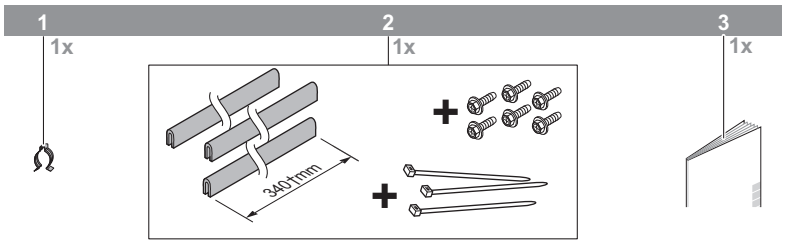
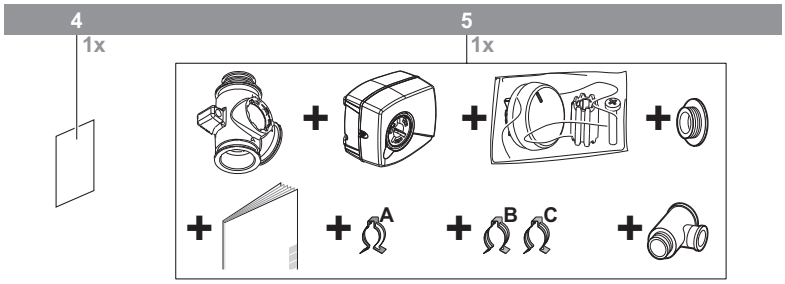
INSTALLATION MANUAL

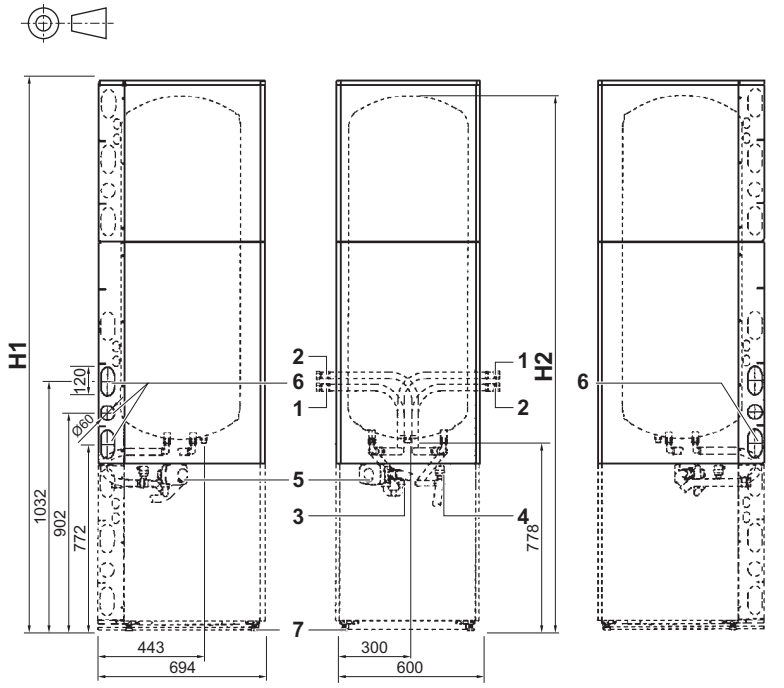
Domestic hot water tank with UK kit for air to water heat pump system

EKHTSU200AC
EKHTSU260AC
EKUHWHTB

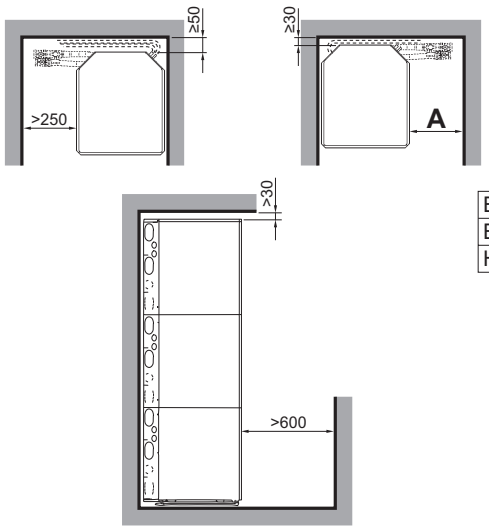




1



2



	A
EKHBRD*	>250
EKHVM(RD/YD)*	>250
HXHD*	>250

3

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   - 2.2. Accessories supplied with the EKUHWHTB kit for the domestic hot water tank 2
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READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

PLEASE LEAVE THIS MANUAL WITH THE EKHTSU DOMESTIC HOT WATER TANK AFTER INSTALLATION.

IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.

IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.

THE UNIT DESCRIBED IN THIS MANUAL IS DESIGNED FOR INDOOR INSTALLATION ONLY AND FOR AMBIENT TEMPERATURES RANGING 5°C~30°C.

1. Introduction

1.1. General information

Thank you for purchasing this domestic hot water tank.

The domestic hot water tank must be installed by a licensed technician and be installed in compliance with instructions as of subject in this manual, all current legislation, codes of practice and regulations governing the installation of unvented hot water cylinders in force at the date of installation.
This installation is subject to building regulation approval, notify Local Authority of intention to install.

The EKHTSU domestic hot water tank can be connected to EKHBRD*, EKHVM(RD/YD)*, HXHD* and E(D/B)(H/L)Q* units. The domestic hot water tank is available in two sizes: approximately 200 and 260 litre. Except for E(D/B)(H/L)Q* units, all models can be mounted on top of the indoor unit. For installation of the domestic hot water tank on the floor next to the indoor unit, the dedicated EKFMAHTB connection kit is required.

In case of E(D/B)(H/L)Q* outdoor monobloc units, the kit EKFMALTA is required. The domestic hot water tank can not be mounted on top of the indoor unit but needs to be floor mounted next to the unit.

For E(D/B)(H/L)Q* units

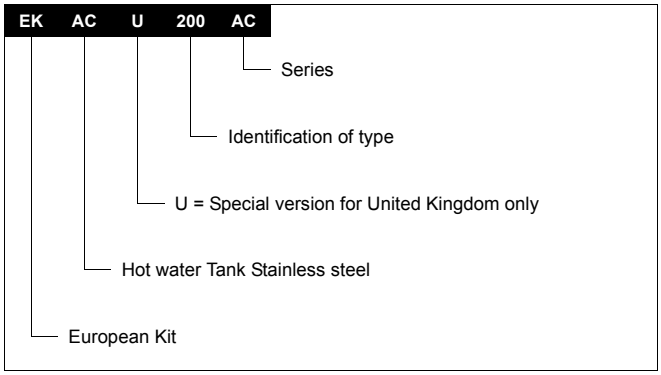
Compatibility with an EKHTSU domestic hot water tank is only possible from E(D/B)(H/L)Q***BB*** unit types onwards.

1.2. Scope of this manual

This installation manual describes the procedures for installing and connecting the EKHTSU domestic hot water tank together with the EKUHWHTB kit.

1.3. Model identification

Domestic hot water tank



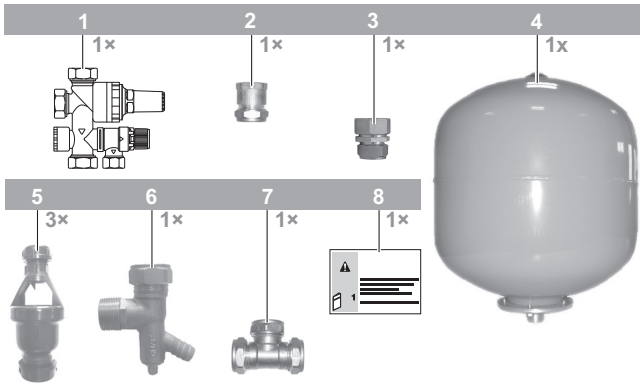
2. Accessories

2.1. Accessories supplied with the domestic hot water tank

See figure 1.

1 Clamp
2 Knock-out hole assembly (grommet + tie-wraps + screws)
3 Installation manual
4 Unpacking instruction sheet
5 3-way valve assembly (body + motor + clamps)+ T-piece

2.2. Accessories supplied with the EKUHWHTB kit for the domestic hot water tank



1 Pressure reducing valve and expansion relief valve.
2 Adaptor 22 mm×3/4" Female BSP
3 Reducing coupler 22-15 mm
4 Expansion vessel of 18 litres 3/4" Male BSP
5 Tundish 15 mm inlet, 22 mm outlet
6 Elbow/Drain valve 22 mm×3/4" Male BSP
7 T-piece 22 mm×22 mm×22 mm
8 Instruction sheet

2.3. Optional equipment

- EKFMAHTB
  Connection kit for installation of the domestic hot water tank on the floor next to the indoor unit.
  Refer to the installation manual of the kit for more details.
- EKFMALTA
  In case the EKHTSU*AC domestic hot water tank is to be installed together with a E(D/B)(H/L)Q* series (indoor) unit, the additional EKFMALTA kit is required.
  Refer to the installation manual of the kit for more details.

