

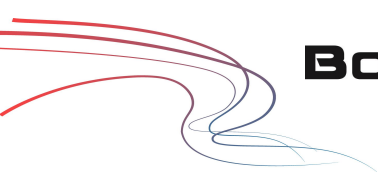
# **BOOSTHERM<sup>®</sup>**

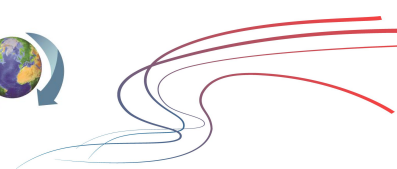
Heat Recovery Systems



2023  
2024







## Innovation at the service of energy saving

Boostherm, a human size company, draws on more than 20 years of experience in the refrigeration industry and as set up R&D, industrial and commercial partnerships to design efficient and sustainable solutions with the target to save energy.

With the aim of always offering solutions closer to your needs and meeting new energy requirements, Boostherm benefits from innovative technologies such as high efficiency devices, automatic regulation via PID controllers, leak detection by HP measurement, speed variation...

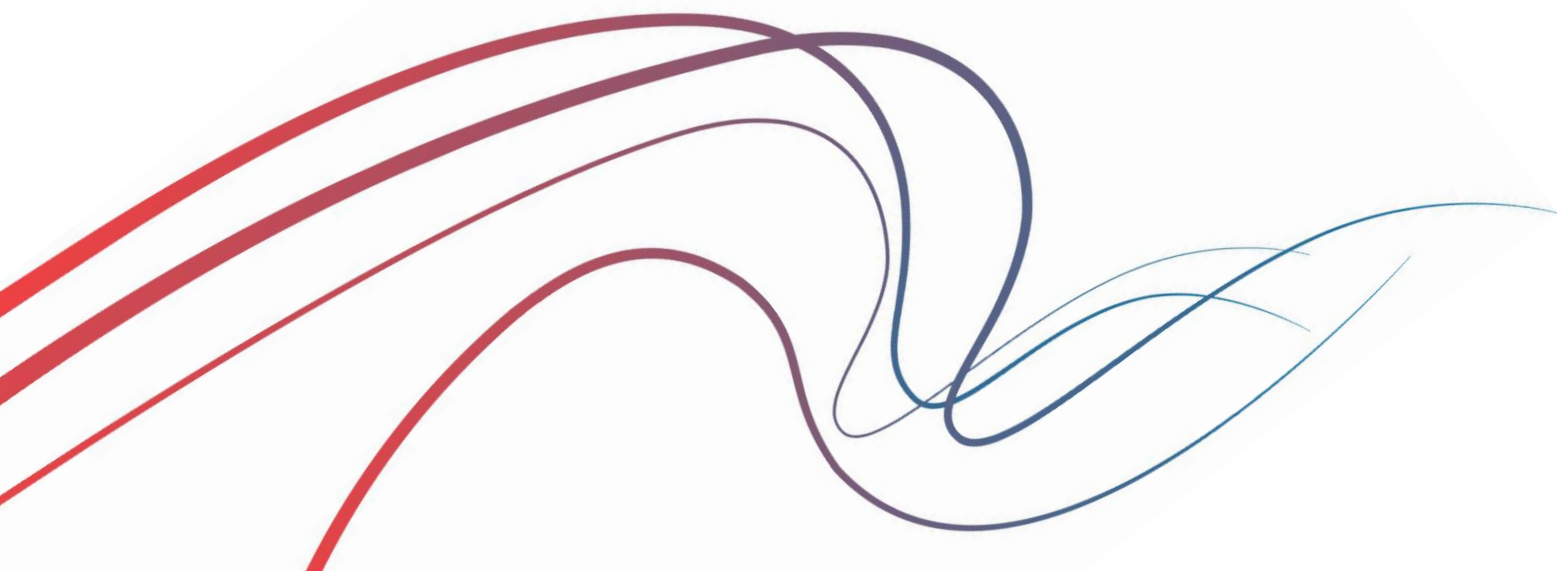
### Boostherm benefits:

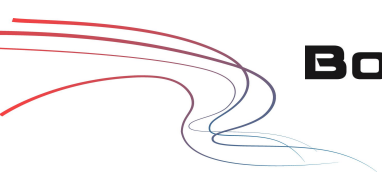
- An efficient solution: 100% of the heat recovered (against 20% with a classic desuperheater).
- A DHW compatible system with a permanent control on hot water production at a fixed set point.
- Compatibility with HFC/HFO refrigerants.
- Condensation problems solving (overheating or wasted water)
- Standing out by offering a simple, efficient and innovative solution.
- Rapid return on investment (2 to 4 years) and easy to estimate.
- Measurable performances (on request/optional: water and energy meters)
- System safeties giving priority to the refrigeration.
- An electronic regulation and a variable speed pump.
- A quality system developed and built in France.

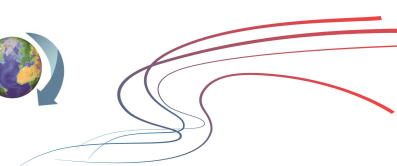


### We guide you through all the stages of your project:

- Sizing assistance.
- Studies / advices / systems implementation / schematic diagrams.
- Technical and economic studies adapted to the project's progress.
- Special and technical specification templates available.
- An online and user friendly simulation tool.
- Technical phone support for commissioning and after sales.

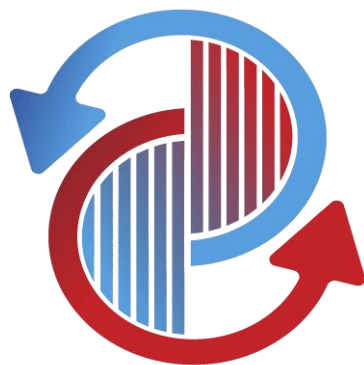
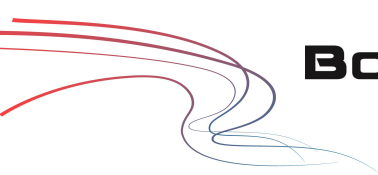


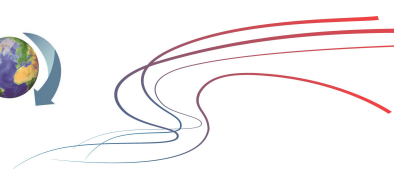




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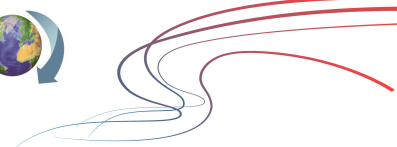




# 1. Heat recovery modules







• **Boostherm 5kW and 10kW heat recovery module**

Total condensation heat recovery module with a heat recovery capacity of 5kW and 10kW

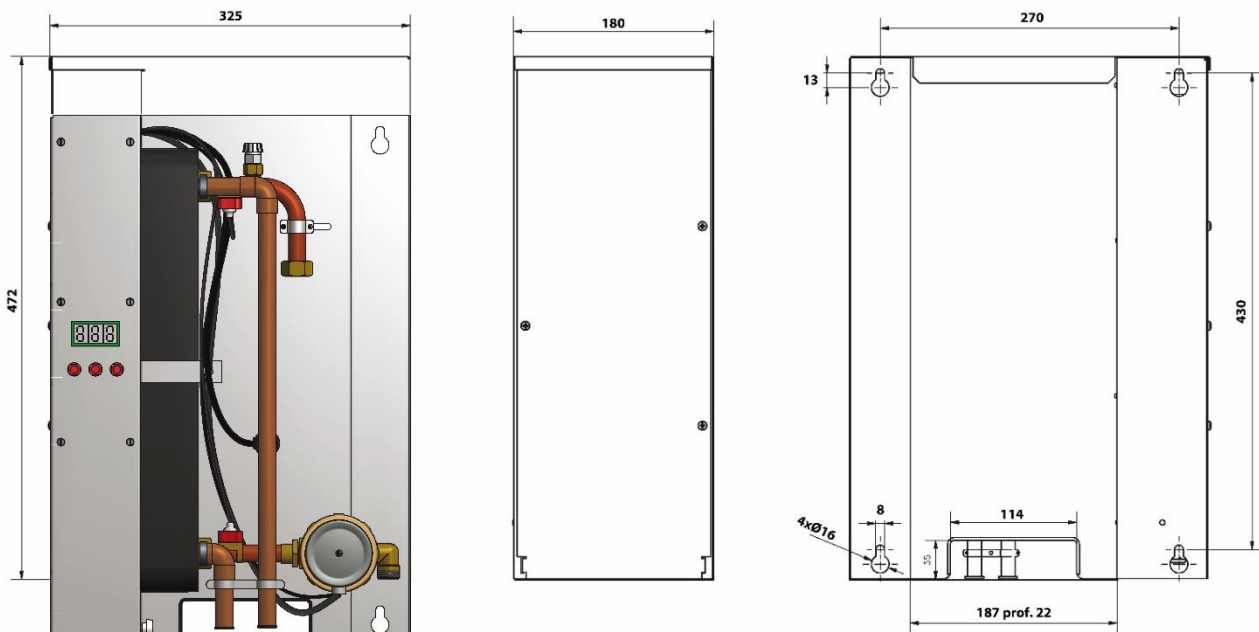
- Stainless steel protection box.
- Insulated double wall high pressure heat exchanger (Pmax 45bar/155°C).
- HP safety security.
- Variable speed pump with internal thermal protection.
- Scale formation warning.
- Electronic regulation with auto-tuning function, pump speed variation, multi-refrigerant system, frost protection mode, boost resistance control, leak detection...
- Power supply 230V-50/60Hz + compressor(s) signal.
- Fans relay control (2x NC max 16A/contact).
- Electrical board protection: 160mA fuse. IP44 electrical compartment.



