



METS ENERGY S A L

Model	MP2000-S		NA			
Frequency/Speed - Voltage	50HZ/1500 RPM-	230/400V	60HZ/1800 RPM- 230/400V		60HZ/1800 RPM- 277/480V	
Prime Power	2000 KVA	1600 KW	NA	NA	NA	NA
Standby Power	2200 KVA	1760 KW	NA	NA	NA	NA



Image for illustration purposes only.

Features

Engine	Perkins ,4016-61TRG2 , Made in UK, in accordance to ISO3046 ,ISO8528,DIN6271
Alternator	Stamford PI734F , Made in UK, complying to the norms: BS EN60034/ BS 5000/ VDE 0530/ NEMA MG 1-32/ IEC 34/ CSA C22.2-100/ AS 1359
Control Panel	Deap sea, M-DCM-417(7320) ,Made in UK, complying to the norms: BS EN60034/ BS 5000/ VDE 0530/ NEMA MG 1-32/ IEC 34/ CSA C22.2-100/ AS 1359
Base Frame	Black steel with Anti-vibration pads, Built in fuel tank
Sound Proof Canopy	Modular SPC, Powder Coated, Extremely Durable, Designed to Reduce Sound Level with Maximum Service Accessibility and Minimum Foot Prints
Worldwide Support	Mets Energy Products are distributed through its PowerMets International Network For more information kindly check our website www.metsenergy.com

Rating Definitions and Conditions

Prime Rating	The power available for an unlimited hour usage with an average load factor of 80% of the published prime power over each 24 hours period. A 10 % overload is available for 1Hr every 12 hours.
Standby Rating	The power limited to 500 hours annual usage with an average load factor of 80% of the published standby power rating over each 24-hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.

KVA Rating @ 0.8 P.F

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Engine Perkins, 4016-61TRG2, 4 Stroke Cycle, Diesel

Structure	Number of Cylinders	16		
	Engine Build	60 ° V		
	Bore	160 mm		
	Stroke	190 mm		
	Displacement	61.123 L		
	Compression Ratio	13 /1		
	Aspiration	Turbocharged		
	Cooling	A /W		
		1500 rpm	1800 rpm	
	Fuel Tank			
		NA	NA	
Fuel	Fuel System		Direct injection	
	Fuel Recommended		N°2 Diesel	
	Fuel System Make (ECM)		-	
			1500 rpm	1800 rpm
	Delivery Flow Rate (l/hr)			
	Fuel Consumption			
	100% Load (g/kWh-L/hr)	205(421)		NA
75% Load (g/kWh-L/hr)	206(337)		NA	
50% Load (g/kWh-L/hr)	210 (216)		NA	
Cooling system	Engine Coolant Capacity		TBA	
	Air Flow-Radiator	TBA	NA	
	radiator with 50 degree ambient capability			
	Cooling Package & Air Cleaner Kit Thermostatically-controlled system			
Air Inlet	Air Intake Engine (Clean Filter/Dirty)		1.2 / 3.7 kPa	
Exhaust System	Exhaust Gas Temperature (Prime)	457 °C	NA	
	Exhaust Gas Flow (Prime)	8166.6 l/s	NA	
	Maximum Exhaust System Back Pressure	4 kPa	NA	
	Muffler	residential (20→25 dB) industrial(15→25 dB)		
	Stainless Steel exhaust flex-fittings			
DC System-Starting/Charging	Cranking Battery Voltage		2 * 24V	
	Battery Charging Alternator		40 A	
	Dc Voltage Monitoring via control panel			
Heat Rejection(prime)	Radiated Heat to Ambient (Prime)	130 kW	NA	
	Heat Rejection to Coolant (Prime)	670 kW	NA	
	Heat Rejection to Exhaust (Prime)	1240 kW	NA	
	Heat Rejection to intercooler (prime)	606 kW	NA	
Lube System	Lubricating System Oil Capacity		TBA	
Governor	Electronic			

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Alternator Stamford, PI734F

Structure	Insulation System	Class H	
	Winding Pitch	2/3 to minimize harmonics effects	
	Number of Poles	4	
	Number of Bearings	Single bearing	
	Winding Leads	6	
	Power Factor	0.8	
	Over Speed Capability (% of Rated)	2250 Rpm (150%)	
	Wave Form Distortion	No load < 1.5% Non-Distorting balanced linear load < 5.0%	
	Telephone Interference	THF< 2%	
	IP Rating (Protection)	IP23	
	AVR	Separately excited by PMG	
		Synchronous, 3 phase, Brushless & Self ventilated	
		1500 rpm	1800 rpm
Power Switching	3-P Circuit Breaker, ACB	3200A	NA
Temperature	Temperature Rise	125/40 °C	
Control & Voltage Regulator	Control System (Standard)	Separately excited by PMG	
	Voltage Regulator (AVR)	MX321(3 phase sensing) or MX341(1 phase sensing)	
	% Of Voltage Regulation	± 0.5 % (for MX321) / ± 1.0 %(for MX341)	
Motor Starting Capacity@30%	if voltage 230/400V	TBA	
Voltage Dip	if voltage 277/480V	TBA	

Standard Controller, M-DCM-417(7320)

