

Industrial Generator

DL5

POWER RATING	1500 rpm/50 Hz	1800 rpm/60 Hz
Prime	4.5kVA, 3.7kW	5.8kVA, 4.6kW
Standby	5kVA, 4kW	6.1kVA, 4.9kW

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 to SAE standards. The rotor is fixed to the flywheel using steel discs for flexibility. This structure assures perfect alignment and the absence of vibrations.

The unit is fixed to the baseframe using antivibration dampeners.

ENGINE

Type 4 stroke diesel with direct injection.

Technical Data

Manufacturer Lombardini
Model 4 LD 640 L
No. of cylinders 1
Engine capacity 638cc
Bore 95 mm
Stroke 90mm
Compression ratio 17.5:1
Aspiration Atmospheric
Engine speed 50 / 60 Hz 1500 / 1800 rpm
Prime power 6,7 / 8,4 HP DIN Nb 6271
Fuel consumption 100% load 50 / 60 Hz 1,5 / 1,8 ltr/h
Fuel tank capacity 11.5 litres
Approximate running time 50 / 60 Hz 7,6 / 6,3 hours without refill
Noise level 77 dB(A) at 7 metres

Cooling system

Cooled by air forcing fan on flywheel.
Cooling air flow 1500 / 1800 r.p.m. 6 / 7.2 m3/min

Lubrication system

Forced lubrication via gear type pump. Oil filter.
Oil sump capacity 2.6 litres
Consumption 0.020 kg/h

Air intake system

Natural intake via dry air filter, with changeable cartridge.

Aspirated air flow 1500 / 1800 r.p.m..... 0.41 / 0.49 m³/min

Injection system

Injection pump submerged in block with centrifugal regulator. Fuel filter

Electric system

12 V electric starting system. Axial starter motor. 70 A.h. battery. Battery charging alternator. Oil pressure gauge.

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 with 10 dB(A) noise reduction.

ALTERNATOR

Three phase and brushless. Electronic regulation on all three phases. Class "H" insulation. All windings are impregnated with polyester resin, making them resistant to acids and oil. IP 23 protection. Electrical characteristics to IEC.34.1, CEI 2-3, VDE 0530 and BS 4999 - 5000. Radio interference suppression to grade G of VDE 0875.

Manufacturer.....	Mecc Alte
Model	BTA3-SA/4
Power rating 1500 / 1800 rpm.....	7 kVA / 8,4 kVA
Voltage(*)	230/400 V three phase
Frequency	50 / 60 Hz
Speed	1500 / 1800 rpm
Regulation.....	Compound
Nominal current 1500 / 1800 rpm	10,1 A

(*) Other voltages: PLEASE CONSULT.

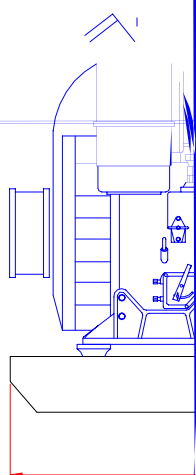
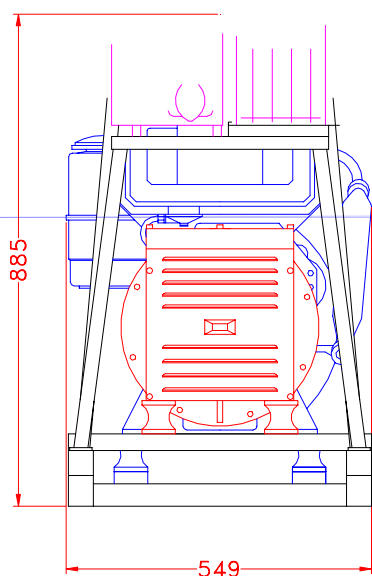
VERSIONS

The PS-DL 5 may be supplied in the following versions:

- ***STATIONARY***
- ***STATIONARY WITH CANOPY***
- ***MOBILE WITH CANOPY***
- ***AUTOMATIC.***

STATIONARY Version

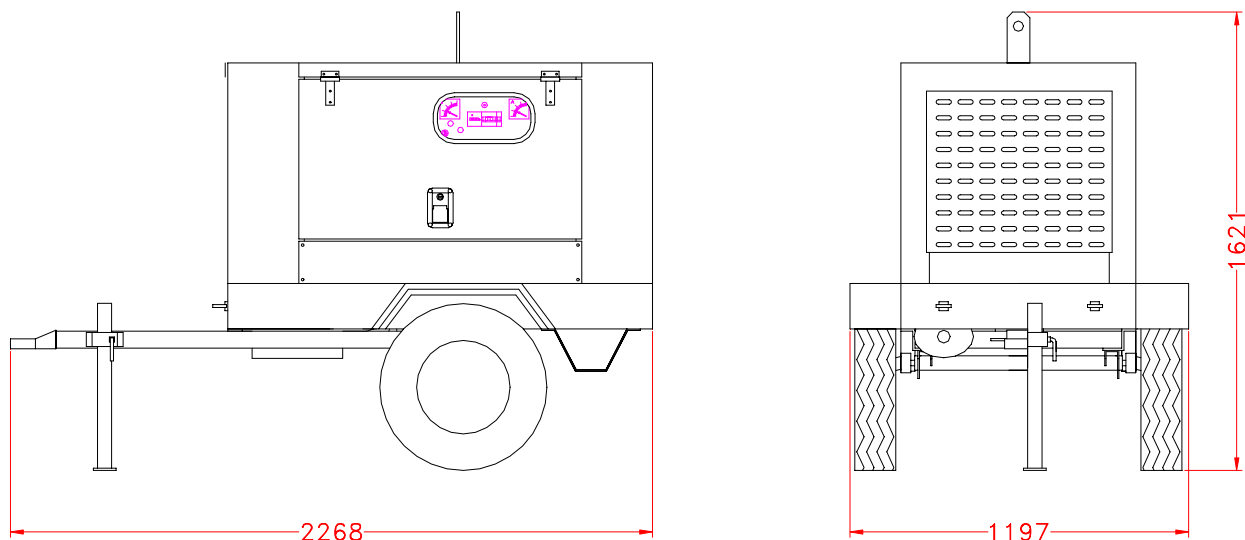
In the STATIONARY version, the generator set is supplied with a control panel featuring an ignition key for manual start-up. [&21752/](#)



