

# **IQN** Smart HEAT Heat Pumps



A smart solution for comfortable and efficient home heating

# RESIDENTIAL HEAT PUMPS

## Series SmartHEAT

IQN **Smart HEAT** heat pumps are designed to deliver maximum energy savings with extremely high efficiency ratings (**SCOP** and **SEER**) and very quiet operation. The latest development in DC inverter technologies and their use in various internal components, including the compressor, fan motor and water pump, has been a major player in the success of our **SmartHEAT** line.



**A+++ Energy Class** High energy efficiency and stable performance. With this inverter technology, it achieves an energy level of **A+++** and a **COP** of up to 5.



**Control console with touch screen control**

With simple visual functions, user-friendly and easy to install.



**Very quiet operation**

Precise arrangement of components and many unique technological skills ensure a comfortable living space.



# **RESIDENTIAL HEAT PUMPS**

## Series SmartHEAT



### **Easy and quick installation**

Only with water connection pipes.



### **Revolutionary components**

Due to the built-in high-quality DC Inverter type moving components and inorganic coated evaporator, long service life and high operating efficiency are expected.



### **WI-FI control**

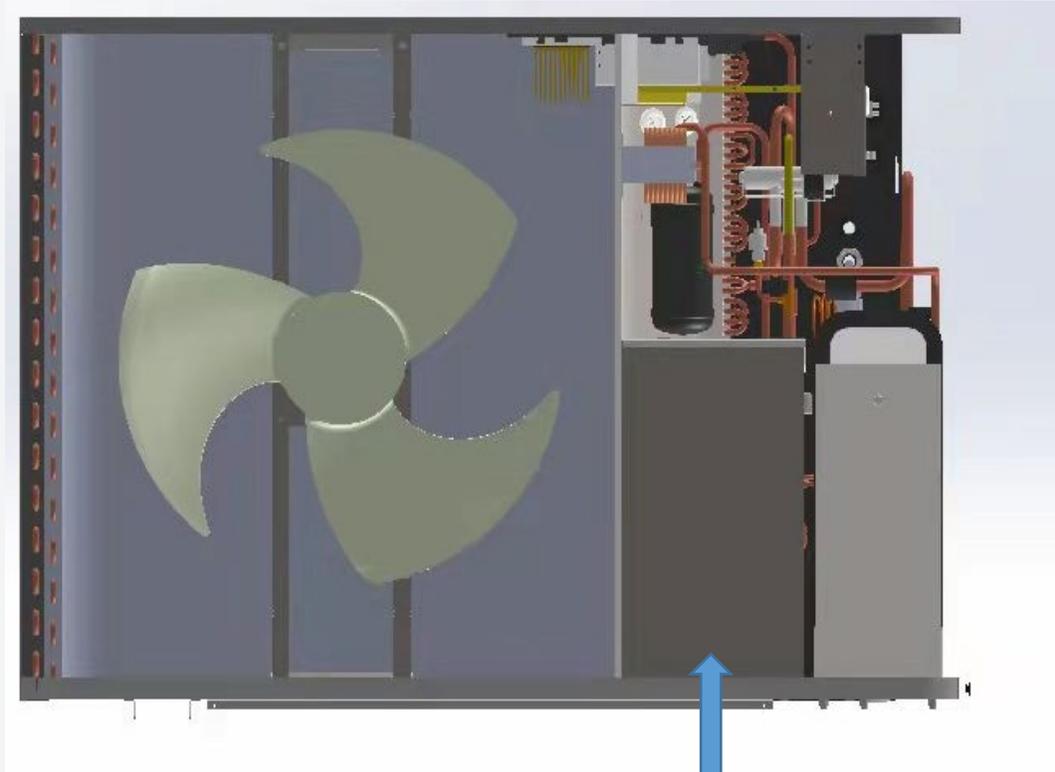
Due to the built-in WIFI module, there is the possibility of comfortable control in the palm of your smartphone.



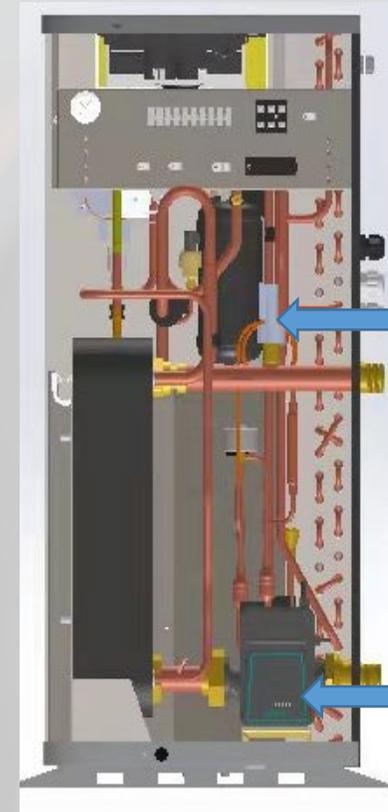
### **Remote Assistance**

Through the WIFI function included in the unit, the system has the ability to always have the latest firmware.

