BAXI

# Baxi Auriga HP

## Mid-Temperature Commercial Air To Water Heat Pump

### Specification overview

# Contents



**Note**: content provided in this document is correct as of publication, subject to change without notice. Please refer to the Installation, Operation and Maintenance Manual which can be found at baxi.co.uk

In the interests of the quality of our products, we strive constantly to improve them. We therefore reserve the right to modify the specifications and details provided within this document.

# Explore
# the range

## Introducing the Baxi Auriga HP Mid-Temperature Air to Water Heat Pump, perfect for commercial applications in both fully-electric and hybrid heating systems.

Built from over 30 years' experience in commercial air source heat pumps and low carbon heating systems across Europe, Baxi's Auriga HP ASHP is a monobloc design, self-contained heat generator, extracting renewable heat from the atmosphere and amplifying it using R32 refrigerant compression.

Available in four outputs of 20kW, 26kW, 30kW and 40kW, Baxi Auriga HP ASHPs can be used as part of a hybrid or standalone system in both new build and retrofit applications.

Whatever the size or complexity of your project, our dedicated experts are on hand to advise you on the right product accessories to support your installation.


**Auriga HP 20T**
- Up to 60°C flow temperature
- Operation down to -20°C
- COP at A7/W35 = 4.38
- 21.22kW at A7/W35

**Auriga HP 26T**
- Up to 58°C flow temperature
- Operation down to -20°C
- COP at A7/W35 = 4.30
- 27.2kW at A7/W35

**Auriga HP 33T**
- Up to 60°C flow temperature
- Operation down to -20°C
- COP at A7/W35 = 4.4
- 33.4kW at A7/W35

**Auriga HP 40T**
- Up to 60°C flow temperature
- Operation down to -20°C
- COP at A7/W35 = 4.30
- 40.2kW at A7/W35

# A total solution

We've unified our diverse portfolio of product brands, from Remeha to Heatrae Sadia to Baxi Packaged Solutions, creating one seamless integrated suite of heating and hot water solutions from names you can trust.

We understand that every building project is different, and one size never fits all. That's why we tailor our solutions for every type of building; from new and refurbished buildings, to hotels and leisure facilities, education and healthcare, and so much more.

Our dedicated experts are on hand to advise you on the right product accessories to support your installation.

We're committed to guiding every customer through the energy transition. Our design team is there from the start, helping developers and specifiers in choosing the right solution for the application. Our technical teams help with everything from installation and commissioning, to servicing and maintenance; all supported by our nationwide network of expert engineers, and excellent parts and labour warranties.

We also design and manufacture prefabricated bespoke rigs or full turnkey-enabled plant rooms via our Baxi Packaged Solutions service – for easy on-site installation that ensures better health and safety, as well as cost savings.

Our customer training supports best practice across the industry, developing all the skills and knowledge needed for a low-carbon future – and our friendly customer support offers expert advice as and when you need it.

Together, we're everything you need in a heating and hot water solution.

| Product | Sales code | Baxi Auriga HP 20T | Baxi Auriga HP 26T | Baxi Auriga HP 33T | Baxi Auriga HP 40T |
|---|---|---|---|---|---|
| Rubber Shock Absorber 20/26T | 7841692 | ● | ● | | |
| Rubber Shock Absorber 33/40T | 7848648 | | | ● | ● |
| Water Filter 1 ¼" | 7841694 | ● | ● | | |
| Water Filter 1 ½" | 7841695 | | | ● | |
| Water Filter 2" | 7841696 | | | | ● |
| Antifreeze Security Valve 1 ¼" | 7841697 | ● | ● | | |
| Antifreeze Security Valve 1 ½" | 7841698 | | | ● | |
| Antifreeze Security Valve 2" | 7841699 | | | | ● |
| Refrigerant Detector | 7841700 | ● | ● | ● | ● |

