



- 2 cylinders
- 1248 cm<sup>3</sup>
- 21 kW/28.5 HP
- 3000 rpm
- Nm. 7.5@2200

## Homologation

- EPA TIER 2 ■
- 97/68/CE ●
- ECE R 24-03 ▲

## Technical features

- 4 -stroke air cooled diesel engine.
- Power take-off on crankshaft.
- Counterclockwise rotation.
- Direct injection on piston.
- Air cooling by fan.
- Gear pump forced feed lubrication.
- Full flow oil filter.
- Automatic mechanical fuel supplement.
- Centrifugal governor.
- Torque regulator.
- Aluminium alloy tunnel crankcase.
- Cast-iron independent cylinders.
- Aluminium alloy independent heads.
- Hydraulic pump double power-take-off timing and blower side.

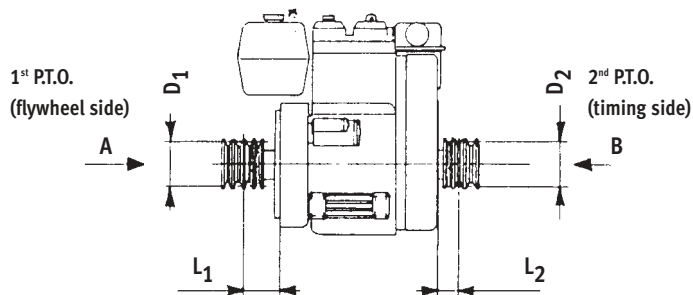


## Main applications

- Dumper
- Rulli compattatori
- Gruppi elettrogeni
- Motosaldatrici
- Compressori
- Trasporter
- Centraline idrauliche
- Motopompe
- Motoagricole
- Trattori

## Specifications

Cylinders	N.	2
Displacement	cm <sup>3</sup>	1248
Bore	mm	95
Stroke	mm	88
Compression ratio		17.5:1
Rating kW/HP	N (80/1269/CEE) ISO 1585	21.0/28.5
	NB ISO 3046 IFN	19.2/26.0
	NA ISO 3046 ICXN	17.7/24.0
Max. torque	Nm.	75@2000
Max. torque 3 P.T.O. counterclockwise	kgm	3.0
Engine speed - 3 P.T.O. ratio		1:1
Min. idling speed		1000÷1100
Fuel tank capacity	l	10
Oil consumption	kg/h.	0.058
Oil sump capacity	l	2.8
Min. allowable oil pressure	kg/cm <sup>3</sup>	1.5±2.0
Max. allowable tilt for short time operation (peak values)		25° (35°)
Combustion air required at 3000 r.p.m.	l/min.	1870
Cooling air required at 3000 r.p.m.	l/min.	26300
Dry weight	kg	110
Recommended battery	V/ah	12/66
Minimum pulley diameters for belt drive		



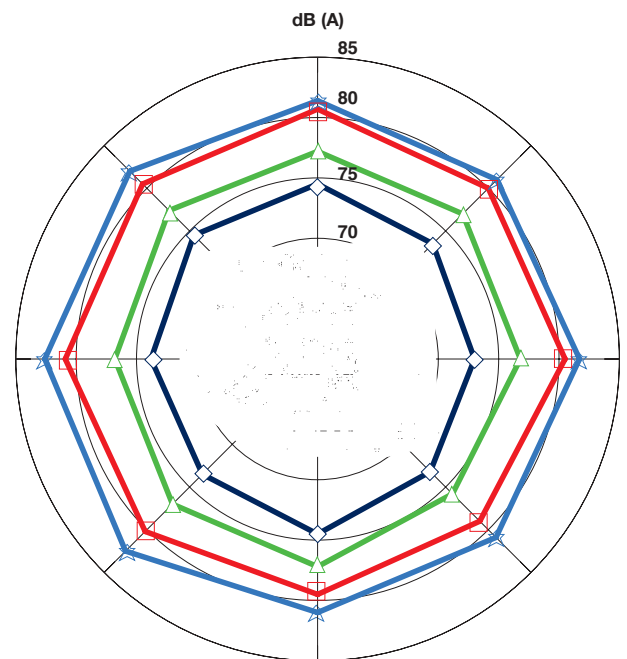
$$D_1 \text{ (mm)} \geq 100 [162 + L_1 \text{ (mm)}] \frac{N \text{ (HP)}}{n \text{ (RPM)}}$$

$$D_2 \text{ (mm)} \geq 150 [260 + L_2 \text{ (mm)}] \frac{N \text{ (HP)}}{n \text{ (RPM)}}$$

