

# HRC<sup>70</sup>

New generation

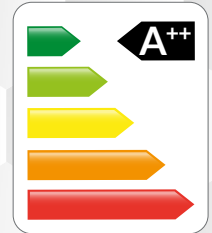
70°C high temperature modulating heat pump



Heating guaranteed even in extreme cold!

- Heats the house independently and comfortably throughout the winter
- From 17 kW to 32 kW and up to 96 kW in battery
- A hydraulic pilot for all types of installation

**COP**  
up to  
**4,9**  
according to  
EN 14511



**NEW**  
HRC<sup>70</sup> 32



Designed for domestic, collective, tertiary, industrial, and agricultural use.



A complete, strong and reliable range from 17 to 32 kW, with outstanding results!

**HFC free**  
HRC<sup>70</sup> is even more  
**ECOLOGICAL**  
**R 290**



**AIR SOURCE**



**HEATING**



**DOMESTIC WATER**

\*Subject to compliance with the warranty conditions stipulated in our current Terms and Conditions.



Made in France

RANGE FROM 17kW TO 32kW



# HRC<sup>70</sup>

## 70°C High Temperature modulating heat pump

*The HRC<sup>70</sup> heat pump is the ideal solution to replace a fuel boiler for up to 75 % of energy savings.*



### HIGH PERFORMANCE

- A genuine high temperature heat pump which provides heating up to 70°C, even on the coldest days.
- Modulating heating capacity: an innovating combination of **two scroll compressors of different capacities**, with a high pressure ratio, to constantly adjust the supply of heat to match the current heating need.
- Equipped with a multifunctional hydraulic pilot for **turnkey installation**.
- Can ensure your **domestic hot water tank heating without any back-up required**.
- Up to -20°C outside, it heats using only the heat pump.

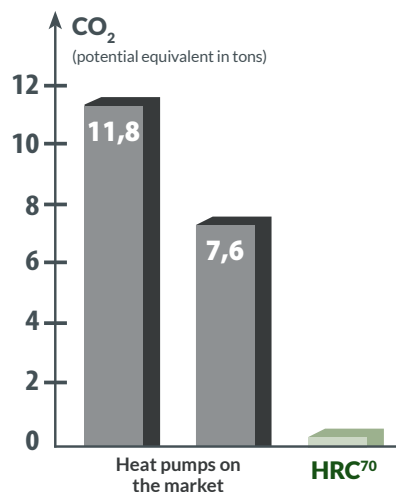
### RESULT:

For every **1kWh** of electricity used, there is up to **4.9kWh** of heat returned to the circuit, leading to almost **80% of energy savings**.

### SILENT

- Extremely quiet due to the **low-speed fan**.
- **Noise reduction technology** for improved airflow and acoustics.
- 4 adjustable **shock-absorbing feet** on the base.
- **Sound isolated compressor chamber**.

### ECO-FRIENDLY



- Auer heat pumps are produced with the **non-fluorinated refrigerant, R290**. It has 2100 times less impact on greenhouse gas emissions than the refrigerants used in standard systems.
- This eco-friendly refrigerant is not subject to mandatory annual maintenance checks nor the European F-GAS regulations.

**The equivalent of 10 tons of CO<sub>2</sub> emissions avoided.**

# HRC<sup>70</sup> ADAPTS ITS PERFORMANCE BASED ON THE DEMANDS OF THE SEASONS



**Mid-season,**



only the small compressor runs.



**First frost,**



the large compressor takes over to increase heating capacity.



**Cold season,**

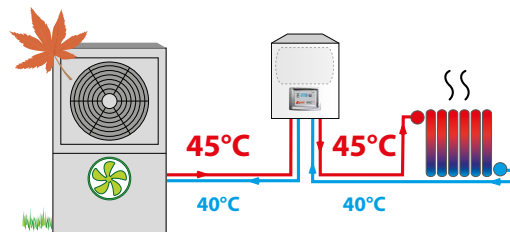


both compressors run to provide maximum heating capacity.

## Why is the HRC<sup>70</sup> heat pump ideal when renovating?

### Advantages of high temperature:

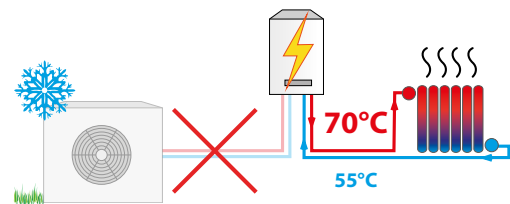
- When renovating, it can serve to replace an older heating system equipped with a high-temperature radiator circuit.
- Not only is the HRC<sup>70</sup> high performing it is also capable of providing domestic hot water at a high temperature.
- To ensure your central heating and maintain your comfort, you need to be able to have your radiators as well as hot water. Only a high temperature heat pump is capable of doing both using only the heat pump, leading to higher energy savings.



- **Mid-season:**  
Water temperature necessary in radiators: 45°C

The HRC<sup>70</sup> supplies only the temperature necessary to the radiators.

