

VW-318T6 powered by: TAD843GE



DESIGN SPECIFICATIONS

√High quality,reliable,long life and complete power unit. √ compact design.

VEasy start and maintenance possibility.

veasy start and mainterlance possibility.

Vevery generating set is subject to a comprehensive test programme which includes full load testing and checking and proving of all control and safety shut down functions

 $\sqrt{\text{Fully}}$ engineered with a wide range of options and accessories:Electrical,mechanical,soundproof canopy and mobile units

Diesel Genset Features		P.F=0.8 3Phase	
Service		P.R.P	Standby
Rated output	kVA	317.5	350.0
Active power output %	kW	254	280
Rated Speed	r.p.m	1800	
Standard Voltage	V	380/220	
Voltage available	V	480/277-460/265 - 440/254-416/240-240/139-220/127-208/120	

erforemance data refer to Standard Reference Conditions of ISO 8528: +25 °C ,100m ALT, relative humidity 30%

er reduction acc.to DIN ISO 3046 Standard values:Above 100m ALT approx.1% per 100m.Above 25˚C(77˚F) approx.4% per 10˚C(50˚F). %Considering cos phi=0.8

Prime Mover Performance		1800 r.p.m		
SERVICE		P.R.P	Standby	
Rated output	KW	294	321	
Manufacturer		VOLVO PENTA		
Model		TAD843GE		
4 stroke Diesel Engine - Injection type		Direct		
Aspiration type		Turbocharge		
Cylinders,number and arrangement		6		
Bore×Stroke	mm	110X135		
Total Displacement	L	7.7		
Cooling system		Water		
Compression ratio		17.5:1		
Specific fuel consumption(P.R.P)	L/H	71.37		
Total coolant capacity	L	36		
Speed governor	Туре	Electronic governor		

①P.R.P. Prime Power - ISO 8528:PRIME POWER is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during a 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

②Max Standby power -ISO 3046 Fuel Stop power:Power available for use at variable loads for limited annual time (500h), within the following limits of maximum operating time: 100% load 25h per year ,90% load 200h per year. No overload available. Applicable in case of failure of the main in areas of reliable electrical network.

Synchronous Generator		
Manufacturer		Guericke
Model		GRK 254G4
Rated output		254
Poles	num	4
Winding Conections (standard)		Star-serie
Insulation	class	Н
Enclosure(according to IEC-34-5)		IP23
Phases		3+N
Votage Regulaors		A.V.R (SX460)
Steady voltage precision		within±1.5% from no load to full loading with cosΦ=0.8-1.0

**Alternator used by GTL Gensets meet the requirements of following Standard:BS5000,VDE0530,NEMA MG1-32,IEC34,CA C22.2-100,AS1359

Materiator used by GTE Gensets meet the requirements or following Sta	IIIdaid.b00000, VDE0000, INEIVIA IVIG 1-02, IEC04,	OA 022.2-100,A01009	
Generationg Set Installation Data	1800 r.p.m		
EXHAUST SYSTEM			
Exhaust Gas Temperature at full load	$^{\circ}$ C	459	
Exhaust Gas Temperature at full load	°F	858.2	
Exhaust gas flow	L/s	883.3	
Maximum allowed back pressure	Кра	10	
AIR REQUIREMENT			
Air requirement for combustion at 100% load/rated speed	L/s	365.0	
	ft3/min(CFM)	772.9	
ELECTRIC STARTING SYSTEM			
Starting motor output	kw	5.6	
Standard Battery Charging System	A	110	
Auxiliary voltage	V	24	
LUBRICATION SYSTEM	·		
Lube oil system including sump, filters, etc.	L	27	

Standard Control Panel -EPmaster EPM6

Protection, distribution, and automatic control panel, which starts the generator set when it detects a mains failure and stops it when the mains is restored with the control unit EPM6. It also starts and stops the group manually via a pushbutton or remote start-up by contact.

It has the following:

- Emergency stop push button
- Circuit breaker (preheating resist.) 2P (16 A)
 Protection fuses for control module
- 3 Voltage&speed trimmers
- Battery charger ⑤ DC switch
- Working Lamp switch
- ① Distribution:Direct output of the circuit breaker
- ® EPM6&EPM6+(cloud monitoring communication 4G)control and protection centre













EPmaster EPM6

t has a digital LCD screen, which provides easy reading of the information regarding the Engine, Alterator, Mains and Charging. The controller meets all requirements for Auto Mains Failure (AMF) applications including remote communication and internet control, user configuration and complete genset monitoring and protection.