## Main Components



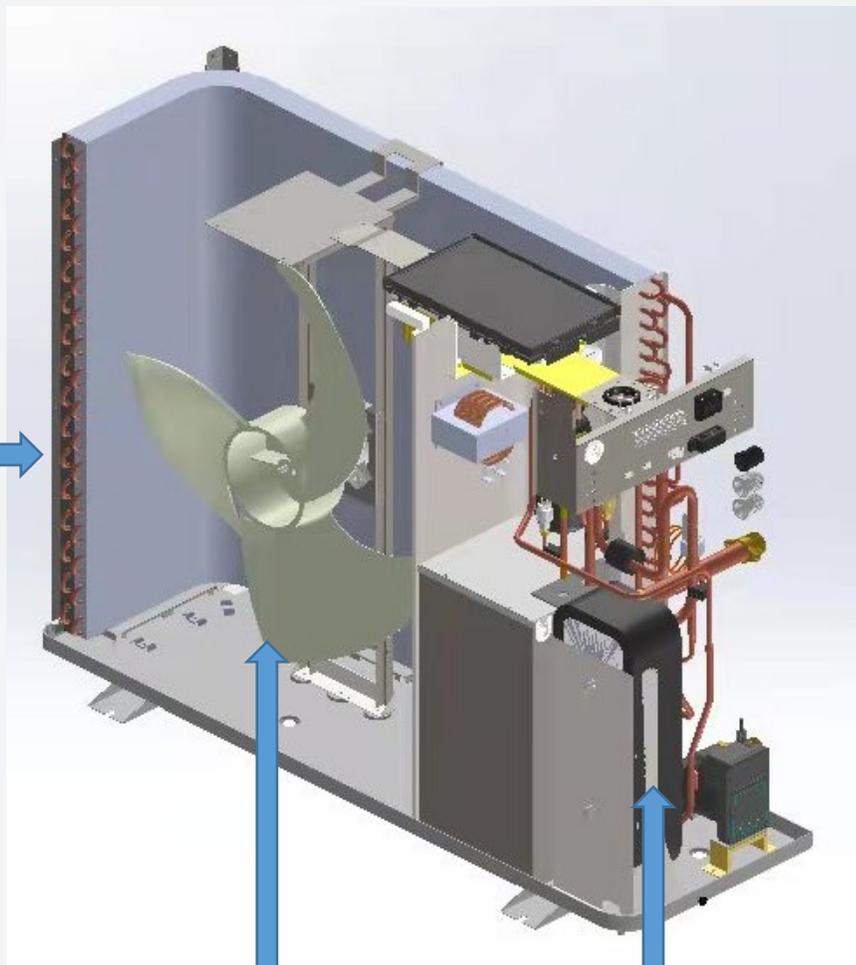
DC Inverter compressor, with sound-insulated cabinet, for low-noise operation



