70°C High temperature modulating heat pump

Heating guaranteed even in extreme cold

**HEATS THE HOUSE INDEPENDENTLY**
and comfortably
THROUGHOUT THE WINTER

From 11 to 35 kW
and up to 140 kW in battery

**COP**
up to 4.9
according to
EN 14511

**HFC free**
HRC® is even more
+ECOLOGICAL

R 290

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

www.auer.fr
The HRC\textsuperscript{70} 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 of days.
- Modulating heating capacity: an innovating combination of two compressors* of differing power levels, with a high compression level, 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.

**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 1400 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.

\textbf{RESULT:}

For every 1 kWh of electricity used, there is up to 4,9 kWh of heat returned to the circuit, leading to almost 80\% of energy savings.

\begin{tikzpicture}
    \begin{axis}[
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        ylabel={$CO_2$},
        xlabel={Heat pumps on the market},
        ybar, /pgf/bar width=10pt,
        symbolic x coords={HRC\textsuperscript{70}},
        xtick=data,
        enlarge x limits=0.5,
        nodes near coords,]
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        };
        \addplot coordinates {
            (HRC\textsuperscript{70}, 7.6)
        };
    \end{axis}
\end{tikzpicture}

The equivalent of 10 tons of $CO_2$ emissions avoided.

*HRC\textsuperscript{70} 17 kW - 20 kW - 25 kW - 35 kW.*
**HRC®70 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.

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**WHY IS THE HIGH TEMPERATURE HEAT PUMP HRC®70 IDEAL WHEN RENOVATING?**

- When renovating, it can serve to replace an older heating system equipped with a high-temperature radiator circuit.
- Not only is the HRC®70 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.

> “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)*

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**HRC®70 PRODUCT RANGE**

- 5 and 7 kW
- 11, 17, 20 and 25 kW
- 35 kW
- 50 and 70 kW
- 100 kW
- 140 kW

*HRC® 17 kW - 20 kW - 25 kW - 35 kW.*
DOMESTIC INSTALLATION

PREMIUM PILOT
for the HRC 70 11 to 25 kW

Integrated 60L tank for the decoupling of the circuits

Components of the PILOT

- Air purger
- Pressure gauge
- Programmable electrical back-up 0 to 6 kW
- Multifunctional insulated 60L buffer tank
- Connection to back-up possible
- Connection to 2nd heating circuit

ADVANTAGES

- The most complete pilot option. Everything is integrated for an optimised operation without constraints.
- Can manage 2 heating circuits
- Integrated buffer tank and boiler connection included
- Electrical back-up from 0 to 6 kW included

Heating outlet temperature sensor
Safety valve
Desludging valve
- Peak time connection
- Load shedding connection possible
- Flowrate monitor
- Heat pump circulator
- Heating circuit circulator
EASY INSTALLATION

Installation example with 1 heating circuit

A «turnkey» solution for easy installation on an existing heating circuit.

![Diagram of single heating circuit]

Installation example with 2 heating circuits

The PREMIUM pilot offers a multitude of possibilities when it comes to hydraulic connections. Everything is planned for so that set-up is simplified.

![Diagram of dual heating circuits]
DOMESTIC INSTALLATION

XS PILOT
for the HRC$^{70}$ 11 kW

The only thing needed for simple and optimised operation

**ADVANTAGES**

- Everything you need for a simple and economical heating installation
- Decoupling of the hydraulic radiator circuit and the heat pump
- Electrical back-up 0 to 6 kW included
- Cast-iron heating body which is guaranteed for 20 years

**COMPONENTS OF THE PILOT**

- Heating circuit
- Electrical back-up
- Decoupling pipe
- Heating circulator
- Heat pump circulator
- Temperature limiting safety aquastat
- Cast-iron heating body which is guaranteed for 20 years
- Water pressure gauge
- Safety valve
- Programmable electrical back-up 0 to 6 kW
EASY INSTALLATION

Installation example with an underfloor heating circuit

Due to its 2 independent circulators, the XS pilot offers flexible operation for both new-builds and renovation projects.

Installation example with a radiator circuit

For a more reliable operation on an existing radiator circuit, the 50L buffer tank ensures:
- desludging
- purging
- optimised operation of the heat pump
DOMESTIC INSTALLATION

**DS150 PILOT**
for the HRC\(^{70}\) 11 to 25 kW

**Domestic hot water and heating ensured by a high temperature heat pump**

UNIQUE! The HRC\(^{70}\) heat pump ensures the production of domestic hot water without the use of a back-up, even in winter.