MOBILE Version with canopy

DL5-MC

Set on baseplate mounted on independent trailer. Incorporates metal canopy housing the control panel and is started manually using an ignition key.



Metal canopy

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

Trailer

Made up of: wheels with pneumatic tyres, DIN towing eye, rubber axle suspension and support leg. Jockey wheel on request.

As an option, A REGULATION TRAILER KIT for road transportation may be supplied.

Control panel

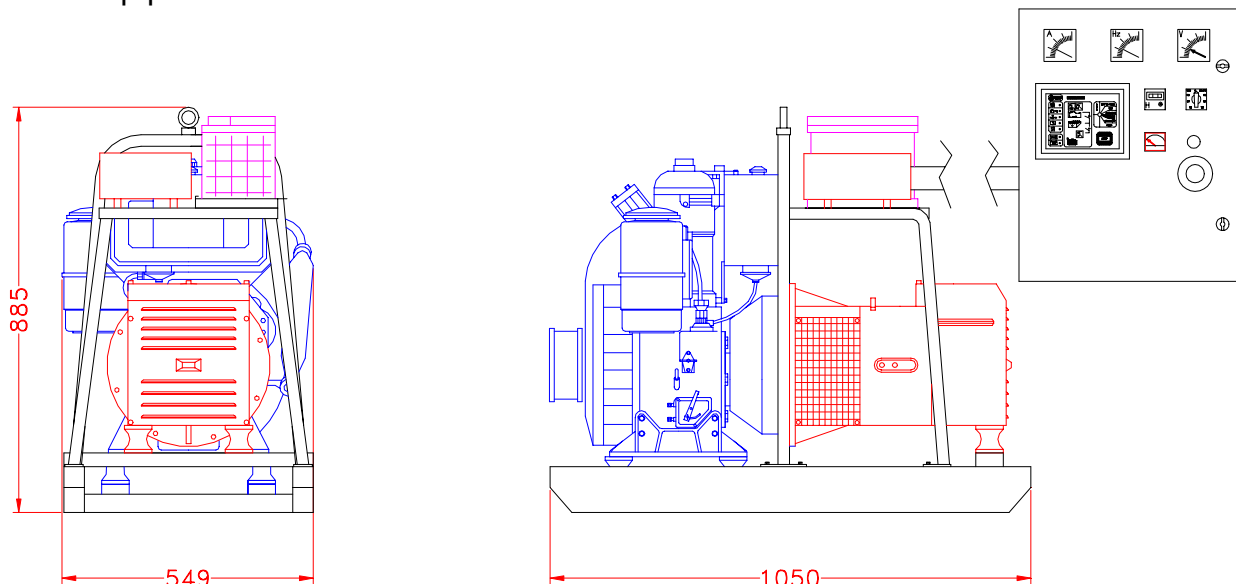
Metal cabinet mounted on baseframe with anti-vibration pads, equipped with:

- Thermo - magnetic circuit breaker.
- 1 Ammeter.
- Voltmeter.
- Hours run meter.
- Three phase output socket.
- Shutdown using manual choke.
- Single phase socket.
- On light
- Battery charge lamp.
- Oil pressure lamp.
- Ignition key

AUTOMATIC Version

DL5-N

The automatic version of this generator set is supplied on a skid base with an automatic start-stop panel for mains failure.



ELECTRIC PANEL

Enclosed in metal cabinet with IP 54 protection for wall mounting. Includes monitoring and control system, measuring and handling apparatus and transfer system.

Monitoring and control system

- Automatically monitors the mains, and, if the mains fails (in one or all three phases) connects the consumers to the generator set via mechanically and electrically activated contactors. 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 Off, Automatic Mode, Manual Mode and Test.
- The generator set may be selected to run manually or automatically. In manual mode starting, stopping and load transfer are performed via a selector switch.
- Three phase voltage monitor with adjustable values.

Measuring equipment

Consists of the following items:

- | | | |
|---|---|------------------------------------|
| • 1 Ammeter | • Battery indicator lamp. | • Low oil pressure |
| • 1 Voltmeter | • Battery charge indicator lamp. | • High water/engine temperature |
| • 1 mains-generator set voltmeter selector switch | • Large emergency stop pushbutton. | • Overload |
| • 1 Frequency meter | • Audible and visual signal for low fuel level. | • Protection fuse. |
| • 1 Battery voltmeter. | • Alarm system ordering generator set to disconnect and stop, with audible and visual signal for: | • Thermo-magnetic circuit breaker. |
| • Off button. | | |
| • Battery maintaining system. | • Start-up failure | |

Transfer system

Made up of two electrically and mechanically activated contactors. WORKING VOLTAGE: 380/220Vac