Water flow switch, to detect the water flow rate

water pump

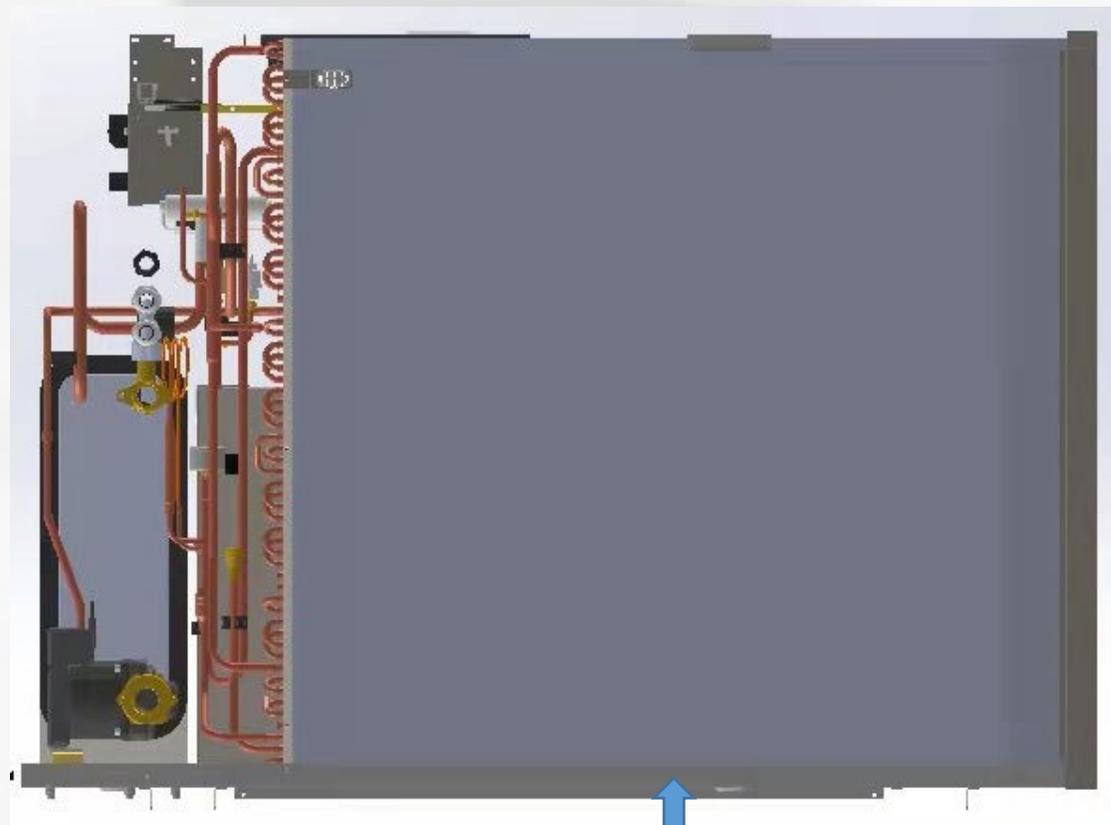
# Main Components



Evaporator →

Fan blade

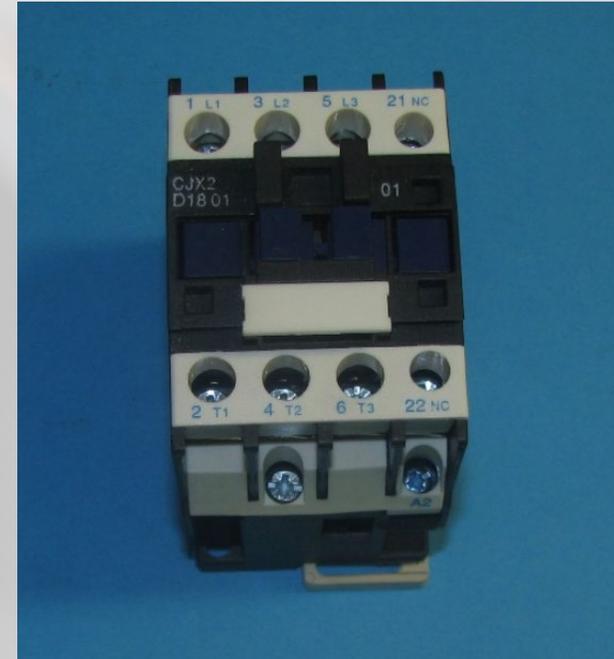
Plate heat exchanger, with high efficiency



Electric heater of plate heat exchanger for anti-freezing

## Main Components

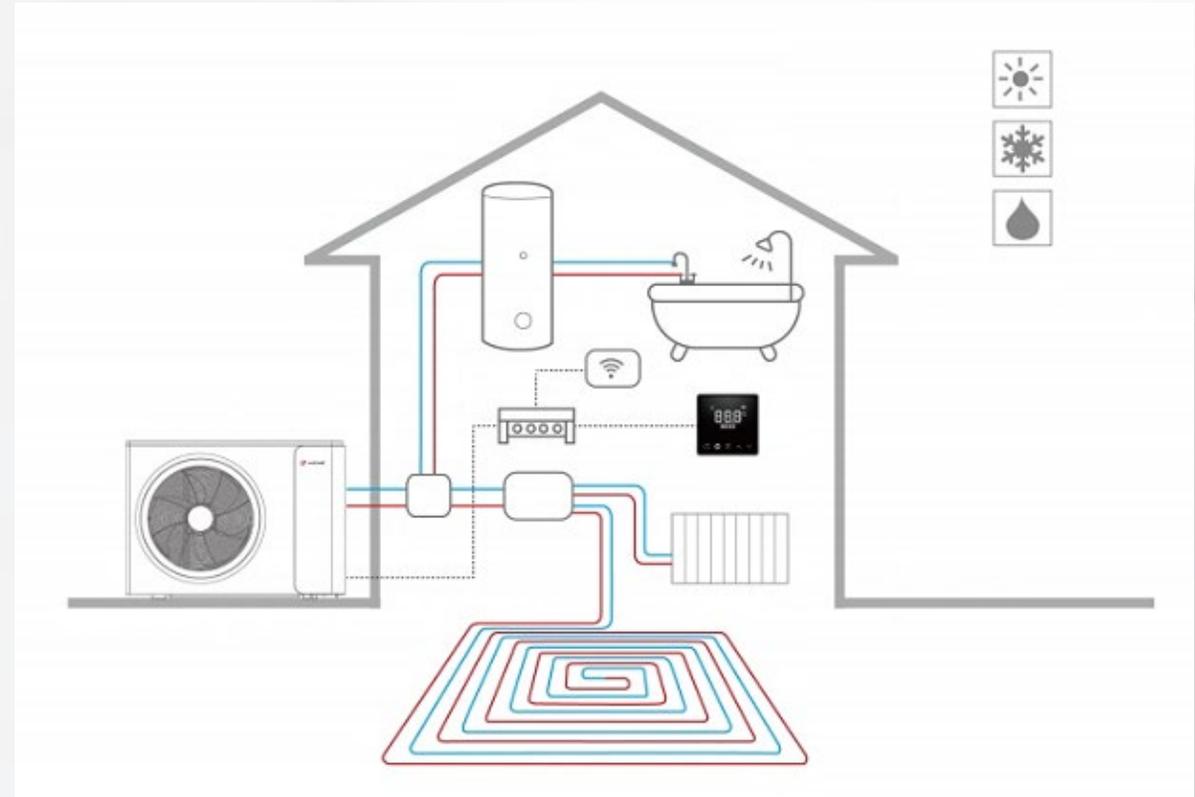
**Electrical Heater 6kW** and **Contactor** included with all models. Instalation in boiler room and possible to connect 2kW, 4kW or 6kW heater.