Characteristics / dimensions:

Model	Connections		Pump		Max power input (W)	Heat recovery potential * (l/day)	Size HxLxD / Weight (mm) / (kg)	Code
	Ref.	Water	Max head (mWg at 0m3/h)	Max. Flow rate (l/h)				
BOOSTHERM 5 kW	1/2"	1/2" (15/21)	3	200	35	1 000	472x325x186 / 13,6	<b>812 305</b>
BOOSTHERM 10 kW	5/8"	1/2" (15/21)	3	400	35	2 000	472x325x186 / 14,4	<b>812 310</b>

\* Average potential estimated for 10h/day (from 12 to 55°C) compressor(s) operation.



• **Boostherm 20kW at 70kW heat recovery module**

Total condensation heat recovery module with a heat recovery capacity of 20kW,70kW

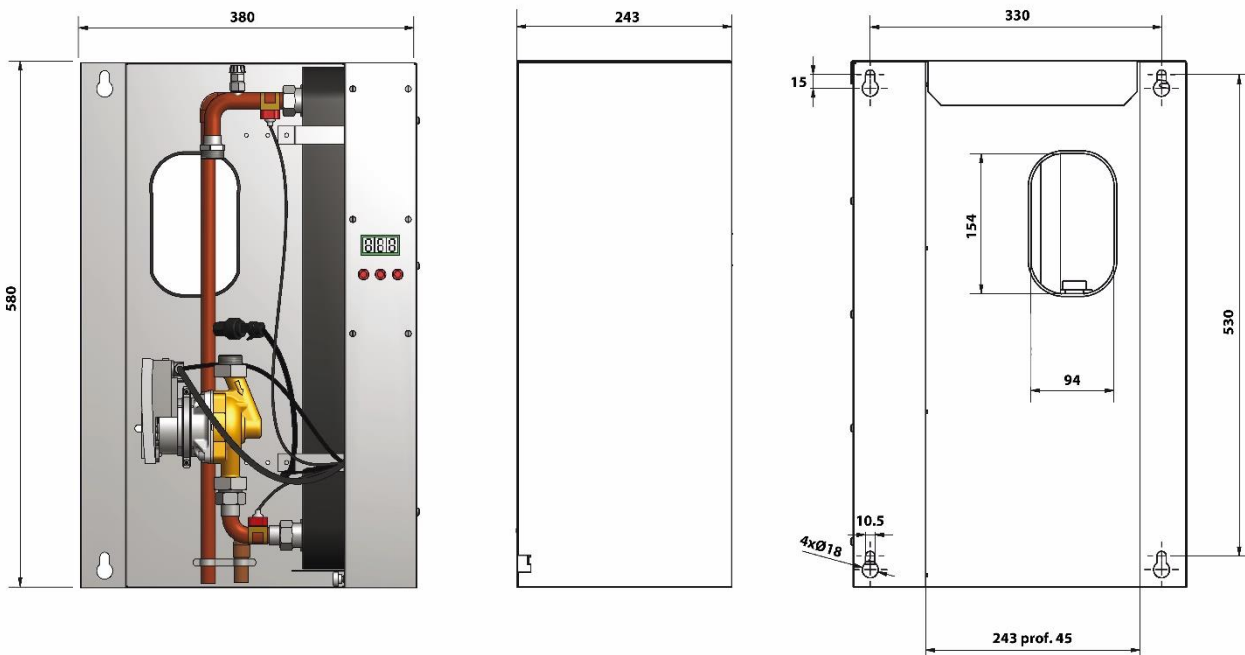
- Stainless steel protection box.
- SHW version: insulated double wall high pressure heat exchanger (Pmax 45bar/155°C)
- Heating version: insulated simple wall high pressure heat exchanger (Pmax 40bar/200°C)
- HP safety security.
- Variable speed pump with internal thermal protection.
- Scale formation warning.
- Electronic regulation with auto-tuning function, pump speed variation, multi-refrigerant system, frost protection mode, boost resistance control, leak detection...
- Power supply 230V-50/60Hz + compressor(s) signal.
- Fans relay control (2x NC max 16A/contact).
- Electrical board protection: 160mA fuse. IP44 electrical compartment.

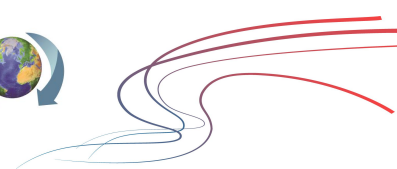


Characteristics / dimensions:

Model	Connections		Pump		Max power input (W)	Heat recovery potential* (l/day)	Size HxLxD / Weight (mm) / (kg)	Code
	Ref.	Water	Max head (mWg at 0m3/h)	Flow rate (l/h)				
BOOSTHERM 20 kW ECS	5/8"	3/4" (20/27)	8	600	55	4 000	580x380x245 / 20,7	812 320
BOOSTHERM 45 kW ECS	7/8"	3/4" (20/27)	8	1 400	55	9 000	580x380x245 / 26,8	812 345
BOOSTHERM 70 kW ECS	1"1/8	1" (26/34)	8	2 200	55	14 000	580x380x245 / 32,2	812 370
BOOSTHERM 30 kW CH	7/8"	3/4" (20/27)	8	2600	75	NC	580x380x245 / 24	812530
BOOSTHERM 60 kW CH	1"1/8	1"1/4 (33/42)	8	2 600	75	NC	580x380x245 / 26,2	812 560

\* Average potential estimated for 10h/day (from 12 to 55°C) compressor(s) operation.





• **Boostherm 100kW heat recovery module**

Total condensation heat recovery module with a heat recovery capacity of 100kW.

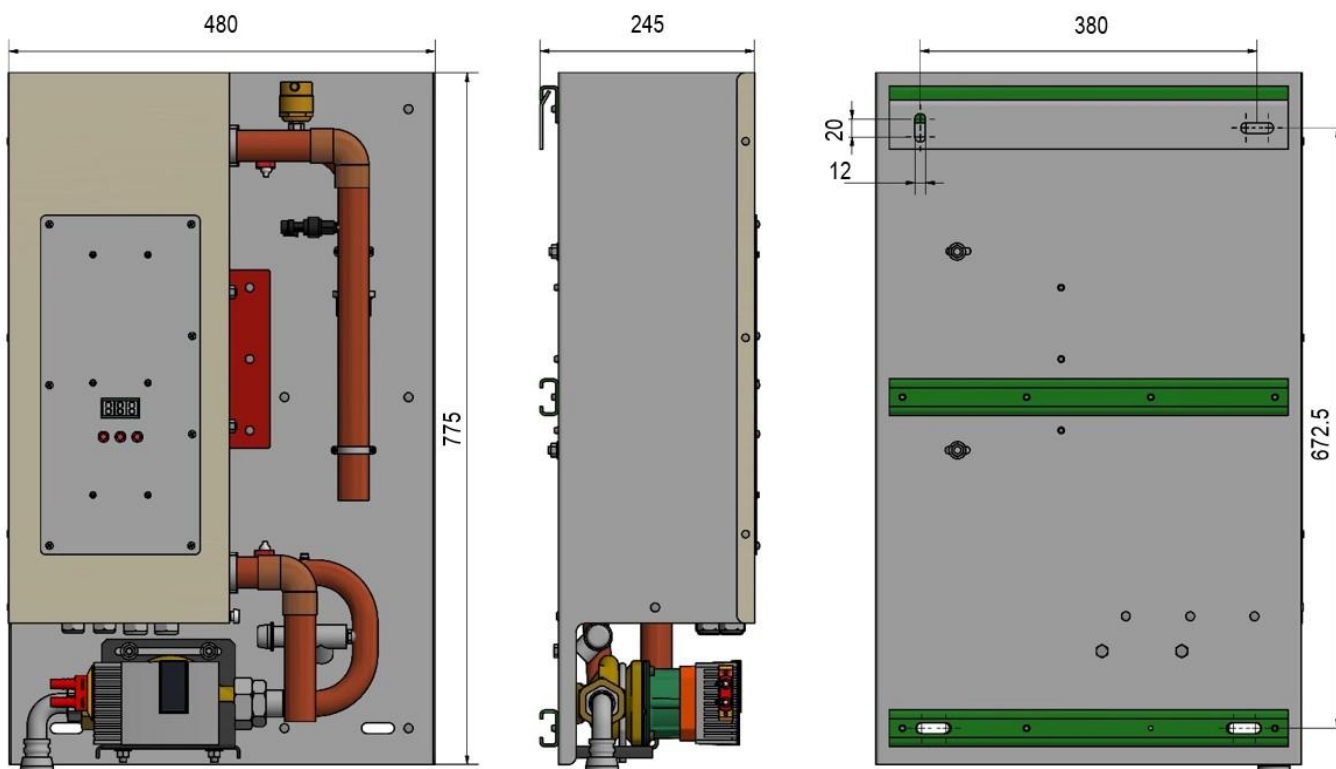
- Stainless steel protection box.
- SHW version: insulated double wall high pressure heat exchanger (Pmax 45bar/155°C)
- Heating version: insulated simple wall high pressure heat exchanger (Pmax 40bar/200°C)
- HP safety security.
- Variable speed pump with internal thermal protection.
- Scale formation warning.
- Electronic regulation with auto-tuning function, pump speed variation, multi-refrigerant system, frost protection mode, boost resistance control, leak detection...
- Power supply 230V-50/60Hz + compressor(s) signal.
- Fans relay control (2x NC max 16A/contact).
- Electrical board protection: 160mA fuse. IP44 electrical compartment.



Characteristics / dimensions:

Model	Connections		Pump		Max power input (W)	Heat recovery potential* (l/day)	Size HxLxD / Weight (mm) / (kg)	Code
	Ref.	Water	Max man. head (mWg at 0m3/h)	Max flow rate (l/h)				
BOOSTHERM 100 kW ECS	1"3/8	1"1/4 (33/42)	8	3 100	135	20 000	775x480x245 / 70	812 399
BOOSTHERM 100 kW CH	1"3/8	1"1/4 (33/42)	12	4 000	315	NC	775x480x245 / 65	812 599

\* Average potential estimated for 10h/day (from 12 to 55°C) compressor(s) operation.



