Auer devient intuis

MORE COMFORT, LESS ENERGY.

ORIGINE FRANCE® GARANTIE

BVCert 6020118

OUR HTi[70] HEAT PUMPS

R290

*Only for HTi[70] 6 single-phase & 8kW single-phase en three-phase, with Orium, Premium+ and DS170D control units

OUR HTi^{70} HEAT PUMPS AND CONTROLS

The HTi^{70} range is renowned for its Inverter technology, which allows a vast power adaptation range from 15% to 100%. The ability to respond to the desired level of comfort, depending on external conditions. This generates efficiency and ensures savings.

High temperatures (up to 70 °C) are possible thanks to R290. This refrigerant can be used to provide 100% thermodynamic heating and domestic hot water for renovation projects. Remarkable performance levels that improve even further when water levels are lower, as with new-build projects.

Technology		
Maximum water outlet temperature (excluding back-up)		
Refrigerant		
Maximum heat pump capacity		
Type of back-up/Power		
Configuration	**Heating**	1 circuit
		2 circuits
	DHW	Integrated
		Remote[1]
	Cooling	Integrated
Energy class up to		35 °C/55 °C
		DHW (From A+ to F)
Seasonal performance coefficient up to		35 °C/55 °C
Seasonal energy efficiency/ SEER (ηs) up to		35 °C/55 °C
Description Application	**New**	Individual
		Collective
	Renovation	Individual
		Collective
Transmitters		Underfloor/Ceiling
		Radiators
		Fan coils

(1) See catalogue
(2) With HTi^{70} 8kW single-phase
(3) With HTi^{70} 8kW single-phase and three-phase
(4) With HTi^{70} 6 and 8 kW

HTi[70] Range				HYBRID Range
				
PILOTE ORIUM 3S	**ORIUM CONTROL UNIT**	**PREMIUM+ CONTROL UNIT**	**DS170 D CONTROL UNIT**	**GAS HYBRID CONTROL UNIT**
Variable-power individual unit				Variable-power individual unit
70 °C				70 °C
R290				R290
Single-phase: 6kW Single-phase/Three-phase: 8kW		Single-phase: 6kW Single-phase/Three-phase: 8/11/14kW		Single-phase: 6kW Single-phase/Three-phase: 8/11/14kW
Electric 6kW single-phase/three-phase		Electric 6kW single/three-phase or boiler *(not included)*	Electric 6kW single-phase/three-phase	Integrated gas condensing boiler
✓	✓	✓	✓	✓
Optional	Optional	Can be integrated	Optional	Optional[1]
-	-	-	170 L	-
✓	✓	✓	-	✓
✓	-	-	-	-
A+++/A+++ [3]	A+++/A+++ [2]	A+++/A+++ [2]	A+++/A+++ [2]	A+++/A+++ [3]
-	-	-	A+ [4]	-
4.85[3]/3.84[3]	4.83[2]/3.82[2]	4.83[2]/3.82[2]	4.83[2]/3.82[2]	4.87[2]/3.96[2]
191%/151%[3]	190%/150%[2]	190%/150%[2]	190%/150%[2]	192%/155%[2]
✓	✓	✓	✓	✓
-	-	-	-	-
✓	✓	✓	✓	✓
-	-	-	-	-
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	-	-	-	-

PRESENTATION OF OUR HTi^{70} HEAT PUMPS

High-temperature 70 °C intuis heat pumps with highly adaptative power.

Advantages for business customers

Design

- The single-unit design allows easy installation, with a simple hydraulic link between the heat pump and control unit, so there's no need to handle any fluids.
- All components are quickly accessible to facilitate maintenance.
- Delivery includes a full kit with heat pump, control unit, hydraulic connection kit with filter and sensor, and a buffer tank where necessary.

Use

- The Premium+ model can also use the existing boiler as a back-up in a hybrid system.

Performance

- High temperatures up to 70 °C thanks to R290 refrigerant, providing heating in all configurations and anti-legionella cycles without back-up for DHW production.

Comfort & durability

- The solid construction with anti-rust and UV-protected steel panel structure, fully stainless steel heat exchanger, anti-rust-treated evaporator ensure a longer lasting product.

Savings

- Operates with or without back-up (gas, electricity, etc.) depending on the installation configuration.

Benefits for your customers

Design

- Our heat pumps are designed and manufactured in France at our Feuquières-en-Vimeu factory, and the majority are Origine France Garantie certified(1).
- Heating, cooling, and domestic hot water requirements can be covered according to the control unit chosen.
- The main parts are guaranteed for 5 years (compressor, tank, electrical equipment)(2).

Use

- Our heat pumps are designed for detached homes, recent builds, new RE2020 builds, and renovation projects.
- They are perfect for underfloor/ceiling heating/cooling, low-temperature, fan coil or high-temperature radiator projects.

Performance

- The Inverter compressor allows for highly adaptive power, from 15 to 100%, to adjust power according to requirements and outdoor conditions
- Our heat pumps run on thermodynamic power down to a -20 °C outside air temperature.

Comfort & durability

- Their meticulous design ensures very low noise emission (see diagram p.5).

Environment

- The R290 used in our heat pumps is a non-fluorinated gas low environmental impact (GWP=3).

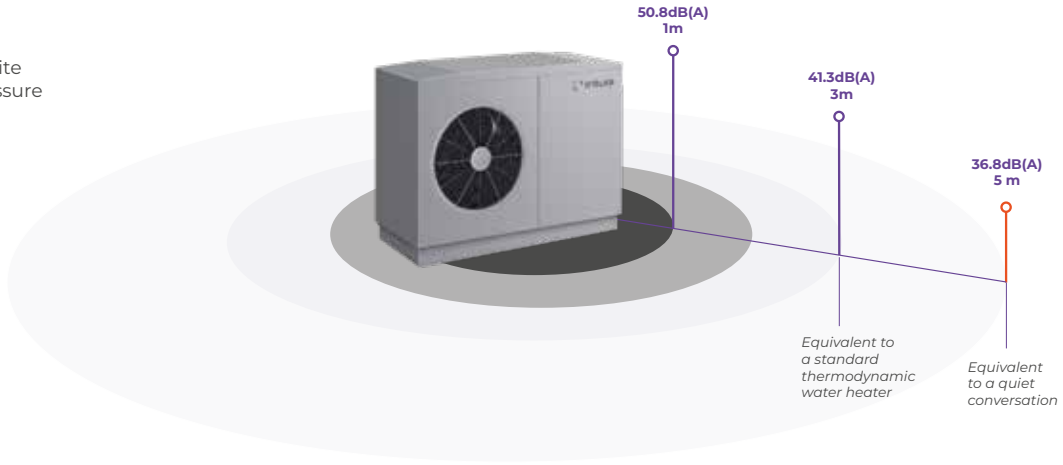
Savings

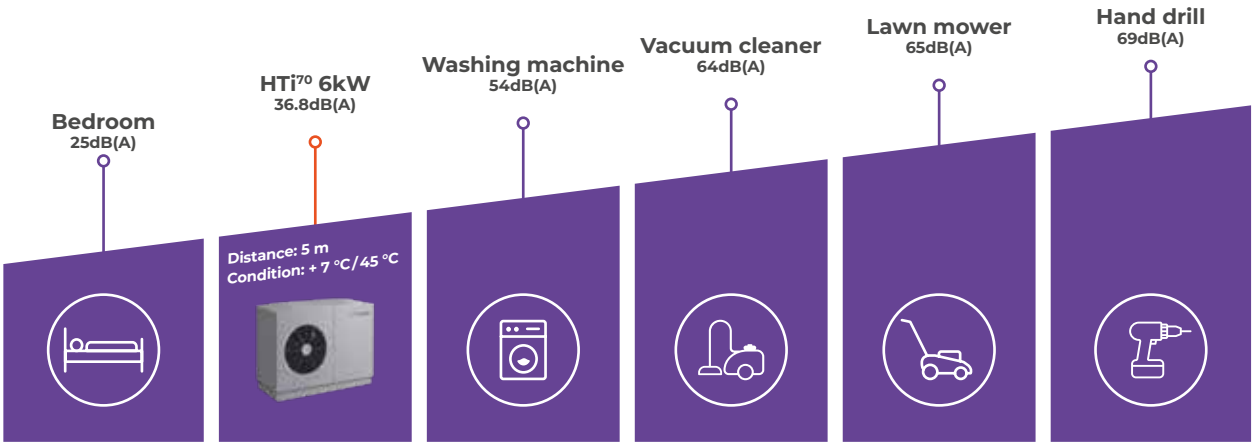
- The high performance coefficient allows a reduction in meter subscription costs.