**Contactor** for Electrical Heater

## Function

- Heating/Cooling/Hot water
- Fix setpoint or heating curve
- Operation mode selection
- Current temperature
- Set temperature
- Energy Monitoring



Heating



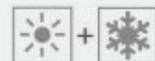
Cooling+DHW



Heating+Cooling+DHW



Cooling



Heating+DHW

# Operation panel



Touchscreen operation panel



User-friendly & easy operations



Wifi & App available



Connect with web platform



MyHeatPump



MyHeatPump3

# Technical data

Model			IQ 06 ON	IQ 09 ON	IQ 12 ON
IP class		IPXX	IPX4		
Electrical power supply					
Electrical power supply - outdoor unit	Outdoor unit	V / Hz / Ph	220~240V/50Hz/1Ph	220~240V/50Hz/1Ph	220~240V/50Hz/1Ph
	Prescribed fuse	A	1p/16A/C	1p/20A/C	1p/20A/C
<b>Characteristics</b>					
Min/max heating capacity (1)		kW	3.3~7.2	5.0~9.7	5.9~11.9
Min/max electrical heating input power (1)		KW	0.7~1.6	1.0~2.4	1.3~2.9
Min/max C.O.P. efficiency (1)		W/W	4.26~ 4.87	4.01~4.57	4.05~4.67
Min/max C.O.P. efficiency (2)		kW	3.1~6.9	4.2~8.9	6~11.5
Min/max electrical heating input power (2)		KW	0.9~1.9	1.3~2.9	1.6~3.6
C.O.P min/max (2)		W/W	3.41~3.78	3.03~3.4	3.19~3.66
SCOP - average seasonal efficiency		W	4.66	4.62	4.57
Energy class			A+++		
Min/max cooling capacity (3)		kW	3.1~7.1	4.2~9.1	5.1~12.2
Min/max electrical cooling input power (3)		KW	0.82~1.9	1.2~2.9	1.34~3.4
E.E.R. min/max (3)		W/W	3.32~4.25	3.28~4.24	3.33~4.33
Min/max cooling capacity (4) [A35/W7]		kW	1.8~4.8	3.1~7.9	4.2~8.9
Min/max electrical cooling input power (4)		KW	0.66~2.54	1.1~3.2	1.6~3.1
E.E.R. min/max (4)		W/W	2.54~2.84	2.38~2.83	2.61~3.22
Operating temperature range	heating	°C	-25~43		
	cooling	°C	7~43		
Outlet hot water temperature range		°C	7~55		
Sound power level	55°C	dB (A)	54	61	62
	35°C	dB (A)	54	57	58
<b>Components</b>					
Fan	Yes	piece	1		
	Airflow	m³/h	2500	3280	3280
	Rated power	W	60	62	62
	Fan size	mm	Φ455	Φ550	Φ550
Plate Heat Exchanger	Water pressure	kPa	22	25	26
	Pipe connection	size	1" external thread		
Refrigerant	Gas type	/	R32		
	charge	kg	0.75	1.15	1.3
Compressor	type	/	Twin rotary		
<b>Hydraulics</b>					
Min. water flow		m³/h	0.5	0.8	1.03
Nominal water flow		m³/h	1	1.6	2.06
Hydraulic connection		size	1" external thread		
<b>Dimensions &amp; Weight</b>					
Net dimensions (L xD xH)	Outdoor unit	mm	1015×380×700	1175×380×845	1175×380×845
Gross dimensions (L xD xH)	Outdoor unit	mm	1060×470×865	1230×470×1020	1230×470×1020
Net weight	Outdoor unit	kg	70	79	82
Brutto weight	Outdoor unit	kg	81	90	93
<b>Included with the unit</b>					
WI-FI		Yes/No	Yes		
Communication cable		m	10		

(1) Heating condition: water inlet/outlet temperature: 30 °C/35°C, Ambient temperature: DB 7 °C /WB 6 °C

(2) Heating condition: water inlet/outlet temperature: 40°C/45°C, Ambient temperature: DB 7 °C /WB 6 °C

