

**ETDG146****Generator Set Technical Data Sheet****Water-Cooled DEUTZ BF4M1013FC****Standby: 117KW/146KVA****Prime: 100KW/125KVA****at 50Hz, 230/400V**

Manufacturer reserves the right to make changes in model, technical specification, color, equipment and accessories without prior notice.

Generator Set Main Specifications**3-PH, 50Hz@1500RPM, 400/230V (Other voltage ranges are available)**

- Compacted power units
- Composed of DEUTZ four cycle, water cooled diesel engine and Leroy-Somer alternator
- Cooling radiator and fan
- Electronic governor
- Electrical 12V DC starter & charge alternator motor
- Normal duty, dry type air filter
- Brushless, Self-excited, IP23, Insulation class H and single bearing alternator
- Digital auto-panel control system with emergency stop press bottom
- Welded steel base frame with A/V mounting
- Flexible fuel connection hoses and lube-oil drain hand pump fitted
- Starter batteries with cables and rack
- Industrial type silencer and steel bellows delivered loose
- Mounted main circuit breaker
- Soundproof canopy or container, 8 hours working bottom fuel tank and engine jacket water heater are optional available on the whole range
- According with standards of **ISO8528,ISO3046,ISO3046,ICE34-1GB/T2820-97,GB755**

Prime Power	100KW/125KVA	Standby Power	117KW/146KVA
Rated Speed	1500RPM	Frequency	50Hz
Phase	3 Phase 4 Wires	Rated Voltage	400/230V
Engine Model	BF4M1013EC	Alternator Model	LSAP44E
Steady Voltage Deviation	$\leq \pm 1\%$	Transient Voltage Adjustment · Recovery Time (Sudden deducting / Increasing load)	$\leq +20\% \cdot 4s / -15\% \cdot 4s$
Steady Frequency Drop	$\leq 2\%$	Transient Frequency Adjustment · Recovery Time (Sudden deducting / Increasing load)	$\leq +10\% \cdot 3s / -7\% \cdot 3s$
Dimension Open Type	2650x900x1460	Gross Weight	1700
Dimension Silent Type	2800x1060x1860	Gross Weight	1920



- a. Available in the following voltages:
415/240 V·400/230 V·380/220 V·220/127 V·200/115V
- b. Standby Power: Standby duty operation, under variable load, without over load
- c. Prime Power: Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours
- d. ISO8258:Rating are given for 25°C ambient temperature.Attitude:100m above sea level.Derating,please contact us or refer to data sheet

Engine Main Specifications

DEUTZ Diesel Engine


Engine Model	BF4M1013FC
Number of Cylinder	4
Cylinder Arrangement	In line
Cycle	4
Aspiration	Turbo, CAC
Bore X Stroke (mm X mm)	108X130
Displacement (L)	4.76
Compression Ratio	18.1
Prime Power/Speed(KW/RPM)	117@1500
Standby Power/Speed(KW/RPM)	129@1500
Governor	Electrical(EMR/GAC)
Cooling System	Radiator with water cooled
Speed Stability (%)	≤3
Fuel Consumption at 100% Load(L/H)	31.8
Start Motor System	12 Vdc battery and start motor