(1) Only for HTi70 6 single-phase & 8kW single- & three-phases with Orium, Premium plus and DS170D control units.
(2) Compressor guaranteed for 5 years subject to compliance with the warranty conditions set out in the T&Cs of the current price list.

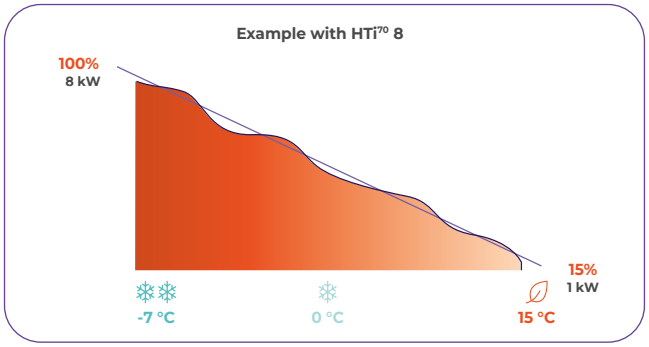
Noise output of 6kW outdoor unit

The diagrams opposite show the sound pressure at 5 m +7 °C/45 °C
Directionality 4 measures.



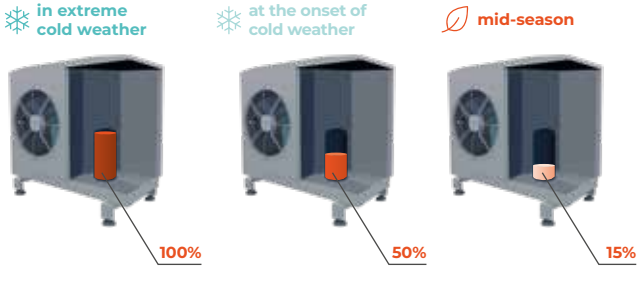


Presentation of Inverter technology



– heating needs
– adaptability of the Inverter compressor
■ power generated by the 100% thermodynamic heat pump

Mid-season, the HTi70 adjusts its power and temperature to optimum levels.
In the middle of winter, the HTi70 delivers full power at a high temperature to ensure comfort.



The HTi70 has an Inverter compressor that adapts its power from 15 to 100%.

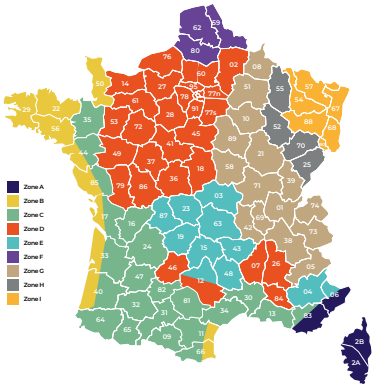
1. Robust, corrosion-resistant metal casing
2. Easy-to-access, simple, and highly reliable electrical box
3. Fully adaptative Inverter compressor
4. Optional adjustable booster kit
5. Pre-fitted carrying straps provided for easy installation

TIPS FOR EFFICIENT INSTALLATION

Use our DimoPAC tool dedicated to detached home projects to choose the most suitable heat pump model for your project. It's a practical tool that will help you assess heat loss and offer you a selection of suitable solutions, in line with QualiPAC requirements and state financial aids. It can be downloaded from the business section of our website and will soon be available online via a specialised app.
Warning: this tool is only an indicator; accuracy depends on the quality of the information entered. If you require greater precision, please use a qualified design office.

What questions do you need to ask to be as precise and thorough as possible when preparing your project?

1. Project location



To establish the reference temperature, location, altitude, and distance from the sea are decisive indicators. Your design will be defined according to these factors as well as the building's heat loss information.

2. Installation

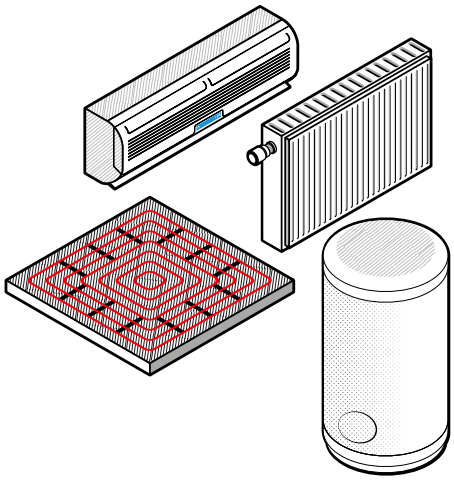
Equipment installation conditions, available space, state of the floor and walls, condensate drainage, visual and acoustic impact, performance linked to the distance between the indoor and outdoor units, etc. There are many points to take into account to ensure a good setup.

3. Electricity

Correctly calibrating your electrical installation is the key to success. It's a step that deffinitely shouldn't be overlooked! You should take into account the wattage of the meter, the presence of a circuit breaker, the current (single-phase or three-phase), the need to add an electrical panel, and voltage variations or micro-cuts in the network and cable cross-sections.

4. The type of project

What does this mean? The use of a heat pump. Are you replacing an existing boiler or a heat pump? What was your previous consumption level?
Is there a fireplace or woodburner? All this information will guide the design of your installation.



5. The heating conditions

Type (radiator, underfloor, ceiling, fan coil), water flow rates and DHW requirements if necessary.

6. Miscellaneous points

To avoid any issues after the job has been completed, you'll need to ensure an open dialogue with your customer. What is the objective? Find out what their habits are and how they use their heating and DHW system.

All these aspects contribute to overall satisfaction, user comfort, and efficient energy consumption. System design is crucial.

With these elements in hand, what's the next step?

DESIGN

The design stage is crucial when preparing a project

1

Calculate the heat losses of the building to be fitted, taking into account the reference temperature and thermal insulation.

2

Select your heat pump according to the QualiPAC guidelines, which stipulate that for heat pumps with an electric back-up, the following 2 criteria must be met:

- The power of the heat pump alone must cover between 80% and 100% of heat loss for Inverter (HTi^{70} range) heat pumps and between 70% and 100% of heat loss for 'All Or Nothing' heat pumps (HRC^{70} range).

- The capacity of the heat pump + the capacity of the electric back-up must cover at least 120% of the heat loss.

For the hybrid solution, a specific setup is required

3

Choose a control unit that will be compatible with the requirements: heating and/or DHW, taking into account the number of circuits, the circuit water regime (high, medium, and low temperatures)...

4

Configure the installation and choose the accessories that may be required to best meet the specific requirements of the project.

UNDERSTANDING THE DIFFERENT CONTROL UNITS

Compatibility of individual residential control units and HTi^{70} heat pumps

Control units	Control unit features Excluding the Thorix hydraulic module, which allows more circuits to be covered	Control unit plus points Integrated separator kit Hydraulic connection kit included	HTi^{70} 6kW/HTi^{70} 8kW	HTi^{70} 11kW/HTi^{70} 14kW
				