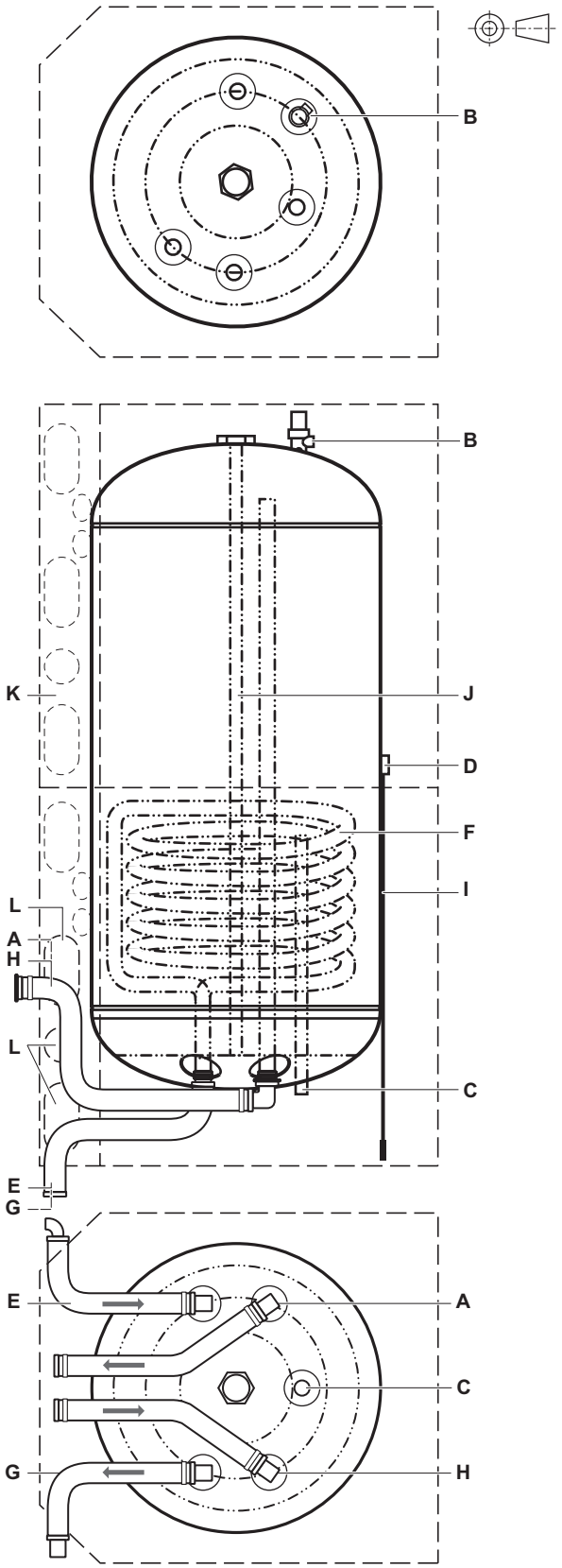
3. Overview of the unit

The total system (indoor unit and outdoor unit) is designed for combination with a Daikin domestic hot water tank. In case another tank is being used in combination with the Daikin indoor unit, Daikin cannot guarantee neither good operation nor reliability of the system. For those reasons Daikin cannot give warranty of the system in such case.

3.1. Position of flexibles (Factory mounted)



3.2. Main components



A Hot water from the tank (G 3/4" Female)
B Temperature and pressure relief valve
C Recirculation connection (G 1/2" Male)
D Thermistor socket
E Hot water from the indoor unit to the tank coil (quick coupling 90°)
F Heat exchanger coil
G Return water from the tank coil to the indoor unit (quick coupling)
H Cold water to the tank (G 3/4" Female)
I Thermistor
J Casing
K Knock-out holes for water piping
→ Water flow direction

3.3. Safety devices

- The domestic hot water tank relief valve connections may not be used for other purposes.
- This domestic hot water tank can only be used with an EKHBRD*, EKHVM(RD/YD)*, HXHD* or E(D/B)(H/L)Q* unit.
  Compatibility with an EKHTSU domestic hot water tanks is only possible from E(D/B)(H/L)Q*BB* unit types onwards.

- Thermal protector — The heat pump unit is equipped with a thermal protector. The thermal protector is activated when the temperature becomes too high. When activated, the protector has to be reset on the heat pump unit by pressing it (for access, remove the decoration panels like indicated in the manual of the heat pump unit).

  Switch off the power supply before opening the decoration panels of the indoor unit.

- Temperature and pressure relief valve
  The temperature and pressure relief valve prevents excessive water temperature (>95°C) and excessive water pressure (≥10 bar) in the domestic hot water tank.
- Expansion relief valve (EKUHWHTB kit)
  The pressure relief valve prevents excessive water presssure (≥8 bar) in the water circuit.

NOTICE

Refer to"Installation of the EKUHWHTB kit on the domestic hot water tank" on page 12 for connection of other safety devices in accordance with relevant local and national regulations.

3.4. Outlook diagram

(See figure 2 and figure 3)

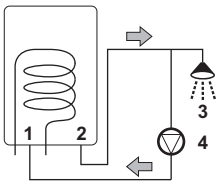
1 Hot water from the tank (G 3/4" Female)
2 Cold water to the tank (G 3/4" Female)
3 Hot water from the indoor unit to the tank coil (quick coupling 90°)
4 Return water from the tank coil to the indoor unit (quick coupling)
5 3-way valve
6 Knock-out holes for water piping
7 Levelling feet

Domestic hot water tank model	H1	H2
EKHTSU200AC	2010 mm	1935 mm
EKHTSU260AC	2285 mm	2230 mm

4. Installation of the EKHTSU domestic hot water tank

- Installation shall be done by a licensed technician, the choice of materials and installation shall comply with local and national regulations.
- The equipment is not intended for use in a potentially explosive atmosphere.
- Domestic hot water quality must be according to EU directive 98/83 EC.
- For safety reasons, it is not allowed to add any kind of glycol to the water circuit.
- To avoid stagnation of water, it is important that the storage capacity of the domestic hot water tank meets the daily consumption of domestic hot water.
  In cases where during longer periods of time there is no consumption of hot water, the equipment must be flushed with fresh water before usage.
  The disinfection function provided on the equipment is specified in the operation manual of the indoor unit.
- It is advised to avoid long runs of piping between the domestic hot water tank and the hot water end point (shower, bath, ...) and to avoid dead ends.
- The installation must be in compliance with local and national regulations and may require additional hygienic installation measures.
- For compliance with UK Building Regulations, thermostatic mixing valves must be installed.
- Immediately after installation, the domestic hot water tank must be flushed with fresh water. This procedure must be repeated at least once a day the first 5 consecutive days after installation.

If required by relevant local and national regulations, connect a recirculation pump in between the hot water end point and the recirculation connection of the domestic hot water tank.



1 Recirculation connection
2 Hot water connection
3 Shower
4 Recirculation pump

4.1. Installation guidelines

Keep in mind the following guidelines when installing the domestic hot water tank:

- The installation location is frost-free.
- Standard installation location of the domestic hot water tank is on top of the indoor unit.

If available service space to left and/or right side is limited, carefully consider all indoor module installation steps first.

Not applicable for E(D/B)(H/L)Q* units.

- The domestic hot water tank can be floor mounted as well. In that case, the dedicated EKFMAHTB connection kit for installation of the domestic hot water tank next to the indoor unit is required and to be ordered separately.
- Locate the domestic hot water tank in a suitable position to facilitate ease of maintenance. Refer to the grey-coloured zones indicated in the outlook diagram figure and to the installation manual of the indoor unit.
- To avoid back siphonage it is advised to install a non-return valve on the water inlet of the domestic hot water tank in accordance with local and national regulations.
- Take care that in the event of a leak, water can not cause any damage to the installation space and surroundings.
- If installing an EKHTSU* domestic hot water tank, installing the kit EKUHWHTB is obligatory. Refer to the UK Building Regulation G3.

4.2. Installing and commissioning the domestic hot water tank

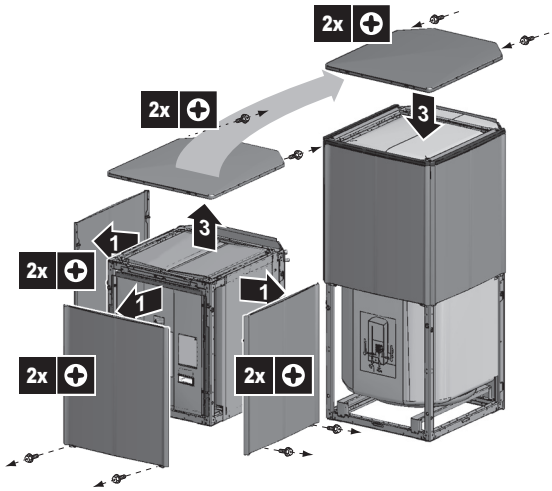
- Unpack the domestic hot water tank according to the instructions mentioned on the unpacking instruction sheet.
- Check if all domestic hot water tank accessories are enclosed (see "2. Accessories" on page 2).

Remove the indoor unit casing

For EKHBRD*, EKHVM(RD/YD)* and HXHD* units.

Take away the decoration panels by removing the 2 bottom screws and then unhitching the panel.

Mount the top plate of the indoor unit on the domestic hot water tank module.

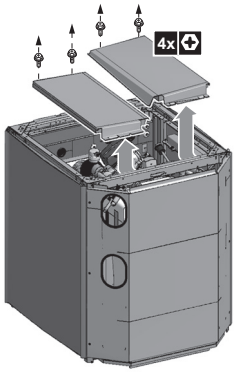


Connect the 3-way valve to the indoor unit

Refer to the instruction sheet delivered with the 3-way valve.

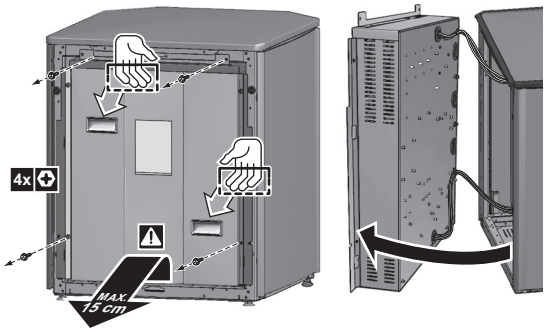
1 In case of EKHBRD*, HXHD* and EKHVM(RD/YD)* units

Remove both parts of the drain plate on top of the indoor unit before installing the 3-way valve.



In case of EKHBRD* and HXHD* units

Remove the indoor unit switch box by unscrewing fixations and by then sliding the switch box aside without disconnecting any wiring connections.

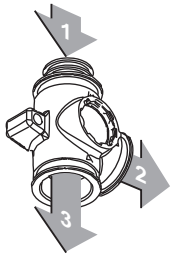


In case of E(D/B)(H/L)Q* units

Go to the step 2.

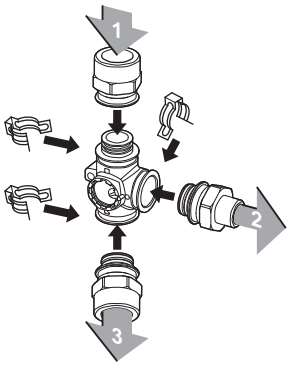
2 Installation position.

- For EKHBRD*, EKHVM(RD/YD)* and HXHD* units, this 3-way valve must be installed in the indoor unit.



1 From unit
2 To domestic hot water tank
3 To room heating

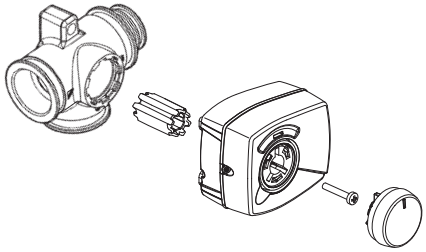
- For E(D/B)(H/L)Q* unit.