Alternator Main Specifications

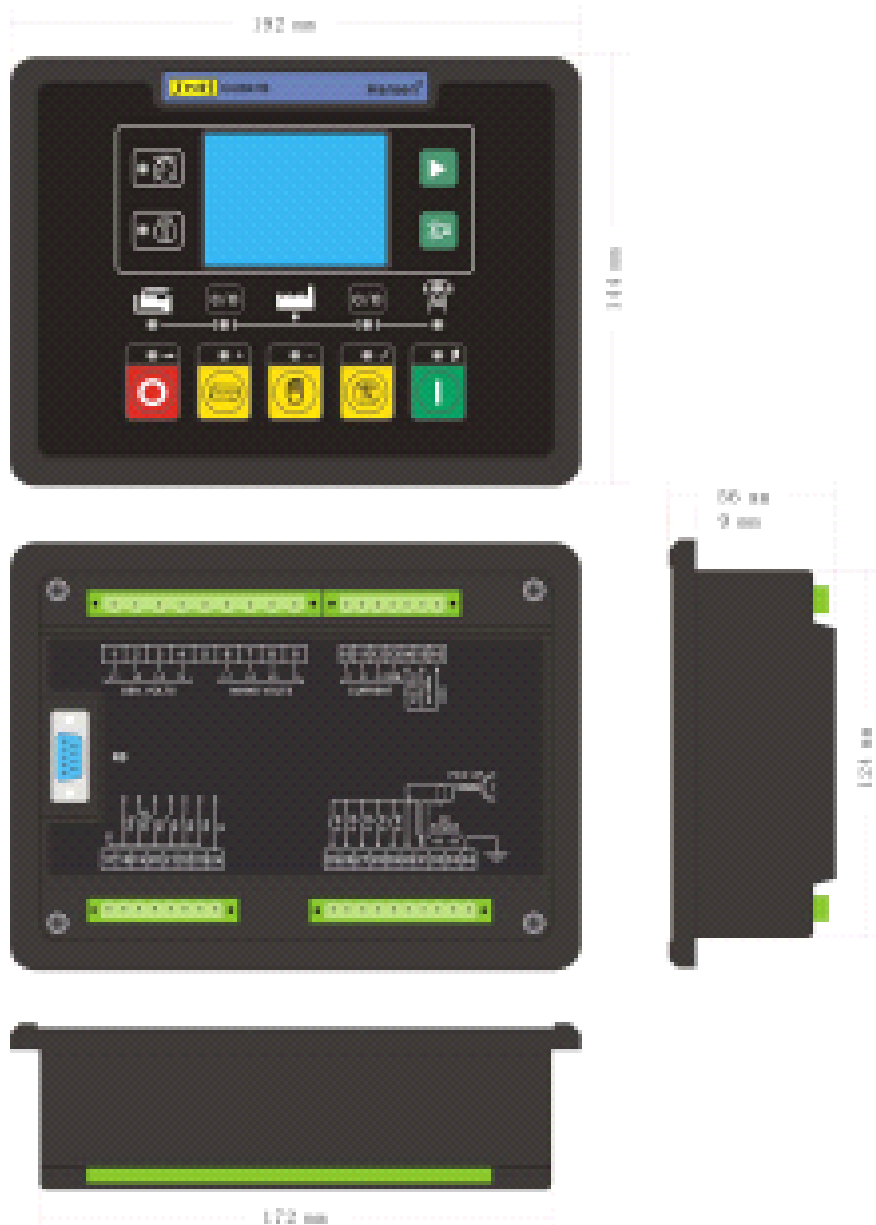
LEROY SOMER Self-excited,Brushless,Single Bearing Alternator

Alternator Model	LSAP44E
Exciting Type	Brushless, Self-excited
Rated Output(KVA)	125
Rated Speed(RMP)	1500
Rated Frequency(Hz)	50
Phase	3
Rated Voltage(V)	400/230
Power Factor	0.8
Voltage Adjustment Range	≥5%
Voltage Regulation	±1%
Insulation Grade	H
Protection Grade	IP23

Harson GU641BC Digital Controller (Standard Allocation)

	<p>Description</p> <ul style="list-style-type: none"> ■ True RMS measure of voltage and current ■ Multi-Language menu. ■ Flexible equipped with RS485, RS232 and USB, realizing remote monitor; ■ All connections of the controller are by secure plug and socket, for ease and convenience to connect, move, maintain and replace the device. ■ Optional ultra low temperature function, the ambient temperature is from -40 °C to 70 °C. ■ More configurable isolated digital inputs. ■ Emergency stop
---	--

The Outline Dimension Drawings and Controller Wiring



Other brands of control modules are available. Harsen, Datakom, ComAp etc.

Available Accessories

Enclosed Unit

Sound Enclosure 78dB (A) @ 7 m (23 ft)

Open Unit

Exhaust Silencer, Residential 18-25dB(A) Reduction

Exhaust Silencer, Critical 25-32dB(A) Reduction

Exhaust Silencer, Hospital 32-42dB(A) Reduction

Extension, 40 cm (16in)



Flexible Exhaust Connector

Protection Mach

Cooling System

Block Heater

[Recommended for ambient temperature below 0°C (32°F)]

Radiator Core Guard

Controller

-Automation

External Starting Order

Plug Preheating

-Remote Start Capability

Utility Sensing, 3-Phase

-Engine Parameter Control

Plug Preheating Control

Water Preheating Control

-Measurements

Analog indicator

Line Voltage, Volts

Phase Current, Amps

Single Voltage, Volts

-Safety Device

Overload or Short-circuit Fault

Differential Triggering Fault

-Miscellaneous

Alarm Horn

Battery Charger, 12 Volt

Differential Protection with Time and Sensitivity Adjustment

Permanent insulation Controller

Fuel System

Automatic Fuel Tank Fill Kit

Sub-base Fuel Tank with Secondary Containment Basin

Sub-base Fuel Tank Leak Alarm

Water Separator Fuel Filter

Electrical System

Battery Charger, Equalize/Float Type

Battery isolator Switch

Engine and Alternator

Air Cleaner, Heavy-Duty (with air restriction indicator)

Electronic isochronous Governor

Lube Oil Drain Pump