



METS ENERGY S A L

Model	MP2-180-M		MP2-200@6-M			
Frequency/Speed - Voltage	50HZ/1500 RPM- 230/400V		60HZ/1800 RPM- 230/400V		60HZ/1800 RPM- 277/480V	
Prime Power	180 KVA	144 KW	195 KVA	156 KW	198 KVA	158.4 KW
Standby Power	198 KVA	158.4 KW	214.5 KVA	171.6 KW	217.8 KVA	174.24 KW



Image for illustration purposes only.

Features

Engine	Perkins ,1106A-70TAG3 , Made in UK, in accordance to ISO3046 ,ISO8528,DIN6271
Alternator	Meccalte, ECO38 -1SN/4 , Made in UK, complying to the following norms:CEE/ CEI2-3/ EN60034-1/ IEC34-1/ VDE/ BS/ CAN/ CSA
Control Panel	Deep sea, M-DCM-317B ,Made in UK, complying to the norms: comply to the norms BS EN 61000, BS EN 60950, BS EN 60068
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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Rev0_MP2-180-M/MP2-200@6-M_150213



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Engine Perkins, 1106A-70TAG3, 4 Stroke Cycle, Diesel			
Structure	Number of Cylinders	6	
	Engine Build	In line	
	Bore	105 mm	
	Stroke	135 mm	
	Displacement	7.0 L	
	Compression Ratio	16.0:1	
	Aspiration	Turbocharged	
	Cooling	A /A	
Fuel	Fuel Tank	1500 rpm Built in fuel tank TBA for TBAhours operation @ full load	1800 rpm Built in fuel tank TBA L for TBA hours operation @ full load
	Fuel System	Direct injection	
	Fuel Recommended	N°2 Diesel	
	Fuel System Make (ECM)	-	
	Delivery Flow Rate (l/hr)	1500 rpm TBA	1800 rpm TBA
	Fuel Consumption		
	100% Load (g/kWh-L/hr)	TBA (40.2)	TBA
	75% Load (g/kWh-L/hr)	TBA (30.9)	TBA
	50% Load (g/kWh-L/hr)	TBA (19.7)	TBA
	Cooling system	Engine Coolant Capacity	27L
Air Flow-Radiator		TBA	TBA
radiator with 50 degree ambient capability Cooling Package & Air Cleaner Kit Thermostatically-controlled system			
Air Inlet	Air Intake Engine (Clean Filter/Dirty)	TBA	
Exhaust System	Exhaust Gas Temperature (Prime)	TBA	TBA
	Exhaust Gas Flow (Prime)	TBA	TBA
	Maximum Exhaust System Back Pressure	6 kPa	6 kPa
	Muffler residential (20→25 dB) industrial(15→25 dB) Stainless Steel exhaust flex-fittings		
DC System-Starting/Charging	Cranking Battery Voltage	12 V	
	Battery Charging Alternator	85 A	
Heat Rejection(Prime)	Dc Voltage Monitoring via control panel		
	Radiated Heat to Ambient (Prime)	TBA	TBA
	Heat Rejection to Coolant (Prime)	TBA	TBA
	Heat Rejection to Exhaust (Prime)	TBA	TBA
Lube System	Heat Rejection to intercooler (prime)	TBA	TBA
	Lubricating System Oil Capacity	16.5 L	
Governor	Mechanical		

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Alternator Meccalte, ECO38 -1SN/4

Structure	Insulation System	Class H	
	Winding Pitch	2/3 to minimize harmonics effects	
	Number of Poles	4	
	Number of Bearings	Single bearing	
	Winding Leads	12	
	Power Factor	0.8	
	Over Speed Capability (% of	2250 Rpm (150%)	
	Wave Form Distortion	2.3/2 % @ full Load , 2.6/2.6% @ no Load	
	Telephone Interference	THF< 2%	
	IP Rating (Protection)	IP21(other Protection on request)	
AVR	DSR (1-phase sensing/ additional equipment for 3-phase sensing)		
	Synchronous, 3 phase, Brushless & Self ventilated		
		1500 rpm	1800 rpm
Power Switching	3-P Circuit Breaker, MCCB	300A	300A
Temperature	Temperature Rise	125/40 °C	
Control & Voltage Regulator	Control System (Standard)	MAUX excitation	
	Voltage Regulator (AVR)	DSR (1-phase sensing/ additional equipment for 3-phase sensing)	
	% Of Voltage Regulation	± 1.0 %	
Motor Starting Capacity@30%	if voltage 230/400V	TBA	
Voltage Dip	if voltage 277/480V	TBA	

