

- 2 cylinders
- 686 cm<sup>3</sup>
- 12,5 kW/17,0 HP
- 3600 r.p.m.
- Nm 40,5@2000

## Available homologation

- EPA TIER IV    ■
- ECE R 24    ▲
- 80/1269 CE    ◆

## Construction

- 4-stroke diesel engine with cylinders in line
- Liquid-cooled with axial fan.
- Indirect injection with injector-pump on head.
- Single-shaft distribution in head.
- Distribution control with timing belt.
- Double pto on the crankshaft.
- Pto on the distribution.
- Counterclockwise rotation (1° PTO).
- Forced lubrication with vane pump on the crankshaft.
- Total passage external oil filter.
- Water pump in the engine block.
- Automatic extra fuel starting device.
- Centrifugal governor.
- Torque regulator.
- Cast iron engine block with re-borable integral liners.
- Aluminium cylinder head.



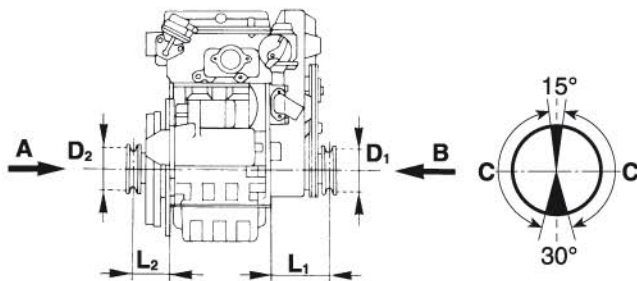
## Applications

- Excavator
- Dumper
- Roller
- Access platform
- Generating set
- Sweeper
- High pressure cleaner
- Lawn mower

## Specifications

Cylinders	N.	2
Displacement	cm <sup>3</sup>	686
Bore	mm	75
Stroke	mm	77,6
Compression ratio		22,8:1
Rating kW/HP	N (80/1269/CEE) ISO 1585	12,5/17,0
	NB ISO 3046 IFN	11,7/16,0
	NA ISO 3046 ICXN	10,7/14,5
Max. torque	Nm	40,5@2000
Max. torque 3 PT.O.	Nm	37,0@1800
Min. idling speed		900
Water pump delivery at 3600 r.p.m.	l/min.	40 (~)
Oil consumption	kg/h.	0,008
Oil sump capacity	l	1,6
Min. allowable oil pressure	bar	1,5
Max. allowable inclination for:		
- short periods of operation (max. time 30 minutes)		25°
- peak values (max. time 1 minute)		35°
Cap. of air required for correct combustion @ 3600 r.p.m.	l/min.	1240
Cap. of air required for correct cooling @ 3600 r.p.m.	m <sup>3</sup> /min.	65 (1:1,23)
Dry weight	kg	66
Recommended battery	V/Ah	12/66

Minimum pulley diameters for belt drive



V Belt	$D_2 \text{ (mm)} \geq 143 [L_2 \text{ (mm)} + 101]$	$\frac{N \text{ (kW)}}{n \text{ (RPM)}}$
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Cogged belt	$D_1 \text{ (mm)} \geq 99 [L_1 \text{ (mm)} + 101]$	$\frac{N \text{ (kW)}}{n \text{ (RPM)}}$
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Max. intermittent axial load in both directions A-B = 300 kg  
C - zone in which the radial load acts on the pulley

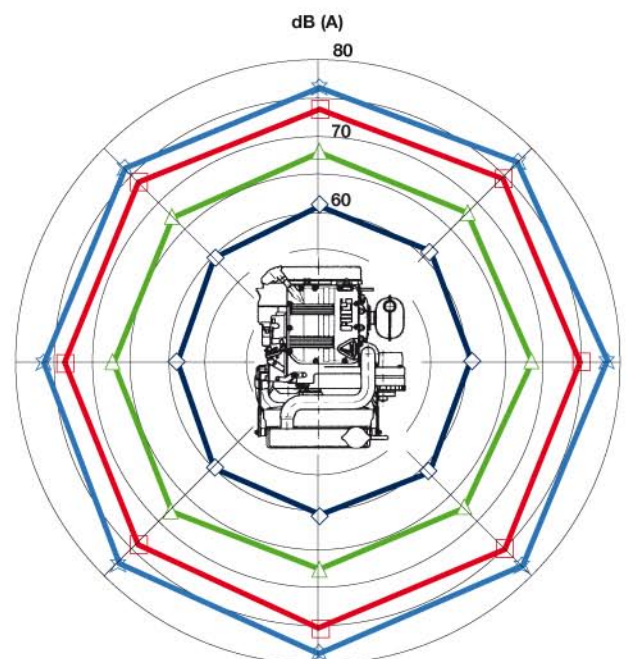
HOMOLOGATION EPA TIER IV ■

Rating kW @ 3600 rpm	ISO 14396	12,5
Max. torque	Nm	38,0@2200



## Sound pressure level dB (A)

Sound level polar diagram open field - 7 meters microphone - no load running engine.

