

Techomey HFT-012CCH2E1-DE

Techomey 12 kW Air Source Heat Pump

MODEL: HFT-012CCH2E1-DE

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Techomey 12 kW Air Source Heat Pump, Model HFT-012CCH2E1-DE. This unit is designed to provide heating, cooling, and domestic hot water, offering a versatile 3-in-1 solution for your comfort needs. Please read this manual thoroughly before installation and use, and retain it for future reference.

2. Safety Information

Important: Installation, maintenance, and repair must be performed by qualified and certified personnel only. Failure to comply with safety instructions may result in property damage, personal injury, or death.

- Ensure the power supply matches the unit's requirements.
- Do not operate the unit with damaged power cords or plugs.
- The unit contains R290 refrigerant, which is flammable. Handle with care and ensure proper ventilation during installation and servicing.
- Keep children away from the unit during operation.
- Do not block the air intake or exhaust vents.
- Always disconnect power before performing any maintenance or cleaning.

3. Product Features



Figure 3.1: Techomey 12 kW Air Source Heat Pump. This image shows the main outdoor unit, highlighting its modern design and energy efficiency class.

The Techomey HFT-012CCH2E1-DE heat pump offers advanced features for optimal performance and energy efficiency:

- **3-in-1 Functionality:** Provides heating, cooling, and domestic hot water from a single unit.
- **High Energy Efficiency:** Achieves an A+++ energy efficiency class with a SCOP of 5.1, leading to significant energy savings.



Figure 3.2: A+++ Energy Efficiency. The unit is designed for high energy savings, achieving an A+++ rating.

- **High Water Temperature Output:** Capable of delivering hot water up to 75 °C (167 °F).
- **R290 Refrigerant:** Utilizes R290 refrigerant for high condensation temperature and improved efficiency.
- **EVI Jet Enthalpy Enhancement Technology:** Improves low-temperature performance by over 10%, allowing stable operation down to -30 °C (-22 °F).



Figure 3.3: Low Temperature Operation. The heat pump is engineered to operate reliably in extreme cold, down to -30 °C.

- **Variable Frequency Control:** Enhances system stability, especially under high water temperature conditions.
- **Anti-freeze System:** Incorporates multiple anti-freeze technologies, including water pump circulation, system circulation, and electric heating, to prevent freezing.

4. Installation

Professional installation is required for this heat pump. Ensure the installation site meets all local regulations and provides adequate space for operation and maintenance.

4.1 Unit Dimensions



Figure 4.1: Unit Dimensions. The heat pump measures 131.2 cm (width) x 47.0 cm (depth) x 99.0 cm (height).

4.2 Installation Space Requirements

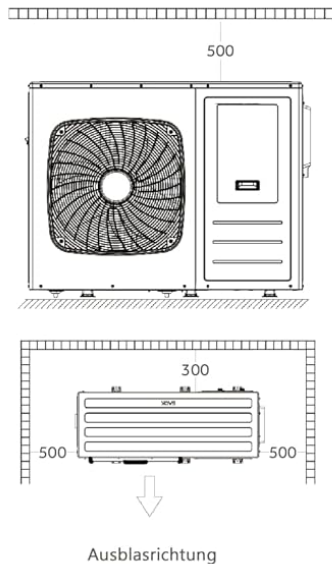
A minimum maintenance clearance of 500 mm (19.7 inches) must be provided on the top of the unit and on the side of the connection box. The outdoor unit base must be erected on a solid foundation or a structure with sufficient load-bearing capacity to prevent excessive vibrations and noise. The foundation should be at least 130 mm (5.1 inches) high and 90 mm (3.5 inches) wide, and include drainage channels to prevent water ingress into the housing. Both steel and concrete foundations are suitable.