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Standard Controller, M-DCM-317B

Control	Fuel tank monitoring	
	Emergency Stop Pushbutton/ Alarm Acknowledge	
	Engine Cool Down Timer	
	Warm-up Timer	
	Load Switching Timer	
Indications	Engine Cycle Crank	
	Operating Hours	
	3 Phase Generator Voltage Sensing & Monitoring	
	Current Protection & Monitoring	
	Power Measurement (kW, kVA, kVAh, kVAh, kVAh, pf)	
Warning & Shutdown Alarms	Frequency Monitoring (Hz)	
	Oil Pressure/Coolant Temperature/Fuel Level Monitoring	
	Battery Voltage Monitoring (DC)	
	Alarm Acknowledge	
	Generator Over/Under Voltage & Frequency	
Features	Crank Disconnect (Failure to Start)	
	Under/Over Speed	
	Over Current	
	Low oil pressure	
	High Water Temperature	
	Low Fuel Level	
	Low Water Level	
	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	AVR (3 phase Sensing)
	Reactive Droop
	Winding Temperature Detectors
	Anti- Condensation Heaters
	Excitation with auxiliary exciter (PMG)
Power Switching	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	

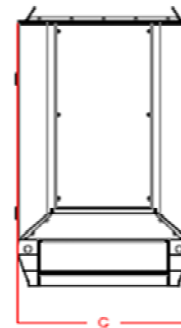
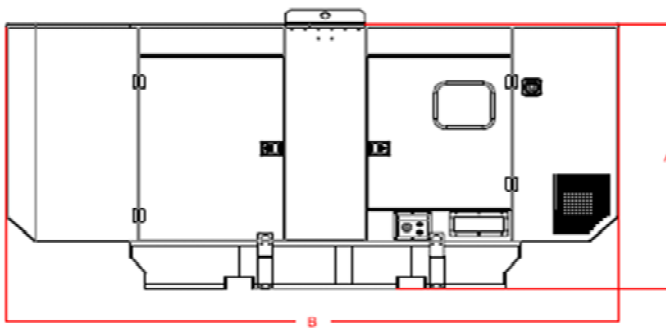
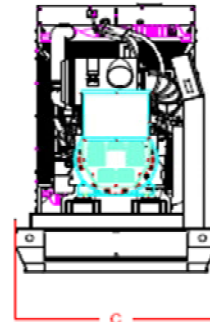
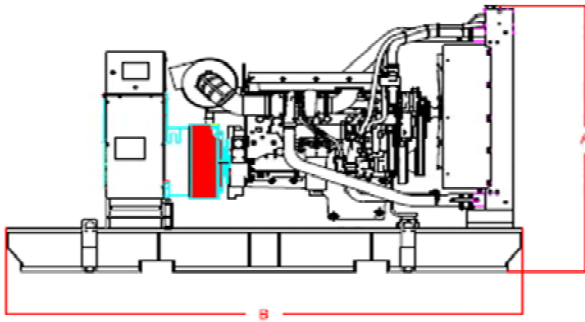


Optional Accessories^(continues)

	<ul style="list-style-type: none"> Micro-Diesel Filter for Micro-Particles Filtration Automatic Fuel Refilling System Fuel Water Separator (2000/10) Mechanical Fuel Level Kit Oversize Fuel Tank Upon Custom Requirements Fuel Tanks-Pipes Heater
Engine	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 Disconnecter 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)	Height (mm)	Weight Dry
Open set (NB)	2720	1210	1560	1667
SPC Type S	4280	1210	2136	2490



Drawings for illustration purposes only.

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