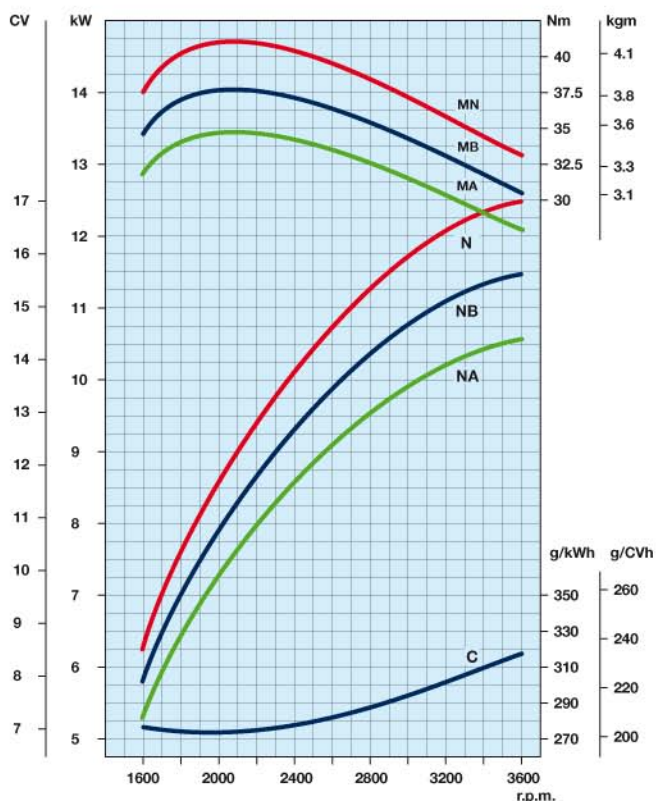


1000 RPM    2000 RPM    3000 RPM    3600 RPM

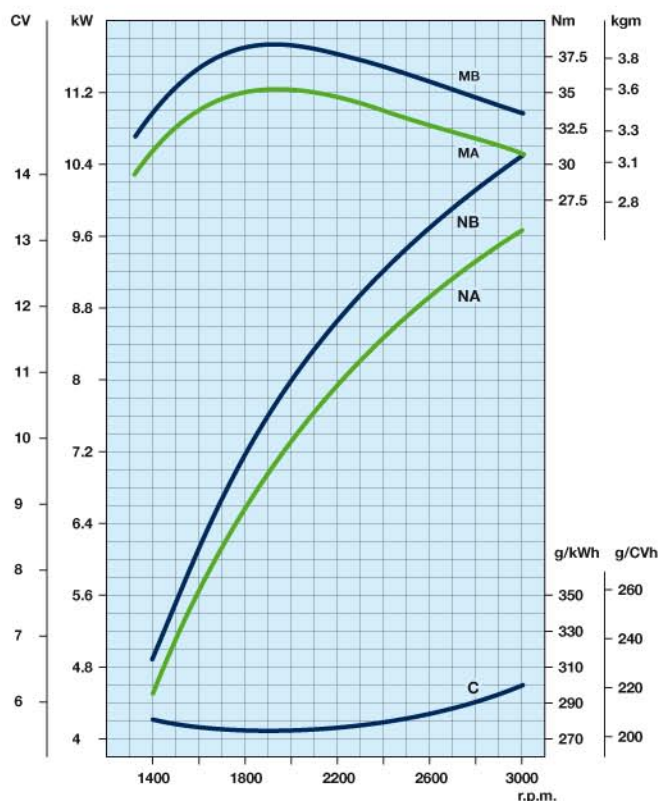


## Curves

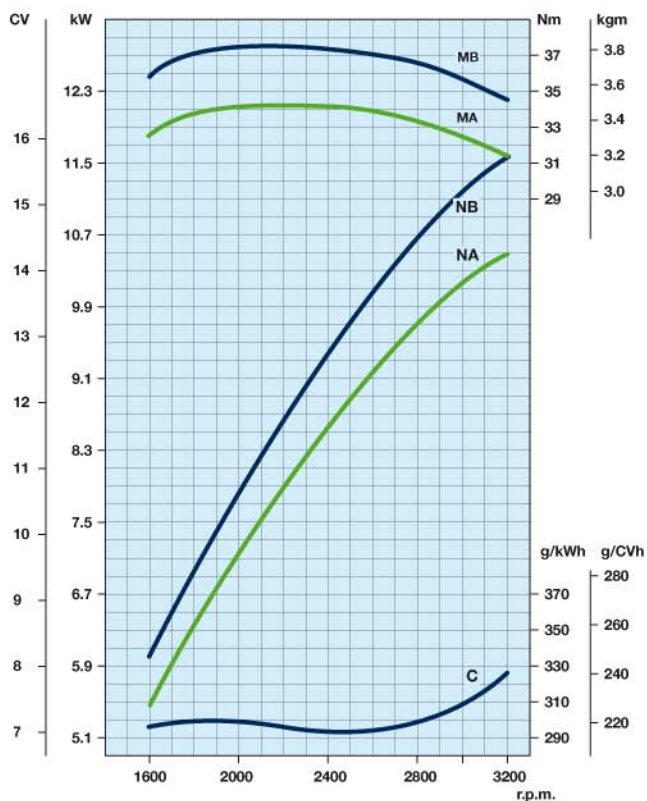
LDW 702 @ 3600 r.p.m. ▲ ◆



LDW 702 / B1 @ 3000 r.p.m. ▲ ◆



LDW 702 @ 3200 r.p.m. ▲ ◆



**N** Power curve - 80/1269/CEE - ISO 1585 -

**NB** Power curve - ISO 3046 - IFN -

**NA** Power curve - ISO 3046 - ICXN -

**MN** Torque curve - (N curve)

**MB (NB curve) - MA (NA curve)**

**C** Specific fuel consumption - (NB curve)

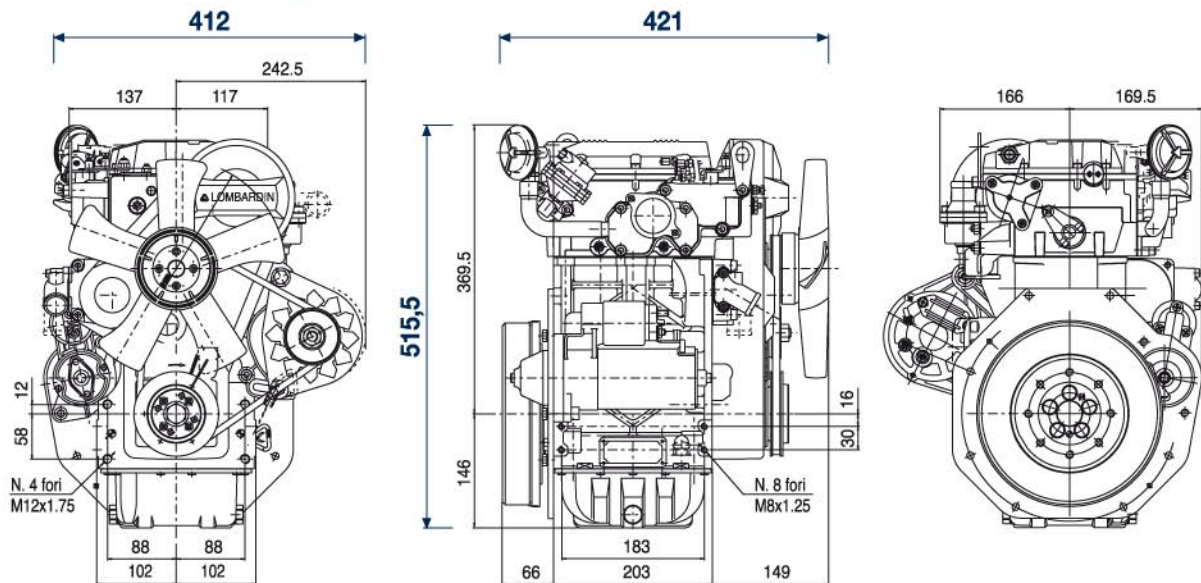
Power ratings refer to engines equipped with air filter, standard muffler, after being run in and in ambient conditions of 20°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 20°C.

### Output power for fixed speed application (including generating sets)

#### Engine power kW

r.p.m.	Intermittent (NB)	Continuous (NA)
3600	11,5	10,4
3000	11,0	10,0
1800	6,5	5,9
1500	5,5	5,0

## Technical drawings \*



\* More specific dimensions are available on [www.lombardini.it](http://www.lombardini.it) (see table at the bottom of the page)

## Standard equipment

- External oil filter
- Intake manifold
- Exhaust manifold
- Intake fan
- Accelerator control
- Electric starter and 12V alternator
- Thermostatic valve
- Fuel feed diaphragm pump
- Water pump
- Flanging plate
- Flywheel with ring gear
- Use, maintenance and spare parts booklet

## Accessories

- Different guards according to use
- Clutch flywheels
- Flanges
- Transmission adaptors
- Keyswitch panel
- Electric stop
- Electronic plant for plugs
- Alternators 12V or 24V
- Radiators
- Blowing fan
- Engine feet
- Fuel tanks
- Mufflers
- Dry air-cleaners mounted and separated
- Cyclonic precleaners
- Fuel filter on engine
- High capacity oil sumps (see picture)
- Cab heating system



ISO 9001 Cert. n. 0446 - 1405  
QS. 9000 Cert. n. 2231/0



LOMBARDINI S.r.l. a Socio unico  
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Files for this product available on [www.lombardini.it](http://www.lombardini.it)

Data sheet	LDW702DS.PDF
Owner manual	LDW702OM.PDF
Service manual	LDW702SM.PDF
Technical drawing	LDW702TD.DWG
Power curve	LDW702PC.PDF

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cod. 35581490 - 11-2009