• **DWV heat recovery kit**

Boostherm DWV heat recovery kits for cooling plants.

- Double wall high pressure heat exchanger (Pmax 41bar/225°C).
- Heat exchanger insulation shell.
- Variable speed pump with internal thermal protection.
- Electronic regulation with auto-tuning function, pump speed variation, frost protection, adjustable temperature set point, stand-by mode, automatic air venting cycle...
- Power supply 230V-50/60Hz + compressor(s) signal.
- Fans relay control (2x NC max 16A/contact).
- Electrical board protection: 160mA fuse. IP44 electrical compartment.



Characteristics / dimensions:

Model	Connections		Pump		Max power Input (W)	Volume primary side (L)	Size HxLxD / Weight (fixing type) (mm) / (kg)	Code
	Ref.	Water	Max man. head (mWg at 0m <sup>3</sup> /h)	Max flow rate (l/h)				
DWV A kit	1"5/8	3/4" (20/27)	7	600	55	2,16	495x330x177 / 25 (wall)	853 010
DWV B kit	2"1/8	3/4" (20/27)	7	1 200	55	3,78	495x330x255 / 34 (wall)	853 020
DWV C kit	2"1/8	1" (26/34)	8	1 800	135	5,58	495x330x273 / 44 (ground)	853 030
DWV D kit	2"5/8	1" (26/34)	8	2 500	135	8,46	495x330x345 / 60 (ground)	853 040

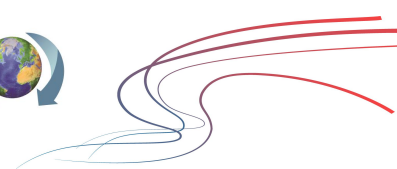
• **SWV heat recovery kit**

Boostherm SWV heat recovery kits for cooling plants.

- Single wall high pressure heat exchanger adapted to HFC's.
- Heat exchanger insulation shell.
- Variable speed pump with internal thermal protection.
- Electronic regulation with auto-tuning mode (no setting) with pump speed variation, frost protection mode, adjustable temperature set point, stand-by mode, automatic air venting cycle...
- Power supply 230V-50/60Hz + compressor(s) signal.
- Fans relay control (2x NC max 16A/contact).
- Electrical board protection: 160mA fuse. IP44 electrical compartment.

Characteristics / dimensions:

Model	Connections		Pump		Max power Input (W)	Volume primary side (L)	Size HxLxD / Weight (fixing type) (mm) / (kg)	Code
	Ref.	Water	Max man. head (mWg at 0m <sup>3</sup> /h)	Max flow rate (l/h)				
SWV A kit	1"5/8	1" (26/34)	8	2 000	170	1.51	287x117x121 / 8 (wall)	854 010
SWV B kit	2"1/8	1" (26/34)	8	4 000	170	2.86	525x243x76 / 26 (wall)	854 020
SWV C kit	2"1/8	1"1/4 (33/42)	12	6 000	370	4.68	525x243x107 / 32 (wall)	854 030
SWV D kit	2"5/8	1"1/4 (33/42)	12	8 000	370	6.50	525x243x148 / 39 (ground)	854 040
SWV E kit	3"1/8	1"1/4 (33/42)	12	10 000	370	9.88	783x318x214 / 50 (ground)	854 050



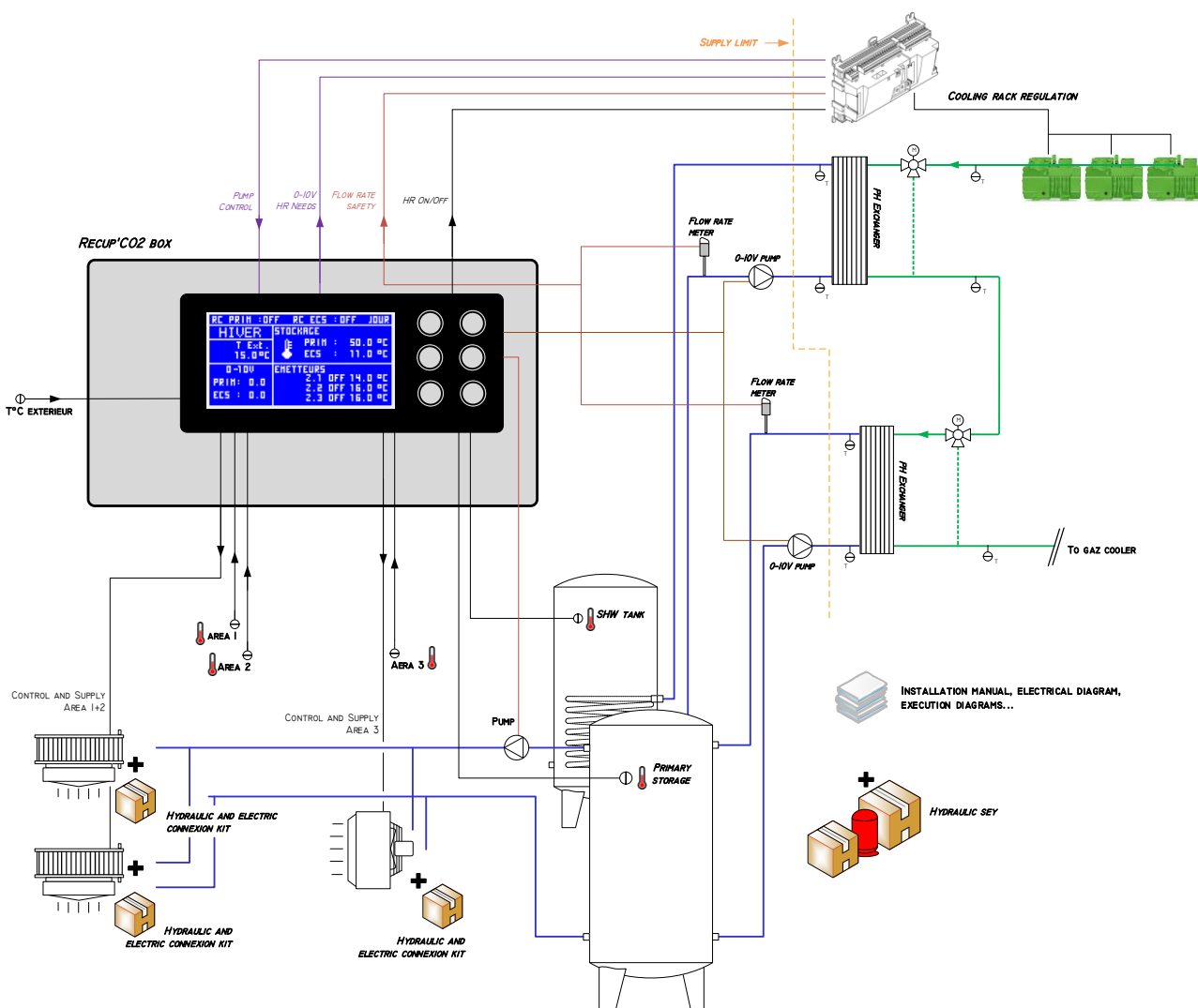
• **Recup'CO2 and Tailor-made solutions**

Custom-made solution for CO2 transcritical plants based on a complete and adapted supply:

- A pre-wired metal box designed for interface needs between the CO2 refrigeration plant (s) pre-equipped with heat exchanger by the manufacturer.
- Variable speed pump(s) (0-10V) adapted to DHW / Heating heat recovery needs.
- Electronic flow controller (s) recommended by the manufacturers of CO2 plants to avoid the overheating risk of the recovery circuits.
- PT1000 probes to assess to the heating or the DHW requirements of the installation.

Depending on the project, RECUP'CO2 can be supplemented by other references from the Boostherm range such as DHW or Primary water tanks, air heaters and associated accessories such as hydraulic connection kits.

Electrical box delivered with a complete technical file including the assembly plans of the various components and the correspondences between the terminal blocks of the refrigeration unit cabinet and the RECUP'CO2 box.





• **Supermarket heat recovery packages**

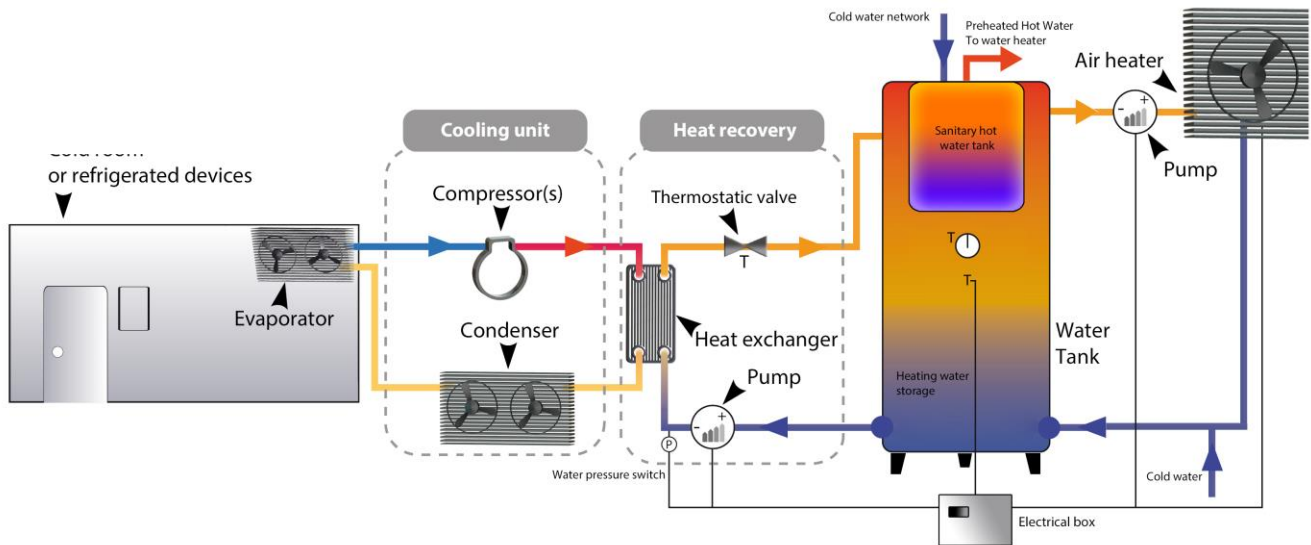
All included packages for super/hypermarkets.