1 From unit
2 To domestic hot water tank
3 To room heating

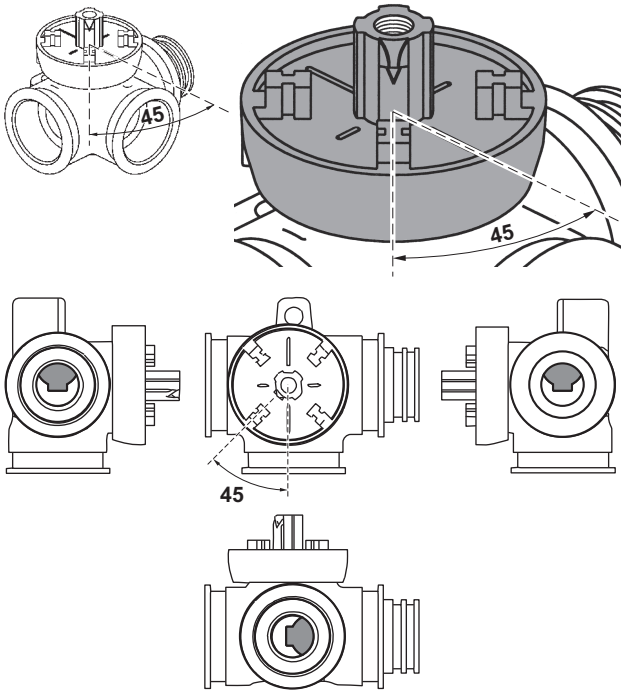
3 Unpack the 3-way valve body and 3-way valve motor.

Verify that following accessories are provided with the motor.



1 Sleeve
2 Valve motor cover
3 Screw
4 Turn knob

4 Put the sleeve on the valve and turn the valve so that the sleeve is positioned according to the figure below.



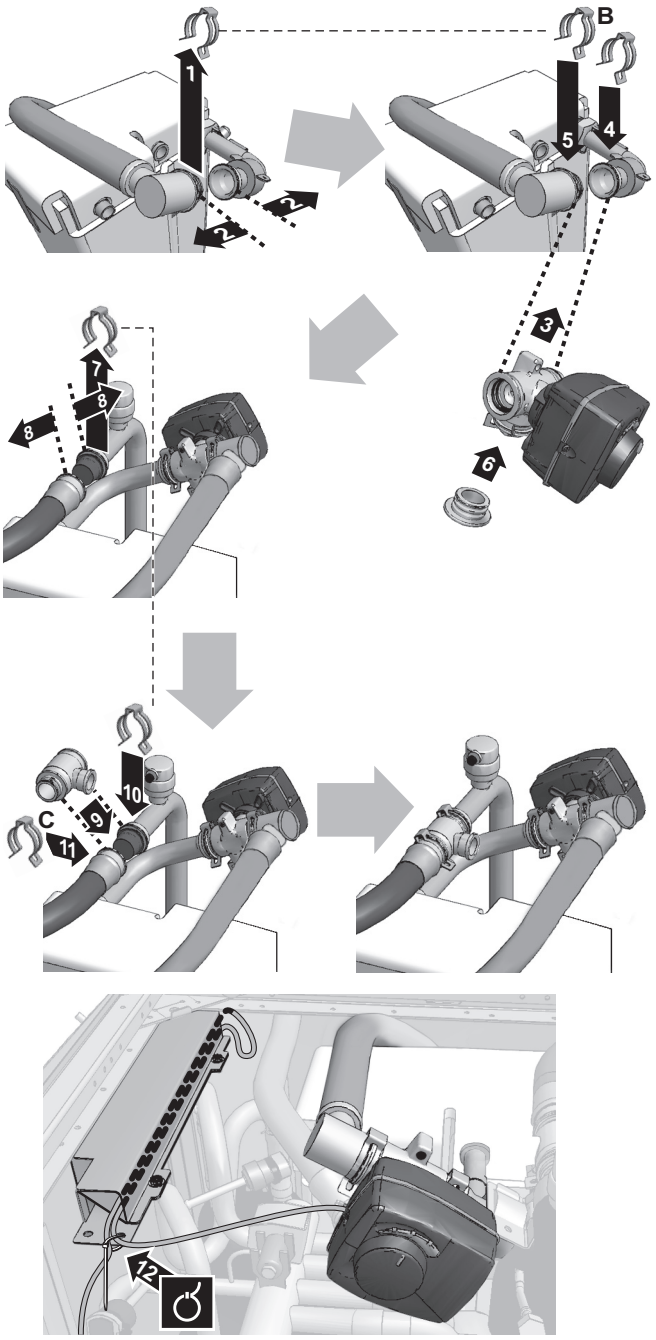
If the valve is not positioned in this way before mounting the motor, the valve will give way to both domestic water and room heating during operation.

5 Install the 3-way valve body in the pipework.

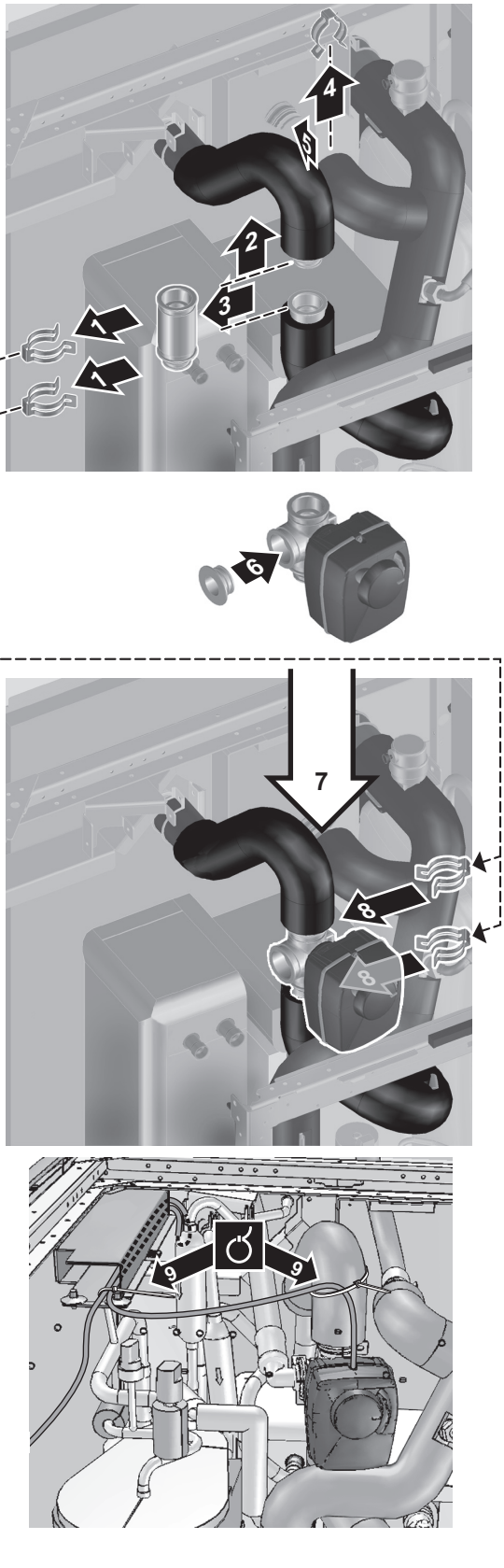
Avoid contact between hot piping and electrical wiring at all time.

Refer to the figure below before making the connection.

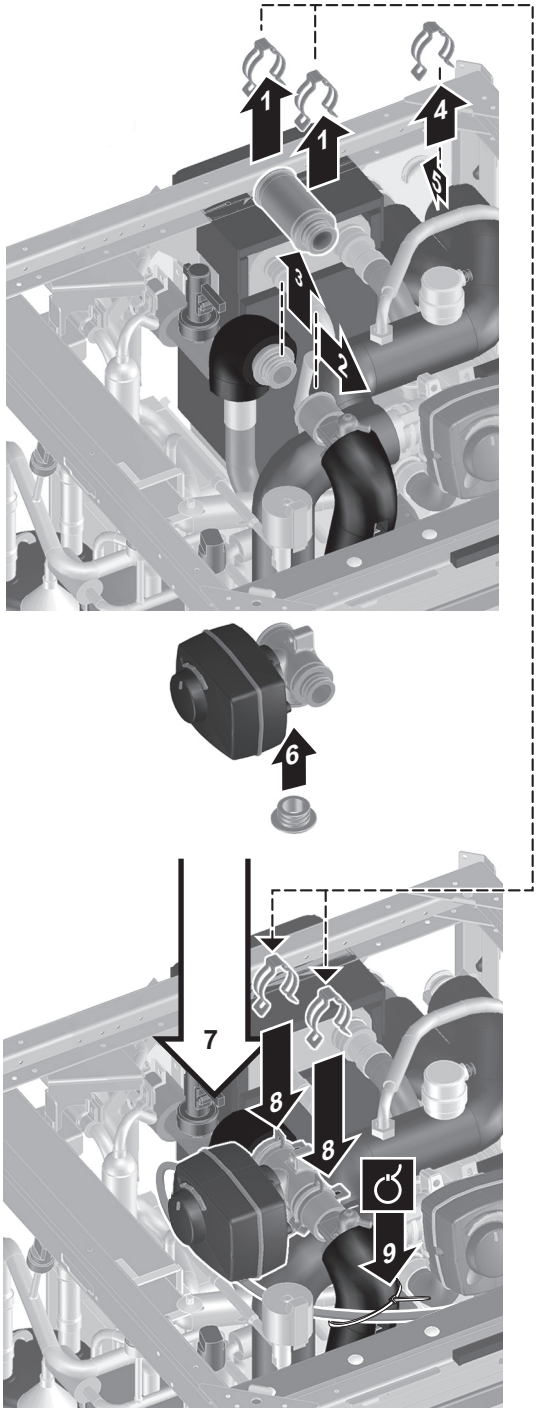
■ For EKHBRD* units only.



