



WATER



1-3 PHASE



50 Hz



STAGE 2



DIESEL

Service		Standby	Prime
Power	kVA	500	450
Power	kW	400	360
Engine Speed	r.p.m	1500	
Voltage	V	230/400	
Power Factor	Cos Phi	0,8	

**Standby power;** In standby mode, the load value defined in the document describes annual usage under variable load conditions, averaging 70% load. Overloading is not permitted. Standby power is 10% more than prime power. It is used as backup power in areas where grid power infrastructure is available.

**Prime power;** This document specifies unlimited hours of use throughout the year with an average load factor of 70% of the power defined in the document during a 24-hour working period. It may be overloaded for a maximum of 1 hour at varying intervals during every 12-hour workday. This does not include continuous operation for 1 hour under overload conditions.

**Continuous power;** This allows for unlimited hours of use at the full (100%) of the defined power. Overloading beyond the defined power is not permitted. It is intended for use in locations without mains power.

## QUALITY STANDARDS

Our generators comply with VDE 0530, BSE 4999 BS5000, IEC 34, EN12601; EN60204-1; TS ISO 8528-1 ... -13; EN12100-1; EN12100-2; EN61000-6-4; EN61000-6-2; EN61000-4-11; EN61000-4-6; EN61000-4-5; EN61000-4-2; EN55011; EN55016-2-1; EN55016-2-3; EN61000-3-2; EN61000-3-3; EN55014-1; EN61000-6-2; EN61000-4-3; EN61000-4-4; Manufactured in accordance with EN61000-4-8; EN61000-4-11; TS EN ISO 3744; TS EN ISO 3746; TS EN 60034-1; TS EN 60034-22; TS EN ISO 3046; BS 5514; NEMA MG 21; IEC 60034, BS 4999/5000, TS EN 60947-1..4 standards. ISO 9001-2015, ISO 14001-2015, ISO 45001-2018 and ISO 1002-2006 management system certificates have been obtained with accreditation from TÜV AUSTRIA.

Our generators, with sound insulation enclosures up to 400 kW power, are manufactured in accordance with directive 2000/14/EC and are certified by SZUTEST.

Our generators are certified according to TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 Insulation Foam Fire Behavior and TS EN ISO 9227 1500 Hour Neutral Salt Test. Our generators have CE Declaration.



# TRX VL ST 0500

## ENGINE

Service		Features
Brand		VOLVO PENTA
Model		TAD1345GE
Engine Type		4 Stroke - Diesel
Injection Type		Direct Injection
Intake Type		Turbo Şarj
Number of Cylinders		6
Cylinder Bore and Stroke	mm	131 x 158
Cylinder Volume	L	12,78
Cooling Type		Water Cooled
Compression Ratio		18.5:1
Fuel Consumption at Standby Load	l/h	99,2
Fuel Consumption at 100% Prime Load	l/h	93,1
Fuel Consumption at 75% Prime Load	l/h	92,7
Fuel Consumption at 50% Prime Load	l/h	92,2
Total Oil Capacity	L	36
Total Cooling Capacity	L	24
Governor Type	Type	Electronic

The engine used in the generator set is a heavy-duty, industrial-type diesel engine. Depending on the model, the system is equipped with a water-cooled structure, naturally aspirated or turbocharged air intake system, mechanical or electronic governor, 12V/24V starter motor and charging alternator. The engine has replaceable air, fuel and oil filters, a flexible fuel hose, an oil drain valve and extension hose or oil drain pump. The system is also supplied with an industrial-type muffler, exhaust spiral or compensator, maintenance-free starter battery, and, in suitable models, an engine block water heater. Maintenance and operating manuals and electrical diagrams are provided with all products.

## ALTERNATOR

Service		Features
Brand		STAMFORD
Model		S4L1D-G
Output Voltage	V	230/400
Frequency	HZ	50
Automatic Voltage Regulation	±%	1
Alternator Standby Power	kVA	520
Alternator Continuous Power	kVA	500
Power Factor	Cosφ	0,8
Number of Cables		12
Winding Pitch		2/3
Protection Class		IP23/H
Warning System		Self Warning
AVR Model		AS440
Performance - PF 0.8 / 75% Load	%	94,5

The alternator used in the generator set is a brushless, single-bearing, 4-pole synchronous type with flexible disc connections. It has Class H insulation and IP21-IP23 protection class. The system is self-excited and provides voltage stability with an electronic voltage regulator (AVR). The alternator stator windings are designed with a 2/3 pitch to reduce harmonic distortions. All windings are protected with a special insulation varnish against oil, moisture and acidic effects, offering long-lasting and reliable operation.

## DIMENSIONS

### Open Type



LxWxH	mm	4000x1900x2990
Weight	kg	5125
Fuel Tank	lt	1370

### Canopied



LxWxH	mm	4000x1900x2790
Weight	kg	5500
Fuel Tank	lt	1370

### CABIN FEATURES

- Modular design, sound insulation cabin
- Cabin assembly performed with bolts and nuts without welding
- Cabin parts painted with epoxy polyester exterior powder paint using nanotechnology
- IP23 protection class
- Design suitable for easy generator maintenance
- Lockable doors on both sides
- Emergency stop button in a special, non-protruding recess on the cabin's exterior surface
- Transparent panel window
- Fireproof acoustic foam insulation
- Nanotechnology cleaning system
- Container optional

### GENERATOR PROTECTION AND ALARMS

- High engine temperature
- Low oil pressure
- Excessive and low engine speed
- Low radiator water level
- Excessive current
- Excessive and low generator voltage and frequency
- Start/stop malfunction

### SILENCER OPTIONS

- Industrial type
- Critical type Silencer
- Hospital type

### CABIN OPTIONS

- Standard Cabin
- Quiet Cabin
- Special Type Cabin

### OPTIONAL EQUIPMENT

- Charging ammeter
- Thermal magnetic circuit breaker (in automatic models)
- Hospital/Critical type muffler
- Sound insulation cabinet designed according to modular principle
- Trailer
- Synchronization panel for 2-16 generators
- 3-pole/4-pole power transfer panel
- Fuel heater, oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel water separator filter
- PMG warning system

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## OPTIONAL GENERATOR CONTROL DEVICES

Next-generation single generator control units combining multifunctionality for backup and main power applications and extensive communication with EFI engines.



	Datakom DKG 309	Datakom D500	Datakom D500-GSM	Deepsea 6120	Deepsea 7320	ComAp AMF25	EMKO Trans-AUTO
Automatic Master Monitoring	✓	✓	✓	✓	✓	✓	✓
Manual Operation	✓	✓	✓	✓	✓	✓	✓
Remote Operation	OPTIONAL	OPTIONAL	✓	<b>X</b>	OPTIONAL	OPTIONAL	OPTIONAL
Remote Monitoring with SIM Card	<b>X</b>	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
Optional Options (Horn, Oil-Fuel, etc.)	✓	✓	✓	✓	✓	✓	✓
Warning Light and MIM Diagram	✓	✓	✓	✓	✓	✓	✓
Battery Charger	✓	✓	✓	✓	✓	✓	✓
RS-485 Communication	OPTIONAL	✓	✓	<b>X</b>	✓	OPTIONAL	✓
Ethernet (TCP-IP) Communication	<b>X</b>	✓	✓	<b>X</b>	OPTIONAL	OPTIONAL	OPTIONAL

## GENERATOR CONTROL DEVICES FOR SYNCHRONIZATION SYSTEMS

The new generation synchronized generator control unit has all kinds of communication and functionality.

