



## VS88DS-L

### Output Power

|                     |     |      |
|---------------------|-----|------|
| Standby Power (ESP) | kVA | 88   |
|                     | kW  | 70.4 |
| Prime Power (PRP)   | kVA | 80   |
|                     | kW  | 64   |

### Size

|           | W x L x H (mm) | Weight (kg) | Fuel Tank (lt) | Noise dB(A) @ 7m |
|-----------|----------------|-------------|----------------|------------------|
| Canopied  | 1100x3320x1600 | 1745        | 260            | 70               |
| Open Skid | 1100x2350x1480 | 1324        | 260            | 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                       |                      | DOOSAN           |
| Model                              |                      | D1146            |
| Cylinder Configuration             |                      | IN-LINE          |
| No of Cylinders                    |                      | 6                |
| Displacement                       | lt                   | 8,1              |
| Bore                               | mm                   | 111              |
| Stroke                             | mm                   | 139              |
| Compression Ratio                  |                      | 17,5:1           |
| Aspiration                         |                      | NATURAL INTAKE   |
| Governor Type                      |                      | MECHANIC         |
| Cooling System                     |                      | WATER            |
| Coolant Capacity                   | lt                   | 38,5             |
| Lubrication Oil Capacity           | lt                   | 15,5             |
| Electrical System                  | VDC                  | 24               |
| Speed / Frequency 50 Hz            | rpm                  | 1500 rpm / 50 Hz |
| Engine Gross Power (Standby 50 Hz) | kW                   | 85               |
| Fuel Consumption %110 ESP 50 Hz    | lt / h               | 20,8             |
| Fuel Consumption %100 PRP 50 Hz    | lt / h               | 20,6             |
| Fuel Consumption %75 PRP 50 Hz     | lt / h               | 15,9             |
| Fuel Consumption %50 PRP 50 Hz     | lt / h               | 11,3             |
| Exhaust Outlet Temperature 50 Hz   | °C                   | 590              |
| Exhaust Gas Flow 50 Hz             | m <sup>3</sup> / min | 16,5             |
| Combustion Air Flow 50 Hz          | m <sup>3</sup> / min | 5,8              |
| Cooling Air Flow 50 Hz             | m <sup>3</sup> / min | 225              |

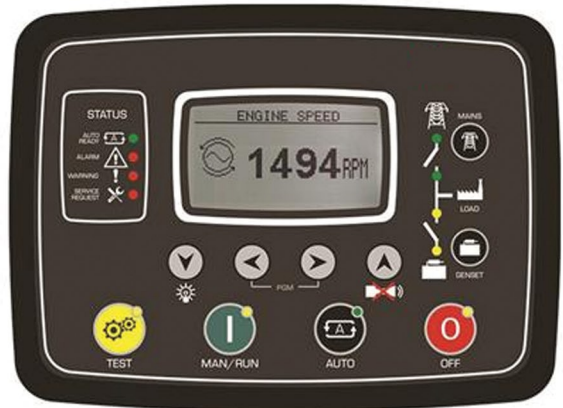
## Alternator

|                                   |     |  |
|-----------------------------------|-----|--|
| 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   |
| Efficiency (4/4_400 V_50 Hz)      | %   | 89,6   |

# 509-T

## Control Panel Features 509-T

- The 509-T is a next generation genset control unit combining multi-functionality and wide communication possibilities together with a reliable and low cost design.
- The unit complies and mostly exceeds world's tightest safety EMC, 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 PC and server based Rainbow Scada software allows monitoring and control of an unlimited number of gensets from a single central location.



## Functions

- AMF unit with uninterrupted transfer
- ATS unit with uninterrupted transfer
- Remote start controller
- Manual start controller
- Engine controller
- Remote display & control unit
- Wave form display of V & I
- Harmonic analysis of V & I
- CTs at genset or load side

## Topologies

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

## Communications

- SM-GPRS
- Web monitoring
- Web programming
- GSM-SMS
- e-mail
- USB Device
- RS-232
- J1939-CANBUS

- Technical information and values are according to ISO8528, ISO3046, NEMAMG-1.22, IEC600341, BS4999-5000, VDE0530 standards.
- Producing with ISO9001, ISO14001, OHSAS18001, CE standards.
- All information given in this leaflet is intended for general purposes only.

