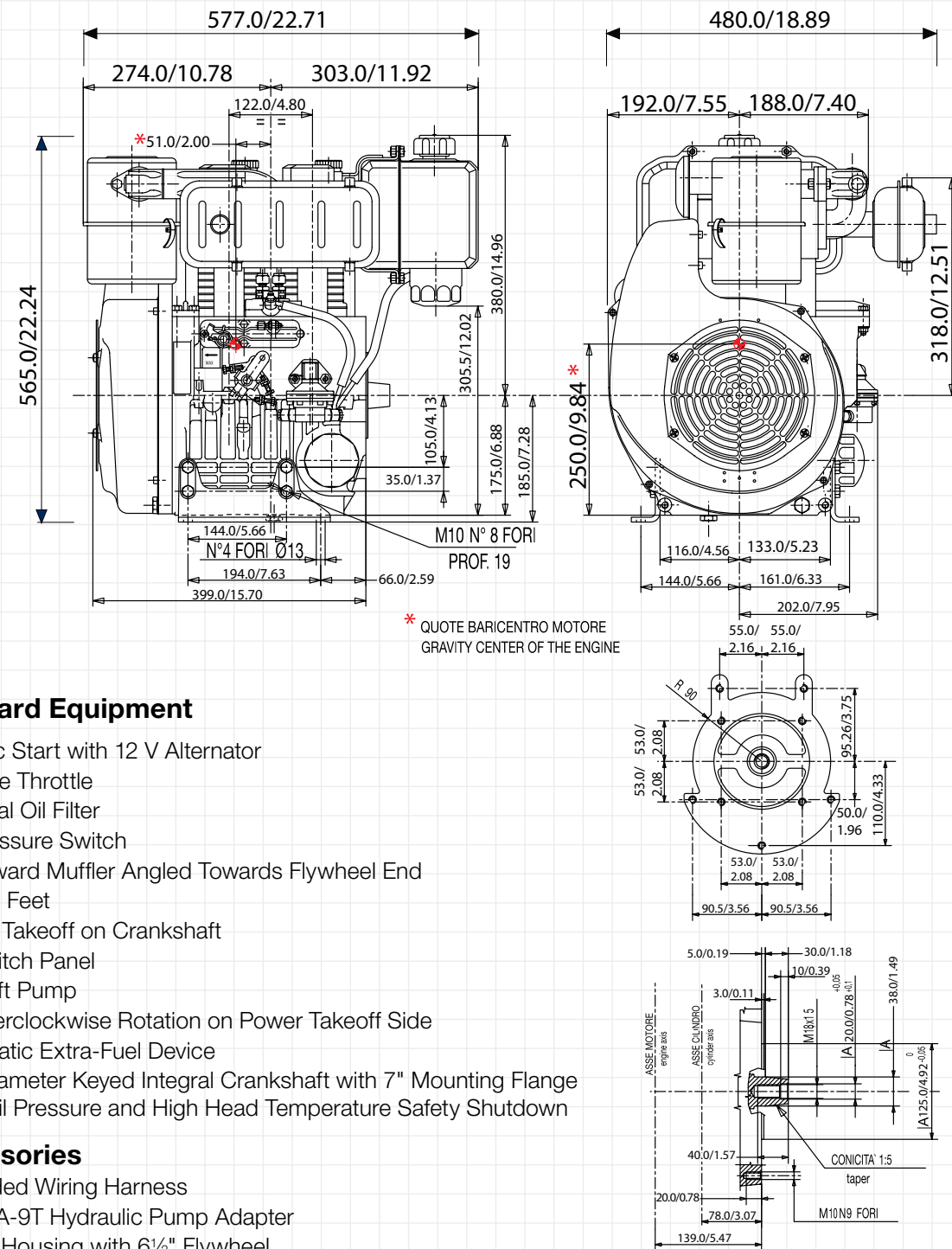


KOHLER Diesel

Model KD477-2

Technical Drawings



Standard Equipment

- Electric Start with 12 V Alternator
- Remote Throttle
- External Oil Filter
- Oil Pressure Switch
- Downward Muffler Angled Towards Flywheel End
- Engine Feet
- Power Takeoff on Crankshaft
- Keyswitch Panel
- Fuel Lift Pump
- Counterclockwise Rotation on Power Takeoff Side
- Automatic Extra-Fuel Device
- 1½" Diameter Keyed Integral Crankshaft with 7" Mounting Flange
- Low Oil Pressure and High Head Temperature Safety Shutdown

Accessories

- Extended Wiring Harness
- SAE 2A-9T Hydraulic Pump Adapter
- SAE 5 Housing with 6½" Flywheel

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Form E-2151 3/09
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KOHLER

Relentless Power. Legendary Performance.

