

# AIR COOLED DIESEL ENGINES

12.0 – 26.0 kW | 16.3 – 35.4 hp



**KOHLER**<sup>®</sup>  
IN POWER. SINCE 1920.

# AIR COOLED DIESEL ENGINES

## STANDARD EQUIPMENT

- Electric starting with 12 V starter motor and alternator
- Remote throttle
- Oil pressure switch
- Combined manifold and exhaust muffler
- Engine feet
- Fuel lift pump
- Counter-clockwise rotation on power take-off side
- Automatic extra fuel device
- Use, maintenance and spare parts booklet
- Oil bath air filter
- Manual control accelerator
- Power take-off on flywheel (KD 625/2; KD 626/3)
- Power take-off on crankshaft (KD 330/2; KD 425/2; KD 477/2)
- Fuel tank with filter
- Guard for belt (KD 626/3)





## ACCESSORIES ON DEMAND

- |  |   |
|--|---|
| Different guards according to use      | Hydraulic pump adapters                             |
| 24V alternators and starter motors     | Range of flywheels for various clutches             |
| Automatic release decompression system | Mufflers and exhaust pipes                          |
| Flanges                                | Controls  |
| Dry air filter                         | Pulleys   |
| External fuel filter                   | Oil cooler (KD 625/2; KD 330/2; KD 425/2; KD 626/3) |
| Clutches                               | Crank starter (KD 625/2)                            |
| Range of fuel tanks of various sizes   | Keyswitch panel                                     |

# KD

## 330/2



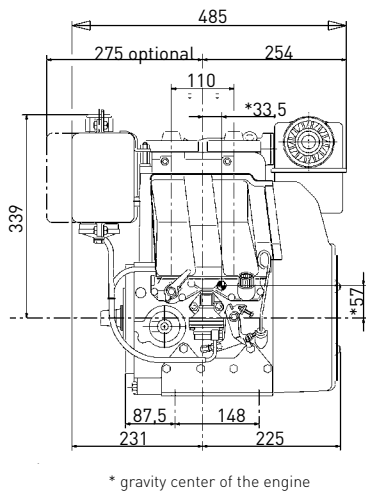
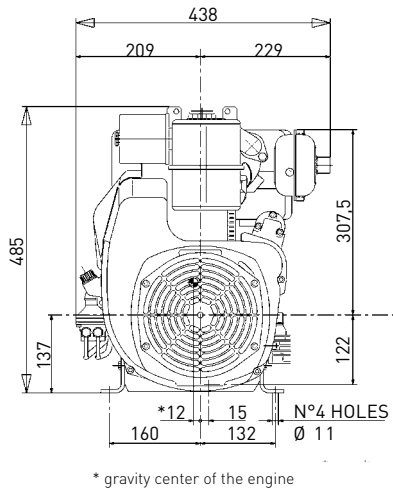
### Quick specifics

CYLINDERS	2
MAX POWER kW (hp)@rpm	12.0 (16.3) @ 3600
MAX TORQUE Nm@rpm	32.0 @ 2400

(Power & torque N curve - 80/1269/CE E-ISO 1585)