Orium 3S 	**Standard equipment:** 1-circuit heating, remote DHW and cooling	**Intended use:** new/recent houses and simple installations 6kW stepped back-up Ideal for floor/ceiling	✓ 6kW SEER 35/55: 182%/137% 8kW SEER 35/55: 191%/151%	-
Orium 	**Standard equipment:** 1-circuit heating & remote DHW	**Intended use:** new/recent houses and simple installations 6kW stepped back-up Ideal for floor/ceiling	✓ 6kW SEER 35/55: 186%/136% 8kW single-phase SEER 35/55: 190%/150% 8kW three-phase SEER 35/55: 190%/149%	-
Premium+ 	**Standard equipment:** 1-circuit heating & boiler connection **Optional kit:** 2-circuit heating & boiler connection Or 1-circuit heating & remote DHW & boiler connection	**Intended use:** renovations and complex installations **Integrated 38L buffer tank** **Connection to existing boiler** for back-up. Stepped 6kW back-up, compliant with norms Optional kit for 2nd circuit	✓ 6kW SEER 35/55: 186%/136% 8kW single-phase SEER 35/55: 190%/150% 8kW three-phase SEER 35/55: 190%/149%	✓ 11kW SEER 35/55: 185%/144% 14kW SEER 35/55: 175%/141%
DS170D 	**Standard equipment:** 1-circuit heating & integrated DHW	**Intended use:** new homes or renovation projects Onix 40L buffer tank for 11 & 14kW power ratings Stepped 6kW back-up, compliant with norms 170 L DHW tank (integrated in the control unit)	✓ 6kW SEER 35/55: 186%/136% 8kW single-phase SEER 35/55: 190%/150% 8kW three-phase SEER 35/55: 190%/149%	✓ 11kW SEER 35/55: 185%/144% 14kW SEER 35/55: 175%/141%
Gas Hybrid 	**Standard equipment:** 1-circuit heating & remote DHW	**Intended use:** renovation projects Integrated 18kW gas boiler. High temperature - 80 °C Adaptative gas condensing booster Smart system with 3 operating modes (heat pump only, hybrid, boiler only)	✓ 6kW SEER 35/5 : 190%/137% 8kW single-phase SEER 35/55: 192%/155% 8kW three-phase SEER 35/55: 191%/153%	✓ 11kW single-phase SEER 35/55: 191%/153% 11kW three-phase SEER 35/55: 186%/144% 14kW SEER 35/55: 177%/144%

REMINDER OF THE STEPS TO FOLLOW DURING A WORKSITE

1 - Proceed with installation

Don't forget that the quality of the hydraulic system is paramount. Desludging and treatment are effective solutions that protect the system and improve its performance.
Other basic rules need to be followed, such as the correct positioning of filters, inclusion of a sludge trap, a tapping point, a correctly sized expansion tank, air valves at high points, etc. Bleeding the circuit is a key stage in installation, but long-term maintenance is essential.

2 - Send off the warranty certificates

Once the installation has been completed, it is essential to return the warranty certificates for the equipment installed. This enables you to activate the guarantee on the date of installation.

Watch a video showing an example of a renovation project.

HTi^{70} NEW
ORIUM 3S

Compact and multifunctional with triple service for comfort all year round.

*For space heating at a temperature of 35°C. More information on opposite page.

Advantages for business customers

Design

- Easy to install.
- Staged 6kW electric booster (2, 4, 6kW) single or three-phase.
- One-piece design, no need to handle fluids thanks to a simple hydraulic connection between the heat pump and the control unit. The hydraulic kit includes: strainer, 2 flexible hoses, isolation valves, bleeder and fittings. The heat pump is supplied as standard with 4 adjustable feet and is pre-equipped with a10 m bus cable. The hydraulic pilot is delivered as standard with an outdoor sensor.

Performances

- COP of 5 and seasonal energy efficiency ratio (ETAS) of up to 191%.
- Heat pump designed with an Inverter compressor for power modulation from 15% to 100% for optimised energy consumption.
- Operates without back-up at temperatures down to-20°C outside air.

Comfort & durability

- Its flexibility means it can cover several circuits(accessories need to be added, in particular the Thorix).

Savings

- It can operate with or without back-up depending on configuration.
- Compressor guaranteed for 5 years(1).

Benefits for your customers

Design

- Made in France, at our factory in Hauts-de-France factory.
- The compact, comprehensive control unit meets all needs : heating, cooling and remote DHW (optional).
- Available in 6kW single and 8kW single and three-phase.

Usage

- Orium 3S is ideal for new-build projects with low-temperature heating (underfloor or ceiling heating), fan coil units or high-temperature high-temperature radiators.

Performances

- The Inverter compressor provides ultra modulation of power from 15 to 100% to adjust requirements and outdoor conditions.
- Water outlet temperature of up to 70°C, even in very cold weather (-20°C outside air).

Comfort & durability

- Low noise emission, just 36.8dB(A)(2).
- Remote control with connectivity (optional).

Environnement

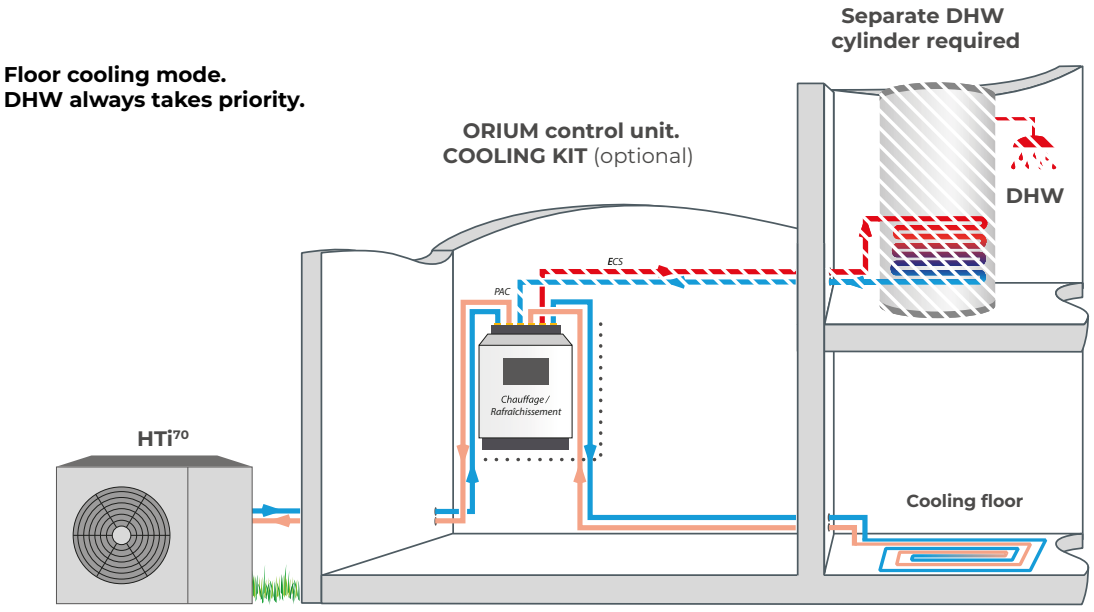
- The R290 used in our heat pumps is a nonfluorinated gas low environmental impact (GWP=3).

Savings

- The high performance coefficient allows a reduction in meter subscription costs.

(1) More information on page 26.
(2) Sound pressure at 5 m. Comparable to a whisper.

Schematic diagram[1] : HTi[70] ORIUM 3S



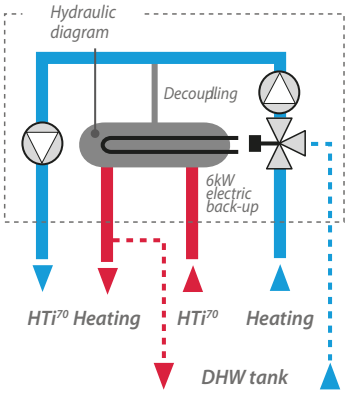
Valid for references 155309, 155319, 155359

(1) Refer to instructions for connection layout

Diagram of ORIUM 3S control unit

1. Heating circulator
2. 3-way valve heating/DHW
3. Cast iron module with 20-year guarantee
4. Control panel
5. Automatic air trap
6. Valve
7. 5L expansion tank
8. Heating / DHW circulator
9. Stepped 6kW electric back-up
10. Cooling backsplash

Hydraulic diagram



HTi[70] 6, 8kW and ORIUM 3S heat pump system - hydraulic kit

Product name	Item	Heating capacity Maximum at -7°C/65°C	Energy class & SEER 35°C/55°C	SCOP 35°C/55°C
HTi[70] 6kW single-phase Orium 3S	155309	5.5kW	A+++/A++ 182%/137%	4.62 / 3.51
HTi[70] 8kW single-phase Orium 3S	155319	6.9kW	A+++/A+++ 191%/151%	4.85 / 3.84
HTi[70] 8kW three-phase Orium 3S	155359	6.9kW	A+++/A+++ 191%/151%	4.85 / 3.84

Sets come with an exterieur sensor as standard – this allows an extra 2% on the SEER.
intuis heat pump controller : class VI thanks to a thermostat supplied as standard.