Max. allowable axial load in both direction A-B = 300 kg

## Sound pressure level dB (A)

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

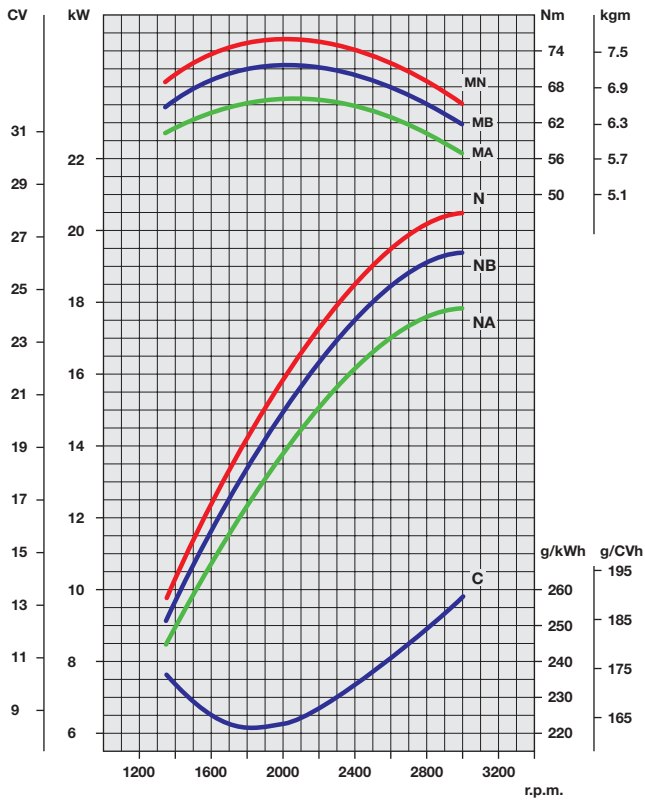


1500 RPM    2000 RPM    2500 RPM    3000 RPM

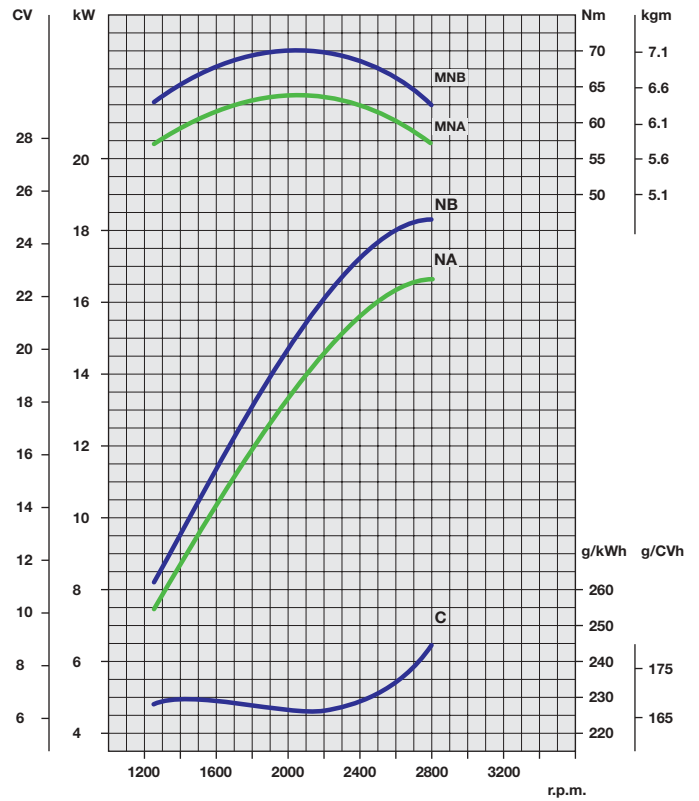
# SERIE RD

## Curves

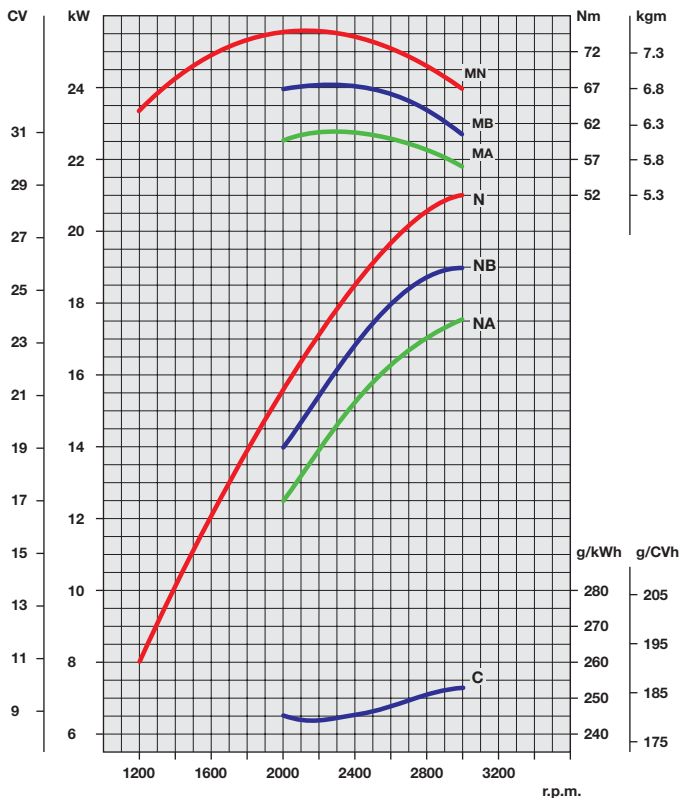
RD 290 NR @ 3000 r.p.m. ■ ● ▲



RD 290 B2 NR @ 2800 r.p.m. ■ ● ▲



RD 290 @ 3000 r.p.m.



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

**NB** Power curve - ISO 3046/1 - IFN -

**NA** Power curve - ISO 3046/1 - ICXN -

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

**MB** (B curve - **MA** (A curve)

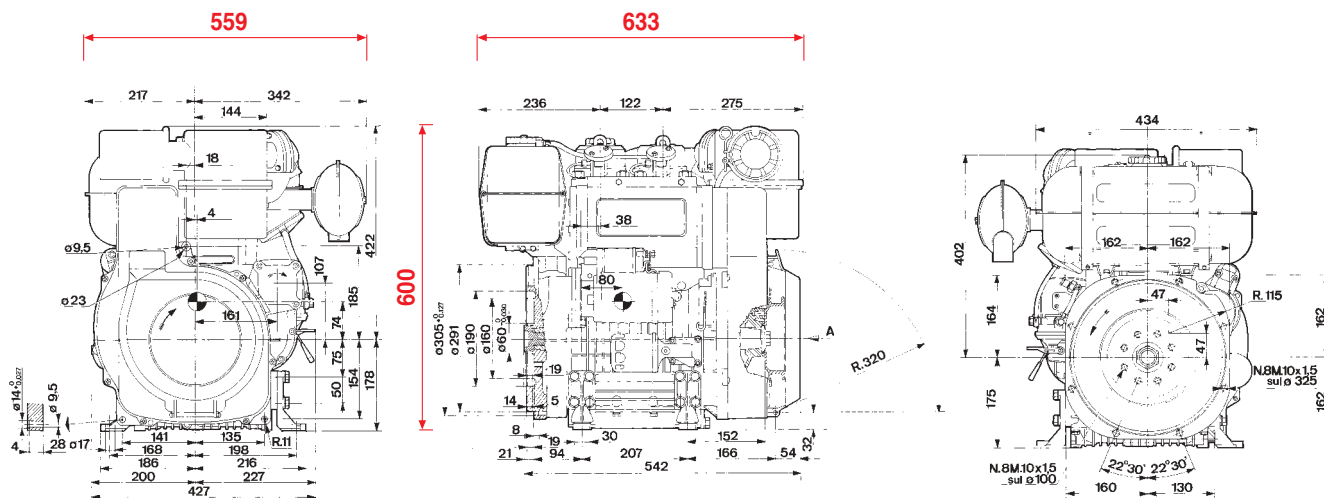
**C** Specific fuel consumption - (NB curve)

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

#### Engine power kW

r.p.m.	Intermittent (NB)	Continuous (NA)
3600	15.7	14.5
3000 (RD210)	14	12.9
1800	9.0	8.1
1500	7.7	7.0

## Technical drawings \*



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

## Standard equipment

- Electric starter and 12 V alternator
- Black paint on sheet metal parts
- Manual control accelerator (fixed)
- Oil-bath air-cleaner with cyclonic pre-filter
- Oil pressure switch
- External oil filter
- Combined manifold and exhaust muffler
- Engine feet
- Power take-off on flywheel
- Fuel lift pump
- Counter-clockwise rotation on power take-off side
- Fuel tank with filter
- Automatic mechanical supplement
- Denoising
- User maintenance - spare parts booklet

## Accessories on request

- Different guards according to use
- Hand crank starting
- Alternators
- Control board
- Compression release
- Clutches
- Flanges
- Hydraulic pump adaptors
- Range of fuel tanks of various sizes
- External fuel filter
- Detached dry air filter
- Mufflers and exhaust pipes
- Controls
- Pulleys
- Oil cooler
- Various colour paints



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Files for this product available on [www.ruggerini.it](http://www.ruggerini.it)

Data sheet	RD290DS.PDF
Owner manual	RD290OM.PDF
Service manual	RD290SM.PDF
Technical drawing	RD290TD.DWG
Power curve	RD290PC.PDF

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