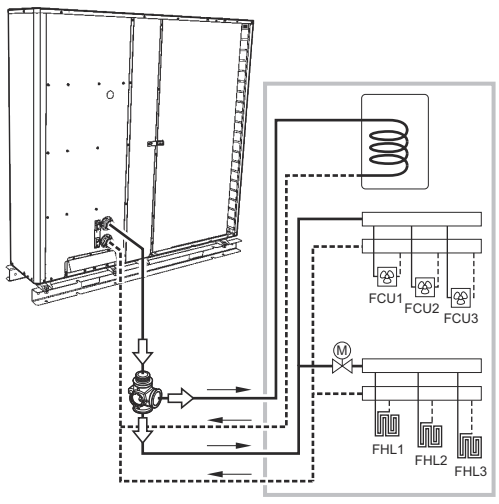
■ For EKHVMRD* and HXHD* units only.



■ For EKHVMYD* units only.



■ For E(D/B)(H/L)Q* units only.

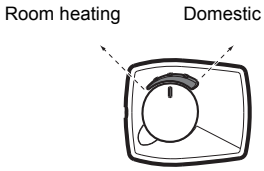


The 3-way valve needs to be installed indoors.

6 Push the motor on the sleeve.

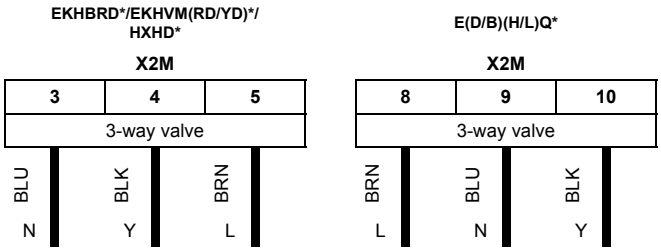
Make sure not to rotate the sleeve during this action, so as to maintain the valve position as set during step 4.

7 Put the turn knob on the valve motor cover as shown below.



Make sure that the turn knob is completely pushed in to allow the turn knob being operated automatically by the unit. If the turn knob is lifted slightly, manual operation is possible.

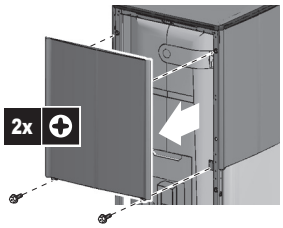
8 Perform the wiring in the (indoor) unit switch box in accordance with the following figure: (make sure power supply is switched off)



Make sure to follow the appropriate wiring routing inside of the unit (this wiring routing can be found in the installation manual of the indoor unit).

Refer also to the wiring diagram delivered with the indoor unit.

Installing the hot water tank on top of the indoor unit



1 Remove the top front decoration panel of the tank module as indicated in the figure.

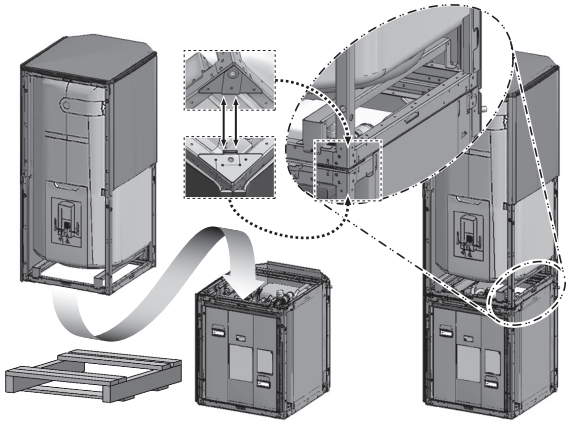
2 Routing of the flexible hoses with threaded connection coupling (G 3/4" female). Depending on the installation location (left or right side installation), punch the required right or left knock-out holes out of the rear plate. Apply the grommet to the edges of the knocked out holes to protect the flexible hoses.

If the recirculation connection is used, connect a tube with threaded connection to this hole and guide it through a hole in the rear plate too.

3 Mount the tank module on top of the indoor unit.

Not applicable for E(D/B)(H/L)Q* unit.

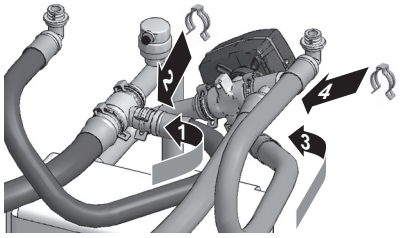
- Because of the weight of the domestic hot water tank, it is advised to handle and lift it with two persons.
- Refer to the figure below and make sure that the positioning guides on all four corners of the domestic hot water tank bottom perfectly match on the positioning guides of the indoor unit top when mounting the tank module.



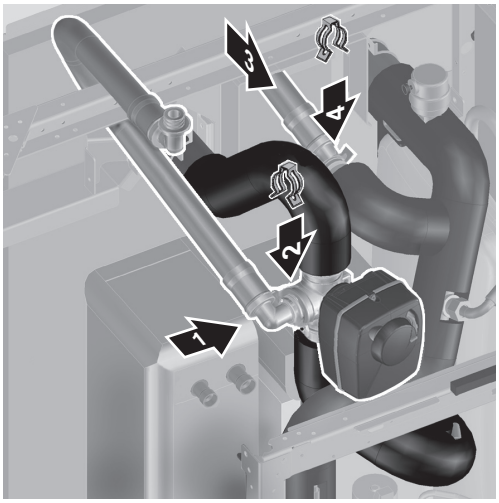
4 Connect the flexible hoses as indicated below and in figure 4, figure 5, figure 6 and figure 7

- **1** Hot water from the tank (G 3/4" Female)
- **2** Cold water to the tank (G 3/4" Female)
- **3** Recirculation connection (G 1/2" Male)
- **4** Hot water from the indoor unit to the tank coil (quick coupling 90°)
- **5** Return water from the tank coil to the indoor unit (quick coupling)
- **6** 3-way valve
- ⟶ Water flow direction

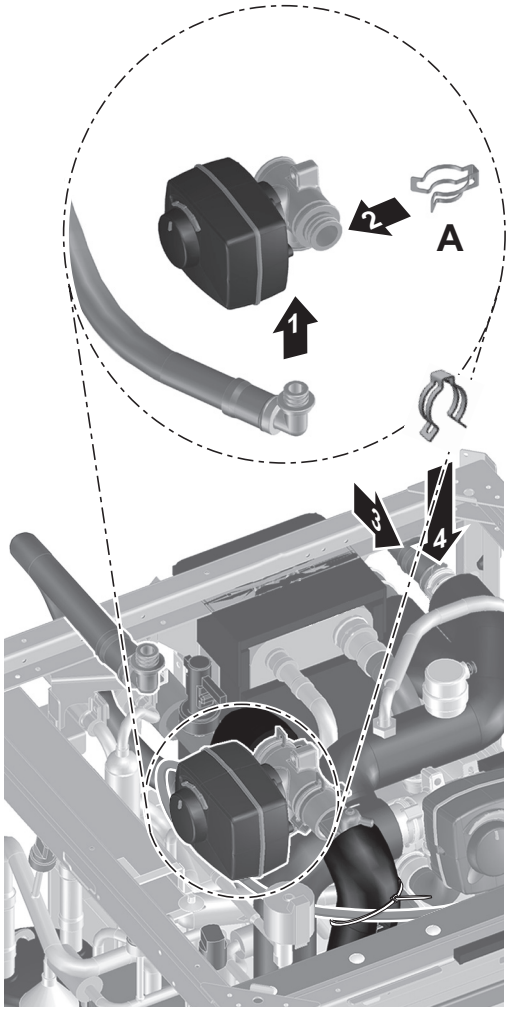
■ For EKHBRD* unit.



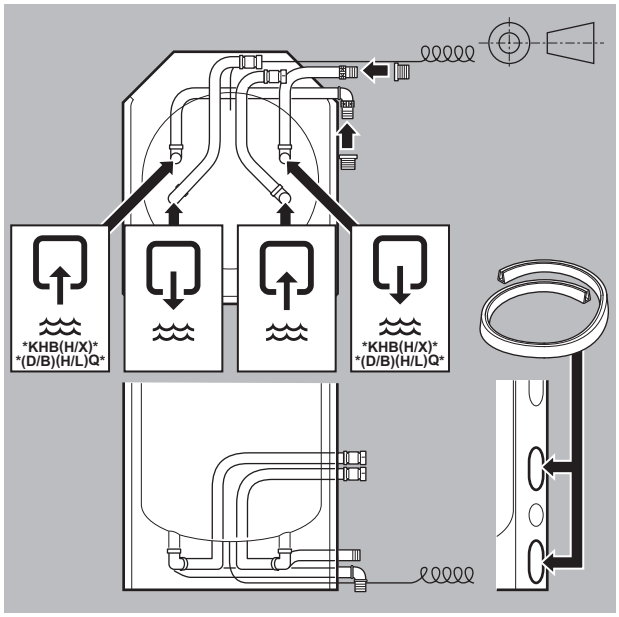
■ For EKHVMRD* and HXHD* units.



■ For EKHVMYD* unit.



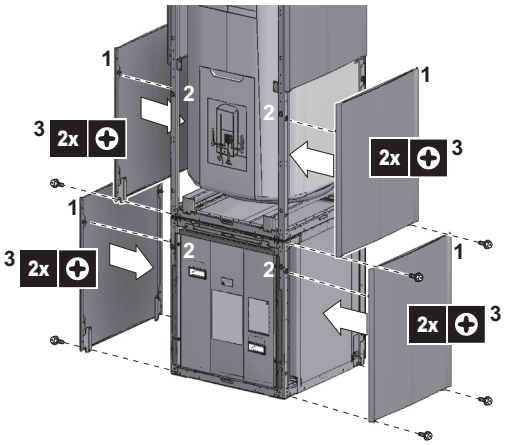
■ For E(D/B)(H/L)Q* unit only.



⚠ It is recommended to install a shut off valve to the cold water inlet. Close this shut off valve during periods of absence to avoid damage to the surroundings in case water should leak.

5 Fix the side bottom decoration panels of the domestic hot water tank to the indoor unit.

Not applicable for E(D/B)(H/L)Q* unit.

