

# M1650E5

Industrial Range Powered By MTU

**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, EN ISO 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	1500kVA	1650kVA
Power	1200kW	1320kW
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)	6770*2555*2550	12192*2438*2896
Weight(kg)	13000	19500
Fuel tank(L)	N/A	2000
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	MTU	
Engine model	12V4000G14F	
Fuel	Diesel	
Aspiration	Turbocharged and Intercooling	
Cooling	Water-cooled	
Governor	ECU	
Cyl arrangement	12V	
Application	Prime & Standby	
Fuel consumption	100% ESP(L/H)	345.3
	100% PRP(L/H)	313.9
	75% PRP(L/H)	228.9
	50% PRP(L/H)	155.5

## ENGINE SPECIFICATION

### BASIC DATA

Engine brand	MTU
Engine model	12V4000G14F
Displacement	57.2L
No. of cyl / arrangement	12V
Bore x stroke	170x210mm
Compression ratio	16.4 : 1
Engine speed	1500rpm
Engine type	4-stroke diesel

### EXHAUST SYSTEM

Exhaust stack gas temperature (max. )	490 °C
Exhaust gas flow rate (max. )	5.6 m <sup>3</sup> /s
Exhaust system backpressure (maximum allowable)	85 mbar

### FUEL SYSTEM

Maximum restriction at lift pump	7.5 Bar
Max. fuel flow	16 L/min

### COOLING SYSTEM

Radiator air flow	TBA m <sup>3</sup> /min
Total oil capacity	260 L
Total coolant capacity	600 L

### ELECTRICAL SYSTEM

Starter motor rated voltage	DC24V
Start battery	4x120Ah(850CCA)
Battery charging alternator	DC24V/TBA

### INLET AIR

Air filter	Dry type
Max. combustion air Intake restriction	50 mbar
Combustion air inlet flow rate	2.2 m <sup>3</sup> /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	6
Winding connections (standard)	Star
Winding pitch	Two thirds
Number of phase	Three phase

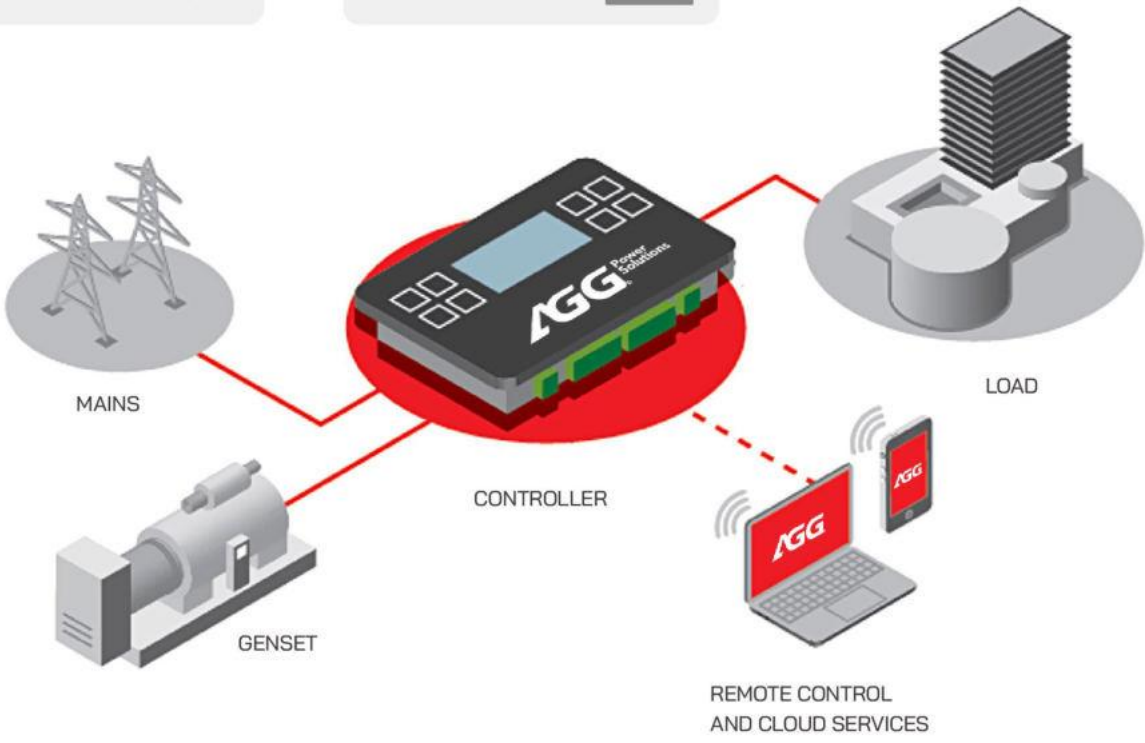
### BASIC DATA

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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Fuel	Diesel	
Aspiration	Turbocharged and Intercooling	
Cooling	Water-cooled	
Governor	ECU	
Cyl arrangement	12V	
Application	Prime & Standby	
Fuel consumption	100% ESP(L/H)	299.3
	100% PRP(L/H)	272.1
	75% PRP(L/H)	209.5
	50% PRP(L/H)	144.0