HTi^{70} ORIUM

Compact dual-service solution for simplified installation.

*For space heating at a temperature of 35°C. More information on opposite page.

(1)

Advantages for business customers

Design

- No refrigerant handling required thanks to a simple hydraulic connection between the heat pump and the control unit. The hydraulic kit includes: stainer, 2 flexible hoses, isolation valves, bleeder and fittings. The heat-pump is supplied as standard with 4 adjustable feet and is pre-equiped with a 10 m bus cable. The hydraulic control unit is delivered as standard with an outdoor sensor.

Performance

- High temperatures up to 70 °C thanks to R290 refrigerant, providing heating in all configurations and anti-legionella cycles without back-up for DHW production.

Comfort & durability

- Its flexibility means it can cover several circuits (requires accessories, notably the Thorix).
- Integrated single- or three-phase 6kW electric back-up (2, 4, and 6kW).

Savings

- Operates with or without back-up (gas, electricity, etc.) depending on the installation.

Benefits for your customers

Design

- The compact and dual service controllers meets needs : heating and remote DHW (optional).

Usage

- Orium is ideal for new-build projects with low-temperature heating (underfloor or ceiling heating) or high-temperature radiators for renovations.

Performance

- The Inverter compressor allows for highly adaptive power, from 15 to 100%, to adjust power according to requirements and outdoor conditions.
- Our heat pumps run on thermodynamic power down to a -20 °C outside air temperature.

Comfort & reliability

- Smart remote management (optional).
- Their meticulous design ensures very low noise emission (see diagram p.5).

Environment

- The R290 used in our heat pumps is a non-fluorinated gas low environmental impact (GWP=3).

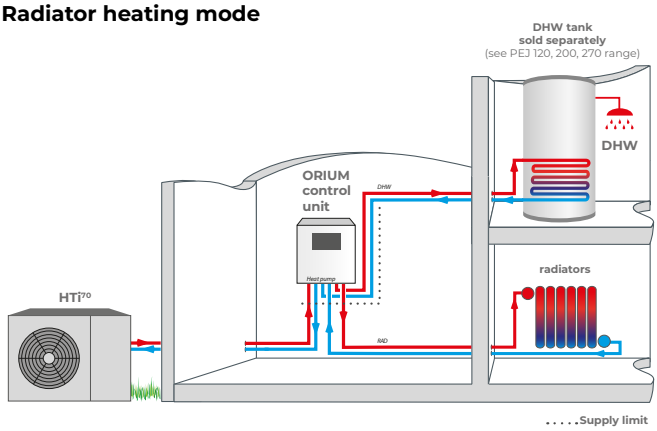
Savings

- The high performance coefficient allows a reduction in meter subscription costs.

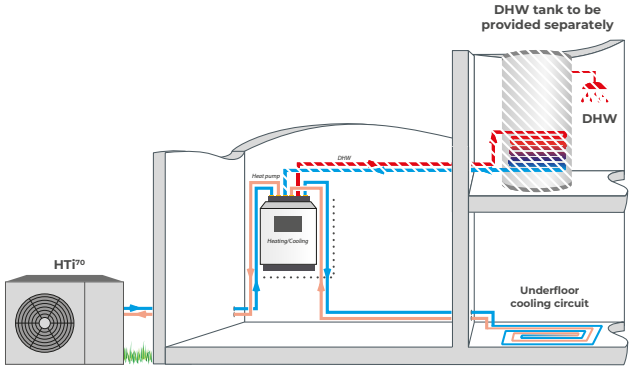
(1) Only for HTi^{70} 6 single-phase & 8kW single-phase en three-phase, with Oriun, Premium+ and DS170D control units.

Schematic diagram [1]: HTi[70] ORIUM

Radiator heating mode



Floor heating mode

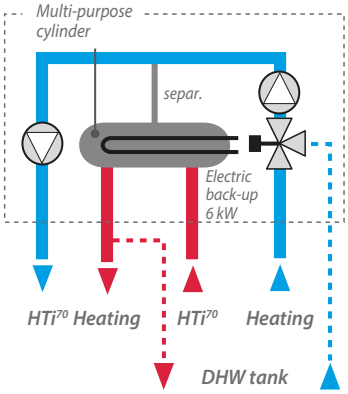


(1) Refer to instructions for connection layout.

Diagram of ORIUM control unit

1. Heat pump circulator
2. 3-way heating/DHW valve
3. 20-year warranty on cast-iron unit
4. Control panel
5. Automatic air vent
6. Valve
7. 5L expansion tank
8. DHW/Heating circulator
9. Stepped 6kW electric back-up

Hydraulic diagram



HTi[70] 8kW and ORIUM heat pump system - hydraulic kit

Product name	Item	Heating capacity Maximum at -7° C/65 °C	Energy class & SEER 35° C/55 °C	SCOP 35°/55°C
HTi[70] 6kW single-phase Orium	155009	5.5kW	A+++/A++ 186%/136%	4.72 / 3.48
HTi[70] 8kW single-phase Orium	155019	6.9kW	A+++/A+++ 190%/150%	4.83 / 3.82
HTi[70] 8kW three-phase Orium	155059	6.9kW	A+++/A++ 190%/149%	4.82 / 3.79

NB: Sets come with an exterior sensor as standard. This allows an extra 2% on your SEER.

HTi^{70} PREMIUM+

Ideal for renovation projects with numerous hydraulic connection options.

*For space heating at a temperature of 35°C. More information on opposite page.

Advantages for business customers

Design

- No refrigerant handling is required thanks to a simple hydraulic link between the heat pump and the control unit. The full kit includes: strainer, 2 flexible hoses, isolation valves, bleeder and fittings. The heat pump is supplied as standard with 4 adjustable feet and is pre-equipped with a bus cable 10 m bus cable. The hydraulic control unit is supplied with an outdoor sensor.

Performance

- High temperatures (up to 70 °C) providing heating in all configurations and anti-legionella cycles without back-up for DHW production.
- Wide power range: HTi^{70} 6kW single-phase, HTi^{70} 8, 11, 14kW single- or three-phase; can be adapted to different configurations.

Comfort & durability

- Its flexibility allows it to cover several circuits. What's more, it can be adapted using a second circuit kit.
- Integrated single- or three-phase 6kW electric back-up (2, 4, and 6kW).

Savings

- Operates with or without back-up (gas, electricity, etc.) depending on the installation configuration.

Benefits for your customers

Design

- Origine France Garantie certified control unit(1): French know-how at factories located within France.
- The Premium+ control unit covers all heating and remote DHW requirements.
- Independent circuits allow for an extended service life.

Usage

- Ideal control unit for older detached homes as well as renovation projects.
- Premium+ can be used to replace or accompany an old boiler and does not require the replacement of existing high-temperature radiators.

Performance

- The Inverter compressor allows for highly adaptive power, from 15 to 100%, to adjust power according to requirements and outdoor conditions.
- Thermodynamic running down to a -20 °C outside air temperature.

Comfort & reliability

- Smart remote management (optional).
- Their meticulous design ensures very low noise emission (see diagram p.5).

Environment

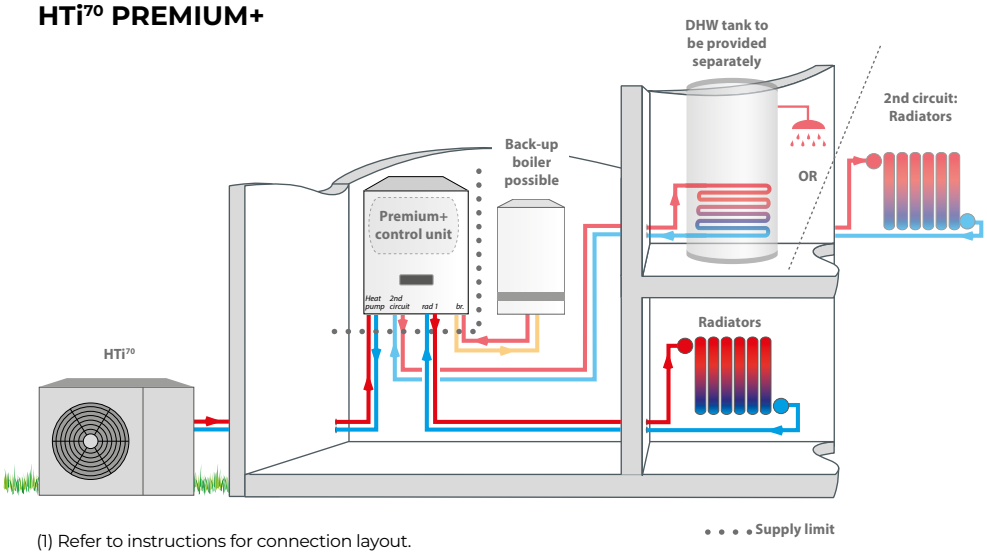
- The R290 used in our heat pumps is a non-fluorinated gas low environmental impact (GWP=3).

