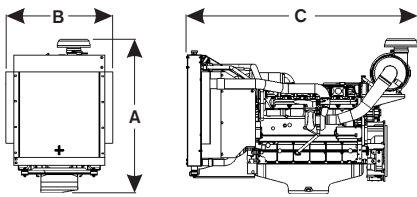


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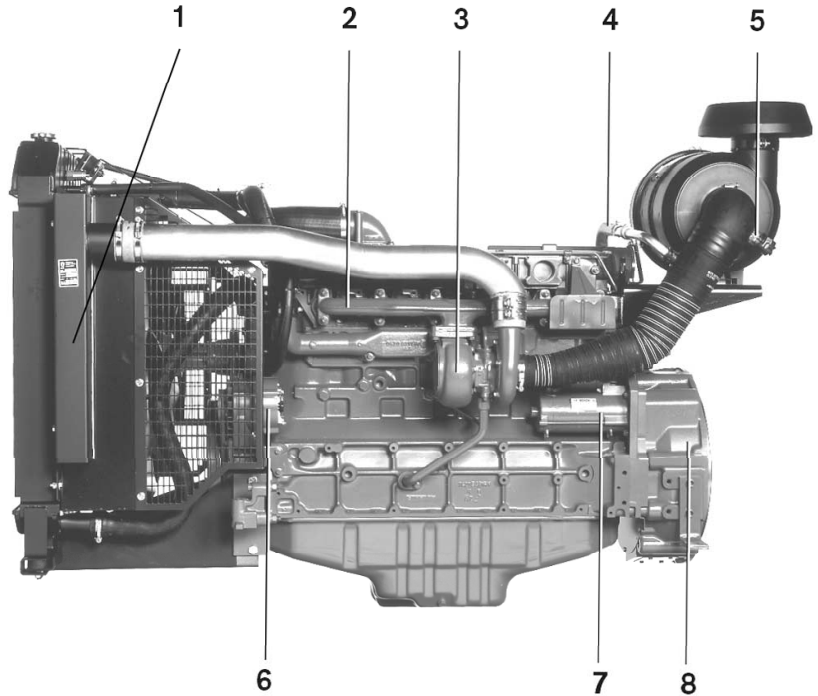
Gen Set Engine

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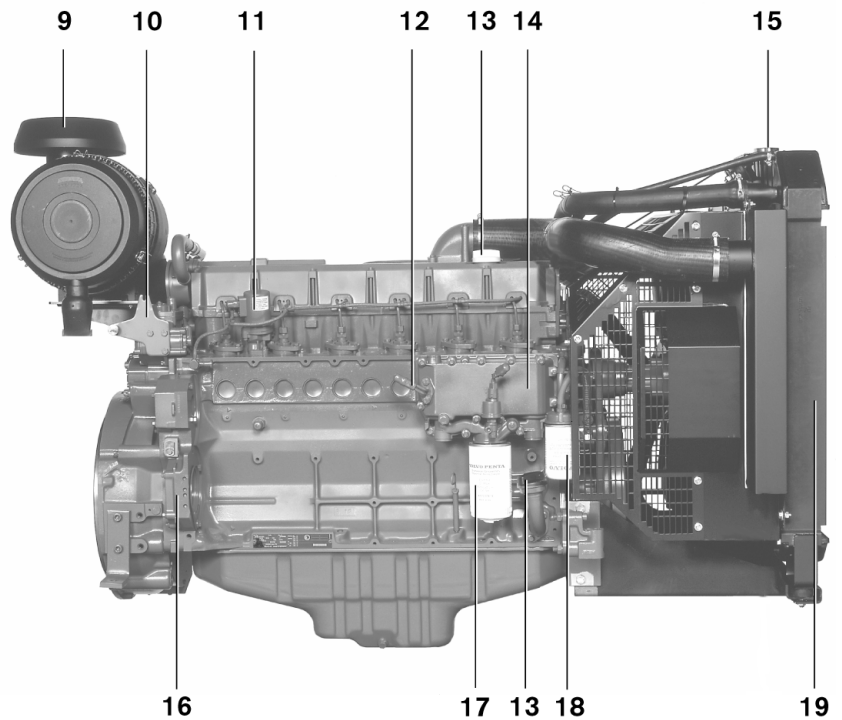
- Turbocharged
- Air to air intercooled
- Diesel fuel
- Displacement indication (l)
- Generation
- Version
- Generator drive
- Emission controlled



mm / in
 A = 1240 / 48.8
 B = 866 / 39.1
 C = 1881 / 74.0



1. Charged air to cooler
2. Exhaust manifold
3. Turbocharger
4. Closed loop crank case breather system
5. Air restriction indicator
6. Alternator
7. Starter motor
8. Flywheel housing SAE 2
9. Air filter
10. Speed governor
11. Stop solenoid
12. Coolant heater (option)
13. Oil filling
14. Oil cooler
15. Radiator cap
16. Engine transmission with PTO
17. Oil filter
18. Fuel filter
19. Radiator



