

HTI DS170 Inverter

- Intuis - Auer
- Air/water monoblock
- Hydromodule + DHW
- R290



Inverter high temperature air/water heat pump with DHW tank 70°C type HTI DS170 Inverter

The HTI high temperature heat pump with a DS170 DHW tank is an environmentally friendly device that uses the natural refrigerant R290 (propane) to heat water up to 70°C. The indoor module consists of a DHW tank of 170 liters and a built-in hydraulic module. The unit guarantees good operation down to -20°C outside temperature. The HTI monoblock is a heating only appliance with an inverter compressor; The unit maintains its high COP values even at negative outside temperatures. The DS170 consists of a monobloc outdoor unit and an indoor module with a buffer tank of 50 liters. Its compactness is its great asset and makes it applicable in most places.

Brand

- Auer - Intuis

Application

- Production of domestic hot water
- Floor heating
- Fan coils

Composition

Outdoor: Monoblock heatpump type HTI⁷⁰ 6-8-11-14 kW with supplied:

- Communication cable of 10 m long, between HTI/Pilote (3 core and already connected to HTI) (do not place along the power supply cables)
- Flexible pipes (Durite) of 1 m long => rest of the hydraulic circuit in fixed insulated pipe to indoor module (diameter according the distance between these two, see table at the bottom of this page)
- Ball valve with built-in filter for placement on the return connection.
- Pressure relief valve (2,5 bar) to be installed at the hydraulic output of the heatpump.

Indoor module Pilote DS 170 D:

- Primary circulation pump between the HTI heatpump and this indoor module
- Built-in pump for circulation of central heating water through underfloor heating, radiators or fan coil units
- Hydraulic disconnection between primary and secondary circuit
- Enamelled tank for domestic hot water of 170 liters with built-in heating coil
- 3-way valve for automatic switchover between DHW and CH water
- Cast iron back-up resistance 3 kW
- Pressure sensor
- Electronic controller
- Water pressure sensor
- Expansion vessel 8L (dimensioned for hydraulic piping between indoor and outdoor unit)

- Vent valve
- Replaceable magnesium anode built into this tank
- Only for models DS170 11 or 14: included buffertank 25 L (to be placed in return line)

Refrigerant

- Ecological and natural refrigerant Propane (R290) with a GWP value of only 3

Installation

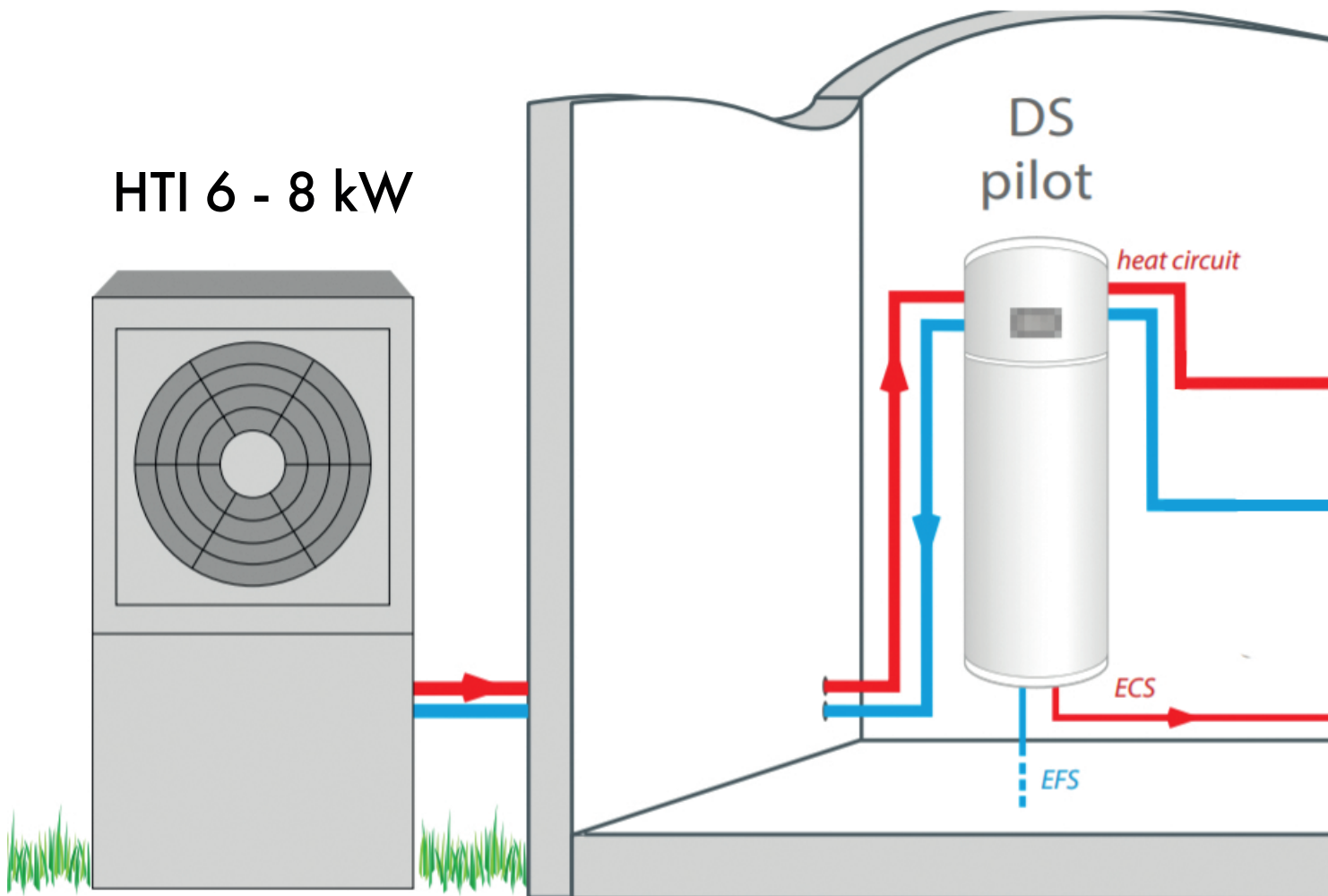
- The secondary water pump is selected by the installer depending on the consumer network.
- The startup of the installation is always with a technician of CAIROX BELGIUM.
- Safety group should be placed on the cold water supply pipe - connect to drain pipe.
- **The addition of an anti-corrosion agent or a glycol/anti-corrosion mixture is mandatory.**

