

## **ETD500**

### **Generator Set Technical Data Sheet**

**Water-Cooled DEUTZ BF8M1015C-LA G2**

**Standby: 400KW/500KVA**

**Prime: 360KW/450KVA**

**at 50Hz, 230/400V**

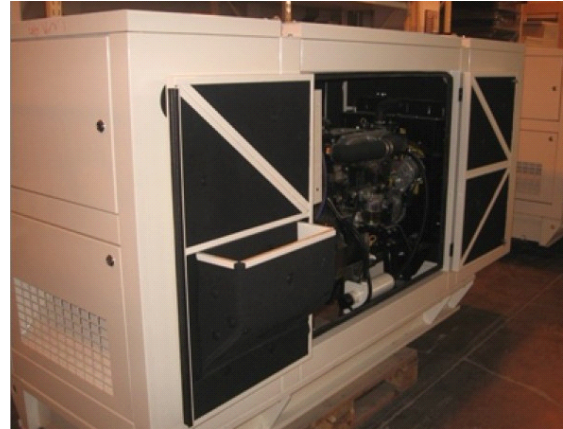
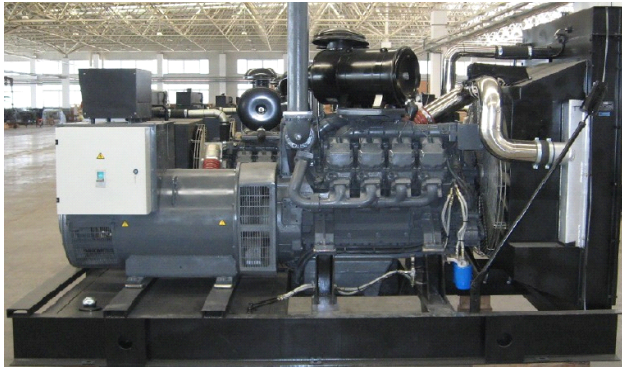
**Manufacturer reserves the right to make changes in model, technical specification, color, equipment and accessories without prior notice.**

## 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              | 360KW/450KVA           | Standby Power   | 400KW/500KVA           |
| Rated Speed              | 1500RPM                | Frequency   | 50Hz                   |
| Phase                    | 3 Phase 4 Wires        | Rated Voltage   | 400/230V               |
| Engine Model             | <b>BF8M1015C-LA G2</b> | Alternator Model  | <b>LSA47.2 S5</b>      |
| 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      | 3400x1250x1730         | Gross Weight  | 2800                   |
| Dimension Silent Type    | 3650x1420x2260         | Gross Weight  | 3150                   |



- 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                       | <b>BF8M1015C-LA G2</b>           |
| Number of Cylinder                 | 8                                |
| Cylinder Arrangement               | V type in 90°                    |
| Cycle                              | 4                                |
| Aspiration                         | Turbo-charged, CAC Inter-cooling |
| Bore X Stroke (mm X mm)            | 132X145                          |
| Displacement (L)                   | 15.874                           |
| Compression Ratio                  | 16.5                             |
| Prime Power/Speed(KW/RPM)          | 440@1500                         |
| Standby Power/Speed(KW/RPM)        | 484@1500                         |
| Governor                           | Electrical(EMR/GAC)              |
| Cooling System                     | Radiator with water cooled       |
| Speed Stability (%)                | ≤3                               |
| Fuel Consumption at 100% Load(L/H) | 122.4                            |
| Start Motor System                 | 24 Vdc battery and start motor   |

## Alternator Main Specifications

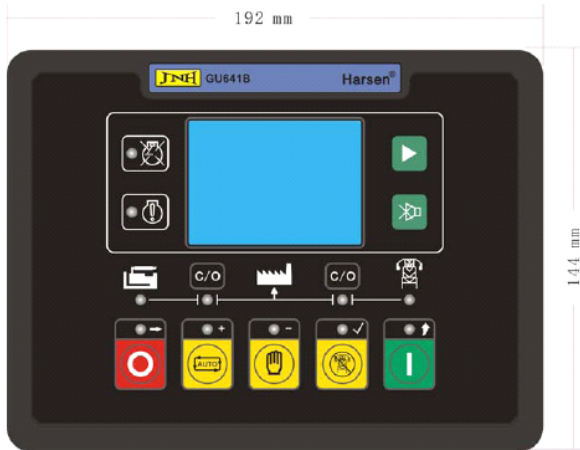
### LEROY SOMER Self-excited,Brushless,Single Bearing Alternator



|                          |                         |
|--------------------------|-------------------------|
| Alternator Model         | <b>LSA47.2 S5</b>       |
| Exciting Type            | Brushless, Self-excited |
| Rated Output(KVA)        | 471                     |
| 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                    |

## Control System

### 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