# Auriga HP 20T - 7832028
# Auriga HP/TX 20T (Coastal Protection) - 7854470

## Technical specification

| Performance | 20T |
|---|---|
| Heating capacity at A7/W35 | 21.22 kW |
| Power input at A7/W35** | 4.84 |
| COP at A7/W35 | 4.38 |
| Heating capacity at A-10/W35 | 13.06 kW |
| Power input at A-10/W35** | 4.41 |
| COP at A-10/W35 | 2.96 |
| SCOP at Water 35 | 4.42 |
| SCOP at Water 55 | 3.33 |
| Seasonal efficiency at Water 35 | 174% |
| Seasonal efficiency at Water 55 | 130% |
| **ERP data** | |
| Energy label rating at Water 35 | A++ |
| Sound power rating at A7/W35 | 65 dB(A) |
| **Refrigerant** | |
| Refrigerant type | R32 |
| Refrigerant weight | 4.8 kg |
| Refrigerant GWP | 675 |
| Equivalent $CO_2$ | 3.24 Tn |
| **Hydraulics** | |
| Nominal volume flow rate | 1.02 l/s |
| Minimum volume flow rate | 0.68 l/s |
| Water temperature min/max | +25/+60°C |
| Available water pressure | 6.3 mwc |
| Max operating pressure | 6 bar |
| Min operating pressure | 0.5 bar |
| Max supply temperature | +60°C |
| Flow connection size*** | 1¼" |
| Return connection size*** | 1¼" |
| Circulation pump integrated | Yes |
| Pressure relief valve integrated | Yes |
| Expansion vessel integrated | No |
| **Source data** | |
| Operating limits, source (air) | -20 to +40°C |
| Nominal volume flow rate, source | 7,400 $m^3/h$ |

| Electrical | 20T |
|---|---|
| Protection class | IP24 |
| **Power source** | |
| Power supply compressor | 3 Phase + Neutral |
| | 50 Hz |
| Nominal voltage compressor | 400 V |
| Nominal voltage fans | 400 V |
| Number of compressors | 1 x Scroll Inverter |
| Number of fans | 2 x DC Inverter |
| Starting current | 6.5 A |
| Minimum cable size**** | 6$mm^2$ |
| Max operating current | 30 A |
| Circuit protection type | 32 A Type C |
| **General** | |
| Nominal sound power level LwA* | 73 dB(A) |
| Nominal sound pressure LpA @5m | 51 dB(A) |
| Unit dimensions (mm) | 1,276 Height |
| | 1,612 Width |
| | 669 Depth |
| Unit weight dry | 271 kg |
| Service clearances (mm) | 1,500 Front |
| | 600 Rear |
| | 800 Left Side |
| | 800 Right Side |
| | 600 Top |

* In accordance with EN 9614-2 under condition A7/W55.

** Calculated from Line to Line voltage of 400V and a Power Factor of 0.85.

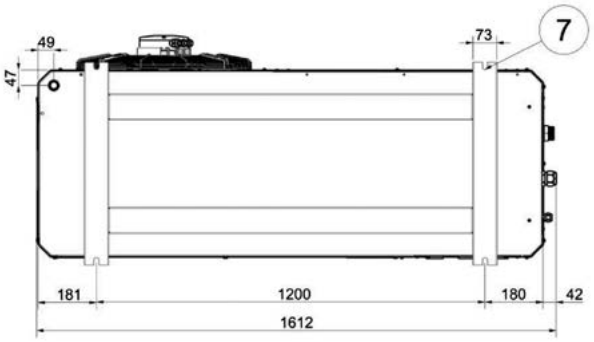
*** Ensure a flexible pipe is utilised for the flow and return connections to prevent vibration transmission. A water filter must be installed on the return line to the appliance.

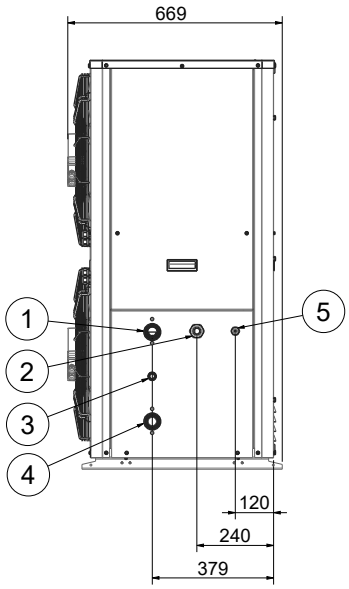
**** The wiring installation must comply with BS 7671, cable size may need to be increased depending on length of cable, cable type and any other installation factors that need to be taken into account.