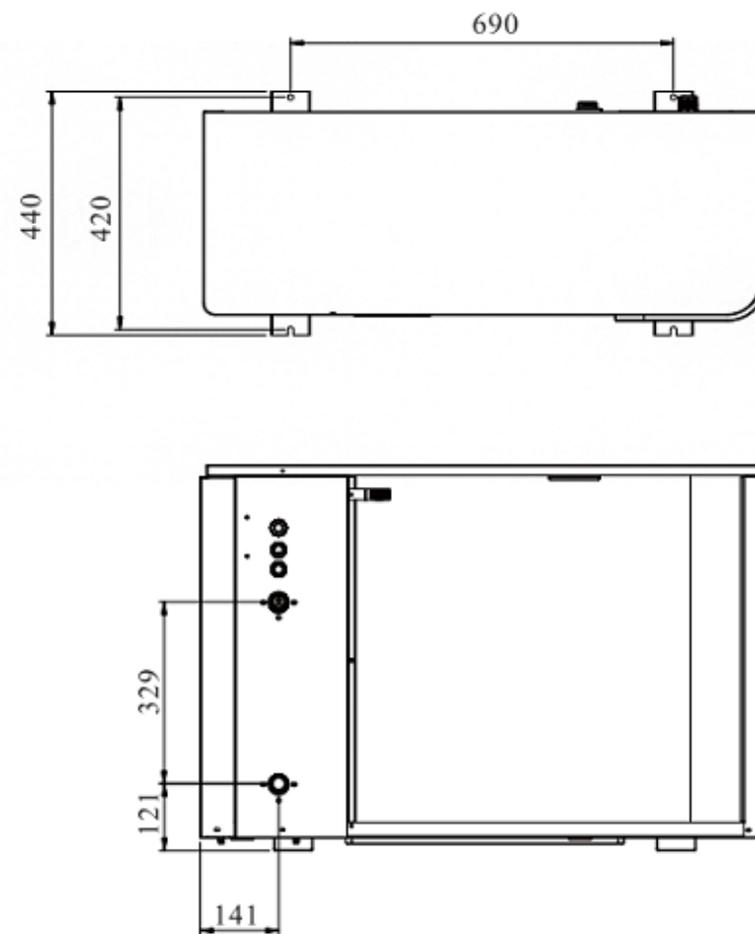
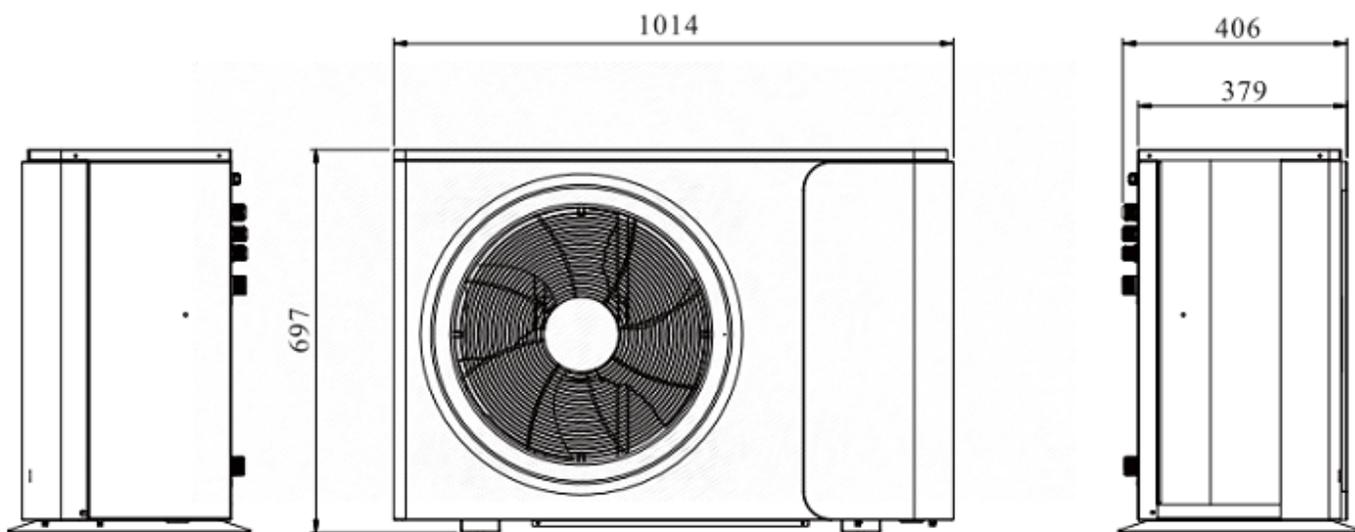
(3) Cooling condition: water inlet/outlet temperature: 23 °C/18°C, Ambient temperature: DB 35 °C /WB 24 °C

(4) Cooling condition: water inlet/outlet temperature: 12°C/7°C, Ambient temperature: DB 35 °C /WB 24 °C



