DyMac GLOBAL

POWER GENERATION



Model:

MPRR-PM45FO

MacPower
ready rental

MODEL : MPRR-PM45FO Fuel Optimised



Overview

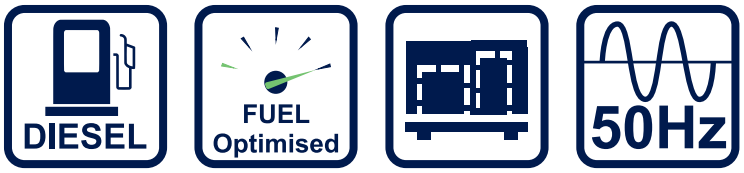
The MacPower ready rental range of Fuel Optimised Generators Sets comes equipped with Perkins engine & Meccalte Alternator from DyMac and have been specifically designed to meet the rigours of the rental and construction industries world wide. The overall Generators design is robust, compact and hard wearing. The base frame is fully bunded to 110% and comes complete with an integrated fork lift pocket design.

The DyMac MPRR has a silent canopy, designed to achieve maximum noise level reduction as well as a perfect cooling of the engine insuring its full rating is achieved under full load conditions.

The exhaust silencer is residential type and mounted internally. The canopy is made of hot galvanised carbon sheet steel pre-treated before being powder coated and is suitable also for use in tropical environments its strong structure is fully bolted and all panels can be easily and individually removed.

Power Rating

Emergency Standby Power ESP	49kVA
Emergency Standby Power ESP	39.5kW
Prime power PRP	45kVA
Prime power PRP	36kW
Frequency	50Hz
Voltage	400V
Phases	3№
Power factor	0.8 cos Φ
Rated current at 400 V- (A/Ph)	65A
Rated current at 415 V- (A/Ph)	63A
Fuel	Diesel
[50Hz] Exhaust emission level	Fuel Optimised



Engine Specifications

Engine Brand	Perkins
Model	1103A-33TG1
Engine cooling system	Water Cooled
No. of cylinder and disposition	3
Displacement	3300cm³
Aspiration	Turbo-GT20
Speed governor	Mechanical
Coolant capacity	10.2L
Electric circuit	12V
Fuel	Diesel

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Engine Data	50Hz
[50Hz] Operating Speed-Nominal	1500 rpm
[50Hz] Exhaust emission level	Fuel Optimised
[50Hz] Specific fuel consumption 75% PRP	8.3L/h



Alternator Specifications

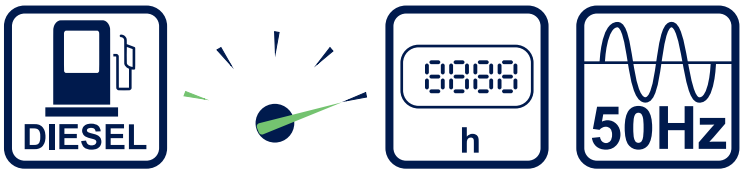
Alternator	Meccalte
Model	ECP322S4C
Type	Brushless (Shunt), Closed loop
Class	H
IP protection	23
Insulation Protection Systems	Protection System 1
Poles	4
Winding leads	12
Voltage regulation system	Electronic
Voltage tolerance	±1%



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Fuel Tank Autonomy

Fuel tank location	Internal
Fuel tank material	Carbon steel
Fuel tank capacity	165L
[50Hz 400V] Fuel consumption 75% PRP	8.3L/h
[50Hz 400V] Running time 75% PRP	20H
[50Hz 400V] Fuel consumption 100% PRP	10.8L/h
[50Hz 400V] Running time 100% PRP	15.2H

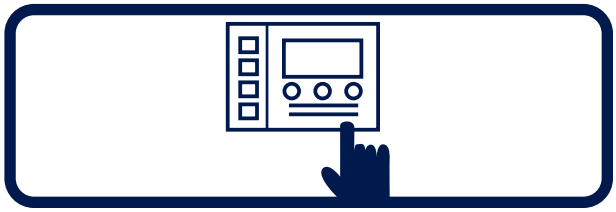


Control System

Controller Brand	Deepsea
Model	DSE7320 MKII
Module	Manual/Auto start/stop module
Standard function	Engine control
	Generator monitoring
	Generator protection
	Specification
Display	Frequency
	Battery voltage
	Running hour
Warning/shutdown	Under/over voltage
	Under/over speed
	Under/over frequency
	Low oil pressure
	High water temperature
Communication port	USB

