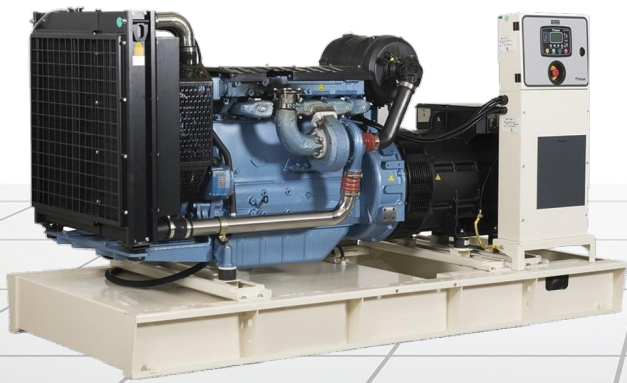




# VS87BD-L

## Output Power

|                     |     |    |
|---------------------|-----|----|
| Standby Power (ESP) | kVA | 87 |
|                     | kW  | 69 |
| Prime Power (PRP)   | kVA | 78 |
|                     | kW  | 62 |

## Size

|           | W x L x H (mm)    | Weight (kg) | Fuel Tank (lt) | Noise dB (A) @ 7m |
|-----------|-------------------|-------------|----------------|-------------------|
| Canopied  | 980 x 2650 x 1510 | 1269        | 160            | 70                |
| Open Skid | 950 x 2000 x 1060 | 955         | 160            | N/A               |

TBA: To Be Asked / N/A: Not Applicable

## Continuous Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

## Standby Power

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

## Prime Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hrs.

| Engine                             |        |                  |
|------------------------------------|--------|------------------|
| Manufacturer                       |        | BAUDOUIN         |
| Model                              |        | 4M10G4D0/S       |
| No of Cylinders                    |        | 4                |
| Cylinder Configuration             |        | INLINE           |
| Displacement                       | lt     | 4,08             |
| Stroke                             | mm     | 118              |
| Bore                               | mm     | 105              |
| Compression Ratio                  |        | 17,5:1           |
| Aspiration                         |        | TURBOCHARGED     |
| Governor Type                      |        | ELECTRONIC       |
| Cooling System                     |        | WATER            |
| Coolant Capacity                   | lt     | 18               |
| Lubrication Oil Capacity           | lt     | 13               |
| Electrical System                  | VDC    | 12               |
| Speed / Frequency 50 Hz            | rpm    | 1500 rpm / 50 Hz |
| Engine Gross Power (Standby 50 Hz) | kW     | 80               |
| Fuel Consumption 110% (ESP 50 Hz)  | lt/h   | 21,3             |
| Fuel Consumption 100% (PRP 50 Hz)  | lt/h   | 18,8             |
| Fuel Consumption 75% (PRP 50 Hz)   | lt/h   | 13,5             |
| Fuel Consumption 50% (PRP 50 Hz)   | lt/h   | 9,1              |
| Exhaust Outlet Temperature 50 Hz   | °C     | 570              |
| Exhaust Gas Flow 50 Hz             | m3/min | 17,25            |
| Combustion Air Flow 50 Hz          | m3/min | 4,77             |
| Cooling Air Flow 50 Hz             | m3/min | 146              |

| Alternator                         |     |                                              |
|------------------------------------|-----|----------------------------------------------|
| Manufacturer                       |     | LEROY-SOMER                                  |
| Model                              |     | TAL044B                                      |
| No of Phases                       |     | 3                                            |
| Power Factor                       |     | 0,8                                          |
| No of Bearings                     |     | SINGLE                                       |
| No of Poles                        |     | 4                                            |
| No of Leads                        |     | 6                                            |
| Voltage Regulation (Steady State)  |     | ± 1%                                         |
| Insulation Class                   |     | H                                            |
| Degree of Protection               |     | IP 23                                        |
| Excitation System                  |     | AVR (Automatic Voltage Regulator), Brushless |
| Connection Type                    |     | STAR                                         |
| Total Harmonic Content (No Load)   |     | < 2%                                         |
| Frequency                          | Hz  | 50                                           |
| Voltage Output 50 Hz               | VAC | 230 / 400                                    |
| Rated Power (Standby) 400_50 Hz    | kVA | 88                                           |
| Rated Power (Continuous) 400_50 Hz | kVA | 80                                           |
| Efficiency (4/4_400 V_50 Hz)       | %   | 89,5                                         |