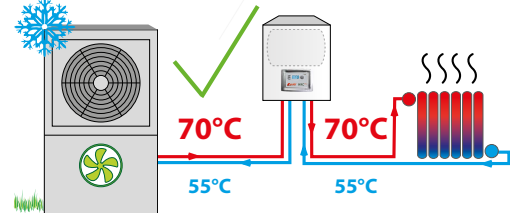
### LOW TEMPERATURE HEAT PUMP



- **Winter:**  
Water temperature necessary in radiators: 60 to 70°C

- Low temperature heat pump:  
A low temperature heat pump cannot provide water over 50°C. It will stop and only the electric heater will function, leading to more energy consumption and less comfort.

### HRC<sup>70</sup> HIGH TEMPERATURE HEAT PUMP



- High temperature heat pump:  
Runs 100% using only the heat pump until the outdoor air temperature drops to -20°C.

“It works on our existing radiators, we don't have to change anything in the house, that is very important!”

(testimony from a customer in the Somme area)

## HRC<sup>70</sup> product range

The HRC<sup>70</sup> heat pumps offer capacities over 80kW with an installation in battery!



17, 20 & 25 kW



32 kW

NEW



40, 60 & 80 kW\*

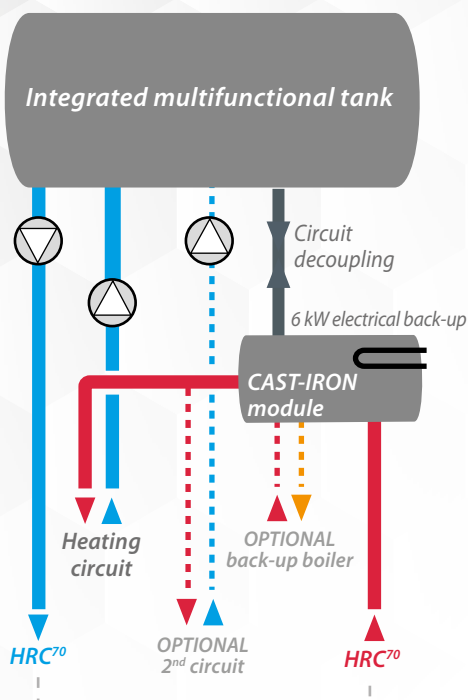
\* Consult your Auer correspondent to know their availability and obtain further technical details.

## PREMIUM+ PILOT

For HRC<sup>70</sup> 17, 20 or 25 kW

Single or three-phase (delivered in single-phase)

**Integrated 38 L tank  
for decoupling of circuits**



## ADVANTAGES

- Can manage 2 heating circuits.
- Integrated hydraulic decoupling tank (38L) with degassing, decantation and desludging.
- Pre-plumbed for direct connection with existing back-up boiler.
- Electrical back-up from 0 to 6 kW included.
- Cast iron hydraulic distribution module.



