

HYDRO-BLOCK

HYDRONIC INDOOR UNIT FOR HEAT
PUMPS



Hydronic indoor unit for heat pumps



HYDRO-BLOCK

Domestic water boiler

Vitrified steel structure resistant to 10 bar and 95°C. Thermally insulated with high-density polyurethane foam.

Complete with inspection flange, heating element and helical heat exchanger with increased surface area to optimise heat pump performance.

Hot/cold storage

Storage tank and hydraulic separator with 30-litre capacity, complete with temperature probes and baffles to improve carrier fluid distribution. Rigid polyurethane foam insulation.

Complete with supplementary 3-phase heating element.

Electronic control

Integrated master control system that can control the heat pump via Modbus protocol, the boiler (if present) in OpenTherm, the auxiliary heaters and the secondary circulator to the system.

Expansion option with native control modules for external mixed units and solar thermal systems.

Native WiFi connection and entire system control with dedicated App.

Command panel



- Winter/Summer/Off selector
- Heating temperature regulator
- DHW temperature regulator
- Analog water pressure reading
- Screen display of DHW and heating temperature
- Display of fault diagnostics, lockout conditions and fault log

Remote control and thermoregulation



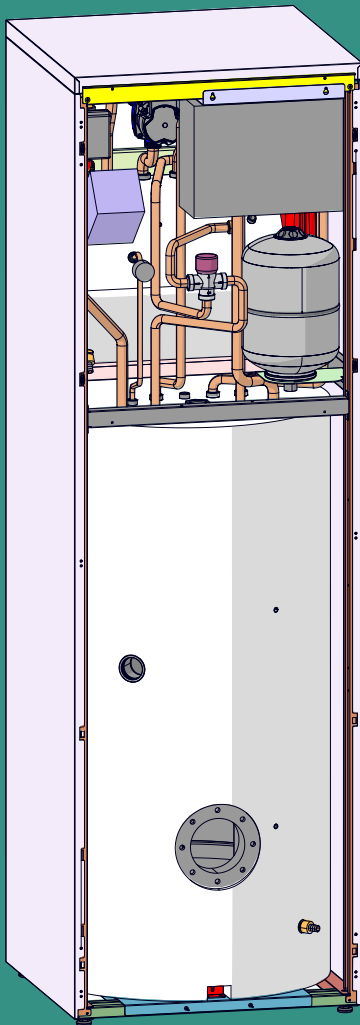
The new remote control (optional) allows the boiler to be controlled by customising its operation depending on different requirements.

Two keys will let you regulate the temperature of the hot water produced without having to go through tedious mixing operations. The ambient temperature is easy to set using two keys. With one special key, you can discover the temperature of the domestic environment.

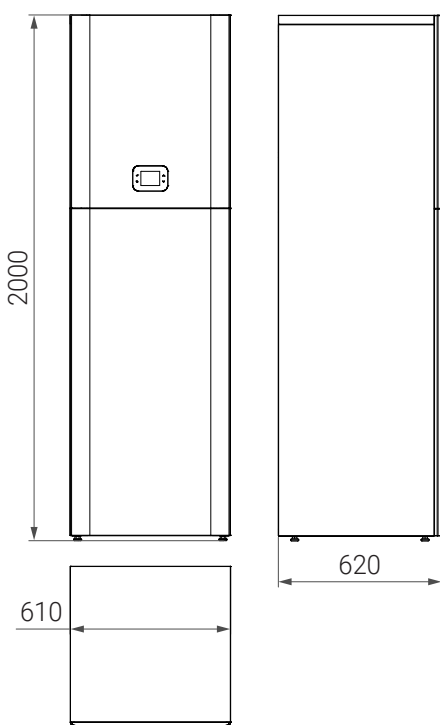
By connecting the external probe directly to the boiler you can benefit from climate regulation. Thermodens Adaptive boiler will adjust the water temperature in the system to external climatic conditions, ensuring the desired ambient temperature is reached without any wastage and optimising consumption. The use of climate regulation also produces a rise in the regulation efficiency, increasing the value of your home.



GENERAL FEATURES



- Multifunction hydronic indoor unit.
- Class A.
- Modbus connection with 2 and 4-pipe hydronic heat pumps.
- OpenTherm connection with boilers.
- 190 litre hot water boiler, with a maximum output of 380 litres of water at 40°C.
- 30 litre hot water /separator storage.
- Domestic water and system expansion vessels included.
- Secondary delivery circulator (pre-arrangement).
- Priority or 4-pipe DHW management.
- Climate control included.
- Diverter valve for domestic hot water integration with boiler (integrable option).
- Anti-scald thermostatic mixing valve (integrable option).








Technical specifications		Unit	HYDRO-BLOCK
Weight and volumes	Net weight	Kg	136
	Boiler volume	L	195
	Storage volume	L	30
Electrical power supply	Supply	kW	230 V / 50 Hz
	Auxiliary heater power supply	kW	4.5 – 400V (3-phase)
Dimensions	Indoor unit dimensions (LxDxH)	mm	620 x 610 x 2000
	Heat exchanger area	m ²	2.0
	DHW heating element	kW	1.5 kW
	Expansion vessel on DHW side	L	8
	Expansion vessel on hot water side	L	5
	Water connections	Inch	¾"

Technical data

Mounting

Ref.	Description	Ref.	Description
1	Adatta 2T MB	10	Mixing valve DHW
2	DHW boiler 190 Lt	11	DHW diverter valve (230VAC)
3	Gas boiler	12	System supply main circulator
4	Distribution and system zone booster units	13	DHW system recirculation pump
5	DHW boiler low probe 190 Lt	14	Main system supply probe
6	Heating element for DHW integration	15	Main system return probe
7	Electronic anode (12 Vdc - 1.5 kW)	16	System pressure probe
8	DHW boiler high probe 190 Lt	17	Storage intermediate probe (buffer/separator)
9	Heat pump primary diverter valve (230Vac)	18	Heating element kit for system integration

HOT WATER SUPPLY	
COLD WATER RETURN	
HOT WATER COLD	
DHW COLD WATER	
DHW RECIRCULATION RETURN	
MACHINE DIAGRAM BOX	