READINGS that can be made:

Engine:cooling temperature/oil pressure/revolution speed (rpm)/fuel level/battery voltage/battery alternator voltage/opera ng hours/number of start

Alterator: voltages between phases and between phases and eutral/frequency/phase sequence

Mains: frequency/voltages between phases and between phases and neutral (L1-N, L2-N,L3-N)/voltages between phases and (L1-L2, L2-L3, L1-L3)/phase sequence

Protection of the engine and alternator, with the ALARMS activated:

Engine: low oil pressure/high coolant temperature/low and high battery Voltage./failure of the alternator to charge batteries ow fuel level.

Alterator: I ow and high voltage/low and high frequency/over ad /short-circuit/

Mains: over and under voltage and loss of phase

Control of the set:

STARTS and STOPS the set AUTOMATICALLY when main failure is detected and when it is restored, respectively. It can also operate MANUALLY and Auto Transfer Switch control

Other characteristics:

Event log, real-time clock, scheduled start & stop generator (can be set as start genset once a day/week/month whether with load or not). Maximu n 99 event logs can be memorized.

With maintenance function. Types (date or running time) can be optional and actions (ever, warning, or shutdown) can be set when maintenance time out.

Equipped with CANBUS port and can communicate with J1939 enginet. Not only can monitor frequently-used data (such as water

temperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but all so control starting up, shutdown, raising speed and speed droop via CANBUS port

RS485 communication interface enables "Three remote" functions (remote control, remote measuring and remote communication) according to MODBU

S protocol.

Parameter setting: parameters can be modified and stored in internal FLASH memory and cannot be lost even in case of power outage; most of them can be adjusted using ront panel of the controller and also can be modified using PC via USB or RS485 port.

Standard Configuration & Ontion

Standard Configuration & Option		
Item	Standard	Option
	Standard air filter	Heavy duty air filter
	Standard fuel filter	Air intake shutoff valve chalwin type
	Standard oil filter	Intake air heater
	Low coolant level sensor	Oil temperature sensor
	Exhaust gases compensator	Diesel-powered heater
Engino	24V Electrical system	Engine water heater
Engine	Radiator with bloweing fan	
	Electronic governor	
	Sender WT	
	Sender OP	
	Hot components and radiator guards	
	Mobile components guards	
Alternator	Self-excited and Self-regulated	Air inlet filter
	IP23 protection degree	IP44/IP54/IP55
	Insulation H class	Space heater/anti-condensation heater
		Environment protection
		Temperature detectors
		Parallel operation
	Battery isolator switch	Distribution board with sockets kit and power busbar
	3 poles circuit breaker	4 poles circuit breaker
Electrical system	Door opening alarm	Adjustable ELCB (Earth Fault)
	Battery charger 220-240V	Grouding rod
		ATS
Accessories	Water separator filter	Diverter valve kit for external fuel tank
	Low fuel level alarm	Automatic fuel refilling kit
	Oil extraction pump	Trailer
	Tool kit for maintenance	Residential silencer
	Voltage/Speed potentiometer	Electric engine fuel heater
	No Expansion tank	Expansion tank for coolant water

Generating Set transport data

Dimensions(Open Skid Type) With Standard Fuel Tank





- The complete gen-set is mounted on whole on a heavy-duty fabricated, steel base frame.
- Antivibration pads are fixed between the engine/ alternator feet and the base frame Base frame design incorporates an integral fuel tank.
- The generating set can be lifted or carefully pushed / pulled by the base frame;
- Dial type fuel gauge and drain plug on the fuel tank;
- Forklift pockets within base frame (up to 500kVA)

Dimensions(Silent Type) With Standard Fuel Tank





- All canopy parts are designed with modular principles.
- Without welding assembly
- All metal canopy parts are painted by electrostatic polyester powder paint.
- Doors on each side
- Thermally insulated engine exhaust system.
- Emergency stop push button outside of canopy. Easy maintenance and operation.

Over All Size

Length	mm	3310
Height	mm	1390
Width	mm	1930
Shipping Volume	m3	8.88
Dry Weight	Kg	3055
Fuel Tank Capacity		570

Over All Size

mm	4360
mm	1700
mm	2400
•	
m3	17.79
Kg	4415
	570
	mm m3