## ENGINE SPECIFICATION

### BASIC DATA

Engine brand	MTU
Engine model	12V4000G23F
Displacement	57.2L
No. of cyl / arrangement	12V
Bore x stroke	170x210mm
Compression ratio	16.4 : 1
Engine speed	1500rpm
Engine type	4-stroke diesel

### EXHAUST SYSTEM

Exhaust stack gas temperature (max. )	460 °C
Exhaust gas flow rate (max. )	4.5 m <sup>3</sup> /s
Exhaust system backpressure (maximum allowable)	85 mbar

### FUEL SYSTEM

Maximum restriction at lift pump	7.5 Bar
Max. fuel flow	16 L/min

### COOLING SYSTEM

Radiator air flow	TBA m <sup>3</sup> /min
Total oil capacity	260 L
Total coolant capacity	600 L

### ELECTRICAL SYSTEM

Starter motor rated voltage	DC24V
Start battery	4x120Ah(850CCA)
Battery charging alternator	DC24V/TBA

### INLET AIR

Air filter	Dry type
Max. combustion air Intake restriction	50 mbar
Combustion air inlet flow rate	1.8 m <sup>3</sup> /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	6
Winding connections (standard)	Star
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### BASIC DATA


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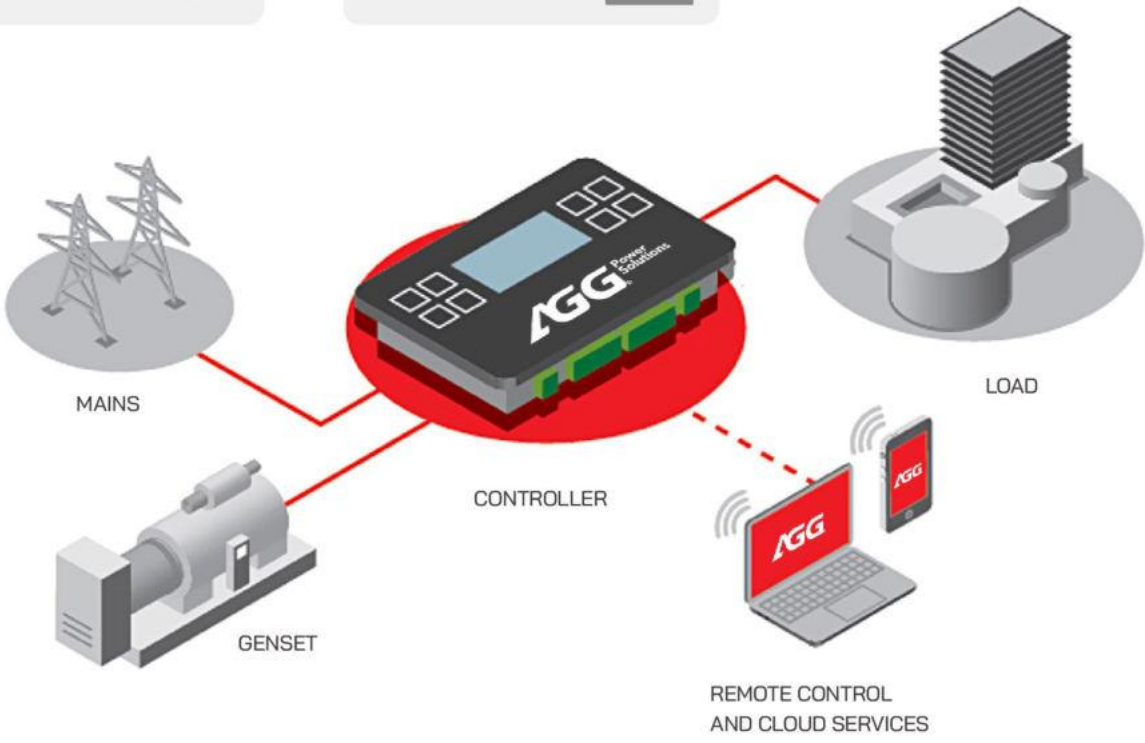

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