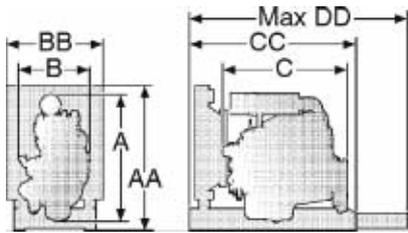


TAD740GE

Gen Set Engine - Gen Pac

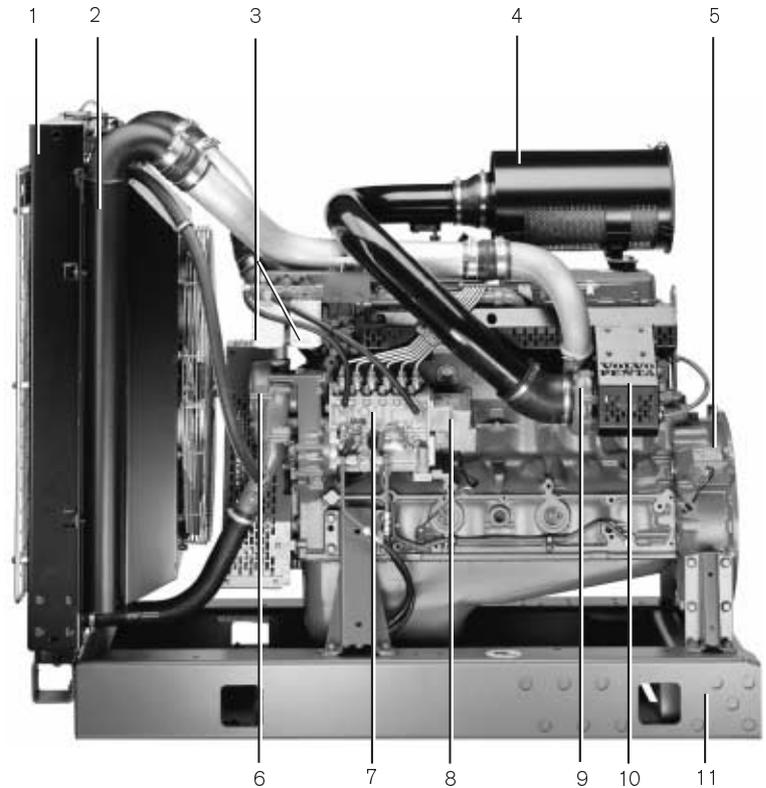
TAD740GE

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

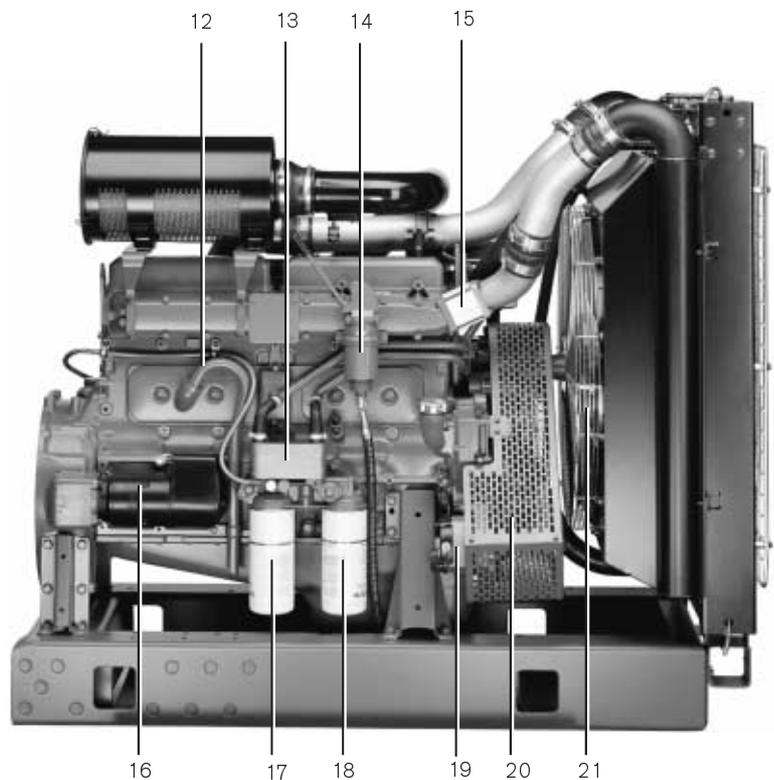


mm / in AA = 1490.5 / 58.7
 A* = 1372 / 54.0 BB = 945 / 37.2
 B* = 945 / 37.2 CC = 1732 / 68.2
 C* = 1697 / 66.8 DD = 2722 / 107.2
 * Incl. radiator and intercooler

Gen Pac - Gen Set Engine mounted on an expandable base frame. Complete unit with engine, radiator, radiator core guard, fan, fan and belt guard providing reduced delivery time and installation cost and simplified transportation.