Savings

- The high performance coefficient allows a reduction in meter subscription costs.

(1) Only for HTi^{70} 6 single-phase & 8kW single-phase and three-phase, with Orium, Premium+ and DS170D control units.

Schematic diagram [1]: HTi[70] PREMIUM+



(1) Refer to instructions for connection layout.

Hydraulic diagram

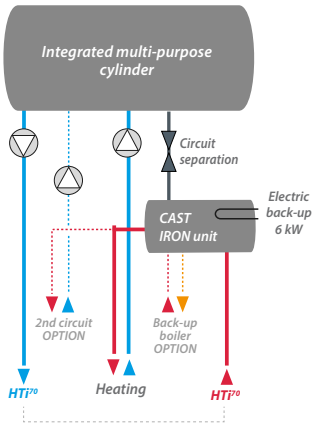


Diagram of PREMIUM+ control unit

1. Heating circulator
2. 38 L insulated multi-function tank
3. Safety valve
4. Pressure sensor
5. Cast iron hydraulic distribution unit
6. Air vent
7. Heat pump circulator
8. Stepped 6kW electric back-up

HTi[70] 6, 8, 11 14kW and PREMIUM+ heat & pump system - hydraulic kit

Product name	Item	Heating capacity Maximum at -7° C/65 °C	Energy class & SEER 35° C/55 °C	SCOP 35°/55°C
HTi[70] 6kW single-phase Premium+	155006	5.5kW	A+++/A++ 186%/136%	4.72 / 3.48
HTi[70] 8kW single-phase Premium+	155016	6.9kW	A+++/A+++ 190%/150%	4.83 / 3.82
HTi[70] 8kW three-phase Premium+	155056	6.9kW	A+++/A++ 190%/149%	4.82 / 3.79
HTi[70] 11kW single-phase Premium+	155026	11kW	A+++/A++ 185%/144%	4.71 / 3.67
HTi[70] 11kW three-phase Premium+	155066	11kW	A+++/A++ 185%/144%	4.71 / 3.67
HTi[70] 14kW single-phase Premium+	155036	12.8kW	A+++/A++ 175%/141%	4.44 / 3.59
HTi[70] 14kW three-phase Premium+	155076	12.8kW	A+++/A++ 175%/141%	4.44 / 3.59

NB: Sets come with an exterior sensor as standard - this allows an extra 2% on the SEER.

HTi^{70} DS170D

All-in-1 heating and DHW integrated into the unit for compactness, practicality and style.

* For space heating at a temperature of 35°C. ** For domestic hot water production of 6 and 8 kW unit. More information on opposite page.

Advantages for business customers

Design

- DS170D is an autonomous, compact, and comprehensive hydro-electronic control unit boasting easy installation and optimised running.
- No refrigerant handling required thanks to a simple hydraulic link between the heat pump and the control unit. The full kit includes: strainer, 2 flexible hoses, isolation valves, bleeder and fittings. The heat-pump is supplied as standard with 4 adjustable feet and is pre-equiped with a 10m bus cable.
  The hydraulic control unit is delivered as standard with an outdoor sensor.

Performance

- High temperatures (up to 70 °C) providing heating in all configurations and anti-legionella cycles without back-up for DHW production.
- Wide power range: HTi^{70} 6kW single-phase, HTi^{70} 8, 11, 14kW single- or three-phase; can be adapted to different configurations.

Comfort & durability

- Its flexibility allows it to cover several circuits.
- Integrated 170 L DHW tank.
- Integrated single- or three-phase 6kW electric back-up (2, 4, and 6kW).

Savings

- Operates with or without back-up (gas, electricity, etc.) depending on the installation configuration.

Benefits for your customers

Design

- Origine France Garantie certified control unit (1): French know how at factories located within France.
- The DS170D control unit covers all integrated heating and DHW requirements.
- Independent circuits allow for an extended service life.

Usage

- DS170D is perfectly suited to RE2020 new-build projects with low-temperature heating (underfloor or ceiling heating, low-temperature radiators) or high-temperature radiators for renovations.
- Can be used to replace an old boiler and does not require the replacement of existing high-temperature radiators.

Performance

- The Inverter compressor allows for highly adaptive power, from 15 to 100%, to adjust power according to requirements and outdoor conditions.
- Thermodynamic running down to a -20 °C outside air temperature.

Comfort & reliability

- Smart remote management (optional).
- Their meticulous design ensures very low noise emission (see diagram p.5).

Environment

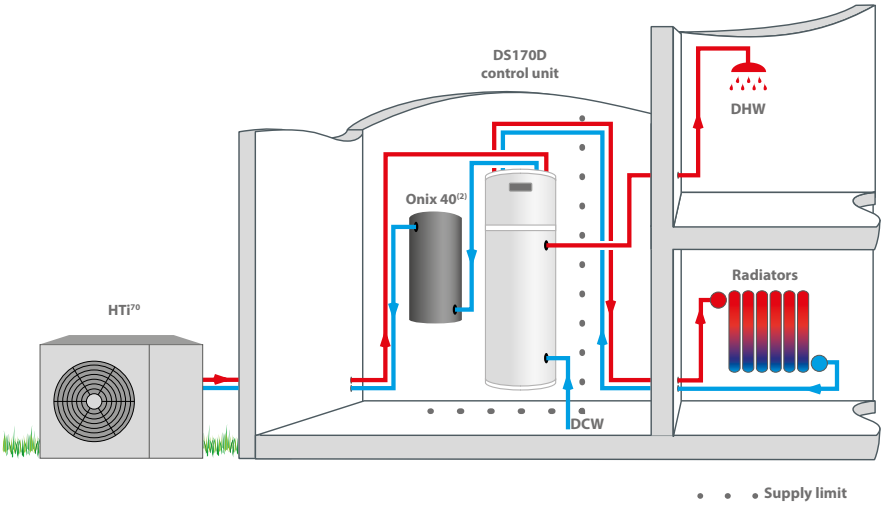
- The R290 used in our heat pumps is a non-fluorinated gas low environmental impact (GWP=3).

Savings

- The high performance coefficient allows a reduction in meter subscription costs.

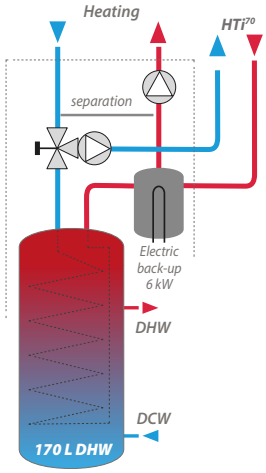
(1) Only for HTi^{70} 6 single-phase & 8kW single-phase and three-phase, with Orium, Premium+ and DS170D control units.

Schematic diagram [1]: HTi[70] DS170D



(1) Refer to instructions for connection layout.
(2) Buffer tank for HTi[70] 11 and 14 kW only.

