



vetus

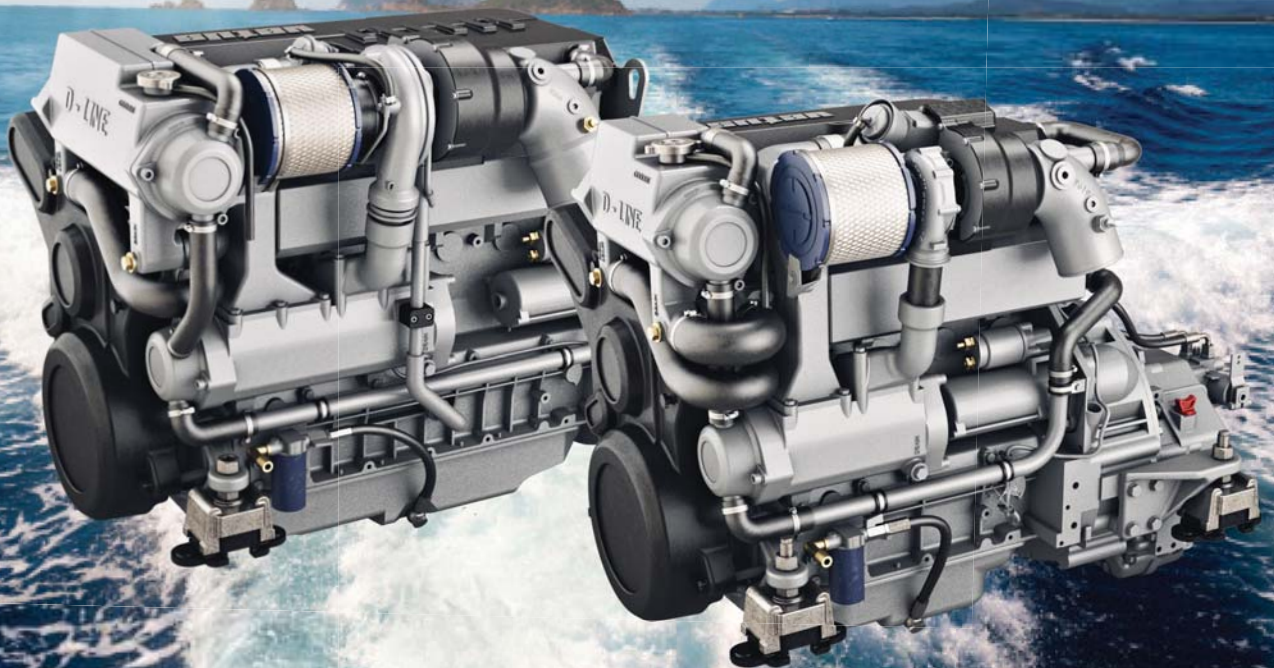
WWW.VETUS.COM



ENGINES

D-LINE

COMMON-RAIL ENGINES



VETUS is proud to introduce the evolution of the D-Line engines:

- **Innovative water cooled top cover for heat & noise reduction**
- **High power & torque, extremely suitable for power hydraulics**
- **Highly reliable & durable engine block with low revolutions**
- **High output alternator as standard**
- **Smaller air filter and water heater connections as standard**
- **CAN bus system with SAEJ1939 protocol**
- **Meets the new RCD2013/53/EU emission regulations**
- **Power output from 122 - 210 hp**

D-LINE

COMMON-RAIL ENGINES



VETUS COMMON RAIL D-LINE ENGINES

- Power output from 122 - 210 hp
- CAN bus system with SAEJ1939 protocol
- Meets RCD2013/53/EU emission regulations
- Silent, highly reliable and durable engine blocks

VETUS introduces a new range... The VETUS D-Line common-rail engines run smoothly, have a high power and torque, low revolutions and are highly reliable and durable. They are in conformity with the new RCD2 emissions regulations. Extremely suitable for power hydraulics on board. These engines have a CAN bus system with a SAEJ1939 protocol but can easily work with NMEA2000 systems on board as well.

These new VETUS D-Line engines now have a water cooled top cover in order to reduce the heat in the engine room but also to reduce the engine noise of an already quiet engine block.

This top cover can also be used as a step. Other features we have added to the new D-Line engines are: smaller air filters in order to save space in the engine room, new exhaust manifold insulation, high output alternators as standard (160 Amps) and a 2nd alternator as an option. Electric fuel pumps are standard (ump pumps are sometimes installed under head compartments to handle shower waste water).