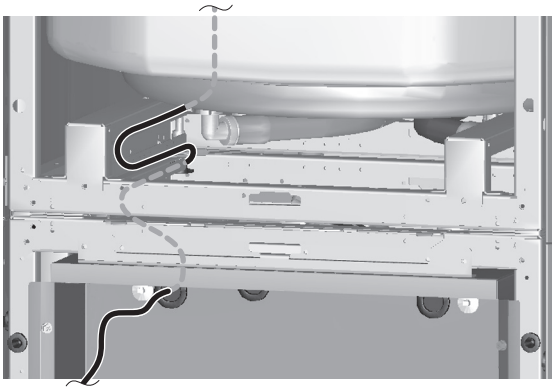


1 Decoration panel
2 Quick fixation hole
3 Fasten with 2 screws

6 Connect the pressure relief valve (field supply, opening pressure maximum 10 bar) and the drain.

7 Connect the thermistor wire to the indoor unit switch box. Make sure power supply is switched off. Refer to the wiring diagram delivered with the indoor unit.

■ For EKHBRD*, EKHVM(RD/YD)* and HXHD* units only



The distance between the thermistor cable and power supply cable must always be at least 25 mm to prevent electromagnetic interference on the thermistor cable.

1 Plug the thermistor cable connector in the socket X11A (EKHBRD*, EKHVM(RD/YD)* and HXHD* (A3P)) or X9A E(D/B)(H/L)Q*(111P) on the PCB.

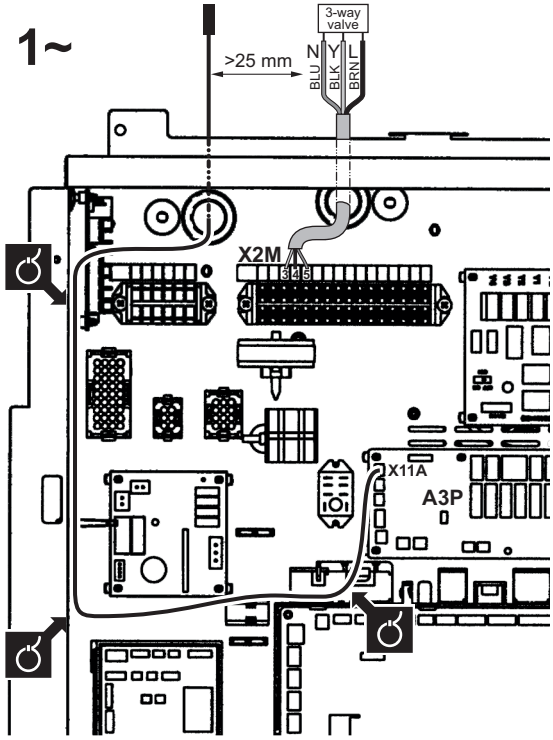
2 Fix the cables to the cable tie mountings with cable ties to ensure strain relief.

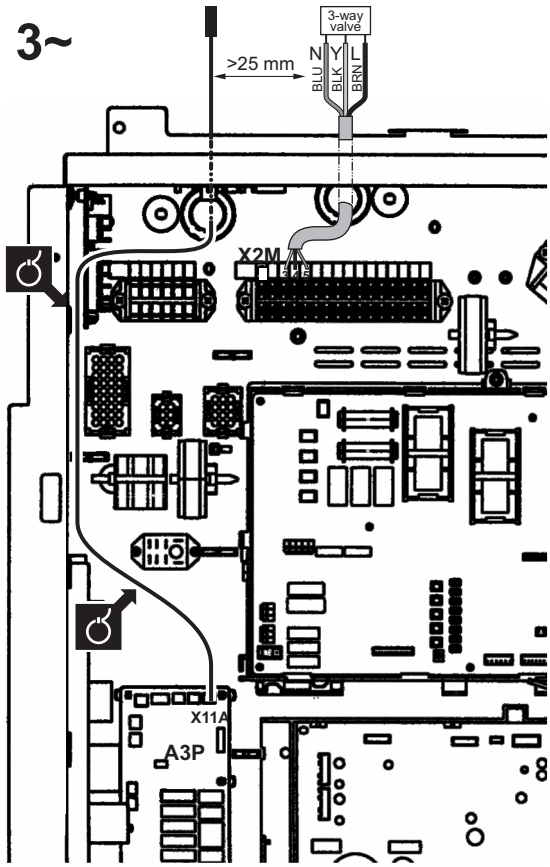
3 When routing out cables, make sure that these do not obstruct mounting of the indoor unit cover.

NOTICE

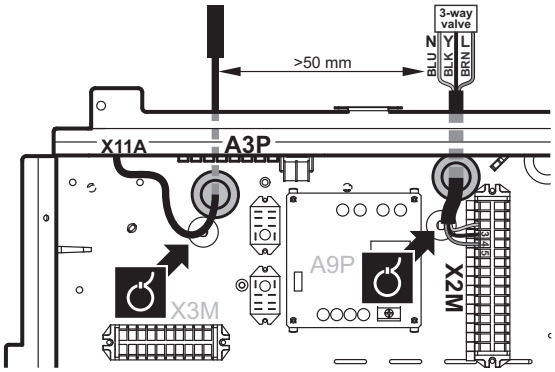
Only relevant field wiring is shown.

■ For EKHBRD* indoor units only.

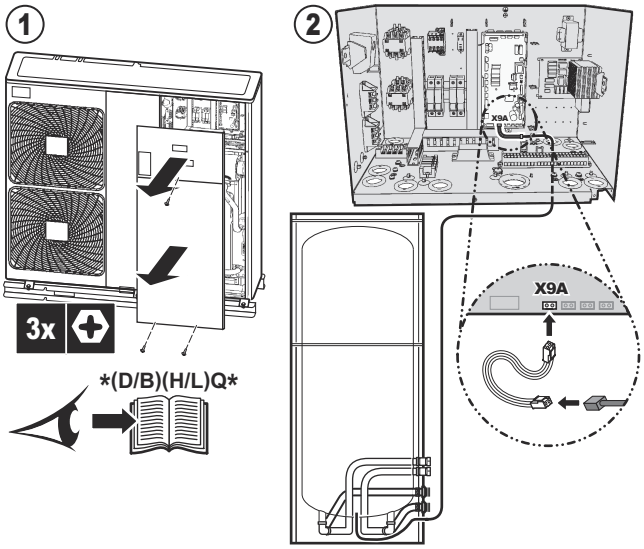




■ For EKHVM(RD/YD)* and HXHD* indoor units only.



■ For the E(D/B)(H/L)Q* unit.



8 Only for EKHBRD*, EKHVM(RD/YD)* and HXHD* units: reattach the drain plate on the indoor unit.

Not applicable for EKHB(H/X)* and E(D/B)(H/L)Q* units.

NOTICE

When secondary return circuits are used then an additional expansion vessel may be required.

9 Commissioning

The domestic hot water tank coil must be filled with water at the indoor unit water inlet. This to avoid that dirt enters the system.

Follow the next steps to fill up the tank:

1 Open each hot water tap in turn to expel air from the system pipe work.

2 Open the cold water supply valve. Make sure the decoration panels of both the domestic hot water tank and the indoor unit are aligned.

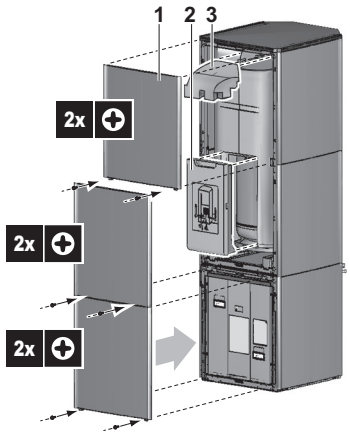
3 Close all water taps after all air is expelled.

4 Check for leaks.

5 Manually operate the temperature and pressure relief valve to ensure free water flow through the discharge pipe (turn knob counterclockwise). Refer to "3.2. Main components" on page 3 for location of the temperature and pressure relief valve.

10 Reattach the temperature and pressure relief valve insulation piece, and both front decoration panels of the domestic hot water tank.

11 Reattach the front decoration panel of the indoor unit.



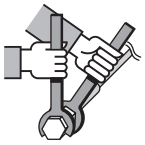
1 Decoration panel
2 Insulation piece
3 Temperature and pressure relief valve insulation piece

Installing the hot water tank by the side of the indoor unit

Refer to the manual delivered with the kit EKFMAHTB.

Connecting to the domestic hot water tank recirculation connection

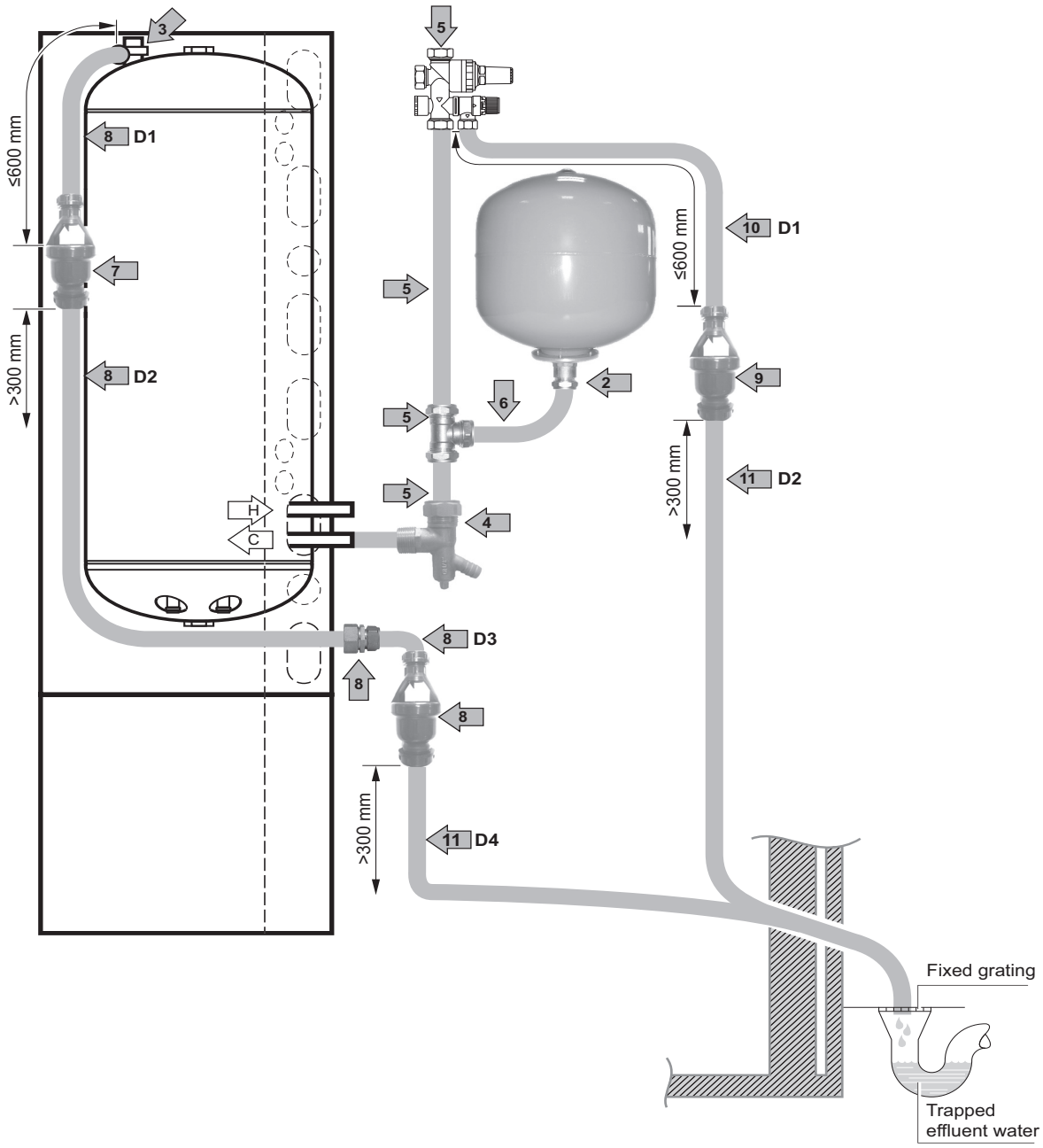
When loosening the recirculation plug or when connecting piping to the recirculation connection, always use 2 wrenches together.





