Installation and operating manual

HT 6Split
HT 12Split

Indoor unit
Cooperating with air
heat pumps

List of contents

1 Important information

Information regarding safety

This manual contains installation and maintenance procedures for specialists.

The device can be operated by children aged over 8 and persons with physical, sensoric, or mental disabilities, and without any experience or knowledge about its operation, if supervised or trained in safe operation, and if they understand the risks related to its operation. The device must not serve as a toy for children. Activities related to cleaning and basic maintenance must not be performed by unsupervised children.

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Symbols

> **! IMPORTANT**
> This symbol informs about the risk to the device or a person

> **ADVICE**
> This symbol shall mean tips to make product operation easier.

> **☞ CAUTION**
> This symbol points to important information to be noted when operating the device easier.

Marking

HT 6Split / HT 12Split features the CE mark and water protection IP21.

The CE mark confirms that Alpha innotec has taken care for product conformity with applicable regulations of relevant EU Directives. The CE is required for most products sold in the EU, regardless of their place of manufacture.

IP21 means that items with the diameter greater or equal to 12.5 mm cannot access inside causing damage, and that the product has been secured against vertically falling water drops.

Serial number

The serial number is located at the bottom of the rating plate, on the top cover HT 6Split / HT 12Split and consists of 14 digits.
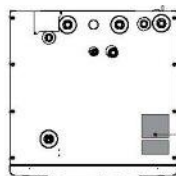
Serial number (PF3)

Waste disposal

Disposal of the packaging shall be the responsibility of the installation technician installing the product, or a special waste management facility.
Do not dispose of decommissioned products together with regular household wastes. Hand them over to a specialist facility dealing with waste disposal or salesperson offering such services.

Incorrect disposal of the product by the user is subject to administrative penalties under applicable regulations.

Installation acceptance

The heating system must be accepted before start-up. Acceptance must be done by a person with appropriate qualifications. Complete the card in the operating manual by entering the installation data.

CHECKLIST

|	Description	Notes	Signature	Date
Heating medium				
	Installation rinsing			
	Installation venting			
	Diaphragm expansion vessel			
	Particulate filter			
	Safety valve			
	Cut-off valves			
	Pressure in the heating system			
	Connection according to the drawing			
Hot water				
	Cut-off valves			
	Mixing valve			
	Safety valve			
Power supply				
	Communication connection			
	Circuit fuses			
	Fuses, internal module			
	Building fuses			
	Temperature sensor outdoor			
	Room sensor			
	Energy meter			
	Emergency switch			
	Switch differential			
	Thermostat emergency mode setting			
Miscellaneous				
	Connected to			

2 Supply and operation

Transport

HT 6Split / HT 12Split heat pump must be transported and stored vertically in a dry place. HT 6Split / HT 12Split can be, however, carefully placed on the rear side of the casing when carrying the device into the building.

Assembly

- HT 6Split / HT 12Split must be set on a solid waterproof base that would keep the weight of the indoor unit. The regulated legs of the heat pump allow for levelling and stable setting of the device.

Wrench size 13

20-40 mm
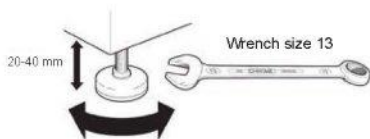
- Because HT 6Split / HT 12Split is equipped with condensate drain, indoor unit installation site must be furnished with a floor drain with a discharge to the sewer system.
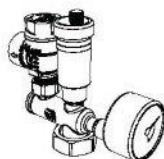
Installation site

Leave 800 mm free space at the front of the heat pump. All maintenance works on HT 6Split / HT 12Split can be done from the front.

25-30 mm

800 mm
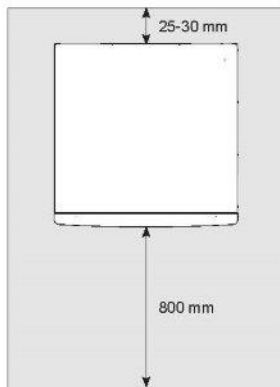
> **! IMPORTANT**
> When using an additional heat source, leave behind the device the space necessary for non trouble free connections and subsequent maintenance.

Included items

Safety group with safety valve (3 bar), pressure gauge and automatic air vent (1 pc.)

Temperature sensor Outdoor and indoor (2 pcs) Connection p.28

Current sensor (3 pcs) Connection p.28
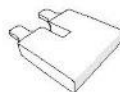
230V connection jumper (1 pc.)

> **! IMPORTANT**
> The opening pressure of the safety valve is 3 bar.

Removal of the covers
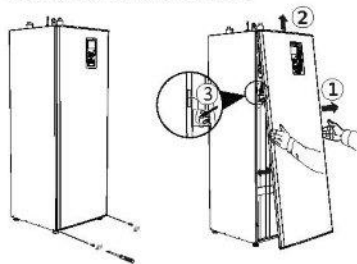
1. Remove screws at the bottom edge of the front cover.
2. Open the cover at the lower edge, taking care to not damage the connecting cables, and then remove the front cover by lifting it up.
3. Disconnect the cable connecting the front cover to the unit.

The side covers and rear wall of the housing are permanently attached, therefore it is not possible to dismantle them.

3 Indoor module structure

HT 6Split / HT 12Split
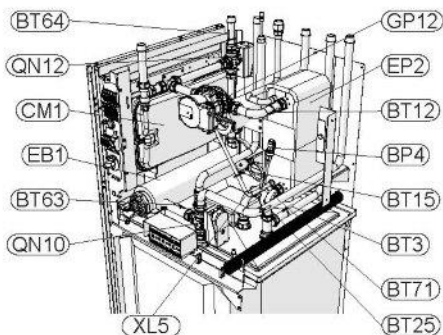
LEGEND

Pipe connections

XL1	Connection, heating medium, supply
XL2	Connection, heating medium, return
XL3	Connection, cold water
XL4	Connection, hot water
XL5	Connection, hot water circulation
XL10	Connection, cooling
XL11	Connection, safety group,manometer
XL13	Connection, liquid cooling medium
XL14	Connection, gas cooling medium

HVAC elements

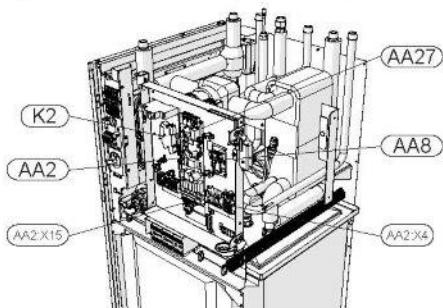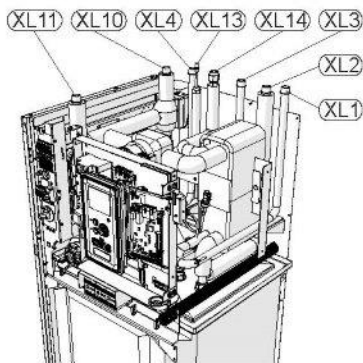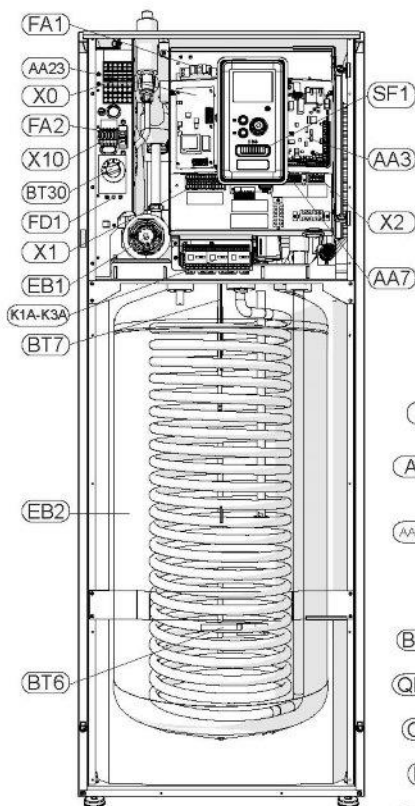|	
CM1	Diaphragm expansion vessel, closed
QN10	Isolation valve, domestic hot water / central heating
QN12	Isolation valve, cooling/heating
GP12	Circulation pump
EP2	Heat exchanger

Sensors

BP4	Pressure sensor, high pressure
BT3	Temperature sensor, heating medium return
BT6	Temperature sensor, hot water loading
BT7	Temperature sensor, top of the hot water heater
BT12	Temperature sensor, condenser outlet
BT15	Temperature sensor, liquid
BT25	Temperature sensor, heating medium supply
BT63	Temperature sensor, heating medium supply downstream the submersible heater
BT64	Temperature sensor, cooling medium supply
BT71	Temperature sensor, heating medium return

Electrical elements

X0	High voltage terminal block 400V~/230V~
X1	Low voltage terminal block 230V~
X2	Low voltage terminal block 230V~
X10	Low voltage terminal block 230V~
AA2:X4	Low voltage terminal block
AA2:X15	Low voltage terminal block
K1A-K3A	Submersible heater switch
K2	Alarm relay
BT30	Thermostat - emergency mode
AA2	Main card
AA3	Sensor card
AA23	Communication card
AA7	Relay card
AA8	Titanium anode card
AA27	Relay card
FD1	Temperature limiter
FA1	Circuit breaker (to internal module)
FA2	Circuit breaker (L Split)
EB1	Submersible heater

Other

EB15	HT 6Split / HT 12Split
SF1	Controller switch
PF3	Serial number
EB2	Domestic hot water tank

4 Pipe connections

General pipe connections

Pipe installation must be carried out in accordance with current norms and directives.

The pipe dimension should not be less than the recommended pipe diameter according to the table below. However, each system must be dimensioned individually to achieve the recommended system flows.

MINIMUM SYSTEM FLOWS

The installation must be dimensioned at least to manage the minimum defrosting flow at 100% pump operation, see table.

Air/water heat pump	Minimum flow during defrosting (100% pump speed (l/s)	Minimum recommended pipe dimension (DN)	Minimum recommended pipe dimension (mm)
HT 6Split/ L6Split	0,19	20	22
HT 12Split/ L8Split	0,19	20	22
HT 12Split/ L12Split	0,29	20	22

> **!** **IMPORTANT**
> An undersized system can result in damage to the machine and lead to malfunctions.

The system can cooperate with a low- and medium temperature heating system. Recommended temperature of the heating medium at minimum designed outdoor temperature DOT must not exceed 55°C on supply, and 45 °C on return circuit from the heating system, whereas HT 12Split / HT 6Split can achieve even 65 °C when using a flow-through heating module or another peak heat source.

Excess medium flowing out of the safety valve must be discharged via a pipe to a floor drain. The overflow pipe must be slanted at the entire length from the safety valve, and must be secured against freezing. In order to achieve maximum system efficiency, we recommend the installation of HT 12Split / HT 6Split as close to the heat pump as possible.
The HT 12Split / HT 6Split module is not equipped with cut-off valves, which must be installed outside the indoor module to make future maintenance easier.

The HT 12Split / HT 6Split module can be connected to the central heating, cooling, and domestic hot water installation. Install the supplied safety valve and the manometer.

> **!** **IMPORTANT**
> All connections require free flow, hence a discharge valve must be installed.

> **!** **IMPORTANT**
> Any high points in the climate system, must be equipped with air vents.

> **!** **IMPORTANT**
> The pipe systems need to be flushed out before the indoor module is connected so that any debris cannot damage component parts.

> **!** **IMPORTANT**
> As long as heating circuits in the system have not been filled with the heating medium, do not set the switch (SF1) in the controller in position "1" or "⚠". The compressor in the heat pump and the flow-through heating module can be damaged.

Expansion vessel

HT 6Split / HT 12Split is equipped with a pressure expansion vessel of 10 litres. The pre-pressure of the pressure expansion vessel must be dimensioned according to the maximum height (H) between the vessel and the highest positioned radiator, see figure. A pre-pressure of 0.5 bar (5 mvp) means a maximum permitted height difference of 5 m. The maximum system volume excluding the boiler is 220 litres at the above pre-pressure.
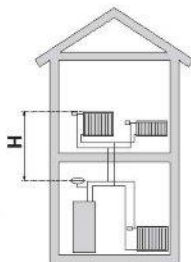
Minimum volume of the heating system

	LSplit		
	6	8	12
Minimum volume of the heating system during heating / cooling	50l	80l	100l

Buffer vessel

Approx. 10 l/kW is required for connection to the heat pump, and many heating systems do not have this volume. To prevent operational problems, the volume is then expanded using a UKV buffer vessel.

> **!** **IMPORTANT**
> In order to achieve undisturbed flow of the heating system, use a hydraulic coupling or open heating loops. Remember to always keep the minimum required flow in the installation - see the section 'Minimal flow in the installation'

> **☞** **CAUTION**
> The diaphragm expansion vessel at the domestic hot water installation is not required. It is, however, required to install a safety valve with opening pressure of 3 bar.

Installation diagram

The HT 6Split / HT 12Split indoor unit is equipped with a coil water heater, diaphragm expansion vessel, safety group, electric heating module (heater), isolation valves, plate heat exchanger, metering instruments, and an electronic circulation pump. Together with the outdoor unit of air heat pump LSplit, forms a complete heating system.

The LSplit outdoor unit provides heat for heating the domestic hot water and supplying the heating system while using free energy in the outdoor air, efficiently operating within the range of low temperatures up to -20°C.

The connection of the outdoor unit and indoor unit HT 6Split / HT 12Split, with a system of pipes filled with a cooling medium secures the connection against freezing in the event of any power outages. The control of system operation is the function of controller module.

The control mechanism of HT 6Split / HT 12Split allows for two cooling operation systems to be used:
· 2-pipe cooling system,
· 4-pipe cooling system.

Basic connection diagram

HT 6Split
HT 12Split
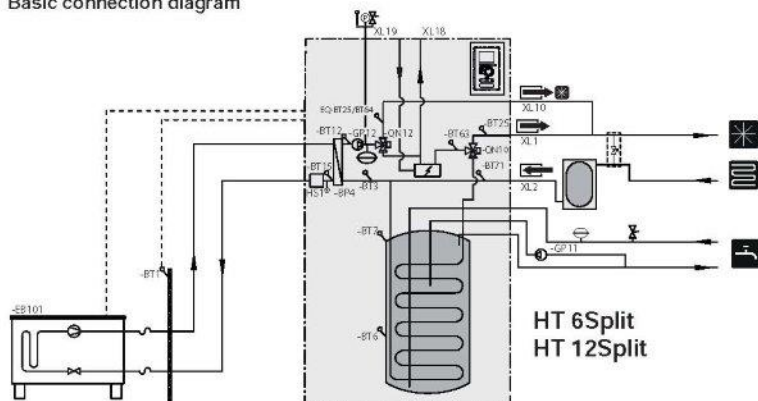
Symbol	Description
✕	Cut-off valve
✕	Non-return valve
✕	Three-way valve
✕	Safety valve
⚲	Temperature sensor
⊖	Diaphragm expansion vessel
Ⓟ	Manometer
↑	Vent
①	Circulation pump
⚡	Electric module

Symbol	Description
▢	Particulate filter
⊝	Compressor
╱	Heat exchanger
❋	Cooling
▥	Central heating systems
⌫	Domestic hot water
✕	Relief valve
△	Additional heat source

Diagram of 2-pipe cooling operation

HT 6Split
HT 12Split
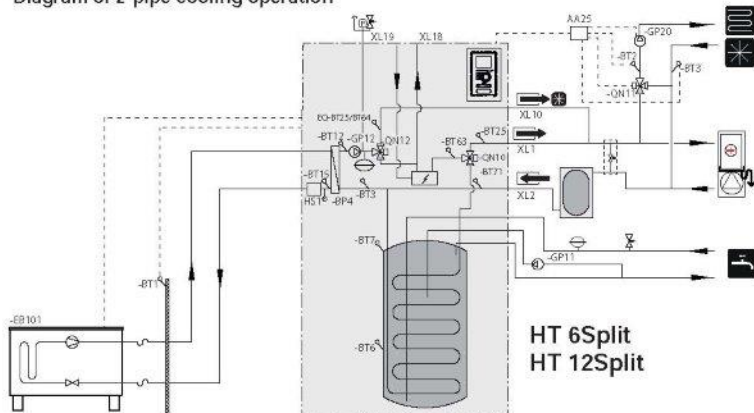
The operating principle of the 2-pipe system is to use the same installation for cooling operation as for heating (Diagram of 2-pipe cooling operation). In the 2-pipe system, the control mechanism operates all components of the system i.e. GP10, expansion mo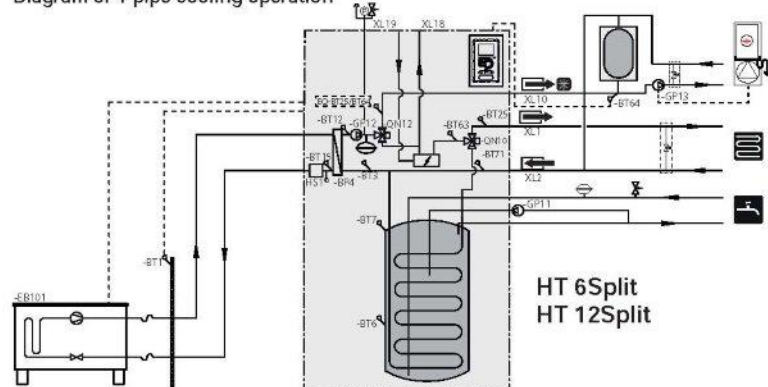dules (additional heating/cooling circuits) etc. Selection of the 2-pipe system can be found in the SERVICE section, menu 5.2.4.

