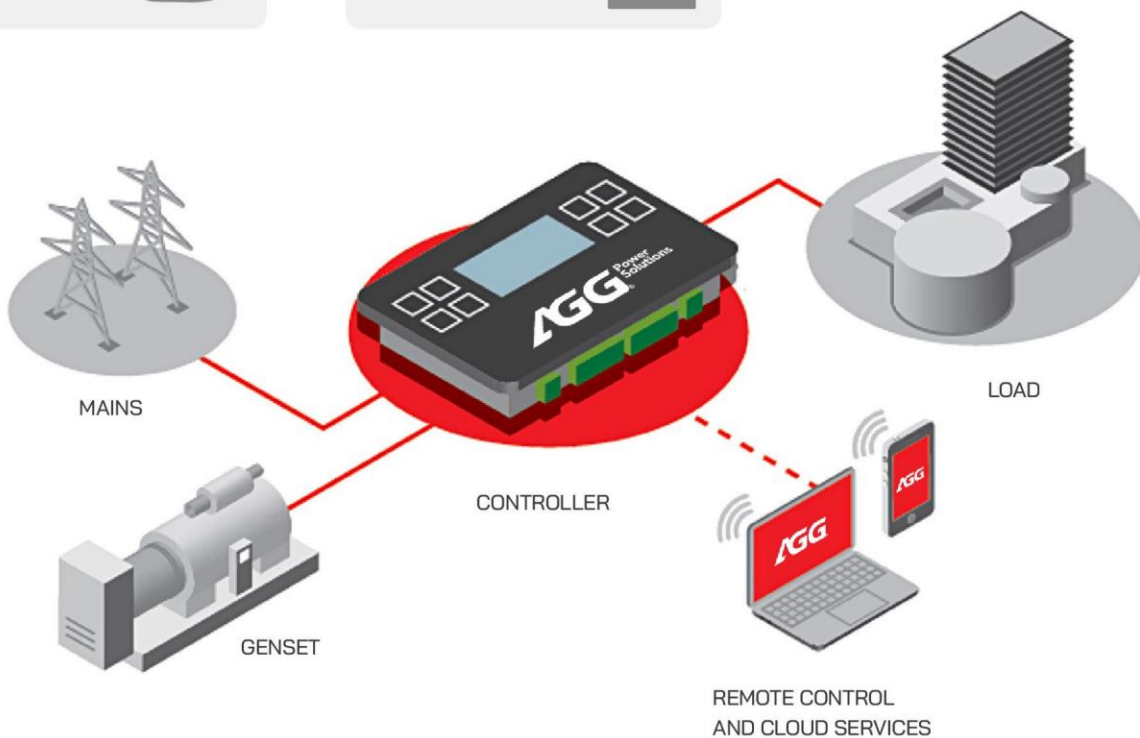
Event log / running hours  
history / maintenance  
warning, LCD screen



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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