

DALE GENERATING SET DATASHEET

VNE 275-450 – 3 PHASE, 250-440 kVA

DALE POWER SOLUTIONS
ERASKINE

Optional

Sound Attenuated Canopies
Weatherproof modular canopy assemblies
Electrostatic polyester power paint system
Engine exhaust system manufactured from aluminum plated steel
Thermally insulated engine exhaust system
Emergency stop push button on outside of the canopy
Large doors giving access for maintenance
Compliant with the European Union Noise Directive 2000/14/EC

Engine
Residential exhaust silencer
Automatic fuel filling system from remote bulk tank

Alternator
Over sized alternator for motor starting and thyristor load applications

Control
Automatic transfer switches
Earth fault protection
Automatic synchronizing and load control



Models		VNE 275	VNE 305	VNE 360	VNE 410	VNE 450
Engine Manufacturer		Volvo	Volvo	Volvo	Volvo	Volvo
Engine Model		TAD734GE	TAD940GE	TAD941GE	TAD1241GE	TAD1242GE
Gross Engine Power		250 kWm	277 kWm	323 kWm	360 kWm	398 kWm
Output @ Rated rpm		335 Hp	371 Hp	433 Hp	483 Hp	533 Hp
Aspiration Type*		Turbo, IC	Turbo, IC	Turbo, IC	Turbo, IC	Turbo, IC
Engine Capacity	Litres	7.15	9.36	9.36	12.13	12.13
Cylinders		6 in-line	6 in-line	6 in-line	6 in-line	6 in-line
Rated Engine Speed		1500 rpm	1500 rpm	1500 rpm	1500 rpm	1500 rpm
Governor		Electronic	Electronic	Electronic	Electronic	Electronic
Fuel Consumption (Ltrs/Hr)	Full Load	51.7	51.6	57.1	65.6	81.9
	75% Load	42.0	40.5	44.6	49.0	75.4
	50% Full Load	29.2	30.1	32.9	33.3	57.4

Specifications

Weights	Open	Canopied	Kilo Grams	2027	2547	2637	3537	3537
				TBA	TBA	TBA	TBA	TBA
Dimensions	Open	Canopied	Millimeters (L x W x H)	3000 x 1000 x 1560	3200 x 1100 x 1700		3500 x 1100 x 1735	
				4500 x 1450 x 2050			5000 x 1450 x 2300	
Fuel Capacity (with base tank)	Open	Canopied	Litres	1232			1400	
				1232			1400	
Autonomy (at 75% load)	Open	Canopied	Hours	29	29	27	28	19
				29	29	27	28	19
Noise Level	Canopied	dBA	72 @ 6m & 78 @ 6 available					

*CAC – Turbo charged and charge air cooled
TAC – Turbo charged, after cooled
IC – Turbo charge and intercooled

Dale Power Solutions plc reserves the right to make changes in specification without notice or liability. All information is subject to Dale Power Solutions own data & is considered accurate at time of publishing.

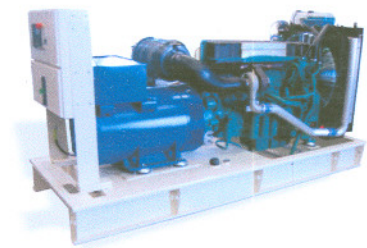
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VNE275_450issue9.2E

Subsidiary of  **TP electronics**

Features

- Multi function digital generator controllers incorporating engine and alternator protections and digital metering. Simple to operate with advanced PCB layout for high reliability.
- Integral high capacity fuel tanks allow a minimum of 8 hours running time.
- Bunded fuel tanks with leak protection in accordance with the DEFRA Pollution Prevention Guidelines PPG2.
- Acoustic enclosures compliant with the Noise Directive of the EU 2000/14/EC.
- Durable and efficient diesel engines giving fuel economy and low exhaust emissions.
- Mechanical or electronic governors with CAN-bus communication.
- Standard product can be configured for multiple applications including standby to mains, prime power, parallel with other generating sets and the utility applications.
- Product supported by Dale warranty.



Product Range

Model	VNE 275	VNE 305	VNE 360	VNE 410	VNE 450
Prime Power (PRP)	250 kVA	275 kVA	325 kVA	375 kVA	400 kVA
Prime Power (PRP)	200 kW	220 kW	260 kW	300 kW	320 kW
Emergency Standby Power (ESP)	275 kVA	303 kVA	360 kVA	412 kVA	440 kVA
Emergency Standby Power (ESP)	220 kW	242 kW	288 kW	330 kW	352 kW
Standby Amps @ 400V, 50Hz	397A	437 A	520 A	595 A	635 A

Standby: Continuous running at variable load for the duration of the emergency. No overload permitted on these ratings. In accordance with ISO 3046, BS 5514

Prime: Continuous running at variable load for unlimited periods. A 10% overload is permissible for 1 hour in any 12 hour period. In accordance with ISO 8528, ISO3046, BS 5514.

Standard Specifications

Engine	Volvo heavy duty industrial diesel engine 4 cycle, water cooled and turbo charged Electronic engine governor Direct injection fuel system 24 Vdc starter and charge alternator Replaceable fuel filter, oil filter and dry element air filter Engine driven cooling radiator Lead acid starting batteries with rack and cables Flexible fuel connection hoses Jacket water heater Operation manuals and circuit diagram documents	Control System	Multi function digital control system The control system is designed to monitor the mains supply via the Dale Transfer Switch Automatic starting in the event of a mains failure Front panel programming of the module settings Remote communication via RS 232 or RS 485 "modbus" output Scrolling digital LCD display Event logging of shutdown alarms Stop / Reset / Auto / Manual / Test / Start
Alternator	Brushless single bearing, 4 pole Insulation class H Standard degree of protection IP21 Self exciting and self regulating Stator windings with 2/3 pitch for improved harmonics Impregnation with tropicalised epoxy varnish Solid state automatic voltage regulator	LCD Display Metering	Generator Volts (Ph – Ph / Ph – N) Generator Amps (L1, L2, L3) Generator Frequency (Hz) Generator kVA Generator kW Generator power factor Mains Frequency (Hz) Engine Oil Pressure Engine Temperature Engine Speed Engine Hours Run Plant battery voltage
Baseplate	The complete generating set is mounted on a heavy duty fabricated steel base plate with engine and alternator mounting points Heavy duty lifting eyes are provided for easier installation of the generating set	Alarms	Under / Over generator voltage Under / Over generator frequency Over Current Low oil pressure High engine temperature Under / Over speed Fail to start Fail to stop Emergency stop Charge fail Low / High battery voltage Can data fail – on Canbus engines only Can ECU fail – on Canbus engines only
Exhaust	Loose industrial exhaust silencer		
Power outlet	3 Pole MCCB Mains powered battery charger		