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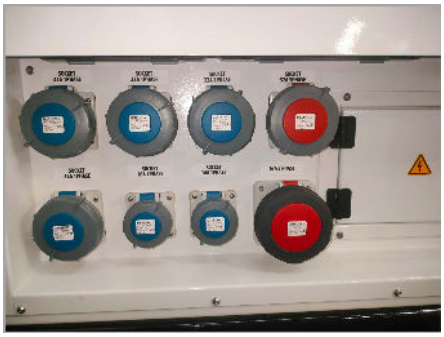
Automatic control panel	ACP - Standard
Synchronizing control panel	SCP - Optional





Sockets Module

Protection	Protected with RCBOs
Differential Sensivity	30 (only for 16A and 32A) mA
Sockets	2 x 16A 230V 3P P/SKT IP67
Sockets	4 x 32A 230V 3P P/SKT IP67
Sockets	1 x 32A 400V 5P P/SKT IP67
Sockets	1 x 63A 400V 5P P/SKT IP67





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Genset Equipment

Canopy

The DyMac MPRR has a silent canopy, designed to achieve maximum noise level reduction as well as a perfect cooling of the engine insuring its full rating is achieved under full load conditions.



Base Frame

Heavy duty base guarantees the highest standards of durability and resistance, painted using a high quality powder coating process.

Fully bunded, able to retain 110% of all the sets fluids, the base frame is provided with integrated fork pockets and drag bar for easy maneuverability and site positioning.

Single Lifting Point

Manual Battery Isolator Switch

Earth Rod (Optional)

Document Holder

Hot Parts Protections



Lube Oil Drain Pump

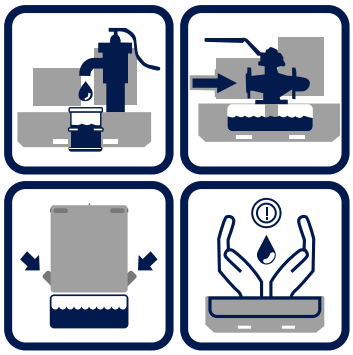
Fuel Valve (3 Way)

System designed for quick connection to external bulk fuel tank.

Fuel Tank (110% bunded)

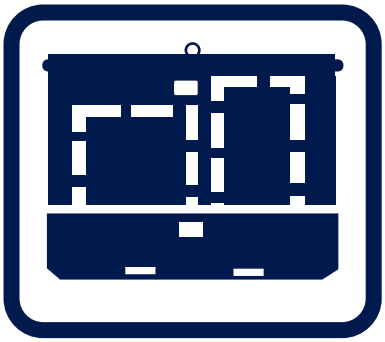
Heavy Duty Water Separator Fuel Filter (Optional)

Micro-Switch are located at the buzz bar door and main breaker door for emergency shut down



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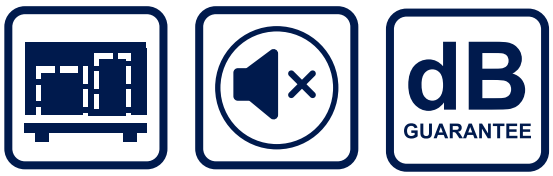
- Weatherproof Enclosure manufactured using heavy duty steel insuring the engine & alternator is protected from corrosion and aggressive site condition.
- Internal soundproofing is washable & is a fire resistance material.
- Rubber buffers for forklift entry protection.