Installationsszenario

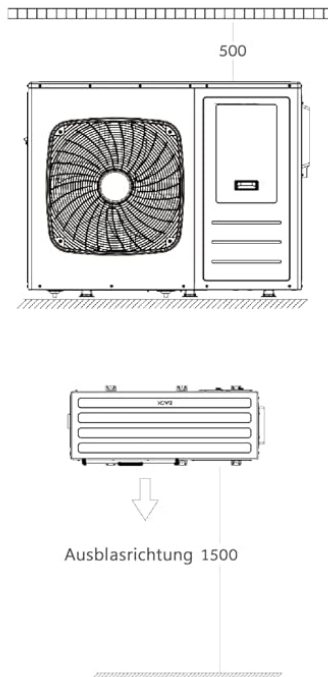
Installationsraum – "Einzelgerät-Set"

An der Oberseite des Geräts und an der Seite des Anschlusskastens ist ein Wartungsabstand von 500 mm vorzusehen.

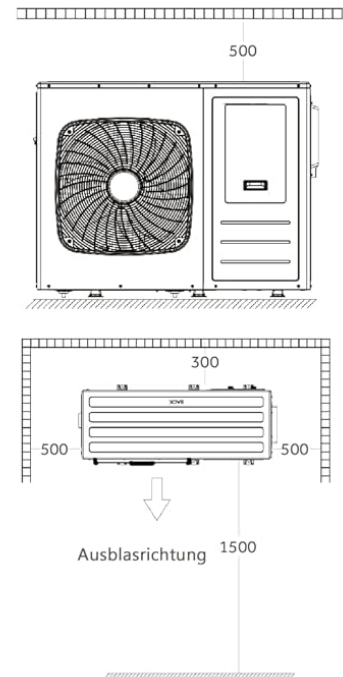
1 In Situationen, in denen sich an der Geräteseite eine umgebende Wand befindet.



2 In Fällen, in denen sich vor dem Gerät eine Wand befindet.



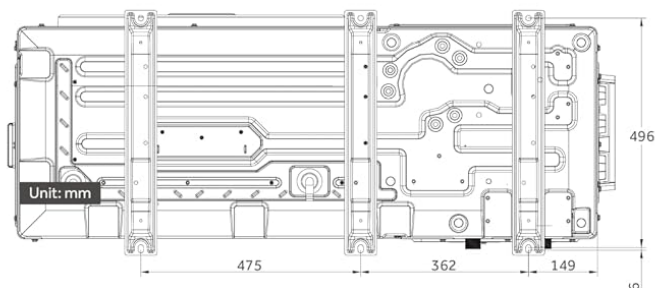
3 Das Gerät ist sowohl an der Vorder- als auch an der Rückseite von Wänden umgeben.



Einheit: mm

Es gilt das tatsächlich erworbene Gerät.

Installationsmaße



- Der Sockel ist zur Vermeidung übermäßiger Vibrationen und Geräusche ausgelegt. Der Außengerätesockel muss auf festem Untergrund oder einer Konstruktion mit ausreichender Tragfähigkeit für das Gerätegewicht errichtet werden.
- Das Fundament muss mindestens 130 mm hoch und 90 mm breit sein und mit Entwässerungsrinnen versehen werden, um ein Eindringen von Wasser in das Gehäuse zu verhindern. Es können sowohl Stahl- als auch Betonfundamente verwendet werden

Figure 4.2: Installation Scenarios. Diagrams illustrate minimum clearances for installations with walls on the side, front, or both front and back of the unit. Ensure proper air discharge direction.

4.3 System Connection

The heat pump integrates into your home's heating, cooling, and hot water systems. Consult a professional for proper plumbing and electrical connections to ensure optimal performance and safety.