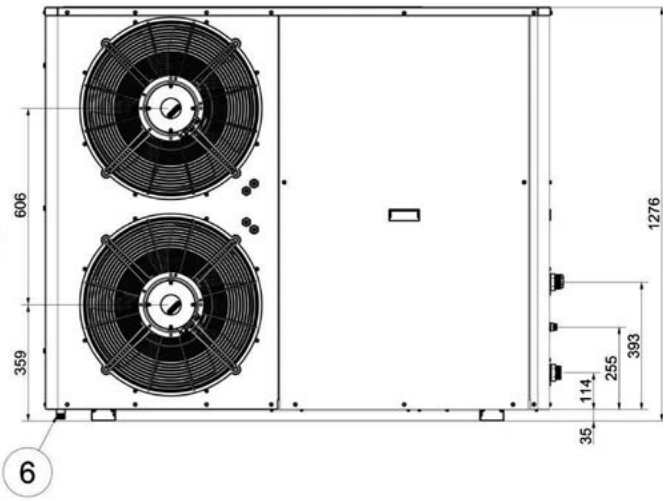
# Auriga HP 20T
# Auriga HP/TX 20T

## Dimensions

| Marker | Description | Dimension |
|---|---|---|
| 1 | BSPP male thread hydraulic connection - water outlet | Ø 1¼" |
| 2 | Electrical connection - power supply | - |
| 3 | Safety valve drain connection (BSPP male thread) | Ø ½" |
| 4 | BSPP male thread hydraulic connection - water inlet | Ø 1¼" |
| 5 | Communication connection - control | - |
| 6 | Condensate drain connection (BSPP male thread) | Ø ¾" |
| 7 | Anti-vibration feet housing† | Ø 16mm |



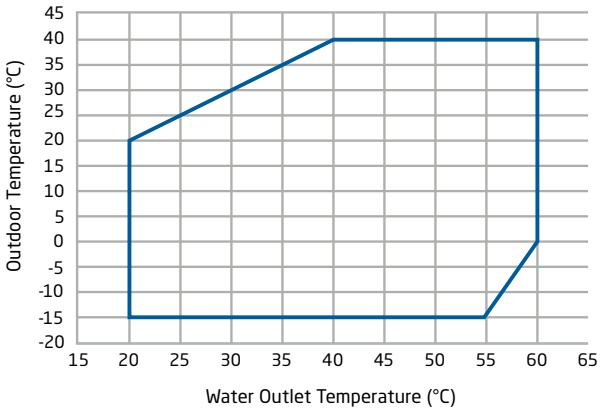



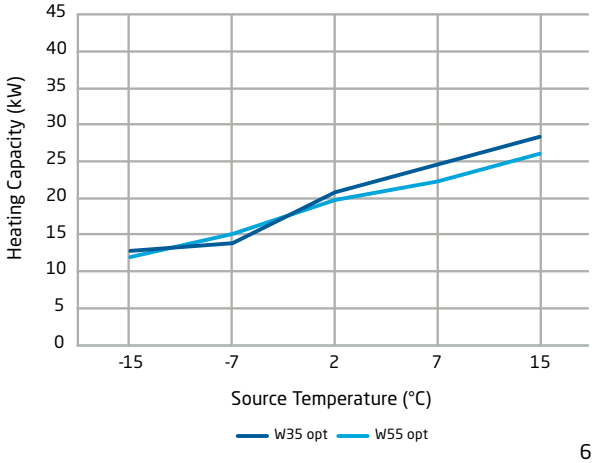

† Support rail is prepared for housing the anti-vibration feet. The given diameter information corresponds to the metal rod of the anti-vibration feet.