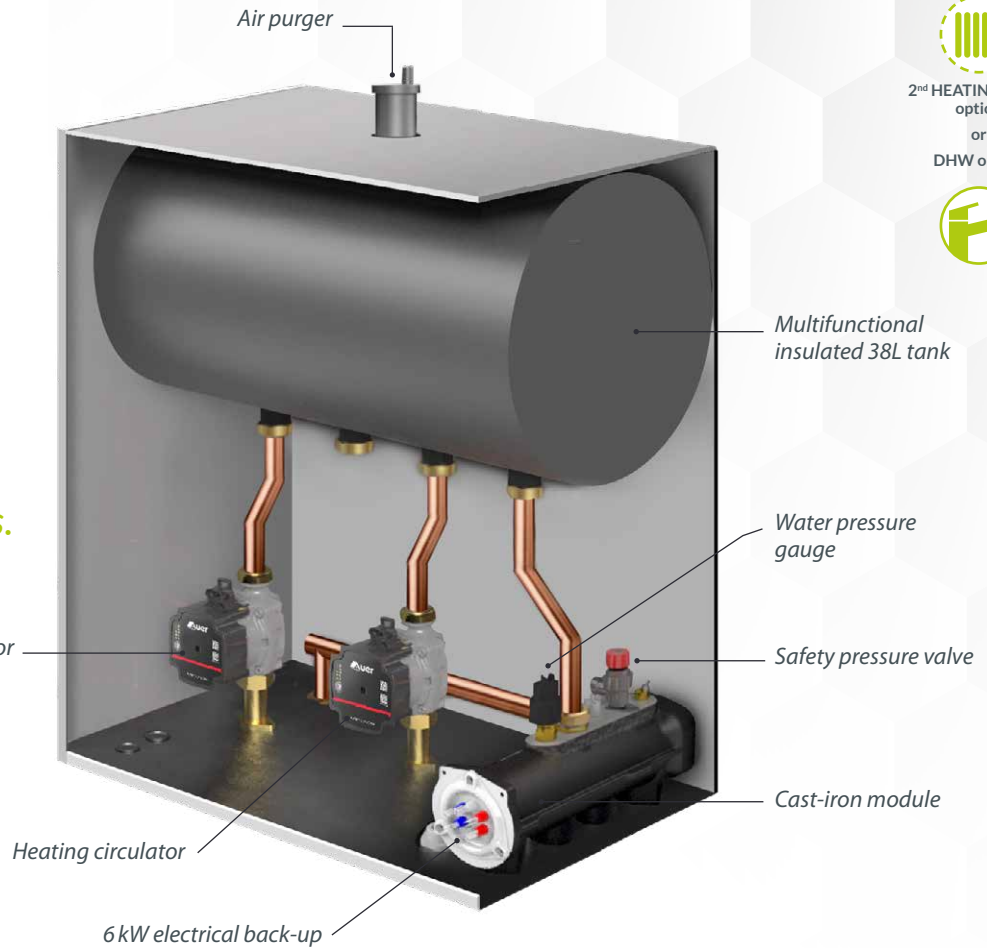
# DOMESTIC INSTALLATION

## COMPONENT OF THE PILOT

The most complete pilot. Everything is integrated for an optimised and non-constraining operation.

The ideal solution when renovating with several hydraulic connexion possibilities.

**HFC Free** | Not subject to F-GAS regulations  
NO GAS CONNECTION TO THE OUTDOOR UNIT



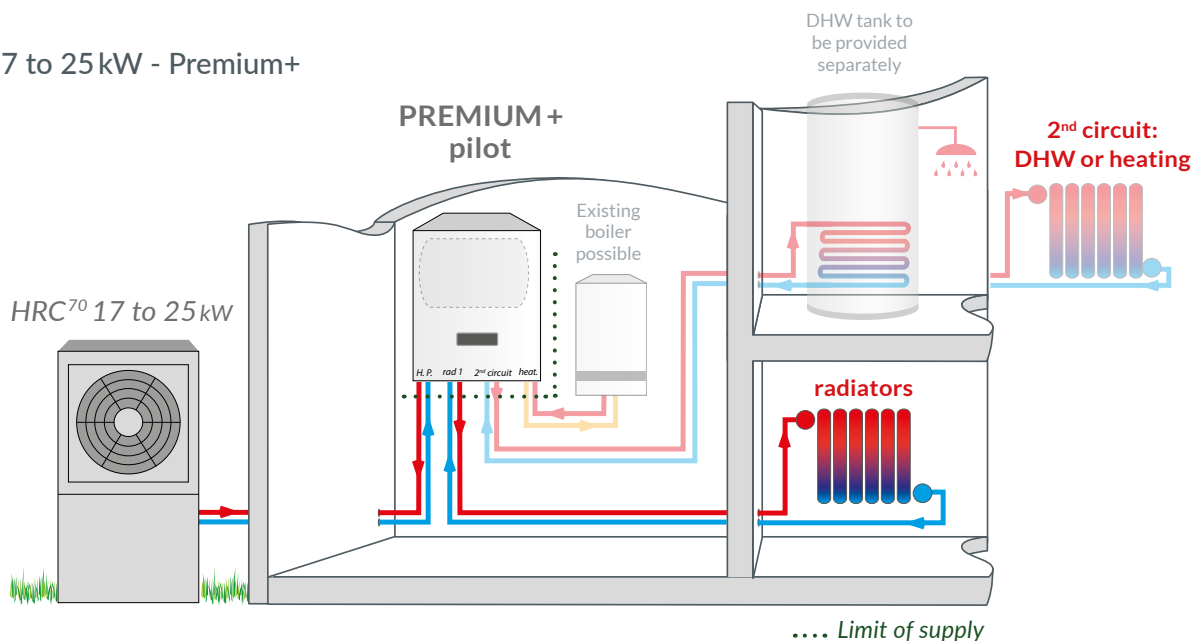
**HEATING**  
(radiators or under-floor heating)