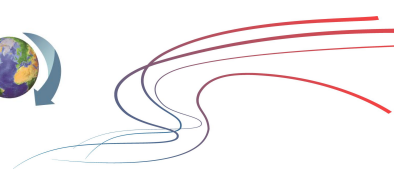
Packages configured for each installation including:

- **Heat exchanger package**
  - o Single wall high-pressure heat exchanger adapted to HFC's + support
  - o Low power input pumps
  - o Specific thermostatic valve or pump speed control
  - o Fittings and accessories
- **Tank package**
  - o Tank in tank storage system (heating + sanitary hot water)
  - o Fittings and all required components for a heating circuit
  - o Control box with optional communication.
- **Air heater packages**
  - o Air heater(s), standard or destratifier
  - o Low power input pump and fittings
  - o Balancing valves



➤ *Consult us to perform sizings and layout studies.*

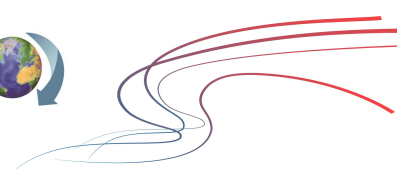




## 2. Storage







• **Boostherm combined water tanks**

Boostherm tanks for preheated storage and hot water production at final temperature of use.

- Anti-legionella design.
- 300-1000L enamelled steel tank then epoxy coated steel beyond. 316L stainless steel on demand.
- M1-100mm (B class) insulation foam up to 1 000L ( $\lambda = 0,038$  W/mK) and M3-100mm (D class) beyond.
- Other fire protection on demand.
- Total drain orifice and quick drain valve to easily remove deposits.
- Electronic anode up to 1 000L and magnesium anode beyond.
- Connection kit including the Boostherm diffuser, a safety group (or valve), air vent, 2 thermometers, quick drain valve and fittings.
- 5 years tank warranty
- Optional electrical resistance

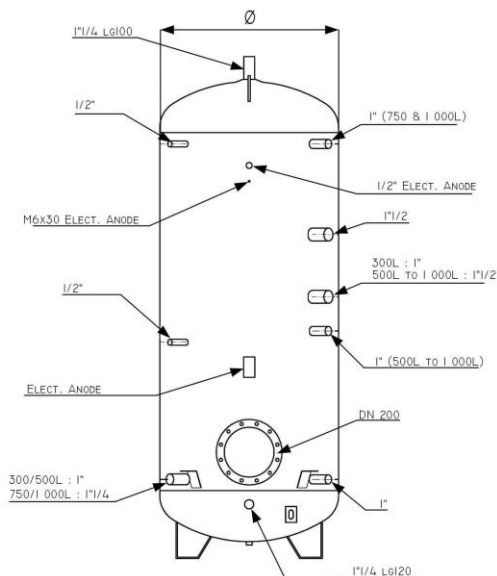


Boostherm water tanks can also be used as buffer tanks.  
See selection guideline for hydraulic diagrams as illustration.

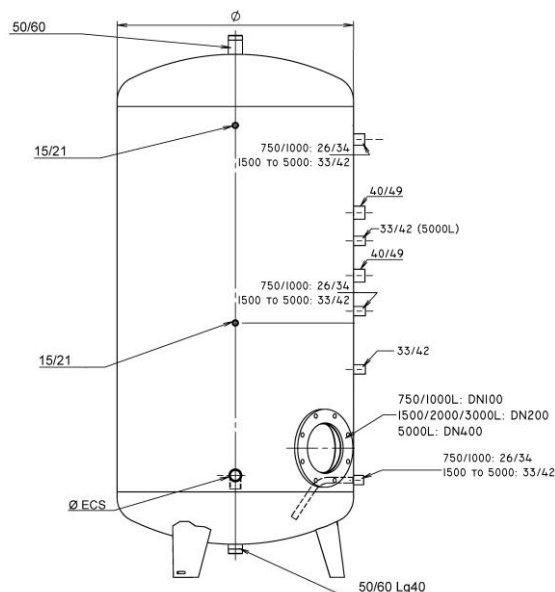
Model	Cold water network connection	Hot water outlet	Heat recovery connection	Height (1)	Ø (2)	Weight (kg) ATL / INOX	Code
BOOSTHERM 300L	M3/4"	M3/4" or F1"1/4	2 x M3/4"	1 690	500	70	810 403
BOOSTHERM 500L	M3/4"	M3/4" or F1"1/4	2 x M1"	1 765	650	135	810 405
BOOSTHERM 750L	M3/4"	M3/4" or F1"1/4	2 x M1"	1 885	790	195	810 307
BOOSTHERM 1 000L	F1"1/4	M1"1/4	2 x M1"	2 215	790	205	810 410
BOOSTHERM 1 500L	F1"1/4	F1" or M2"	2 x M1"1/4	2 290	1 000	220	810 315
BOOSTHERM 2 000L	F1"1/4	F1" or M2"	2 x M1"1/4	2 035	1 250	330	810 320
BOOSTHERM 3 000L	F1"1/2	F1"1/4 or M2"	2 x M1"1/4	2 785	1 250	430	810 330
BOOSTHERM 5 000L	F1"1/2	F1"1/4 or M2"	2 x M1"1/4	3 365	1 500	740	810 350

(1) Height without outlet elbow + air vent: Total height = height + 200mm

(2) Diameter without insulation: total diameter = tank diameter + 200mm. Insulation delivered pre-assembled up to 1 000L.



**300 & 500L**



**750 to 5 000L**

**Combined needs of DHW and Low temperature heating:**  
Possibility to create an interface with a low temperature heating system (up to 50kW) with an 827 120 exchanger.

• **Tank in tank storage systems**

**Tank in tank storage device** combines the heating of water in a primary circuit (low temperature heating) and the preheating of sanitary hot water.

Low temperature air heaters can be connected to the main storage tank to heat supermarkets sales areas or stores for example.

In addition, the sanitary water tank immersed in the main tank is heated by the water bath phenomenon and supplies the water heater(s) of the site thus saving a part of the energy necessary to produce sanitary hot water.

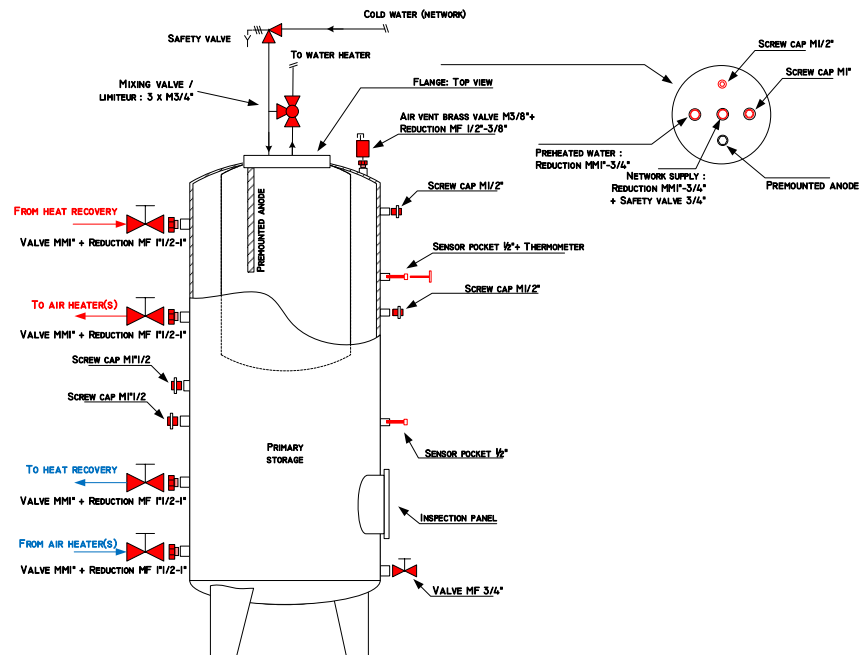


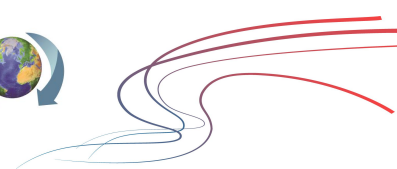
Model	Usable capacity (L)		External tank size (mm)			Weight (kg) With insulation	Code
	Primary (heating)	DWH	Without insulation		With insulation *		
			Ø	Height	Ø (mm)		
400L	320	100	600	1 710	700	155	810 606
1 000L	665	190	790	1 985	990	330	810 610
1 500L	1 200	320	1 000	2 110	1 200	395	810 615

\*M1 "B" Fire classification

Model	Description	Code
Hydraulic 320 + 100 kit	Complete Hydraulic kit: - Filling valves	820 336
Hydraulic 800 + 200 kit	- Disconnecter and connection to expansion vessel - Thermometer	820 310
Hydraulic 1 200 + 300 kit	- Expansion vessel adapted to the primary volume**, sludge pot - Safety group and temperature limiter for DWH - Other fittings to connect the system	820 312