## Performance

### Heating Operation Limits




### Heating Capacity



# Auriga HP 26T - 7832029
# Auriga HP/TX 26T (Coastal Protection) - 7854471

## Technical specification

| Performance | 26T |
|---|---|
| Heating capacity at A7/W35 | 27.2kW |
| Power input at A7/W35** | 6.33 |
| COP at A7/W35 | 4.3 |
| Heating capacity at A-10/W35 | 17.54kW |
| Power input at A-10/W35** | 6.42 |
| COP at A-10/W35 | 2.73 |
| SCOP at Water 35 | 4.31 |
| SCOP at Water 55 | 3.47 |
| Seasonal efficiency at Water 35 | 170% |
| Seasonal efficiency at Water 55 | 136% |
| **ERP data** | |
| Energy label rating at Water 35 | A++ |
| Sound power rating at A7/W35 | 65 dB(A) |
| **Refrigerant** | |
| Refrigerant type | R32 |
| Refrigerant weight | 4.8 kg |
| Refrigerant GWP | 675 |
| Equivalent $CO_2$ | 3.24 Tn |
| **Hydraulics** | |
| Nominal volume flow rate | 1.31 l/s |
| Minimum volume flow rate | 0.83 l/s |
| Water temperature min/max | +25/+58°C |
| Available water pressure | 3.2 mwc |
| Max operating pressure | 6 bar |
| Min operating pressure | 0.5 bar |
| Max supply temperature | +58°C |
| Flow connection size*** | 1 ¼ inch |
| Return connection size*** | 1 ¼ inch |
| Circulated pump integrated | Yes |
| Pressure relief valve integrated | Yes |
| Expansion vessel integrated | No |
| **Source data** | |
| Operating limits, source (air) | -20 to +40°C |
| Nominal volume flow rate, source | 8,500 $m^3/h$ |

| Electrical | 26T |
|---|---|
| Protection class | IP24 |
| **Power source** | |
| Power supply compressor | 3 Phase + Neutral |
| | 50 Hz |
| Nominal voltage compressor | 400 V |
| Nominal voltage fans | 400 V |
| Number of compressors | 1 x scroll inverter |
| Number of fans | 2 x DC inverter |
| Starting current | 7.0 A |
| Minimum cable size**** | 6$mm^2$ |
| Max operating current FLC | 30 A |
| Circuit protection type | 32 A Type C |
| **General** | |
| Nominal sound power level LwA* | 73 dB(A) |
| Nominal sound pressure LpA @5m | 51 dB(A) |
| Unit dimensions (mm) | 1,276 Height |
| | 1,612 Width |
| | 669 Depth |
| Unit weight dry | 272 kg |
| Service clearances (mm) | 1,500 Front |
| | 600 Rear |
| | 800 Left Side |
| | 800 Right Side |
| | 600 Top |

* In accordance with EN 9614-2 under condition A7/W55.

** Calculated from Line to Line voltage of 400V and a Power Factor of 0.85.

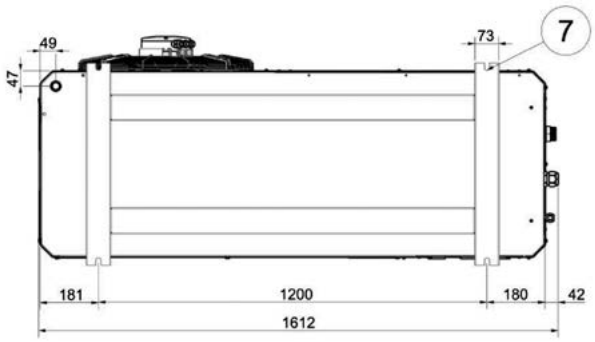
*** Ensure a flexible pipe is utilised for the flow and return connections to prevent vibration transmission. A water filter must be installed on the return line to the appliance.

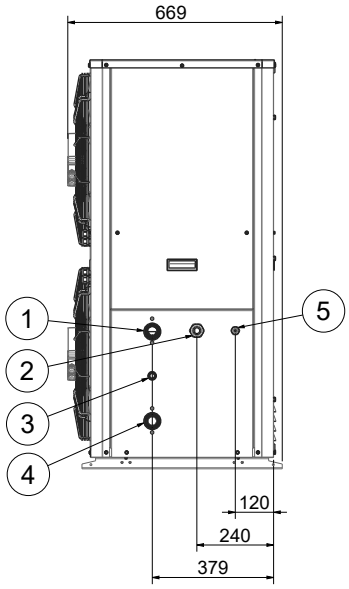
**** The wiring installation must comply with BS 7671, cable size may need to be increased depending on length of cable, cable type and any other installation factors that need to be taken into account.

