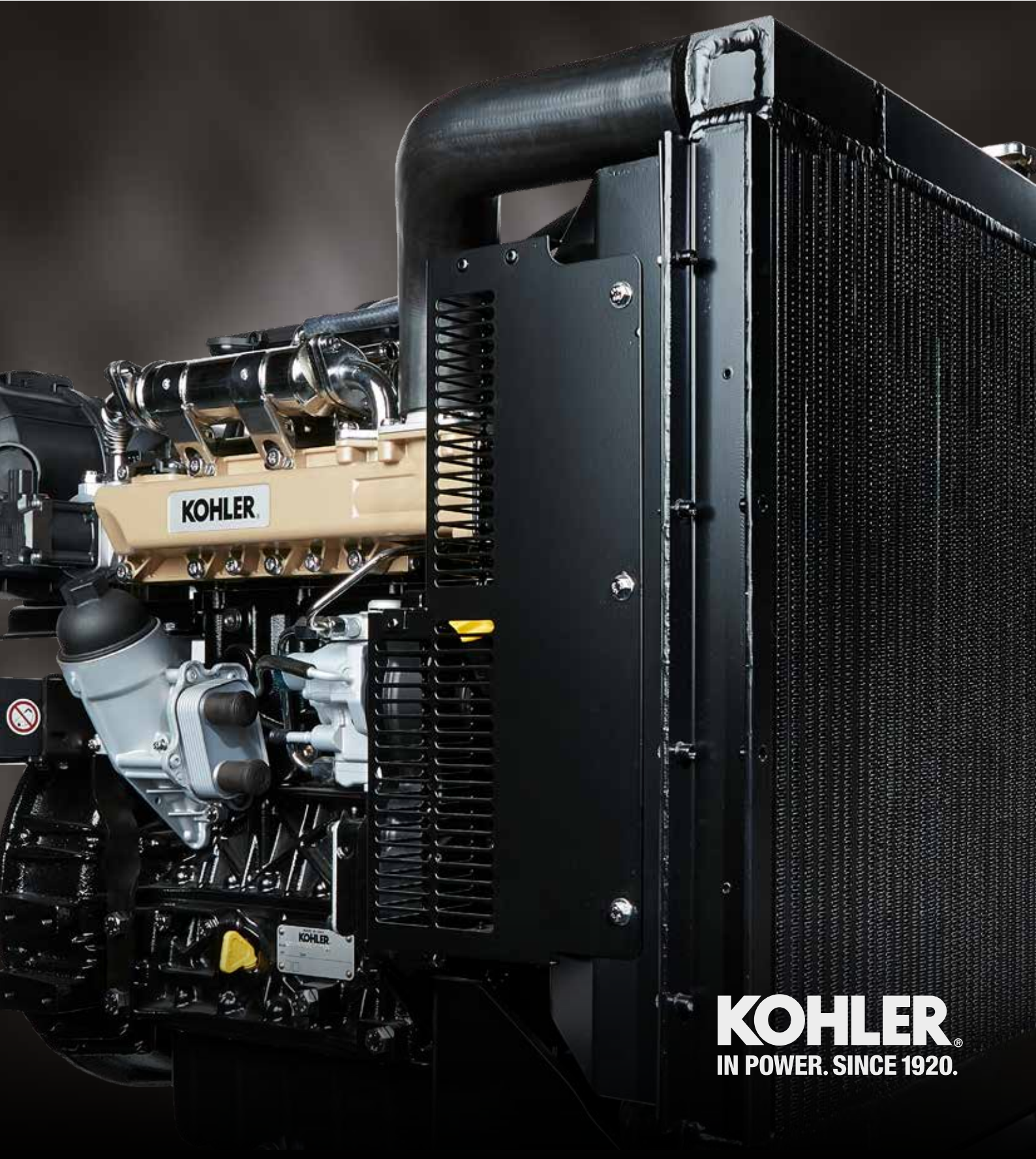


# KOHLER<sup>®</sup> DIESEL KDI

Power Pack version



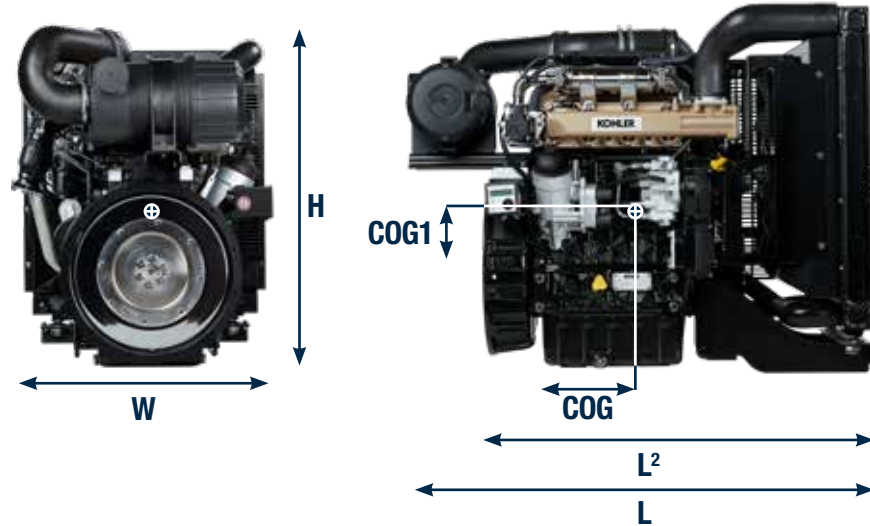
**KOHLER<sup>®</sup>**  
IN POWER. SINCE 1920.

# KDI POWER PACK

## DIESEL ENGINES

### STANDARD EQUIPMENT

Waste-gate turbocharger  
 Charge-air cooling  
 Blower fan  
 Fan guard  
 Radiator  
 Air cleaner  
 Oil filter/Fuel filter  
 DOC  
 Muffler



### TECHNICAL DATA

MODEL	KDI 1903TCR	KDI 2504TCR
Dimensions (L - L <sup>2</sup> - H - W) (mm)	1061 - 863 - 893 - 727	1151 - 969 - 893 - 717
COG - Center of gravity	223	275
COG1 - Center of gravity height	118	122
Dry weight (kg)	300	335
Daily service points - positions	1 side service	1 side service
Ambient operating temps (°C)	-40 to +50	-40 to +50
Gradeability-all round (continuous) (deg)	25	25
Gradeability-all round (intermittent-1min) (deg)	35	35

QUICK SPECIFICATIONS	KDI-TCQ 1903U3/26	KDI-TCF 1903U4/26	KDI-TCR 1903E5/26	KDI-TC 1903E5/26
CYLINDERS / FIE	3 / Turbo Common Rail	3 / Turbo Common Rail	3 / Turbo Common Rail	3 / Turbo Common Rail
MAX POWER kW (hp)@rpm **	42 (56) @ 2600	42 (56) @ 2600	42 (56) @ 2600	37 (50) @ 2600
MAX TORQUE Nm@rpm **	225 Nm @ 1500	225 @ 1500	225 @ 1500	170 Nm @ 1500
EMISSION COMPLIANCE	US Tier 3 Equivalent	EU Stage IIIB US TIER 4 Final	EU STAGE V US TIER 4 Final	EU STAGE V US TIER 4 Final
KOHLER Flex Emissions Management system	U3 (EGR)	U4 (EGR+DOC)	E5 (EGR+DOC+DPF)	E5 (EGR+DOC+DPF)
AFTERCOOLER	•	•	•	-