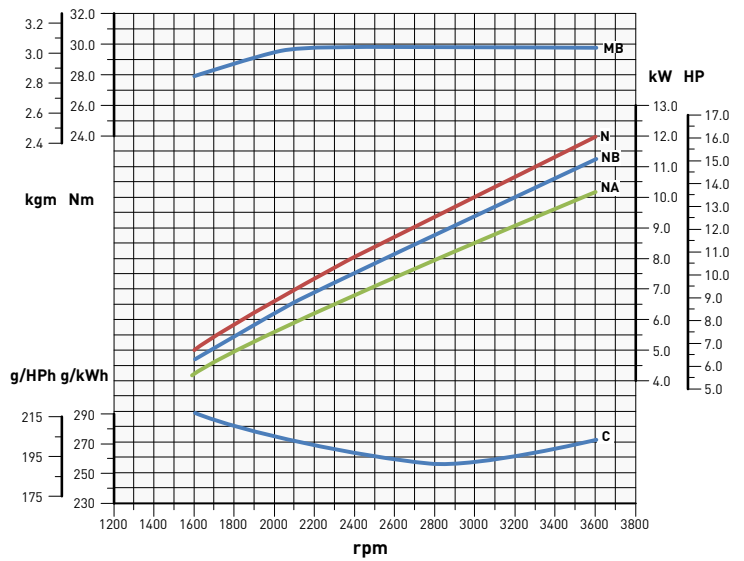
# DATA

## Dimensions (mm)



# PERFORMANCE CURVES

(IFN-ACCORDING TO ISO 3046 and ISO 14396)



N - Power curve - 80/1269/CE E-ISO 1585

NB - Power curve - ISO 3046/1 - IFN

NA - Power curve - ISO 3046/1 - ICXN

MB - Torque curve - (NB 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 25°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 25°C.

# KD

## 425/2



### Quick specifics

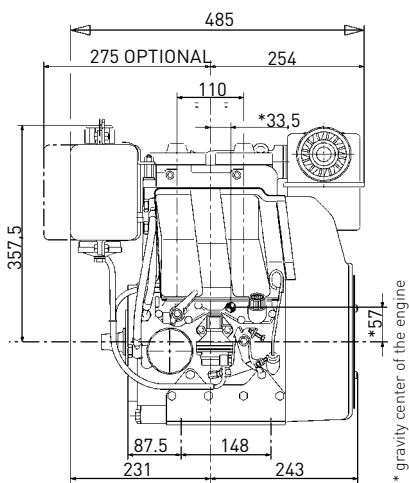
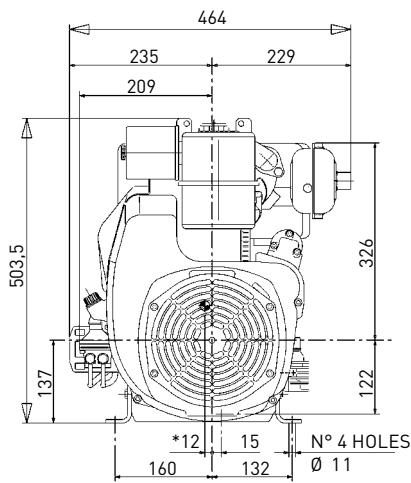
CYLINDERS	2	2
MAX POWER kW (hp)@rpm	13.5 (18.1) @ 3600	12.2 (16.3) @ 3600
MAX TORQUE Nm@rpm	42.0 @ 2200	37.8 @ 2200
EMISSIONS COMPLIANCE	ECE R 24 / EU STAGE V*	US TIER 4 FINAL

(Power & torque NB curve - ISO 3046/1 - IFN)

