

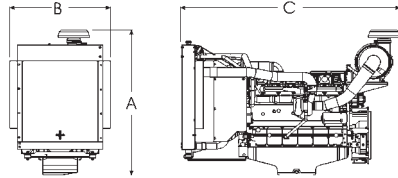
VOLVO PENTA GENSET ENGINE

TAD720GE

1500 rpm, 153 kW (209 hp) – 1800 rpm, 163 kW (222 hp)

TAD720GE

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

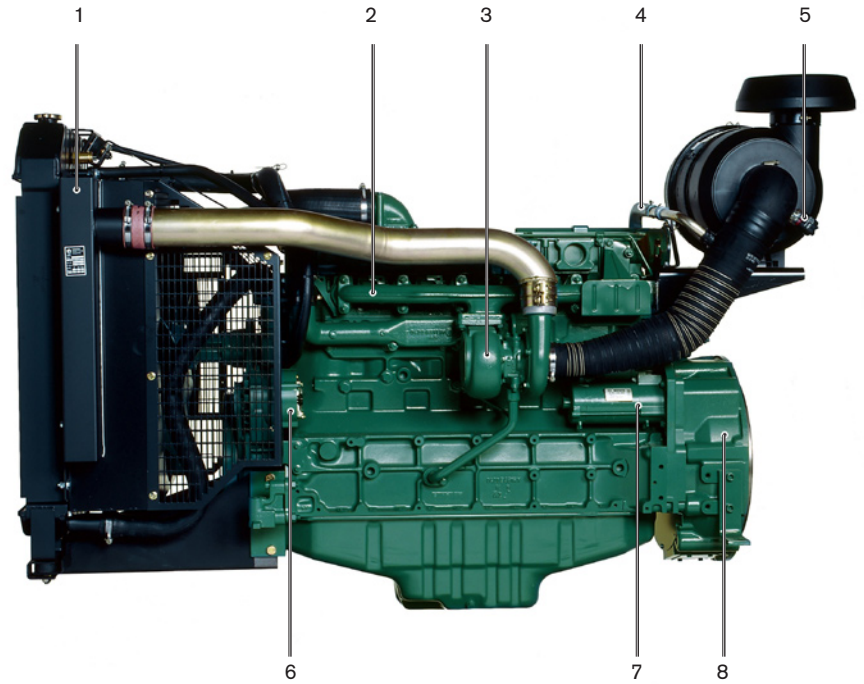


mm / in.

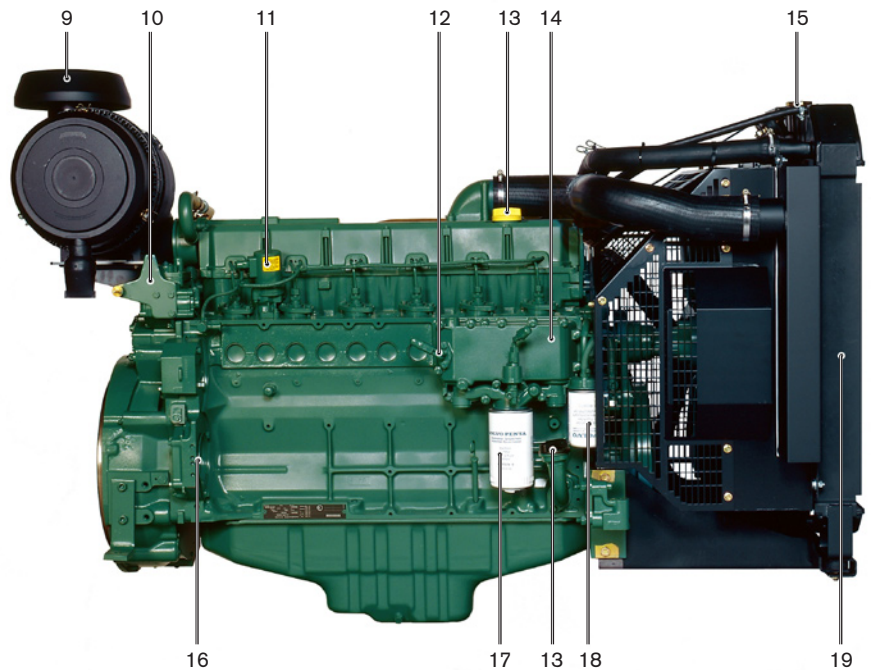
A = 1240 / 48.8

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 / EDC4 actuator
11. Stop solenoid (mechanical engine)
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



TAD720GE

Technical Data

General

Engine designation	TAD720GE	
No. of cylinders and configuration	in-line 6	
Method of operation	4-stroke	
Bore, mm (in.)	108 (4.25)	
Stroke, mm (in.)	130 (5.12)	
Displacement, l (in ³)	7.15 (436)	
Compression ratio	17.5:1	
Dry weight, kg (lb)	760 (1674)	
Wet weight, kg (lb)	804 (1773)	