KOHLER Diesel

Model KD477-2

2 Cylinders • 954 cc • 16.2 kW/21.7 hp • 3000 rpm • 40.6 ft lbs @ 2200 rpm

Certification

- EPA Tier 4 @ 2700 rpm

Features

- 4-Stroke Air-Cooled Diesel Engine
- Direct Injection
- Flywheel Fan Air Cooling
- Mechanical Fuel Pump
- Full-Pressure Lubrication
- Full-Flow Oil Filter
- Automatic Extra-Fuel Starting Device
- Variable Speed Governor
- Aluminum Crankcase
- 12 V Electric Starter
- Counterclockwise Rotation (From PTO Side)
- Aluminum Alloy Independent Heads
- Reborable Independent Cast-Iron Cylinders
- Power Takeoff on Crankcase

Applications

- Power Buggy
- Vibrating Roller
- Generator
- Welder
- High-Pressure Cleaner
- Hydraulic Power Pack
- Agricultural Pump
- Two-Wheel Tractor



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1 of 4
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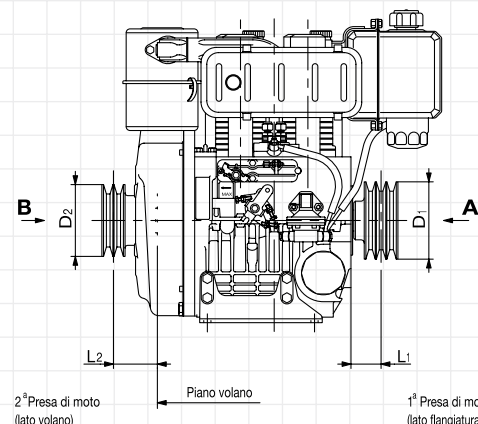
KOHLER Diesel

Model KD477-2

Specifications

Cylinders	No. of Cylinders	2	
Displacement	cc/cu in	954/58.2	
Bore	mm/in	90/3.5	
Stroke	mm/in	75/3	
Compression Ratio		19:1	
Rating kW/hp	N (80/1269/CEE) ISO 1585 NB ISO 3046 IFN NA ISO 3046 ICXN	16.2/21.7 15/20.1 13.7/18.4	
Maximum Torque	Nm/ft lbs @ 2200 rpm	55/40.6	
Maximum Torque 3 PTO	Nm	25/18.4	
Counterclockwise Rotation			
Engine Speed - 3 PTO Ratio		1:0.89	
Minimum Idling Speed rpm		1000	
Fuel Tank Capacity	liters/quarts	7/7.4	
Oil Consumption	kg/h/lb/h	0.011/0.024	
Oil Capacity	liters/quarts	3/3.2	
Minimum Allowable Oil Pressure	bar/psi	0.8/11.6	
Maximum Allowable Angle of Operation (Peak Values)		25° (35°)	
Volume of Air Required for Correct Combustion @ 3600, 3000 rpm	liters/min/cfm	1500,1220/53,43	
Volume of Air Required for Correct Cooling @ 3600, 3000 rpm	liters/min/cfm	15800,13200/558,466	
Dry Weight	kg/lb	78/172	
Recommended Minimum Battery Size	V/CCA Standard, Heavy-Duty	12/600, 660	
Axial Load	(Continuous) (Intermittent)	kg/lb kg/lb	100/220 350/772

Minimum Pulley Diameters for Belt Drive

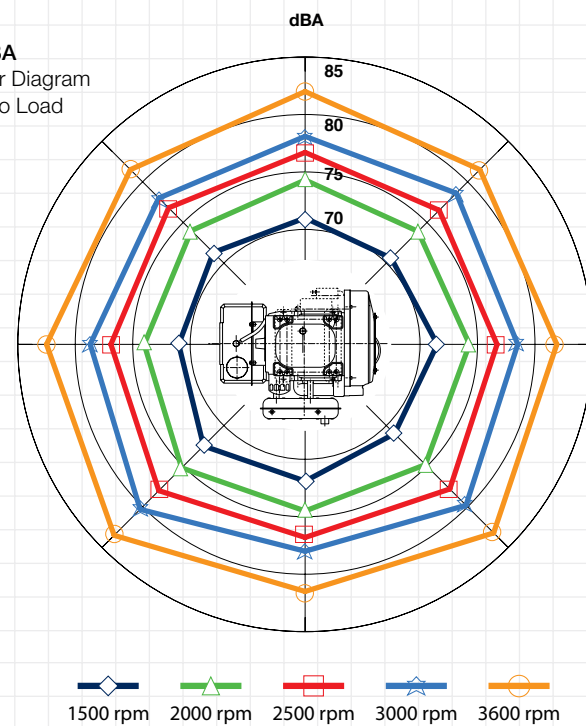


$$D_1 \text{ (mm)} \geq 220 [78 + L_1 \text{ (mm)}] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

$$D_2 \text{ (mm)} \geq 196 [150 + L_2 \text{ (mm)}] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

