

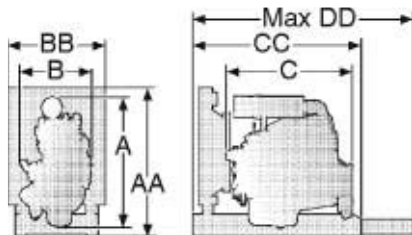
VOLVO PENTA GENSET ENGINE

TWD740GE

1500 rpm, 196 kW (267 hp) – 1800 rpm 222 kW (302 hp)

TWD740GE

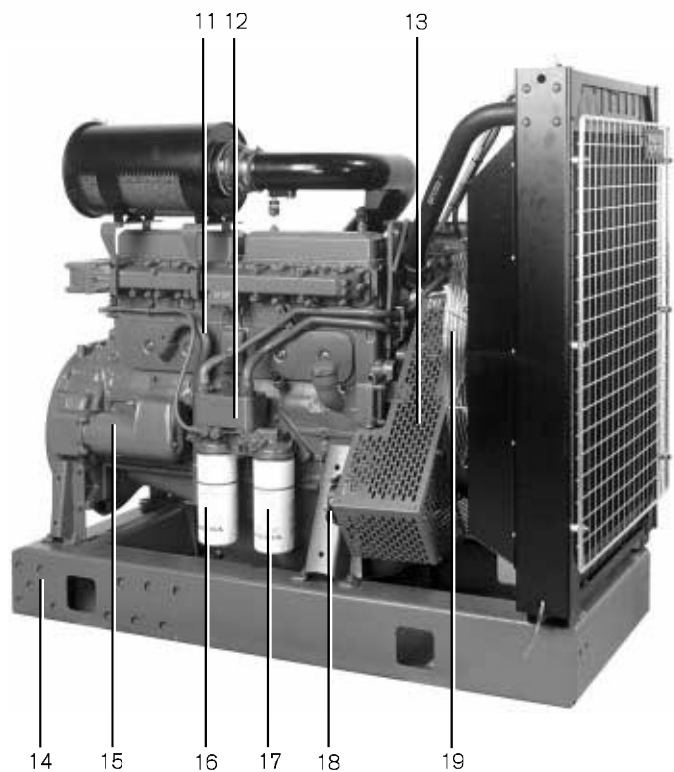
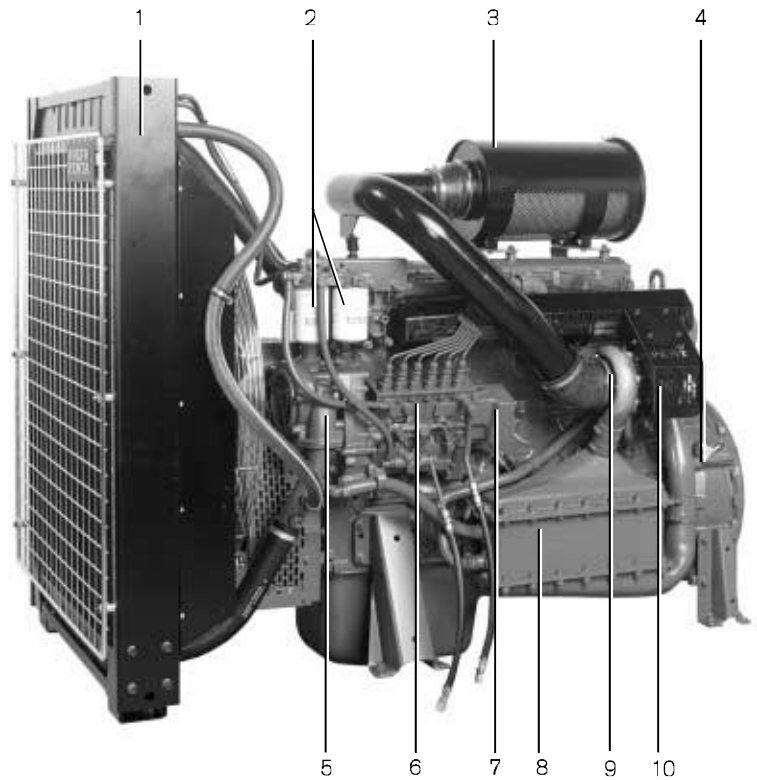
Turbocharged _____
 Water to air intercooled _____
 Diesel fuel _____
 Displacement indication (l) _____
 Generation _____
 Version _____
 Generator drive _____
 Emission controlled _____



mm / in
 A = 1274 / 50.2
 B = 787 / 31.0
 C = 1264.7 / 49.8
 AA = 1490.5 / 58.7
 BB = 880 / 34.6
 CC = 1626 / 64.0
 DD = 2616 / 103.0

