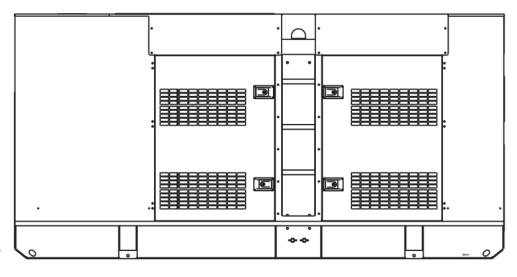
# POWER OUTPUT

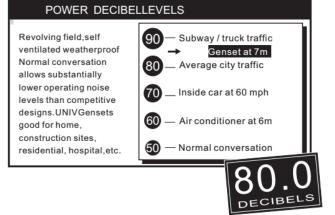
Prime Rating — 329kW (411 kVA) Standby Rating — 365 kW (457 kVA) 3-Phase, 60 Hertz, 0.8 PF



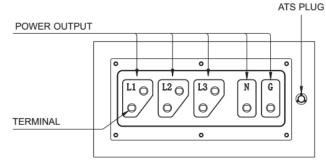
# STANDARD FEATURES

- Heavy duty, 4-cycle, variable speed fan, diesel engine provides maximum reliability.
- Brushless alternator reduces service and maintenance requirements. Class H protection.
- Open delta alternator design provides virtually unlimited excitation for maximum motor starting capability.
- Automatic voltage regulator (AVR) provides precise regulation.
- Electronic governor system maintains frequency to ±0.25%.
- Full load acceptance of standby nameplate rating in one step
  Soundproof, weather resistant, steel housing provides
- operation at 80dB (A) at 7meters. Fully lockable enclosure allows safety operation. Outdoor operation available.
  Internal fuel tank with direct observing glass, and fuel level
- meter display on control panel E-coat and powder coat paint provides durability and weather protection.
- . Digital engine gauges including oil pressure, water temperature, battery volts, engine speed, and fuel level.
- Analog generator instrumentation including Ampere meter,
- Voltage meter, frequency meter, ammeter phase selector switch, voltmeter phase selector switch. Analog generator instrumentation and regulator adjustment.
- Deepsea/Comap professional generator controller.
  High visibility LCD display with heated screen and alphanumeric readout.
- IP65 Protection standard, operational temperature range of -40° to 85° C.
- Modbus interface for gauge panel and expansion options.
- DPF cleaningcycle indication.
- Log record for inspection
- Automatic safety shutdown system monitors the water temperature,engine oil pressure, low coolant, low DEF, overspeed, and overcrank. Warning lights indicate abnormal conditions.
- Fuel/water separator. Removes condensation from fuel for extended engine life.
- Emergency stop switch when manually activated, shuts down in any emergency.

# SILENT SERIES



# **GENERATOR OUTPUT PANEL**



# SPECIFICATIONS

Generator Specifications	
Model	evolving field, self-ventilated weatherproof
Armature Connection	Star with Neutral
Phase	3
Standby Output	365KW (457 KVA)
Prime Output	329KW (411 KVA)
Power Factor	0.8
Voltage Regulation (No load to full load)	±0.5%
Generator RPM	1800
Frequency	60 Hz
No. of Poles	4
Excitation	Brushless with AVR
Frequency Regulation: No Load to Full Load	Isochronous under varying loads from no load to 100% rated load
Frequency Regulation: Steady State	0.25% o f mean value for constant loads from no load to full load.
Insulation	Class H
Sound Level dB(A) Full load at 7M	80

Amperage	
Rated Voltage	Maximum Amps
3Ø Volt 127/220	1200.7 Amps
3Ø Volt 254/440	598.7 Amps
Main Line Circuit Breaker Rating	1200Amps
Over Current Relay Trip Set Point	1320 Amps

Fuel System	
Fuel Tank Capacity	13.2 gallons (500 liters)
Fuel Consumption	L/h
At full load	90.0
At 3/4 load	68.1
At 1/2 load	45.4
At 1/4 load	22.7