1. Tropical radiator
2. Air to air intercooler
3. Twin fuel filters of throwaway type
4. Air filter
5. Flywheel housing SAE2
6. Gear driven coolant pump
7. Fuel injection pump
8. Electric speed governor
9. Turbocharger
10. Heat guard
11. Expandable base frame (optional)
12. Crankcase ventilation
13. Oil cooler
14. Oil drain pump (optional)
15. Inlet manifold heater
16. Starter motor
17. Full-flow oil filter of spin-on type
18. By-pass oil filter of spin-on type
19. Alternator
20. Belt guard
21. Fan guard



TAD740GE

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.

Technical Data

General

In-line four-stroke diesel engine with direct injection	Number of cylinders	6
Turbocharged and air to air intercooled	Displacement, total	7.28 liter / 445 in ³
Rotation direction, anti-clockwise viewed towards flywheel	Firing order	1-5-3-6-2-4
	Bore	107 mm / 4.21 in
Dry weight, kg/lb Engine only*) 901 / 1987 Gen Pac 1128 / 2487	Stroke	135 mm / 5.31 in
Wet weight, kg/lb Engine only*) 964 / 2126 Gen Pac 1196 / 2637	Compression ratio	17.2:1

*) Including radiator and intercooler

TAD740GE	Speed, rpm	1500	1800
Performance	Test no.	24001183	24001190
Prime Power with fan	kW / hp	217 / 295	222 / 302
Continuous Standby Power with fan	kW / hp	217 / 295	222 / 302
Maximum Standby Power with fan	kW / hp	239 / 325	245 / 333
Mean piston speed	m/s / ft/sec	6.5 / 21.6	7.8 / 25.6
Effective mean pressure at Prime Power	MPa / psi	2.5 / 362	2.2 / 318
Max combustion pressure at Prime Power	MPa / psi	16.3 / 2360	15.8 / 2287

Lubrication system

Lubricating oil consumption at Prime Power	liter/h / US gal/h	0.04 / 0.011	0.05 / 0.013
Maximum Standby Power	liter/h / US gal/h	0.05 / 0.013	0.06 / 0.016
Oil system capacity including filters	liter		29
Oil change intervals / specifications, VDS-2	h		600
VDS, ACEA E3	h		400
ACEA E1, E2, API CD, CF, CF-4, CG-4	h		200

Fuel system

Specific fuel consumption at			
25% of Prime Power	g/kWh / lb/hph	227 / 0.368	230 / 0.373
50% of Prime Power	g/kWh / lb/hph	200 / 0.324	205 / 0.332
75% of Prime Power	g/kWh / lb/hph	198 / 0.321	199 / 0.323
100% of Prime Power	g/kWh / lb/hph	200 / 0.324	200 / 0.324
Specific fuel consumption at			
25% of Maximum Standby Power	g/kWh / lb/hph	219 / 0.355	230 / 0.373
50% of Maximum Standby Power	g/kWh / lb/hph	200 / 0.324	203 / 0.329
75% of Maximum Standby Power	g/kWh / lb/hph	198 / 0.321	199 / 0.323
100% of Maximum Standby Power	g/kWh / lb/hph	201 / 0.326	202 / 0.328

Intake and exhaust system

Air consumption at Prime Power (at 27 °C)	m ³ /min / cfm	14.7 / 519	17.6 / 622
Maximum Standby Power (at 27 °C)	m ³ /min / cfm	15.6 / 551	18.6 / 657
Max allowable air intake restriction	kPa / In wc		5 / 20.1
Heat rejection to exhaust at Prime Power	kW / BTU/min	160 / 9099	164 / 9327
Maximum Standby Power	kW / BTU/min	180 / 10237	184 / 10464
Exhaust gas temperature after turbine at Prime Power	°C / °F	525 / 977	470 / 878
Maximum Standby Power	°C / °F	540 / 1004	485 / 905
Max allowable back-pressure in exhaust line	kPa / In wc		10 / 40
Exhaust gas flow at Prime Power	m ³ /min / cfm	39.2 / 1384	43.0 / 1519
Maximum Standby Power	m ³ /min / cfm	41.8 / 1476	46.3 / 1653

Cooling system

Heat rejection radiation from engine at Prime Power	kW / BTU/min		13 / 737
Maximum Standby Power	kW / BTU/min		15 / 850
Heat rejection to coolant at Prime Power	kW / BTU/min		99 / 5630
Maximum Standby Power	kW / BTU/min	106 / 6028	110 / 6256
Fan power consumption	kW / hp	8 / 11	14 / 19

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)

Exhaust emissions.

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

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. A 10 % overload capability is available for this rating.

CONTINUOUS STANDBY POWER rating corresponds to ISO Power. It is applicable for supplying standby electrical power at variable load for an unlimited number of hours in the event of normal utility power failure. A 10 % overload capability is available for this rating.

MAXIMUM 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.

VOLVO PENTA

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