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



**VOLVO
PENTA**

TWD740GE

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
Turbocharged and water to air intercooled
Rotation direction, anti-clockwise viewed towards flywheel

Number of cylinders 6
Displacement, total 7.28 liter / 445 in³
Firing order 1-5-3-6-2-4
Bore 107 mm / 4.21 in
Stroke 135 mm / 5.31 in
Compression ratio 17.2:1

Dry weight, kg/lb Engine only 795 / 1753 Gen Pac 1095 / 2414
Wet weight, kg/lb Engine only 835 / 1841 Gen Pac 1158 / 2553

| TWD740GE | Speed, rpm | 1500 | 1800 |
|--|--------------|-------------|-------------|
| Performance | Test no. | 24001179 | 24001169 |
| Prime Power with fan | kW / hp | 178 / 242 | 201 / 273 |
| Continuous Standby Power with fan | kW / hp | 178 / 242 | 201 / 273 |
| Maximum Standby Power with fan | kW / hp | 196 / 267 | 222 / 302 |
| Mean piston speed | m/s / ft/sec | 6.5 / 21.6 | 7.8 / 25.6 |
| Effective mean pressure at Prime Power | MPa / psi | 2.0 / 290 | |
| Max combustion pressure at Prime Power | MPa / psi | 14.3 / 2084 | 14.2 / 2069 |

Lubrication system

Lubricating oil consumption at Prime Power liter/h / US gal/h 0.03 / 0.008 0.05 / 0.013
Maximum Standby Power liter/h / US gal/h 0.04 / 0.011 0.06 / 0.016
Oil system capacity including filters liter 29

Fuel system

Specific fuel consumption at
25% of Prime Power g/kWh / lb/hph 237 / 0.384 247 / 0.400
50% of Prime Power g/kWh / lb/hph 211 / 0.342 218 / 0.353
75% of Prime Power g/kWh / lb/hph 205 / 0.332 207 / 0.335
100% of Prime Power g/kWh / lb/hph 203 / 0.329 207 / 0.335
Specific fuel consumption at
25% of Maximum Standby Power g/kWh / lb/hph 234 / 0.379 246 / 0.399
50% of Maximum Standby Power g/kWh / lb/hph 210 / 0.340 213 / 0.345
75% of Maximum Standby Power g/kWh / lb/hph 203 / 0.329 207 / 0.335
100% of Maximum Standby Power g/kWh / lb/hph 203 / 0.329 208 / 0.337

Intake and exhaust system

Air consumption at Prime Power (at 27 °C) m³/min / cfm 11.6 / 410 16.1 / 569
Maximum Standby Power (at 27 °C) m³/min / cfm 12.5 / 441 17.2 / 607
Max allowable air intake restriction kPa / In wc 5 / 20.1
Heat rejection to exhaust at Prime Power kW / BTU/min 141 / 7995 169 / 9582
Maximum Standby Power kW / BTU/min 156 / 8845 190 / 10773
Exhaust gas temperature after turbine at Prime Power °C / °F 525 / 977 528 / 982
Maximum Standby Power °C / °F 540 / 1004 555 / 1031
Max allowable back-pressure in exhaust line kPa / In wc 10 / 40
Exhaust gas flow at Prime Power m³/min / cfm 31.0 / 1095 39.3 / 1388
Maximum Standby Power m³/min / cfm 33.5 / 1183 42.8 / 1511

Cooling system

Heat rejection radiation from engine at Prime Power kW / BTU/min 11 / 624 13 / 737
Maximum Standby Power kW / BTU/min 12 / 680 14 / 794
Heat rejection to coolant at Prime Power kW / BTU/min 107 / 6085 123 / 6995
Maximum Standby Power kW / BTU/min 118 / 6711 134 / 7621
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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