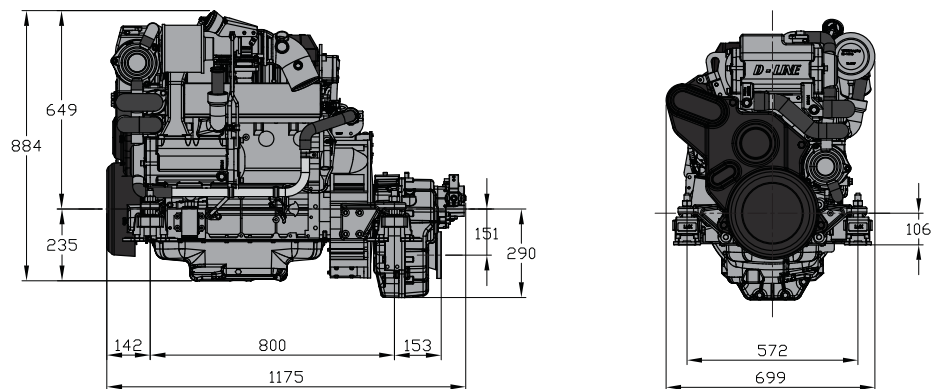
Options like a calorifier /hot water tank kit, PTO to install a hydraulic pump, fly-bridge instrument panel, trolling valve, etcetera can be ordered separately but will be installed on the engine when ordered as a complete package. Furthermore, for the 6-cylinder there is a possibility for a separate fuel filter kit.

To help you select the best possible solution for your vessel, our skilled dealer network is available for advice and installation.

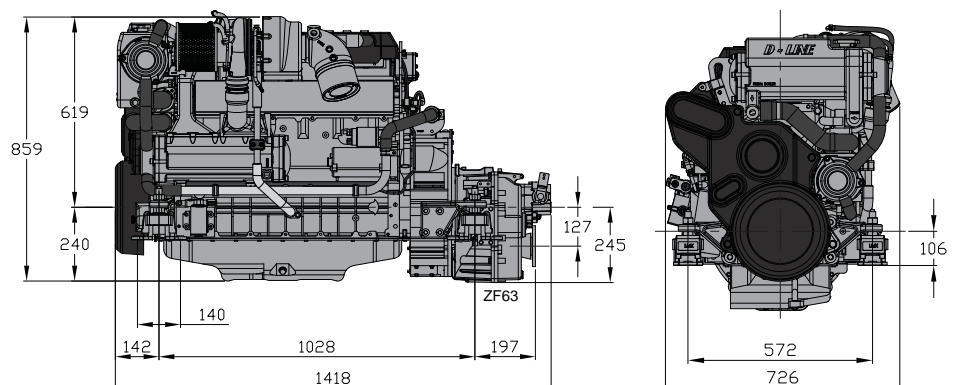
Durability, reliability and performance

- All D-Line engines are marinised in-house by VETUS
- These VETUS engines are very reliable and also highly fuel efficient
- Innovative cooling system to improve performance and reduce sound levels

Dimensions VD4.120 & VD4.140



Dimensions VD6.170 & VD6.210





TECHNICAL SPECIFICATIONS

Supplied as standard with:

