

DEM 50P

DEMMANS DIESEL GENERATING SET TECHNICAL SPECIFICATIONS







	ELECTRICAL					
	FREQUENCY	VOLTAGE	PRIM	1E	STAND-BY 49,5 kVA / 39,5 kW	
	50 Hz	400/230 V	45 kVA / 3	36 kW		
	Rated Speed		1500 RPM	- 50 Hz		
	Phase		3			
	Power Factor		0,8			
WEIGHT	AND DIMENSIONS					
				0	OPEN	C/
Length			mm		1750	
Width			mm		900	
Height			mm		1250	
Weight			kg		735	



<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



		50 Hz
Output Rating	kW	46,5
Manufacturer and Model		Perkins 1103A-33TG1
Fuel		Diesel
Injection		Direct
Aspiration		Turbocharged
Cylinders		3
Bore and Stroke	mm	105 x 127
Displacement	lt	3,3
Cooling		Water
Engine Oil Specification		SAE 15W40
Compression Ratio		17,25:1
Engine Oil Capacity	lt	8,3
Coolant Capacity (incl.radiator)	lt	10,2
Governor		Mechanical
Air Filter		Dry element
Fuel Consumption		50 Hz
100 % Load	lt/h	10,7
75 % Load	lt/h	8,2
50 % Load	lt/h	5,7
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

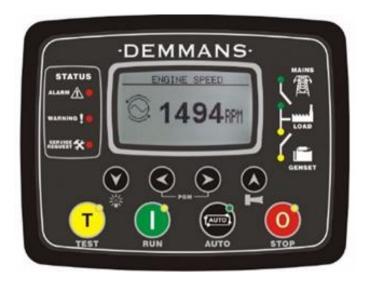


EXHAUST SYSTEM					
Maximum Temperature	°C	537			
Exhaust Gas Flow	m³/min	7,7			
Maximum Allowed Back Pressure	kPA	10			
Exhaust Flange Size (Internal Dia.)	mm	56			
AIR SYSTEM					
Intake Air Flow	m³/min	3,1			
Total Cooling Air Flow	m³/min	53			
STARTING SYSTEM					
Starter Motor	kW	3			
Battery Capacity	Ah	60			
Auxiliary Voltage	V	12			
FUEL SYSTEM					
Diesel Specification		EN590			
Fuel Tank Capacity	lt	110			





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.

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 selecte ECUs		
Standardized USB port for programming	J1939-CANBUS for electrocially governe		
and communication	engines		



GENERATOR FEATURES	STANDARD		OPTIONAL	GENERATOR FEATURES	STANDARD		OPTIONAL
ENGINE	MANUAL	AUTOMATIC		ENGINE	MANUAL	AUTOMATIC	
Engine	e •		Х	ELECTRICS			
Cooling Pack	•		Х				v
Tropical Radiator	X		•	Alternator	•		٨
Heavy Duty Air Filter	X		•	Circuit Breaker - 3 poles	Х		•
Electronic Governor X		(•	Circuit Breaker - 4 poles	Х		•
High Coolant Temperature Sender	•		Х	Battery Isolator	Х		•
Low Oil Pressure Sender	•		Х	Earth Fault Protection	X		•
Low Coolant Level Sender	•		Х	Anti condensation Heater	×		
Radiator Guards	Radiator Guards •		Х		^		•
Hot Component Guards	ot Component Guards		Х	Optional Voltages	X		•
Manual Oil Drain Pump		(•	Class Finsulation	X		•
Fuel Prefilter	>	(•	External Stop Button - Canopy	•		Х
Water Jacket Heater X		•	● (Manual)	GSM SMS message sending on fault	X		•
Industrial Silencer - Open Set			Х	Battery Charger	Х	•	● (Manual)
Residential Silencer - Open Set	>	(•	ATS Panel - 3 Poles	X	•	X /
Residential Silencer - Canopy			Х		X	v	a (Automotia)
Cold start aid X		(•	ATS Panel - 4 Poles	X	X	(Automatic)
Remote Radiator	>	(•	Synchronisation Panel	X	Х	 (Automatic)
Trailer	>	(•			• - 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 specifiacations without notice.

DEMMANS

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