Accessories

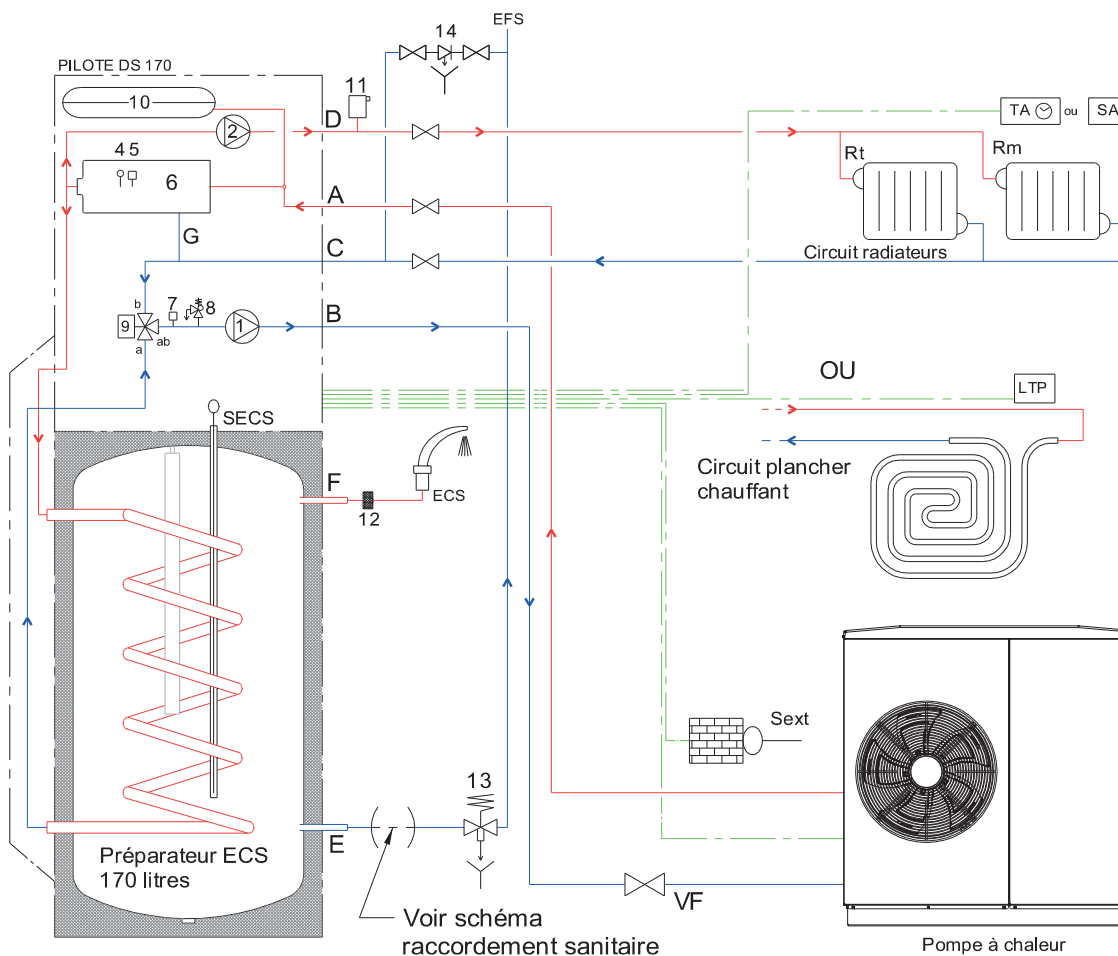
- Room thermostat, type **TH HRC70**
- Low water temperature regulation, type **Thorix**
- Clean existing heating systems first.
- Commissioning (STRONGLY RECOMMENDED), type XSTARTUP] quote on request

