

Kohler® Diesel

Model KDW1404

High Speed Open Power Unit

4 Cylinders » 1372 cc » 26 kW/34.9 HP » 3600 RPM » 62 ft. lbs. @ 2000 RPM

Certification

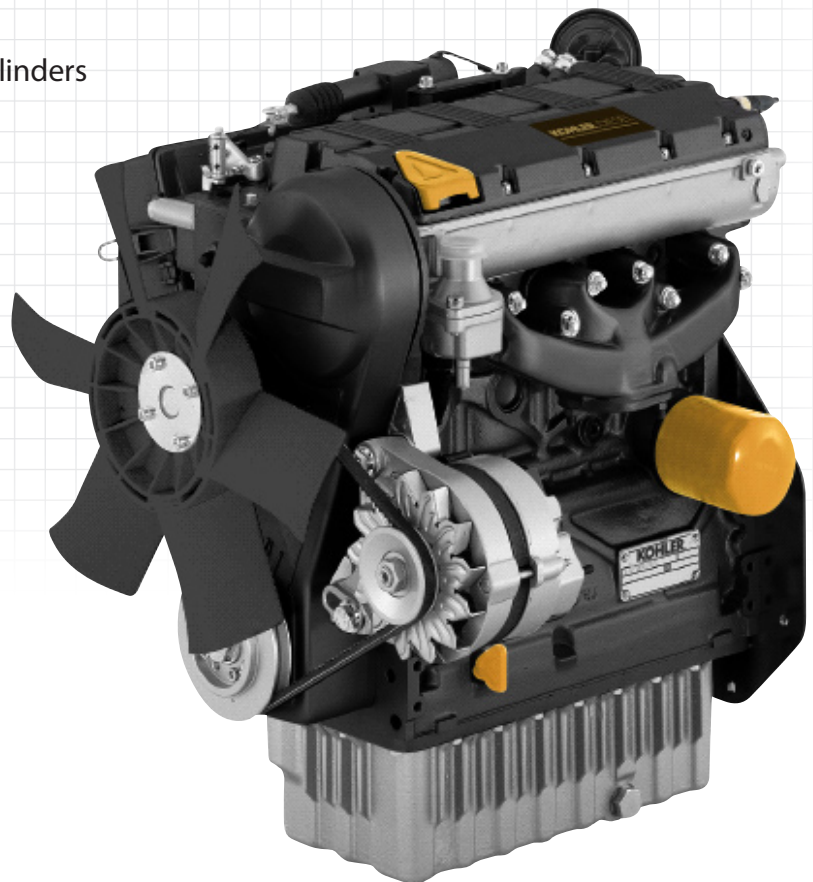
EPA Interim TIER 4 ■
97/68/CE ●

Features

- 4-Stroke Diesel Engine with In-Line Cylinders
- Liquid-Cooled with Axial Fan
- Overhead Camshaft
- Indirect Fuel Injection by Unit Injectors
- Double PTO on Crankshaft
- Counter-Clockwise Rotation (From PTO Side)
- Full-Pressure Lubrication
- Full Flow Oil Filter
- Water Pump Driven by Timing Belt
- Automatic Extra Fuel Starting Device
- Variable Speed Governor
- Cast Iron Crankcase with Re-Borable Cylinders
- Aluminum Cylinder Head

Applications

- Excavator
- Power Buggy
- Roller
- Access Platform
- Generator
- Sweeper
- Lawn Mower
- Ride-On Concrete Trowel



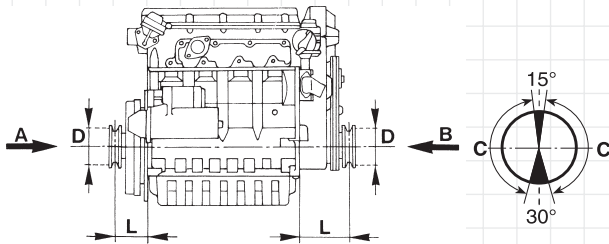
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Specifications

