



FREEPower FP6

Specification & Dimensions for 6kWe Electricity Generating Equipment

FP6 low temperature waste heat ORC generator system converts low grade wasted heat and/or solar heat into a reliable, cost effective source of usable electrical energy.

FP6 is a hand built limited production system designed to get you familiar with the technology and up the learning curve at low cost. It will be followed in the near future by the first full production machine – the FP120.

Turbine : Two stage radial inflow. 45000 rpm.
Turbine entry temp 165. °C.

Generator : High speed 3 pole rare earth (SmCo₅) permanent magnet alternator with carbon sleeve containment. Plain bearings, working fluid cooled. 6kWe output.

Working Fluid : Hydrofluroether. Non flammable, Non toxic, Non ozone depleting.

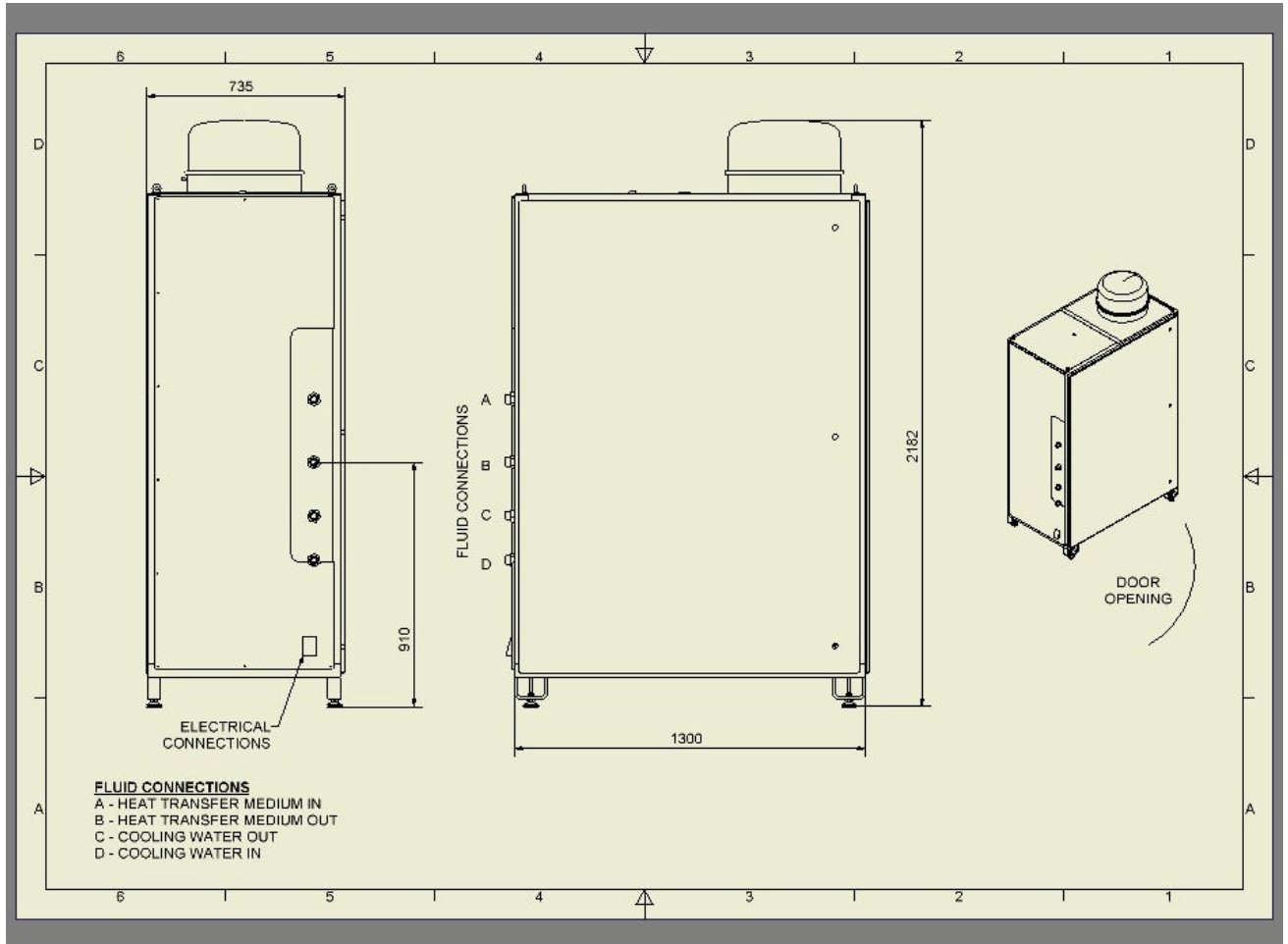
Power Conditioning : 240V 50/60 Hz 6kWe output. Harmonic distortion to comply to IEEE 519. G59/1 compatible. UL 2200 compliant.

Heat Supply : Secondary (external) oil circuit
BP Transcal N or similar 32.4 l/min
Inlet temperature 180°C
Return temperature 123°C
Duty 70kW
(Note : Duty energy calculations from 125°C upwards)

Cooling : Must provide
Flow rate (clean water) 47.6 l/min
Inlet Max 35°C
Outlet Max 55°C
Duty 60kW

Power output : Min 6kW
Type : Single phase AC
Voltage : 340v 50hz or 110v 60hz (or to order)

FREEPower reserve the right to alter any specification without warning.



Dimensions in mm's