\* Available starting from 2019

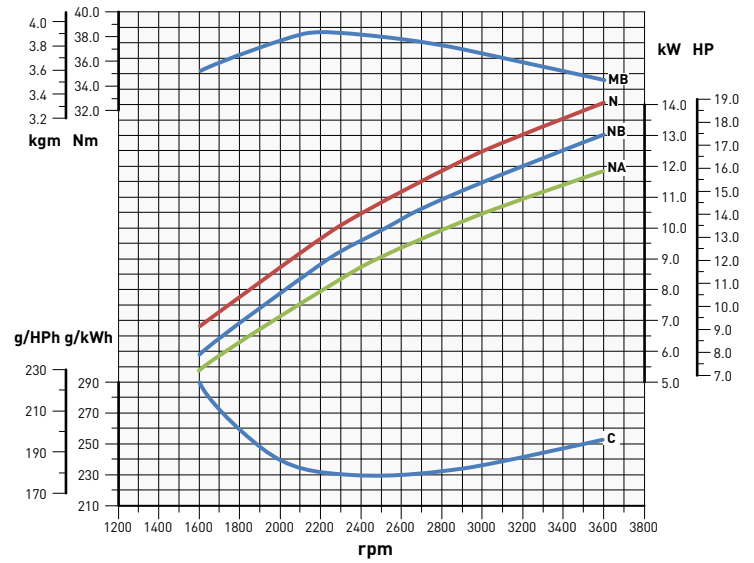
# DATA

## Dimensions (mm)



# PERFORMANCE CURVES

(IFN-ACCORDING TO ISO 3046 and ISO 14396)



N - Power curve - 80/1269/CE E-ISO 1585

NB - Power curve -

NA - Power curve - ISO 3046/1 - ICXN

MB - Torque curve - (NB 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 25°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 25°C.

# KD

## 477/2



### Quick specifics

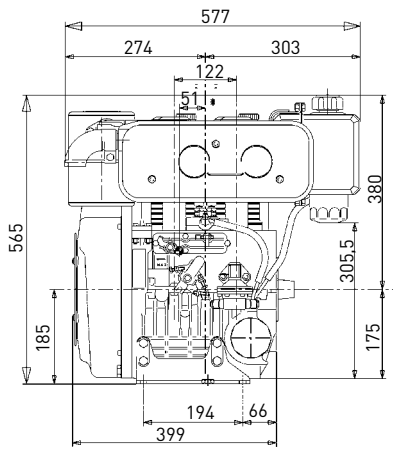
CYLINDERS	2
MAX POWER kW (hp)@rpm	16.8 (22.8) @ 3600
MAX TORQUE Nm@rpm	55.0 @ 2100

(Power & torque N curve - 80/1269/CE E-ISO 1585)

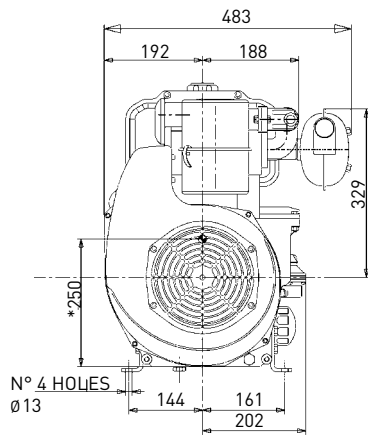


# DATA

## Dimensions (mm)



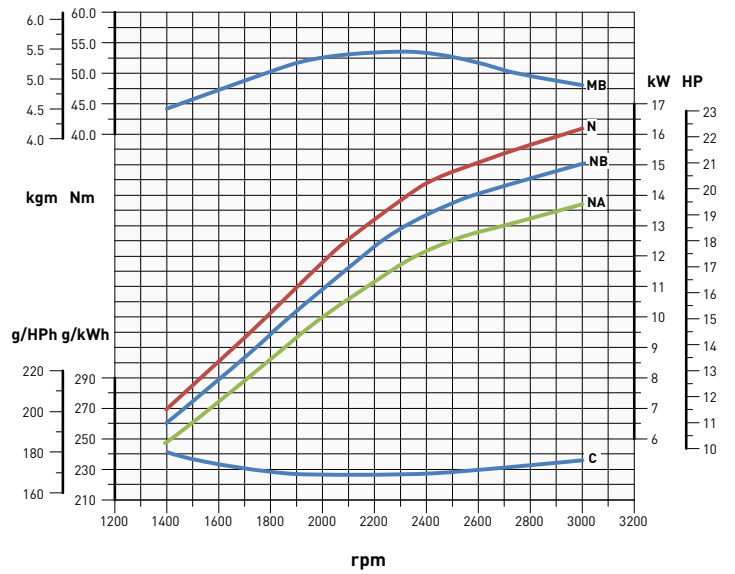
\* gravity center of the engine



\* gravity center of the engine

# PERFORMANCE CURVES

(IFN-ACCORDING TO ISO 3046 and ISO 14396)



N - Power curve - 80/1269/CE E-ISO 1585

NB - Power curve - ISO 3046/1 - IFN

NA - Power curve - ISO 3046/1 - ICXN

MB - Torque curve - (NB 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 25°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 25°C.