5. Installation of the EKUHWHTB kit on the domestic hot water tank

- All pipework and fittings must be flushed free of all flux and debris prior to the fitting of controls of this kit. Failure to do this may cause irreparable damage to the controls.
- All cautions as under chapter "4. Installation of the EKHTSU domestic hot water tank" on page 4 remain of extreme importance and are equally valid in this chapter.



5.1. Piping requirements

- Tundish
  There are 3 tundishes in the EKUHWHTB kit.
  Install 2 tundishes on the discharge of the temperature and pressure relief valve on the domestic hot water tank. The 1st tundish needs to be installed in a vertical position within a maximum of 600 mm away from the temperature and pressure relief valve. The 2nd tundish needs to be installed in vertical position outside the unit. This tundish must be visible at all times. Install 1 tundish in a vertical position within a maximum of 600 mm away from the expansion relief valve.
- Tundish pipework
  Tundish pipework must be 22 mm metal pipe with a minimum vertical length of 300 mm below the tundish. Maximum permitted (equivalent) length of 22 mm pipework is 9 m. Each bend or elbow is equivalent to 0.8 m of pipework.
  All pipework must have a continuous fall.
  Sizing of copper discharge pipe D2~D4.

Valve outlet size D1	Discharge pipe size D1	Discharge pipe size D2	Maximum resistance (a)	Resistance created by each elbow or bend
15 mm	15 mm	22 mm	up to 9 m	0.8 m

(a) Maximum resistance allowed is expressed as a length of straight pipe (i.e. no elbows or bends).

Discharge pipe size D2	Discharge pipe size D3	Discharge pipe size D4
22 mm	15 mm	22 mm

- Requirements to discharges
  - Discharge piping, tundish, drain valves, etc. must be positioned away from any electrical components.
  - The discharge pipe away from the tundish must terminate in a safe, visible position without forming any risk to persons in the vicinity.

NOTICE

To access the tundish connected to the temperature and pressure relief valve, the front decoration panels need to be removed.

If in doubt, refer to Building Regulation G3.

Do not install any valves between the domestic hot water tank and relief valves/expansion vessel.

5.2. Installation procedure of the EKUHWHTB kit

1 Locate the domestic hot water tank in a suitable position to facilitate the installation of water supply, discharge fittings and pipework. It is therefore recommended to first read through this whole procedure.

Refer to the figure on the facing page at the start of this chapter for full understanding of next procedure steps.

Pre-assembly

2 Pre-assemble the adaptor and expansion vessel (parts 2 and 4 of this kit) so that the expansion vessel is ready for installation.

3 Remove the insulation piece to get acces to the factory fitted temperature and pressure relief valve. Manually operate the temperature and pressure relief valve to ensure free water flow through discharge pipe. Turn knob left.

Water main in

4 Fit the elbow/drain valve (part 6 of this kit) in the cold water flexible hose coming out of the rear plate.

Pay attention to position the drain valve in such a way that 80% of the domestic hot water tank can be drained.

5 Position both, the pressure reducing valve with integrated non return valve and line strainer and the expansion relief valve (part 1 in this kit) as high as possible and connect it to the water mains inlet.

The expansion relief valve must be installed with a horizontal discharge. If fitted inverted, debris may be deposited on the seat and cause fouling of the seat when the valve operates. Check direction of flow arrows.
Fit a length of copper tube Ø22 mm (field supply) in between the elbow/drain valve (procedure step 4) and the pressure reducing valve.
Make sure to provide for a connection on this pipe to the expansion vessel (part 4 of this kit).

6 Fit a length of copper tube Ø22 mm (field supply) inbetween the T-piece (part 7 of this kit) and the pre-assembled expansion vessel (procedure steps 2 and 5).

Discharge

7 Remove the front decoration panels of the domestic hot water tank. Install the 1st tundish (part 5 of this kit) in a vertical position within a maximum of 600 mm away from the temperature and pressure relief valve. Use the foreseen space inside the domestic hot water tank module as indicated in the figure. Use tie-wraps to firmly fix the tundish.

8 Connect a metal discharge pipe Ø15 mm (field supply) from the temperature and pressure relief valve to the 1st tundish (≤600 mm). On the 22 mm discharge pipe (field supply) from the 1st tundish in the discharge line of the temperature and pressure relief valve on the domestic hot water tank, install the 22×15 reducing coupler (part 3 of this kit). Install the 2nd tundish (part 5 of this kit) in a vertical position outside the unit and visible at all times. Connect a 15 mm pipe (field supply) from the 22×15 reducing coupler to the 2nd tundish in the discharge line of the temperature and pressure relief valve on the domestic hot water tank.

9 Install the 3rd tundish (part 5 of this kit) in a vertical position within a maximum of 600 mm away from the expansion relief valve.

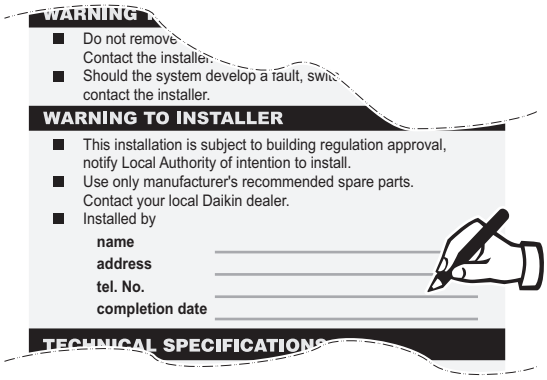
10 Connect a metal discharge pipe Ø15 mm (field supply) from the expansion relief valve to the tundish (≤600 mm).

11 Connect discharge pipes from the 2nd and 3rd tundishes. Refer to paragraph "Tundish pipework" on page 12.

All pipework must have a continuous fall and be fitted conform to the requirements of the Building Regulation G3.

After completing the installation

12 After completing the installation, the installer has to fill in the warning label on the tank with indelible ink. The warning label is located on the lower front decoration panel inside.



6. Commissioning

6.1. Filling up

Follow the next steps to fill up the tank:

1 Switch off the power supply

2 Open each hot water tap in turn to expel air from the system pipe work.

3 Open the cold water supply valve.

4 Check for leaks.

5 Close all water taps if all air is expelled.

6 Manually operate the temperature and pressure relief valve to ensure free water flow through the discharge pipe (turn knob left). Refer to "3.2. Main components" on page 3 for location of the temperature and pressure relief valve.

6.2. Draining

Follow the next steps to drain the tank:

1 Switch off the power supply.

2 Turn off the cold water supply valve.

3 Open the hot water taps.

4 Open the drain valve.

7. Maintenance

In order to ensure optimal availability of the unit, a number of checks and inspections on the unit and the field wiring have to be carried out at regular intervals.

- Each inspection has to be carried out by a licensed technician and **not by the user**.
- Before carrying out any maintenance or repair activity, always switch off the circuit breaker on the supply panel, remove the fuses or open the protection devices of the unit.
- Make sure that before starting any maintenance or repair activity, also the power supply to the outdoor unit is switched off.

NOTICE

The flexible hoses are designed for a 13 year lifetime. It is adviced to replace them after this period.

The described checks must be executed at least once a year by a licensed technician.

1 Checking for leaks

To be able to check for leaks, first remove the front decoration panel of the indoor unit and then the front panels of the tank module.

2 Temperature and pressure relief valve

Check for correct operation of the temperature and pressure relief valve. Remove the front decoration panels and insulation piece. Manually operate the temperature and pressure relief valve to ensure free water flow through the discharge pipe. Turn knob left.

3 Pressure reducing valve with integrated non return valve and line strainer

Depending on local water conditions, annual inspection of the integral line strainer, pressure reducing valve cartridge and seating may be necessary.

- Unscrew the retaining nut of the valve. The complete operating mechanism, including the strainer can be removed.
- Clean the filter mesh and cartridge under running water.
- Replace the cartridge, ensuring that the strainer is correctly located and reassemble the unit.

4 Expansion relief valve

Check for correct operation of the expansion relief valve. Manually operate the expansion relief valve to ensure free water flow through discharge pipe. Turn knob left.
Depending on local water conditions, annual inspection of the expansion relief valve cartridge and seating may be necessary.

- Unscrew the expansion relief headwork from valve body.
- Clean valve seat face and seating - do not scratch or damage either seat face or seating.
- Refit in reverse order. Do not over tighten.

7.1. Descaling

Depending on the water quality and set temperature, scale can deposit on the heat exchanger inside the domestic hot water tank and can restrict heat transfer. For this reason, descaling of the heat exchanger may be required at certain intervals.

When using means for descaling, it must be ensured that the water quality remains compliant with the requirements of EU directive 98/83/EC.

8. Troubleshooting

This section provides useful information for diagnosing and correcting certain troubles which may occur in the unit.