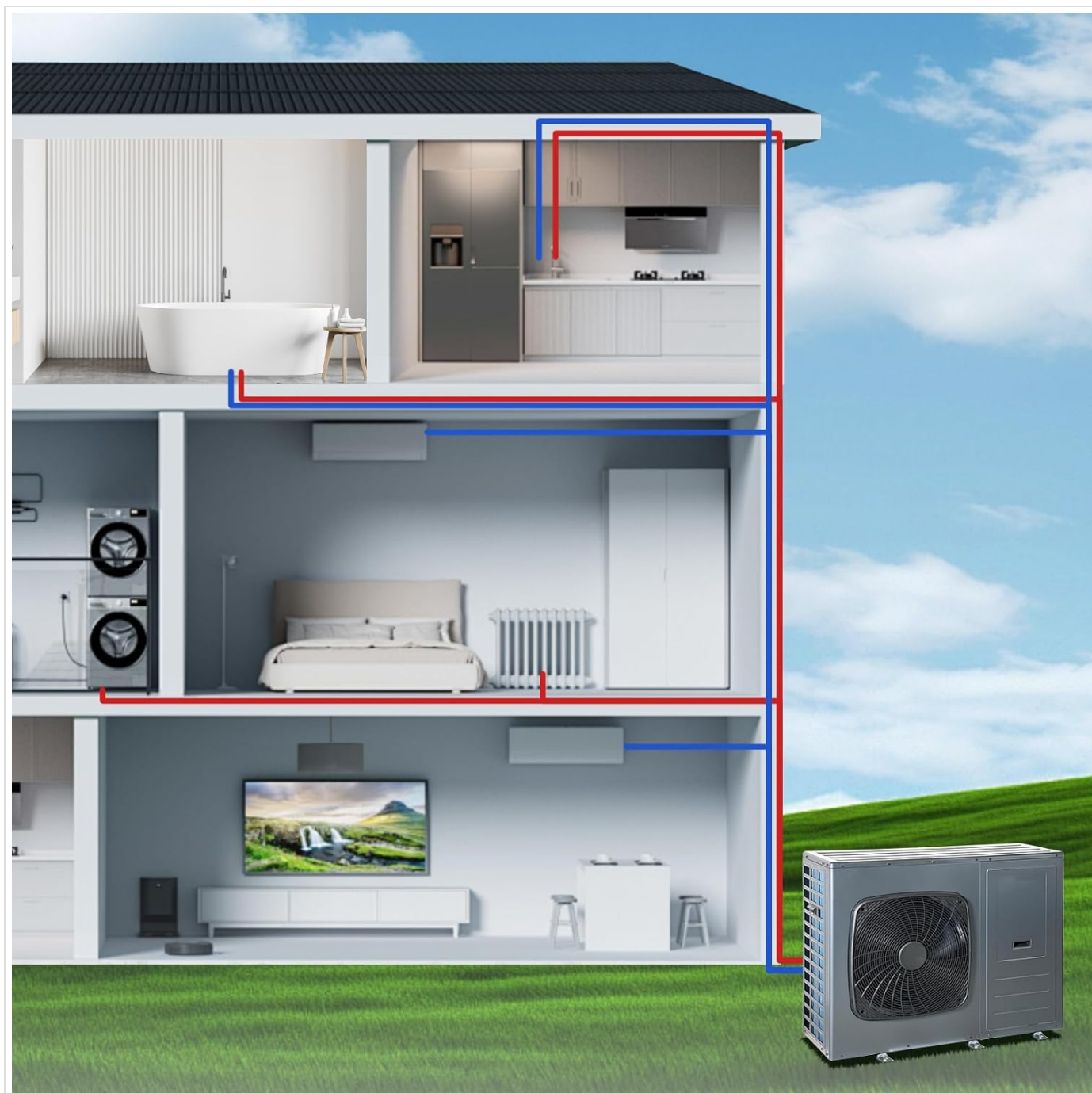


Figure 4.3: System Integration Diagram. This diagram shows how the heat pump connects to a typical household system, providing hot water (red lines) and cold water (blue lines) to various rooms and appliances.

5. Operation

The Techomey heat pump offers various operating modes to suit your comfort needs. All functions are controlled via the integrated control panel.

5.1 Operating Modes

- **Heating Mode:** Provides warmth to your living spaces.
- **Cooling Mode:** Circulates cool air for comfort during warmer periods.
- **Domestic Hot Water Mode:** Heats water for household use.
- **Energy-saving Mode:** Optimizes operation to reduce energy consumption.
- **Quiet Mode:** Operates at a lower frequency during nighttime to minimize noise.
- **Vacation Mode:** Maintains a low anti-freeze temperature and preheats the room before resuming normal operation.