# KD

## 625/2



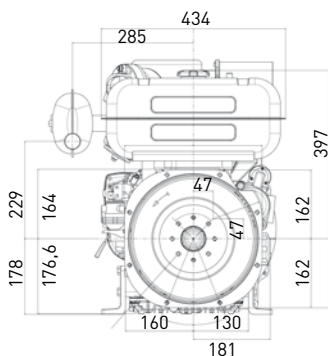
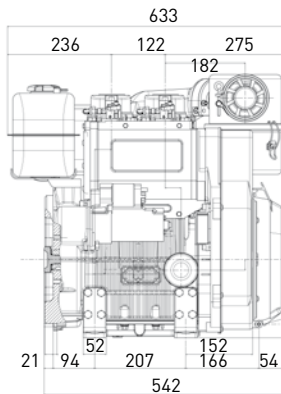
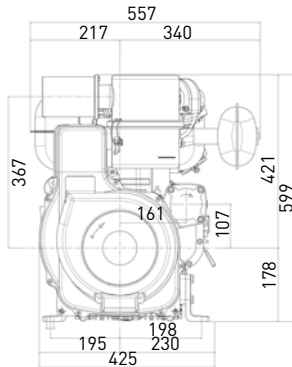
### Quick specifics

CYLINDERS	2
MAX POWER kW (hp)@rpm	18.8 (25.5) @ 3000
MAX TORQUE Nm@rpm	67.0 @ 2200

(Power & torque NB curve - ISO 3046/1 - IFN)

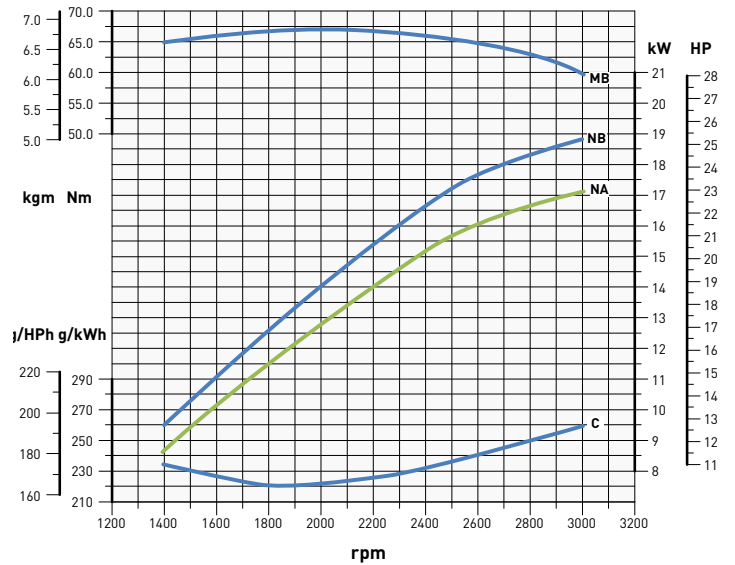
# DATA

## Dimensions (mm)



# PERFORMANCE CURVES

(IFN-ACCORDING TO ISO 3046 and ISO 14396)



N - Power curve - 80/1269/CE E-ISO 1585

NB - Power curve - ISO 3046/1 - IFN

NA - Power curve - ISO 3046/1 - ICXN

MB - Torque curve - (NB 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 25°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 25°C.