\*\* To be confirmed for each project





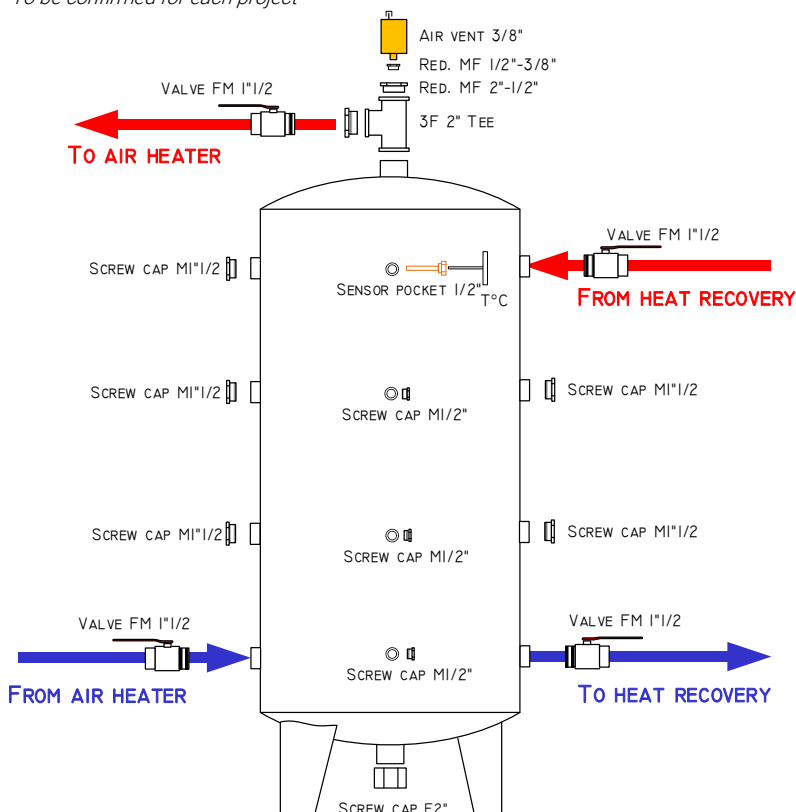
• **Boostherm buffer tanks for primary**

The **primary buffer tank** stores the water preheated by Boostherm heat recovery modules and represents an economical solution for a connection to a low temperature heating circuit or to an instant Boostherm DHW preheater. It stores energy, release the stored heat and extend heating autonomy...

Modèle	Usable capacity (L)	External tank size (mm)			Weight (kg) With insulation*	Code 8x DN40	Code 4x DN50 (DN65 pour 3000L)
		Without insulation*		Without insulation*			
		Ø	Hauteur	Ø (mm)	NC ou M3-100mm		
500L	471	650	1 810	850	79	810 805	-
750L	779	800	1 945	1 000	106	810 807	810 808
1 000L	934	800	2 255	1 000	117	810 810	810 811
1 500L	1 498	1 000	2 310	1 200	163	810 815	810 816
2 000L	1 980	1 250	2 055	1 450	338	810 820	810 821
2 500L	2 597	1 250	2 565	1 450	361	-	810 825
3 000L	2 864	1 250	2 785	1 450	442	810 830	810 831

Model	Description	Code
500 Buffer tank hydraulic kit	Complete Hydraulic kit:	820 383
750 - 1 000 Buffer tank hydraulic kit	- Filling valves	820 384
1 500 Buffer tank hydraulic kit	- Disconnecter and connection to expansion vessel	820 385
2 000 Buffer tank hydraulic kit	- Thermometer	820 386
2 500 - 3 000 Buffer tank hydraulic kit	- Expansion vessel adapted to the primary volume**, sludge pot	820 387
	- Safety group and temperature limiter for DHW	
	- Other fittings to connect the system	

\*\* To be confirmed for each project



**Common specifications:**

- Steel tank without internal coating
- Max. operating pressure 4bar
- 8 circulation ports Ø1"1/2 available (Ø40/49)
- 4 ports in Ø½" available (Ø15/21)
- Exterior protective paint
- Flexible PVC jacket 100mm not classified (specific classification available)

• **Water heaters with tube heat exchangers**

Hot water heaters for water preheating from a primary water storage via a tube heat exchanger / coil. They can be fitted with an additional electrical heater. They are particularly suitable for Recup'CO2 solutions.

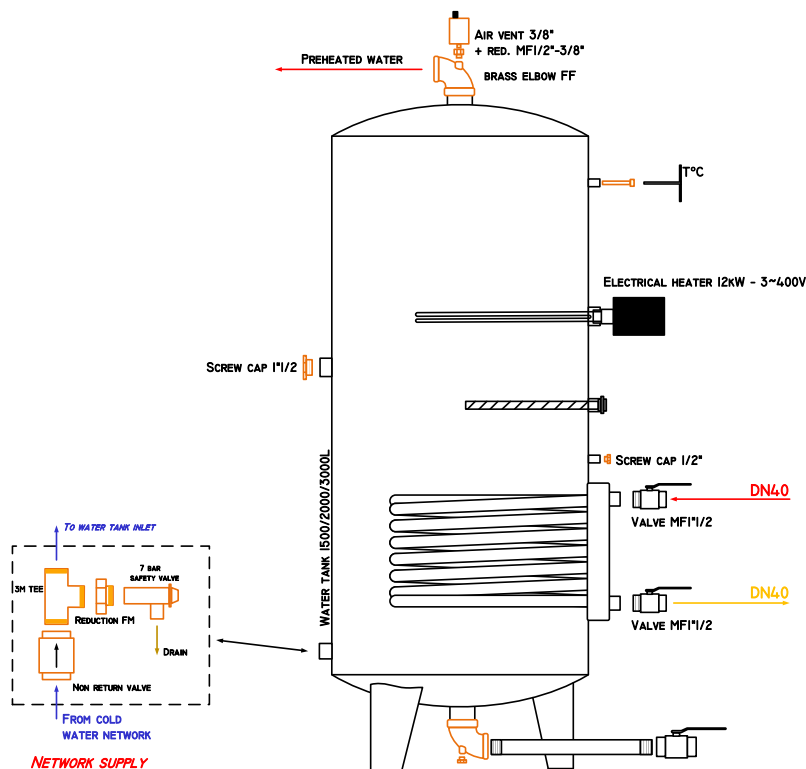
Model	Usable capacity (L)	Heater Type / Power	External tank size (mm)		Weight (kg) With insulation*	Code
			Without insulation*	With insulation*		
			Ø	Height	Ø (mm)	M3-100mm
300L	290	Coil / 19kW	550	1 570	67	810 900
500L	466	Coil / 19kW	650	1 810	94	810 901
750L	770	Coil / 32kW	800	1 945	127	810 902
1 000L	981	Coil / 40kW	800	2 375	155	810 903
1 500L	1 473	On flange DN400 / 69kW	1 000	2 310	303	810 915
2 000L	1 960	On flange DN400 / 103kW**	1 250	2 055	376	810 920
3 000L	2 837	On flange DN400 / 138kW	1 250	2 785	477	810 930

\*Thickness insulation M3 – 50mm for 300L and 500L, 100mm beyond

\*\*

Modèle	Description	Code
300 – 500 Heater tank hydraulic kit	Complete Hydraulic kit: - Filling valves - Disconnecter and connection to expansion vessel	820 381
750 - 1 000 Heater tank hydraulic kit	- Complete connection kit E.C.S. - Thermometer - Expansion vessel adapted to the primary volume**, sludge pot	820 382
DN400 Heater tank hydraulic kit	- Other fittings to connect the system	820 370

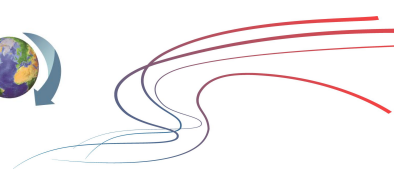
\*\* To be confirmed for each project



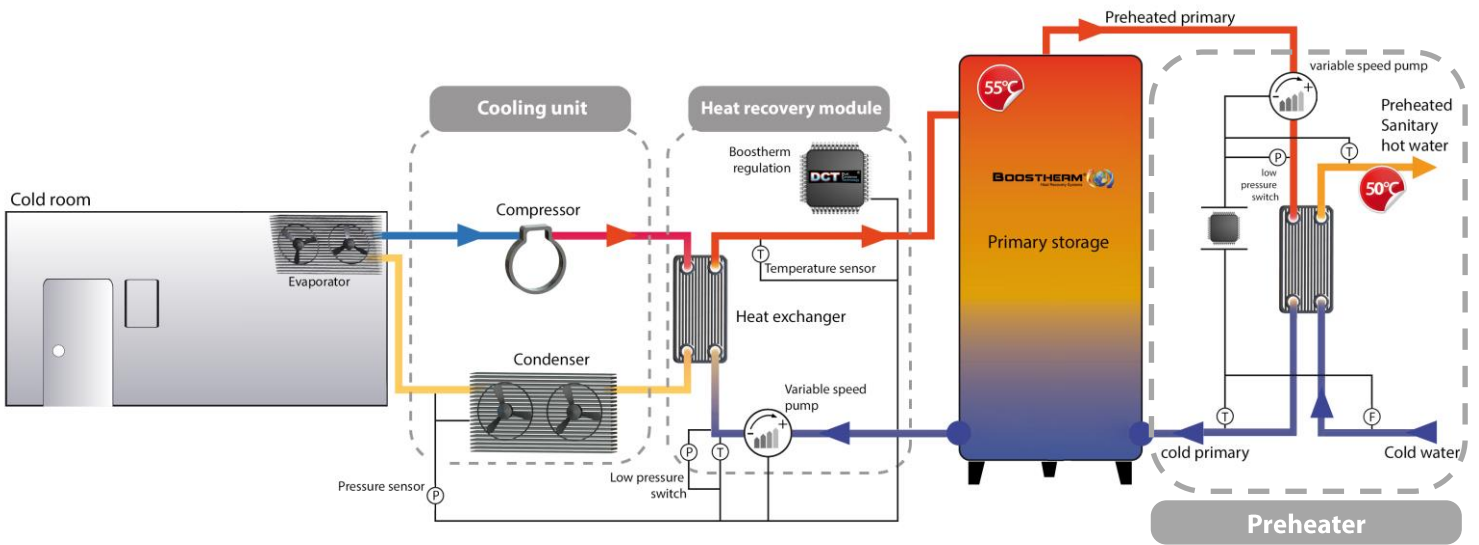
**Common specifications:**

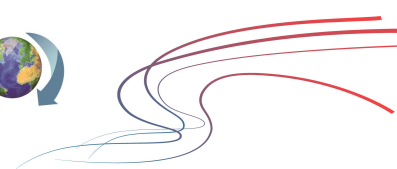
- Epoxy-coated steel tank with a 5 years warranty
- Optional electrical heater
- Magnesium protection anode
- Max. operating pressure 7 bar
- DN 400 Manhole from 1 500L
- M3 "D" fire class as standard

INOX 316L tank option available  
M0 "A2" fire class option available



### 3. Instant Preheaters





• **Instant preheaters**

**Instant preheater systems** can preheat sanitary hot water from a primary storage connected to a Boosterm heat recovery module. A specific electronic regulation optimize preheating operation to obtain the best heat recovery performances. The system can provide preheated water without sanitary water storage to a water heater.