Applicable outdoor units

- HTI 6-8-11-14 kW



Technical data			
DS170 indoor module			
Dimensions	mm	1725 x Ø 520	
Weight	kg	80	
Backup resistance	W	2 x 1500	
Power supply	V	230 mono	
Absorbed current	A	23	
Cable section		3G4	
Fuse		25A	
Hydraulic connections		6 x 3/4"	
Maximum water pressure CH	Bar	2.5	
HTI outdoor unit		HTI 6 mono	HTI 8 mono
Maximum water temperature	°C	70	70
Maximum heating capacity	kW	6	8
Nominal heating capacity +7°C/+35°C	kW	4.17	6.06
Absorbed power +7°C/+35°C	kW	0.83	1.13
COP +7°C/+35°C		5.67	5.35
Heating capacity -7°C/+70°C	kW	5.5	6.85
Energy class		A++	A++
Annual energy consumption	KWh/year	2571	3134
Sound level according to EN 12102	dB(A)	56	57
Refrigerant (GWP)		R290 (3)	
Amount of refrigerant R290	kg	0.42	0.6
Dimensions outdoor unit	mm	1035 x 820 x 480	1035 x 1070 x 480
Weight outdoor unit	kg	92	98
Nominal air flow rate	m³/h	3500	4500
Nominal water flow rate	m³/h	1.05	1.35
Hydraulic connection diameter	mm	26/34 male	
Operating range	°C	-15°C to +40°C	
Maximum absorbed current	A	15	15
Power supply outdoor unit		230V	
Fuse	A	20	20
Cable section	mm²	3G2,5	3G2,5
Power position OFF (POFF)		0.003	0.003
Power thermostat OFF (PTO)		0.005	0.005
Power in standby (PSB)		0.003	0.003
Power carter heating (PCK)		0.013	0.013

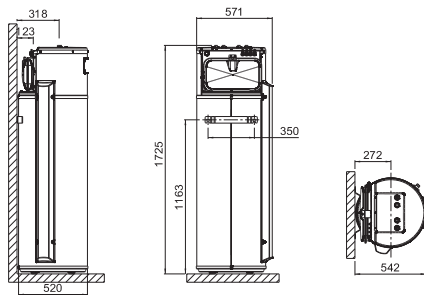


Notes

- A: Return from the heat pump
- B: Supply to the heat pump
- C: Return from the heating circuit
- D: Supply to the heating circuit
- E: Domestic cold water
- F: Domestic hot water

G: Decoupling
 LTP: Floor temperature limiter aquastat
 Rt: Thermostatic valve
 Rm: Manual valve
 SECS: Sanitary probe
 Sext: Outdoor sensor
 TA: Room thermostat
 SA: Room sensor
 VF: Filter valve

- 1: Heat pump circulation pump
- 2: Circulation pump for circuit 1
- 4: Module flow sensor
- 5: Safety aquastat 110 ° C
- 6: Auxiliary immersion heater 3kW
- 7: Pressure sensor
- 8: 3 bar safety valve
- 9: 3-way valve
- 10: Expansion vessel 8 liters
- 11: Air vent (not supplied)
- 12: Electrical connection (not supplied)
- 13: Security group for sanitary cold water (not supplied)
- 14: Filling device (not supplied)



Dimensions		
	Description	Hydraulic connection
1	Outgoing water heat pump	1"
2	Incoming water back-up boiler	1"
3	Emptying	3/4"
4	Outgoing water back-up boiler	1"
5	Incoming water circuit 1	1"
6	Outgoing water circuit 1	1"
7	Incoming water circuit 2 (optional)	1"
8	Outgoing water circuit 2 (optional)	1"
9	Incoming water (cold) to heat pump	1"
10	Safety valve for draining	Not provided
HTI		
Minimum required piping diameter		
	6 kW	8 kW
If distance between heat pump and indoor module >10m (or the equivalent of 20m linear pressure losses)	[mm] 22/24	22/24
If distance between heat pump and indoor module >10m and <15m (or the equivalent of 30m linear drukverlies)	[mm] 24/6	28/30
If distance between heat pump and indoor module >15 and <25m (or the equivalent of 50m linear pressure losses)	[mm] 28/30	32/34
If distance between heat pump and indoor module >25m and <50m (or the equivalent of 100m linear pressure losses)	[mm] 32/34	36/38