**2<sup>nd</sup> HEATING circuit option**  
or  
**DHW option**



## EASY INSTALLATION

HRC<sup>70</sup> 17 to 25 kW - Premium+

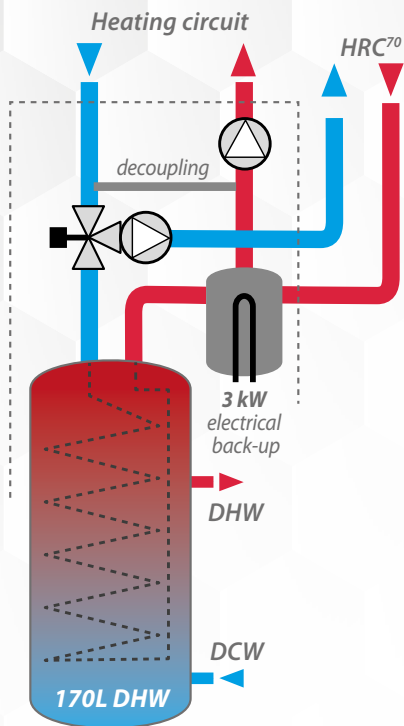


## DS 170D PILOT

For HRC<sup>70</sup> 17, 20 or 25 kW

Single-phase

**Domestic hot water and heating with high temperature heat pump**



170L

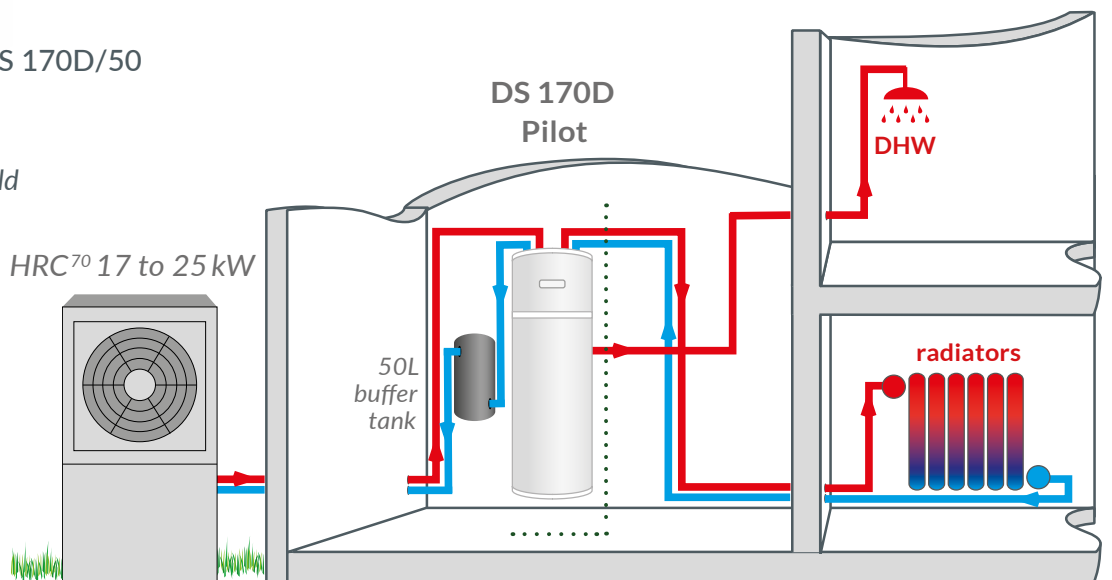
## ADVANTAGES

- Hydro-electronic pilot and domestic hot water tank integrated in one unit.
- Equipped with an expansion vessel.
- Cast iron heating body for electrical back-up of 3 kW.
- Integrated 170L domestic hot water tank.
- Hydraulic decoupling of circuits.

## EASY INSTALLATION

HRC<sup>70</sup> 17 to 25 kW - DS 170D/50

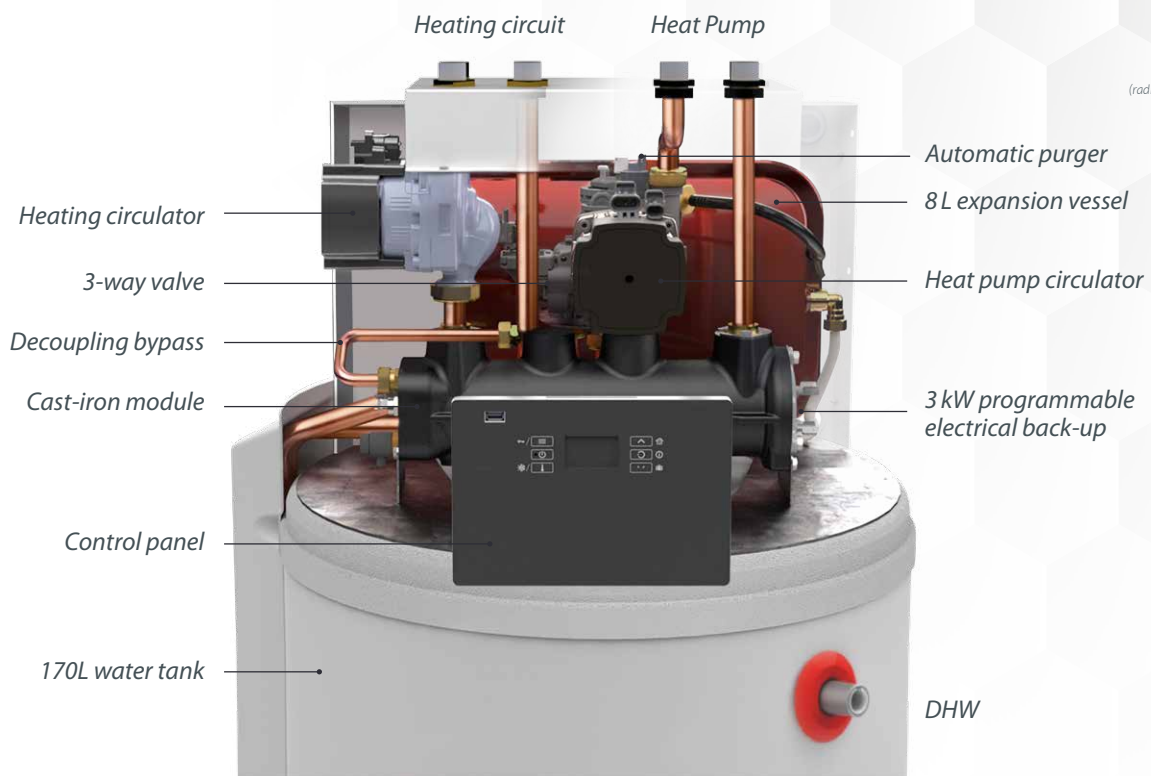
A fully integrated, easily installed and connected solution; ideal for new build houses.



