

TWD1672-1673GE

615 kW (836 hp) & 685 (932) at 1800 rpm, acc. to ISO 3046

US EPA & CARB Tier 4 Final

A powerful, reliable and economical generating set diesel engine range built on the proven Volvo Group in-line six concept.

Powerful package

High power density in a compact package with dual stage turbo charging. Excellent load step performance according to ISO 8528-5.

Low cost of ownership & operation

World class fuel efficiency in combination with a proven and reliable engine and exhaust aftertreatment system design. The exhaust aftertreatment system consists of only SCR, without EGR, DOC or DPF. Minimal of components are used and no downtime for regeneration or decreased service intervals. No EGR also results in less heat rejection, leading to excellent power density and improved fuel economy.

Compact & simple installation

SCR technology selected by Volvo Group does not increase the amount of cooling capacity needed. In combination with the compact engine design, installation is easy with minor impact on existing installation layout. Installation guidelines as well as drawings and CAD models are easy to access.

Durability & low noise

Volvo Group's long experience with SCR systems in combination with base engine development reduces risk of downtime. Well-balanced to produce smooth and vibration free operation with low noise.

Low exhaust emission

Efficient injection as well as robust engine design in combination with SCR technology contributes to excellent combustion and low fuel consumption.

Easy service & maintenance

Easily accessible service and maintenance points contribute to the ease of service.



- Proven and straight-forward design - built on Volvo Group technology
- Low cost of ownership and operation
- SCR only - no EGR, DOC, DPF or regeneration
- High efficient cooling system
- Excellent step load performance acc. to ISO 8528-5
- Compact, simple installation and easy to service
- Available as Genpac or Base engine configuration

60 Hz/1800 rpm

Engine	Prime power			Standby power			Generator eff. (%)
	kWm	kWe	kVa	kWm	kWe	kVa	
TWD1672GE	532	508	635	585	559	698	95,5
TWD1673GE	595	570	713	655	625	781	95,5

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TWD1672-1673GE

Technical Data

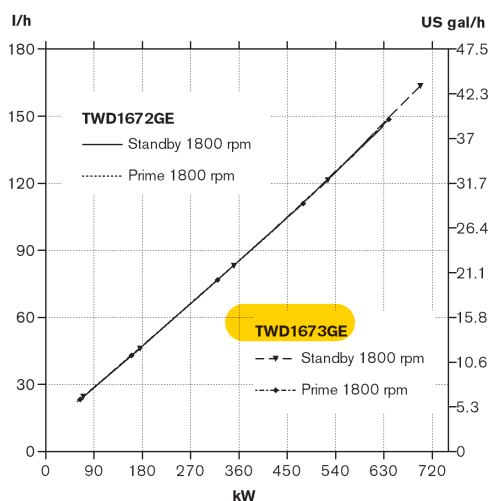
Engine designation	TWD1672-1673GE
Configuration and no. of cylinders	in-line 6
Displacement, l (in ³)	16.12 (983.9)
Method of operation	4-stroke
Bore, mm (in.)	144 (5.67)
Stroke, mm (in.)	165 (6.50)
Compression ratio	16.8:1
Wet weight, engine only, kg (lb)	1810 (3390)
Wet weight, Genpac (engine, cooling system, air filtration system and frame kg (lb)	2767 (6100)

Performance (with fan, kW (hp)) 1800 rpm

TWD1672GE	
Prime Power	532 (724)
Standby Power	585 (796)
Fan power consumption	30 (41)

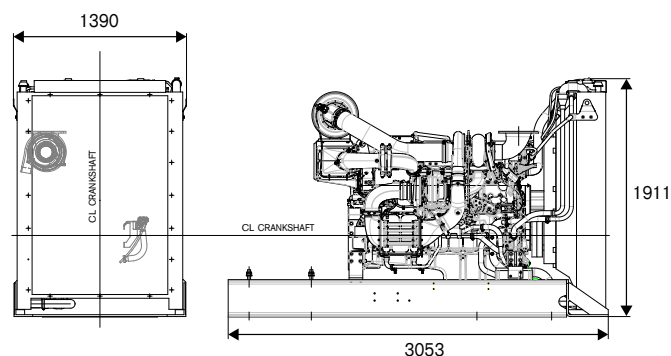
TWD1673GE

Prime Power	595 (809)
Standby Power	655 (891)
Fan power consumption	30 (41)



Dimensions

Not for installation. Dimensions in mm.



Technical description

Engine and block

- Cast iron cylinder block with optimum distribution of forces without the block being unnecessarily heavy.
- Wet, replaceable cylinder liners
- Tapered connecting rods for increased piston lifetime
- Crankshaft induction hardened bearing surfaces and fillets with seven bearings for moderate load on main and high-end bearings
- Case hardened and Nitrocarburized transmission gears for heavy duty operation
- Viscous type crankshaft vibration dampers to withstand single bearing alternator torsional vibrations
- Replaceable valve guides and valve seats
- Over head camshaft and 4 valves per cylinder

Lubrication system

- Full flow oil cooler
- Full flow disposable spin-on oil filter, for extra high filtration
- The lubricating oil level can be measured at start-up

Fuel system

- Electronic high pressure unit injectors
- Fuel prefilter with water separator and water-in-fuel indicator / alarm
- Fine fuel filter with manual feed pump and fuel pressure switch

Cooling system

- Efficient cooling with accurate coolant control through a water distribution duct in the cylinder block.
- Belt driven coolant pumps with high degree of efficiency
- Water-cooled charge air coolers

Turbo charger

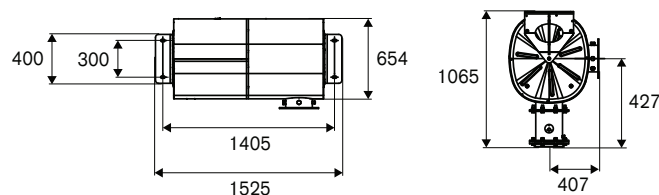
- Efficient and reliable dual stage turbo chargers
- Intermediate charge air coolers for both turbo chargers
- Waste gate system for the high pressure turbo charger

Electrical system

- Engine Management System 2.3 (EMS 2.3), an electronically controlled processing system which optimizes engine performance. It also includes advanced facilities for diagnostics and fault tracing
- The instruments and controls connect to the engine via the CAN SAE J1939 interface. The DCU is a control panel with display, engine control, monitoring, alarm, parameter setting and diagnostic functions. It also presents error codes in clear text. The DCU makes it possible to install and combine several sets of analogue and digital instruments.
- Sensors for oil pressure, oil temp, boost pressure, boost temp, coolant temp, fuel temp, water in fuel, fuel pressure and two speed sensors.

Exhaust aftertreatment system

- SCR only. No EGR, DOC, DPF or regeneration. Wide range of installation options available.
- AdBlue/DEF tank including AdBlue/DEF Quality Level Temperature Sensor



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.

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 kW = 1 hp x 1.36
1 hp = 1 kW x 0.7355

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 class G3

Additional information

For additional information, please contact your Volvo Penta representative or visit www.volvopenta.com

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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.