

# **MP1650EM**



Output Rating					
Voltage	Frequency		Standby	Prime	
400 V	50 Hz	KVA	1815	1650	
		KW	1452	1320	

# **Rating Definitions**

Ratings are in accordance with ISO 8528, ISO 3046, BS 5514.

## **Prime Rating**

Applicable for supplying continuous electrical power (no limitation to annual hours of operation), at variable load, in lieu of utility power network; 10% overload is permitted for 1 hour in every 12 hours.

#### Standby Rating

Applicable for supplying continuous electrical power, at variable load, in the event of a utility power failure; no overload is permitted on standby ratings.

#### Standard Reference Conditions

Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity.

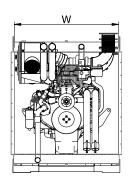
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General Data	
Engine Make	MTU
Engine Model	12V4000G14F
Alternator Make	Mecc-Alte
Alternator Model	ECO46-2S4A
Control Unit	DSE 7320
Engine Speed: RPM	1500
Fuel Tank Capacity (I)	1400
Fuel Consumption Standby (I/hr)	358.6
Fuel Consumption Prime (I/hr)	323.3
Fuel Consumption 75% (I/hr)	250.2
Fuel Consumption 50% (I/hr)	173.7

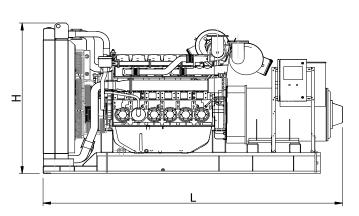
## **Optional Features and Customization**

Optional Features and Customization include:

- Weather and sound proof enclosure
- Stand-alone control panel
- Synchronizing panel
- Load sharing
- Residential silencer
- CE certification
- LV Circuit Breaker

Dimensions and Weights					
	Length	Width	Height	Weigh	t (Kg)
	(mm)	(mm)	(mm)	Dry	Wet
Open Set	5050	2040	2525	12453	12600
Canopied Set	TBA	TBA	TBA	TBA	TBA





• Dimensions and weights are for guidance only. Certified drawings are available upon request. Specifications may change without notice.



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Engine Data		
Engine Model		12V4000G14F
No. of Cylinders		12
Alignment		90° V
Cycle		4-cycle
Bore	mm (in)	170 (6.7)
Stroke	mm (in)	210 (8.3)
Induction		TC-AC
Cooling Method		Water
Governing Type		Electronic
Governing Class		ECU 9
Compression Ratio		16.4
Displacement	L (cu.in)	4.77 (291)
Moment of Inertia	kg m²	N.A.
Voltage	VDC	24
Ground		Negative
Capacity		N.A.
Engine Weight Dry	Kg (lb)	6200 (13669)
Engine Weight Wet	Kg (lb)	6400 (14110)

Engine Performance Data		
Engine Speed	rpm	1500
Gross Engine Power Prime	kW (hp)	1420 (1904)
Gross Engine Power Standby	kW (hp)	1575 (2112)
BMEP Prime	kPa (psi)	N.A.
BMEP Standby	kPa (psi)	N.A.

Air System		
Combustion Air Flow Prime	m³/min	96
Combustion Air Flow Standby	m³/min	108
Max. Combustion Air Intake Restri	kPa	5

Alternator Physical Data	
No. of Bearings	1
Insulation Class	Н
Winding Pitch	2/3
Winding Code	N.A.
Wires	N.A.
Ingress Protection Rating	IP23
Excitation System	S-E, Brushless
AVR Model	Electronic

Fuel System		
Recommended Fuel		Class A2 Diesel
Fuel Consumption Prime (110%)	l/hr	358.6
Fuel Consumption Prime (100%)	l/hr	323.3
Fuel Consumption Prime (75%)	l/hr	250.2
Fuel Consumption Prime (50%)	l/hr	173.7
Fuel Consumption Standby (110%	l/hr	N.A.
Fuel Consumption Standby (100%	l/hr	358.6
Fuel Consumption Standby (75%)	l/hr	N.A.
Fuel Consumption Standby (50%)	l/hr	N.A.
Fuel Consumption Continuous	l/hr	N.A.
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(Based on diesel fuel with a specific gravity of 0.86 and conforming to BS2869 classA2,EN590

Cooling System		
Cooling System Capacity	(I)	260
Heat rejection to coolant*: Prime	kW	540
Heat rejection to coolant*: Standby	kW	580
Fan power for mech. Rad. (40°C)	kWm	38
Cooling air flow	m³/min	N.A.

Lubrication System		
Oil Filter Type		Replaceable elt.
Total Oil Capacity	(I)	260
Oil Pan Capacity:	(1)	N.A.
Oil Type		SAE 15W40
Oil Cooling Method		Water

Exhaust System				
Maximum Allowable Back Pressur	kPa	8.5		
Exhaust Gas Flow: Prime	m³/min	240		
Exhaust Gas Flow: Standby	m³/min	270		
Exhaust Gas T°: Prime	°C	430		
Exhaust Gas T°: Standby	°C	440		

Alternator Operating Data				
Overspeed	rpm	2250		
Voltage Regulation: (Steady state)	%	±0.25		
Wave Form NEMA = TIF		50		
Wave Form IEC = THF	%	2		
Total Harmonic content LL/LN	%	N.A.		
Radio Interference		EN61000-6		
Radiant Heat: 50 Hz	kW	N.A.		

<sup>•</sup> Dimensions and weights are for guidance only. Certified drawings are available upon request. Specifications may change without notice.