.... Limit of supply



## COMPONENT OF THE PILOT



DHW included



HEATING  
(radiators or under-floor heating)

### Principles of installation:

This is a complete solution to substitute an old boiler which provided also domestic hot water. HRC<sup>70</sup> 17 kW DS 170D meets most of the needs of a house consuming between 2000 and 3000 liters of fuel every year.

## HRC<sup>70</sup> 32

**NEW**

Combined pilot: 6P10

Three-phase

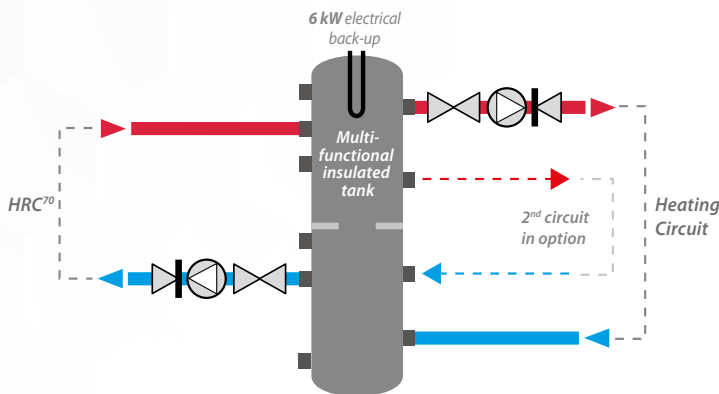
### High temperature (70°C) modulating heat pump with 3 stages of heating capacity

HRC<sup>70</sup> 32 is a genuine and high capacity product with a progressive start-up in stages of the power. Combined with the 6P10 pilot, it provides the same options as the Premium+ pilot does.



## HYDRAULIC PILOT

A modular pilot to drive a high power installation.



## ADVANTAGES

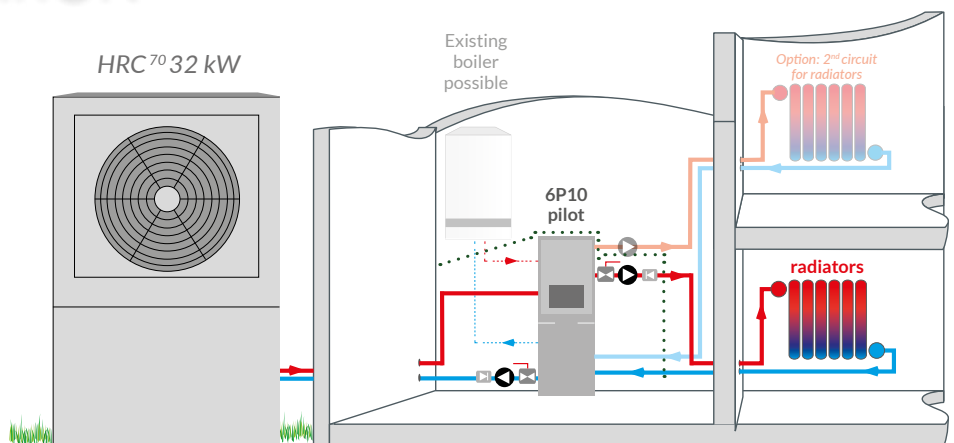
- Significant energy savings.
- The use of R290 refrigerant without HFC for a better respect of the planet.
- Very quiet.
- Up to -20°C outside, it heats using only the heat pump.

Integrated multifunctional 78 L decoupling tank to separate the hydraulic networks.

## EASY INSTALLATION

HRC<sup>70</sup> 32 kW three-phase - 6P10

As the whole range, HRC<sup>70</sup> 32 is a high temperature heat pump. It can fit perfectly in a multi-family house with old radiators for example.