8.1. General guidelines

Before starting the trouble shooting procedure, carry out a thorough visual inspection of the unit and look for obvious defects such as loose connections or defective wiring.

When carrying out an inspection on the supply panel or on the switch box of the unit, always make sure that the circuit breaker of the unit is switched off.

When a safety device was activated, stop the unit and find out why the safety device was activated before resetting it. Under no circumstances safety devices may be bridged or changed to a value other than the factory setting. If the cause of the problem cannot be found, call your local Daikin dealer.

8.2. General symptoms

Symptom 1: No water flow from hot taps

Possible causes	Corrosive action
The main water supply is off.	Check that all shut off valves of the water circuit are completely open.
The strainer is blocked.	Turn off the water supply, remove and clean the strainer (see "Pressure reducing valve with integrated non return valve and line strainer" on page 14 on how to do this).
The cold water inlet pressure reducing valve is not fitted properly.	Check and refit as required (see "Pressure reducing valve with integrated non return valve and line strainer" on page 14 on how to do this).

Symptom 2: Water from hot taps is cold

Possible causes	Corrosive action
The thermal cut-out located in the indoor unit has operated.	• Check and find the cause of tripping and then reset button. • Check if thermistor is correctly installed in thermistor socket. Procedure: remove front panel and insulation, replace or fix the sensor.
The unit is not operating.	Check the unit operation. Refer to the manual delivered with the unit. If any faults are suspected, contact your local dealer.

Symptom 3: Intermittent water discharge

Possible causes	Corrosive action
Thermal control failure (water will be hot).	Contact your local dealer.
The expansion vessel is broken.	Replace the expansion vessel.

Symptom 4: Continuous water discharge

Possible causes	Corrosive action
Cold water inlet pressure.	Check the pressure reducing valve. Replace the pressure reducing valve if the measured pressure is >2.1 bar.
Temperature and pressure relief valve.	Check and reset button.
The expansion relief valve is not functioning properly.	Check for correct operation of the pressure relief valve by turning the red knob on the valve counter clockwise: • If you do not hear a clacking sound, contact your local dealer. • In case the water keeps running out of the unit, close both the water inlet and outlet shut-off valves first and then contact your local dealer.

Symptom 5: Dirty water

Possible causes	Corrosive action
Dirty water	Flush or clean the domestic hot water tank after periods of standstill. It could occur that particles in the water deposit on the bottom of the tank. If this deposit layer becomes thick enough it could enter the hot water outlet and contaminate the hot water.
The water has a smell of rotten eggs.	Check if this phenomena also occurs with the cold water. If it does, this indicates that there is a problem with the water supply or with the water in the piping, but not with the domestic hot water tank itself. Contact your water supplier. If the problem is not solved, increase the domestic hot water tank temperature above 65°C. If this action solves the problem, the smell is most probably caused by bacterial contamination. Contact your water supplier. If the problem is not solved, contact your local dealer.

9. Disposal requirements

Dismantling of the unit and treatment of parts must be done in accordance with relevant local and national legislation.

10. Technical specifications

10.1. Domestic hot water tank specifications

Specifications according to EN12897: 2006

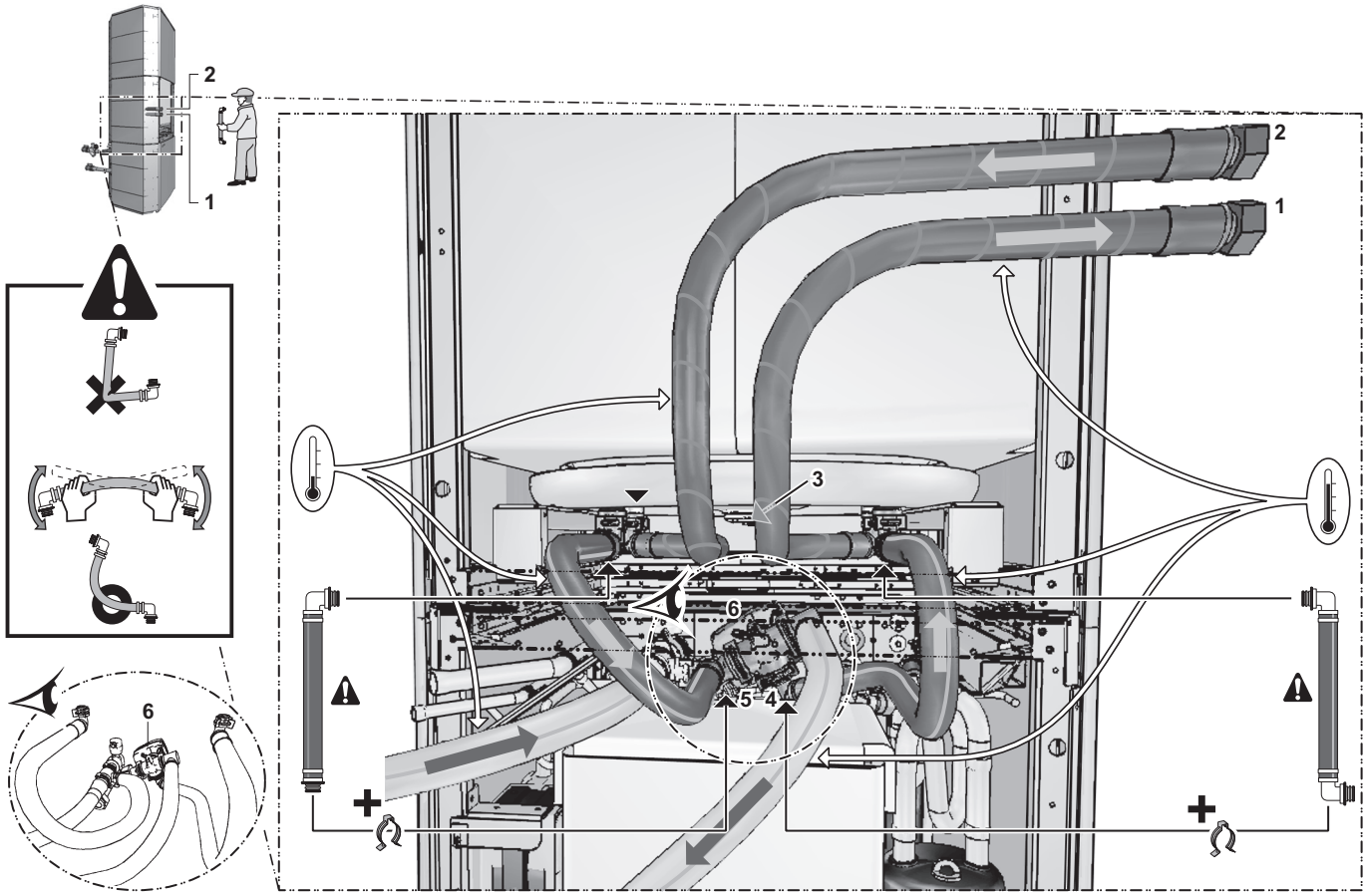
		EKHTSU200AC	EKHTSU260AC
Storage capacity	(l)	200	260
Internal heat exchanger volume	(l)	7.5	7.5
Material		Stainless steel	
Overall dimensions (h x l x w)	(mm)	1335 × 600 × 695	1610 × 600 × 695
Operating pressure	(bar)	2.1	2.1
Maximum primary working pressure (heating side)	(bar)	2.5	2.5
Expansion vessel pre-charge pressure	(bar)	2.5	2.5
Preset opening pressure relief valve	(bar)	8	8
Preset opening temperature of temperature and pressure relief valve	(°C)	90	90
Set opening pressure of temperature and pressure relief valve	(bar)	10	10
Connections		Quick coupling/ G3/4" F	
Inspection access type		G1/2" M Recirculation connection[a]	
Primary heating power	(kW)	18.6	13.8
Standing heat loss	(kWh/ 24h)	1.2	1.5
Pressure drop	(kPa)	20	50
Actual capacity	(l)	191	249
Hot water capacity	(l)	137	176
Primary flow rate	(l/min)	15	15
Reheat time[b]	(min)	20.3	27.8
Set pressure of pressure reducing valve	(bar)	3.5	3.5
Maximum design pressure	(bar)	10	10
Maximum water supply pressure to pressure reducing valve	(bar)	16	16
Maximum operating temperature of the heating fluid	(°C)	85	85
Weight			
-empty	(kg)	70	78
-when full	(kg)	270	338
Mounting		On top of unit or floor mounted	

(a) This connection to the cylinder should be used with an endoscope for inspecting the internal of the cylinder.
(b) The time it takes to increase the water temperature from 15°C to 60°C according to specific combinations specified in EN12897: 2006.

