

VECTOR⁶⁻⁸⁻¹²⁻¹⁶

for industrial application

V 90° - 2.5 l/cyl - TCA - 4 Valves - Common Rail

Power: up to 80 kW/cyl (depending on the requested mission and durability)
Rated speed: up to 2100 rpm
Torque: up to 465 Nm/cyl
Idle speed: 600 rpm (L) - 2300 rpm (H)
Rotation (from flywheel): anticlockwise
Emissions: engines comply/will comply the Euro 2-3, Tier 2-3 rules
Voltage: 12-24 V

Main components:	Description
Injection	Direct
Engine control	Electronic (12-24 V)
Injection system	Bosch - Common Rail
Cold start	Down to -15 °C
Cold start (aided)	Down to -25 °C
Noise (ISO 3744)	≈100 dB (A) @ max Power (without pre-injection)
PTO	4 x 400 Nm, on gears train (front of engine), plus crankshaft pulley
Low pressure fuel pump:	driven by gear (on PTO position)
Cooling system (primary):	for engine and oil cooler
Cooling system (secondary):	for aftercooler (if water-air heat exchanger)
Coolant pumps:	one or two, driven by gears (on PTO position)
Coolant pumps inlet:	radial (adjustable) or axial
Coolant outlet:	adjustable (only for the secondary)
Thermostat:	external
Aftercooler:	water to water (if on engine)
Turbocharger:	two, on rear position; parallel or oblique axis
Turbocharger outlet connection:	straight, V-clamp
Air inlet connection:	axial, V-clamp
Grid heater (for aided cold start):	inside air inlet manifold
Block heater (for the water)	predisposition for electrical heaters
Flywheel:	for manual or automatic gearbox
Flywheel housing:	SAE1/SAE0 - aluminium alloy or cast iron
Oil sump:	up to 40-50 % (continuous-ramp)
Oil filling:	on oil sump
Oil refilling:	manual or automatic
Oil sensors:	two, low oil level (automatic refilling) and very low oil level (minimum)
Oil dipstick (with pipe):	short, long, flexible
Oil filters:	two, on engine
Alternator:	14-24 V, 190-90 A
Air compressor:	up to 630 cm ³ , driven by gear (on PTO position, possible in tandem with fuel pump)
Starter motor:	24V - 8.5 kW (one)
Heat shields:	for turbines and exhaust manifolds
Engine paint:	water or solvent paint
Heated fuel pre-filter (with priming pump)	external
Fine fuel filter	external
Blow-by filter	recirculated, on engine or external
Engine brackets	2 on front and 2 on rear)
Main dimensions:	
Width (from turbo to turbo centre line)	1206 mm
Height (crankshaft to cover)	586 mm
Height (crankshaft to oil pan)	307 mm (railway sump), 500 mm (high slope sump)
Length (flywheel to water pump)	6=1258 mm - 8=1374 mm - 12=1754 mm - 16=2134 mm
Weight (dry)	8= 1570 kg