.... Limit of supply

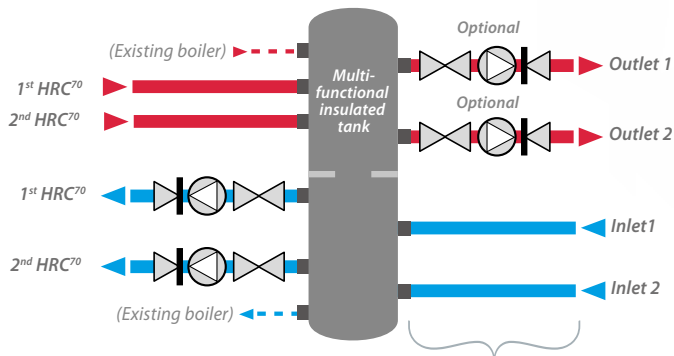


## HRC<sup>70</sup> in battery - Heating

**NEW**

Heating by heat pump from  
50 to 96 kW in battery

### HYDRAULIC PILOT



Up to 4 circuits of heating and/or DHW with 2 HRC<sup>70</sup> 25 or 2 HRC<sup>70</sup> 32 and up to 3 circuits of heating and DHW with 3 HRC<sup>70</sup> 32.



The 6P10 pilot offers a multitude of uses (heating and/or domestic hot water).

### A PILOT FOR ALL INSTALLATIONS

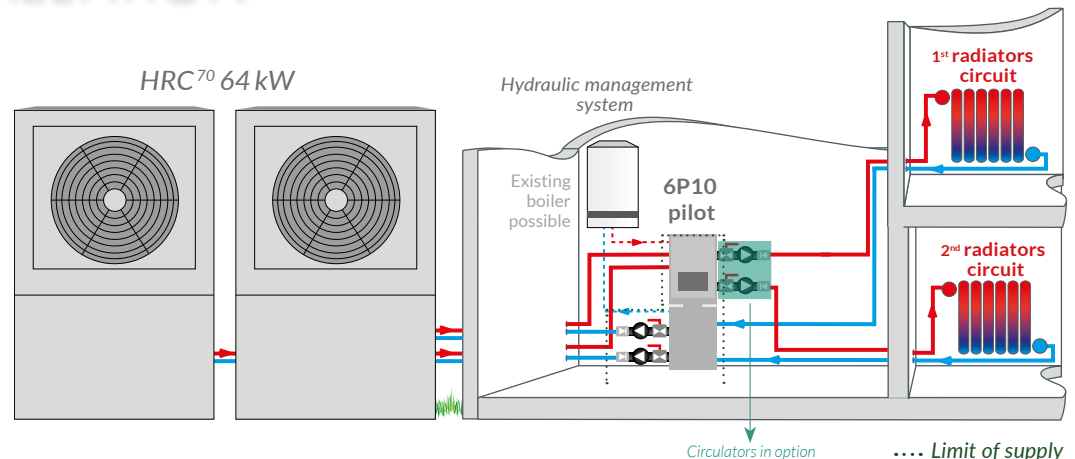
#### An efficient solution full of advantages:

- Complete wall-mounted hydraulic management system integrating the regulation for the coupling of 1, 2 or 3 HRC<sup>70</sup>.
- A multifunctional 78 L decoupling tank offers a wide range of configurations.
- The pilot incorporates a circulator for each HRC<sup>70</sup> heat pump, and comes with all the required safety equipments.
- A multifunctional pilot managing:
  - heating circuits
  - DHW tanks and the water loop
  - back-up boiler
- A one-piece heat pump. There is just a simple hydraulic connection between the external unit and the hydraulic pilot.
- Easy implementation.

### EASY INSTALLATION

HRC<sup>70</sup> battery 64 kW  
three-phase - 6P10

The HRC<sup>70</sup> 32 heat pump in battery provides a high power (by grouping 2 or 3 heat pumps). This solution is perfectly suitable for large projects or refurbishment.



## HRC<sup>70</sup> in battery - Domestic hot water

**NEW**

**Domestic hot water heating by heat pumps between 50kW and 96kW in battery.**

- One-piece heat pump 70°C on primary circuit.
- Thanks to the modular conception, the number of heat pumps and the number of tank heaters can be adjusted according to the needs.
- The comfort of domestic hot water by accumulation.
- Hot water capacities up to 6000 liters.