Hydraulic diagram



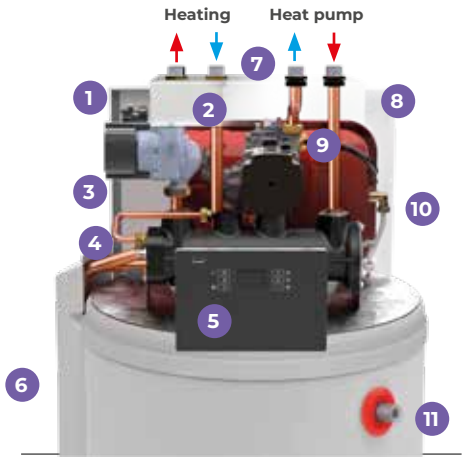


Diagram for DS170D control unit

1. Heating circulator
2. 3-way heating/DHW valve
3. Separator
4. 20-year warranty on cast-iron unit
5. Control panel
6. Enamelled steel 170 L DHW tank
7. Automatic air vent
8. 8L expansion tank
9. Heat pump/DHW circulator
10. Stepped 6kW electric back-up
11. DHW

HTi[70] 6, 8, 11 & 14kW and DS170D heat pump system - hydraulic kit

Product name	Item	Heating capacity Maximum at -7° C/65 °C	Energy class & SEER 35° C/55 °C	DHW Energy Class	SCOP 35°C/55°C
HTi[70] 6kW single-phase DS170 D	155004	5.5kW	A[+++]/A[++] 186%/136%	A+	4.72 / 3.48
HTi[70] 8kW single-phase DS170 D	155014	6.9kW	A[+++]/A[+++] 190%/150%	A+	4.83 / 3.82
HTi[70] 8kW three-phase DS170 D	155054	6.9kW	A[+++]/A[++] 190%/149%	A+	4.82 / 3.79
HTi[70] 11kW single-phase DS170 D/40	155024	11kW	A[+++]/A[++] 185%/144%	A	4.71 / 3.67
HTi[70] 11kW three-phase DS170 D/40	155064	11kW	A[+++]/A[++] 185%/144%	A	4.71 / 3.67
HTi[70] 14kW single-phase DS170 D / 40	155034	12.8kW	A[+++]/A[++] 175%/141%	A	4.44 / 3.59
HTi[70] 14kW three-phase DS170 D / 40	155074	12.8kW	A[+++]/A[++] 175%/141%	A	4.44 / 3.59

NB: sets are supplied with an exterior sensor as standard. This allows an extra 2% on your SEER.

HTi^{70} GAS HYBRID

Combines thermodynamics with a gas condensing back-up incorporated into the control unit; perfect for extreme temperatures.

*For space heating at a temperature of 35°C. More information on opposite page.

Advantages for business customers

Design

- Optimised DHW management with a choice of volume and tank location, and water heated by the heat pump.
- The full kit includes: strainer, 2 flexible hoses, isolation valves,bleeder and fittings. The heat pump is supplied as standard with 4 adjustable feet and is pre-equipped with a 10 m bus cable. The hydraulic pilot is supplied with an outdoor sensor.

Performance

- Suitable for phased renovation of poorly insulated homes:

  - Before insulation > boiler used if requirements exceed the capacity of the heat pump on the coldest days.
  - After insulation > reduced heat loss increases the heat pump's operational share.

Comfort & durability

- Its flexibility allows it to cover several circuits.

Savings

- Operates with or without back-up (gas, electricity, etc.) depending on the installation configuration.

Benefits for your customers

Design

- The Hybrid Gas control unit covers all heating and remote DHW requirements.
- Independent circuits allow for an extended service life.

Usage

- Ideal for extreme temperatures or isolated locations in the countryside or mountains.
- Can be used to replace an old boiler and does not require the replacement of existing high-temperature radiators.

Performance

- Guaranteed thermal comfort all winter long thanks to the adjustable gas condensing auxiliary heating system.
- Thermodynamic running down to a -20 °C outside air temperature. The system selects the most efficient energy based on external conditions.

Comfort & reliability

- Smart remote management (optional).
- Runs in Peak/Off-Peak Time mode and is compatible with the EJP programme (France only).
- The systems are independent: Heat pump only, hybrid heat pump/gas boiler, boiler only.
- Their meticulous design ensures very low noise emission (see diagram p.5).

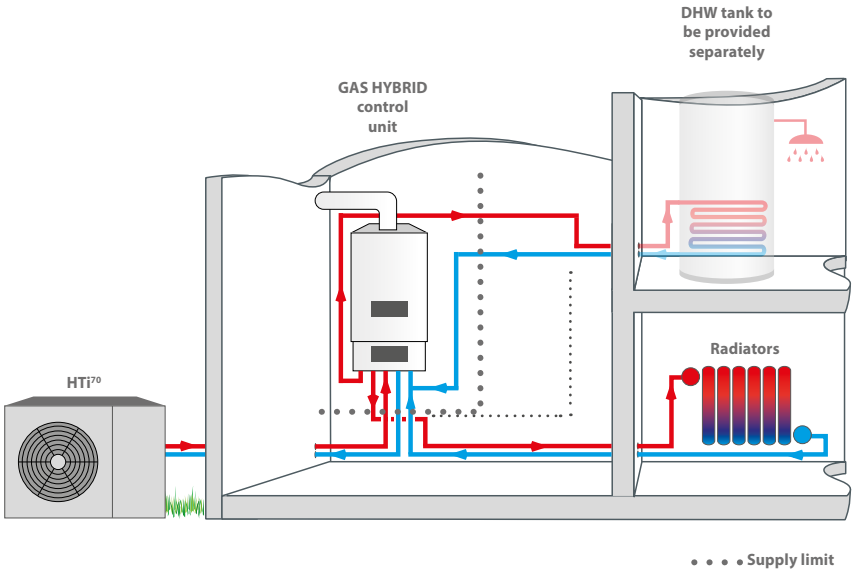
Environment

- The R290 used in our heat pumps is a non-fluorinated gas low environmental impact (GWP=3).

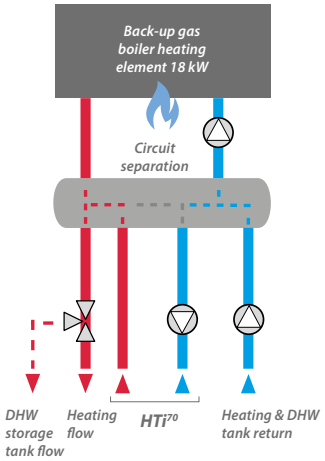
Savings

- The high performance coefficient allows a reduction in meter subscription costs. No need to switch to three-phase and increase your electricity bill for high power requirements. Minimum gas contract.

Schematic diagram [1]: HTi[70] GAS HYBRID



Hydraulic diagram



(1) Refer to instructions for connection layout.

Diagram of a GAS HYBRID control unit

1. 8L expansion tank
2. Burner
3. Gas unit
4. Valve
5. Gas boiler circulator
6. Tank
7. Heating/DHW circulator
8. Heat pump circulator
9. 3-way heating/DHW valve
10. Condensate drain
11. Exhaust valve

HTi[70] 6, 8, 11 & 14kW and GAS HYBRID heat pump system - hydraulic kit

Product name	Item	Heating capacity Maximum at -7° C/65 °C	Energy class & SEER 35° C/55 °C	SCOP 35°/55°C
HTi[70] 6kW single-phase Gas Hybrid	155008	5.5kW	A[+++]/A[++] 190%/137%	4.83 / 3.49
HTi[70] 8kW single-phase Gas Hybrid	155018	6.9kW	A[+++]/A[+++] 192%/155%	4.87 / 3.96
HTi[70] 8kW three-phase Gas Hybrid	155058	6.9kW	A[+++]/A[+++] 191%/153%	4.86 / 3.91
HTi[70] 11kW single-phase Gas Hybrid	155028	11kW	A[+++]/A[++] 191%/153%	4.72 / 3.67
HTi[70] 11kW three-phase Gas Hybrid	155068	11kW	A[+++]/A[++] 186%/144%	4.72 / 3.67
HTi[70] 14kW single-phase Gas Hybrid	155038	12.8kW	A[+++]/A[++] 177%/144%	4.51 / 3.67
HTi[70] 14kW three-phase Gas Hybrid	155078	12.8kW	A[+++]/A[++] 177%/144%	4.51 / 3.67

NB: sets are supplied with an exterior sensor as standard. This allows an extra 2% on your SEER.

HEAT PUMP AND CONTROL UNIT ACCESSORIES

EXTERNAL UNIT

Ref. 753102
2 core armoured cable, 20 m

Ref. 754103
2 core armoured cable, 50 m

Ref. 754210
4 DN30 tube connectors for HTi[70] 11/14 kW

Ref. 754209
4 DN25 tube connectors for HTi[70] 6/8kW

Ref. 711000
High-capacity 1 1/4" filtration kit for HTi[70] 6/8kW

Ref. 751004
External defrosting cable for HRC[70].