QUICK SPECIFICATIONS	KDI-TCK 2504U3/26	KDI-TCF 2504U4/26	KDI-TCR 2504E5/26	KDI-TC 2504E5/26
CYLINDERS / FIE	4 / Turbo Common Rail	4 / Turbo Common Rail	4 / Turbo Common Rail	4 / Turbo Common Rail
MAX POWER kW (hp)@rpm **	55.4 (74) @ 2600	55.4 (74) @ 2600	55.4 (74) @ 2600	50 (67) @ 2600
MAX TORQUE Nm@rpm **	300 @ 1500	300 @ 1500	315 @ 1500	236 @ 1500
EMISSION COMPLIANCE	EU Stage IIIA US Tier 3 Equivalent	EU Stage IIIB US TIER 4 Final	EU STAGE V US TIER 4 Final	EU STAGE V US TIER 4 Final
KOHLER Flex Emissions Management system	U3	U4 (EGR+DOC)	E5 (EGR+DOC+DPF)	E5 (EGR+DOC+DPF)
AFTERCOOLER	•	•	•	-

MODEL	KDI 1903TCR	KDI 2504TCR	
ENGINE SPECS	In crankcase camshaft, gear train driven	•	•
	Pushrod - rocker arms timing with hydraulic tappets	•	•
	Cast iron cylinder head	•	•
	Closed crankcase ventilation system	•	•
TECHNICAL FEATURES	Electronic engine management	•	•
	Cylinder	3	4
	Bore (mm)	88	88
	Stroke (mm)	102	102
	Engine displ (cm <sup>3</sup> )	1861	2482
	Air intake	Turbo charged aftercooled	Turbo charged aftercooled
	Injection system	DI	DI
	Injection Equipment	Common rail (2000 bar)	Common rail (2000 bar)
	Valves per cylinder	4	4
	Cooling	Liquid	Liquid
STARTABILITY	Unaided (°C)	down to -19	down to -19
	Aided (with manifold grid heater)(°C)	below -19	below -19
FUEL CONSUMPTION	Best point (g/kWh)	215	210
	Max power (g/kWh@2400 rpm)	237	226
FUEL COMPATIBILITY	EN 590	•	•
	No 1 Diesel (US) - ASTM D 975-09 B - Grade 1-D S 15	•	•
	No 2 Diesel (US) - ASTM D 975-09 B - Grade 2-D S 15	•	•
	Arctic EN 590/ASTM D 975-09 B (No petroleum added)	•	•
LUBRICATING SYSTEM	Maximum oil temperature at full rated speed: continuous (C°)	110	110
	Maximum oil temperature at full rated speed: intermittent (C°)	110	110
	Total system capacity - including pipes, filters etc. (l)	8.9	11.5
	Oil type	SAE 5W 40 low SAPS/ EURO 6 API CJ-4	SAE 5W 40 low SAPS/ EURO 6 API CJ-4
	Oil consumption at maximum rating (%of fuel consumption)	0.1	0.1
	COOLING SYSTEM	Coolant capacity (radiator only) (l)	6.5
Cooling fluid: 50/50 water/antifreeze		•	•
Cooling liquid maximum temperature (C°)		110°	110°
Coolant specification approved		Etylenglycol/ Propylenglycol	Etylenglycol/ Propylenglycol
Maximum working ambient temperature (C°)		55°	55°
Fan type		400 pusher / suction	450 pusher / suction
BATTERY	Battery -minimum capacity recommended (Ah)	90	90
	Battery - minimum cold cranking capacity (Ah)	110	110
SERVICE FEATURES	Oil/filter change interval std/synthetic (hr)	500-750*	500-750*
	Alternator belt replacement	36mth	36mth
	Coolant change	24 mth	24 mth
VIBRATION	Max engine excitation at mounting locations	5g	5g
AUXILIARY PTO (3RD OPTIONAL)	Max torque (Nm)	40 standard - 100 on demand	40 standard - 100 on demand
	Drive ratio	1.23 times engine speed	1.23 times engine speed
	Provision for a double Gr.2 tandem hydraulic pump	•	•

\* according to operating conditions

\*\* for complete power and torque curves please refer to specific literature available on website Kohlerpower.it

For more information, contact your KOHLER source of supply.  
Kohler Co. reserves the right to make modifications without prior notice.

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

**KOHLERENGINES.COM**

Printed in Italy    ED0035585180    Rev.00 10/18 ENG    KOHLER CO.