## Setting @ 2800 RPM

Max power NB* (kW)	Torque max. (Nm)
18.2 @ 2800 rpm	67.0 @ 2000 rpm

# KD

## 626/3



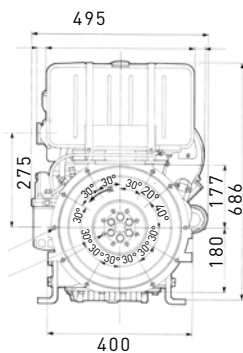
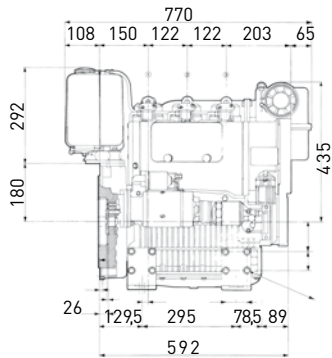
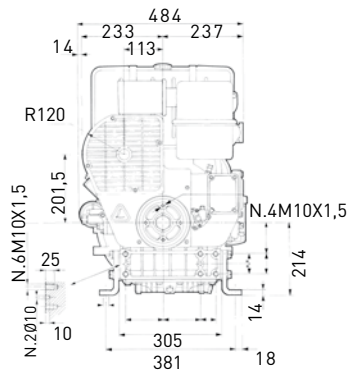
### Quick specifics

CYLINDERS	3
MAX POWER kW (hp)@rpm	26.0 (35.4) @ 3000
MAX TORQUE Nm@rpm	102.0 @ 2000

(Power & torque NB curve - ISO 3046/1 - IFN)

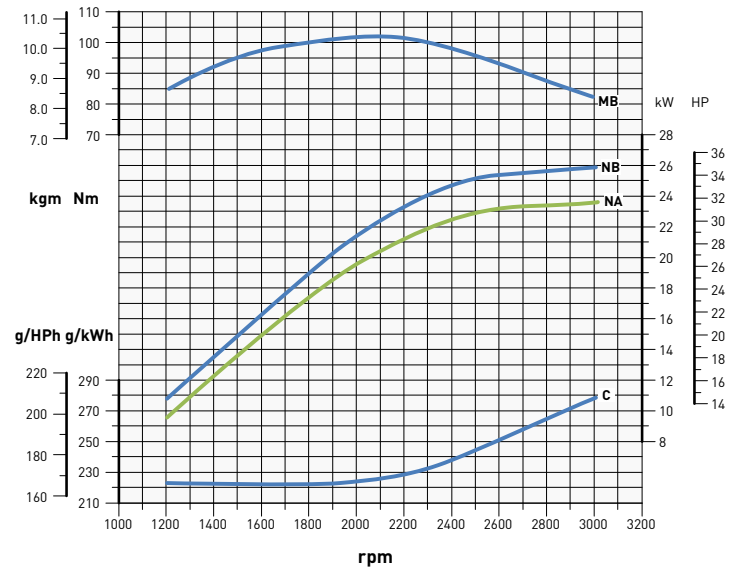
# DATA

## Dimensions (mm)



# PERFORMANCE CURVES

(IFN-ACCORDING TO ISO 3046 and ISO 14396)



N - Power curve - 80/1269/CE E-ISO 1585

NB - Power curve - ISO 3046/1 - IFN

NA - Power curve - ISO 3046/1 - ICXN

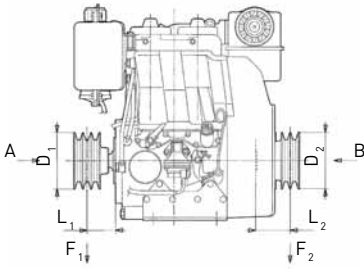
MB - Torque curve - (NB curve)

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 25°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 25°C.

