Rank.® HTHP 0.5MWt

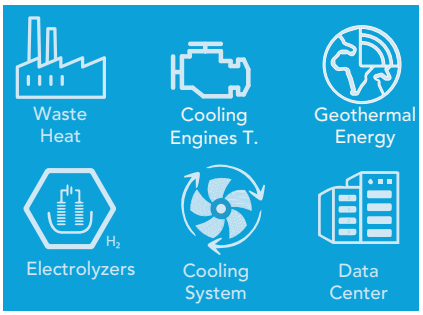
Selected operating point

Water-Water
COP H+C

Useful Heat / Disipation

Tout (ºC)					
150	3,7	4,9	6,0	9,6	12,8
135	3,9	5,5	6,8	12,0	13,8
120	4,3	6,4	9,2	14,8	-
105	5,1	7,4	10,7	15,9	-
90	5,5	10,1	15,3	-	-
Tin (ºC)	25	50	75	100	125

Heat source



Heat source

Heat transfer fluid	Water
Inlet temperature	25 °C
Outlet temperature	20 °C
Volumetric flow rate	62 m³/h
Thermal power	300 kWt
Pressure drop	100 kPa

Useful heat
Disipation

Heat transfer fluid	Water
Inlet temperature	55 °C
Outlet temperature	120 °C
Volumetric flow rate	7 m³/h
Thermal power	500 kWt
Pressure drop	50 kPa

Electricity

Consumption	200 kWe
COP_H+C	4,3
COP_H	2,5
COP_C	1,8
Voltage	3x400 V

Rank.®

Although our staff has made every effort possible to ensure the most accurate data and close to the final solution, these should be considered as indicative and not binding.

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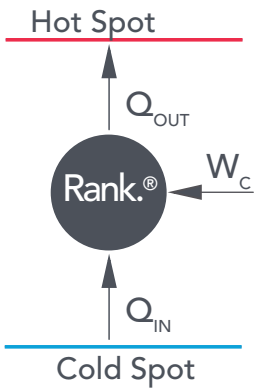
Calculation COP´s



$$COP_{H+C} = \frac{Q_{OUT} + Q_{IN}}{W_c}$$

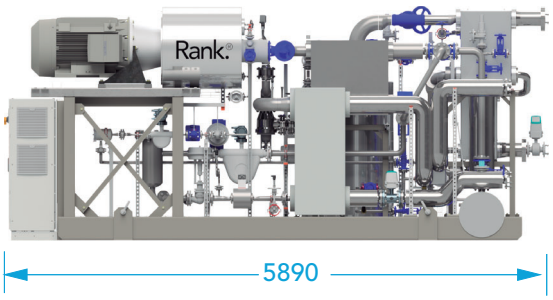
$$COP_H = \frac{Q_{OUT}}{W_C}$$

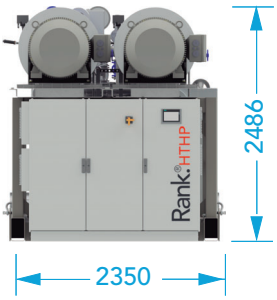
$$COP_C = \frac{Q_{IN}}{W_C}$$

COP_H = COP Heating
COP_C = COP Cooling
COP_{H+C} = COP Aggregate
Q_{OUT} = Thermal Power Delivered
Q_{IN} = Extract Cooling Power
W_C = Electricity Consumption HTHP

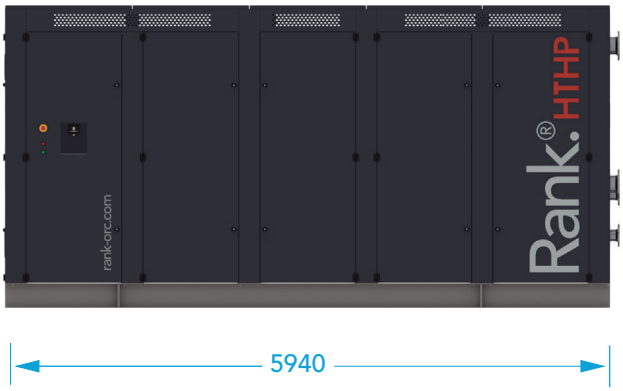
Dimensiones

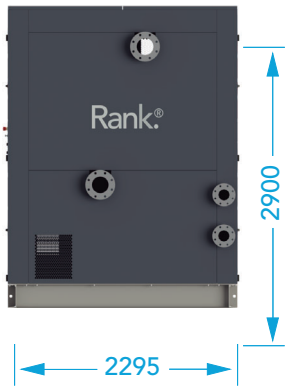
Basic Option



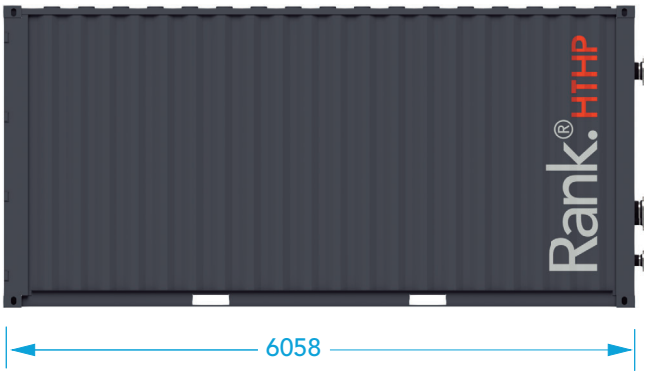


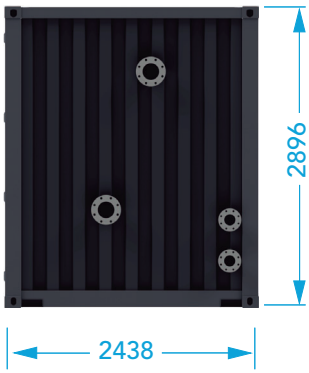
Wrap-around Option





Container Option





Compliance with regulations and standards

- Low voltage Directive
- Machinery Directive
- Electromagnetic Compatibility Directive
- Pressurized Equipment Directive
- EN/ISO 3744:2010
- UNE EN 10216
- UNE EN 764-7
- UNE EN 13136:2014+A1
- 2006/42/CE
- 2014/68/UE
- ASME B31.1 / ASME B31.3 – Process Piping Code
- ASME Boiler and Pressure Vessel Code Section VIII
- UL 508A- Control Panel Wiring
- 2014/35/UE
- 2014/30/UE

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