Control system	
Controller Brand	Deepsea
Model	DSE4520
Module	Manual/Auto start/stop module
Standard function	Engine control
	Generator monitoring
	Generator protection
	Specification
Display	Frequency
	Battery voltage
	Running hour
Warning/shutdown	under/over voltage
	under/over speed
	under/over frequency
	Low oil pressure
	High water temperature
Communication port	USB

Engine Specifications	
Make / Model	VOLVO / TAD1375VE
Emissions	Tier4F
Starting System	Electric
Design	4-cycle, water cooled, direct injection, natural intake
Displacement	12.78 liters
No. cylinders	6
Bore x Stroke	131 x 158 mm
Gross Engine Power Output	551 hp (405 kW)
Compression Ratio	17.8 : 1
Engine Speed	1800 rpm
Overspeed Limit	2070 rpm
Oil Capacity	9.52 Gallons (36 liters)
Battery	24V 120Ah x 2

Alternator	
Alternator Brand	Stamford
Alternator Model	S4L1S-E4
Excitation	Brushless,Self-Excited system
Capacity(KVA)	440kva
Power(KW)	352kw
Efficiency(%)	90%
Insullation class	Class H
Protection class	lp23
Steady state voltage regulation	±1%
Voltage control	AVR

# WARRANTY\*

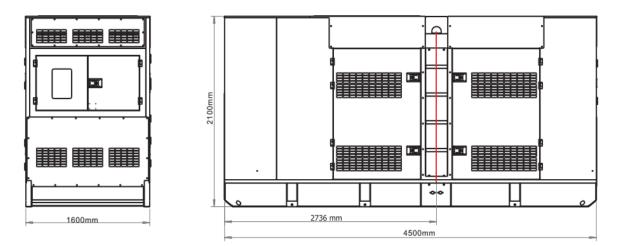
### Generator

12 months from date of purchase or 1000 hours (whichever occurs first).

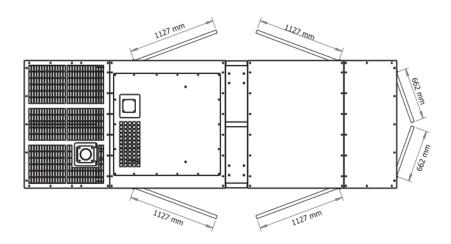
# NOTICE

Enough Air flow is extremely important to
Generator operation.
Improper connection can cause electrocution
and/or property damage.
Do not connect to any electrical system except
through an approved device.
Specifications are subject to change without
notice.

PLEASE NOTE: Custom Packaging Available, Dimensions and Weight are subject to change with customization.



Weight	
Dry Weight	4,200 kg
Wet Weight	5,000 kg
Max. Lifting Point Capacity	11,200 kg



TAD1371-1375VE

12.78 litre, in-line 6 cylinder - 285, 315, 345, 375 & 405 kW EU Stage IV / US EPA Tier 4 Final

TAD1371-1375VE is a powerful, reliable and economical off-road Diesel Engine range built on the Volvo Group in-line six concept.

### Low cost of ownership

World class fuel efficiency combined with high uptime as well as low cost of ownership.

# Compact & simple installation

As optional equipment all material needed in order to install the engine can be ordered from Volvo Penta. Installation guidelines as well as drawings and CAD models are easy to access. The result is an engine that is easy to install.

# **Durability & low noise**

Long experince with base engine development reduces risk of downtime. Wellbalanced to produce smooth operation with low noise.

#### **Power & torque**

Maximum power and torque available at low rpm. As a result noice as well as fuel consumption is very low. Useful engine speed for the TAD1371-1375VE is due to power and torque layout very flexible.

#### Low exhaust emission

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

#### Easy service & maintenance

Easily accessible service and maintenance points contribute to the ease of service of the engine. As optional equipment possible to remote mount filters and service points.