- System delivered with a ground fixation.
- Heat exchanger insulation shell.
- Variable speed pump for primary circuit – internal thermal protection.
- Electronic regulation with auto-tuning mode (no setting) with pump speed variation, frost protection mode, stand-by mode, automatic air venting cycle...
- Delivered with temperature sensors, low pressure switch for primary circuit and flow detector for sanitary water.
- Power supply : 230V-50/60Hz
- Electronic board protection: 160mA. IP44 electrical box.



Model	Connections		Primary Pump		Max power input (W)	Primary volume (L)	Size HxLxD / Weight (mm) / (kg)	Code
	Primary	Secondary	Max man. head (mWg)	Max flow rate (l/h)				
50 kW preheater	G1"	G1"	7.5	2 000	130	1,6	550x150x200 / 25	870 005
150 kW preheater	G1"1/4	G1"1/2	12	4 500	360	2,16	740x160x200 / 35	870 015
300 kW preheater	G2"	G2"	12	4 500	640*	3,78	1000x400x900 / 80	870 030
450 kW preheater	G2"1/2	G2"1/2	12	12 000	850*	5,58	1000x400x1000 / 110	870 045
600 kW preheater	G2"1/2	G2"1/2	16	13 000	1 500*	8,46	1000x400x1000 / 90	870 060

\* Individual power supply and protection for the pump (not from the electrical box)

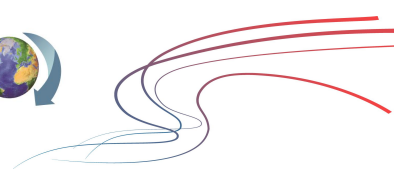
Model	For a primary at 55°C		
	Primary power	Min. DHW flow rate 12-50°C	Max. DHW flow rate 12-50°C
50 kW preheater	50 kW	5 l/min	1.1 m3/h
150 kW preheater	150 kW	5 l/min	3.4 m3/h
300 kW preheater	300 kW	5 l/min	6.8 m3/h
450 kW preheater	450 kW	22 l/min	10.2 m3/h
600 kW preheater	600 kW	22 l/min	12.6 m3/h

See buffer tanks page 13

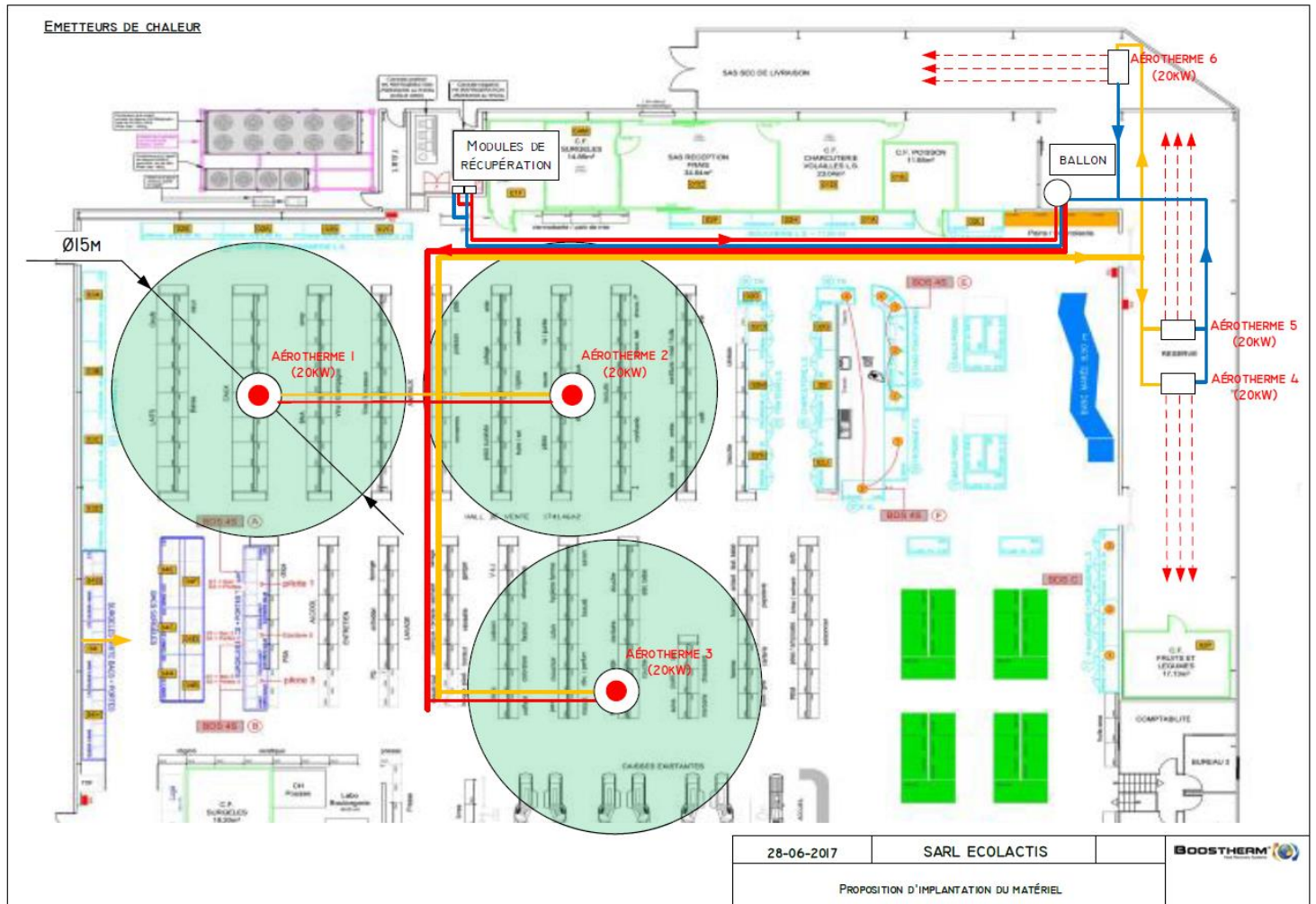


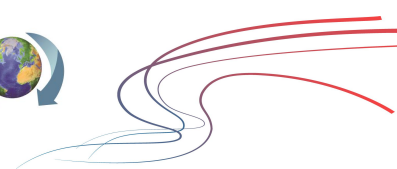






## 4. Air heaters





• **Destratification Air Heater packs for ceiling installation**

- Ø 1"1/2 connections
- Fixing via 4 support cables
- Pack includes: Air vent, connection fittings, valves, proximity switch, ...



*Available: "multi-heater pack" + balancing valves + pump*



Model	Nominal thermal capacity* (kW) – water temp. operation	Thermal capacity* (kW) – water low temp. operation	Max. power input** (W)	Min. mounting heights (m)	Blowing direction Noise level dB(A)	Size H x Ø / Weight (mm) / (kg)	Code
Air heater pack size 1	20,4 - 85/70	12,4 - 55/40	75	4	V / 41 - 46	560 x 780 / 36	820 541
Air heater pack size 2	46,7 - 85/70	19,5 - 55/40	215	4,5	V / 45 - 48	760 x 880 / 58	820 533

\* Data for low speed operation (700rpm)

\*\* Data for high speed operation (900rpm)

• **Standard air heater pack for wall fixation**

- Ø 1" connections
- Wall mounting (mounting bracket supplied)
- Pack includes: Air vent, connection fittings, valves, proximity switch, ...



*Available: "multi-heater pack" + balancing valves + pump*



Model	Nominal thermal capacity* (kW) – water temp. operation	Thermal capacity* (kW) – water low temp. operation	Max. power input** (W)	Range (m)	Blowing direction Noise level dB(A)	Size H x Ø / Weight (mm) / (kg)	Code
Standard heater pack size 1	28,2 - 85/70	12,4 - 55/40	530	15 to 20	H / 41 - 49	688x688x488 / 40	820 532
Standard heater pack size 2	42,4 - 85/70	22,0 - 55/40	530	18 to 25	H / 44 - 52	742x742x513 / 46	820 536

\* Data for low speed operation (1 000rpm)

\*\* Data for high speed operation (1 350rpm)

• **Ceiling cassette packs**

- Ø M3/4" or M1" connections
- Installation in suspended ceiling, delivered with wired control (On/Off and 3 speeds selection)
- For "2 pipes" installation
- Pack includes: Air vent, connection fittings, valves, ...



