

INDUSTRIAL DIESEL GENSET

SERIES L-20

POWER RATING	3000 rpm/50 Hz
Prime	18.8 kVA, 15 kW
Standby	20.4 kVA, 16.3 kW

Generator set consisting of engine and alternator mounted on fabricated steel profile baseframe, painted with phosphate primer and top coat.

The alternator is coupled directly to the engine flywheel housing, to SAE standards. The rotor is fixed to the flywheel using steel discs for flexibility. Perfect alignment and the absence of vibrations are thus guaranteed.

The unit is fixed to the baseframe using anti-vibration dampeners.

ENGINE

Type 4-stroke diesel engine with direct injection
Manufacturer Lombardini
Model 9 LD 625.2
No. of cylinders 2
Engine capacity 1248 cc
Bore 95 mm
Stroke 88 mm
Compression ratio 17.5:1
Aspiration Atmospheric
Engine speed 3000 rpm
Prime power 26 HP DIN Nb 6270
Fuel consumption 100% load 5.7 ltr/h
Fuel tank capacity 10 litres
Approximate running time without refill 1.8 hours
Noise level 82.5 dB (A) at 7 metres

Cooling system

Cooled by air forcing fan on flywheel.
Cooling air flow 26.3 m³/min

Lubrication system

Forced lubrication via gear type pump. Oil filter.
Oil sump capacity 2.8 litres
Consumption 0.058 kg/h

Air intake system

Naturally aspirated via oil soaked air filter.
Combustion air flow 1.87 m³/min

Injection system

VERSIONS

The **L 20** may be supplied in the following versions:

STATIONARY, MOBILE WITHOUT CANOPY, MOBILE WITH CANOPY AND AUTOMATIC.

Injection pump submerged in block with centrifugal governor. Fuel filter

Electric system

12 V electric starting system. Axial starter motor. 55 A.h. battery. Battery charging alternator. Oil pressure sensor.

Protection system

Visual alarm if oil pressure too low. Optionally, alarm system with automatic engine shutdown if oil pressure too low.

Exhaust system

Exhaust silencer.

ALTERNATOR

Three phase, self-regulating and self-exciting. Self ventilating. IP23 protection. Voltage is maintained within +/- 5%. Manufactured to standards CEI 2-3, IEC 34.1, UDE 0530 and BS 4999-5000. Radio interference complies with grade G of UDE 0875.

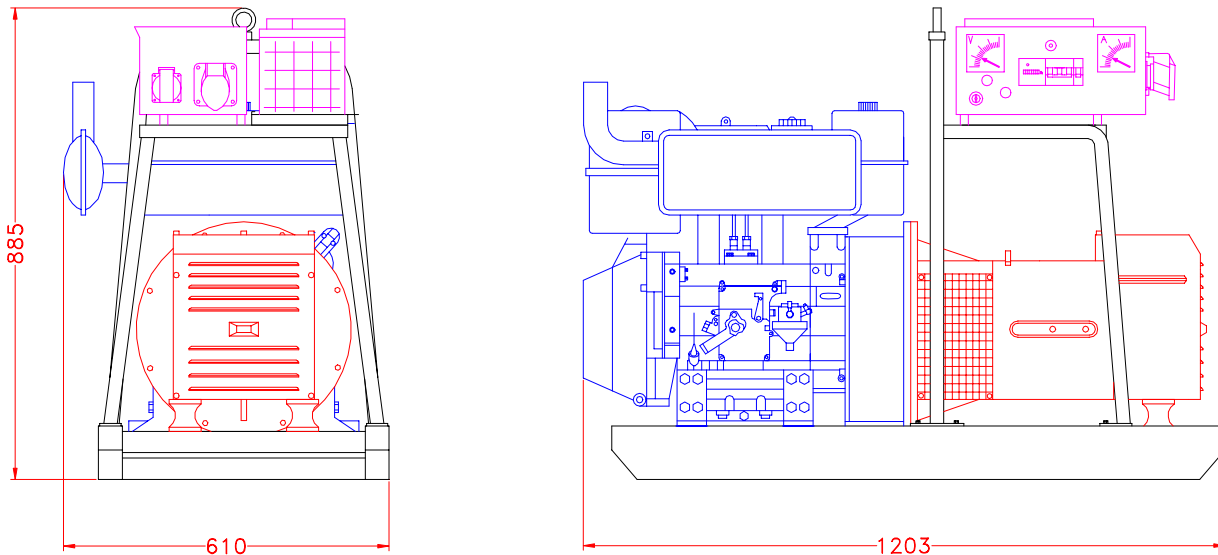
Manufacturer Mecc Alte
Model EC 3 - LB/2
Power rating 19 kVA
Voltage(*) 220/380 V three phase
Frequency 50 Hz
Speed 3000 rpm
Regulation Electronic
Nominal current 29 A
Aux. single phase output 10000 W

(*) Other voltages: PLEASE CONSULT.