Ref. 754600
12 cm adjustable booster for HTi[70]

Ref. 754208
40 m DN 30 coil hose for HTi[70] 11/14kW and HRC[70]

INTERIOR UNIT

Ref. 741003
Adjustable tripod for Onix 40

Ref. 710014
KD 10 - Shutoff kit

Ref. 710111
65 °C manual reset underfloor heating temperature limiter

Ref. 754300
Adjustable humidistat for cooling mode

Ref. 710018
1" F/F check valve

ADDITIONAL CIRCUITS

Ref. 754211
2nd Premium+ circuit kit by Thorix 1C

Ref. 411002
Thorix evolution 1C - 1 mixed circuit + exterior sensor (integrated underfloor flow safety aquastat)

Ref. 411003
Thorix EVOLUTION 1C - 1 direct circuit + mixed circuit + exterior sensor (integrated underfloor flow safety aquastat)

Ref. 753105
2nd circuit identical temperature kit for Premium+

CIRCUIT CONTROL

Ref. 751009
Room sensor with display

Ref. 770001
TH NCR/2 radio: non-chrono-proportional wireless room thermostat

Ref. 710043

Ref. 710029
DHW/pool/cascade sensor

CIRCUITS HYDRAULIQUES

Ref. 710124
3/4» filter valve

Ref. 710125
1» filter valve

Ref. 710132
1 1/4» filter valve

CONNECTIVITÉ

Ref. 730078
Modbus kit - Thermodynamic water heater/Heat pump

Ref. 770002
Thermo-Net Gateway

Heat pump accessories

Product name	HTi	Item
2 core armoured cable, 20 m long, heat pump/control unit (replaces 10 m cable supplied as standard)	✓	753102
2 core armoured cable, 50 m long, heat pump/control unit (replaces 10 m cable supplied as standard)	✓	754103
4 DN25 tube connectors for HTi^{70} 6/8kW	HTi^{70} 6/8kW	754209
4 DN30 tube connectors $^{for\ HTi}$70 11/14 kW	HTi^{70} 11/14kW	754210
Adjustable tripod for Onix 40	HTi^{70} 11/14kW	741003
High-capacity 1 1/4» filtration kit for HTi^{70} 6/8kW	HTi^{70} 6/8kW	711000
External defrosting cable for HTi^{70}.	✓	754101
12 cm adjustable booster for HTi^{70}	✓	754600
40 m DN 25 coil hose for HTi^{70} 6/8kW	HTi^{70} 6/8kW	754207
40 m DN30 coil hose for HTi^{70} 11/14kW	HTi^{70} 11/14kW	754208

Accessoires pilotes

Product name	ORIUM 3S	ORIUM	PREMIUM+	DS170D	GAS HYBRID	Item
KD 10 - Shutoff kit	✓	✓	✓	✓	✓	710014
65 °C manual reset underfloor heating temperature limiter with beam	✓	✓	✓	✓	✓	710111
Adjustable hygrostat for cooling mode	✓	-	-	-	-	754300
Low temperature safety	✓	-	-	-	-	-
«1» F/F check valve(required for domestic boiler back-up only)	-	-	✓	-	-	710118
Second circuit kit Premium+ by Thorix 1C	-	-	✓	-	-	754211
Thorix EVOLUTION 1C - 1 mixed circuit + exterior sensor 2nd circuit at a lower temperature	✓	✓	✓	✓	✓	411002
Thorix EVOLUTION - 2C - 1 direct circuit + 1 mixed circuit + exterior sensor - 2nd circuit at a lower temperature	✓	✓	✓	✓	✓	411003
2nd circuit identical temperature kit for Premium+.	-	-	✓	-	-	753105
Room sensor with display additional 2% on SEER	✓	✓	✓	✓	✓	751009
TH RNC/2 radio: non-chrono-proportional wireless room thermostat* extra 2% on SEER	✓	✓	✓	✓	✓	770001
Room thermostat	-	✓	✓	✓	✓	710043
DHW/pool/cascade sensor	✓	✓	✓	Integrated	✓	710029
Modbus kit - Thermodynamic water heater/Heat pump	✓	✓	✓	✓	✓	730078
Thermo-Net Passerelle	✓	✓	✓	✓	✓	770002
Domestic hot water tanks	✓	✓	✓	-	✓	(See below)
Flue connection pack	-	-	-	-	✓	(See below)

Accessoires hydrauliques

Product name	Item
3/4˝ filter valve	710124
1" filter valve	710125
1 1/4" filter valve	710132

Sanitary hot water tank

Product name	Sizes	Power** (kW)	Capacity (L)	Item
Floor-standing or wall-mounted vertical - stainless steel tank				
PEJ 200	Ø 630 x 1050	29/21	200	341111
PEJ 270 (sol - inox)	Ø 630 x 1382	41/29	270	341106

* Compatible with all non-chrono-proportional connectable thermostats on the market.

** Primary 80°C/65°C (80°C: boiler application ; 65°C; high temperature heat pump application) - secondary 10.40°C.

HEAT PUMP FEATURES

Heat pump		HTi^{70} 6 single-phase/2*	HTi^{70} 8 single-phase/2*	HTi^{70} 8 three-phase/2*	HTi^{70} 6 single-phase
Maximum heat output at -7 °C/35 °C	kW	6	8	8	6
Maximum heat output at -7 °C/65 °C	kW	5.5	6,9	6.9	5.5
Nominal heat output at +7 °C/35 °C (EN14511)	kW	4.14	5.75	5.75	4.06
Performance coefficient at +7 °C/35 °C (EN14511)	-	5	5	5	4.59
Nominal cooling capacity 35°C / 18°C (EN14511)	-	5.30	6.68	6.68	-
EER à 35°C / 18°C	-	2.88	2.72	2.72	-
SEER 23°C / 18°C	-	4.71	4.47	4.39	-
Nominal sound pressure level (5m, directionality 4)	dB(A)	36.8	39.7	39.7	36.8
Power level (ERP +7 °C/55 °C)	dB(A)	53	54	54	52
Outside air range	°C	-20 to +45	-20 to +45	-20 to +45	-20 to +40
Power supply	V	230 single-phase	230 single-phase	400 three-phase	230 single-phase
Protective circuit breaker	A	16 single-phase	16 single-phase	10 four-pole	16 single-phase
Circuit breaker curve	-	D	D	D	D
Maximum electrical power	kVA	3,6	3.6	3,6	3.6
Minimum cross-section of power cable	mm²	3G 2.5	3G 2.5	5G 2.5	3G 2.5
Dimensions (H x W x D)	mm	820 x 1035 x 480	1070 x 1035 x 480	1070 x 1035 x 480	820 x 1035 x 480
Empty weight	kg	82	95	109	81
Nominal water flow rate	L/h	900	1350	1350	1000
Refrigerant	kg	0.60	0.75	0.75	0.42
Hydraulic connection	mm	26/34 male	26/34 male	26/34 male	26/34 male

HTi[70] 8 single-phase	HTi[70] 8 three-phase	HTi[70] 11 single-phase	HTi[70] 11 three-phase	HTi[70] 14 single-phase	HTi[70] 14 three-phase
8	8	11	11	14	14
6,9	6,9	11	11	12,8	12,8
5,72	5,89	8,95	8,95	10,76	10,76
4,85	4,71	4,85	4,85	4,64	4,64
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
37,5	37,5	36,3	36,3	39	39
53	57,6	55	55	58	58
-20 to +40	-20 to +40	-20 to +40	-20 to +40	-20 to +40	-20 to +40
230 single-phase	400 three-phase	230 single-phase	400 three-phase	230 single-phase	400 three-phase
16 single-phase	10 four-pole	32 single-phase	16 four-pole	32 single-phase	16 four-pole
D	D	D	D	D	D
3,6	3,6	7	7	7	7
3G 2,5	5G 2,5	3G 6	5G 2,5	3G 6	5G 2,5
1070 x 1035 x 480	1070 x 1035 x 480	1028 x 1235 x 490	1028 x 1235 x 490	1028 x 1235 x 490	1028 x 1235 x 490
94	108	136	146	142	150
1350	1350	1550	1550	2000	2000
0,6	0,6	0,9	0,9	0,95	0,95
26/34 male	26/34 male	26/34 male	26/34 male	26/34 male	26/34 male

* Applies only to heat pump operating with Orium 3S.