## Diagram of 4-pipe cooling operation

HT 6Split
HT 12Split

The operating principle of the 4-pipe system is to use separate heating and cooling circuits. In the 4-pipe system, a cooling tank is required. The BT64 sensor should be placed in the buffer vessel or on the cooling flow pipeline. BT64 is connected at the AUX inputs. Selection of the 4-pipe system can be found in the SERVICE section, menu 5.2.4.

Scheme with the connection of an additional heat source


HT 6Split
HT 12Split
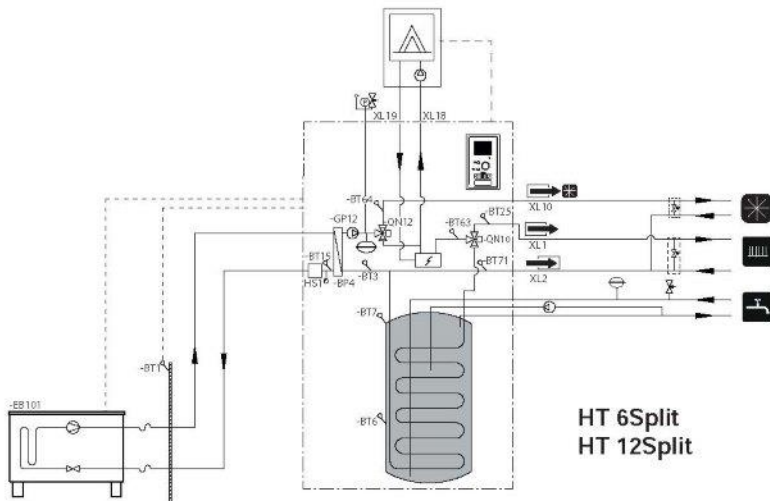
Indoor HT 6Split / HT 12Split module

- It is recommended that the HT 6Split / HT 12Split module should be installed in a room with a floor drain, at best in a utility room or a boiler house.
- The floor must be solid, concrete at best.
- The HT 6Split / HT 12Split module must be set with its back to the outer wall, at best in a room where noise is not a problem. If possible, do not place the device near a wall of a bedroom or another room where noise might be a problem.
- The device can be leveled using regulated legs.
- Pipes must be led in such a way that they are not adjacent to the bedroom or living room.
- Remember to leave about 800 mm free space at the front and 220 mm over the device to provide for future maintenance.

Recommended order of assembly

1. Connect HT 6Split / HT 12Split module to the heating system, cold, and hot water pipelines.
2. Install the cooling medium pipes.
3. Connect the outdoor temperature sensor, and cables between HT 6Split / HT 12Split and LSplit.
4. Connect power supply to module HT 6Split / HT 12Split.
5. Proceed according to start-up instructions in chapter Start-up and regulation.

Pipe connections
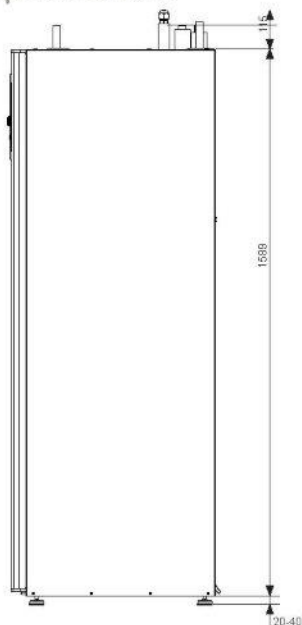
Pipe connections

XL1	Connection, Heating medium supply Ø22 mm
XL2	Connection, Heating medium return Ø22 mm
XL3	Connection, cold water Ø22 mm
XL4	Connection, hot water Ø22 mm
XL5	Connection, circulation Ø15 mm
XL10	Connection, cooling Ø22 mm
XL11	Connection, safety group Ø22 mm, manometer
XL13	Liquid cooling medium Connection ¼" (HT 6Split) Connection ⅜" (HT 12Split)
XL14	Gas cooling medium Connection ½" (HT 6Split) Connection ⅝" (HT 12Split)
XL 18	Connection, return to an additional heat source Ø22 mm
XL 19	Connection, supply from additional heat source Ø22 mm

Other information

PF3   Serial number plate
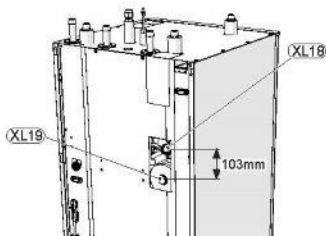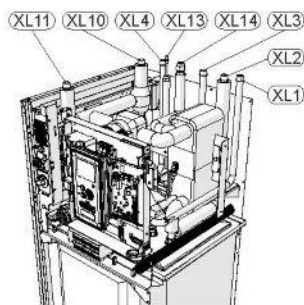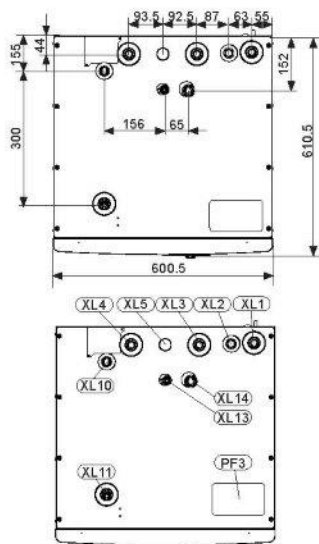
Connection options

Compatible heat pumps air/water by alpha innotec with unit HT 6Split / HT 12Split

Indoor HT 6Split / HT 12Split units can cooperate with external units of Split type. Compatible heat pumps LSplit include:

Symbol	Application
L6Split	HT 6Split
L8Split	HT 12Split
L12Split	

More information about LSplit to be found at https://www.alpha-innotec.com/ and in relevant installation manuals for accessories used.

Chapter Accessories can serve to check the list of accessories to be used with HT 6Split / HT 12Split.

Connecting the heating system

Pipe connections of the heating system are to be made at the top.
* All the required protections and cut-off valves must be installed as close to the HT 6Split / HT 12Split module as possible.
* Where necessary, install the vents.
* Safety valve with a nanometer at the central heating circuit and the safety valve at the hot water system must be installed on relevant conductors XL 11 and XL 4. In order to prevent air sockets, the overflow pipe must be slanted at the entire length from the safety valve, and must be secured against freezing.
* When connecting to the installation where all heaters have been equipped with thermostat valves, install a discharge valve or remove several thermostats to assure appropriate flow.

> **! IMPORTANT**
> The term "heating system", as used in this installation and operation manual, shall mean the heating or cooling system supplied with a hot or cold medium from the HT 6Split / HT 12Split module for heating or cooling purposes.

> **☞ CAUTION**
> Suitable safety valve must be installed directly on the cold water supply line to the hot water tank. Safety valve will protect against excessive increase of pressure.

Connection of the external heat source

An external heat source, eg a gas or oil boiler, can be connected to the back of the HT 6Split / HT 12Split, removing the access block to the connection sockets (picture below). Scheme on page 11.
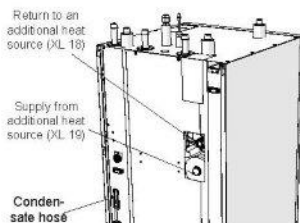
Condensate elimination

The HT 6Split / HT 12Split module is equipped with a condensate hose in the heat exchanger section. The hose drains all condensate away from the device to minimize the risk of damage. If necessary, the hose can be extended.

Connecting refrigerant pipes (not supplied)

Refrigerant pipes must be installed between the external module LSplit and HT 6Split / HT 12Split . The installation must be executed according to the applicable standards and directives.

> **☞ CAUTION**
> The outdoor unit, factory-filled with refrigerant, enables the use of refrigerant pipes (dimension L) between the outdoor unit and the indoor unit measured with a length of L = 15m. The maximum permissible length of the refrigerant pipes can be 30m, but this requires topping up the installation with a refrigerant.

Limitations
* Maximum pipe length, L6Split, L8Split, L12Split is L=30 m.
* Maximum height difference (H): ±7 m.
* Connection of the outdoor unit to the indoor unit must ensure free movement of the refrigerant.
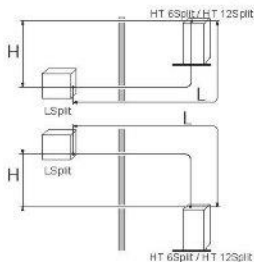
Pipe dimensions and materials
HT 12Split

HT 12Split	Gas pipe	Liquid pipe
Pipe replacement	Ø15,88 mm (5/8")	Ø9,52 mm (3/8")
Connection	Connection – (5/8")	Connection – (3/8")
Material	Quality of copper SS-EN 12735-1 or C1220T, JIS H3300	
Minimum material thickness	1,0 mm	0,8 mm

HT 6Split

| HT 6Split	Gas pipe	Liquid pipe
Pipe replacement	Ø12,7 mm (1/2")	Ø6,35 mm (1/4")
Connection	Connection – (1/2")	Connection – (1/4")
Material	Quality of copper SS-EN 12735-1 or C1220T, JIS H3300	
Minimum material thickness	1,0 mm	0,8 mm

Pipe connection
* Execute the pipe installation with the maintenance valves (QM35, QM36) closed.
* L6Split / L8Split: Remove the side panel on LSplit during the installation to make access easier.
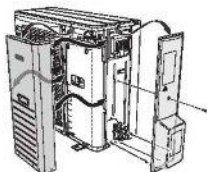
* L12Split:Remove the "to be removed" part from the external panel at the LSplit mode where pipes are to be led. The drawing below presents exemplary pipe outlets.

Front

Elements to be removed
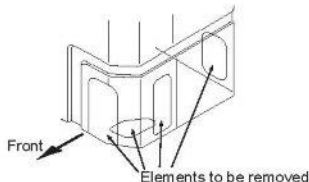
* Make sure that no water or dirt can permeate to the pipes. Contamination of the pipes may damage the heat pump.

* Bend pipes with maximum bending radius (at least R100~R150). Do not bend pipes many times. Use a bending machine.
* Connection of refrigerant pipes to the outdoor unit and indoor unit should be perform with flare connections after prior dismantling of production ends.
* Connect the socket connection and tighten with appropriate torque. Apply the appropriate tightening angle if the torque wrench is not available.

External diameter, copper pipe (mm)	Torque (Nm)	Tightening angle (°)	Recommended tool length (mm)
Ø6,35	14~18	45~60	100
Ø 9,52	34~42	30~45	200
Ø12,7	49~61	30~45	250
Ø 15,88	68~82	15~20	300

> **IMPORTANT**
> When soldering, apply the shielding gas.

Socket connections

Extension:

External diameter, copper pipe	A (mm)
Ø 6,35	9,1
Ø 9,52	13,2
Ø 12,7	16,6
Ø 15,88	19,7

Shift:
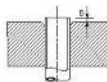
External diameter, copper pipe (mm)	B, using R410A (mm)	B, using a conventional tool (mm)
Ø 9,52	0,0~0,5	0,7~1,3
Ø 15,88		
Ø 6,35		1,0~1,5
Ø 12,7		

Pressure test and leakage test

Both HT 6Split / HT 12Split and LSplit are facto-
ry-tested for pressure and leakage, but pipe connec-
tions between the devices must be checked when the
installation has been completed.

> **IMPORTANT**
> Pipe connections between devices must undergo a
> pressure test and leakage test after completing the in-
> stallation process, according to applicable regulations.
> Use nitrogen only for system compression and rinsing.

Vacuum pump

Use a vacuum pump to remove all air. Turn on ex-
traction for at least one hour. Final pressure, after
emptying, must total 1 mbar (100 Pa, 0.75 Tr or 750
microns) of absolute pressure. If the system is still
moist or is leaking, negative pressure will grow after
the end of emptying.
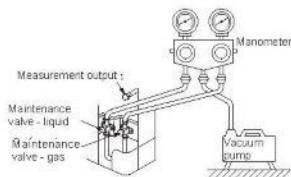
> **ADVICE**
> In order to achieve a better final effect and to acceler-
> ate emptying, follow the following sections:
> • Pipelines should have the largest diameter possi-
>   ble, and be as short as possible.
> • Empty the system to 4 mbar and fill it with dry ni-
>   trogen to atmospheric pressure to end emptying.

Filling the system with a cooling medium

LSplit is supplied together with a cooling medium for
cooling medium of max. length of 15 m. If the length
of the cooling medium pipes exceeds 15 m, supple-
ment the cooling medium in the volume of 0.06 kg/m
for HT 12Split and 0.02 kg/m for HT 6Split.

> **CAUTION**
> The maximum permissible length of the refrigerant pipes
> can be 30m, but this requires topping up the installation
> with a refrigerant after exceeding 15m.

> **IMPORTANT**
> In the case of systems with cooling medium pipes with
> the length of up to 15 m, the supplied volume of the
> cooling medium is sufficient.

When executing pipe connections, pressure tests,
leakage tests and vacuum tests, maintenance valves
(QM35, QM36) must be closed. To fill the pipes and
HT 6Split / HT 12Split with a refrigerant medium main-
tenance valves should be opened again.

Insulation of cooling medium pipes

• Cooling medium (both gas and liquid) pipes must
  be insulated to provide thermal insulation and
  prevent condensation.
• Apply insulation that can sustain at least 120°C.

Principle:
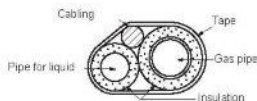
Connections:

> **CAUTION**
> All connections and work related to the refrigeration
> system must be made by a person with appropriate
> authorizations and certificates.

Connections

LSplit can be connected in many various ways.
More information on connections to be found at web-
site https://www.alpha-innotec.com/

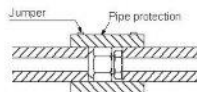|	L6Split	L8Split	L12Split
Max pressure, climate system	0,25 MPa (2,5 Bar)		
Highest recommended supply/return temperature at dimensioned outdoor temperature	55/45 °C		
Max temperature in HT 6Split / HT 12Split	+65 °C		
Max flow line temperature with compressor	+58 °C		
Min supply temperature cooling	+7 °C		
Max supply temp. cooling	+25 °C		
Min volume, climate system during heating, cooling*	50 l	80 l	100 l
Min volume, climate system during under floor cooling*	80 l		100 l
Max flow, climate system	0,38 l/s		0,57 l/s
Min flow, climate system, 100% circulation pump speed (defrosting flow)	0,19 l/s		0,29 l/s
Min flow, heating system	0,12 l/s		0,15 l/s
Min flow, cooling system	0,16 l/s		0,20 l/s

*-Regards circulating volume

Connection options

Connection to the heat pump

The HT 6Split / HT 12Split unit is not equipped with a shut-off valve for the central heating system, hot water system or electric additional heat; these must be installed on the outside of the indoor unit to facilitate any future servicing.
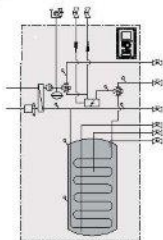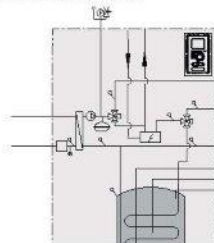

Connection when operating without a heat pump

No change is required to the hydraulic connections configuration for the internal unit to operate individually, without an external unit.

Connection of hot and cold water

The hot water tank should be connected to a water supply system with water pressure of min. 1 bar, max. 10 bar. If the pressure at the cold water inlet to the tank is higher than the permissible level, use a pressure reducer. During heating of the water in the tank, the pressure increases, which is why each tank must be equipped with the appropriate safety valve, installed on the cold water supply, which will protect the tank against an excessive increase in pressure. If using hot water circulation, see subsection "DHW circulation".
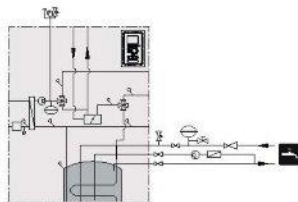
> **IMPORTANT**
> Water supply uti lity must have necessarily installed safety valve which will protect against excessive increase of pressure.

> **IMPORTANT**
> Do not use the heater if there is a blockage of the safety valve.

> **IMPORTANT**
> Installation of any narrowing (e.g. reducers, filters etc.) and shut-off valves between the heater and the safety valve is not allowed. It is only permitted mounting three-way adapter with drain valve that allows to empty the tank and three-way adapter with expansion vessel.

Heating system connection

When connecting to a system with thermostatic valves on all radiators/underfloor heating pipes, use the appropriate hydraulic solutions which ensure the proper heating medium volume and minimum, undisturbed flow. See the subsection "Buffer vessel".
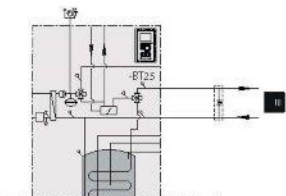
Connecting the 2-pipe cooling operation system

In the 2-pipe cooling operation system, the sensor BT64 / EQ-BT25 assumes the function of sensor BT25. Degree minutes are counted according to EQ-BT25.
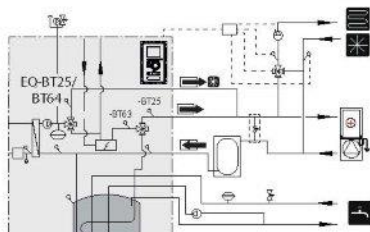
Connecting the 4-pipe cooling operation system

The 4-pipe system requires an additional cooling buffer vessel. Sensor BT64 must be transferred to the buffer vessel. Degree minutes for heating are counted according to BT25. Degree minutes for cooling operation are counted according to BT 64.
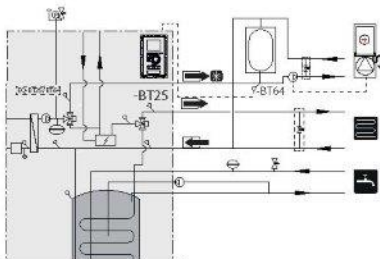
> **IMPORTANT**
> The heat pump should have cooling insulation and are working in an intermittent mode.