# 509-T MK3

## Control Panel Features 509-T MK3

- 509-T MK3 is a next generation genset controller combining multi-functionality and wide communication capabilities together with a reliable and low-cost design.
- The same controller provides synchronization, load share AMF ATS, Remote Start, Engine Control and Remote Display Panel functionalities.
- The module comes ready for remote monitoring over GSM or Ethernet with plug-in communication modules.
- Various plug-in modules provide unlimited expansion capabilities allowing to meet any special requirement.
- The unit complies and mostly exceeds world's tightest safety vibration and environmental standards for the industrial category.
- Software features are complete with easy firmware upgrade process through USB port.
- The Windows based PC software allows monitoring and programming through USB, RS-485, Ethernet and GPRS. The Rainbow Scada web monitoring service allows monitoring and control of an unlimited number of gensets through any web browser.

## Communications

- Ethernet port (10/100Mb) \*
- GSM-GPRS \*
- Embedded web server \*
- Web monitoring \*
- Web programming \*
- Central Monitoring through internet \*
- SMS message sending \*
- E-mail sending \*
- Central monitoring \*
- Modbus RTU through RS-485 \*
- Modbus TCP/IP \*
- SNMP \*
- USB Host \*
- CANBUS-2 for inter- module communication \*
- USB Device
- PC software: Rainbow Plus
- J1939-CANBUS for electronic engines

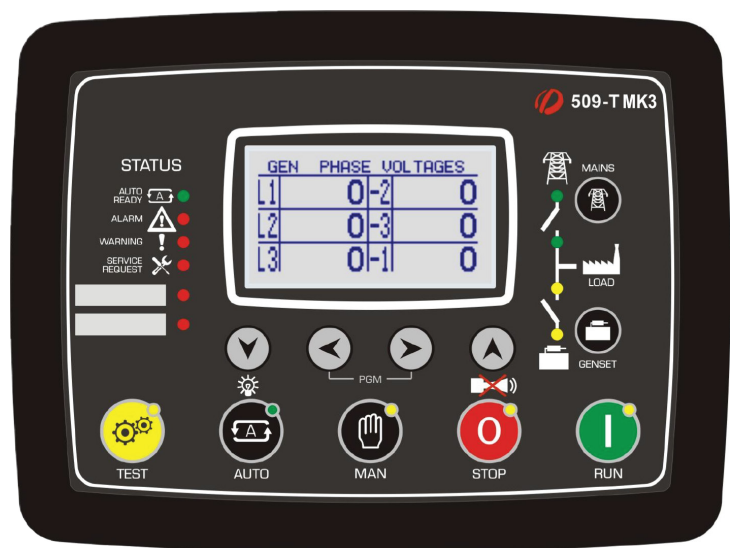
\* Optional with plug-in module

## Functions

- Multi genset synchronizer and load share \*
- Multi genset mains synchronizer \*
- Single genset parallel with mains \*
- AMF unit with uninterrupted transfer
- ATS unit with uninterrupted transfer
- Remote start controller
- Manual start controller
- Engine controller
- Remote display & control unit

## Topologies

- 3 phases 4 wires, star
- 3 phases 4 wires, delta
- 3 phases 3 wires, delta, 3 CTs
- 3 phases 3 wires, delta, 2 CTs (L1-L2)
- 3 phases 3 wires, delta, 2 CTs (L1-L3)
- 2 phases 3 wires, L1-L2
- 2 phases 3 wires, L1-L3
- 1 phase 2 wires



- Technical information and values are according to ISO8528, ISO3046, NEMAMG-1.22, IEC 600341, BS 4999-5000, VDE 0530 standards.
- Producing with ISO9001, ISO14001, OHSAS18001, TSE, CE standards.
- All information given in this leaflet is intended for general purposes only.