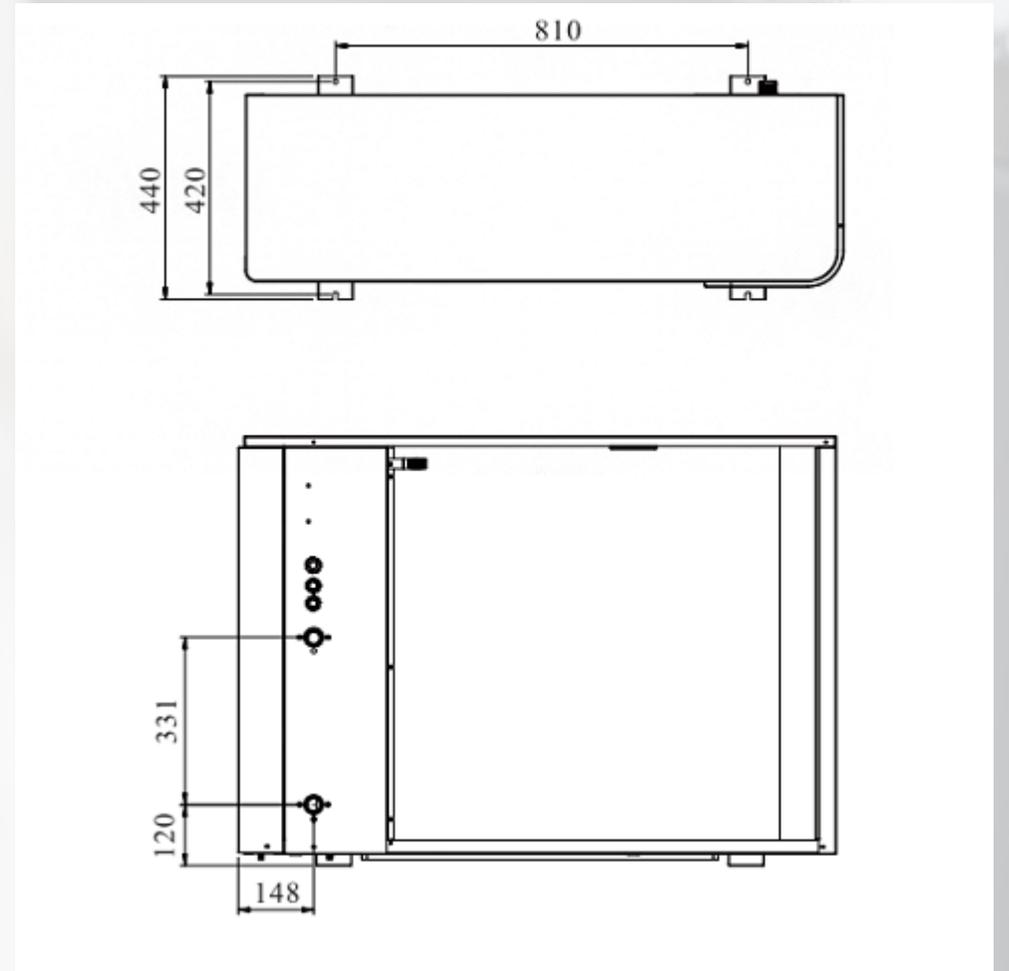
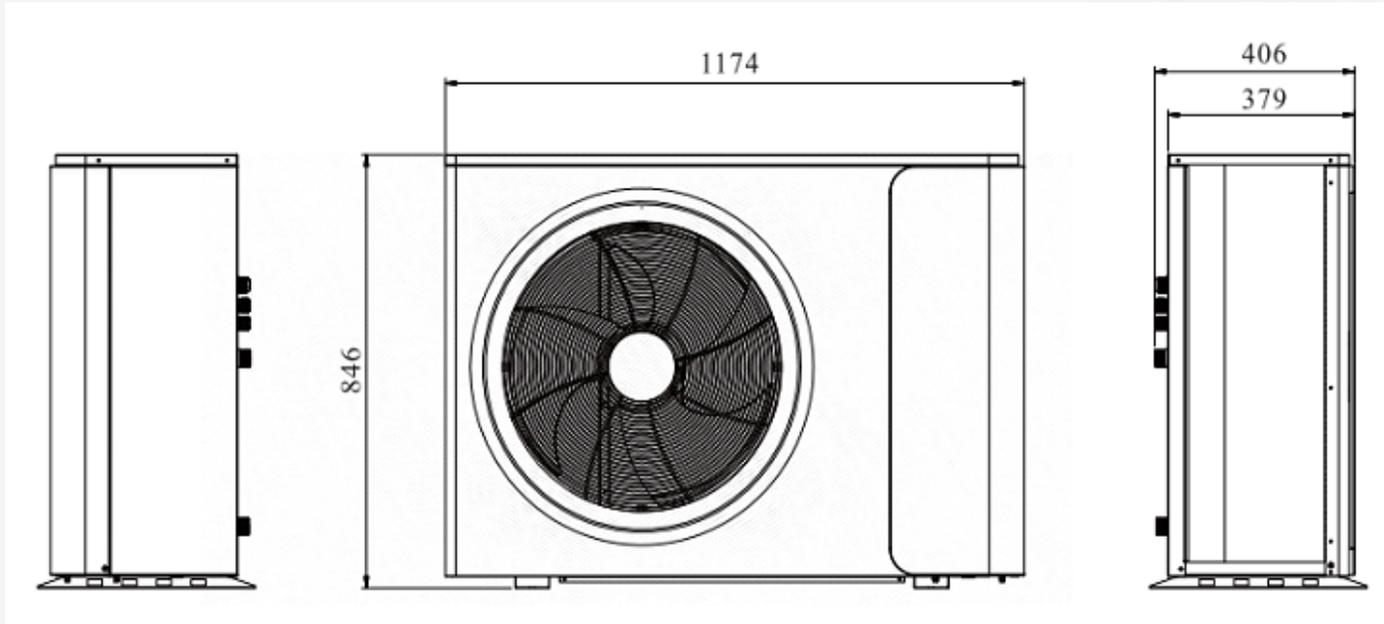
# Dimension