- · Proven and straight-forward design built on Volvo Group technology
- · Low cost of ownership and operation
- · High power and torque already at low engine speed
- · SCR and light EGR only no DPF, DOC or regeneration
- Compact, simple installation and easy to service
- · Similar engine footprint for all emission standards
- · Wide range of optional equipment

# **Technical description**

Engine and block

- Cast iron cylinder block
- Wet, replaceable cylinder liners
- Replaceable valve guides and valve seats Overhead camshaft and four valves per cylinder

#### Lubrication system

- · Full flow disposable spin-on oil filter, for extra high filtration
- Gear type lubricating oil pump, gear driven by the transmission
- Oil level sensor at startup

#### Fuel system

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

#### Cooling system

- Available as power pack or base engine.
- Belt driven coolant pump with high degree of efficiency

### Turbo charger

· Electronically controlled Waste-gate

#### Electrical system

- Engine Management System (EMS) 2.3, an electronically controlled processing system which optimizes engine performance. It also includes advanced features for diagnostics and fault tracing.
- The instruments and controls connect to the engine via the CAN SAE J1939 interface. Options available for engine control equipment.

#### Exhaust aftertreatment system

- SCR and light EGR only
- Airless urea injection
- Wide range of options available, including different sized AdBlue<sup>®</sup> / DEF tanks (also possible for OEM to design own tank).
- AdBlue/DEF Quality Level Temperature Sensor for US Market



# TAD1371-1375VE

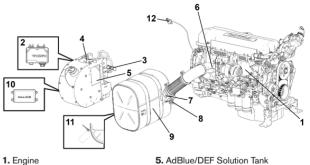
## **Technical data**

Engine designatio Configuration and Displacement, I (i Method of operat Direction of rotatio Bore, mm (in.) Stroke, mm (in.) Compression ratio	I no. of cy n <sup>3</sup> ) on on (viewed	linders d towards flywh	eel)	in-line 6 12.78 (780) 4-stroke anti-clockwise 131 (5.16) 158 (6.22) 17.8:1
Dry weight, engine only, kg (lb) 1267(279				1267(2793)
Engine	kW	Hp	rpm	Max Nm
TAD1371VE	285	388	1900	1965

TAD1371VE	285	388	1900	1965	
TAD1372VE	315	428	1900	2175	
TAD1373VE	345	469	1900	2380	
TAD1374VE	375	510	1900	2595	
TAD1375VE	405	551	1900	2650	

# Main components, Principal layout The illustration shows the main components of the

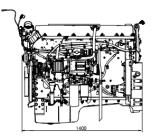
aftertreatment system and its piping connections.



- 2. Pump Unit (PU)
- 3. Solenoid Valve, heating/cooling 4. AdBlue/DEF Level Temperature
- Sensor for EU Market AdBlue/DEF Quality Level
- Temperature Sensor for US Market

## **Dimensions**

Not for installation. Dimensions in mm.

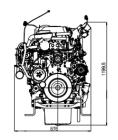


#### Power standards

The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271. The technical data applies to an en-gine 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/litre (7.01 lb/US gal, 8.42 lb/lmp gal), also where this involves a deviation from the standards

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.

- 6. NOx Sensor 7. Temperature Sensor Exhaust
- 8. Dosage Valve (DV)
- 9. Muffler with Catalytic Converter
- 10. Aftertreatment Control Module (ACM)



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

# VOLVO PENTA

1400

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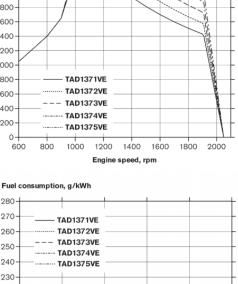
1600

**AB Volvo Penta** SE-405 08 Göteborg, Sweden w.volvopenta.c

1200

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1800



TAD1371VE TAD1372VE

--- TAD1373VE

--- TAD1374VE

TAD1375VE

Engine speed, rpm

1200 1400 1600

記書

1800

2000

- 11. NOx Sensor
- 12. Temperature Sensor Air

210 200 5-22-190 1000 800 Engine speed, rpm

100

75

50-

25-0

600

Torque, Nm 2600

600

400

200

0

280-

270

260

250

240

230 220

600

800

1000