Model	Nominal thermal capacity* (kW) – water temp. operation	Thermal capacity* (kW) – water low temp. operation	Max. power input** (W)	Blowing direction Noise level dB(A)	Size H x Ø / Weight (mm) / (kg)	Code
600 x 600 Ceiling cassette pack	10,1 - 80/70	5,9 - 50/40	90	V / 32-50	572x572x296 / 27	820 545
800 x 800 Ceiling cassette pack	21,0 - 80/70	13,2 - 50/40	170	V / 25-49	819x819x329 / 45	820 546

\* Data for average speed operation (1 280m3/h)

\*\* Data for high speed operation (1 820m3/h)

• **Fan coils pack**

- Ø 1/2" for CRC fan coil
- Ø 1"1/4 for MT ductable fan coil unit
- Pack includes: Air vent, connection fittings, valves, ...



wall / ceiling mounting



MT for duct system

Model	Nominal thermal capacity* (kW) – water temp. operation	Thermal capacity* (kW) – water low temp. operation	Max. power input** (W)	Blowing direction Noise level dB(A)	Size H x Ø / Weight (mm) / (kg)	Code
CRC Fan coil pack	13,3 - 70/60	7,0 - 50/40	130	H or V / 30-51	600x1 465x290 / 39	820 539
MT Fan coil pack	36,5 - 60/50	24,9 - 50/40	885	Ductable	435x1 445x853 / 46	820 544

\* Data for high speed operation (flow rate = 1200m<sup>3</sup>/h)



*Other models available on request*

• **Air curtain pack**

- Ø F1/2" connections
- Pack includes: Air vent, connection fittings, valves, ...



Model	Nominal thermal capacity* (kW) – water temp. operation	Thermal capacity* (kW) – water low temp. operation	Max. power input** (W)	Blowing direction Noise level dB(A)	Size H x Ø / Weight (mm) / (kg)	Code
ECM 2m – MLT Air curtain pack	12,2 - 80/60	7,0 - 55/40	120.5	V / 41-52	240x2 160x255 / 32	820 534

\* Data for high speed operation (1 200m<sup>3</sup>/h)



*Other models available on request*

• **Balancing valves**

Manual valve for flow balancing combines a balancing valve and a shut-off valve. Suitable for constant flow systems.



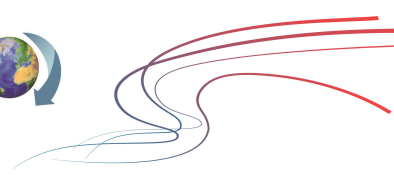
Model	Ø connection	Flow (l/h)	Max Pressure/temperature (bar)	Code
DN20 balancing valve	3/4" FF	50 / 1 600	20 / 120°C	855 139
DN25 balancing valve	1" FF	50 / 1 600		855 140
DN32 balancing valve	1"1/4 FF	250 / 6 000		855 141



*Other diameters on demand*

• **Pumps**

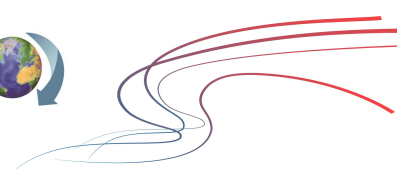
Model	Ø connection	mH / Flow - max piping length & DN to air heaters	Code
Pump 15/1-4	MM 1"	3 mH / 0.7 m <sup>3</sup> /h	825 170
Pump 25/1-8	MM 1"1/2	5.5 mH / 2 m <sup>3</sup> /h - 60 mA/R - DN20	825 171
Pump 25/05-10	MM 1"1/2	10 mH / 3 m <sup>3</sup> /h - 200 mA/R - DN32	855 172
Pump 30/05-12	MM 2"	11 mH / 4m <sup>3</sup> /h - 200 mA/R - DN40	820 560
Pump 40/05-12	Flanges DN40	12 mH / 6m <sup>3</sup> /h - 200 mA/R - DN40	820 561
Pump 50/05-16	Flanges DN50	16 mH / 10m <sup>3</sup> /h - 200 mA/R - DN50	820 562



## 5. Accessories







• **Self-regulated Electrical heater**

With regulation and safety thermostat

- Electrical heaters are equipped with thermostat with adjustable set point on the front panel.
- Requires a protection and a separate power supply (not from the heat recovery modules).



Model	Supply voltage	Set point range (°C)	Security thermostat (°C)	Ø connection on water tank	Heating element length (mm)	Compatible with water tank	Code
3kW IP54 elect. heater	1Ph 230V / 3Ph 400V	30-75	95	1"1/2	300	300L to 5 000L	820 013
6kW IP54 elect. heater	3Ph 400V	30-75	95	1"1/2	500	500L to 5 000L	820 016
9kW IP54 elect. heater	3Ph 400V	30-75	95	1"1/2	700	750L to 5 000L	820 019
12kW IP54 elect. heater	3Ph 400V	30-75	95	1"1/2	800	750L to 5 000L	820 021

• **Anti-scale filter**

See water quality issues in Chapter 1 of the instruction manual

For filtration and protection of water circuits, to be installed on cold water supply.

- 3/4" FF with brass nipple
- Polypropylene head and ring
- Transparent tank
- Brass vents
- Equipped with a 25 µ wool cartridge and an anti-scaling polyphosphate cartridge
- Supplied with wall bracket, screws, gaskets and special key



Model	Ø connection	Filtering cartridge	Max flow rate(l/h)	Max. Pressure (bar)	Code
Anti-scale station	3/4"FF	25 µ	About 2 000	8	820 201
Anti-scale cartridge	Keeps limestone suspended in water and prevents scale formation				820 211
Filtering cartridge 25µ	For mechanical filtration (wool filter) of sludge, sand, particles, ...				820 212

• **Performances monitoring / meters**

Ultrasonic energy meter: measures the energy saved with cumulative kWh.

Installed on the heat recovery water loop.

Measurement and display of instantaneous flow rates, inlet/outlet temperatures, instantaneous power...

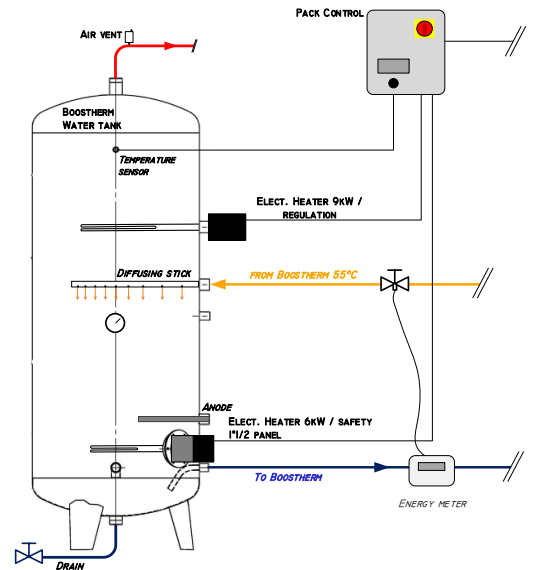


Model	Ø connection / length (mm) / weight (kg)	Nominal flow rate (l/h)	Min/max flow rate (l/h)	Pressure losses at nominal flow rate (mbar)	Max. Pressure (bar)	Code
DN15 energy meter	3/4"MM / 110 / 1	1 500	6 / 3 300	150	16	829 801
DN20 energy meter	1"MM / 110 / 1,5	2 500	6 / 5 500	150	16	829 812
DN25 energy meter	1"1/4 MM / 260 / 2	3 500	35 / NC	150	16	829 808
DN32 energy meter	1"1/2 MM / 260 / 2	6 000	35 / NC	150	16	829 813
DN40 energy meter	2" MM / 300 / 4,5	10 000	100 / NC	100	16	829 809
DN50 energy meter	Flange / 250 / 6,5	15 000	150 / NC	100	16	829 810
DN65 energy meter	Flange / 300 / 9	25 000	100 / 50 000	75	16	829 811
DN15 cold water meter	3/4"MM / 110 / 1	1 500	30 / 3 000	90	16	829 804
DN25 cold water meter	1"1/4MM / 260 / 1,5	6 300	78 / 7 800	400	16	829 805
DN32 cold water meter	1"1/2 MM / 260 / 2	10 000	120 / 12 500	250	16	829 820
DN40 cold water meter	2" MM / 300 / 4.5	16 000	100 / 20 000	350	16	829 821
DN50 cold water meter	Flange / 200 / 11.4	40 000	630 / 50 000	150	16	829 822
DN65 cold water meter	Flange / 200 / 12.6	63 000	1 000 / 79 800	400	16	829 823

- **Control pack for electrical heaters**

Pack designed with an electronic regulation dedicated to a boost heater positioned on the upper third part of a Boosttherm tank to ensure an outlet temperature of 55°C or higher (set point adjustable from 55 to 80°C).

The electrical box can also control a second emergency electrical heater switchable with a manual command. This heater is installed on the lower part of the tank via a specific flange (supplied with gasket and bolts). Sensor cable length = 3m.

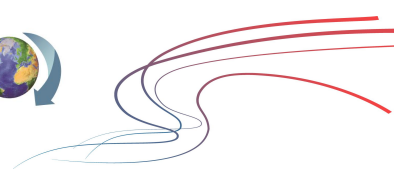


Model	Size HxLxD or Ø x T. (mm)	Weight (kg)	Code
Control pack – electrical box	330 x 220 x 150	5	825 154
Epoxy coated flange DN100 1"1/2	180 x 18	5	825 083
Stainless steel flange DN100 1"1/2	180 x 18	4	825 084
Epoxy coated flange DN200 1"1/2	340 x 18	10	825 088

