

**ETDG90****Generator Set Technical Data Sheet****Water-Cooled DEUTZ BF4M2012C****Standby: 72KW/90KVA****Prime: 65KW/81KVA****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 24V 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	65KW/81KVA	Standby Power	72KW/90KVA
Rated Speed	1500RPM	Frequency	50Hz
Phase	3 Phase 4 Wires	Rated Voltage	400/230V
Engine Model	BF4M2012C	Alternator Model	LSAP43F
Steady Voltage Deviation	≤±1%	Transient Voltage Adjustment · Recovery Time (Sudden deducting / Increasing load)	≤+20% ·4s / -15%·4s
Steady Frequency Drop	≤2%	Transient Frequency Adjustment · Recovery Time (Sudden deducting / Increasing load)	≤+10% ·3s / -7%·3s
Dimension Open Type	2450x900x1400	Gross Weight	1350
Dimension Silent Type	2580x1060x1700	Gross Weight	1550



- 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	BF4M2012C
Number of Cylinder	4
Cylinder Arrangement	In line
Cycle	4
Aspiration	turbo-charged
Bore X Stroke (mm X mm)	101X126
Displacement (L)	4.03
Compression Ratio	18.4
Prime Power/Speed(KW/RPM)	71@1500
Standby Power/Speed(KW/RPM)	75@1500
Governor	Electrical(EMR/GAC)
Cooling System	Radiator with water cooled
Speed Stability (%)	≤3
Fuel Consumption at 100% Load(L/H)	19
Start Motor System	12 Vdc battery and start motor

## Alternator Main Specifications

### LEROY SOMER Self-excited, Brushless, Single Bearing Alternator

Alternator Model	LSAP43F
Exciting Type	Brushless, Self-excited
Rated Output(KVA)	80
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

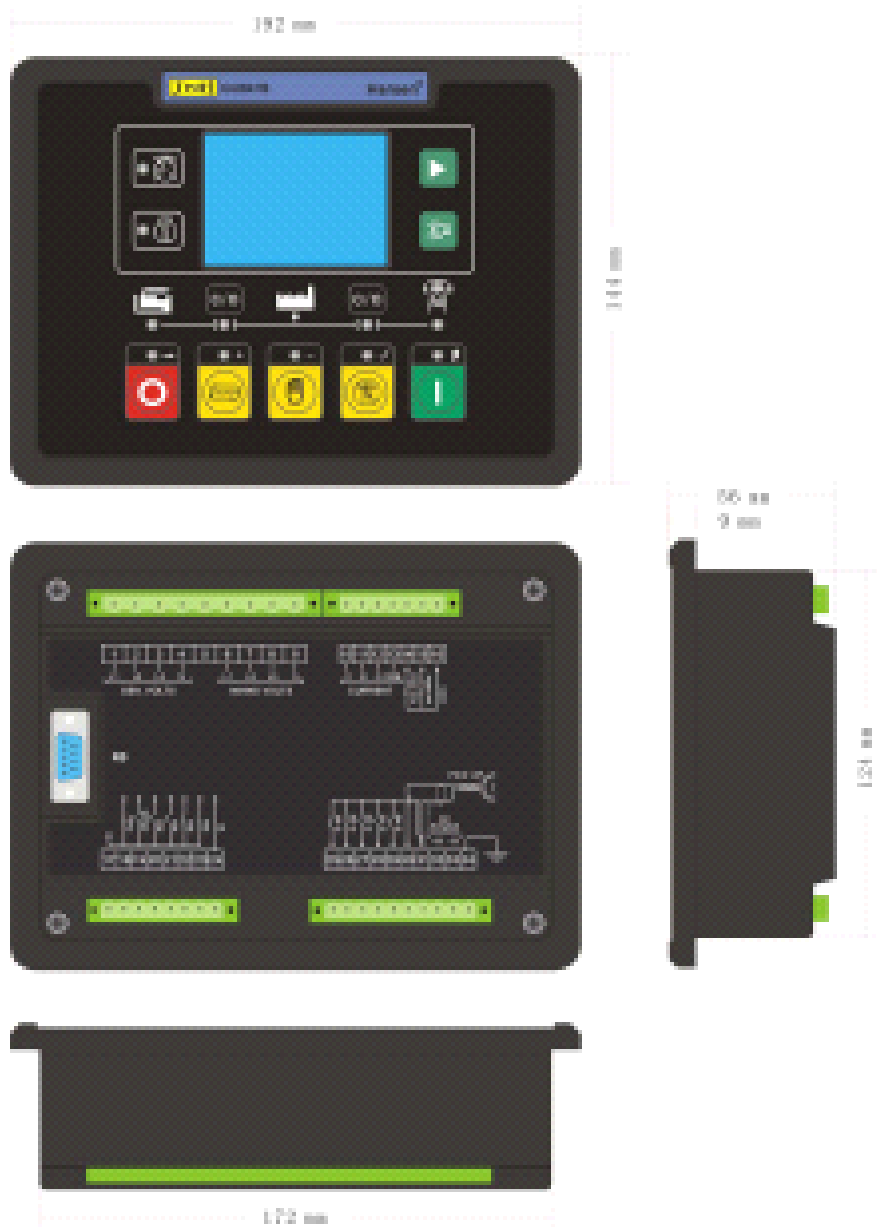
**Harson GU641BC Digital Controller (Standard Allocation)**



**Description**

- 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