- **Timer Mode:** Allows scheduling of operation times.
- **Anti-freezing Mode:** Automatically activates to prevent system freezing in cold conditions.
- **Smart Defrost Mode:** Manages defrost cycles efficiently.
- **Sterilization Mode:** For maintaining water hygiene.

6. Control Panel Overview

The digital control panel allows you to manage all settings and monitor the heat pump's status. Refer to the diagram below for an overview of the buttons and indicators.



Figure 6.1: Control Panel. The panel features a digital display and buttons for various functions including mode selection, settings adjustment, and power control.

6.1 Control Panel Functions

- **FUNC ►:** Accesses additional functions.

- **MODE ►**: Cycles through operating modes.
- **QUERY**: Displays system information.
- **- / +**: Adjusts settings (e.g., temperature).
- **SET**: Confirms selections.
- **(Power)**: Turns the unit on/off.
- **Electric Auxiliary Heating**: Activates supplementary electric heating.
- **Return Water Function**: Manages water return.
- **Child Lock**: Locks the control panel to prevent accidental changes.
- **Energy-saving Mode**: Activates energy-efficient operation.
- **Anti-freezing Mode**: Engages frost protection.
- **Cooling Mode**: Sets the unit to cooling.
- **Timer Mode**: Configures timed operations.
- **Smart Defrost Mode**: Enables intelligent defrosting.
- **Sterilization Mode**: Initiates water sterilization.
- **Vacation Mode**: Special mode for extended absences.
- **Heating Mode**: Sets the unit to heating.
- **Domestic Hot Water Mode**: Sets the unit to produce hot water.
- **Quiet Mode**: Reduces operational noise.

7. Maintenance

Regular maintenance ensures the longevity and efficient operation of your heat pump. Always disconnect power before performing any maintenance.

- **Regular Cleaning**: Keep the outdoor unit free from debris, leaves, and snow to ensure proper airflow. Clean the fan blades and coils periodically.
- **Drainage Inspection**: Ensure the drainage system is clear and free from blockages, especially during colder months.
- **System Checks**: Periodically check for any unusual noises, leaks, or performance issues. Contact a qualified technician for professional inspection and servicing at least once a year.
- **Anti-freeze System**: The unit features an automatic anti-freeze system. Ensure it is functioning correctly, especially in regions with freezing temperatures.

8. Troubleshooting

If you encounter issues with your heat pump, refer to the following general troubleshooting steps. For complex problems, contact qualified service personnel.

- **Unit Not Starting**: Check power supply, circuit breaker, and ensure the unit is not in a timed-off state.
- **Insufficient Heating/Cooling**: Verify thermostat settings, check for blocked air vents, and ensure outdoor unit is clear of obstructions.
- **Unusual Noises**: Minor operational noises are normal. Loud or unusual noises may indicate a problem; contact service.
- **Error Codes**: If the control panel displays an error code, consult the specific error code section in the full technical manual or contact customer support with the code.

9. Specifications

Attribute	Value
Manufacturer	Techomey
Product Dimensions (W x D x H)	131.2 x 47 x 98.99 cm (51.65 x 18.5 x 38.97 inches)
Model Number	HFT-012CCH2E1-DE
Special Features	Heating, Cooling, and Hot Water 3-in-1, Frequency Conversion Technology
Item Weight	177 Kilograms (390.2 lbs)
Energy Efficiency Class	A+++
SCOP	5.1
Max Water Outlet Temperature	75 °C (167 °F)
Minimum Operating Temperature	-30 °C (-22 °F)

10. Warranty and Support

For any product inquiries, technical assistance, or warranty claims, please contact Techomey customer service.

- **Returns:** The product is returnable within 14 days of delivery, if required.
- **Customer Service:** Specialized customer service is available to assist you.
- **Manufacturer:** Techomey Electric Co., Ltd.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question