---

**ADVANTAGES**

- The hydro-electronic pilot is integrated into the tank inside the home
- Compact solution which is equipped to manage the heating and domestic hot water circuits
- Cast-iron heating body which is guaranteed for 20 years
- Electrical back-up 0 to 4.5 kW included
- Large surface hot water heat exchanger

---

**COMPONENTS OF THE PILOT**

150 L domestic hot water tank

- Expansion vessel
- Cast-iron heating body
- Purger
- Programmable electrical back-up 0 to 4.5 kW
- Safety valve
- Calibrated bypass valve
- Safety aquastat
- Circulator
- Water pressure gauge
- 3-way hot water valve
**EASY INSTALLATION**

*Installation example with HRC\(^{70}\) 11 kW*

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

*Installation example with HRC\(^{70}\) 17 - 20 or 25 kW*

In renovation, when the heating capacity is more significant, it is possible to decouple the heating circuit from the heat pump due to the multifunctional tank.
**TERTIARY INSTALLATION**

**HRC\textsuperscript{70} 35 & BATTERY**

*Heat pump heating for 35 kW and from 50 to 140 kW in battery*

- The battery solution for the heating of: a mansion, a hotel, a residential complex, a school, a storage hall, offices, a warehouse, a farming operation...
- Progressive start-up in stages to slowly increase power
- A significant seasonal COP

**HYDRAULIC PILOT**

- Wall mounted hydraulic management system with integrated control for the coupling of 1, 2, 3 or 4 HRC\textsuperscript{70} systems.
- It ensures total flexibility of the operation of the installation.
- The inlet and outlet manifolds are interchangeable right/left for installation in multiple different configurations.

**MULTIFUNCTIONAL DECOULPING TANK**

- It guarantees the safety and longevity of the installation.
- It ensures:
  - the decoupling of the water flows
  - the stratification of the temperatures
  - desludging
- It also allows:
  - connection to a supplementary generator
  - purging
  - inertia

**PRINCIPLES OF INSTALLATION**

*Installation example with HRC\textsuperscript{70} battery 50 or 70 kW*
MÉGAPAC

Collective domestic hot water using HRC70 heat pumps from 11 to 140 kW

- Up to 12,000 L of water capacity
- The best Low Carbon solution on the market (1.5 kg to 5.6 kg eq CO₂)
- Anti-legionellosis treatment is 100% assured by the heat pump

VERSATILE

- A monoblock heat pump. A simple hydraulic connection is necessary between the exterior unit and the hydraulic pilot.
- The multifunctional pilot manages:
  - Heat pump
  - Domestic hot water tank
  - Hot water loop
  - Safety
- Simplified set-up