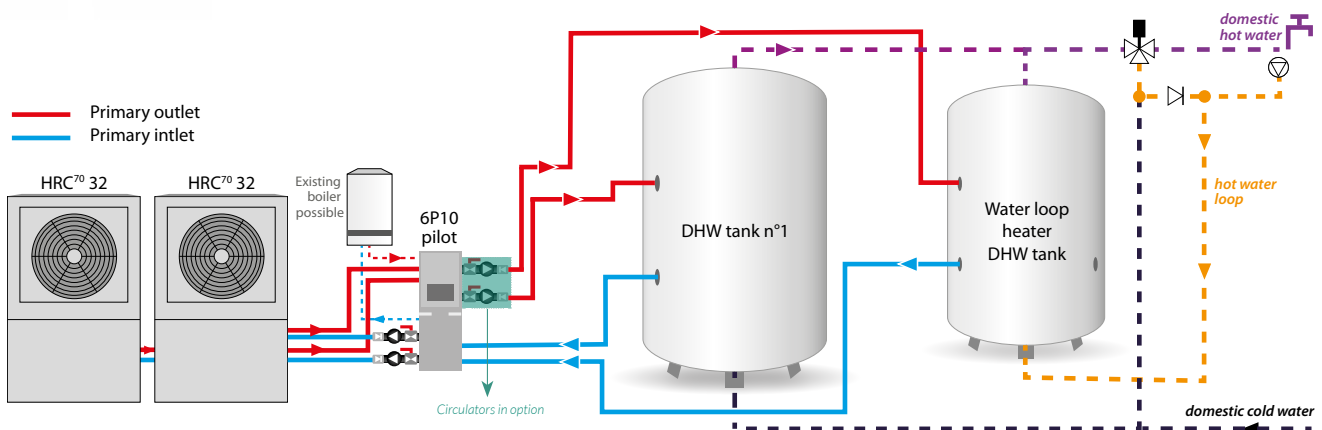


## A PILOT FOR ALL INSTALLATIONS

### An efficient solution full of advantages:

- **Complete wall-mounted hydraulic management system** integrating the regulation for the coupling of 1, 2 or 3 HRC<sup>70</sup>.
- A multifunctional 78 L decoupling tank offers a wide range of configurations.
- The pilot incorporates a **circulator for each HRC<sup>70</sup> heat pump**, and comes with all the required safety equipments.
- A multifunctional pilot managing:
  - heating circuits
  - DHW tanks and the water loop
  - back-up boiler
- A **one-piece heat pump**. There is just a simple hydraulic connection between the external unit and the hydraulic pilot.
- Easy implementation.

## EASY INSTALLATION



**NEW & UNIQUE**  
Coming soon\*

# HRC<sup>70</sup> 40, 60 & 80 Range

## High-performance for high temperature heat pumps



- Available individually or in battery.
- Dual application: DHW + heating.
- For domestic, collective housing and tertiary. Those units are suitable for all buildings (without power limit).
- A simple technical room of 15/20m<sup>2</sup> is enough.
- Easy implementation.

## STAND-ALONE SOLUTION OR IN BATTERY



The 40, 60 and 80 kW heat pumps are equipped with a hydraulic block, filters and circulators. They can be installed in battery to reach a power output of 320 kW!

### An efficient solution full of advantages:

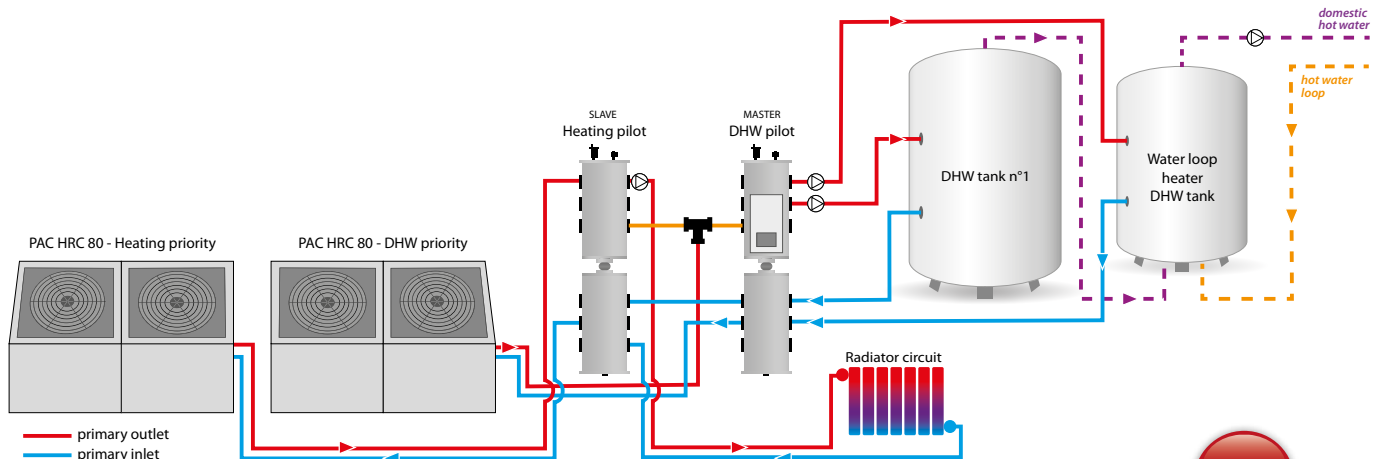
- ◆ **Economical:** no boiler room, no flue duct
- ◆ **Ecological:** the lowest CO<sub>2</sub> impact on the market
- ◆ **Convenient & discreet :** limited height of 1,30m!

Silent  
and very high  
power heat  
pump!



Thanks to an excellent acoustic insulation, HRC<sup>70</sup> is extremely silent, between 15 and 25 dB less than the traditional refrigeration equipments.

## DUAL APPLICATION EXAMPLE



\* Consult your Auer correspondent to know their availability and obtain further technical details.