# APPLICATIONS SPECS

KD 330/2 ; KD 425/2



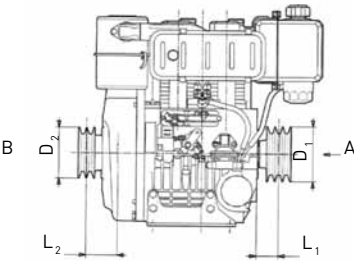
Minimum pulley diameters for belt drive

$$330/2: \quad D_1 \text{ (mm)} \geq 585 [49 + L_1(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}} \quad D_2 \text{ (mm)} \geq 1030 [31 + L_2(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

$$425/2: \quad D_1 \text{ (mm)} \geq 700 [45 + L_1(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}} \quad D_2 \text{ (mm)} \geq 1540 [17 + L_2(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

Max intermittent axial load in both directions A - B = 300 kg

KD 477/2

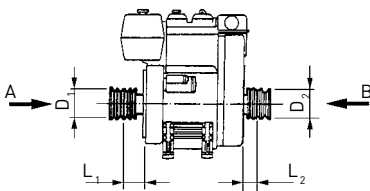


Minimum pulley diameters for belt drive

$$D_1 \text{ (mm)} \geq 220 [78 + L_1(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}} \quad D_2 \text{ (mm)} \geq 196 [150 + L_2(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

Max intermittent axial load in both directions A - B = 350 kg

KD 625/2

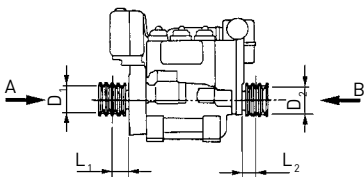


Minimum pulley diameters for belt drive

$$D_1 \text{ (mm)} \geq 136 [162 + L_1(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}} \quad D_2 \text{ (mm)} \geq 204 [260 + L_2(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

Max intermittent axial load in both directions A - B = 300 kg

KD 626/3



Minimum pulley diameters for belt drive

$$D_1 \text{ (mm)} \geq 100 [185 + L_1(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}} \quad D_2 \text{ (mm)} \geq 113 [169 + L_2(\text{mm})] \frac{N \text{ (kW)}}{n \text{ (rpm)}}$$

Max intermittent axial load in both directions A - B = 300 kg



# AVAILABLE FLANGES\*

	Flange standard type	Standard version
KD 625/2	<p>N.8 HOLES M10X1.5</p>	<p>1<sup>ST</sup> CYLINDER AXIS</p>
KD 625/2	<p>Flange type B</p> <p>N.8 HOLES 5/16" 18 UNC 2B</p> <p>N.12 HOLES 3/8" 16 UNC 2B</p>	<p>SAE 4, 7<sup>1/2</sup></p>
KD 626/3	<p>Flange standard type</p> <p>N.10 M.10x1,5 Ø 36,5</p> <p>N.8 M.10x1,5 45° Ø 105</p>	<p>Standard version</p> <p>SEEN FROM "A" SIDE</p> <p>ENGINE AXIS</p> <p>M10 X 1,5</p> <p>ENGINE AXIS</p>
KD 626/3	<p>Flange type B</p> <p>N.12 HOLES 3/8-16 UNC - 2B</p> <p>N.8 HOLES S/16" - 18 UNC - 2B</p> <p>R381</p> <p>R403</p> <p>R105</p> <p>222,25</p> <p>N.8 HOLES M10 x 1,5 - 6H</p>	<p>SAE 4, 7<sup>1/2</sup></p> <p>SEEN FROM "A" SIDE</p> <p>ENGINE AXIS</p> <p>M12X1,75-6H</p> <p>N.8 HOLES 22 DEEP</p> <p>1<sup>ST</sup> CYLINDER AXIS</p>

\*Other flanges available on request



# AVAILABLE FLANGES\*

	Flange standard type	Standard version	Flange type crankshaft version
KD 330/2			
KD 425/2			
KD 477/2			
	Flange type B	SAE 5, 6" 1/2	
KD 477/2			