CONTROL UNIT FEATURES

ORIUM features


Control unit		ORIUM 3S	ORIUM
Minimum cross-section of power cable	mm^2	3G 6 (single-phase)/5G 2.5 (three-phase)	3G 6 (single-phase)/5G 2.5 (three-phase)
Power protection circuit breaker	A	32 (single-phase)/16 (four-pole)	32 (single-phase)/16 (four-pole)
Circuit breaker curve	-	C	C
Power supply	V	230 (single-phase)/400 (three-phase)	230 (single-phase)/400 (three-phase)
Multi-purpose cylinder	L	-	-
Unit dimensions (H x W x D)/Unit empty weight	mm /kg	500 x 400 x 302 / 24	500 x 400 x 302 / 24
Hydraulic connections	mm	26/34 male	26/34 male
Boiler connection	-	✗	✗
Electric connection (standard)	kW	0/2/4/6kW	0/2/4/6kW
Circuit separation	-	✓	✓

PREMIUM+ features

Control unit		PREMIUM+
Minimum cross-section of power cable	mm^2	3G 6 (single-phase)/5G 2.5 (three-phase)
Power protection circuit breaker	A	32 (single-phase)/16 (four-pole)
Circuit breaker curve	-	C
Power supply	V	230 (single-phase)/400 (three-phase)
Multi-purpose cylinder	L	38 (integrated in the control unit)
Unit dimensions (H x W x D)/Unit empty weight	mm /kg	789 x 590 x 420/47
Hydraulic connections	mm	26/34 male
Boiler connection	-	✓
Electric connection (standard)	kW	0/2/4/6kW (single-phase or three-phase)
Circuit separation	-	✓

DS170D features

Control unit		DS170D
Minimum cross-section of power cable	mm^2	3G 6 (single-phase)/5G 2.5 (three-phase)
Power protection circuit breaker	A	32 (single-phase)/16 (four-pole)
Circuit breaker curve	-	C
Power supply	V	230 (single-phase)/400 (three-phase)
Multi-purpose cylinder	L	40 (only applies to HTi^{70} 11 and 14)
Unit dimensions (H x W x D)/Unit empty weight	mm /kg	1725 x 571 x 542/80
Hydraulic connections	mm	20/27 male
Boiler connection	-	✗
Electric connection (standard)	kW	0/2/4/6kW (single-phase or three-phase)
Circuit separation	-	✓

GAS HYBRID features

Control unit		GAS HYBRID
Minimum cross-section of unit power cable	mm^2	3G 1.5 (single-phase)
Minimum cross-section of boiler power cable	mm^2	3G 1.5 (single-phase)
Unit power protection circuit breaker	A	2 (single-phase)
Unit circuit breaker curve	-	C
Boiler power protection circuit breaker	A	10 (single-phase)
Boiler circuit breaker curve	-	C
Power supply	V	230 (single-phase)
Interior unit dimensions (H x W x D)	mm	1063 x 400 x 333
Empty weight of unit/boiler	kg	17,2/32,5
Hydraulic connections	mm	26/34 male
Boiler connection	-	✓
Circuit separation	-	✓
Back-up	-	Natural gas/Propane/Biomethane
Gas connection	-	3/4" male
Flue connection	mm	60/100

OUR BUSINESS SERVICES

Export

For all requests outside mainland France, please **contact the export sales department at the following address:**

export@groupe-intuis.fr

AFTER-SALES SERVICE

For all your requests for information or technical assistance, a team of specially trained professionals based at our Feuquières-en-Vimeu (Fr) site is available to assist you by telephone and answer any questions you may have during your operations.

Contact them on
+33 (0)9 78 45 10 25

Warranty

	CASE 1	CASE 2
	Person responsible for sending supporting documents	
Documents to be sent	Fitter	Fitter
Warranty certificate	x	x
Commissioning form		x
Installation photos		x
Operating installation USB file(1)		x
Parts concerned	Warranty period	
DHW tank (2)	3 years	3 years
Compressor	2 years	**5 years**
Electrical & regulation devices	2 years	2 years
Cast iron hydraulic module	**20 years**	

The warranty only applies only if the terms and conditions stipulated in instructions were respected

(1) Optional (2) When combined with DS170D pilot.

SMART PRODUCTS/THERMOSTATS DETACHED HOUSE

Radio-controlled room temperature

TH NCR: Non-chrono-proportional thermostat:

. Regulates the temperature of a heated area, remotely in the room.
. Radio communication with a receiver, wireless installation.
. Programmable hourly and weekly temperature settings.

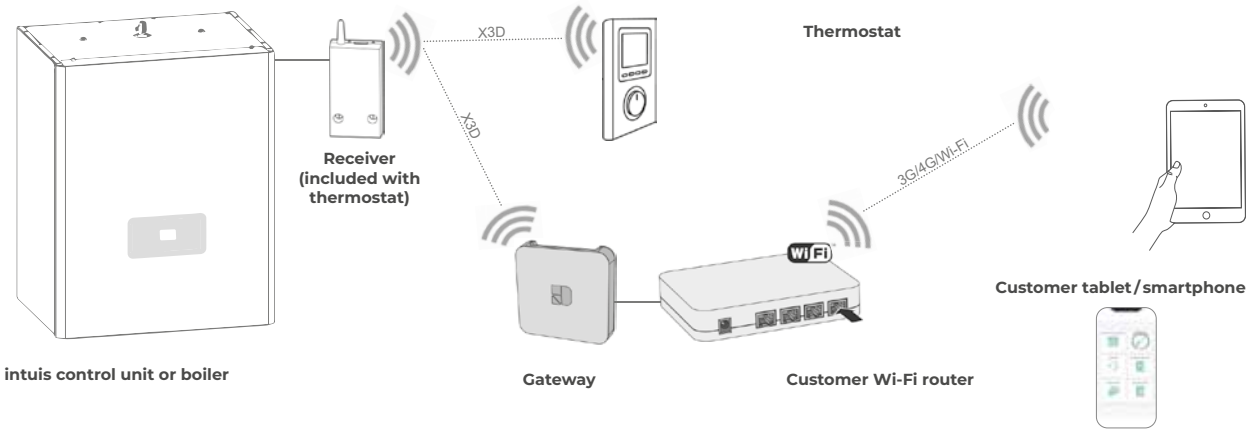
Thermo-Net Gateway:

- Communication gateway for remote temperature control via a Wi-Fi router.
- Manage your smart home equipment with your smartphone, tablet, or by voice control.
- X3D and ZigBee 3.0 communication protocol for multiple compatibility.
- Download the free Tydom app.
- Also allows you to manage other actions in the home (lights, locks, smart plugs, etc.).

Ref. 770001
Thermostat (supplied with receiver)

Ref. 770002
Gateway

Solutions diagram



Thermostat accessories

Product name	Ref.
TH NCR/2 radio - Wireless non-chrono-proportional room thermostat & receiver (1 per circuit)	770001
Thermo-Net - Communication gateway (only compatible with part number 770001)	770002

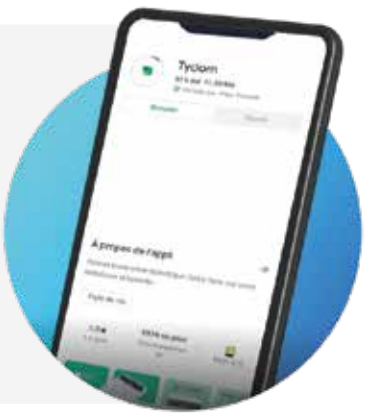
download the Tydom app for free

Available on Google play and the App Store

Download on the App Store
AVAILABLE ON Google Play

System setup:

- **Professional installation**
- **End-user activation**



MORE COMFORT, LESS ENERGY.

Headquarters
28 rue de Verdun
92150 Suresnes

Factory adress
27 rue de la République
80210 Feuquières-en-Vimeu

Export
export@groupe-intuis.fr