Maximum Allowable Axial Load in Both Directions
A-B = 350 kg/772 lb_i

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

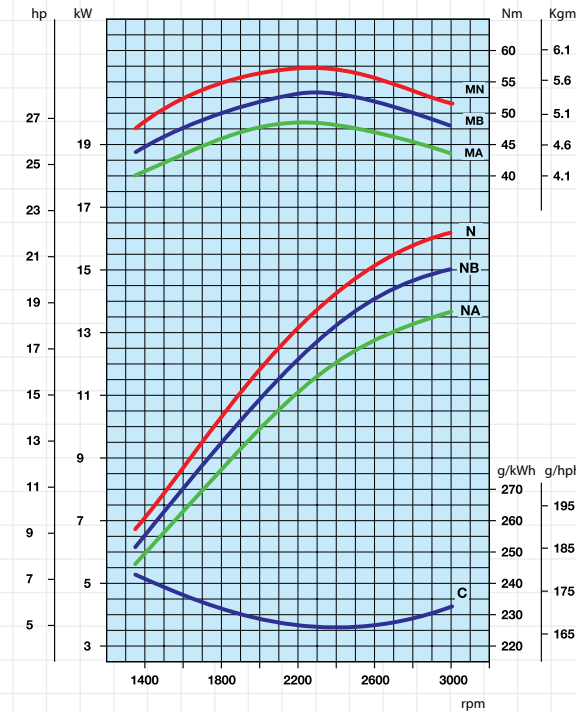


KOHLER Diesel

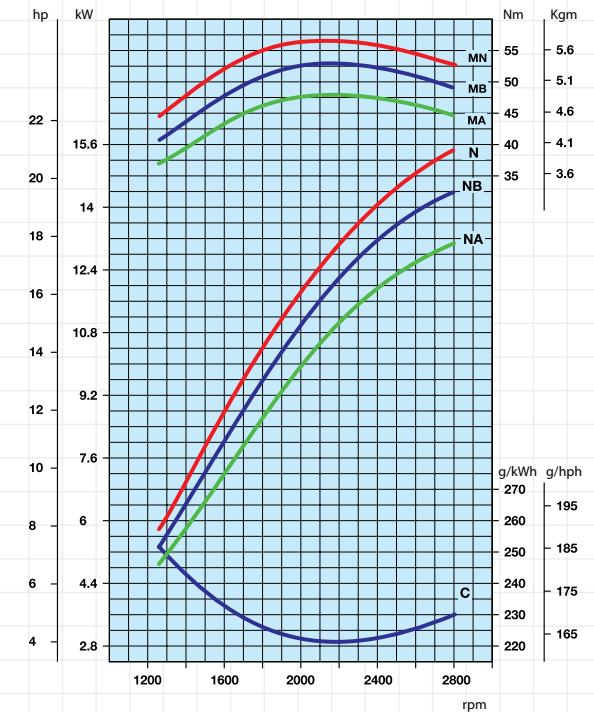
Model KD477-2

Curves

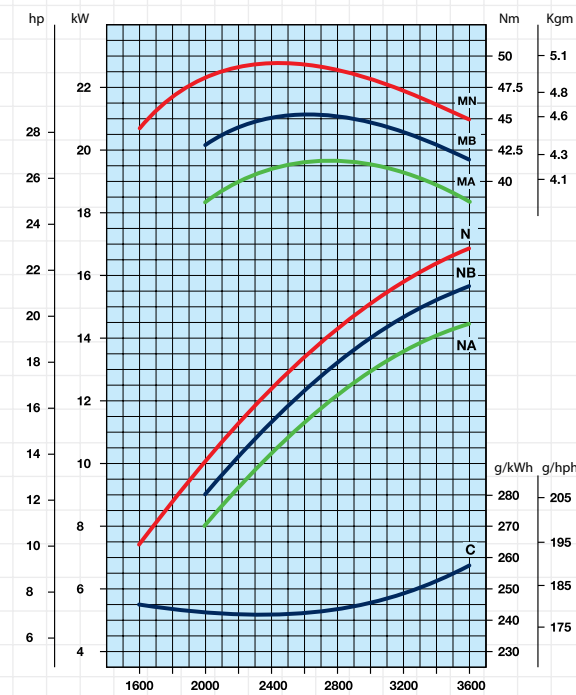
KD477-2 B1 @ 3000 rpm ▲



KD477-2 B2 @ 2800 rpm ▲



KD477-2 @ 3600 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 Generators)

Engine Power kW

rpm	Intermittent (NB)	Continuous (NA)
3600	15.7	14.5
3000	14.9	13.5
1800	9.0	8.1
1500	7.7	7.0