STATIONARY VERSION

SERIES L-20

In the STATIONARY version, the generator set is supplied on a skidbase with a control panel operated manually using an ignition key.



Control panel

In metal cabinet mounted on frame with anti-vibration dampeners.

Equipped with:

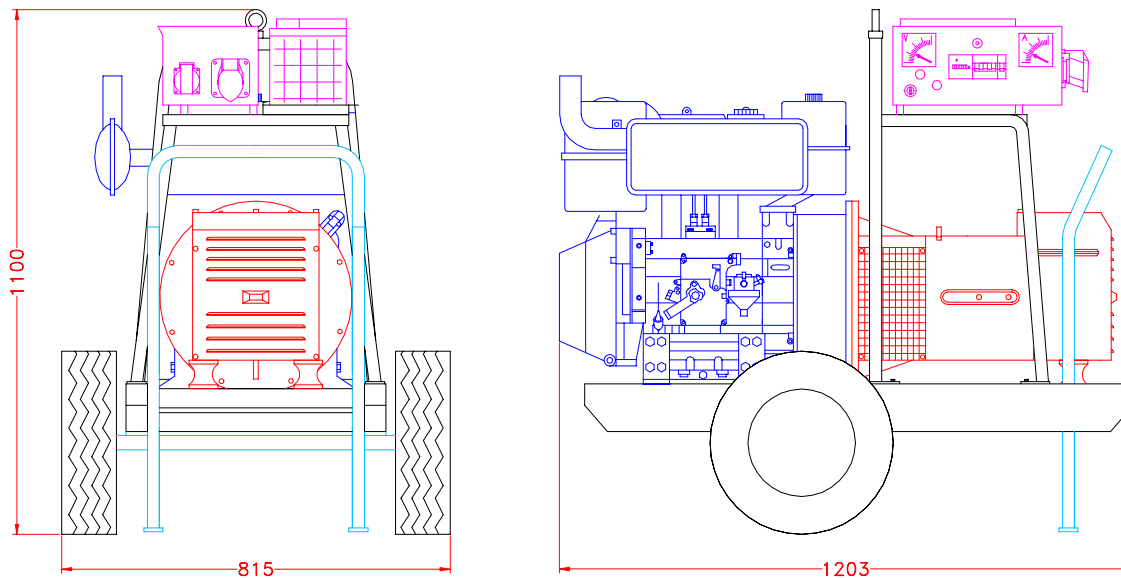
- Thermo-magnetic circuit breaker.
- 1 ammeter
- Voltmeter.
- Hours run meter.
- Three phase output socket.
- Single phase socket.
- On light
- Battery charge indicator lamp.
- Oil pressure indicator lamp.
- Ignition key.

Shutdown using manual choke.

MOBILE WITHOUT CANOPY

L-20M

In this version, the set is supplied on a tubular frame with wheels and handles.



Control panel

In metal cabinet mounted on frame with anti-vibration dampeners.

Equipped with:

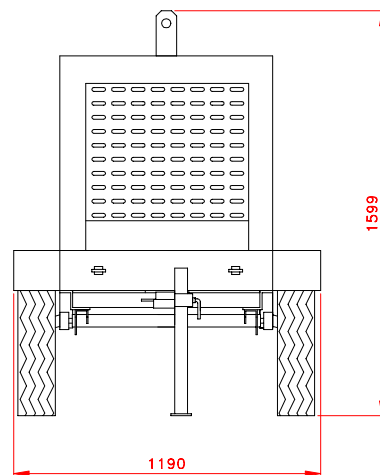
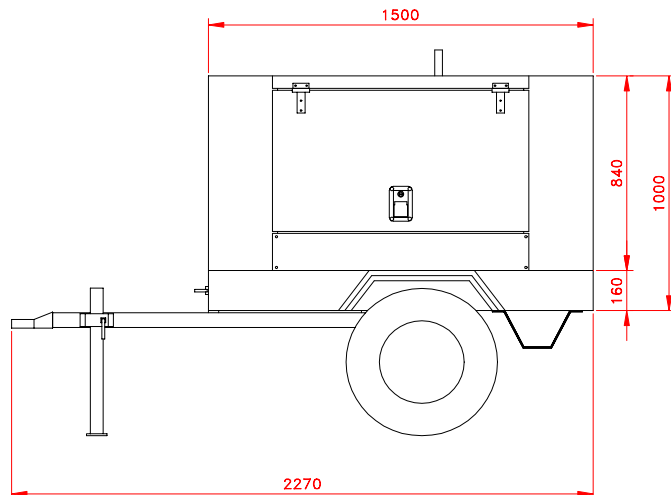
- Thermo-magnetic circuit breaker.
- 1 ammeter
- Voltmeter.
- Hours run meter.
- Three phase output socket.
- Single phase socket.
- On light
- Battery charge indicator lamp.
- Oil pressure indicator lamp.
- Ignition key.