\*Other flanges available on request

# TECHNICAL SPECIFICATIONS

Model	KD 330/2	KD 425/2		
Engine specs	4 stroke air cooled diesel engine	•	•	
	Direct injection	•	•	
	Mechanical fuel lift pump	•	•	
	Forced lubrication with oil pump	•	•	
	Full flow oil filtration	•	•	
	Torque adapter	•	•	
	Centrifugal speed governor	•	•	
	Crankcase in die-cast aluminum	•	•	
	Electric starting	•	•	
	Counter-clockwise rotation (from power take-off side)	•	•	
	Aluminum alloy independent heads	•	•	
	Independent and replaceable cast iron cylinders	•	•	
	Automatic extra fuel starting device	•	•	
	Air cooled by fan	•	•	
	Power take-off on crankshaft	•	•	
Power take off on Flywheel	-	-		
Technical features	Cylinder	2	2	
	Bore (mm)	80	85	
	Stroke (mm)	65	75	
	Engine displ (cm³)	654	851	
	Injection system	DI	DI	
	Compression ratio	19:1	19:1	
Performance	Emission compliance	ECE R 24	ECE R 24 / EU STAGE V #	US TIER 4 FINAL
	Rating (kW/HP)			
	N (80/1269/CEE)ISO 1585	-	14.0/19.0	-
	NB ISO 3046 IFN	12.0/15.2	13.5/17.7	12.2/16.3
	NA ISO 3046 ICXN	10.0/14.0	12.7/16.3	-
Max torque (Nm@rpm)	32.0@2400	42.0@2200	37.8@2200	
Min idling speed (rpm)	1000		1000	
Fuel compatibility	EN 590	•	•	
	No 1 Diesel (US) - ASTM D 975-09 B - Grade 1-D S 15	•	•	
	No 1 Diesel (US) - ASTM D 975-09 B - Grade 1-D S 500	•	•	
	No 2 Diesel (US) - ASTM D 975-09 B - Grade 2-D S 15	•	•	
	No 2 Diesel (US) - ASTM D 975-09 B - Grade 2-D S 500	•	•	
	ARCTIC EN 590/ASTM D 975-09 B	•	•	
	High Sulfur Fuel < 5000 ppm (< 0.5%)	•	•	
	High Sulfur Fuel > 5000 ppm (> 0.5%)	•	•	
	Military NATO Fuels F34 - F35 - F44 - F63 - F64 - F65 *	•	•	
	Military US Fuels JP5 - JP8 (AVTUR) *	•	•	
Civil Jet Fuels Jet A/ A1*	•	•		
Service features	Fuel tank capacity (l)	4	4	
	Oil sump capacity (l)	1.5	1.7	
	Oil consumption (kg/h)	0.007	0.0085	
	Oil change interval std/synthetic (hr)	250 **	250 **	
	Oil filter change interval std/synthetic (hr)	250 **	250 **	
	Valve adjustment	500	500	
Physical characteristics	H x L x W (fan excluded) (mm)	485x485x438	503.5x485x464	
	Dry weight (kg)	60	63	
	Daily service points - positions	1 side service	1 side service	
	Ambient operating temps (°C)	-5° +45° ***	-5° +45° ***	
	Gradeability-all round (intermittent-30 min) (deg)	25°	25°	
	Gradeability-all round (peak value-1 min) (deg)	35°	35°	
	Cap. of air required for correct combustion @3600 (l/min)	1050/875	1330/1110	
	Cap. of air required for correct cooling @3600 (l/min)	11700/9750	14200/11835	
Lubrication	SAE 15 W-40 API CF4/SG ACEA B2/E2	SAE 15 W-40 API CF4/SG ACEA B2/E2		

\* With restrictions \*\* According to operating conditions \*\*\* -32°C on demand # Available starting from 2019