Connecting an additional heating circuit

The system can be extended with additional heating circuits only when provided an additional expansion card After using an EP Split card, an additional heating circuit can be activated in the controller.
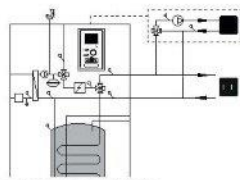
Additional accessories and options and how to connect them are described in the EP Split manual.

DHW circulation

The HT 6Split / HT 12Split have possibility to connect DHW circulation. The circulation connection (XL5) is located at the top of the tank.
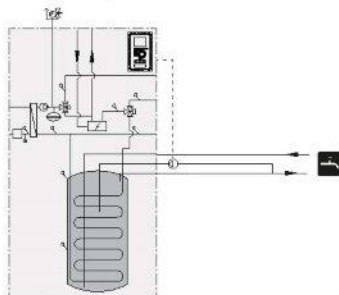
To connect the circulation:

1. Remove the XL5 plug from the top of the housing.
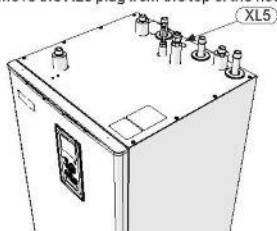
2. Remove the front panel, then move the control box to the right to gain access, to the hydraulic connections.
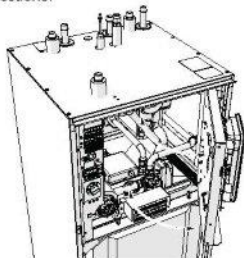
3. Remove the plug from the circulation pipe (XL5).
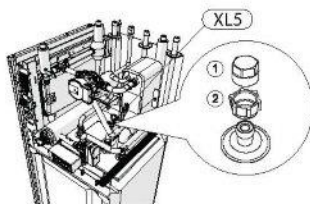
4. Fit an elbow (not included in HT 6Split / HT 12Split) facing towards the back of the casing, into the circulation connection port.
5. Connect the pipe to the elbow, dimensions as shown in the drawing below, routing it out at the top of the casing, where the XL5 plug is located.
6. Fit a circulation pump at the outlet of the pipe from the HT 6Split / HT 12Split unit, and then connect its control to the controller.
7. Replace the control box and the front panel.

Dimensions of the pipe for circulation

elbow 15x15

Connecting the control of the hot water circulation pump

The hot water circulation pump can be connected in two configurations:

- to board AA3:X7 on block AA3-X7:-NO (230V), and N, PE from block X1.
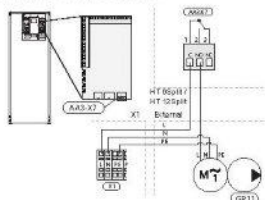
- in case AA3:X7 output is already in use, to accessory board AA5 (not included in HT 6Split / HT 12Split) on block AA5-X9:8 (230V), AA5-X9:7 (N) and X1:PE

Accessory board AA5   External
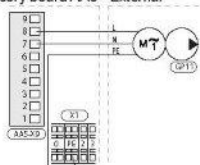
5 Outdoor unit LSplit

Transport and storage

LSplit must be transported and stored vertically.

> **!** **IMPORTANT**
> Ensure that the heat pump cannot fall over during transport.

Assembly

- Place LSplit outdoors on a solid level base that can take the weight, preferably a concrete foundation. If concrete slabs are used they must rest on asphalt or shingle.
- The concrete foundation or slabs must be positioned so that the lower edge of the evaporator is at the level of the average local snow depth; however, a minimum of 300 mm. Stands and attachments on the page are available in the LSplit instruction in the "Accessories" chapter.
- LSplit should not be positioned next to noise sensitive walls, for example, next to a bedroom.
- Also ensure that the placement does not inconvenience the neighbours.
- LSplit must not be placed so that recirculation of the outdoor air can occur. This causes lower output and impaired efficiency.
- The evaporator should be sheltered from direct wind, which negatively affects the defrosting function. Place LSplit protected from wind against the evaporator
- Large amounts of condensation water, as well as melt water from defrosting, can be produced. Condensation water must be led off to a drain or similar (see page13).
- Care must be exercised so that the heat pump is not scratched during installation.
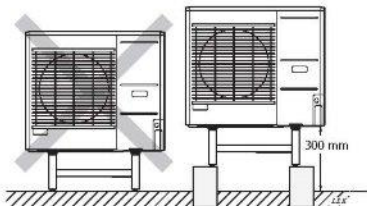
Do not place LSplit directly on the lawn or other non solid surface.
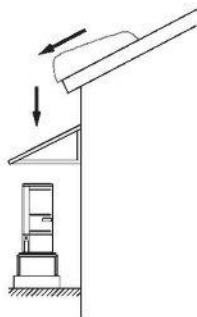
If there is a risk of snow slip from roof, a protective roof or cover must be erected to protect the heat pump,pipes and wiring.

Lift from the street to the set up location

If the base allows, the simplest thing is to use a pallet truck to move the LSplit to the set up location.

> **!** **IMPORTANT**
> The centre of gravity is offset to one side (seep print on the packaging)
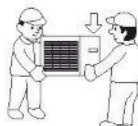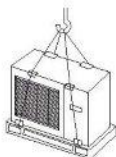
If LSplit needs to be transported across soft ground,- such as a lawn, we recommend that a crane truck is used that can lift the unit to the installation location. When LSplit is lifted with a crane, the packaging must be undamaged and the load distributed with a boom,- see the illustration above.

If a crane cannot be used LSplit can be transported using an extended sack truck. LSplit must be used on the side marked "heavy side" and two people are required to get the LSplit up.

Lift from the pallet to final positioning

Before lifting remove the packaging and the securing strap to the pallet.

Place lifting straps around each machine foot. Lifting from the pallet to the base requires four persons, one for each lifting strap.

It is not permitted to lift anything other than the machine feet.

Scrapping

When scrapping, the product is removed in reverse order. Lift by the bottom panel instead of a pallet!

Condensation run off

Condensation runs out on to the ground below LSplit. To avoid damage to the house and heat pump, the condensation must be gathered and drained away.

> **! IMPORTANT**
> It is important to the heat pump function that condensation water is led away and that the drain for the condensation water run off is not positioned so that it can cause damage to the house.

> **! IMPORTANT**
> The electrical installation and wiring must be carried out under the supervision of an authorised electrician.

> **! IMPORTANT**
> Self regulating heating cables must not b econnected.

- The condensation water (up to 50 litres / 24 hrs) must be routed away by a pipe to an appropriate drain, it is recommended that the shortest outdoor length possible is used.
- The section of the pipe that can be affected by frost must be heated by the heating cable to prevent freezing.
- Route the pipe downward from LSplit.
- The outlet of the condensation water pipe must be at a depth that is frost free or alternatively indoors (with reservation for local ordinances and regulations).
- Use a water trap for installations where air circulation may occur in the condensation water pipe.
- The insulation must be tight against the bottom of the condensation water trough.

Recommended alternative for leading off condensation water

Drain doors
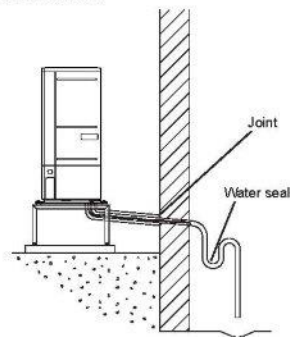
The condensation water is lead to an indoor drain (subject to local rules and regulations).

Route the pipe downward from the air/water heat pump.

The condensation water pipe must have a water seal to prevent air circulation in the pipe.
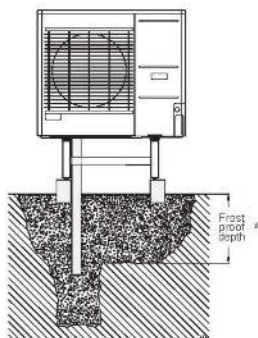
If the house has a cellar the stone caisson must be positioned so that condensation water does not affect the house. Otherwise the stone caisson can be positioned directly under the heat pump.

The outlet of the condensation water pipe must be at frost free depth.

Gutter drainage

IMPORTANT
Bend the hose to create a water seal, see illustration below.
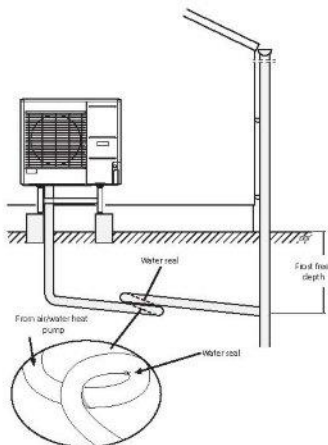
- The outlet of the condensation water pipe must be at frost free depth.
- Route the pipe downward from the air/water heat pump.
- The condensation water pipe must have a water seal to prevent air circulation in the pipe.
- The installation length can be adjusted by the size of the water seal.

CAUTION
If none of the recommended alternatives is used good lead off of condensation water must be assured.

Dimensions

L6Split

L8Split

L12Split

Prawo
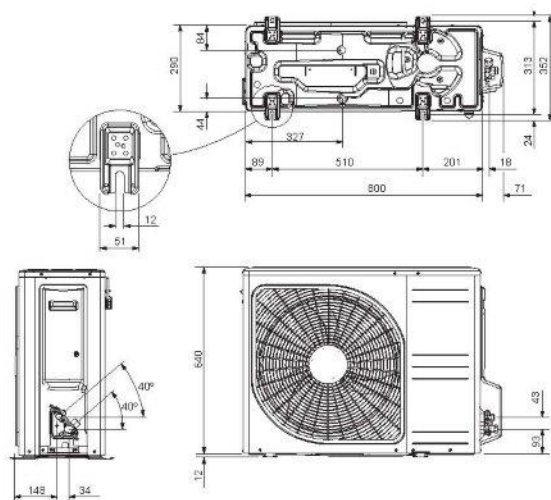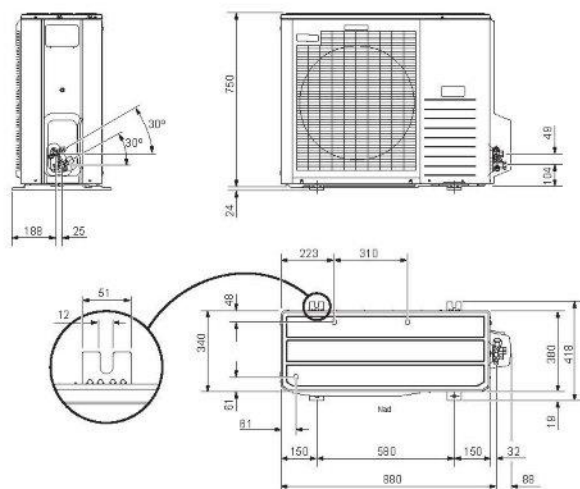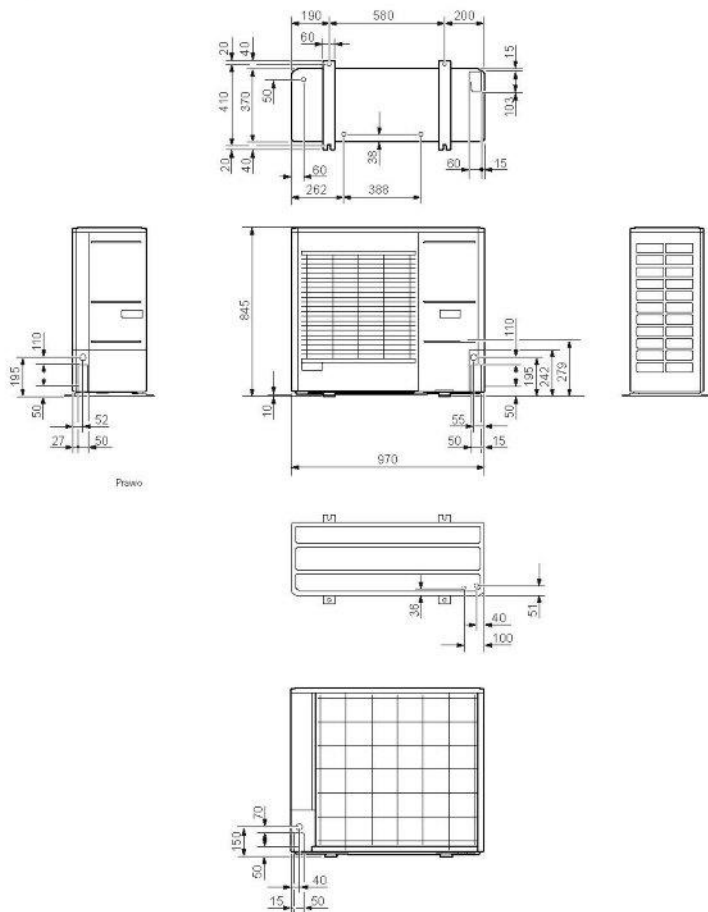
Installation area

The recommended distance between LSplit and the house wall must be at least 15 cm. Clearance above LSplit should be at least 100 cm. However, free space in front must be 100 cm for future servicing

15 cm

Free space behind

30 cm

Minimum free space

30 cm

Minimum distance during use of several LSplit

However, the free space in front must be 100 cm for future servicing
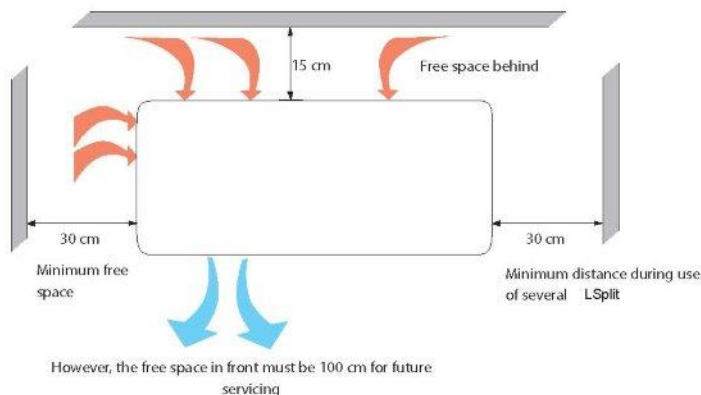
Sound pressure levels

The LSplit is usually placed next to a house wall, which gives a directed sound distribution that should be considered. Accordingly, you should always attempt to find a placement on the side that faces the least sound sensitive neighbouring area. The sound pressure levels are further affected by walls, bricks, differences in ground level, etc and should therefore only be seen as guide values.

2 m
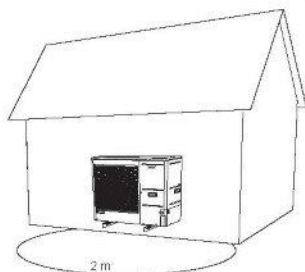
In order to reduce the noise level, avoid direct directing of the air outlet to places particularly sensitive to excessive sound emission. The action that can be taken is, for example, making acoustic screens so that the noise is less onerous. The propagation of sound is influenced by, among others, such as: source directionality, absorption by atmosphere, ground effect, reflection from the surface, shielding through obstacles.

Noise		L6Split	L8Split	L12Split
Sound power level, according to EN12102 at 7/35 °C (nominal)*	L_w(A)	51	55	58
Sound pressure level at 2 m free standing (nominal)*	dB(A)	32	41	44

* Free space

6 Electrical connections

General information

The entire electrical equipment, apart from outdoor temperature sensors, room sensors, and current intensity meters, has been connected according to factory settings.

- Disconnect the indoor module before performing tests of electrical system insulation in the building.
- If the building is equipped with a differential switch, HT 6Split / HT 12Split must be equipped with a separate switch.
- The diagram of indoor module connections can be found in section „Diagram of electrical connections".
- Do not lay communication and signal cables to external contacts near high-voltage cables.
- Minimum cross-section of communication and signal cables to external contacts must total 0.5mm² with the length of up to 50 m, for example EKKX or LiYY, or similar.
- The minimum cross-section of the power cables must be between 2.5 mm² and 4 mm².
- When laying cables in HT 6Split / HT 12Split, apply cable passes UB1 and UB2 (as marked in the illustration). In UB1 and UB2, cables are input through the entire indoor module from the back wall towards the front wall.

> **!** **IMPORTANT**
> As long as the heating circuits have not been filled with the heating medium, and if the central heating system has not been vented, the switch (SF1) in controller cannot be set in positions „I" or „△". Otherwise, the temperature limiter, thermostat and flow-through heater can be damaged.

> **!** **IMPORTANT**
> The electrical installation and maintenance service must be performed under the supervision of a qualified power technician with relevant qualifications. Before starting any maintenance works, power supply must be cut off using an automatic switch. The electrical installation and cabling must be executed according to applicable regulations.