SmartHEAT IQ 06 ON



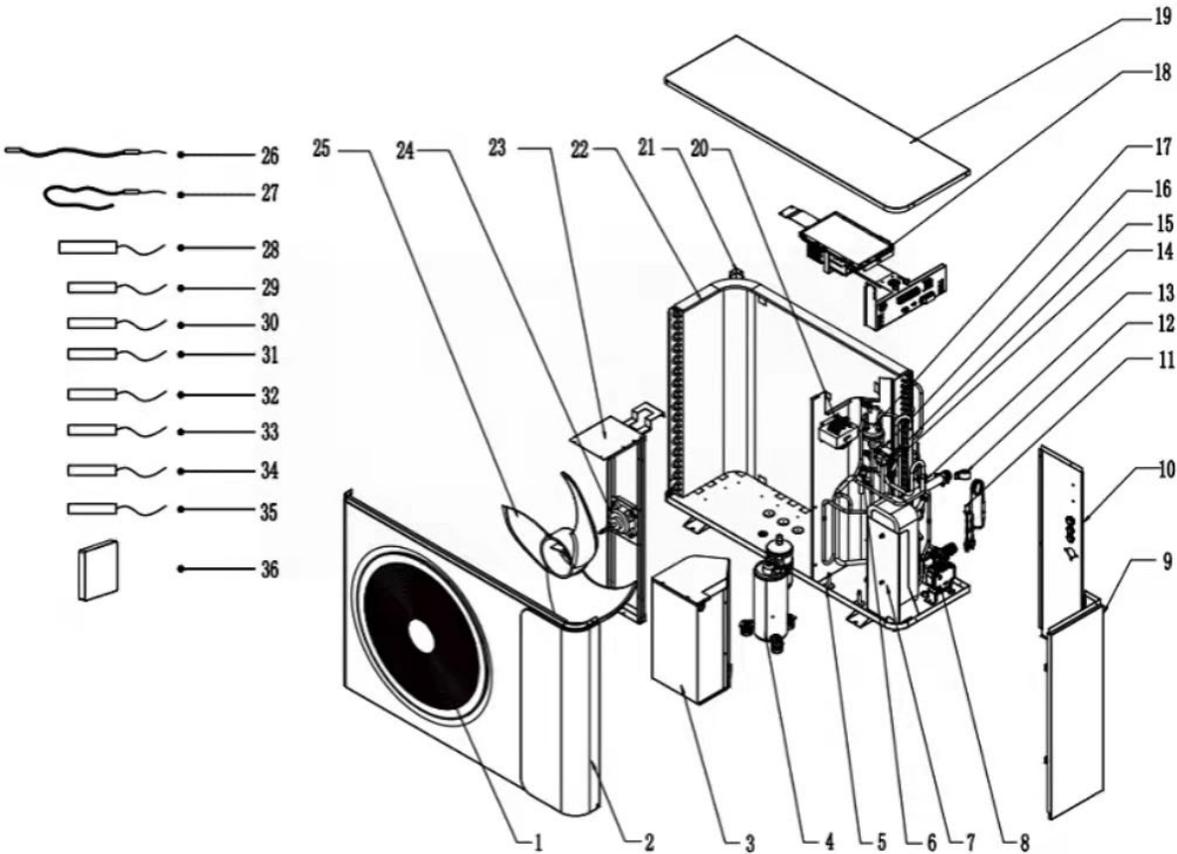
# Dimension

SmartHEAT IQ 09 ON & SmartHEAT IQ 12 ON



# Exploded view

SmartHEAT IQ 06 ON & SmartHEAT IQ 09 ON & SmartHEAT IQ 12 ON

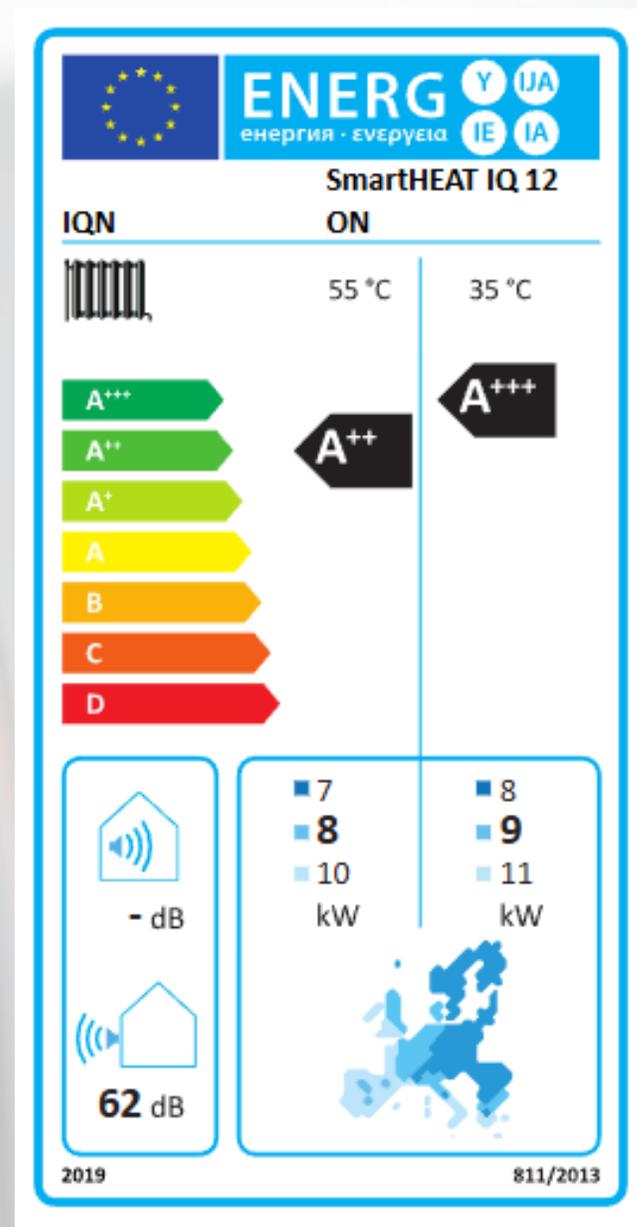
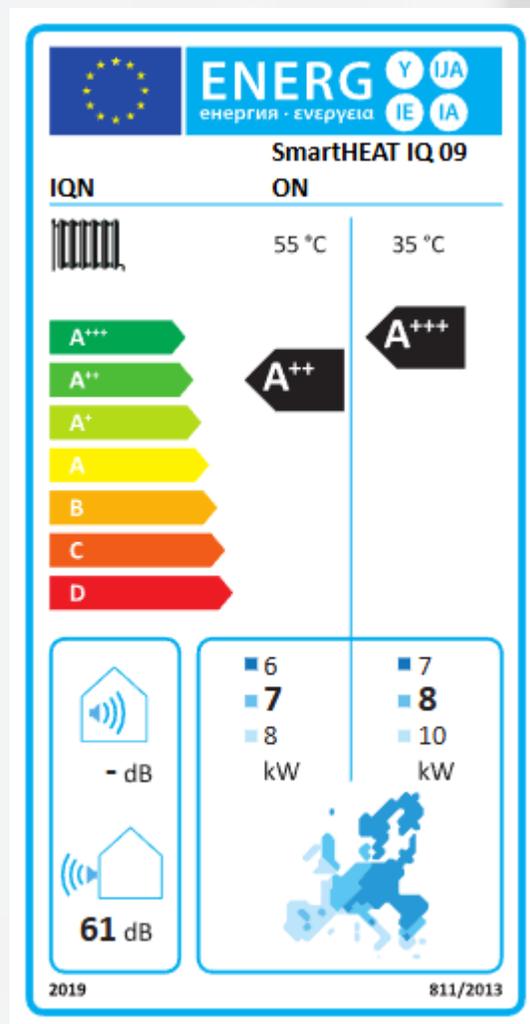
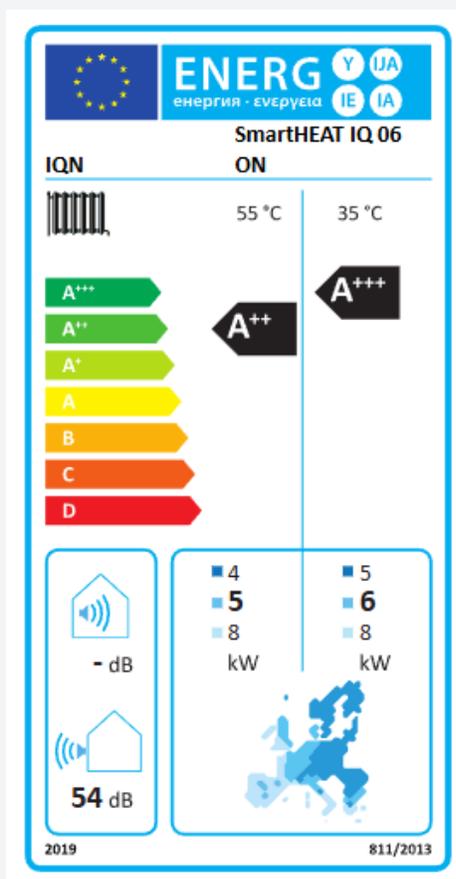