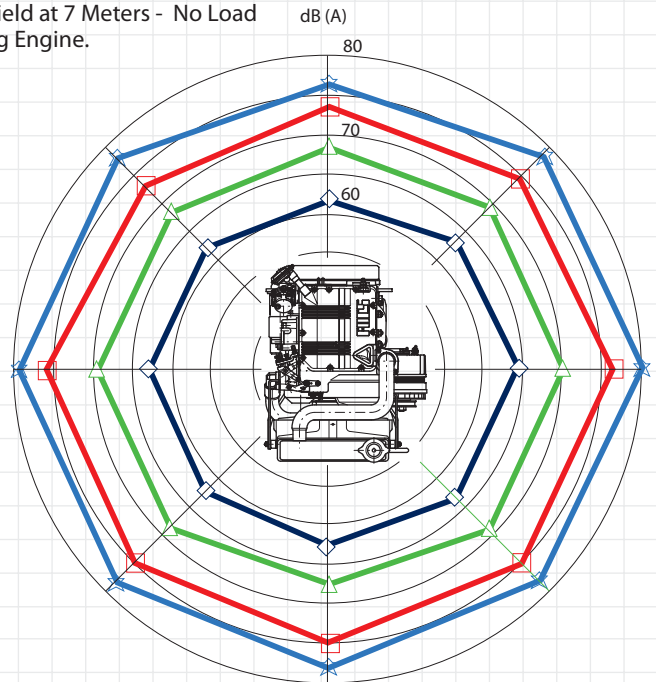
Cylinders	No. of Cylinders	4
Displacement	cc/cu. in.	1372/83.7
Bore	mm/in.	75/3
Stroke	mm/in.	77.6/3.1
Compression Ratio		22.8:1
Rating kW/HP	N (80/1269/CEE) ISO 1585	26/34.9
	NB ISO 3046 IFN	24.5/32.9
	NA ISO 3046 ICXN	22.4/30
Max. Torque	N·m/ft. lbs. @ 2000 RPM	84/62
Max. Torque 3 PTO	N·m/ft. lbs.	37/27
Minimum Idling Speed RPM		900
Water Pump Delivery @ 3600 RPM	liters/min/gpm	70/18 (~)
Oil Consumption	kg/h/lb/h	0.019/0.042
Oil Capacity	liters/quarts	3.3/3.5
Min. Allowable Oil Pressure	bar/psi	1.5/21.8
Max. Allowable Angle of Operation (Peak Values)		25° (35°)
Volume of Air Required for Correct Combustion @ 3600 RPM	liters/min/cfm	2470/87
Volume of Air Required for Correct Cooling @ 3600 RPM	m³/min/cfm	88/3108
Dry Weight	kg/lbs	140/308.6
Recommended Battery	V/Ah	12/44
Minimum Pulley Diameters for Belt Drive		



V Belt	$D \text{ (mm)} \geq 110 [L \text{ (mm)} + 101]$	$\frac{N \text{ (kW)}}{n \text{ (RPM)}}$
Cogged Belt	$D \text{ (mm)} \geq 72 [L \text{ (mm)} + 101]$	$\frac{N \text{ (kW)}}{n \text{ (RPM)}}$
Maximum Allowable Axial Load in Both Directions A-B = 300 kg/661 lbs.		
C - Allowable Zone for Radial Load		

Sound Pressure Level dB (A)

Sound Pressure Level Polar Diagram
Open Field at 7 Meters - No Load
Running Engine.



1000 RPM 2000 RPM 3000 RPM 3600 RPM

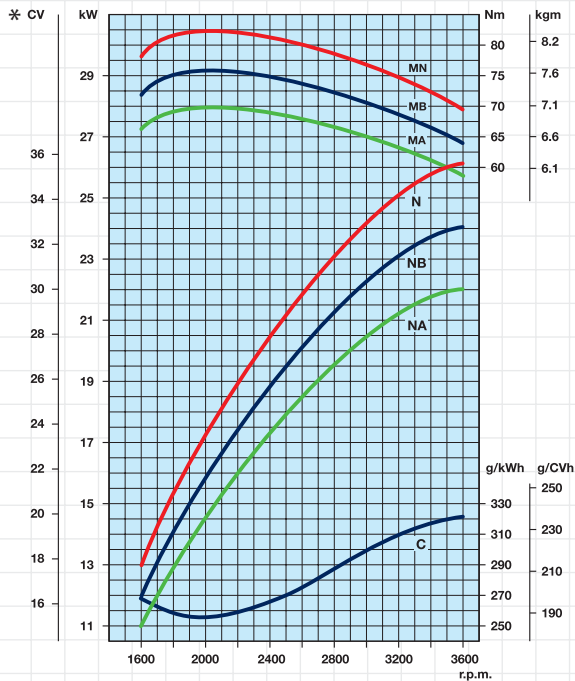
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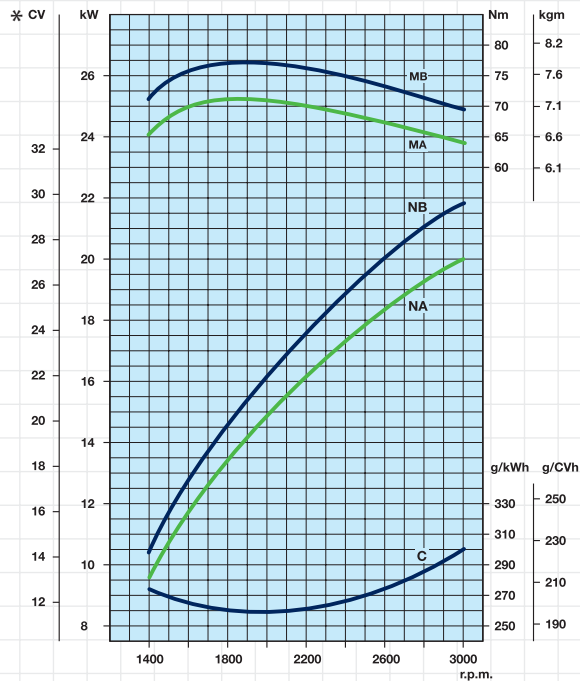
High Speed Open Power Unit