> **!** **IMPORTANT**
> When setting SF1 to „△" - the HT 6Split / HT 12Split unit switches the QN10 valve to C.H. and heating takes place according to BT30 thermostat. Hot water it is not heated during „△".
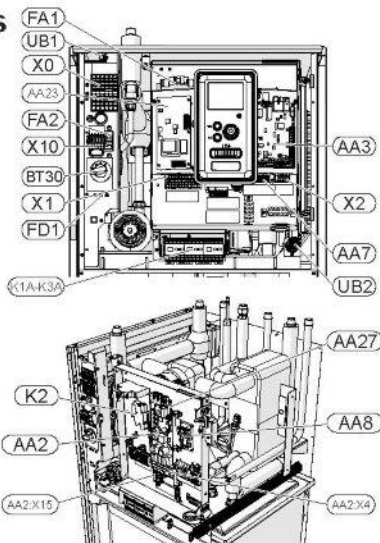
LEGEND

X0	Voltage terminal block 400V~/230V~
X1	Voltage terminal block 230V~
X2	Voltage terminal block 230V~
X10	Voltage terminal block 230V~
FA1	Circuit breaker (to internal module)
K1A-K3A	Submersible heater contact
BT30	Thermostat, standby mode
AA3	Sensor card
AA23	Communication card
AA7	Relay card
FA2	Circuit breaker (L Split)
FD1	Temperature limiter
UB1	Cable pass
UB2	Cable pass
K2	Alarm relay
AA2	Main card
AA2:X15	Low voltage terminal block
AA2:X4	Low voltage terminal block
AA8	Titanium anode card
AA27	Relay card

Temperature limiter

Temperature limiter (FD1) cuts off the power supply of the electrical heating module if the temperature increases to the range of approximately 98°C or decreases below -8°C, and can be reset manually.

> **IMPORTANT**
> In the case of the thermal fuse, please report it to an authorized service facility to eliminate the possible cause.

Resetting

Temperature limiter (FD1) is accessible behind the front cover. Temperature limiter is reset by strong pressing of the button (FD1-SF2) using a small screwdriver. Press the button, max. 15 N (approx. 1.5 kg).
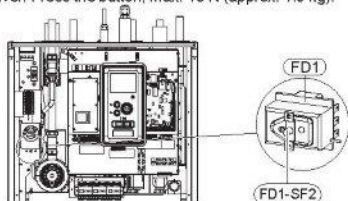
Cable blockade

Use an appropriate tool to release/block cables in the internal module clamps.
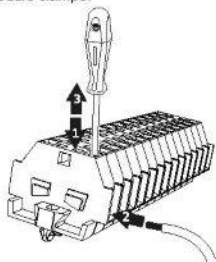
Connections

> **IMPORTANT**
> To prevent interference, do not lay unscreened communication and / or signal cables to external contacts less than 20 cm from high-current cables.

> **IMPORTANT**
> The electrical installation to which the device will be connected should be made in accordance with current regulations.

400V power connection

The power connection is connected to terminal (X0) via the input on the back of the unit. The cable should be dimensioned in accordance with the applicable standards.

400V connection allows for maximum power of 9kW on the additional heater. The connection should be made according to the diagram used in the operating instructions.

400V power supply connection diagram
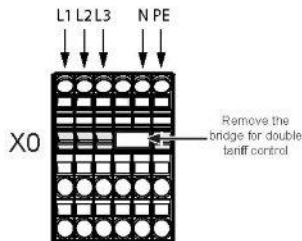
> **IMPORTANT**
> When a 400V connection is used, the maximum power of the electrical module used in the HT Split unit is 9kW.

> **IMPORTANT**
> In the case of dual tariff power supply, it is advisable to connect a neutral wire from the power supply circuit (meter).

230V power connection

The power connection is connected to terminal (X0) via the input on the back of the unit. The cable should be dimensioned in accordance with the applicable standards.

The 230V connection allows for maximum power of 4.5kW on the additional heater. The connection should be made according to the diagram used in the operating instructions.

230V power supply connection diagram

NEVER INSTALL BRIDG-
ES ON THE L2 AND L3
JOINTS!

Place a bridge to
connect the 230V
power supply

Remove the
bridge for double
tariff control
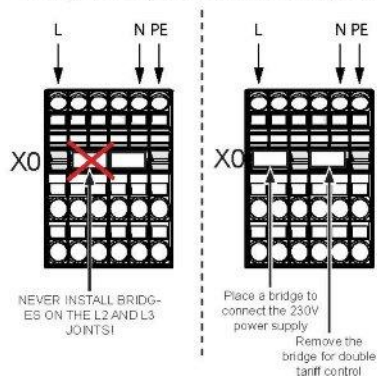
> **! IMPORTANT**
> When 230V connection is used, the maximum power
> of the electric module used in HT Split is 4.5kW.

> **! IMPORTANT**
> In the case of dual tariff power supply, it is advisable to
> connect the neutral wire from the power supply circuit
> (meter) - especially when connecting to 230V.

> **! IMPORTANT**
> It is forbidden to mount bridges on the connection of
> lines L2 and L3. Otherwise, the device and the electri-
> cal system may be damaged.
>
> Alpha Innotec is not responsible for damages caused
> by failure to comply with the above provision.

Circuit breaker

The automatic heating control system, circulation pump and their wiring in the HT 6Split / HT 12Split are internally protected by an overcurrent switch (FA1). The LSplit outdoor module and accessories are inter- nally protected in the HT 6Split / HT 12Split by an over- current breaker (FA2).

Connection
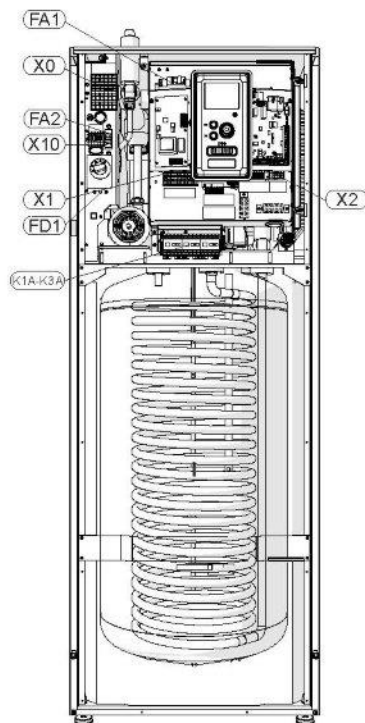
Connection between HT 6Split / HT 12Split and LSplit

The conductor connecting the devices must be connected to the power supply clamp (TB) at LSplit and to clamp (X10) at HT 6Split / HT 12Split .

> **IMPORTANT**
> The LSplit module is to be grounded before connecting the devices with a cable. The cabling must be fixed in such a way so that the terminal block is not under tension. The terminal without insulation is 8 mm long.

LSplit

Connect the phase (brown), neutral conductor (blue), communication (black and grey) i protective (yellow-green) according to the drawing:
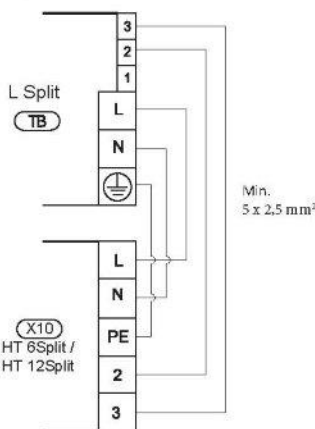
Optional connections

Connection of the external temperature sensor

The outdoor temperature sensor (included in the kit) should be connected to the HT 6Split / HT 12Split unit on the AA3-X6:1 and AA3-X6:2.
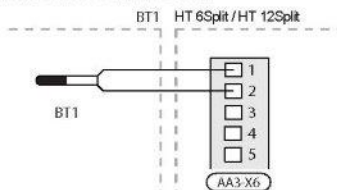
LOAD MONITOR

When many power consumers are connected in the property at the same time as the electric additional heat is in operation, there is a risk of the property's main fuses tripping. Control module has an integrated load monitor that controls the power steps for the electric additional heat by disconnecting step by step in event of overload in a phase. Reconnection occurs when other current consumption is reduced.

Connecting current sensors

A current sensor (BE1 - BE3) must be installed on each incoming phase conductor into the electrical distribution unit, to measure the current. The electrical distribution unit is an appropriate installation point. Connect the current sensors to a multi-core cable in an enclosure next to the electrical distribution unit. Use unscreened multi-core cable of at least 0.5 mm², from the enclosure to control module.

Connect the cable to the input board (AA3) on terminal block X4:1-4 where X4:1 is the common terminal block for the three current sensors.

The value for the size of the fuse is set in menu 5.1.12 to correspond with the size of the property's main fuse. Here it is also possible to adjust the current sensor's transformer ratio. Enclosed current sensors have a transformer ratio of 300 and, if these are used, the incoming current must not exceed 50 A.

> **IMPORTANT**
> The voltage from the current sensor to the input board must not exceed 3.2 V.
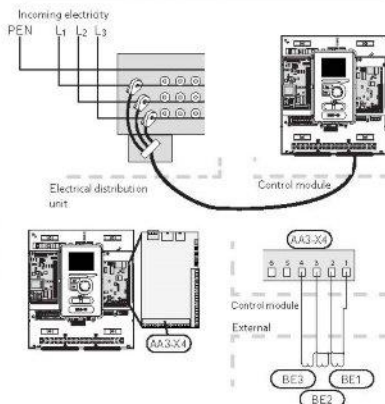
If the installed heat pump is frequency controlled, it will be limited when all power stages are disengaged.

Settings

Auxiliary preheater - max power

Flow-through heater has maximum capacity of 9 kW (3 phases). The capacity of the flow-through heater is divided into 3 gears. Possible operating capacities are as follows: 3, 6, and 9 kW. Maximum capacity of the flow-through heater is set in menu 5.1.12.

Emergency mode

Emergency Mode Thermostat
When the controller automation is in the emergency mode (SF1 is set as ⚠), only the most necessary functions are active.

- Domestic hot water is not heated.
- Constant temperature in the supply pipeline; more information to be found in the Chapter Emergency Mode Thermostat.

> **!** **IMPORTANT**
> During emergency operation, DHW heating is not possible.

Emergency Mode Thermostat

In the emergency mode, the supply temperature is set using a thermostat (BT30). It must be set according to the demand of the circuits in operation. The available regulation range is between 6 and 67°C. Remember that for floor heating, the settings must be min. 20°C, max. 35-45°C in order to preserve heat comfort in the room and assure effective system operation.
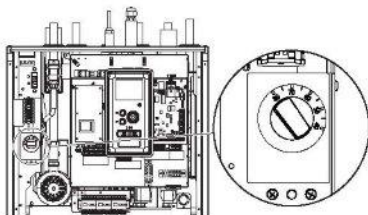
> **!** **IMPORTANT**
> The maximum available heater power in emergency mode is 3kW.

> **!** **IMPORTANT**
> The temperature on the thermostat must be set according to the installation requirements. Too high a temperature can damage the insulation.

7 Start-up and regulation

Preparations

1. Check whether the switch in the controller is in the position „ ⏻ ".
2. Check whether the drain valve has been completely closed, and whether the temperature limiter has not been activated (FD1).
3. Compatible Alpha innotec air/water heat pumps have been listed in the Connection Options section.

Filling and venting

Filling the DHW heater at HT 6Split / HT 12Split

1. Open the hot water tap in the building to the tank.
2. Open the valve cutting off cold water. When doing so, the valve should be completely open.
3. When water starts to flow out of the hot water tap, DHW heater is full and the tap can be closed.

Filling and venting the heating system and HT 6Split / HT 12Split

1. Open the vent at the top point of the heating system.
2. Set all the isolation valves in the position allowing for flow in all circuits.
3. Open the valve for filling the heating installation and fill it with the heating medium.
4. Close the vent when the heating medium flows out of it continuously (without air bubbles).
5. Control the manometer showing pressure increase. Fill the system until the pressure of 2 bar, and then close the filling valve.
6. Start the circulation pump of the heating system every now and then, while opening the vents placed on the heating circuit.
7. Open the safety valve until the pressure at the manometer falls down to about 1 bar of the normal operating range.
8. If, while venting, the pressure drops down below 1 bar, supplement the heating medium in the circuit.

Circulation pump

Pump speed

The circulation pump in HT 6Split / HT 12Split is controlled by frequency, and is automatically regulated via control and based on the heating demand.
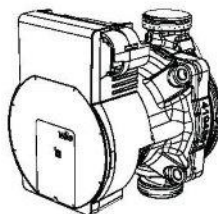
Available pressure, circulation pump.

Emptying the heating system

1. Connect the hose to the external drain valve of the system.
2. Then open the drain valve to empty the heating system.
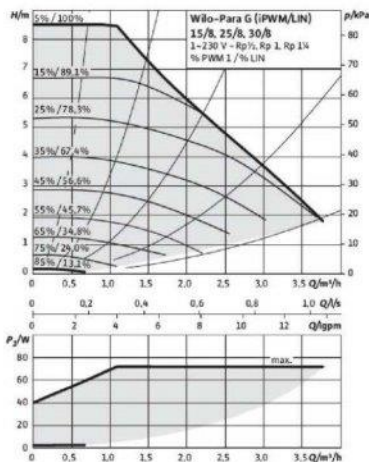
Later regulation, venting

Initially, air is removed from hot water, and venting may be necessary. If gurgling can be heard in the heating system, the entire system needs additional venting. The installation is vented through vents. When venting, HT 6Split / HT 12Split must be switched off.

Start

In order to start the heat pump
1. Turn on the power of the HT 6Split / HT 12Split unit making sure that the LSplit unit has been properly connected to the power supply.
2. Follow the instructions displayed in the controller's start-up wizard or start the start-up wizard in menu 5.7.

Start guide

> **IMPORTANT**
> There must be water in the climate system be-fore the switch is set to „ I ".

1. Set switch (SF1) on controller to position "I".
2. Follow the instructions in the display's start guide. If the start guide does not start when you start the controller , start it manually in menu 5.7.

> **ADVICE**
> See page 38 for a more in-depth introduction to the installation's control system (operation,menus etc.)

Commissioning

The first time the installation is started a start guide is started. The start guide instructions state what needs to carried out at the first start together with a run through of the installation's basic settings.

The start guide ensures that start-up is carried out correctly and cannot be bypassed. The start guide can be started later in menu 5.7.

During the start-up guide, the reversing valves and the shunt are run back and forth to help vent the heat pump.

> **CAUTION**
> As long as the start guide is active, no function in controller will start automatically. The guide will appear at each restart of controller, until it is deselected on the last page.

> **CAUTION**
> If starting up the system in low outdoor temperatures and a low heating medium temperature in the central heating system, the central heating system should be warmed up first, using the additional heat, to a temperature of about 20 ℃.

Operation in the start guide

A. Page   B. Name and menu number

C. Option / setting
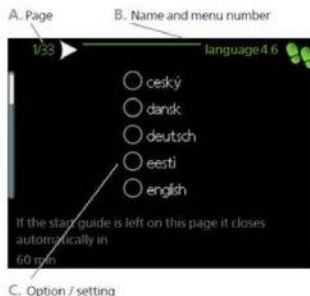
A. Page

Here you can see how far you have come in the start guide. Scroll between the pages of the start guide as follows:
1. Turn the control knob until one of the arrows in the top left corner (at the page number) has been marked.
2. Press the OK button to skip between the pages in the start guide.

B. Name and menu number

Read what menu in the control system this page of the start guide is based on. The digits in brackets re-fer to the menu number in the control system.
If you want to read more about affected menus either consult the help menu or read the user manual.

C. Option / setting

Make settings for the system here.

D. Help menu

In many menus there is a symbol that indicates that extra help is available.

To access the help text:
1. Use the control knob to select the help symbol.
2. Press the OK button..

The help text often consists of several windows that you can scroll between using the control knob.

Starting without a heat pump

The indoor unit can be used without a heat pump, i.e only as an electric boiler, to produce heat and hot water before the heat pump is installed, for example. Go to menu 5.2 System settings and turn off the heat pump.

> **IMPORTANT**
> Select the auto or manual operation mode when the indoor unit is to be used again with the heat pump.

8 Control - Introduction

Display unit

A Display

B Status lamp

C OK button

D Back button

E Control knob

F Switch

G USB port
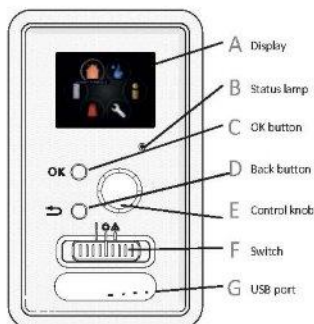
A Display

Instructions, settings and operational information are shown on the display. You can easily navigate between the different menus and options to set the comfort or obtain the information you require.

B Status lamp

The status lamp indicates the status of the control module. It:
- lights green during normal operation.
- lights yellow in emergency mode.
- lights red in the event of a deployed alarm.

C OK button

The OK button is used to:
- confirm selections of sub menus/options/set values/page in the start guide.

D Back button

The back button is used to:
- go back to the previous menu.
- change a setting that has not been confirmed.

E Control knob

The control knob can be turned to the right or left. You can:
- scroll in menus and between options.
- increase and decrease the values.
- change page in multiple page instructions (for example help text and service info).

F Switch (SF1)

The switch assumes three positions:
- On (I)
- Standby (⏻)
- Emergency mode (⚠)

Emergency mode must only be used in the event of a fault on the control module. In this mode, the compressor in the heat pump switches off and the immersion heater engages. The control module display is not illuminated and the status lamp illuminates yellow.

G USB port

The USB port is hidden beneath the plastic badge with the product name on it.

The USB port is used to update the software.

Menu system

Menu 1 - INDOOR CLIMATE

Setting and scheduling the indoor climate. See information in the help menu or user manual subsection MENU 1.

Menu 2 - HOT WATER

Setting and scheduling hot water production. See information in the help menu or user manual subsection MENU 2.

Menu 3 - INFO

Display of temperature and other operating information and access to the alarm log. See information in the help menu or user manual subsection MENU 3.

Menu 4 - MY SYSTEM

Setting time, date, language, display, operating mode etc. See information in the help menu or user manual subsection MENU 4.

Menu 5 - SERVICE

Advanced settings. These settings are not available to the end user. The menu is visible when the Back button is pressed for 7 seconds, when you are in the start menu. See information in the user manual subsection MENU 5.

Symbols in the display

The following symbols can appear in the display during operation.

