

## GREEN POWER VOLVO DIESEL ENGINE

<b>1500 RPM</b>	<b>Type GP630VO</b>
-----------------	---------------------

The Engine with integrated water cooling

**Engine:** TAD1643GE

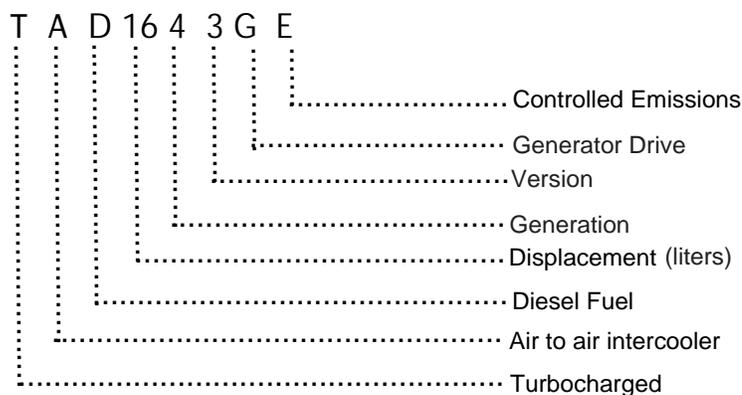
### Technical description

- Cast iron cylinder block with optimum distribution of forces without the block being unnecessarily heavy
- Piston cooling for low piston temperature and reduced ring temperature
- Tapered connecting rods for increased piston lifetime
- Crankshaft induction hardened bearing surfaces and fillets with seven bearings for moderate load on main and big end bearings
- Replaceable valve guides and valve seats
- Keystone top compression rings for long service life
- Viscous type crankshaft vibration dampers to withstand single bearing alternator torsional vibrations
- Over head camshaft and four valves per cylinder
- Case hardened and Nitrocarburized transmission gears for heavy duty operation
- Wet and replaceable cylinder liners

### Benefits

- Low noise emission, cost savings as no noise attenuation measures are required
- Long service intervals: 1000 hour oil change intervals and low fuel consumption bring savings in Operating costs
- Low installation costs
- Excellent load takeover characteristics ensure prompt power supply
- Combined oil cooling and lubrication prevents corrosion and cavitation
- High reliability and durability together with reduced maintenance requirement and wear parts

### Model Designation



## Control Panel

### Manual or Automatic start control panel

- Manual or automatic remote boot controller, selector switch for Off, Man and Auto with the key.
- Complete motor protection functions with alarms visualized via LEDs in the front.
- The control unit 6 is set via DIP switches in the rear part of the case.
- Standard circuit breaker and differential relay.

## Rating Table : The Genset TAD1643GE Engine

<b>Engine type</b>	TAD1643GE		
Speed	min <sup>-1</sup>   rpm	1500	
Frequency	Hz	50	
<b>Engine Power</b>			
Prime power (PRP)	kVA   kW	630	504
Limited time running power (LTP)	kVA   kW	693	554
<b>Spec. fuel consumption PRP (LTP)</b>			
100 % load	g/KWh   lb/hph	199	0.323
75 % load	g/KWh   lb/hph	196	0.318
50% load	g/KWh   lb/hph	196	0.318
25 % load	g/KWh   lb/hph	215	0.349

### PRP\* kVA/KW :

Available electrical power (at variable load) in a medium of 80% of the indicated maximum power.  
A 10% overload capacity is available.

### LTP\*\* kVA/KW :

Available electrical power load (at variable load) for a maximum of 500 hours per year.  
No overload capability available

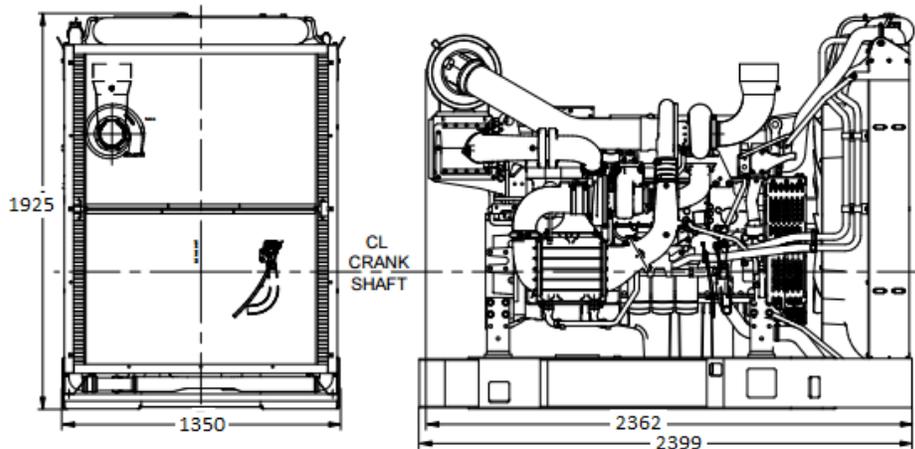
### Scope of supply :

The engine and alternator are mounted together forming a rigid monoblock, the shoulders are connected by inflexible disc connection. The mono-block is mounted on a steel base frame through silent blocks. The base frame is including a fuel tank. Starting is electric and it contains a battery. The generator monitoring system consists of a control module.

