

# THERMODYNAMIC SYSTEMS

## SEQUOIA®

FROM 14 TO 105 KW



**CE compliance**  
• 2014/68/UE  
• 2014/35/UE



**Heat pump power up to 105kW**



**«Plug and play» system**



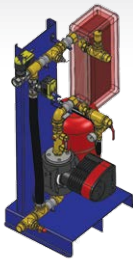
**Patented**

### DESCRIPTION

#### Thermal module transfer

##### Module :

- Support frame in carbon steel.
- Insulated brazed plate heat exchanger.
- Secondary circulator pump.
- Balancing & flow adjustment valve.
- Piloted 3-way valve or 2 solenoid valves according to model.
- PLC controlled.
- Expansion tank (optional).
- Flexible hose for secondary circuit connection for DHW (optional).
- Flexible hose for primary circuit connection for HW (optional).



##### Control and power cabinet :

- General circuit breaker 3x 400 V + N.
- Light indicator.
- Circuit breakers for immersion heaters.
- Circuit breakers for heat pump.
- Connector for I/O information.
- PLC (230V / 6 NTC sensors).

#### Heat pumps

- Air to Water system

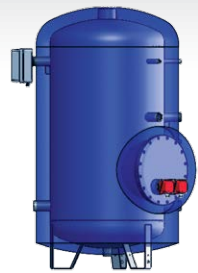
Available power from 14 to 105 kW (14, 19, 35, 45, 55, 75 et 105kW).  
COP up to 4,4  
(Normalized EUROVENT conditions : water 30/35 C deg., air 7/6 C deg.).



- Water to water system from 20 to 100 kW, upon request.

#### DHW tank

- Vertical tank with 3 feet available in:  
- carbon steel with internal coating from 750 to 6 000 L,  
- stainless steel AISI 316L from 750 to 6 000 L.
- Maximum working pressure = 7 bar.
- Test pressure = 10 bar.
- Tappings and dimensions upon request.
- ø 400 mm inspection manhole<sup>(1)</sup>.



<sup>(1)</sup>Note : conformément aux recommandations de la D.G.S.

#### Removable thermal insulation (including the inspection manhole)

- Fire proof rating : M1 (Euroclass B)
- High-performance mineral wool - 100 mm thick (32 kg/m3).
- Flexible PVC jacket.

Other thicknesses of insulation or M0 fire proof rating available upon request.

#### Electrical backup

Electric immersion heater with incoloy pins.  
Double unipolar safety thermostat.

- As a replacement for heat pump if necessary and/or for realization of thermal shock (placed at the bottom of the tank, on the manhole);
- Complementary energy source (placed at the top of the tank).

#### Internal coating (WRAS approved material) of the carbon steel tanks (anti-legionella safety)

- Finished with "RC851" coating (Maximum temp = 85°C constant) or "RC951" coating (T-max = 95°C at peak times).
- Magnesium protection anode(s) with wear indicator.

#### Accessories kit

including thermometer, DN25 safety valve, DN50 drainage valve, air vent valve.



Customized systems upon request

#### Standard configurations (tank + heat pump)

Tank capacity (L-litres)	Heat pump Air to water (kW)	Heat pump Water to water (kW)	additional electric elements (kW)	Number of rooms			number of accomodations			
				One-star hotel	Two-star hotel	Three-star hotel	1 room	2 rooms	3 rooms	4 rooms
750	14	20	9	18	14	9	25	16	12	8
1 000	14	20	12	25	18	12	35	21	16	10
1 500	14	20	12	30	23	15	42	28	20	14
2 000	35	25	20	60	46	30	88	55	42	28
3 000	35	30	30	75	56	38	100	68	52	34
4 000	45	35	35	100	78	52	145	95	70	46