Symbol	Description
	This symbol appears by the information sign if there is information in menu 3.1 that you should note.
	These two symbols indicate whether the compressor in the outdoor unit or additional heat in the installation is blocked via controller. These can, for example, be blocked depending on which operating mode is selected in menu 4.2, if blocking is scheduled in menu 4.9.5 or if an alarm has occurred that blocks one of them. Blocking the compressor Blocking additional heat
	This symbol appears if periodic increase or lux mode for the hot water is activated.
	This symbol indicates whether "holiday setting" is active in 4.7.
	This symbol indicates whether the controller has contact with MyUpway.
	This symbol indicates the actual fan speed if these revolutions have been changed in relation to the normal setting. Required additional equipment.
	This symbol indicates whether solar heating is active. Required additional equipment PV Split.
	This symbol indicates whether pool heating is active. Required additional equipment IPP Split.
	This symbol indicates whether cooling is active.

OPERATION

To move the cursor, turn the control knob to the left or the right. The selected position is white and/or has a highlighted tab.

SELECTING MENU

To advance in the menu system, choose a main menu by selecting it and then pressing the OK button. A new window then opens with submenus.
Choose one of the submenus by selecting it and then pressing the OK button.

SELECTING OPTIONS

In an options menu the current selected option is indicated by a green tick.
To choose another option
1. Select the applicable option. One of the options is pre-selected (white).
2. Press the OK button to confirm the selected option. The selected option has a green tick.

Setting a value

Values to be changed

To set a value:
1. Select the value you want to set using the control knob.
2. Press the OK button. The background of the value turns green, which means that you have accessed the setting mode.
3. Turn the control knob to the right to increase the value and to the left to reduce the value.
4. Press the OK button to confirm the value you have set. To change and return to the original value, press the Back button.

Use the virtual keyboard

Different keyboards
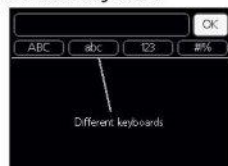
In some menus where text may need to be entered, a virtual keyboard is available.

Depending on the menu, you can access different character sets which you can select using the control knob. To change character table, press the Back button. If a menu only has one character set, the default keyboard is displayed automatically. When you have finished writing, select "OK" and press the OK button.

Scroll through the windows

A menu can consist of several windows. Turn the control knob to scroll between the windows.

Current menu window   Number of windows in the menu

Scroll through the windows in the start guide

Arrows to scroll through window in start guide

1. Turn the control knob until one of the arrows in the top left corner (at the page number) has been marked.
2. Press the OK button to skip between the steps in the start guide.

Help menu

 In many menus there is a symbol that indicates that extra help is available

To access the help text:
1. Use the control knob to select the help symbol.
2. Press the OK button.

The help text often consists of several windows that you can scroll between using the control knob.

9 Control

Menu 1 - INDOOR CLIMATE

1-INDOOR CLIMATE	1.1 temperature	1.1.1 - heating	
		1.1.2 - cooling	
	1.2 - ventilation [1]		
	1.3 - scheduling	1.3.1 - heating	
		1.3.2 - cooling	
		1.3.3 - ventilation [1]	
	1.9 - advanced	1.9.1 - curve	1.9.1.1 - heating curve
			1.9.1.2 - cooling curve
		1.9.2 - external adjustment	
		1.9.3 - min. flow line temp.	1.9.3.1 - heating
			1.9.3.2 - cooling
		1.9.4 - room sensor settings	
		1.9.5 - cooling settings	
		1.9.6 - fan return time[1]	
		1.9.7 - own curve	1.9.7.1 - heating
			1.9.7.2 - cooling
		1.9.8 - point offset	

[1] The additional equipment is necessary.

Menu 2 - HOT WATER

2 - HOT WATER	2.1- temporary lux	
	2.2 - comfort mode	
	2.3 - scheduling	
	2.9 - advanced	2.9.1 - periodic increase
		2.9.2 - hot water recirc.[2]

Menu 3 - INFO

3 - INFO	3.1 - service info
	3.2 - compressor info
	3.3 - add. heat info
	3.4 - alarm log
	3.5 - indoor temp. log

[2] The EP Split additional equipment is necessary.

Menu 4 - MY SYSTEM

4 - MY SYSTEM	4.1 - plus functions	4.1.1 - pool [3]	
		4.1.2 - pool 2 [2]	
		4.1.3 - internet	4.1.3.1 - Uplink
			4.1.3.8 - tcp/ip settings
			4.1.3.9 - proxy settings
		4.1.4 - sms [4]	
		4.1.5 - SG Ready	
		4.1.6 - smart price adapt.	
		4.1.7 - smart home	
		4.1.8 - smart energy source	4.1.8.1 - settings
			4.1.8.2 - set. price
			4.1.8.3 - CO2 impact
			4.1.8.4 - tariff periods, electricity
			4.1.8.6 - tariff per, ext. shunt add
			4.1.8.7 - tariff per, ext. step add
			4.1.8.8 - tariff periods
		4.1.10 - solar electricity [5]	
	4.2 - op. mode		
	4.3 - my icons		
	4.4 - time & date		
	4.6 - language		
	4.7 - holiday setting		
	4.9 - advanced	4.9.1 - op. prioritisation	
		4.9.2 - auto mode setting	
		4.9.3 - degree minute setting	
		4.9.4 - factory setting user	
		4.9.5 - schedule blocking	
		4.9.6 - schedule silent mode	

[3] The IPP Split additional equipment is necessary.
[4] The additional equipment is necessary.
[5] The PV Split additional equipment is necessary.

Menu 5 - SERVICE

5 - SERVICE	5.1 - operating settings	5.1.1 - hot water settings [6]	
		5.1.2 - max flow line temperature	
		5.1.3 - max diff flow line temp.	
		5.1.4 - alarm actions	
		5.1.5 - fan sp. exhaust air [7]	
		5.1.6 - fan sp. supply air [7]	
		5.1.12 - addition	
		5.1.14 - flow set. climate system	
		5.1.22 - heat pump testing	
		5.1.23 - compressor curve	
		5.1.25 - time filter alarm	
	5.2 - system settings	5.2.2 - installed slaves	
		5.2.3 - docking	
		5.2.4 - accessories	
	5.3 - accessory settings	5.3.2 - shunt controlled add. heat	
		5.3.3 - extra climate system [6]	
		5.3.4 - solar heating [9]	
		5.3.6 - step controlled add. heat	
		5.3.8 - hot water comfort [6]	
		5.3.11 - modbus [10]	
		5.3.12 - exhaust/supply air module [7]	
		5.3.14 - F135 [11]	
		5.3.15 - GBM communications module [12]	
		5.3.16 - humidity sensor [13]	
		5.3.21 - flow sensor / energy meter [14]	
	5.4 - soft in/outputs		
	5.5 - factory setting service		
	5.6 - forced control		
	5.7 - start guide		
	5.8 - quick start		
	5.9 - floor drying function		
	5.10 - change log		
	5.11 - slave settings	5.11.1 - EB101	5.11.1.1 - heat pump
			5.11.1.2 - charge pump (GP12)
		5.11.2 - EB102	
		5.11.3 - EB103	
		5.11.4 - EB104	
		5.11.5 - EB105	
		5.11.6 - EB106	
		5.11.7 - EB107	
		5.11.8 - EB108	
	5.12 - country		

[6] The EP Split additional equipment is necessary.
[7] The additional equipment is necessary.
[9] The additional equipment is necessary.
[9] The additional equipment is necessary.
[10] The Modbus Split additional equipment is necessary.

[11] The additional equipment is necessary.
[12] The additional equipment is necessary.
[13] The additional equipment is necessary.
[14] The additional equipment is necessary.

Start guide

The start guide will appear the first time that the HT 6Split / HT 12Split controller is started up. The start guide can also be launched independently in menu 5.7. The individual settings for the start guide's factory settings are described below.

1/16 Language

In this menu, select the operating language of the controller.
Factory settings: English

2/16 Information

This menu displays information about the start guide.

3/16 Flow set. climate system

In this menu, you can choose the basic settings for the climate system. For more information select "⑦".
Factory setting: presettings
Factory setting: radiator
Factory setting: -15.0 DOT C
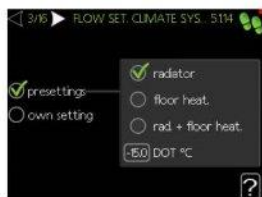
4/16 Accessories

In this menu, you can activate additional accessories that are connected. For more information select "⑦".
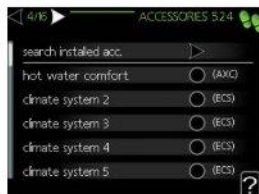
5/16 Room temp. sensor set.

Settings for the room sensor (accessory) can be activated and changed in this menu. For more information select "⑦".
Factory setting: deactivated
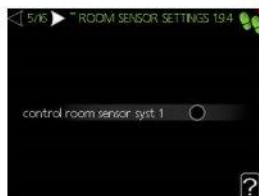
6/16 Outdoor temp. sensor check

In this menu, you can check the permissible values for the external sensors. For more information select "?".

7/16 Add. heat

In this menu, you can choose the settings for the additional heat (built-in electric module). For more information select "?".

Factory settings:
add.type: step controlled
positioning: before QN10
max step: 3
binary stepping: deactivated
fuse size: 16 A
transformation ratio: 300

! **IMPORTANT**

In the case of a fuse rating with a smaller value (applies to the main fuse rating in the house) you can set this value lower than 16 A. Note, this will reduce the power of the appliance. Connecting current sensors is required.

You cannot set this value higher than 20A.

8/16 Installed slave devices

In this menu, you can select slave devices. For more information select "?".
Factory settings:
Slave 1: active (EB101)

9/16 Time and date

In this menu, set the current date and time. There is also the option to choose the time display format and time zone.

10/16 Min. heat. supply. temp.

In this menu, you can edit the minimum supply temperature of the climate system. For more information select "?".
Factory settings:
Climate system 1: 20 C

11/16 Max. heat. supply. temp.

In this menu, you can edit the maximum supply temperature of the climate system. For more information select "?".
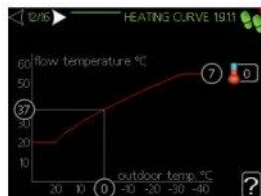*Factory settings:*
Climate system 1: 55 C

The recommended setting values are:
+ 35 for under floor heating systems,
+ 55 for radiator heating.

12/16 Heating curve

In this menu, you can edit the heating curve for the HT 6Split / HT 12Split unit. For more information select "?".
Factory settings:
Heating curve: 7

For detailed information on curve settings, see pt. *"User settings"*.

13/16 Operating mode

In this menu, you can choose the operating mode for the HT 6Split / HT 12Split unit. For more information select "?".

Factory settings: auto

> **CAUTION**
> Recommended operating mode "auto". This may only be edited by qualified persons.

14/16 Alarm actions

In this menu, you can activate alarm actions. For more information select "?".

Factory settings:
Reduce room temp.: deactivated
Stop hot water: deactivated
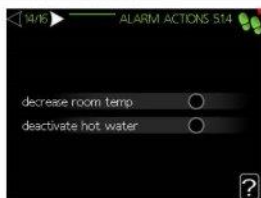
15/16 Reminder

Reminder to fill in the checklist in section 1 of the User manual.

16/16 Start guide

In this menu, you can choose whether the start guide will restart the next time the system is started up.

Settings for the user

Menu 1 – Indoor climate

The INDOOR CLIMATE menu is used to modulate the settings for the climate system. There are several submenus. Status information for the relevant menu can be found on the display to the right of the menus.

Menu 1.1 – Temperature

In this menu, you can set the temperature for the climate system. The status information shows the set point values for the climate system.

In Menu 1.1 choose between heating or cooling (if active) and then set the desired temperature in the next menu "Heating/cooling temperature".

The display shows the set point values for the system (offset heating curve). To increase or reduce the indoor temperature, increase or reduce the value on the display.
For more information select "?".

Setting the temperature (without room sensors activated):
Setting range: -10 do +10
Factory setting: 0

Menu 1.3 - Scheduling

In this menu, you can schedule the room temperature (heating/cooling/ventilation) for each day of the week. You can also schedule a longer period during a selected period (holiday) in menu 4.7.

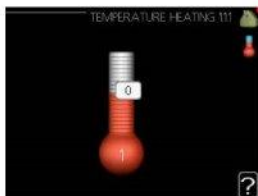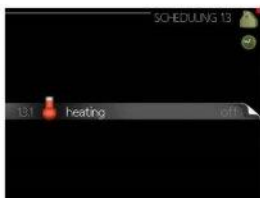In menu 1.3, select heating or cooling (if active), then program an increase or decrease in the room temperature for a maximum of three time periods per day. For more information select "?".

Factory settings:
Heating: off
Cooling (if activated): off

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.
System: Select here which climate system the schedule is for. This option is only displayed if more than one climate system is present.
Day: Select which day or days of the week the scheduling is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to be the same as the finish time. If the line "all" is used, days in the period will be set for these times
Time period: The scheduled start and finish time for the selected day are selected here.
Adjustment: See relevant sub menu.
Conflict: If two settings conflict with each other, a red exclamation mark is displayed.

Menu 1.9 - Advanced

This menu is intended for advanced users. It contains several other submenus.

Menu 1.9.1 - Curve

You can select heating or cooling operation in the curve menu. The next menu (heating curve/cooling curve) shows the heating and cooling curves for your house. The curve is designed to ensure a constant indoor temperature, regardless of the outdoor temperature, and thereby ensure energy-efficient operation. It is from these heat curves that the heat pump's controller determines the temperature of the heating medium in the system, the supply temperature, and therefore the indoor temperature. Select the curve and read off how the supply temperature changes at different outdoor temperatures here. The number to the far right of "system" displays which system you have selected the heating curve/cooling curve for.

The optimal slope depends on the climate conditions in your location, if the building has radiators or underfloor heating, and how well insulated the building is.

The curve is set when the climate system is installed, but may need adjusting later. Normally, the curve will not need further adjustment. For more information select "?".
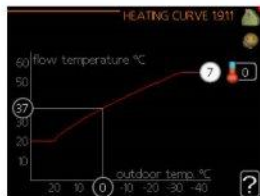
Factory settings:
Heating curve: 7

CAUTION
When making fine adjustments to the indoor temperature, the curve must be offset up or down, this is done in menu 1.1 - Temperature.

IMPORTANT
In underfloor heating systems, the max. supply temperature is usually set between 35 and 45 °C.

The figure at the end of the curve indicates the curve slope. The figure beside the thermometer gives the offset of the curve. Use the control knob to set a new value. Confirm the new setting by pressing the OK button.

Curve 0 is your own curve created in menu 1.9.7.

Menu 1.9.2 - External adjustment

Connecting an external contact, for example, a room
sensor or a timer allows you to temporarily or period-
ically raise or lower the room temperature while heat-
ing. When the external contact is activated, the offset
heating curve is changed by the number of steps se-
lected in the menu. If a room sensor is installed and
activated, the desired room temperature (°C) will be
set.

If there is more than one climate system, separate set-
tings can be entered for each system. For more infor-
mation select "?".

Factory settings:
Heating
Climate system 1: 0

Cooling (if activated)
Climate system 1: 0

Menu 1.9.3 - Min. supply temp.

Select heating or cooling operation in menu 1.9.3, and
in the next menu (min. supply temp.heating/cooling)
set the minimum supply temperature of the climate
system. This means that HT 6Split / HT 12Split never
calculates a temperature lower than the one set here.
If there is more than one climate system, separate

settings can be entered for each system.

Factory settings:
Heating
Climate system 1: 20 °C

Cooling (if activated)
Climate system 1: 18 °C

Menu 1.9.4 - Room sensor settings

Room sensors to adjust the room temperature (not in-
cluded) can be activated here.

Here you can set a factor (a numerical value) that de-
termines how much an over or sub normal temperature
(the difference between the desired and actual room
temperature) in the room is to affect the supply tem-
perature to the climate system. A higher value gives a
greater and faster change of the offset heating curve.
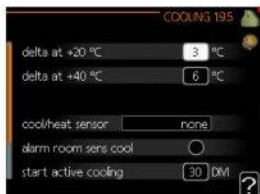For more information select "?".

Factory settings: off

Menu 1.9.5 - Cooling operation settings

HT 6Split / HT 12Split can be used to cool the house during hot periods of the year. For more information select "⁇".

heat./cool. sensor

An extra temperature sensor can be connected to the heat pump in order to determine when it is time to switch between heating and cooling operations.
When several heating/cooling sensors are installed, you can select which one of them should be in control.

> **CAUTION**
> When the heating/cooling sensors BT74 have been connected and activated in menu 5.4, no other sensor can be selected in menu 1.9.5.

start active cooling

Here you can set when active cooling is to start. Degree minutes are a measurement of the current heating demand in the house and determine when the compressor, cooling operation or additional heat will be started/stopped.

Factory settings:
Delta at +20 C.: 3 °C
Delta at +40 C.: 6 °C

Heat./cool. sensor: N/A
Alarm - room sens. cooling: deactivated
Start active cooling 30 DM
Time betw. switch heat/cool: 2 hours

Menu 1.9.7 - My curve

In this menu, you can create your own heating or cooling curve by setting the desired supply temperatures for different outdoor temperatures.

> **CAUTION**
> Curve 0 in menu 1.9.1 must be selected in order for "My curve" to apply.

> **CAUTION**
> "My curve" may only be edited by qualified persons.

Menu 1.9.8 - Point offset

Changes to the heating curve at a certain outdoor temperature are selected here. One step is usually enough to change the room temperature by one degree, but in some cases several steps may be required.

The heating curve is affected at ± 5 °C from the set outdoor temperature point.