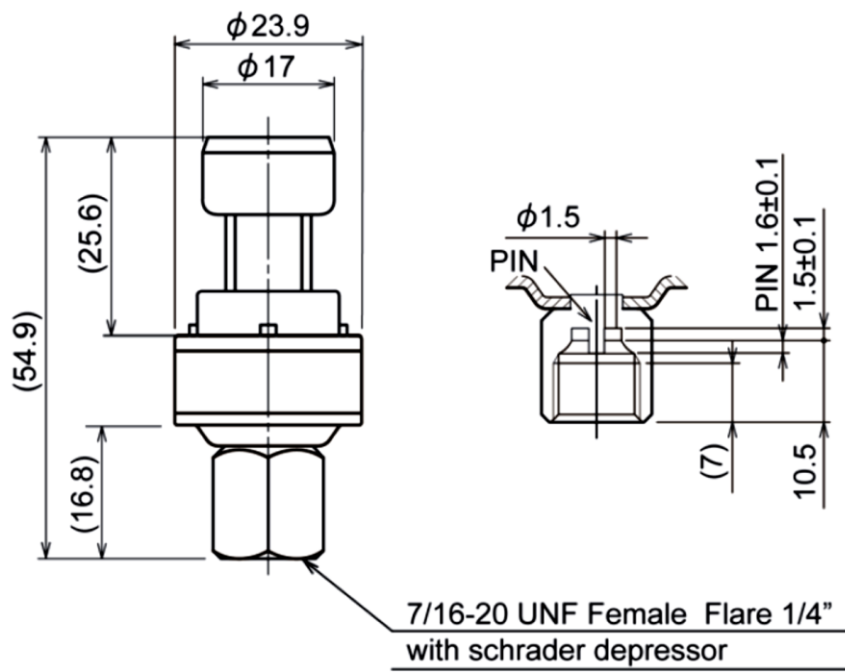
- **Heat exchanger for low temperature heating interfacing**

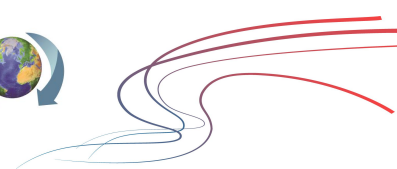
Model	Thermal capacity – temp. P/S	Ø connection	Size H x L x D (mm)	Weight (kg)	Code
Heat exchanger BT 50KW	50kW P=55-25 / S=20-35	4x M1" (26/34)	289 x 119 x 100	5,55	827 120
Insulation shell BT 50KW	-	-	350 x 179 x 121 x th. 29mm	0,50	827 121





## 6. Spare parts





• Heat recovery modules with thermostatic valve (1st generation)

MODELE	DESCRIPTION	MODULE	CODE
PWM XYLEM ECOCIRC E3 Pump	After sales version : motor + rotor only	Boostherm 5/10/20kW DW	825 141
NSB25 Pump	3 speeds selector / previous generation	Boostherm 45kW DW	825 119
NSB30 Pump – Motor block	3 speeds selector / previous generation	Boostherm 70/100kW DW	825 111
Elect. board B5 &10kW	Previous generation board	Boostherm 5/10kW DW	825 127
Elect. board EB 20-100kW	Previous generation board	Boostherm 20/45/70kW DW / 100DSH	825 129
EVCO EVKB21 regulator	1 set point regulation	Boostherm 5-70kW DW / 100DSH	825 126
DCT therm. valve ¾"	Water outlet temperature regulation	Boostherm 10-70kW DW	825 112



825 192



825 119 ou 825



825 127



825 129



825 126



825 112

• Speed variation heat recovery modules (2nd generation)

MODELE	DESCRIPTION	MODULE	CODE
PWM XYLEM ECOCIRC E3 Pump	PWM variable speed / mH=3mWg	Boostherm 5/10kW DWV	825 141
VARIOS PICO STG 15/1-8 Pump	PWM variable speed / mH=8mWg	Boostherm 60kW SWV CH	825 187
PWM PARA Z KU HW Pump	PWM variable speed / mH=7mWg	Boostherm 20/45/70 kW DWV	825 198
PWM Stratos SHW Pump	PWM variable speed / mH=8mWg	Boostherm 100kW DWV SHW	825 193
PWM Stratos Heat Pump	PWM variable speed / mH=12mWg	Boostherm 100kW SWV Heating	825 199
Regulation Board V2	Electronic Boostherm regulation	Boostherm 5-100kW DWV	825 180
Automatic air vent	Microporous disc air vent	Boostherm 5-70kW DWV	825 136
Pressure sensor	Range: 0-50bar / ratiom. output: 0...5V	Boostherm 5-100kW DWV	825 162
Ø15 probe lg850mm	For 15mm pipe	Boostherm 5/10kW DWV	825 157
Ø18 probe lg850mm	For 18mm pipe	Boostherm 20/45/70kW DW	825 159
Ø28 probe lg850mm	For 28mm pipe	Boostherm 100kW	825 161



825 141



825 198



825 193 ou 825



825 180



825 136



825 162



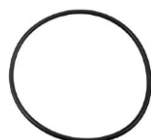
825 157 ou 159  
ou 161

• Sanitary hot water tanks / Buffer tanks / Tank in tank systems

MODELE	DESCRIPTION	TANK	CODE
DN100 gasket	Flat gasket for DN100 flange	Boostherm 300 to 1 000L	825 093
DN200 gasket	O-ring for DN200 flange	Boostherm 1 500 to 3 000L	825 095
Joint bride DN400	O-ring for DN400 flange	Boostherm 5 000L	825 097
400mm Anode	Magnesium anode M1"1/4	Boostherm 300 to 1 000L	825 031
800mm Anode	Magnesium anode M1"1/4	Boostherm 1 500L and more	825 036
Air vent	3/8" brass air vent – 30L/min at 3bar	Boostherm	825 142
Safety valve	3/4" connection – max pressure=7bar	Boostherm 300 to 750L	825 135
Thermometer ½" lg100	Thermometer with a Ø60 dial	Boostherm	825 143
Thermostat Sedes 3~380V	Temp. regulation for heaters	Electrical heaters ref. 821 0xx	821 020
Thermostat Charot	Thermostat Charot RICA/COTHERM 2010-2014	Electrical heaters ref. 820 0xx	820 000
Thermostat Charot	Thermostat Charot EGO 2015-2020	Electrical heaters ref. 820 0xx	820 001
Thermostat Charot	Thermostat Charot RICA 2021 and +	Electrical heaters ref. 820 0xx	820 002



825 093



825 095 ou 097



825 031 ou 036



825 142



825 135



825 143

- DWV/SWV heat recovery kits

MODELE	DESCRIPTION	KIT	CODE
M2 regulation board	Regulation and pump control	150/300/450/600kW	825 165
PWM YONOS pump	PWM variable speed / mH=7mWg	150 and 300kW	825 149
PWM Stratos ECS pump	PWM variable speed / mH=8mWg	450 and 600kW	825 193
PWM Stratos CH pump	PWM variable speed / mH=8mWg	150 and 300kW	825 191
PWM Stratos CH pump	PWM variable speed / mH=12mWg	450 and 600kW	825 199
Ø18 probe lg850mm	For 18mm pipe	150 and 300kW	825 159
Ø28 probe lg850mm	For 28mm pipe	450 and 600kW	825 161
Air vent	3/8" brass air vent – 30L/min at 3bar	150/300/450/600kW	825 142



825 165



825 149



825 191



825 193



825 142



825 159 / 161

- Supermarket Packages

MODELE	DESCRIPTION	USAGE	CODE
Supermarket regulation	2 set-points / IC915+	Wiring E. Box	855 173
Thermostatic valve	Outlet temperature regulation	Heat recovery circuit	825 112
Low pressure switch	Cartridge type / 1 bar	Heat recovery circuit	855 181
Proximity switch - 3P 20A	Emergency/maintenance stop	Heaters	855 176



855 173



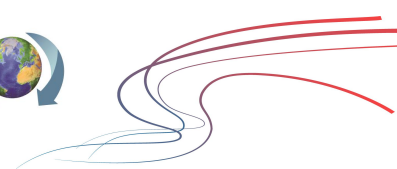
825 112



855 181



855 176



# 7. Simulation tool

- *About our online simulation tool:*

Size simply and quickly your Boostherm modules on: <http://boostherm.com/Simulator>

The online simulator is design to guide the user during the sizing process of Boostherm heat recovery modules but also to conduct technical and economic study for your sanitary hot water production project. The user can edit the study as a PDF file.

The simulator estimates the condensation capacity based on the cold room volume or the cooling capacity. You can also use the compressor tables if the brand and the model is listed.

The simulator performs the sizing automatically by using the average evaporating temperature and the maximum evaporating temperature (°C) indicated by the user.

**POTENTIEL DE RÉCUPÉRATION DE CHALEUR**

Nombre de systèmes frigorifique: 1

Équiper le système avec Boostherm ?

Nom du système frigorifique: ZB76 + ZED76

Température dans votre chambre froide (°C) [-25 ; 15]: 4

● Économie réalisée avec Boostherm<sup>®</sup> : 31571 kWh/an  
 ● Énergie consommée pour appoint eau chaude sanitaire : 3487 kWh/an  
 ● Pertes sur rondement : 184 kWh/an  
 Potentiel moyen : 4525 L/jr [9050 ; 0]  
 Facture énergétique programmable avec Boostherm<sup>®</sup> : 918 €/an  
 Économie réalisée avec Boostherm<sup>®</sup> : 8929 €/an

Estimation de l'investissement (€)\*: 12694

Estimation des économies annuelles (€/an)\*: 8929

Temps de retour sur investissement (hors CEE)\*\*: 1 an(s) et 5 mois

Temps de retour sur investissement (avec CEE)\*\*: 0 an(s) et 0 mois

\* données non contractuelles  
 \*\* sans déduire des déductions fiscales  
 (pour une pré-sélection standard avec module(s) Boostherm et 1 ballon)

**CEE** Les systèmes Boostherm sont éligibles aux certificats d'économie d'énergie : consultez nous pour optimiser votre reste à charge !

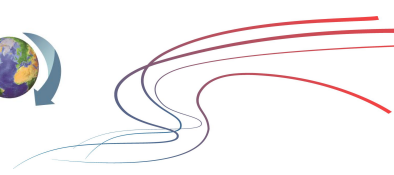
Les certificats D'ÉCONOMIES D'ÉNERGIE

Prime CEE (€) (selon votre classe d'utilisation): 14000.00

Vous pouvez maintenant mettre fin à votre simulation. Aucune donnée ne sera enregistrée et exploitée. Si vous souhaitez être recontacté par un technicien Boostherm, cliquez sur suivant.







- ***NOTES***

**BOOSTHERM**<sup>®</sup>  
Heat Recovery Systems



Boost your  
energy savings

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