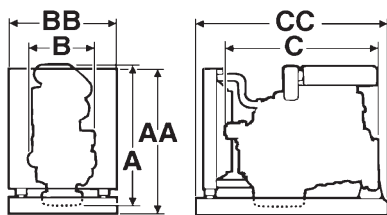


TAD1232GE

Gen Set Engine – Gen Pac

TAD1232GE

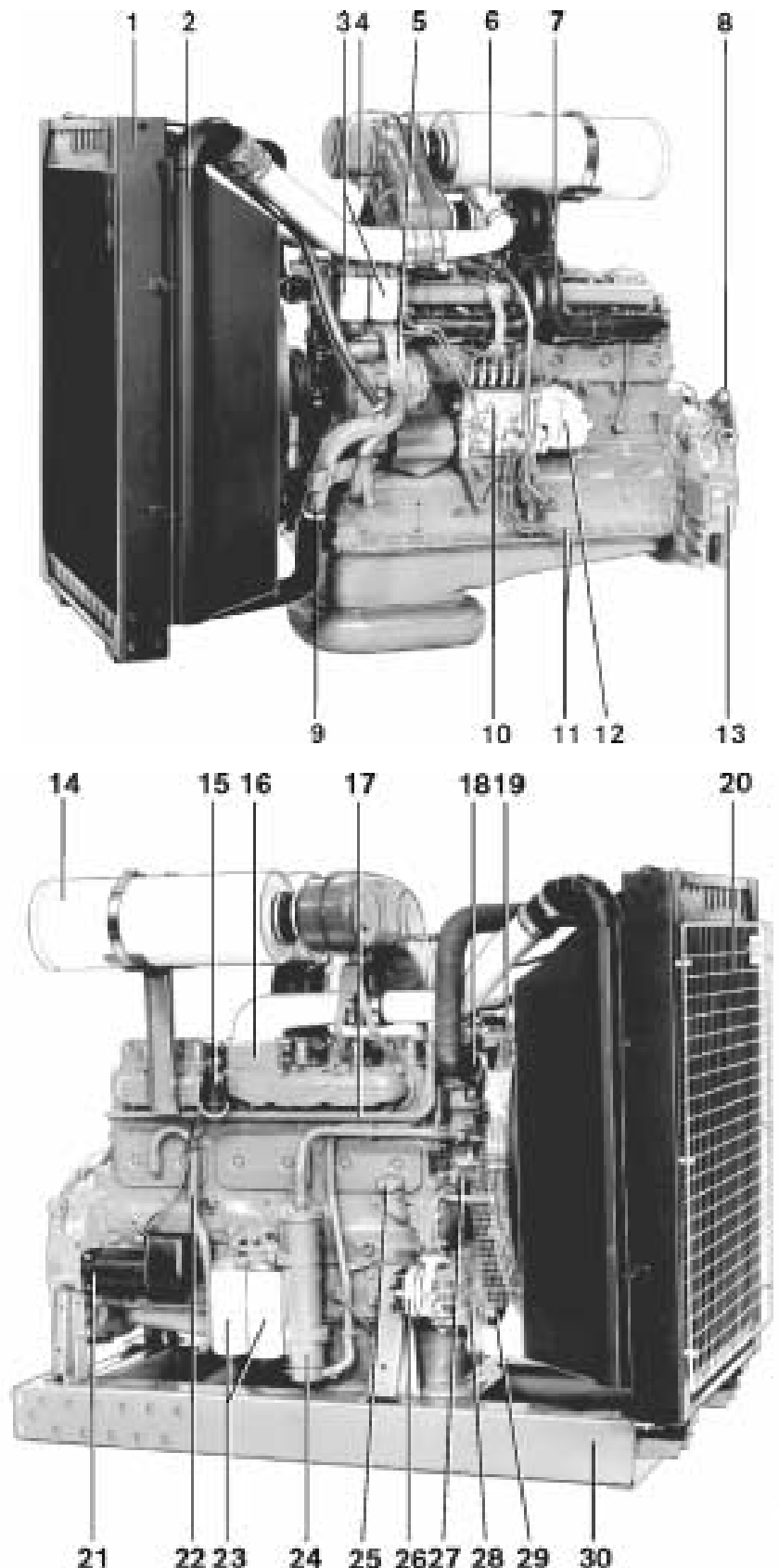
Turbocharged _____
 Air to air intercooled _____
 Diesel fuel _____
 Displacement indication (l) _____
 Generation _____
 Version _____
 Generator Drive _____
 Emission Controlled _____



mm / in. AA = 1668 / 65.7
 A* = 1582 / 62.3 BB = 1089 / 42.9
 B* = 1089 / 42.9 CC = 2059 / 81.1
 C* = 1961 / 77.2 DD = 2393 / 94.2
 * Incl. radiator and intercooler