SILENT

Installation example of MégaPAC 70 kW with 2 domestic hot water tanks

PRINCIPLES OF INSTALLATION
## TECHNICAL SPECIFICATIONS

### HEAT PUMP

<table>
<thead>
<tr>
<th>Power</th>
<th>11 kW single phase</th>
<th>11 kW three phase</th>
<th>17 kW single phase</th>
<th>17 kW three phase</th>
<th>20 kW three phase</th>
<th>25 kW three phase</th>
<th>35 kW three phase</th>
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<tbody>
<tr>
<td>kW</td>
<td>11,5</td>
<td>11,5</td>
<td>19,8</td>
<td>19,8</td>
<td>23,2</td>
<td>28,3</td>
<td>41,6</td>
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<tr>
<td>kW</td>
<td>9,4</td>
<td>9,4</td>
<td>7,8</td>
<td>7,9</td>
<td>10,9</td>
<td>10,9</td>
<td>18,0</td>
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<td>kW</td>
<td>2,1</td>
<td>2,1</td>
<td>1,8</td>
<td>1,6</td>
<td>2,4</td>
<td>2,4</td>
<td>4,1</td>
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<tr>
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<td>-4,5</td>
<td>4,5</td>
<td>4,4</td>
<td>4,9</td>
<td>4,6</td>
<td>4,6</td>
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<tr>
<td>kW</td>
<td>6</td>
<td>6</td>
<td>10,5</td>
<td>10,5</td>
<td>12,7</td>
<td>15,5</td>
<td>23,1</td>
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<td>°C</td>
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<td>-20 to +40</td>
<td>-20 to +40</td>
<td>-20 to +40</td>
<td>-20 to +40</td>
<td>-20 to +40</td>
<td>-20 to +40</td>
</tr>
<tr>
<td>1x 230 V</td>
<td>3x 400 V</td>
<td>1x 230 V</td>
<td>3x 400 V</td>
<td>3x 400 V</td>
<td>3x 400 V</td>
<td>3x 400 V</td>
<td></td>
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<tr>
<td>A</td>
<td>1x 32 A</td>
<td>3x 16 A</td>
<td>1x 40 A</td>
<td>3x 16 A</td>
<td>3x 16 A</td>
<td>3x 20 A</td>
<td>3x 32 A</td>
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<tr>
<td>kW</td>
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<td>3,9</td>
<td>6,5</td>
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<td>7,5</td>
<td>9,0</td>
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<td>kW</td>
<td>0,206</td>
<td>0,181</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>kW</td>
<td>-1 compressor fixed speed</td>
<td>2 compressors fixed speed in stages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>mm²</td>
<td>3 x 6 or 5 x 2,5</td>
<td>3 x 6 or 5 x 2,5</td>
<td>3 x 10</td>
<td>5 x 4</td>
<td>5 x 4</td>
<td>5 x 6</td>
<td>5 x 10</td>
</tr>
<tr>
<td>Dimensions (H x L x P)</td>
<td>1300 x 700 x 400</td>
<td>1300 x 700 x 400</td>
<td>1660 x 1035 x 523</td>
<td>1660 x 1035 x 523</td>
<td>1660 x 1035 x 523</td>
<td>1660 x 1035 x 523</td>
<td>1815 x 1235 x 700</td>
</tr>
<tr>
<td>kg</td>
<td>120</td>
<td>120</td>
<td>245</td>
<td>245</td>
<td>252</td>
<td>262</td>
<td>350</td>
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<tr>
<td>m³</td>
<td>1850</td>
<td>1850</td>
<td>1300</td>
<td>1300</td>
<td>1350</td>
<td>1350</td>
<td>1350</td>
</tr>
<tr>
<td>mm</td>
<td>26/34 male</td>
<td>26/34 male</td>
<td>26/34 male</td>
<td>26/34 male</td>
<td>26/34 male</td>
<td>26/34 male</td>
<td>33/42 male</td>
</tr>
</tbody>
</table>

*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 installation of the heat pump (Electricity provider form).

### HYDRO-ELECTRONIC PILOT

<table>
<thead>
<tr>
<th>Specifications</th>
<th>XS PREMIUM DS150 35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum power cable width</td>
<td>3 x 6 or 5 x 2,5</td>
</tr>
<tr>
<td>Circuit breaker</td>
<td>32 A or 16 A (x3)</td>
</tr>
<tr>
<td>Power supply</td>
<td>1x 230 or 3x 400</td>
</tr>
<tr>
<td>Multifunctional tank</td>
<td>L yes if XS/50</td>
</tr>
<tr>
<td>Dimensions of the pilot (H x L x P)</td>
<td>550 x 320 x 280</td>
</tr>
<tr>
<td>Weight of the pilot without water</td>
<td>22 kg</td>
</tr>
<tr>
<td>Hydraulic connections</td>
<td>26/34 female</td>
</tr>
<tr>
<td>Boiler connection provided</td>
<td>- compatible</td>
</tr>
<tr>
<td>Electrical back-up</td>
<td>as standard : 0 to 6 kW</td>
</tr>
<tr>
<td>Decoupling of circuits</td>
<td>- yes</td>
</tr>
<tr>
<td>1&quot; filter valve (delivered with connection kit)</td>
<td>- as standard</td>
</tr>
</tbody>
</table>

### HRC® IN BATTERY

<table>
<thead>
<tr>
<th>Reference</th>
<th>50 kW</th>
<th>70 kW</th>
<th>100 kW</th>
<th>140 kW</th>
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<tbody>
<tr>
<td>151622</td>
<td>2 x 25 kW</td>
<td>2 x 35 kW</td>
<td>3 x 35 kW</td>
<td>4 x 35 kW</td>
</tr>
<tr>
<td>Number of HRC® heat pumps</td>
<td>2 x 25 kW</td>
<td>2 x 35 kW</td>
<td>3 x 35 kW</td>
<td>4 x 35 kW</td>
</tr>
<tr>
<td>Multifunctional tank for battery installation</td>
<td>200 L</td>
<td>200 L</td>
<td>200 L</td>
<td>200 L</td>
</tr>
</tbody>
</table>

### MÉGAPAC

**Consult your Auer correspondent.**

### COMMERCIAL SERVICES

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