



# **DEM 25P**

DEMMANS
DIESEL GENERATING SET
TECHNICAL SPECIFICATIONS









ELECTRICAL			
FREQUENCY	VOLTAGE	PRIME	STAND-BY
50 Hz	400/230 V	20 kVA / 16 kW	22 kVA / 18 kW
Rated Speed		1500 RPM - 50 Hz	
Phase	3		
Power Factor	0,8		

WEIGHT AND DIMENSIONS			
		OPEN	CANOPY
Length	mm	1300	1820
Width	mm	800	800
Height	mm	1100	1350
Weight	kg	505	670

<u>Prime</u>: This rating is for the supply of continuous electrical power at variable load.

There is no limitation on the annual hours in operation and 10% overload power can be supplied for 1 hour in 12.

<u>Stand-by:</u> This rating is for the supply of continuous electrical power at variable load, in the event of utility power failure. No overload is permitted



# **Servins**

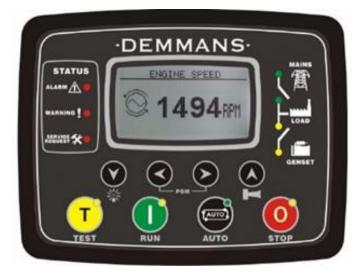
ENGINE			
		50 Hz	
Output Rating	kW	20,6	
Manufacturer and Model		Perkins 404D-22G1	
Fuel		Diesel	
Injection		Direct	
Aspiration		Naturally Aspirated	
Cylinders		4	
Bore and Stroke	mm	84 x 100	
Displacement	lt	2,216	
Cooling		Water	
Engine Oil Specification		SAE 15W40	
Compression Ratio		23,3:1	
Engine Oil Capacity	lt	10,6	
Coolant Capacity (incl.radiator)	lt	7	
Governor		Mechanical	
Air Filter		Dry element	
Fuel Consumption		50 Hz	
100 % Load	lt/h	5,4	
75 % Load	lt/h	4,0	
50 % Load	lt/h	2,9	
ALTERNATOR			
Poles		4 pole	
Winding Connections		Star	
Insulation		Class H	
Enclosure		IP23	
Exciter System		Self regulating Brushless	
Voltage Regulator		AVR	
Steady State Voltage Regulation		±1%	
Bearing		Single bearing sealed	
Coupling		Flexible disc	
Cooling		Direct drive centrifugal blower fan	



EXHAUST SYSTEM				
Maximum Temperature	°C	505		
Exhaust Gas Flow	m³/min	3,94		
Maximum Allowed Back Pressure	kPA	10,2		
Exhaust Flange Size (Internal Dia.)	mm	42		
AIR SYSTEM				
Intake Air Flow	m³/min	1,45		
Total Cooling Air Flow	m³/min	29,4		
STARTING SYSTEM				
Starter Motor	kW	2		
Battery Capacity	Ah	60		
Auxiliary Voltage	V	12		
FUEL SYSTEM				
Diesel Specification		EN590		
Fuel Tank Capacity	lt	50		



#### **CONTROL PANEL - DMP500**



The DMP500 is next generation genset control unit combining multifunctionality and wide communication possibilities together with a reliable and low cost design.

The unit complies and mostly exceeds world's tightest safety, EMC, vibration and environmental standards for the industrial category. Software features are complete with easy firmware upgrade process through USB port. The Windows based PC software allows monitoring and programming through USB, serial and GPRS.

CONTROL PANEL FEATURES	
Alarm and Shutdown functions	
High Coolant Temperature	Alarm & Shutdown
Low Oil Pressure	Alarm & Shutdown
Battery High / Low Voltage	Alarm
Battery Charger Alternator Failure	Alarm
Overspeed / Underspeed	Alarm & Shutdown
Failure to Start	Alarm & Shutdown
Low Coolant Level	Alarm & Shutdown
Stop Fault	Alarm & Shutdown
Low Fuel Level	Alarm
Service Required	Alarm
Generator High / Low Voltage	Alarm & Shutdown
Generator High / Low Frequency	Alarm & Shutdown
Symmetry between Phases	Alarm & Shutdown
Over Current	Alarm & Shutdown
Recitifer Fail	Alarm
ECU failure	Alarm
Measure and Monitor functions	
Total Run Hour	Coolant Temperature
kW meter - Generator	Oil Pressure
Service Indicator	Fuel Level
Phase to Phase Voltage - Mains	Battery Voltage
Phase to Neutral Voltage - Mains	Engine RPM
Phase to Phase Voltage - Generator	Battery Charge Alternator Voltage
Phase to Neutral Voltage - Gen.	Frequency - Generator & Mains
Phase current - Generator	Power Factor - Generator
Other functions	
Events History	Programmable Timer
External Start Capability	Multi Lingual
Start Restriction Program	Lamp test
Mains Failure Start	Remote Monitoring
Test Run Start (On load & off Load)	Manual Override
Allows SMS controls	Remote Programming
Fuel consumption counter	Magnetic Pick Up Input
Waveform display of voltage & current	Total Harmonic Distortion view
Programmable as an ATS controller	Manual "speed fine adjust" on selected ECUs
Standardized USB port for programming	J1939-CANBUS for electrocially governed
and communication	engines
	1 20



GENERATOR FEATURES	STANDARD		OPTIONAL
ENGINE	MANUAL	AUTOMATIC	
Engine		•	Χ
Cooling Pack		•	X
Tropical Radiator		Х	•
Heavy Duty Air Filter		X	•
Electronic Governor		X	•
High Coolant Temperature Sender		•	X
Low Oil Pressure Sender		•	Χ
Low Coolant Level Sender		•	Χ
Radiator Guards		•	Χ
Hot Component Guards		•	Χ
Manual Oil Drain Pump		X	•
Fuel Prefilter		X	•
Water Jacket Heater	X	•	<ul><li>(Manual)</li></ul>
Industrial Silencer - Open Set		•	Χ
Residential Silencer - Open Set		X	•
Residential Silencer - Canopy		•	Χ
Cold start aid		X	•
Remote Radiator		X	•
Trailer		Х	•

GENERATOR FEATURES	STANDARD		OPTIONAL
ENGINE	MANUAL	AUTOMATIC	
ELECTRICS			
Alternator		•	X
Circuit Breaker - 3 poles		Χ	•
Circuit Breaker - 4 poles	Х		•
Battery Isolator	Х		•
Earth Fault Protection	Х		•
Anti condensation Heater	Х		•
Optional Voltages	Х		•
Class Finsulation	Х		•
External Stop Button - Canopy	•		X
GSM SMS message sending on fault	X		•
Battery Charger	Х	•	• (Manual)
ATS Panel - 3 Poles	X	•	X
ATS Panel - 4 Poles	Х	Х	• (Automatic)
Synchronisation Panel	Х	Х	• (Automatic)
	_	• - Available X	: - Not Available

### **DEMMANS** Generating Sets are CE certified and conform to the following standards;

- Power according to ISO 3046 and ISO 8528
- EN 12100 , EN 13857 , EN 60204
- 2006/42/CE Machinery Safety
- 2006/95/EC Low Voltage
- 2004/108/CE EMC
- Ambient reference conditions 1000 mbar, 25 °C, 30 % relative humidity ISO8528

All the information in this leaflet is intended for general purposes only. DEMMANS reserves the right to change the specifications without notice.

## **DEMMANS**

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