Gen Pac – Genset 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. Intercooler
3. Twin fuel filters of throwaway type
4. Air restriction indicator
5. Gear-driven coolant pump
6. Turbocharger
7. Air cooled exhaust manifold
8. Lift eyelet
9. Coolant pipe, inlet
10. Injection pump
11. Fuel pipes for tank connection
12. Electronic speed governor
13. Flywheel housing SAE 1
14. Air filter
15. Relay for inlet manifold heater
16. Inlet manifold heater
17. Cable iron
18. Coolant pipe, outlet
19. Fan guard
20. Radiator guard (option)
21. Starter motor
22. Crankcase ventilation
23. Full-flow oil filters of spin-on type
24. Oil cooler
25. Oil filler
26. Alternator
27. Automatic belt tensioner
28. Belt guard (option)
29. Vibration damper
30. Expandable base frame



**VOLVO
PENTA**

Technical Data

General

In-line four-stroke diesel engine with direct injection

Turbocharged and air to air intercooled

Rotation direction, anti-clockwise viewed towards flywheel

Number of cylinders

6

Displacement, total

11.98 liters / 731 in³

Firing order

1-5-3-6-2-4

Bore

130.17 mm / 5.12 in

Stroke

150 mm / 5.91 in

Compression ratio

14.0:1

Dry weight, kg/lb Engine only*) 1250 / 2754 Gen Pac 1434 / 3162

Wet weight, kg/lb Engine only*) 1330 / 2933 Gen Pac 1514 / 3338

*) Including radiator and intercooler

TAD1232GE	Speed, rpm	1500	1800
Performance	Test no.	21000675/676	21000677/678
Prime Power with fan	kW / hp	323 / 439	341 / 464
Continuous Standby Power with fan	kW / hp	323 / 439	349 / 475
Maximum Standby Power with fan	kW / hp	356 / 481	381 / 518
Mean piston speed	m/s / ft/sec	7.5 / 24.6	9.0 / 29.5
Effective mean pressure at Prime Power	MPa / psi	2.20 / 319	1.96 / 284
Max combustion pressure at Prime Power	MPa / psi	12.8 / 1860	13.8 / 2000
Total mass moment of inertia, J (mR ²)	kgm ² / lbft ²	2.80 / 66.4	
Lubrication system			
Lubricating oil consumption at Prime Power	liter/h / US gal/h	0.18 / 0.048	0.21 / 0.055
Maximum Standby Power	liter/h / US gal/h	0.19 / 0.050	0.25 / 0.066
Oil system capacity including filters	liter	38	
Oil change intervals/ specifications, VDS-2	h	600	
VDS, ACEA E3	h	400	
ACEA E2, API CD, CF, CF-4, CG-4	h	200	
Fuel system			
Specific fuel consumption at			
25% of Prime Power	g/kWh / lb/hph	222 / 0.360	234 / 0.379
50% of Prime Power	g/kWh / lb/hph	206 / 0.334	210 / 0.341
75% of Prime Power	g/kWh / lb/hph	204 / 0.339	204 / 0.331
100% of Prime Power	g/kWh / lb/hph	208 / 0.337	206 / 0.334
Specific fuel consumption at			
25% of Maximum Standby Power	g/kWh / lb/hph	220 / 0.357	231 / 0.375
50% of Maximum Standby Power	g/kWh / lb/hph	205 / 0.332	207 / 0.336
75% of Maximum Standby Power	g/kWh / lb/hph	209 / 0.339	204 / 0.331
100% of Maximum Standby Power	g/kWh / lb/hph	210 / 0.341	210 / 0.341
Intake and exhaust system			
Air consumption at Prime Power (at 27°C)	m ³ /min / cfm	22.3 / 790	26.8 / 950
Maximum Standby Power (at 27 °C)	m ³ /min / cfm	24.9 / 880	29.1 / 1030
Max allowable air intake restriction	kPa / In wc	5 / 20.1	
Heat rejection to exhaust at Prime Power	kW / BTU/min	292 / 16600	312 / 17700
Maximum Standby Power	kW / BTU/min	328 / 18600	359 / 2040
Exhaust gas temperature after turbine at Prime Power	°C / °F	575 / 1071	525 / 977
Maximum Standby Power	°C / °F	580 / 1072	540 / 1004
Max allowable back-pressure in exhaust line	kPa / In wc	5.0 / 20.1	7 / 28.1
Exhaust gas flow at Prime Power	m ³ /min / cfm	65.2 / 2302	71.5 / 2525
Maximum Standby Power	m/min / cfm	73.4 / 2592	79.7 / 2822
Cooling system			
Heat rejection radiation from engine at Prime Power	kW / BTU/min	20 / 1140	22 / 1250
Maximum Standby Power	kW / BTU/min	22 / 1250	23 / 1300
Heat rejection to coolant at Prime Power	kW / BTU/min	113 / 6420	113 / 642
Maximum Standby Power	kW / BTU/min	120 / 6830	122 / 6940

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**

AB Volvo Penta
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