Shutdown using manual choke.

MOBILE WITH CANOPY

L-20MC

Set on baseframe mounted on independent trailer. Incorporates metal canopy housing the control panel which is operated manually using an ignition key.



Metal canopy

Ideal for outdoor use, it is painted with a phosphate primer and a long lasting top coat.

Trailer

Made up of:

wheels with tyres, DIN towing eye, rubber axle suspension, and support leg. Jockey wheel on request.

As an option, A TRAILER ADAPTED FOR ROAD TRANSPORTATION may be supplied

Control panel

Metal cabinet mounted on frame with anti-vibration pads.

Equipped with:

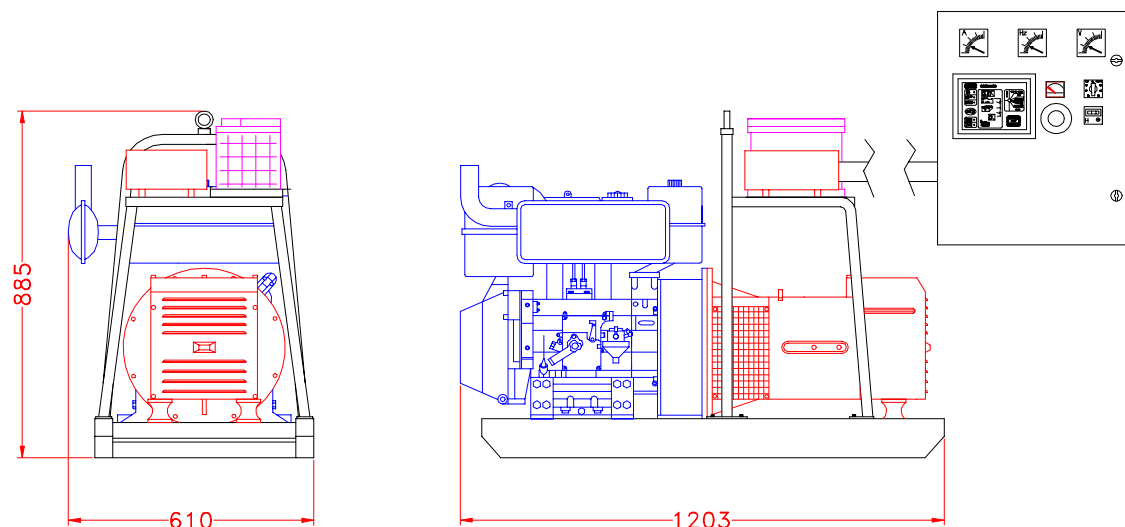
- Thermo-magnetic circuit breaker.
- 1 ammeter
- Voltmeter.
- Hours run meter.
- Three phase output socket.
- Single phase socket.
- On light
- Battery charge indicator lamp.
- Oil pressure indicator lamp.
- Ignition key.

Shutdown using manual choke.

AUTOMATIC

L-20N

The automatic version generator set is supplied on a skidbase with an automatic start / stop panel for mains failure.



ELECTRICAL PANEL

Mounted in metal cabinet with IP 54 protection and supplied loose for wall mounting. Includes monitoring and control, measuring and handling and changeover systems.

Monitoring and control system

- Automatically monitors the mains, and if the mains fails connects the consumers to the generator set via contactors which are mechanically and electronically activated. When the mains is restored, the load is reconnected to the mains, the set idles and then stops.
- No. of start-up attempts: 3
- Selector switch for Disconnect, Automatic Service, Manual Service and Test.
- The generator set may be set to run manually or automatically. When running manually, start-up, shutdown and changeover are performed using a selector switch.
- Three phase voltage monitor with adjustable values.

Measuring and handling equipment

Consists of the following items:

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| • 1 Ammeter | • Large emergency stop push button. | • High water/engine body temperature |
| • 1 Voltmeter | • Audible and visual alarm for low fuel level. (Shown as "ALARMS NO STOP"). | • Overload |
| • 1 Mains-generator set voltmeter selector switch. | • Alarm system disconnecting generator, shutdown, audible alarm and visual signal for: | • Protection fuse |
| • 1 Frequency meter | • Start-up failure | • Thermo-magnetic circuit breaker. |
| • 1 Battery voltmeter. | • Low oil pressure | |
| • Off button. | | |
| • Battery maintenance system. | | |
| • Battery indicator light. | | |
| • Battery charge light. | | |

Transfer system

Made up of two mechanically and electrically interlocking contactors.

WORKING VOLTAGE: 380/220 V