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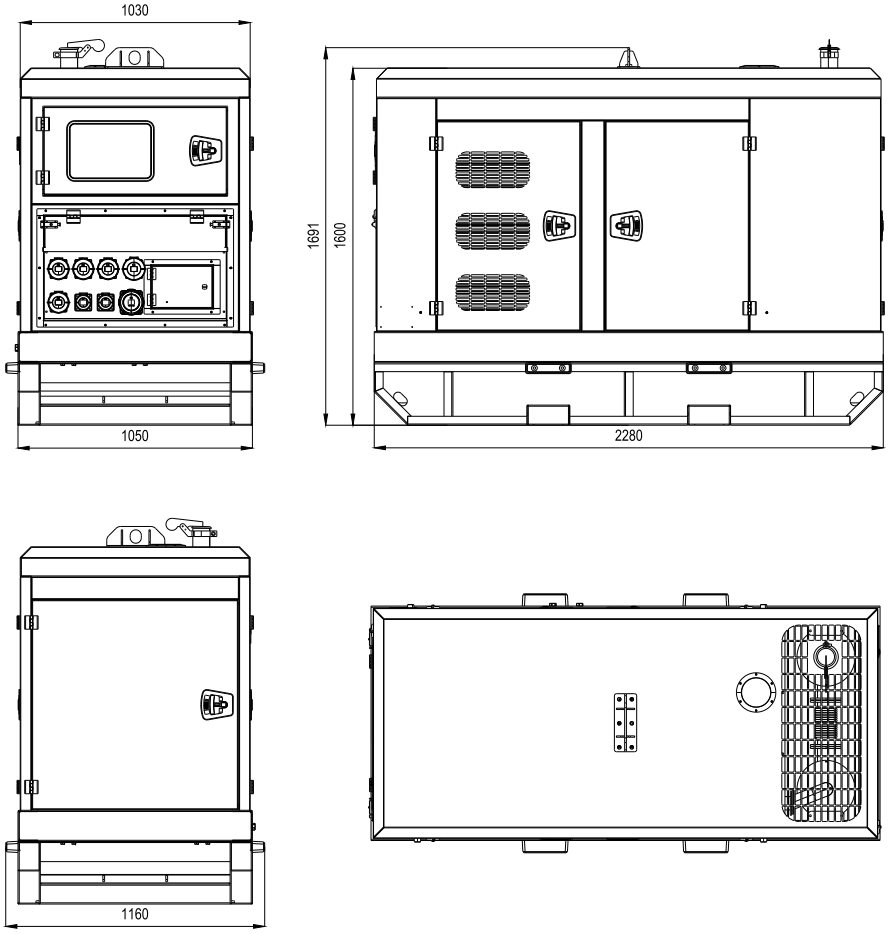
Noise Level 50Hz

Guaranteed noise level (LWA)	97dB(A) (FFC)
Noise pressure level @ 1 m	85dB(A) (FFC)
Noise pressure level @ 7 m	68dB(A) (FFC)



Dimensional Data Canopy Version

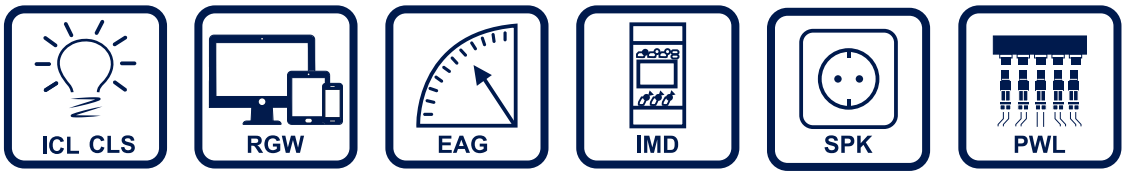
Length	2280mm
Width	1050mm
Height	1691mm
Weight (Dry)	1575kg
Weight (Wet)	1732kg



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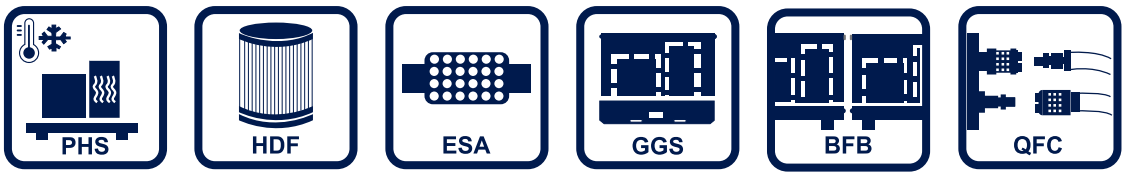
Electrical Optional Extras

Internal Canopy Lighting system with manual switch	ICL
Control section internal lighting (automatic with door switch)	CLS
DSE890 MKII DSEWebNet ® Gateway 4G (GSM/Ethernet)	RGW2
DSE2157 Output (8) Expansion Module	ARM7
DSE855 USB to Ethernet Communications Device	RGW9
Insulation Monitoring Device (Replace standard differential protection)	IMD
Socket kit	SPK
Power lock	PWL



Mechanical Optional Extras

Pre-heating system	PHS
Air Inlet Preheater	APH
Heavy-Duty Air Filter	HDF
Exhaust Spark Arestor ATEX certified	ESA
Air Shut-Off Valve	ASV
Galvanized Sliding Skid	GGS
Base frame Bumpers	BFB



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