## Technical Data

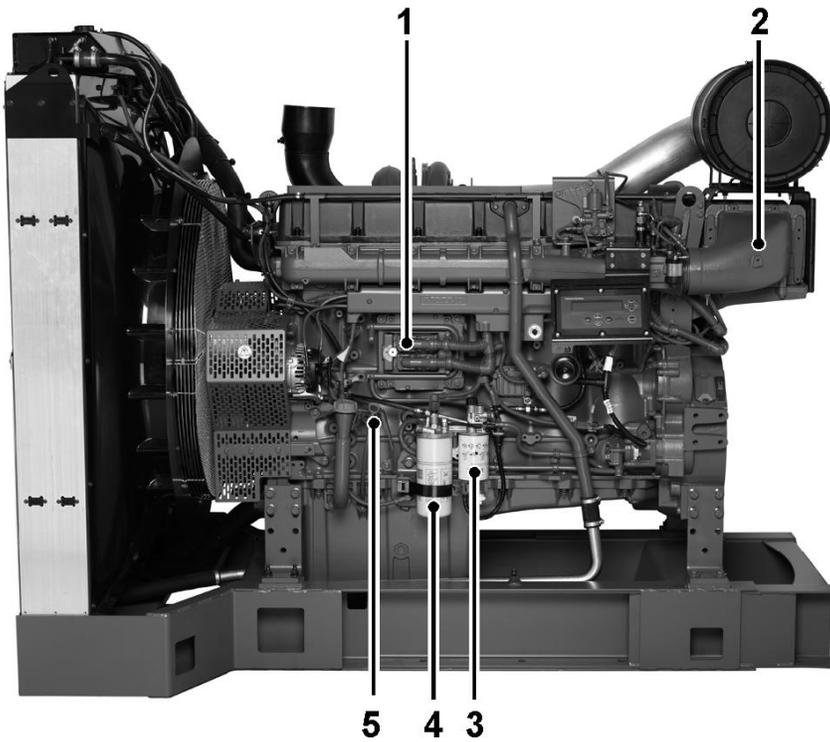
Engine type	<b>TAD1643GE</b>	
Numer of cylinder	<b>6</b>	
Bore x Stroke	mm	144 x 165
Displacement	l	16.12
Compression ratio	16.5:1	
Engine Power PRP	KW	504
Engine Power LTP	KW	554
Cooling Type	water	
Injection Type	Electronic unit	
Max allowable Back pressure	Kpa	10
Max Permitted air Intake restriction	Kpa	5
Standard Governor	Electronic	
Oil system capacity	Litres	48
Battery	Ah	80
Starting engine	KW	7.0
Exhaust gas flow	m <sup>3</sup> /min	111.8
Exhaust gas Temperature	°C	463

## Dimensions



Engine type	Length	Width	Height
<b>TAD1643GE</b> mm	2362	1350	1925

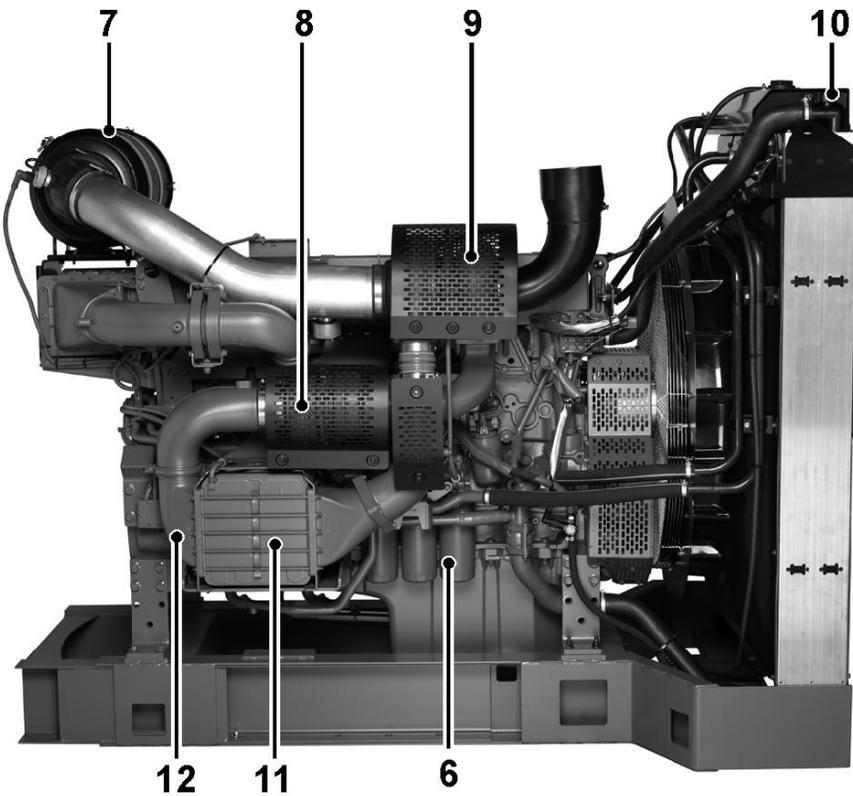
## Engine Illustration



### Engine Description

TAD1643GE

- 1 Control unit, EMS
- 2 Charge air cooler, HP turbo
- 3 Fuel water monitor
- 4 Fuel filter with fuel pressure monitor
- 5 Oil dipstick
- 6 Oil filter
- 7 Air filter
- 8 HP turbo
- 9 LP turbo
- 10 Expansion tank
- 11 Charge air coolers, LP turbo
- 12 Starter motor



### Greenpower AB

Helsingborgsvägen Varalöv  
 262 96 Ängelholm, Sweden  
 Tel: +46 431-222 40  
 E-mail: [info@greenpower.se](mailto:info@greenpower.se)  
 web: [www.greenpower.se](http://www.greenpower.se)