It is important that the correct heating curve is selected so that the room temperature is experienced as constant. For more information select "⁇".

> **CAUTION**
> The point offset can only be edited by qualified personnel.

Menu 2 - HOT WATER

The hot water menu is used for adjusting hot water settings. The user can edit temperatures and operating modes for hot water. Within this menu there are several submenus. Status information for the relevant menu can be found on the display to the right of the menus.

Menu 2.1 - Temporary lux.

Activation of a temporary increase in the hot water temperature. Status information reads "off", or the duration of the temporary increase in temperature. For more information select "⁇".
Factory settings: off

When hot water demand has temporarily increased, this menu can be used to select an increase in the hot water temperature to luxury mode for a specified time.

The function is activated immediately once a time period is selected and confirmed using the OK button. The remaining time for the selected setting is shown to the right. When the time has run out, the controller returns to the mode set in menu 2.2.

Please select "off" to switch off temporary lux. mode.

Menu 2.2 - Comfort mode

In this menu, you can select the operating modes for various hot water temperatures. For more information select "?".

Factory setting: normal

Smart control - In this menu, you can activate the Smart Control function. The function learns the previous week's hot water consumption and adapts the temperature in the water heater for the coming week to ensure minimal energy consumption.

If the hot water demand is greater, there is a certain additional amount of hot water available.

When the Smart Control function is activated, the water heater delivers the performance reported on the energy label.

Economy - provides a smaller amount of hot water, but is more economical. This mode can be used in smaller households with a small hot water demand.

Normal - Normal mode provides a larger amount of hot water and is suitable for most households.

Luxury - Luxury mode provides the greatest possible amount of hot water. In this mode, the additional

heat, as well as the compressor, may be used to heat hot water, which may increase operating costs.

Menu 2.3 - Scheduling

Two different periods of hot water temperature per day can be scheduled here. Scheduling is activated/deactivated by ticking/unticking "on". Set times are not affected at deactivation. For more information select "?".

Factory setting: off

Schedule: The schedule to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

Day: Select which day or days of the week the scheduling is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to be the same as the finish time. If the line "all" is used, all days in the period are set for these times.

Time period: The scheduled start and finish time for the selected day are selected here.

Adjustment: Set the hot water temperature that is to apply during scheduling here.

Conflict: If two settings conflict with each other, a red exclamation mark is displayed.

Factory settings: off

Menu 2.9 - Advanced

The advanced menu is intended for advanced users.

Menu 2.9.1 - Periodic increase

To prevent bacterial growth in the hot water tank, the compressor and the immersion heater can increase the hot water temperature for a short time at regular intervals. For more information select "?".

The frequency of temperature increases can be selected here. The length of time can be set between 1 and 90 days. The factory setting is 14 days. Tick/untick "on" to start/stop the function.

Factory settings:
Activated: activated
Period: 14 days
Start time: 00:00

Menu 3 - Info

The information menu is used for reading information. Status information for the relevant menu can be found on the display to the right of the menus.

Menu 3.1 - Service info

Information about the heat pump's current operating status (e.g. current temperatures etc.) can be obtained here. This menu cannot be edited. The information is on several pages. Turn the control knob to scroll between the pages. A QR code appears on one side. This QR code indicates serial number, product name and limited operating data.

Menu 3.2 - Compressor info

Information about the compressor's operating status and statistics can be obtained here. This menu cannot be edited. The information is on several pages. Turn the control knob to scroll between the pages. For more information select "?".
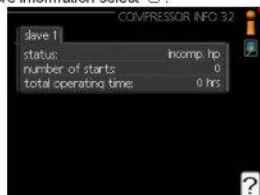
Menu 3.3 - Add. heat info

Information about the additional heat settings, operating status and statistics can be obtained here. This menu cannot be edited. The information is on several pages. Turn the control knob to scroll between the pages. For more information select "?".

Menu 3.4 - Alarm log

To facilitate fault-finding, the heat pump's operating status at the time of the alarm is recorded here. You can see information for the 10 most recent alarms. To view operating status in the event of an alarm, select the alarm and press the OK button.

Menu 3.5 - Room temp. log

Here you can see the average indoor temp. - temp. log week by week over the past year. The dotted line indicates the annual average temperature.

The average indoor temperature is only shown if a room temperature sensor/room display unit is installed.
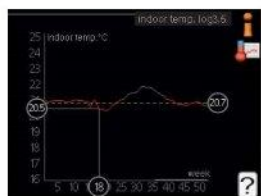
To read the average temperature
1. Turn the control knob so that the ring on the axis with the week number is selected.
2. Press the OK button.
3. Follow the grey line on the graph to read the average indoor temperature for the selected week.
4. You can now take readings for different weeks by turning the control knob to the right or left and reading the average temperature.
5. Press the OK or Back button to exit read mode.

Menu 4 - MY SYSTEM

Information about the controller's operation and settings can be viewed in this menu. Status information for the relevant menu can be found on the display to the right of the menus.

Menu 4.1 - Additional functions

Settings for any additional functions installed in HT 6Split / HT 12Split can be changed in the submenus.

Menu 4.1.3 - Internet

You can configure HT 6Split / HT 12Split unit internet connection in this menu. For more information select "?".

IMPORTANT
For these functions to work the network cable must be connected.

Menu 4.1.8 - Smart Energy Source™

The function prioritises how / to what extent each docked energy source will be used. Here you can choose if the system is to use the energy source that is cheapest at the time. You can also choose if the system should use the energy source that is most carbon neutral at the given time. For more information select "?".

Menu 4.2 - Operating mode

The heat pump operating mode is normally set to "auto". The heat pump can also be set to "add. heat only", but only when using the additional heat, or "manual" and select the available functions yourself. Change the operating mode by selecting the desired mode and pressing the OK button. When an operating mode is selected, the available functions of the heat pump (crossed out = not available) and options will be displayed on the right. To choose which functions should be available or not available, select the function using the control knob and press the OK button. For more information select "?".

Factory settings: auto

Auto

In this operating mode, the heat pump automatically selects what functions are available to select.

Manual

In this operating mode you can select what functions will be available to select. It is not possible to deselect "compressor" in manual mode.

Add. heat only

In this operating mode the compressor is not active, additional heat only is used.

> **IMPORTANT**
> Selecting the "add. heat only" mode will block the compressor and result in higher costs for running the system.

Menu 4.4 - Date and time

Set time and date, display mode and time zone in this menu.

Menu 4.6 - Language

In this menu, choose the language that you want the information to be displayed in.

Menu 4.7 - Holiday sched.

To reduce energy consumption during a holiday you can schedule a reduction in heating and hot water temperature. Cooling operation, ventilation, pool and solar collector cooling can also be scheduled if the functions are connected.

If a room sensor is installed and activated, the desired room temperature (°C) is set during the given time period. This setting applies to all climate systems with room sensors.

If a room sensor is not activated, set the desired offset of the heating curve. One step is usually enough to change the room temperature by one degree, but in some cases several steps may be required. This setting applies to all climate systems without room sensors.

Holiday scheduling starts at 00:00 on the start date and stops at 23:59 on the finish date.

> **CAUTION**
> If you choose to stop hot water production for a holiday, "periodic increase" (preventing bacterial growth) will be blocked during this time. "periodic heat increase" will start up in conjunction with the vacation setting ending.

Menu 4.9 - Advanced

In this menu, you can configure the advanced operational functions of the controller for HT 6Split / HT 12Split. For more information select "?".

Menu 4.9.1 - Operating priority

Choose here how long the heat pump should work with each requirement if there are two or more requirements at the same time (e.g. for heating and hot water). If there is only one requirement, the heat pump only works with that requirement.

The indicator marks where in the cycle the heat pump is. If 0 minutes is selected it means that requirement is not prioritised, and will only be activated when there is no other requirement. For more information select "?".

Menu 4.9.2 - Auto mode setting

When the operating mode is set to "auto", the heat pump selects when to start and stop the additional heat and heat production, dependent on the average outdoor temperature.

Select the average outdoor temperatures in this menu. You can also set the time (filtering time) at which the average temperature is calculated. If you select 0, the current outdoor temperature is used. For more information, select "?".

Factory settings:
Stop heating: 17°C
Stop add. heat: 5°C
Filtering time: 24 hrs

CAUTION
You cannot set "stop add. heat" higher than "stop heating".

CAUTION
In systems where heating and cooling share the same pipes, "stop heating" cannot be set higher than "start cooling" if there is no cooling/heating sensor.

Menu 4.9.3 - Degree minute value

Degree minutes are a measurement of the current heating demand in the house and determine when the compressor or additional heat will be started/stopped. For more information select "[?]".
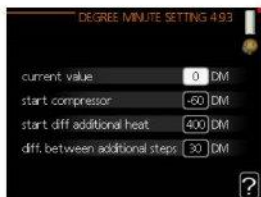
Factory settings:
Current value: 0 DM
Start compressor: -60 DM
start diff. add. heat: 400 DM
diff. between additional steps: 30 DM

CAUTION
A higher value for "start compressor" causes more frequent compressor starts, which increases wear on the compressor. Too low a value can give uneven indoor temperatures

Menu 4.9.4 - Factory setting user

All settings that are available to the user (including advanced menus) can be restored to default values here. For more information select "[?]".

CAUTION
After factory setting, personal settings such as heating curves must be reset

Menu 4.9.5 - Blocking sched.

The compressor can be scheduled to be blocked for up to two different time periods here. When scheduling is active, the actual blocking symbol in the main menu on the heat pump symbol is displayed. For more information select "[?]".

ADVICE
If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

ADVICE
Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.

Scheduling always starts on the date that the start time is set for

CAUTION
Long term blocking can cause reduced comfort and operating economy

Service submenus

Go to the main menu and press down on the Back button for 7 seconds to access the Service menu.

The SERVICE menu has orange text and is intended for the advanced user. This menu has several submenus. Status information for the relevant menu can be found on the display to the right of the menus.

- *Operating settings* Operating settings for the control module.
- *System settings* System settings for the control module, activating accessories etc.
- *Accessory settings* Operational settings for different accessories.
- *Prog. input/output* Software-controlled setting of inputs and outputs on the input card (AA3) and terminal block (x2).
- *Factory setting service* Total reset of all settings (including settings available to the user) to default values.
- *Forced control* Forced control of the various components of the indoor unit.
- *Start guide* Manual launch of the start guide which is run the first time the control module is started.
- *Quick start* Quick start of the compressor.

> **!** **IMPORTANT**
> Incorrect settings in the service menus can damage the installation, heat pump and indoor unit.

Menu 5.1 - Operating settings

Operating settings for the control module can be set in the submenus.

Menu 5.1.1 - Hot water settings

Operating settings for the control module can be set in the submenus.

economy
Start temp. setting range in econ. mode: 5 – 55 °C
Start temp. factory setting in econ. mode: 39°C
Stop temp. setting range in econ. mode: 5 – 60°C
Stop temp. factory setting in econ. mode: 43°C

normal
Start temp. setting range in normal mode: 5 – 60°C
Start temp. factory setting in normal mode: 42°C
Stop temp. setting range in normal mode: 5 – 65°C
Stop temp. factory setting in normal mode: 46°C

luxury
Start temp. setting range in lux. mode: 5 – 65°C
Start temp. factory setting in lux. mode: 45°C
Stop temp. setting range in lux. mode: 5 – 65°C
Stop temp. factory setting in lux. mode: 49°C

stop. temp. periodic increase
Setting range: 55 – 65°C
Factory setting: 60°C

step difference compressors
Setting range:0,5 – 4,0°C
Factory setting: 1,0°C

charge method
Setting range: target temp., delta temp.
Factory setting: delta temp.

Here you set the start and stop temperature of the hot water for the different temperature options in menu 2.2 as well as the stop temperature for periodic increase in menu 2.9.1.

Menu 5.1.2 - Max. supply temperature

climate system
Setting range: 5-65°C
Factory setting: 55°C

Set the maximum supply temperature for the climate system here. If the installation has more than one climate system, individual maximum supply temperatures can be set for each system. Climate systems 2 - 8 cannot be set to a higher max. supply temperature than climate system 1.

> **☞** **CAUTION**
> In underfloor heating systems, the max. supply temperature is set between 35 and 45 °C.
>
> For information on the maximum permitted underfloor heating supply temperature, ask your floor and heating system supplier/contractor.

Menu 5.1.3 - Max. diff. supply temp.

max. diff. compressor
Setting range: 1 – 25°C
Factory setting: 10°C

max. diff. add. heat
Setting range: 1 – 24°C
Factory setting: 7°C

Here you set the maximum permitted difference between the calculated and actual supply temperature during compressor heating or additional heat mode. Max. diff. additional heat can never exceed max. diff. compressor.

Max. diff. compressor

If the current supply temperature exceeds the supply calculated using the set point value, the degree minute value is set to 0. The compressor in the heat pump stops when there is only a heating demand.

Max. diff. add. heat

If "add. heat" is selected and activated in menu 4.2 and the current supply temperature exceeds that calculated using the set point value, the additional heat will be forced to stop.

Menu 5.1.4 - Alarm actions

Indicate here if you would like the control module to inform you of the presence of an alarm on the display. One option is that the heat pump stops producing hot water and/or reduces the room temperature.
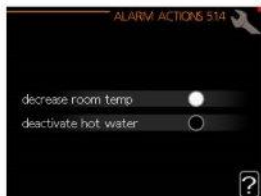
Menu 5.1.5 - Fan speed, exhaust.

For detailed information on accessory settings, see the instructions for the given accessory.

Normal and speed 1-4
Setting range: 0 – 100 %
Factory setting normal:75%
Factory setting speed 1: 0%
Factory setting speed 2: 30%
Factory setting speed 3: 80%
Factory setting speed 4: 100%

Set the speed from the five different available speeds for the fan here.

Menu 5.1.6 - Fan speed, supply.

Normal and speed 1-4
Setting range: 0 – 100 %
Factory setting normal: 75%
Factory setting speed 1: 0%
Factory setting speed 2: 30%
Factory setting speed 3: 80%
Factory setting speed 4: 100%

Set the speed from the five different available speeds for the fan here.

Menu 5.1.12 - Add. heat

The settings in this menu pertain to how the additional heat is controlled.

Factory setting: add.type: step controlled
Factory setting: positioning: before QN10 (REQUIRED)

Max. step
Setting range (binary stepping deactivated): 0 – 3
Setting range (binary stepping activated): 0 – 7
Factory setting max. step: 3

Binary stepping
Setting range: activated / deactivated
Factory settings:
deactivated

Fuse size
Setting range: 1 - 20 A
Factory setting: 16 A

Transformation ratio
Setting range: 300 - 3000
Factory setting: 300

Menu 5.1.14 - Flow set. climate system

Factory setting: presetting
Setting range: radiator, underfloor heat., centr. heat. + underfloor heat., DOT °C
Factory setting: radiator
Setting range DOT: -40,0 – 20,0°C
The factory setting of the DOT value is given for climatic zone III in Poland.
Factory setting DOT: -15,0°C
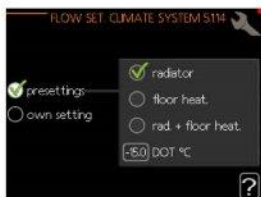
The type of heating distribution system the heating medium pump works towards is set here.

dT at DOT is the difference in degrees Celsius between supply and return temperatures at projected outdoor temperature.

Menu 5.1.22 - Heat pump testing

IMPORTANT
This menu is used to test the controller's compliance with various standards. Using this menu for other purposes may result in your installation not functioning as intended.

This menu contains several submenus, one for each standard.

Menu 5.1.23 - Compressor curve

CAUTION
Compressor curve can be edited only by qualified persons.

IMPORTANT
This menu is only displayed if the controller is connected to a heat pump with inverter-controlled compressor.

Set whether the compressor in the heat pump should work to a particular curve under specific conditions or if it should work to predefined curves.

To set a curve for a requirement (heat, hot water etc.), untick "auto", turn the control knob until a temperature is selected and press OK. You can now set at which temperatures the max. and min. frequencies will occur.
This menu may contain several windows (one for each available requirement). To navigate between windows, use the arrows at the top left corner.

Menu 5.2 - System settings

Choose various system settings here, e.g. activate a connected slave device or an installed accessory.

Menu 5.2.2 - Installed slave devices

If a slave device is connected to the master installation, it is specified here.
There are two ways of activating connected slave devices. You can either select the given option in the list or use the automatic function "search installed slave devices".

Search installed slave devices

Select "search installed slave devices" and press the OK button to automatically find connected slaves for the master heat pump.

Menu 5.2.4 - Accessories

Here is where it states if an accessory is installed (see "Accessories" section).
There are two ways of activating connected accessories. You can either select the given option in the list or use the automatic function "search installed accessories".

ACCESSORIES 5.2.4	
search installed acc.	▶
hot water comfort	○ (AXC)
climate system 2	○ (ECS)
climate system 3	○ (ECS)
climate system 4	○ (ECS)
climate system 5	○ (ECS)

Search installed accessories

Select "search installed accessories" and press the OK button to automatically find connected accessories for the controller.

ACTIVE COOLING 4 PIPE

In order to activate 4-pipe cooling, select the function "active cooling 4 pipe" .

ACCESSORIES 5.2.4	
FB5	○ (F135)
flow sensor / energy meter 1	○ (X22)
flow sensor / energy meter 2	○ (X23)
external energy meter accessor	○ (AXC)
photovol control	○ (EME20)
BA-SVM 4-pipe cooling	✓

Menu 5.3 - Accessory settings

The operating settings for installed and activated accessories are entered in the submenus for this.