Performance	1500 rpm	1800 rpm
kW (hp)		
Prime Power	140 (190)	149 (203)
Max Standby Power	153 (209)	163 (222)

Lubrication system	1500 rpm	1800 rpm
Oil consumption, liter/h (US gal/h)		
Max Standby Power	0.1 (0.02)	0.1 (0.02)
Oil system capacity incl filters, liter.....	20	

Fuel system	1500 rpm	1800 rpm
Specific fuel consumption at Prime Power, g/kWh (lb/hph)		
50 %	204 (0.330)	215 (0.348)
75 %	198 (0.321)	205 (0.332)
100 %	197 (0.319)	203 (0.329)

Intake and exhaust system	1500 rpm	1800 rpm
Air consumption at 25°C, m ³ /min (cfm)		
Max Standby Power	10.1 (357)	13.8 (487)
Max allowable air intake restriction, kPa (In wc)	3 (12)	
Heat rejection to exhaust, kW (BTU/min)	1500 rpm	1800 rpm
Max Standby Power	109 (6199)	121 (6881)
Exhaust gas temperature after turbine, °C (°F)		
Max Standby Power	476 (889)	433 (811)
Max allowable back-pressure in exhaust line, kPa (In wc)	5 (20)	7 (28)
Exhaust gas flow, m ³ /min (cfm)		
Max Standby Power	26.7 (943)	31.3 (1105)

Cooling system	1500 rpm	1800 rpm
Heat rejection radiation from engine, kW (BTU/min)		
Max Standby Power	18.4 (1046)	19.6 (1115)
Heat rejection to coolant, kW (BTU/min)		
Max Standby Power	77.8 (4424)	84.9 (4828)
Fan power consumption, kW (hp)		
standard cooling system	3.8 (5.2)	6.6 (9.0)
troical cooling system	8.2 (11.1)	9.2 (12.5)

Standard equipment

Engine

Power setting 1500 rpm Prime and Standby
Lift eyelets

Flywheel

Flywheel housing with conn. acc. to SAE 2
Flywheel for 11.5" and 10,0"
flexible plate or flexible coupling
Vibration damper

Engine suspension

Fixed front mounting

Lubrication system

Oil dipstick
Full-flow oil filter of spin-on type

Fuel system

Fuel filters of spin-on type
Prefilter delivered loose
Injection pump, Bosch, unit pumps with
Heinzmann governor, mechanical or EDC4

Intake and exhaust system

Air filter with paper insert
Air restriction indicator
Air cooled exhaust manifold
Connecting flange for exhaust line, delivered loose
Turbo charger
Closed crankcase ventilation system

Cooling system

Radiator for 45 °C air on temp
Air to air charge air cooler
Belt driven coolant pump
Fan hub
Thrust fan
Fan guard
Belt guard

Control System

Manual fine speed control
Stop solenoid energized to run (mechanical spec.)
Mechanical speed governor (mechanical spec.)
ECU (Engine Control Unit) (EDC4 spec.)
Electronical speed actuator (EDC4 spec.)

Electrical system

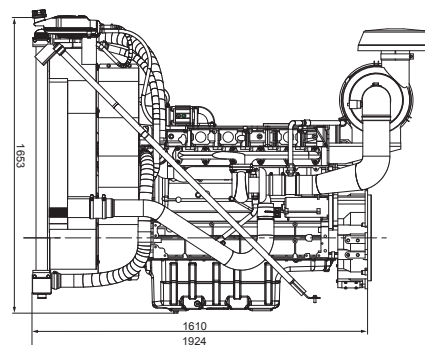
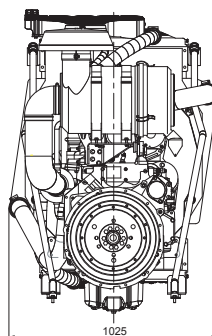
Alternator 55A / 14V, left side, 1 pole
Starter motor, 3.1kW / 14V, 1 pole

Instruments and senders

Oil pressure switch
Coolant temp switch and sender

Engine Packing

Plastic wrapping, standard



Note! Not all models, standard equipment and accessories are available in all countries.
All specifications are subject to change without notice.
The engine illustrated may not be entirely identical to production standard engines.

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% att 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 class G3

Exhaust emissions

The engine complies with Tier 2 and TA-luft -50% exhaust emission 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. A10 % overload capability for governing purpose 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.
1 hp = 1 kW x 1.36

Information

For more technical data and information, please look in the Generating Set Engines Sales Guide.

VOLVO PENTA

AB Volvo Penta
SE-405 08 Göteborg, Sweden
www.volvopenta.com