



# VS21BD-L

## Output Power

Standby Power (ESP)	kVA	21
	kW	16
Prime Power (PRP)	kVA	20
	kW	16

## Size

	W x L x H (mm)	Weight (kg)	Fuel Tank (lt)	Noise dB (A) @ 7m
Canopied	950 x 2200 x 1450	824	90	63
Open Skid	950 x 1650 x 1060	550	90	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		BAUDOUIIN
Model		4M06G20/5
No of Cylinders		4
Cylinder Configuration		INLINE
Displacement	lt	2,3
Stroke	mm	92
Bore	mm	89
Compression Ratio		17,5:1
Aspiration		NATURAL ASPIRATION
Governor Type		ELECTRONIC
Cooling System		WATER
Coolant Capacity	lt	16
Lubrication Oil Capacity	lt	9,5
Electrical System	VDC	12
Speed / Frequency 50 Hz	rpm	1500 rpm / 50 Hz
Engine Gross Power (Standby 50 Hz)	kW	20
Fuel Consumption %110 ESP 50 Hz	lt/h	5,4
Fuel Consumption %100 PRP 50 Hz	lt/h	4,8
Fuel Consumption %75 PRP 50 Hz	lt/h	3,7
Fuel Consumption %50 PRP 50 Hz	lt/h	2,6
Exhaust Outlet Temperature 50 Hz	°C	700
Exhaust Gas Flow 50 Hz	m3/min	4,5
Combustion Air Flow 50 Hz	m3/min	1,38
Cooling Air Flow 50 Hz	m3/min	48

## Alternator

Manufacturer		LEROY-SOMER
Model		TAL040F
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)		< %3,5
Frequency	Hz	50
Voltage Output 50 Hz	VAC	230 / 400
Rated Power (Standby) 400_50 Hz	kVA	22
Rated Power (Continuous) 400_50	kVA	18
Efficiency (4/4_400 V_50 Hz)	%	86,7

# 509-T

## Control Panel Features 509-T

- The 509T is a next generation genset control unit combining multifunctionality 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
- Waveform 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, 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.