> **NOTE**
> Menu 5.3 is deactivated in the factory settings. For this menu function to be active, it is necessary to install an accessory and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.2 - Add. heat. ctrl shunt valve

> **NOTE**
> Menu 5.3.2 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory EP Split and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.3 - Additional climate system

> **NOTE**
> Menu 5.3.3 is deactivated in the factory settings. For this menu function to be active, it is necessary to install an additional accessory and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.6 - step controlled add. heat

> **NOTE**
> Menu 5.3.6 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory EP Split and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.11 - Modbus

> **IMPORTANT**
> Menu 5.3.11 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory Modbus Split and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.12 - Exhaust/supply air module

> **IMPORTANT**
> Menu 5.3.12 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.14 - F135

> **IMPORTANT**
> Menu 5.3.14 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.16 - Humidity sensor

> **IMPORTANT**
> Menu 5.3.16 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory and activate it in the Accessories menu 5.2.4

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.3.21 - flow sensor / energy meter

> **IMPORTANT**
> Menu 5.3.21 is deactivated in the factory settings. For this menu function to be active, it is necessary to install accessory and activate it in the Accessories menu 5.2.4.

For a detailed description of how to program accessories, refer to the instructions of the individual accessories.

Menu 5.4 - Selectable in/outputs

In this menu you can select which input on the input board (AA3) the external contact function (page 73) can be connected to.
Available inputs on the terminal blocks AUX1-3 (AA3-X6:9-14). The AUX inputs are freely programmable and allow for the introduction of additional functions using external contacts.

> **IMPORTANT**
> The contact to the AUX input must be a potential-free contact (normally open-normally closed).

Input AA3-X7 can be programmed according to your needs.

Factory setting:

SOFT IN/OUTPUTS 5.4	
AUX1	not used
AUX2	not used
AUX3	not used
AUX4	not used
AUX5	(EQ1-BT25)
AUX6	addition (BT63)
AA3-X7	alarm output

Possible configurations AA3-X7:
- Not used,
- Holiday,
- Away mode,
- Alarm output,
- Hot water recirculation,
- Ext heat. med. pump

Menu 5.5 - Factory setting service

All settings can be reset (including settings available to the user) to factory default values here.

> **IMPORTANT**
> After resetting, the start guide will be displayed the next time the control module is started up, and the settings will be lost.

Menu 5.6 - Forced control

You can force control the different components in the control module and any connected accessory in this menu.

This menu is used for testing individual components of the HT 6Split / HT 12Split .

Menu 5.7 - Start guide

When the HT 6Split / HT 12Split controller is started up for the first time, the start guide is automatically launched. In this menu, you have the option to start it manually. See page 38 for more information about the start guide.

Menu 5.8 - Quick Start

It is possible to start the compressor from here.

☞ **CAUTION**
There must be a heating or hot water demand to start the compressor.

☞ **CAUTION**
Do not start the compressor too often within a short period of time, as this could damage the compressor and accessories.

Menu 5.9 - Underfloor drying function

Length period 1 – 7
Setting range: 0 – 30 days
Factory setting, period 1 – 3, 5 – 7: 2days
Factory setting, period 4: 3 days

Temp. period 1 – 7
Setting range: 15 – 65°C
Factory setting:
Activated: deactivated
period 1 20°C
period 2 30°C
period 3 40°C
period 4 45°C
period 5 40°C
period 6 30°C
period 7 20°C

Set the function for underfloor drying here.

You can set up to seven time periods with different calculated supply flow temperatures. If less than seven periods are to be used, set the remaining time periods to 0 days.
Select the active window to activate the underfloor drying function. A counter at the bottom shows the number of days the function has been active.

💡 **ADVICE**
If the "add. heat only" operating mode is to be used, select it in menu 4.2.

Menu 5.10 - Changes log

Read off any previous changes to the control system here. The date, time and ID no. (unique to certain settings) and the new set point value is shown for every change.

❗ **IMPORTANT**
The change log is saved at restart and remains unchanged after factory setting.

Menu 5.11 - Slave device settings

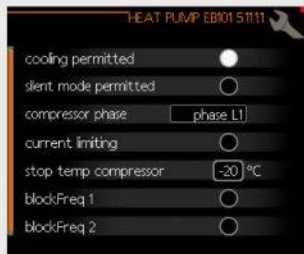Settings for installed slave devices can be entered in the submenus.

Menu 5.11.1 - EB101 - 5.11.8 - EB108

Enter the settings for the installed slave devices here.

Menu 5.11.1.1 - Heat pump

Input the settings for the installed slave device here. To view the available settings, see installation manual for the relevant installed slave device.

Factory setting:

Menu 5.11.1.2 - Charge pump (GP12)

Operating mode
Heating/cooling operation
Setting range: auto / intermittent
Factory settings: auto

Set the operating mode for the feed pump here.
Auto: The feed pump runs according to the current operating mode of the controller.
Intermittent: The feed pump starts and stops 20 seconds before and after the compressor in the heat pump.

Speed during operation
Heating, hot water, pool, cooling operation
Setting range: auto / manual
Factory settings: auto

This menu allows you to set the revolutions at which the GP10 circulation pump should work in the current operating mode. In "auto" mode, the feed pump speed is adjusted automatically to ensure optimal operation.

In "auto" mode, you can also set "max. allowed speed" to limit the feed pump and not allow it to operate at higher speeds than the one set.

For manual operation of the charge pump, deactivate the "auto" option for the current operating mode and set the value to between 1 and 100% (the previously set value for "max. allowed speed" no longer applies).

In this menu, you can set the maximum and minimum circulation pump speed. The settings depend on the central heating system.

> **IMPORTANT**
> Changes to the settings in menu 5.11 may only be edited by qualified personnel.

Regardless of the settings entered for cooling mode, the cooling operation is not active. For cooling activation see subsection "Cooling operation settings".

5.12 - Country

This allows access to country-specific settings for your product.
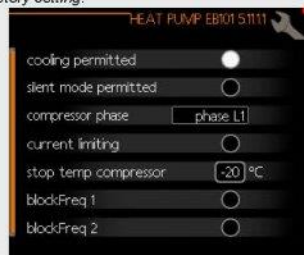Language settings can be changed regardless of this selection.

> **IMPORTANT**
> This option locks after 24 hours, after restarting the display or program updating.

Cooling settings

In the factory settings of the HT 6Split / HT 12Split controller, the cooling operation is deactivated and requires activation in menu 5.11.1.1 in order to start it up.

Factory setting:

By default, cooling works in the 2-pipe system. In order to change the cooling mode to 4-pipe, it must be activated in menu 5.2.4.

To start up cooling, change the "start cooling" parameter in menu 4.9.2 to the higher value (applies to the outside temperature) which starts cooling in accordance with the settings in menu 1.9 (settings are in menu 1.9.1.2 and 1.9.3.2).

Factory setting:

If the average temperature calculated by the "filtering time" is higher than the one set,[1]cooling will start in accordance with the settings in menu 1.9 (settings are in menu 1.9.1.2 and 1.9.3.2).

> ☞ **CAUTION**
> Settings for the cooling operation should be selected based upon the existing central heating system.
> The above cooling operation settings may only be edited by qualified personnel.

10 Service

Service actions

> **IMPORTANT**
> Servicing should only be carried out by persons with the necessary expertise.
> When replacing components in the HT 6Split / HT 12Split, only original spare parts should be used.

Emergency mode

> **IMPORTANT**
> Switch (SF1) must not be put into mode „⚠" before the installation is filled with water. The compressor in the heat pump can be damaged.

Emergency mode is used in event of operational interference and in conjunction with service. Hot water is not produced in emergency mode.

Emergency mode is activated by setting switch (SF1) in mode „⚠". This means that:
- The status lamp illuminates yellow
- The display is not lit and the control computer is not connected.
- Hot water is not produced.
- The compressors are switched off. Charge pump (EB101-GP12) and charge pump (EB102-GP12) (if installed) are running.
- Accessories are switched off
- The heating medium pump is active.
- The emergency mode relay (K1) is active.

External additional heat is active if it is connected to the emergency mode relay (K1, terminal block X1). Ensure that the heating medium circulates through the external additional heat.

Temperature (°C)	Resistance (kOm)	Voltage (VDC)
-40	351,0	3,256
-35	251,6	3,240
-30	182,5	3,218
-25	133,8	3,189
-20	99,22	3,150
-15	74,32	3,105
-10	56,20	3,047
-5	42,89	2,976
0	33,02	2,889
5	25,61	2,789
10	20,02	2,673
15	15,77	2,541
20	12,51	2,399
25	10,00	2,245
30	8,045	2,083
35	6,514	1,916
40	5,306	1,752
45	4,348	1,587
50	3,583	1,426
55	2,968	1,278
60	2,467	1,136
65	2,068	1,007
70	1,739	0,891
75	1,469	0,758
80	1,246	0,691
85	1,061	0,607
90	0,908	0,533
95	0,779	0,469
100	0,672	0,414

USB service outlet
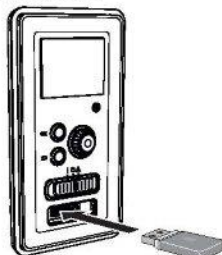
The display unit is equipped with a USB socket that can be used to update the software, save logged information and manage the settings in the controller.

When a USB memory is connected a new menu (menu 7) appears in the display

Menu 7.1 - Update system software

This allows you to update the software in the controller.

> **IMPORTANT**
> For the following functions to work the USB memory must contain files with software for the controller.

The fact box at the top of the display shows information on the most likely update that the software has selected from the USB memory.

This information states the product for which the software is intended, the software version and general information about it. If you wish to choose a different file than the one selected, the correct file can be selected by pressing "select a different file".

Start the update

Select "start the update" if you wish to start the update. You will be asked whether you really want to update the software. Click "yes" to proceed or "no" to go back. If you responded "yes" to the previous question, the update will start and you can now follow the progress of the update on the display. After the update is complete, your controller will reboot.

> **IMPORTANT**
> A software update does not reset the menu settings in the controller.

> **IMPORTANT**
> If the update is interrupted before it is complete (for example power out etc.), the software can be reset to the previous version if the OK button is held in during start up until the green lamp starts to illuminate (takes about 10 seconds).

Select a different file

Select "select a different file" if you do not want to use the suggested software. When you scroll through the files, information about the selected software is shown in a fact box just as before. Once you have selected a file with the OK button, you will return to the previous page (menu 7.1) where you can choose to start the update.

Menu 7.2 - Logging

Setting range: 1 s – 60 min
Factory setting range: 5 s

Here you can choose how current measurement values from the controller should be saved onto a log file on the USB memory stick.

1. Set the desired logging frequency.
2. Select "on".
3. The present values from the controller are saved in a file in the USB memory stick at the set interval until "on" is unticked.

> **IMPORTANT**
> Before removing the USB memory stick, remember to untick "On".

Menu 7.3 - Manage settings

Here you can manage (save or reset) all the user settings (user and service menus) in the controller from the USB memory stick. With "save settings" you save the menu settings to the USB memory stick in order to restore them later or to copy the settings to another controller.

> **IMPORTANT**
> When you save the menu settings to the USB memory you replace any previously saved settings on the USB memory.

With "reset settings" you delete all menu settings from the USB memory stick.

> **IMPORTANT**
> Deletion of the menu settings from the USB memory cannot be undone.

Emptying the hot water tank

For emptying the hot water tank the siphon principle applies. This can be done via the drain valve on the cold water supply pipe or by placing a hose in the cold water connection.

Emptying the heating system

To facilitate the servicing of the heating system, it must first be emptied using the filling valve.

> **IMPORTANT**
> When emptying the side of the heating medium / heating system, remember that they may contain hot water. There is a risk of burns.

1. Connect the hose to the external drain valve of the system.
2. Then open the drain valve to empty the heating system.
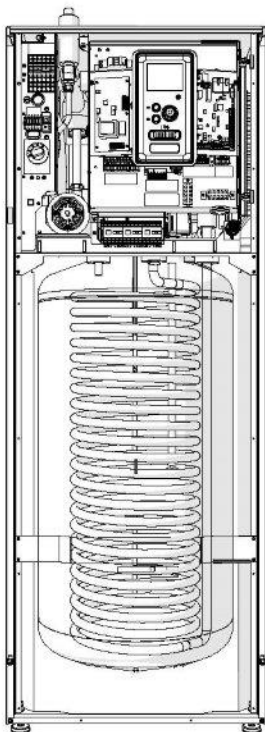
11 Disturbances in comfort

In most cases, the control module notes a malfunction and indicates this with alarms and shows instructions to rectify it in the display. See "Manage alarm" for information about managing alarms. If the malfunction does not appear in the display, or if the display is not lit, the following troubleshooting guide can be used.

In the event of an alarm, some kind of malfunction has occurred, which is indicated by the status lamp changing from green continuously to red continuously. In addition, an alarm bell appears in the information window.

Alarm

In the event of an alarm with a red status lamp a malfunction has occurred that the heat pump and/or control module cannot remedy itself. In the display, by turning the control knob and pressing the OK button, you can see the type of alarm it is and reset it. You can also choose to set the installation to aid mode.

info / action Here you can read what the alarm means and receive tips on what you can do to correct the problem that caused the alarm.

reset alarm In many cases, it is sufficient to select "reset alarm" in order for the product to revert to normal operation. If a green light comes on after selecting "reset alarm", the alarm has been remedied. If a red light is still visible and a menu called "alarm" is visible in the display, the problem that caused the alarm remains. If the alarm disappears and then returns, contact the installer.

reset alarm "aid mode" is a type of emergency mode. This means that the installation produces heat and/or hot water despite there being some kind of problem. This can mean that the heat pump's compressor is not running. In this case any electrical addition produces heat and/or hot water

> **CAUTION**
> Selecting "aid mode" is not the same as correcting the problem that caused the alarm. The status lamp will therefore continue to be red.

If the alarm has not been reset, contact the installer for proper repair.

> **IMPORTANT**
> When reporting a fault, always enter the serial number of the product (14 digits).

Troubleshooting

If the operational interference is not shown in the display the following tips can be used:

Basic actions

Start by checking the following items:
- The switch's position.
- Group and main fuses of the accommodation.
- The control module's miniature circuit breaker.
- Correctly set load monitor (if installed).

Low hot water temperature or no hot water

This part of the fault-tracing chapter only applies if the water heater is installed in the system.
- Closed or choked filling valve for the hot water.
  – Open the valve.
- Mixing valve (if there is one installed) set too low.
  – Adjust the mixer valve.
- Control module in incorrect operating mode.
  – If mode "manual" is selected, select "addition".
- Large hot water consumption.
  – Wait until the hot water has heated up. Temporarily increased hot water capacity (temporary lux) can be activated in menu 2.1..
- Too low hot water setting.
  – Enter menu 2.2 and select a higher comfort mode
- Too low or no operating prioritisation of hot water.
  – Enter menu 4.9.1 and increase the time for when hot water is to be prioritised.

Low room temperature

- Closed thermostats in several rooms.
  – Set the thermostats to max, in as many rooms as possible.
- Adjust the room temperature via menu 1.1, instead of choking the thermostats.
- Control module in incorrect operating mode.
  – Enter menu 4.2. If mode "auto" is selected, select a higher value on "stop heating" in menu 4.9.2.
  – If mode "manual" is selected, select "heating". If this is not enough, select "addition".
- Too low set value on the automatic heating control.
  – Enter menu 1.1 "temperature" and adjust the offset heating curve up. If the room temperature is only low in cold weather the curve slope in

menu 1.9.1 "heating curve" needs adjusting up.

- Too low or no operating prioritisation of heat.
  - Enter menu 4.9.1 and increase the time for when heating is to be prioritised.
- "Holiday mode" activated in menu 4.7.
  - Enter menu 4.7 and select "Off".
- External switch for changing the room heating activated.
  - Check any external switches.
- Air in the climate system.
  - Vent the climate system.
  - Open the valves (contact the installer to locate them).

High room temperature

- Too high set value on the automatic heating control.
  - Enter menu 1.1 (temperature) and reduce the offset heating curve. If the room temperature is only high in cold weather the curve slope in menu 1.9.1 "heating curve" needs adjusting down.
- External switch for changing the room heating activated.
  - Check any external switches.

The compressor does not start

- There is no heating requirement.
  - The controller does not call on heating or hot water.
- Compressor blocked due to the temperature conditions.
  - Wait until the temperature is within the product's working range.
- Minimum time between compressor starts has not been reached.
  - Wait 30 minutes and then check if the compressor has started.
- Alarm tripped.
  - Follow the display instructions.

Additional heating only

If you are unsuccessful in rectifying the fault and are unable to heat the house, you can, whilst waiting for assistance, continue running the heat pump in "add. heat only". This means that additional heating only is used to heat the house.

Set the installation to additional heat mode

1. Go to menu 4.2 op. mode.
2. Mark "add. heat only" using the control knob and then press the OK button.
3. Return to the main menus by pressing the Back button.

> **CAUTION**
> When commissioning without Alpha innotec air/water heat pump, the communication error alarm may appear in the display.
> The alarm is reset if the relevant heat pump is deactivated in menu 5.2.2 ("installed slaves").

12 Accessories

Room sensor RS Split

This accessory is used to obtain a more even indoor temperature.

Accessory card EP Split

An accessory board for active cooling (4-pipe system), extra climate system, hot water comfort or if more than four charge pumps are to be connected to the controller. It can also be used for step controlled additional heat (e.g. external electric boiler), shunt controlled additional heat (e.g. wood/oil/gas/pellet boiler).

An accessory board is required if for example an HWC pump is to be connected to the controller at the same time that the common alarm indication is activated.

Communications module Modbus Split

Modbus Split enables controller to be controlled and monitored using a BMS (building management system) in the building. Communication is then performed using Modbus Split.