Control	<ul style="list-style-type: none"> Auto/Start/Stop Control Emergency Stop Pushbutton/ Alarm Acknowledge Engine Cool Down Timer Warm-up Timer Load Switching Timer Engine Cycle Crank 	
Indications	<ul style="list-style-type: none"> Operating Hours 3 Phase Generator Voltage Sensing & Monitoring Current Protection & Monitoring Power Measurement (kW, kVA, kVA_r, kWh, kVAh, kVA_rh, pf) Frequency Monitoring (Hz) Oil Pressure/Coolant Temperature/Fuel Level Monitoring Battery Voltage Monitoring (DC) Alarm Acknowledge 	
Warning & Shutdown Alarms	<ul style="list-style-type: none"> Generator Over/Under Voltage & Frequency Crank Disconnect (Failure to Start) Under/Over Speed Over Current Low oil pressure High Water Temperature Low Fuel Level Low Water Level 	
Features	<ul style="list-style-type: none"> IP 65 (if ordered with gasket) Basic Scheduler 8-35 VDC Supply Digital Inputs(4)- Outputs(4 MPU/ 6 CAN) Event Log (5 shutdowns) 	

Optional Accessories

Alternator	<ul style="list-style-type: none"> AVR (3 phase Sensing) Reactive Droop Winding Temperature Detectors Anti- Condensation Heaters Excitation with auxiliary exciter (PMG)
Power Switching	<ul style="list-style-type: none"> 4-P Circuit Breaker Special Brands (ABB- MG- Siemens...) Motorized Operation Shunt Trip Under Voltage Trip UVT Residual Current Protection Ground Fault Protection Earthing Kit Surge Arrestor

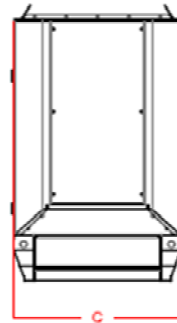
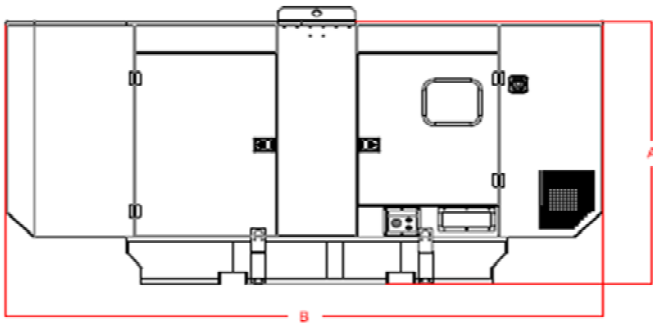
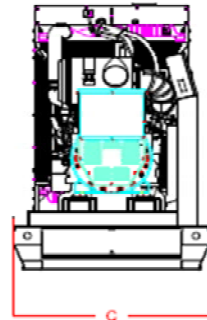
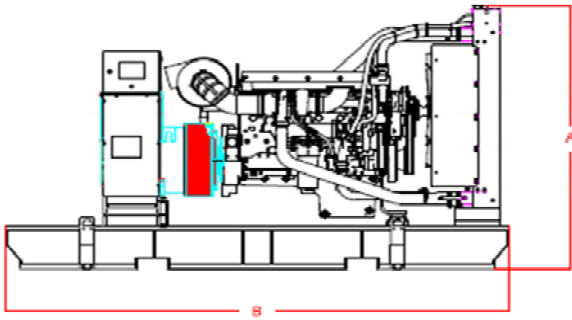


Optional Accessories ^(continues)

		Micro-Diesel Filter for Micro-Particles Filtration Automatic Fuel Refilling System Fuel Water Separato (2000/40) Mechanical Fuel Level Kit Oversize Fuel Tank Upon Custom Requirements Fuel Tanks-Pipes Heater Optional Built in fuel tank 180 L operation full load (Height will be increased by 100 mm and weight by 20 kg)
Engine	Fuel	
	Air Inlet	Sy-klone Air Cleaner Installed @ Air Intake System
	Exhaust	Muffler: Critical (25→30 dB) Hospital (35→40 dB) Elbow, Flanges, Expanders & Y Adaptors
	Cooling / Heating	Radiator with 35 °C or 60 °C Ambient Capability Jacket Water Heater
	Lube	Manual Sump Drain Pump Semi-Rotator Hand Pump
	DC System - Starting/Changing	Mains Battery Charger 24 V DC-5A Battery Charger 10A-20A on Request Automatic Battery Charger on Request Battery Disconnect Switch DC/AC Current Monitoring (Ammeter) Oversize Battery
Control Panel	DSE 7310/7320/7410/7420-More Inputs & Outputs-Advanced Communications Features; DSE 8610/8710/8810- Load Share Module; Digital & Analogues Inputs Module DSE 2130 (for 7000 Series & Above); Analogue Inputs advanced Module DSE 2131-2133(for 7410 &Above); Digital relay Outputs Module DSE 2157 (for 7000 Series &Above); Analogue Outputs Module DSE 2152 (for 7410 & Above); Local & Remote enunciator Module DSE 2548 (for 7000 Series & Above); Display Modules DSE 2510/2520 (with 7310-7320); Remote Monitoring via: Web Interface (All Series), GSM (for 7000 Series & Above), RS485 (for 7000 Dry Contacts Alarm Indication for Customer Use Audible Alarm (Option for 6010/20; Standard for 7000 Series & Above); Voltage Adjust Potentiometer; Speed Adjust Potentiometer;	

Dimensions & Weights

	Length (mm)	Width (mm)	"C"	Height (mm)	Weight Dry
Open set (NB)	TBA	TBA		TBA	TBA
SPC Type S	TBA	TBA		TBA	TBA



Drawings for illustration purposes only.

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