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Volvo Penta reserves the right to make changes at any time, without notice, as to technical data, prices, materials, standard equipment, specifications and models, and to discontinue models. The engine illustrated may not be entirely identical to production standard engines.

Technical Data

General

In-line four-stroke diesel engine with direct injection	Number of cylinders	6
Turbocharged and air to air intercooled	Displacement, total	7.15 liter / 4.36 in ³
Rotation direction, anti-clockwise viewed towards flywheel	Firing order	1-5-3-6-2-4
	Bore	108 mm / 4.25 in
	Stroke	130 mm / 5.12 in
Dry weight, kg / lb	Engine incl. cooling system	760 / 1674
Wet weight, kg / lb	Engine incl. cooling system	804 / 1773
	Compression ratio	17.5:1

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Performance

	Speed, rpm	1500	1800
Prime Power without fan	kW / hp	140.0 / 190.4	149.0 / 202.6
Standby Power without fan	kW / hp	153.0 / 208.0	163.0 / 221.0
Fan power consumption			
Standby cooling system	kW / hp	3.8 / 5.2	6.6 / 9.0
Tropical cooling system	kW / hp	8.2 / 11.1	9.2 / 12.5
Mean piston speed	m/s / ft/sec	6.5 / 21.3	7.8 / 25.6
Effective mean pressure at Prime Power	MPa / psi	1.7 / 247	1.5 / 218
Max combustion pressure at Prime Power	MPa / psi	13.5 / 1958	13.0 / 1885
Total mass moment of inertia, J (mR ²)	kgm / lbft ²	3.09 / 73.3	

Lubrication system

Lubricating oil consumption at Standby Power	liter/h / US gal/h	0.1 / 0.02	0.1 / 0.02
Oil system capacity including filters	liter / US gal	20 / 5.3	
Oil change interval	h	500	
Minimum quality API-CF			

Fuel system

Specific fuel consumption at			
50% of Prime Power	g/kWh / lb/hph	204 / 0.330	215 / 0.348
75% of Prime Power	g/kWh / lb/hph	198 / 0.321	205 / 0.332
100% of Prime Power	g/kWh / lb/hph	197 / 0.319	203 / 0.329

Intake and exhaust system

Air consumption			
at Standby Power (at 25 °C)	m ³ /h / cu.ft/h	608 / 21472	830 / 29311
Max allowable air intake restriction	kPa / In wc	3 / 12	
Heat rejection to exhaust			
at Standby Power	kW / BTU/min	109 / 6199	121 / 6881
Exhaust gas temperature after turbine			
at Standby Power	°C / °F	476 / 914	433 / 837
Max allowable back-pressure in exhaust line	kPa / In wc	5 / 20	7 / 28
Exhaust gas flow			
at Standby Power	m ³ /min / cfm	26.7 / 943	31.3 / 1105

Cooling system

Heat rejection radiation from engine at Standby Power	kW / BTU/min	18.4 / 1046	19.6 / 1115
Heat rejection to coolant at Standby Power	kW / BTU/min	77.8 / 4424	84.9 / 4828
Fan power consumption			
standard cooling system	kW / hp	3.8 / 5.2	6.6 / 9.0
tropical cooling system	kW / hp	8.2 / 11.1	9.2 / 12.5

Power Standards

The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271. The technical data applies to an engine without cooling fan and operating on a fuel with calorific value of 42.7 MJ/kg (18360 BTU/lb) and a density of 0.84 kg/liter (7.01 lb/US gal), also where this involves a deviation from the standards. Power output guaranteed within 0 to +2% at rated ambient conditions at delivery. Ratings are based on ISO 8528.

Engine speed governing in accordance with ISO 3046/IV, class A1 and ISO 8528-5 (G3 with electronic speed governor)

Rating Guidelines

PRIME POWER rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A10 % overload capability is available for this rating.

STANDBY POWER rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating.

Exhaust emissions.

The engine exhaust emissions complies with EPA, CARB and TA-luft regulations.

VOLVO PENTA

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