# TECHNICAL SPECIFICATIONS

**NEW**

	17 kW single-phase	17 kW three-phase	20 kW three-phase	25 kW three-phase	32 kW three-phase
HRC <sup>70</sup> & PREMIUM+ pilot	151631	151636	151446	151541	-
HRC <sup>70</sup> & DS 170D/50 pilot	151432	151437	151447	151452	-
HRC <sup>70</sup> & 6P10	-	-	-	-	151461

## HEAT PUMP

		17 kW single-phase	17 kW three-phase	20 kW three-phase	25 kW three-phase	32 kW three-phase
Energy class at 35°C/55°C	-	A+/A++	A+/A++	A+/A++	A+/A+	A+/A++
SCOP at 35°C /55°C	-	3,7 / 3,1	4,1 / 3,1	4,1 / 3,2	3,7 / 2,9	4 / 3,1
Seasonal energy efficiency 35°C/55°C	η <sub>s</sub>	152%/125%	165%/125%	167%/129%	150%/119%	163%/127%
Maximum heating capacity*	kW	19,8	19,8	23,2	28,3	33,5
Nominal heating capacity at +7°C/+35°C (EN14511)	kW	7,8	7,9	10,9	10,9	13,54
Nominal COP at +7°C/+35°C (EN14511)	-	4,4	4,9	4,6	4,6	4,57
Nominal sound pressure level (at 5m directivity 4)	dB(A)	36	36	40	40	44,8
Sound power level (ERP +7°C/55°C)	dB(A)	60	60	61	61	66
Max heating capacity at -7°C/+65°C	kW	10,8	9,4	13,8	14,4	19,4
Outdoor air temperature range	°C	-20 to +40	-20 to +40	-20 to +40	-20 to +40	-20 to +40
Power supply	V/Ph/Hz	230/1N/50	400/3N/50	400/3N/50	400/3N/50	400/3N/50
Circuit breaker	A	40/D	16/D	16/D	20/D	32/D
Max electrical power**	kVA	6,5	6,5	7,5	9,0	13
Power control mode**	-	2 compressors fixed speed in stages				
Power stages	-	3	3	2	3	3
Progressive starter**	-	yes	no	no	yes	yes
Minimum power cable width	mm <sup>2</sup>	3G10	5G4	5G4	5G6	5G6
Dimensions (HxLxP)	mm	1713x1035x561	1713x1035x561	1713x1035x561	1713x1035x561	1713x1235x561
Weight without water	kg	245	245	245	245	270
Nominal flow rate	L/h	1350	1350	1550	1850	2250
Refrigerant fluid	-	R290	R290	R290	R290	R290
Hydraulic connections	mm	26/34 male	26/34 male	26/34 male	26/34 male	33/42 male

\* Heat output delivered by the heat pump when manually and temporarily forced to operate at an air temperature of 15°C.

\*\* Data to provide to the electricity provider prior to the installation of the heat pump (Electricity provider form).

## HYDRO-ELECTRONIC PILOT

		PREMIUM+	DS 170 D	6P10
Minimum power cable width	mm <sup>2</sup>	3x6 (single) or 5x2,5 (three-phase)	3x4 (single)	3x6 (single) or 5x2,5 (three-phase)
Circuit breaker	A	32 A (single) or 16 A (three-phase)	25 A (single)	single or three-phase
Power supply	V	230 single or 400 three-phase	230 single	230 single or 400 three-phase
Multifunctional tank	L	38	50	78
Dimensions of the pilot (HxLxP)	mm	845x590x420	1725x520x571	1385x1135x635
Weight of the pilot without water	kg	47	80	90
Hydraulic connections	mm	26/34 female	26/34 female	40/49 female
Boiler connection provided	-	as standard	compatible	as standard
Electrical back-up	kW	as standard: 6 kW	as standard: 3 kW	as standard: 6 kW
Decoupling of circuits	-	yes	yes	yes
1" filter valve (delivered with connection kit)	-	as standard	as standard	as standard

## HRC<sup>70</sup> IN BATTERY

	50 kW three-phase	64 kW three-phase	96 kW three-phase
Reference	151453	151462	151463
Number of HRC <sup>70</sup> heat pumps	2x25 kW three-phase	2x32 kW three-phase	3x32 kW three-phase
Hydraulic pilot and connection kit	included	included	included
Multifunctional tank for battery installation	78L	78L	78L

## HRC<sup>70</sup> 40, 60 & 80

Consult your Auer correspondent

YOUR INSTALLER:

### SALES

Rue de la République  
80210 Feuquières-en-Vimeu - FRANCE  
Tel. +33 (0)3 22 61 21 01  
Fax. +33 (0)3 22 30 01 19  
E-mail : adv@auer.fr

### TRAINING

Tel. +33 (0)3 22 61 21 03  
Fax. +33 (0)3 22 30 01 19  
E-mail : formation@auer.fr



SEPTEMBER 2021 ISSUE