



Uninterrupted Power, Unmatched Reliability with Perfect Generators powered by

VE COMMERCIAL VEHICLES

A VOLVO GROUP AND EICHER MOTORS JOINT VENTURE

&

**VOLVO
PENTA**



PERFECT SUPER SILENT GENERATING SETS POWERED BY VOLVO EICHER ENGINE

100 KVA SPECIFICATIONS (VOLVO EICHER)

D.G.Set	Generating Set Model	PVE 100	
	kVA /KW (Prime)	100/80	
	kVA /KW (Standby)	110/1440	
	Frequency / RPM	50 Hz /60 Hz , 1500 / 1800	
	Voltage / no. of Phase	415 / 3	
	Power Factor	0.8	
	Rated Current (Amps)	139	
	Over Load Capacity	10 % over Load for 1 Hours in each 12 Hour of Operation	
	Fuel Tank Capacity (liters)	170	
	Acoustic Enclosure Dimensions L X W X H (mm) including Silencer	3200X1080 X1575	
	Gross Weight (Kg)(Approx)	2000	
Diesel Engine	Engine Make	VOLVO EICHER (A Volvo Group and Eicher Motor Joint Venture)	
	Engine Model	EE683TCI	
	Engine Power (bhp)	128	
	No. of Cylinders	6	
	Fuel Consumption (Lit/ Hr) @100% Load	17.15	
	Fuel Consumption (Lit/ Hr) @75% Load	12.8	
	Cooling system	Liquid Cooled	
	Type of governor	Mechanical	
	Aspiration	TURBO CHARGED INTERCOOLED	
	Lube oil sump capacity (Ltrs.)	16	
	Recommended Service Interval for Genset.	500 Hours / 12 Month whichever is earlier	
	Coolant Capacity - UOM as Litres	20	
	Recommended Coolant	Ethylene glycol base concentrate ideal mixing ratio of water to antifreeze is 50:50	
	Electrical System (12V /24V)	12V	
	NO. of Battery	1	
	Battery Capacity	120 AH	
Alternator	Alternator Make	Stamford	Leroy-somer
	Alternator Model	UCI274C	LSAP 44.3 C
	Volage	415 Vol / 230 Vol	
	Frequency	50Hz	
	Class of Insulation	Class H	
	Voltage Regulation	± 1%	
	Power Fcator	0.8	
	Pole	4 Pole	
	Voltage Regulation	AVR (Automatic Voltage Regulator)	
	IP Rating	IP 23	
Panel	Battery Charger	12 VDC, Automatic Battery Charger	
	Controller	Deep Sea 4520 MK II	

Notes:

- Specifications and Dimensions are subjected to change without prior notice.
- Data is on NTP conditions as per ISO 3046.
- ±5% production tolerance is applicable as per ISO3046. Fuel consumption is based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2) and standard alternator efficiency. The fuel consumption may vary depending upon the alternator.

DG CONTROL PANEL

► Operating Features

- Microprocessor based digital controller
- Accurate LCD display
- Local Start/Stop
- Remote Start/Stop
- Generator breaker control
- Easily Accessible through Fascia
- Flexibility for selecting Manual, Auto operations
- Easily Convertible AMF by giving Mains Fail Signal

► Metering

Engine Parameters:

- Engine Speed
- Lube Oil pressure
- Coolant temperature
- Engine Running Hour
- Engine Battery voltage
- Running status
- Fuel level in Percentage
- Event Log with date and time

Electrical Parameter

- Generator Voltage (Ph-Ph)
- Generator Voltage (Ph-N)
- Generator Current (R,Y,B)
- Generator Apparent power (kVA)
- Generator active power (kW)
- Generator reactive power (kVAR)
- Generator Power Factor
- Generator Frequency (Hz)
- Cumulative Power Consumption in kWh
- Cumulative Power Consumption in kVAh
- Cumulative Power Consumption in kVArh
- Control Supply Voltage

► Protection

Engine

- High Water Temperature
- Low oil pressure
- Low Fuel Level
- Over Speed
- Engine Fails to Start

Electrical

- Generator under Voltage (ANSI-27)
- Generator over Voltage (ANSI-59)
- Generator under Frequency (ANSI-81L)
- Generator over Frequency (ANSI-81H)
- Generator over Current (ANSI-51)
- Control Supply under Voltage
- Control Supply over Voltage
- Phase Reversal
- Unbalanced Load

► Controller

The DSE 4520 MKII Is A Compact Auto Mains (utility) Failure Control Module That Has Been Developed To Provide An Outstanding Range Of Features Within A Compact Enclosure.

The Module Can Be Configured For Use As An Auto Start Control Module.



► Controller Feature

- User-friendly interface and backlite full graphics LCD
- Battery voltage monitoring & reverse protection to aux supply
- 7/9 configurable analogue/digital inputs
- Auto, Manual and Remote Start/Stop Operation
- Island Operation
- Automatic Mains Failure Function
- CANbus Engine interface for communication
- Log with latest 100 events
- Fully configurable via PC using USB, RS485 communication
- DC Battery supply voltage range 8 to 32V
- -20 to 65 °C operating temperature range
- Ip65 Protection class with gasket
- LCD alarm indication
- Power save mode
- 7 configurable Digital output

► Electrical Specification

- Supply Voltage Range: Nominal Voltage - 12/24 V DC
- Cranking drop out period: 50 ms
- Maximum reverse voltage protection: -32 V DC
- Measurement accuracy (battery voltage): $\pm 1\%$ Full scale
- Resolution: 0.1 V
- Maximum current consumption ~ 200 mA
- Measurement accuracy (battery voltage) - $\pm 1\%$ full scale

► Environmental Specification

- Operating Temp: -20 to 65°C in compliance with 60068-2-1, 2
- Vibration: 2G in X, Y and Z axes for 8 to 500Hz in compliance with IEC 60068-2-6
- Shock: 15 g for 11 ms in compliance with IEC 60068-2-27
- Humidity: 0 to 95% RH in compliance with IEC 60068-2-78
- Protection Degree: IP65 Protection class with gasket in compliance with IEC60529
- EMI/EMC in compliance with IEC 61000-6-2, 4

► Approvals

- CE Compliant
- UL/cUL Recognized to UL/ulc6200:2019 1st edition



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Factories

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