Curves

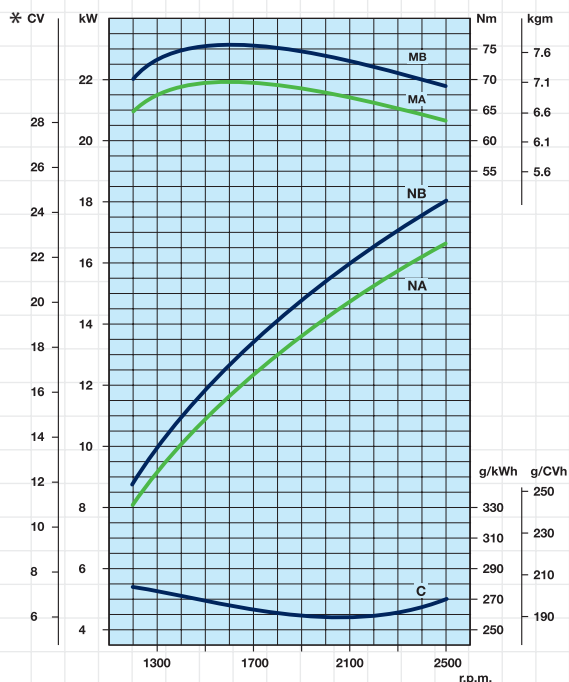
KDW1404 @ 3600 RPM



KDW1404 B1 @ 3000 RPM



KDW1404 B6 @ 2500 RPM



- 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 Generator Sets)

Engine Power kW

RPM	Intermittent (NB)	Continuous (NA)
3600	24	21.8
3000	22	20
1800	13.5	12.3
1500	11.5	10.5

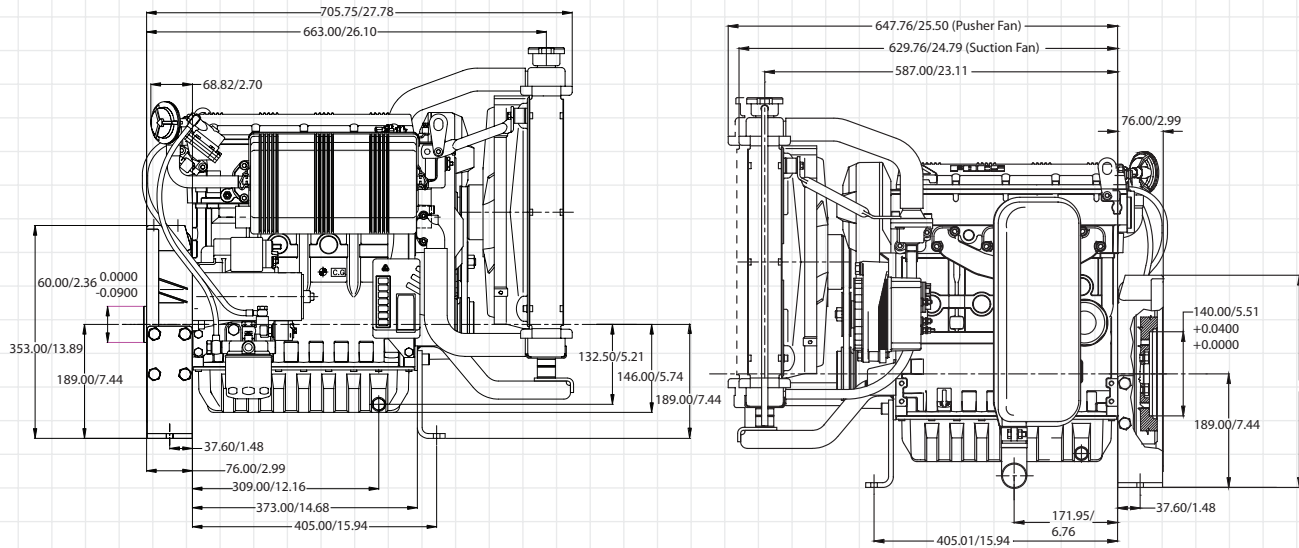
*European Equivalent of HP (1 CV = 0.986 HP)

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Technical Drawings



Standard Features (Open Power Unit)

- Base Engine
- Mounted Top Tank Radiator
- Radiator Fan Guard
- Suction Fan
- Mounted Air Cleaner
- Muffler and Guard
- 12 V Electric Starter
- Fuel Filter with Valve
- 45 Amp External Alternator
- Mounting Feet
- Mounted Control Panel
- Group 8 Interchange Housing
- 3600 RPM
- Safety Shutdown for Low Oil Pressure and High Coolant Temperature

Accessories

- SAE Housings and Drives
- Shaft Extensions
- Hydraulic Drives
- Dry Air Cleaners
- Various Mufflers and Manifolds
- Various Muffler Guards and Flanges
- Remote Oil Filter
- Top Tank and Cross-Flow Radiators
- Suction and Pusher Fans
- High-Capacity Oil Sump
- Wiring Harness Extension
- 2nd PTO Two-Groove Pulley
- Extended Dipstick