NO	Name	NO	Name
1	Fan Grill	19	Top cover
2	Front Panel	20	Reactor
3	Compressor Housing	21	Stand column
4	Compressor	22	Evaporator
5	Bottom Plate	23	Fan motor bracket
6	High Pressure Switch	24	Fan motor
7	Plate Heat Exchanger	25	Fan blade
8	Water Pump	26	Bottom plate heater
9	Maintenance panel	27	Compressor heater
10	Back side panel	28	Discharge temp. sensor Td
11	EEV	29	Suction temp. sensor Ts
12	Coil of EEV	30	Outdoor coil temp. sensor Tp
13	Water flow switch	31	Ambient temp. sensor Ta
14	Low pressure sensor	32	Inlet water temp. sensor Tui
15	4-Way valve coil	33	Outlet water temp. sensor Tuo
16	4-Way valve	34	DHW temp. sensor Tw
17	Liquid receiver	35	Indoor coil temp. sensor Tup
18	Main PCB	36	Wired Controller



# Energy label

A+++



# Warranty conditions

Two antifreeze valves set to 4 °C, or glycol mixture rated to -8 °C

Y-strainer



In the case of an existing installation, a **magnetic filter** is also required.

**Appropriate pipe cross-sections** and flow rates as shown in the table.

Before commissioning, the entire hydraulic system must be thoroughly flushed and cleaned to remove dirt, installation residues and metal particles.

For existing installations, the installation of a particulate filter and a magnetic filter is required to ensure long-term system protection and reliable operation.



## ***Warranty conditions***

We recommend the installation of a **buffer tank** to ensure smoother and more stable flow conditions; however, the final decision is at the discretion of the installer. The minimum flow rates that the heat pump must achieve are as follows: **6 kW model – 1 m<sup>3</sup>/h, 9 kW model – 1.6 m<sup>3</sup>/h, and 12 kW model – 2.06 m<sup>3</sup>/h.**



As importers and distributors, we are not responsible if the heat pump is **unsuitable for the building**. The installer or designer is responsible for selecting a heat pump of the **appropriate capacity** for the building. An incorrect selection may result in higher costs or, in extreme cases, insufficient heating capacity. This does not constitute a warranty claim.

## Installation Examples:

The following examples illustrate typical heat pump installations. They are intended for guidance only and should be adapted to the specific requirements of each building. Proper sizing, flow rates and system design must always be verified by the installer or designer in accordance with engineering guidelines.



SmartHEAT IQ 12 ON



Example of hydraulic connection **Radiator heating** Domestic water, **storage tank 100l**, switching valve for switching between heating and domestic water and instantaneous heater with a power of 6kW. Connected in a **4kW** configuration.

## ***Installation Examples:***

### **Operating Conditions:**

The system example shown in the illustration corresponds to January 2026 conditions, with an outdoor temperature of -20 °C. All flow rates, heat pump capacity and system design must account for such extreme temperatures to ensure flawless and stable operation, consistently achieving the desired indoor temperatures throughout the building.



**SmartHEAT IQ 9 ON**

Example of hydraulic connection **Radiator heating, storage tank 300 l**, instantaneous heater with a power of 6kW. Connected in a **6kW** configuration.

## Installation Examples:



Direct circuit floor heating is combined with an **instantaneous heater** with a nominal power of 6 kW, connected in a **4 kW configuration**. The system ensures proper flow rates and temperatures in accordance with the building's calculated heating demand and design losses.



SmartHEAT IQ 06 ON

# Thank you!



**Gregor Ambrož & Sašo Kričej**  
**VREDU d.o.o., 2026**