Room unit RBE

RBE means that control and monitoring of the controller can be carried out in a different part of your home to where it is located.

Air/water heat pump

L6Split   L8Split   L12Split

Auxiliary relay HS Split

Auxiliary relay HS Split is used to control external 1 to 3 phase loads such as oil burners, immersion heaters and pumps.

More accessories available at
https://www.alpha-innotec.com/

Connecting the KVR accessory

The KVR 10 accessory is used to safely drain off most of the condensate from the air/water heat pump to a frost-free collection point.
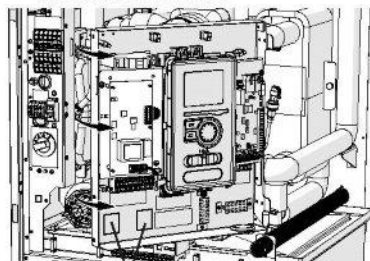
HYDRAULIC CONNECTION

For information on hydraulic connection of the KVR 10 accessory, see the instructions for the KVR accessory.
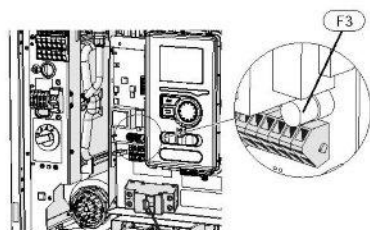
ELECTRICAL CONNECTION

In order to connect the electric KVR accessory:

1. Open the control panel and punch-out the notched plates in the control panel casing under the residual-current device.

Plates to be punched-out

2. Attach the residual-current device RCD.

Residual-current device RCD

3. Use fuse (F3) depending on the length of the KVR cable in accordance with the below table.

Length (m)	P_{tot} (W)	Fuse (F3)	Part no.
1	15	T100mA/250V	718 085
3	45	T250mA/250V	518 900*
6	90	T500mA/250V	718 086

*Fitted at the factory

4. Connect a residual-current device to terminal AA2-X1 under terminal block 5(N) and 6(L).

5. Connect a residual-current device to terminal AA23-X1 to terminal blocks 1(L) and 2(N).
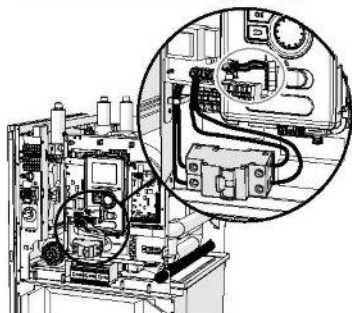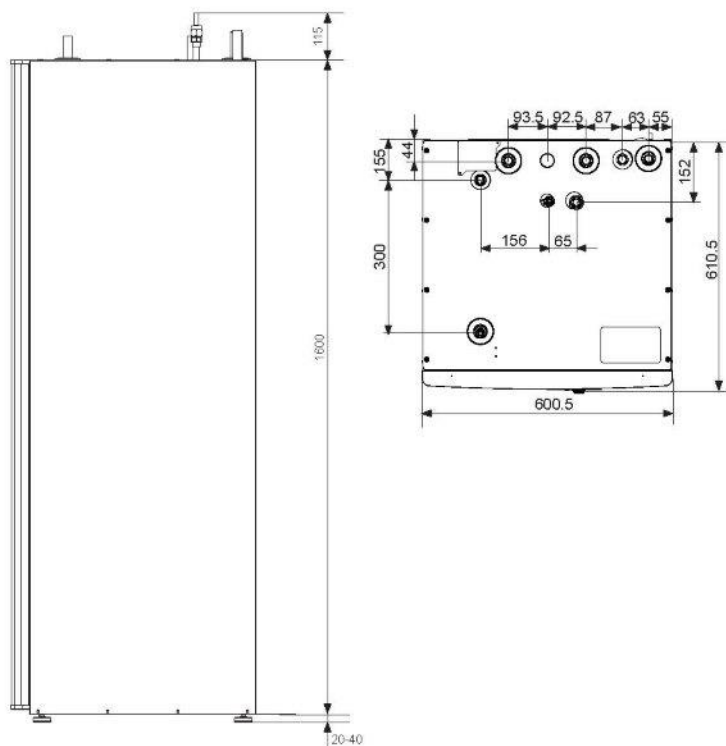

6. Connect an external heating cable (EB14) to terminal AA23-X1 to terminal blocks: 4 (PE), 5 (N), 6 (L).
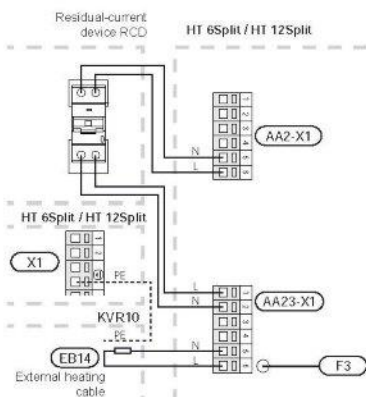
13 Technical data

Dimensions and layout of connections

Technical data

Product type	Unit	HT 12Split	HT 6Split
Height	mm	1600	
Required room height	mm	2100	
Width	mm	600	
Depth	mm	610	
Weight	kg	165	
Maximum working pressure on the coil	bar	16	
Opening pressure of the safety valve	bar	3	
DHW tank capacity	l	180	
Low-energy circulation pump of the heating system	-	yes	
Safety valve, heating system	-	yes	
Diaphragm expansion vessel	l	10	
Auxiliary preheater	kW	9	
Rated voltage	V	9 (400V) / 4,5 (230V)	
Anticorrosive protection	-	3x400 / 1x230	
Mixed water quantity at 40°C	-	230 l, 40°C	
Energy class (acc. to ErP, at supply temp. 55°C) (Applies to LSplit + HT 6Split)	-	A++	
Performance class / Load profile (DHW)	-	A/XL	

Outdoor module	Unit	L6Split	L8Split	L12Split
Starting current	A	5		
Compressor	-	Twin Rotary		
Max fan flow (heating, nominal)	m³/h	2 530	3 000	4 380
Fan rating	W	86		
Defrosting	-	Reversing		
Drain pan heater	W	Integrated 110	Integrated 100	Integrated 120
Breaking value high pressure	MPa (bar)	4,15 (41,5)		
Cut-out value low pressure (15 s)	MPa (bar)	0,079 MPa (0,79)		
Height	mm	640	750	845
Width	mm	800	780 (+67 valve protection)	970
Depth	mm	290	640 (+110 with foot rail)	370 (+80 with foot rail)
Weight	kg	46	60	74
Colour (two coats powder coating)	-	Dark gray		
Refrigerant quantity (R410A)	kg	1,5	2,55	2,90
Max. length, refrigerant pipe, one way	m	30*		
Dimensions, refrigerant pipe	-	Gas pipe: from 12,7 (1/2") Fluid pipe: from 6,35 (1/4")	Gas pipe: from 15,88 (5/8") Fluid pipe: from 9,53 (3/8")	
Pipe connection option	-	Right-hand side		Bottom / right-hand side / back
Part no.	-	064 205	064 033	064 110

*If the length of the refrigerant pipes exceeds 15 metres, extra refrigerant must be added at a rate of 0.06 kg/m.
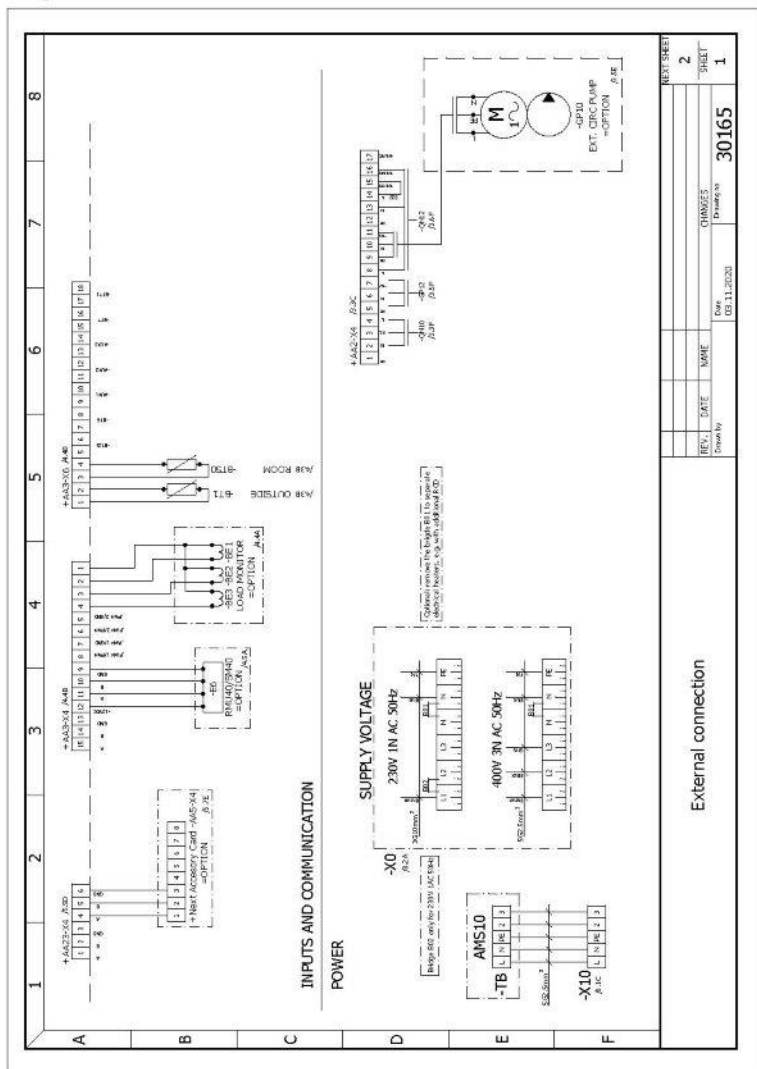
Max. operating current and recommended fuse rating when connected 3x400 V	Unit	HT 6Split + L6Split	HT 12Split + L8Split	HT 12Split + L12Split
Max. operating current compressor	A	16	16	20
Max operating current heat pump including 3 kW immersion heater, compressor working and enabled contactor K1 (Recommended fuse rating)	A	16 (20)	16 (20)	20 (20)
Max operating current heat pump including 6 kW immersion heater, compressor working and enabled contactor K1+K2 (Recommended fuse rating)	A	16 (20)	16 (20)	20 (20)
Max operating current heat pump including 9 kW immersion heater, compressor working and enabled contactor K1+K2 +K3 (Recommended fuse rating)	A	20 (20)	20 (20)	20 (20)
Max operating current 9 kW immersion heater, compressor not working and enabled contactor K1+K2 +K3 (Recommended fuse rating)	A	20 (20)	20 (20)	20 (20)

Max. operating current and recommended fuse rating when connected 1x230 V	Unit	HT 6Split + L6Split	HT 12Split + L8Split	HT 12Split + L12Split
Max. operating current compressor	A	16	16	20
Max operating current heat pump including 1,5 kW immersion heater, compressor working and enabled contactor K1 (Recommended fuse rating)	A	22,5 (25)	22,5 (25)	26,5 (25)
Max operating current heat pump including 3 kW immersion heater, compressor working and enabled contactor K1+K2 (Recommended fuse rating)	A	29 (32)	29 (32)	33 (32)
Max operating current heat pump including 4,5 kW immersion heater, compressor working and enabled contactor K1+K2 +K3 (Recommended fuse rating)	A	35,5 (32)	35,5 (32)	39,5 (40)
Max operating current 4,5 kW immersion heater, compressor not working and enabled contactor K1+K2 +K3 (Recommended fuse rating)	A	19,5 (20)	19,5 (20)	19,5 (20)

Performance

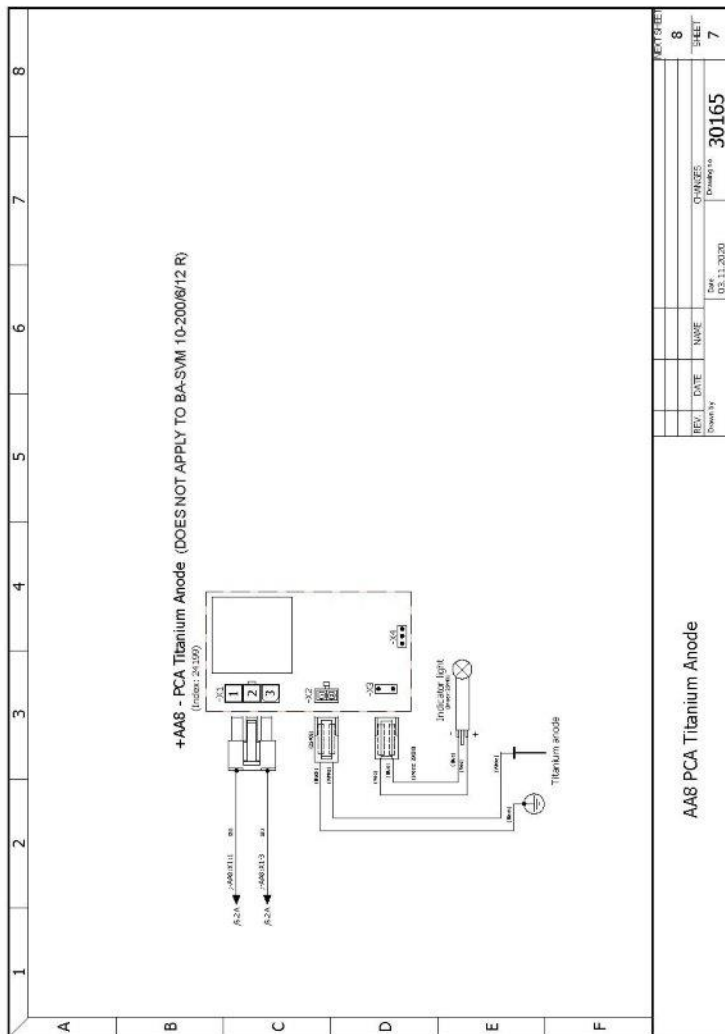| Outdoor module / HT 6Split / HT 12Split		L6Split / HT 6Split	L8Split / HT 12Split	L12Split / HT 12Split
Heating	Outd. temp. / Supply temp.	Nominal	Nominal	Nominal
Output data according to EN14511	7/35°C (floor)	2,67/0,5/5,32	3,86/0,83/4,65	5,21/1,09/4,78
ΔT5K	2/35°C (floor)	2,32/0,55/4,2	5,11/1,36/3,76	6,91/1,79/3,86
Specified/supplied power/COP (kW/ kW/-)	7/45°C	2,28/0,63/3,62	3,70/1,00/3,70	5,00/1,31/3,82
	2/45°C	1,93/0,67/2,88	5,03/1,70/2,96	6,80/2,24/3,04
Cooling	Outd. temp. / Supply temp.	Max.	Max.	Max.
Output data according to EN14511 ΔT5K	27/7°C	5,87/1,65/3,56	7,52/2,37/3,17	9,87/3,16/3,13
Specified/supplied power/EER	27/18°C	7,98/1,77/4,52	11,20/3,20/3,50	11,70/3,32/3,52
	35/7°C	4,86/1,86/2,61	7,10/2,65/2,68	9,45/3,41/2,77
	35/18°C	7,03/2,03/3,45	9,19/2,98/3,08	11,20/3,58/3,12

Diagram of electrical connections

+AA2 - PCA Base

AA2 PCA Base I/O

30165

AA2 PCA Base Power

AA3 Input

AA23 PCA Accesory

COOLING FLUID PRESSURE CONVERTER

+AA23
PCA Accesory

+Next Accessory Card -AA5-X4
=OPTION

| NEXT SHEET | 6 |
| SHEET | 5 |

30165

Drawing no

CHANGES

Date
03.11.2020

REV. | DATE | NAME

Drawn by

+AA8 - PCA Titanium Anode (DOES NOT APPLY TO BA-SVM 10-200/6/12 R)

AA8 PCA Titanium Anode

30165

SHEET 7

Power connection

PCA Display

+AA4 - PCA Display

OK

-X1

-X8

-X9

29282

SHEET 9

NEXT SHEET

EC Declaration of Conformity

$C\epsilon$

The undersigned
confirms that the following designated device(s) as designed and marketed by us fulfill the
standardized EC directives, the EC safety standards and the product-specific EC standards.
In the event of modification of the device(s) without our approval, this declaration shall become
invalid.

Designation of the device(s)

Heat Pump   alpha innotec

Unit model	Number	Unit model	Number
L6 Split-HT 6	100698HT601	10069801	15210101
L8 Split- HT 12	100626HT1201	10062601	15210201
L12 Split-HT 12	100627HT1201	10062701	15210201
L8 Split-HT	100626HTS01	10062601	15078201
L12 Split-HT	100627HTS01	10062701	15078201
L6 Split-HM 6	100698HM601	10069801	15214401
L8 Split-HM 8-12	100626HMS01	10062601	15081701
L12 Split- HM 8-12	100627HMS01	10062601	15081701

EC Directives

2014/35/EU	813/2013
2014/30/EU	814/2013
2011/65/EG	
*2014/68/EU	

EN..

EN 378	EN 349
EN 60529	EN 60335-1/-2-40
EN ISO 12100-1/2	EN 55014-1/-2
EN ISO 13857	EN 61000-3-2/-3-3
EN 14825	

* Pressure equipment component
Category   II
Module   A1
Designated position:
TÜV-SÜD
Industrie Service GmbH (Nr.:0036)

Company:
ait-deutschland GmbH
Industrie Str. 3
93359 Kasendorf
Germany

Place, date: Kasendorf, 28.11.2019

Signature:

Jesper Stannow
Head of Heating Development

UK818198