# TECHNICAL SPECIFICATIONS

Model	KD 477/2	KD 625/2	KD 626/3	
Engine specs	4 stroke air cooled diesel engine	•	•	•
	Direct injection	•	•	•
	Mechanical fuel lift pump	•	•	•
	Forced lubrication with oil pump	•	•	•
	Full flow oil filtration	•	•	•
	Torque regulator	•	•	•
	Centrifugal speed governor	•	•	•
	Crankcase in die-cast aluminum	•	•	•
	Electric starting	•	•	•
	Counter-clockwise rotation (from power take-off side)	•	•	•
	Aluminum alloy independent heads	•	•	•
	Independent cast iron cylinders	•	•	•
	Automatic extra fuel starting device	•	•	•
	Air cooled by fan	•	•	•
	Power take-off on crankshaft	•	-	-
	Power take off on Flywheel	-	•	•
Technical features	Cylinder	2	2	3
	Bore (mm)	90	95	95
	Stroke (mm)	75	88	88
	Engine displ (cm <sup>3</sup> )	954	1248	1870
	Injection system	DI	DI	DI
	Compression ratio	19:1	17.5:1	17:1
Performance	Emission compliance	ECE R 24	ECE R 24	ECE R 24
	Rating (kW/HP)			
	N (80/1269/CEE)ISO 1585	16.8 /22.8	-	-
	NB ISO 3046 IFN	15.7 /21.0	18.8/25.5	26.0/35.4
	NA ISO 3046 ICXN	14.5 /19.7	16.8/23.0	23.5/31.8
Max torque (Nm@rpm)	55.0@2100	67.0@2000 52.5@3000	102.0@2000	
Min idling speed (rpm)	1000	1000÷1100	800-900	
Fuel compatibility	EN 590	•	•	•
	No 1 Diesel (US) - ASTM D 975-09 B - Grade 1-D S 15	•	•	•
	No 1 Diesel (US) - ASTM D 975-09 B - Grade 1-D S 500	•	•	•
	No 2 Diesel (US) - ASTM D 975-09 B - Grade 2-D S 15	•	•	•
	No 2 Diesel (US) - ASTM D 975-09 B - Grade 2-D S 500	•	•	•
	ARCTIC EN 590/ASTM D 975-09 B	•	•	•
	High Sulfur Fuel < 5000 ppm (< 0.5%)	•	•	•
	High Sulfur Fuel > 5000 ppm (> 0.5%)	•	•	•
	Military NATO Fuels F34 - F35 - F44 - F63 - F64 - F65 *	•	•	•
	Military US Fuels JP5 - JP8 (AVTUR) *	•	•	•
Civil Jet Fuels Jet A/ A1*	•	•	•	
Service features	Fuel tank capacity (l)	7	10	15
	Oil sump capacity (l)	2.5	2.8	5
	Oil consumption (kg/h)	0.011	0.013	0.017
	Oil change interval std/synthetic (hr)	200 **	250 **	250 **
	Oil filter change interval std/synthetic (hr)	200 **	250 **	250 **
	Valve adjustment	300	250	500
Physical characteristics	H x L x W (fan excluded) (mm)	565x577x483	599x633x557	686x770x495
	Dry weight (kg)	78	115	170
	Daily service points - positions	1 side service	1 side service	1 side service
	Ambient operating temps (°C)	-10° +45° ***	-10° +45° ***	-10° +45° ***
	Gradeability-all round (intermittent-30 min) (deg)	25°	25°	25°
	Gradeability-all round (peak value-1min) (deg)	35°	35°	35°
	Cap. of air required for correct combustion @3600 (l/min)	1500/1220	1600 (@3000)	2400 (@3000)
	Cap. of air required for correct cooling @3600 (l/min)	15800/13200	26300 (@3000)	38000 (@3000)
Lubrication	Oil type	SAE 15 W-40 API CF4/ SG ACEA B2/E2	SAE 10 W-40 API CF4/SG ACEA B2/E2	SAE 15 W-40 API CF4/ SG ACEA B2/E2

\* With restrictions \*\* According to operating conditions \*\*\*-32°C on demand

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