

SPECIFICATION SHEET



FREEMPOWER™ FP120

Clean Electricity Generation

Power Output : 130kW (Gross)

Specification & Dimensions

Type : 3 phase AC

**Voltage : 380/480v line to line RMS
50/60Hz**

The Freepower™ FP120 unit has been specifically designed to operate off the exhaust gas heat of a 1MW gas engine or from any appropriate wasted heat source, be it biogas, biomass, industrial engines and turbines, process heats, flarestacks, ovens, geothermal or solar energy.

NOTE: The operating inlet temperature is managed by the secondary oil circuit (in balance of plant), the actual source of wasted heat may be very much higher, and may take a combination of Freepower™ units, working in parallel

Heat Supply

Thermal Input 742kW
Secondary (external) oil circuit
e.g. BP Transcal N 2.01kg/s
Inlet Temperature 280°C
Return Temperature 136°C
(Note : Duty calculations from 150°C upwards from any viable wasted heat source).

Technology

Worldwide patented Organic Rankine Cycle (orc)
Incorporating high speed turbine & direct drive
Sealed working fluid system
Solid state power conditioning unit

Cooling

Must provide:-

Flow rate 7.950kg/s.
Inlet (Max) 43°C
Outlet Max 64°C
Thermal Output 612 kW

Technology

Hydrocarbon (Kyoto approved)

Power Conditioning

PWM (Pulse Width Modulated) solid state
.programmable to customer requirements.
Output 380-480v line to line rms; 3phase; 4 wire;
50/60Hz; 120kW
Grid inject standard.
G59/1 compatible

EC Standards

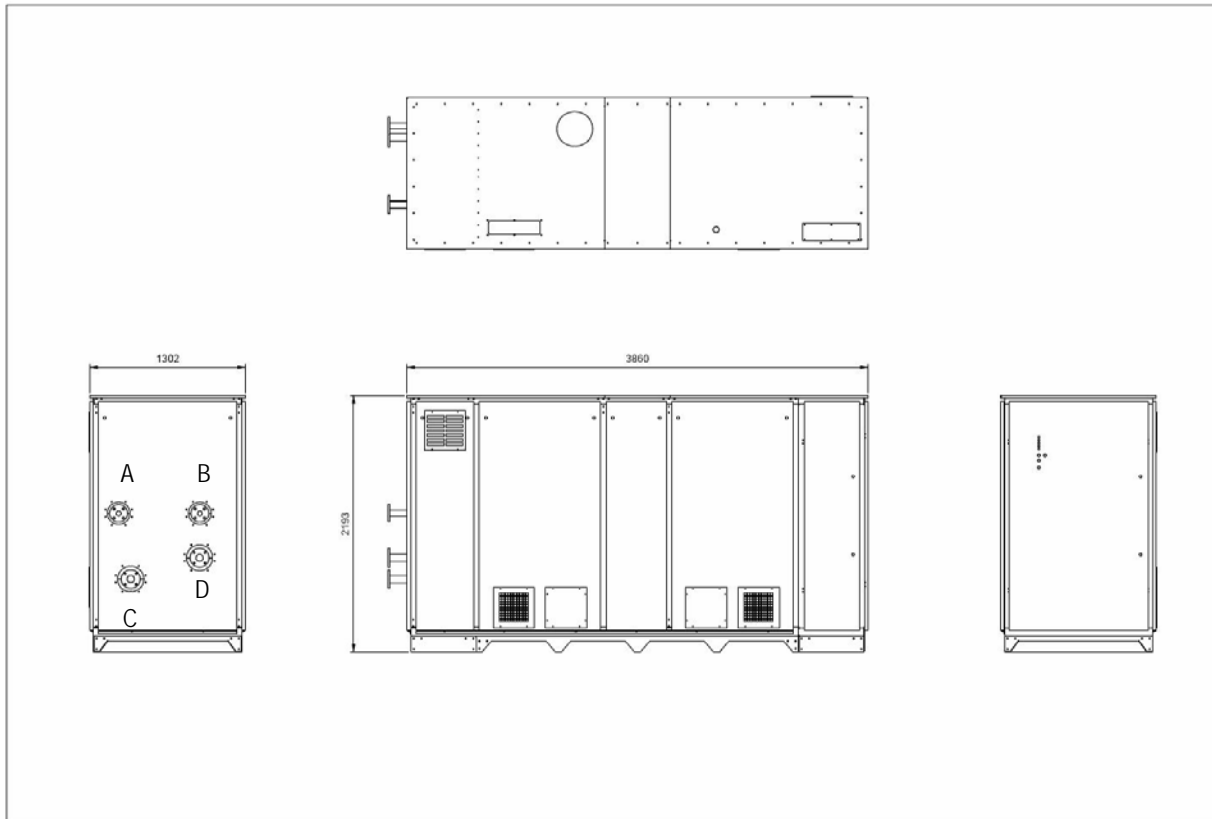
Conformity to:-
97/23/EC – Pressure Equipment
94/9/EC – ATEX
2004/108/EC – EMC
98/37/EC – Machinery Safety

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FP120 Cabinet



Outline Dimensions & Connections



Weight to include Working fluid : 3 tonnes

Dimensions in mm

A : Heat Transfer Medium	IN
B : Heat Transfer Medium	OUT
C : Cooling Water	IN
D : Cooling Water	OUT

FREEPOWER™ reserve the right to alter any specification without warning.

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