- 1 Instrument panel type MPA34B
- 4 Flexible engine mounts LMX140 / LMX210



Engine model	VD4.120	VD4.140	VD6.170	VD6.210
CAN bus	SAE J1939	SAE J1939	SAE J1939	SAE J1939
*Max. output at flywheel (ISO 8665)	90 kW (122 hp)	103 kW (140 hp)	125 kW (170 hp)	155 kW (210 hp)
*Max. output at propeller shaft (ISO 8665)	86 kW (117 hp)	98.9 kW (134.4 hp)	120 kW (163 hp)	149 kW (203 hp)
Maximum rpm	2400	2400	2400	2400
Bore x stroke	101 mm x 126 mm	101 mm x 126 mm	101 mm x 126 mm	101 mm x 126 mm
Capacity	4040 cm ³	4040 cm ³	6060 cm ³	6060 cm ³
Number of cylinders	4 in line	4 in line	6 in line	6 in line
Cooling system	intercooling	intercooling	intercooling	intercooling
Compression ratio	18:01	18:01	18:01	18:01
Firing order	1-3-4-2	1-3-4-2	1-5-3-6-2-4	1-5-3-6-2-4
Alternator	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.
Optional 2nd alternator	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.	12 Volt - 160 Amps. 24 Volt - 80 Amps.
Torque	449 Nm / 1600 rpm	520 Nm / 1600 rpm	680 Nm / 1600 rpm	810 Nm / 1600 rpm
Idle speed	800 rpm	800 rpm	800 rpm	800 rpm
Fuel consumption at max. rpm	235 g / kW.h	235 g / kW.h	240 g / kW.h	240 g / kW.h
Gearbox (standard)	ZF45	ZF45	ZF63	ZF63
Ratio	2.2 / 2.51 / 3.1	2.2 / 2.51 / 3.1	1.51 / 1.93 / 2.48 / 2.78:1	1.51 / 1.93 / 2.48 / 2.78:1
Gearbox (optional)	ZF45A 1.26:1 / 1.51 / 2.03 / 2.44:1 ZF63IV 1.29 / 1.56 / 1.99 / 2.47:1	ZF45A 1.26:1 / 1.51 / 2.03 / 2.44:1 ZF63IV 1.29 / 1.56 / 1.99 / 2.47:1	ZF63A 1.22 / 1.56 / 2.04 / 2.52:1 ZF63IV 1.29 / 1.56 / 1.99 / 2.47:1	ZF63A 1.22 / 1.56 / 2.04 / 2.52:1 ZF63IV 1.29 / 1.56 / 1.99 / 2.47:1
Dry weight (incl. standard gearbox)	532 kg	532 kg	657 kg	657 kg
Fuel lift pump	1.5 m	1.5 m	1.5 m	1.5 m
Max. installation angle (backwards)	15°	15°	15°	15°
Max athwartship angle (continuously)	30°	30°	26°	26°
Calorifier connection kit	optional	optional	optional	optional
Electric oil drain pump	standard	standard	standard	standard
P.T.O. flange to install hydr. pump	optional	optional	optional	optional
Instrument panel	MPA34B	MPA34B	MPA34B	MPA34B
Instruments	Key switch Tacho meter/hour counter Volt meter Oil pressure gauge Temperature gauge	Key switch Tacho meter/hour counter Volt meter Oil pressure gauge Temperature gauge	Key switch Tacho meter/hour counter Volt meter Oil pressure gauge Temperature gauge	Key switch Tacho meter/hour counter Volt meter Oil pressure gauge Temperature gauge
Acoustic alarm	Oil pressure Temperature Charging current fresh & raw water	Oil pressure Temperature Charging current fresh & raw water	Oil pressure Temperature Charging current fresh & raw water	Oil pressure Temperature Charging current fresh & raw water
Electric circuit protection	Resetable circuit breaker	Resetable circuit breaker	Resetable circuit breaker	Resetable circuit breaker
Certification	2013/53/EU RCD II	2013/53/EU RCD II	2013/53/EU RCD II	2013/53/EU RCD II

D-LINE

COMMON-RAIL ENGINES



Equipment selection table for D-Line series



VDR



FTR470



75330VTEB



MGP

Engine model	VD4.120		VD4.140		VD6.170		VD6.210	
Gearbox reduction	2,2:1	2,5:1	2,2:1	2,5:1	2,04:1	2,5:1	2,04:1	2,5:1
VETUS water lubricated propeller shaft system								
* Shaft diam., Duplex 1-4462	40	40	40	40	45	45	45	50
VETUS manganese bronze propeller								
* 3- or 4-blade	on request							
VETUS flexible couplings								
* Bullflex type	12	12	12	16	16	16	16	32
VETUS intermediate flange between gearbox and flexible coupling								
* Type, only suitable for ZF gearbox	ZF45A: CT50009; ZF45: CT50068; ZF63(A)/16: CT50009; ZF63(A)/32: CT50065							
VETUS constant velocity joint with integrated thrust bearing								
* Type	depending on the application							
* Dimensions gearbox flange	ZF45: 6", ZF45A: 5", ZF63: 5", ZF63A: 5"							
VETUS water strainers								
* hose connection (mm)	32							
* water strainer, type FTR470 or FTR330:	330 or 470/32							
* water strainer kit, type	WKIT33032							
VETUS water separator / fuel filter								
* hose connection suction/return in mm	12 - 10							
* water separator / fuel filter, type:	(75)330VTEB or WS720							
VETUS water-injected exhaust systems								
* exhaust hose, diam. (mm)	100				125			
* waterlock, type	MF or MGP				MF or MGS			
* muffler, type	MP100				n.a.			
* gooseneck, type	LT102				LT127			
* exhaust transom connection, type	TRCR/PV or SV							
* anti-siphon, type AIRVENT or ASD	AIRVENTV or -H/ASDV or -H							
VETUS engine remote controls								
* to be selected	SICO, SISCO, AFSTZU, RCTOPB, RCTOPS, AFSTTOP, EC4							
VETUS maintenance free batteries								
* voltage	12							
* start battery, min. Ah	108							
* light battery, Ah	to be selected							
VETUS louvred air suction vents								
* per engine, type ASV, SSV or SSVL	2 x 60 + 2 x 70		4 x 70		2 x 80 + 2 x 90		4 x 50 + 4 x 60	

Complementary services

A VETUS engine brings with it 50 years of experience in producing reliable and compact marine engines, ensuring safe and continuous boating pleasure for all customers. We believe that our customers deserve the best when choosing VETUS, therefore all our engines come with a 5-year warranty in accordance with the VETUS Guarantee and Service conditions. Furthermore, all our customers can rely on the VETUS dealer network, which provides service, spare parts, and a specialised point of contact worldwide.

For more information check the VETUS warranty conditions on www.vetus.com.