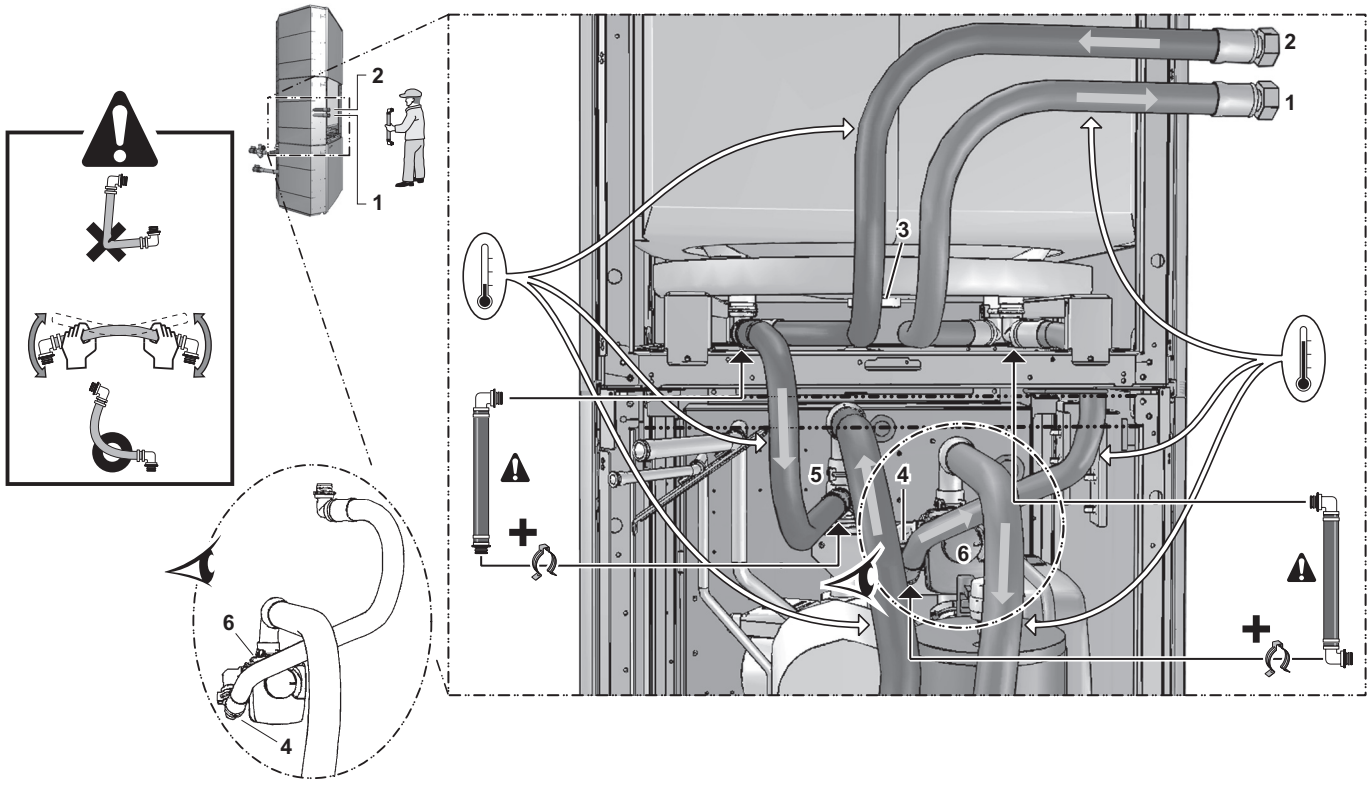
Unit combined specifications

		EKHTSU200AC	EKHTSU260AC
Maximum temperature domestic hot water			
-EKHBRD*	(°C)	75	75
-EKHVM(RD/YD)*	(°C)	75	75
-HXHD125*	(°C)	75	75
-E(D/B)(H/L)Q*	(°C)	60	60
Maximum temperature heat exchanger			
-EKHBRD*	(°C)	85	85
-EKHVM(RD/YD)*	(°C)	85	85
-HXHD125*	(°C)	85	85
-E(D/B)(H/L)Q*	(°C)	65	65
Supply temperature time[a]			
-EKHBRD011*	(min)	60	70
-EKHBRD014*	(min)	50	60
-EKHBRD016*	(min)	40	50
-EKHVM(RD/YD)50*	(min)	109	141
-EKHVM(RD/YD)80*	(min)	68	88
-HXHD125*	(min)	68	88
-E(D/B)(H/L)Q11*	(min)	100	129
-E(D/B)(H/L)Q14*	(min)	93	119
-E(D/B)(H/L)Q16*	(min)	84	108
Re-heat time[b]			
-EKHBRD011*	(min)	50	60
-EKHBRD014*	(min)	40	50
-EKHBRD016*	(min)	30	40
-EKHVM(RD/YD)50*	(min)	77	99
-EKHVM(RD/YD)80*	(min)	48	62
-HXHD125*	(min)	48	62
-E(D/B)(H/L)Q11*	(min)	68	88
-E(D/B)(H/L)Q14*	(min)	66	85
-E(D/B)(H/L)Q16*	(min)	60	77

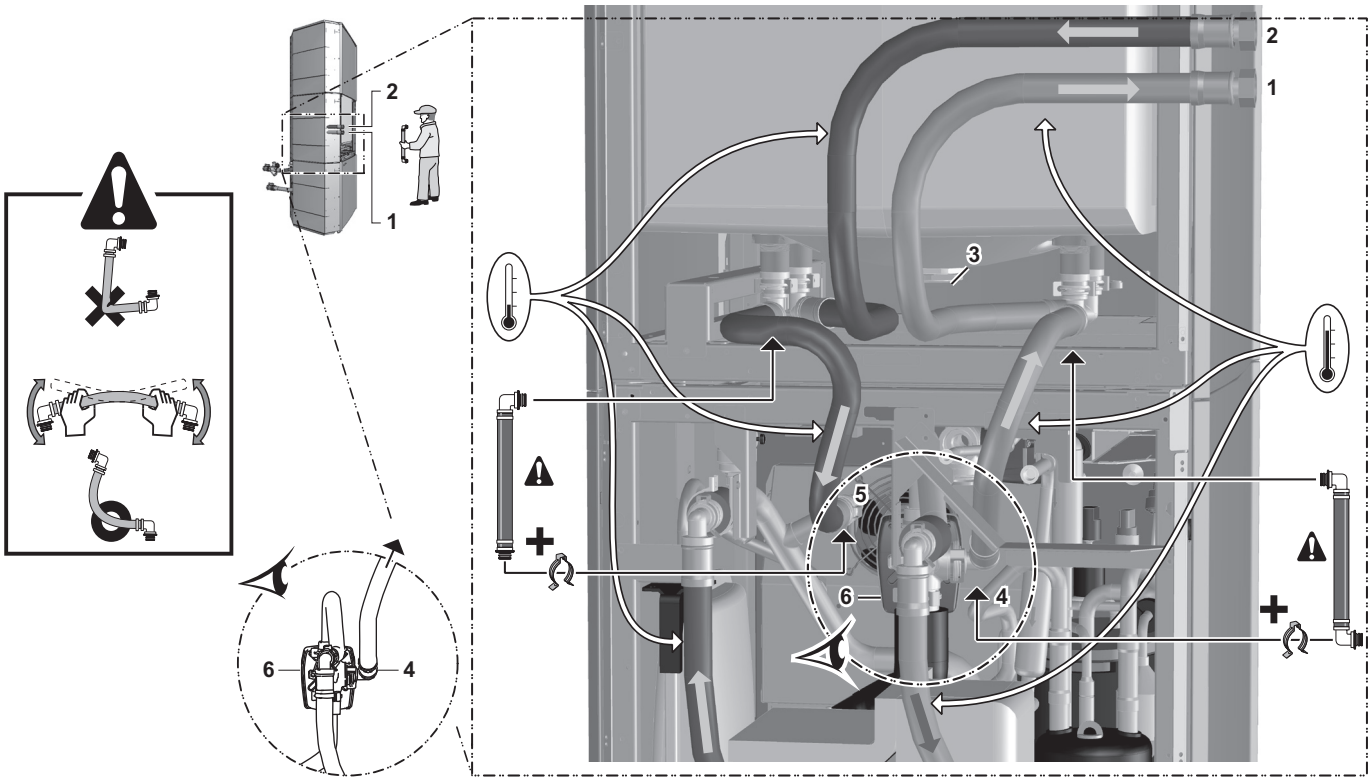
(a) The time it takes to increase the temperature from 15°C to 60°C.
(b) The timeit takes to increase 70% of the contents of the vessel back up to 60°C.



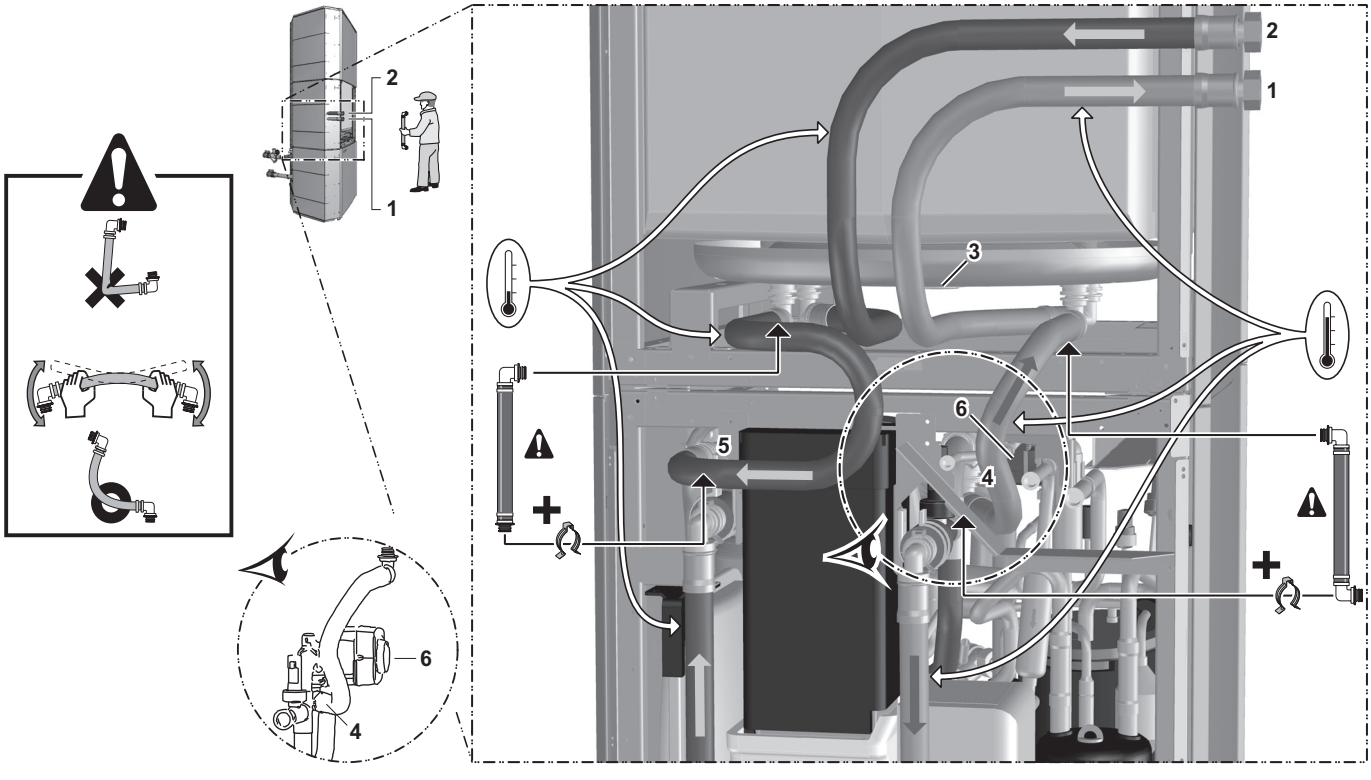
4 EKHBRD*



5 EKHVH/X*



6 EKHVMRD* + HXHD*



7 EKHVMYD*

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