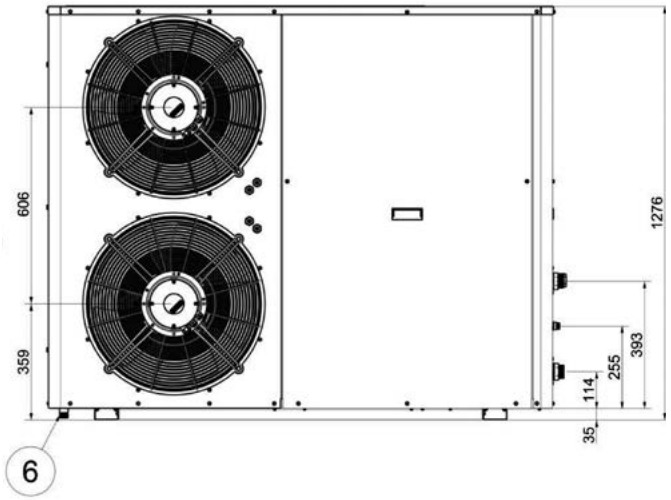
# Auriga HP 26T
# Auriga HP/TX 26T

## Dimensions

| Marker | Description | Dimension |
|---|---|---|
| 1 | BSPP male thread hydraulic connection - water outlet | Ø 1¼" |
| 2 | Electrical connection - power supply | - |
| 3 | Safety valve drain connection (BSPP male thread) | Ø ½" |
| 4 | BSPP male thread hydraulic connection - water inlet | Ø 1¼" |
| 5 | Communication connection - control | - |
| 6 | Condensate drain connection (BSPP male thread) | Ø ¾" |
| 7 | Anti-vibration feet housing† | Ø 16mm |



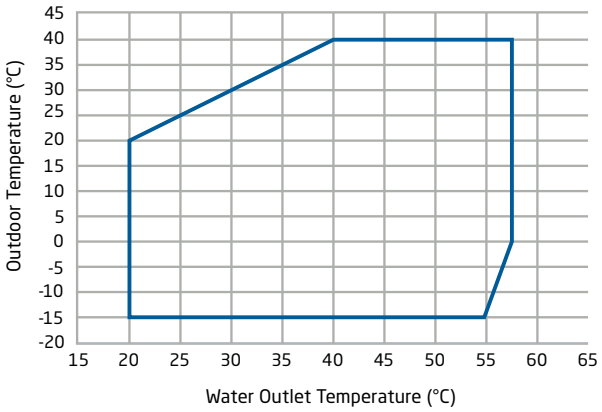



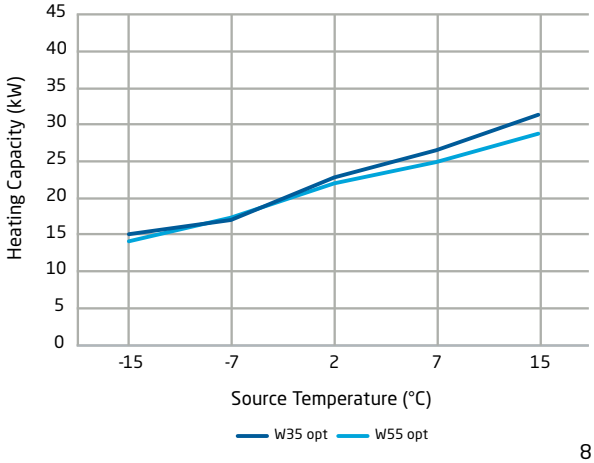

† Support rail is prepared for housing the anti-vibration feet. The given diameter information corresponds to the metal rod of the anti-vibration feet.

## Performance

### Heating Operation Limits




### Heating Capacity



# **Auriga HP 33T** - 7832031
# **Auriga HP/TX 33T** (Coastal Protection) - 7854472

## Technical specification

| **Performance** | **33T** |
|---|---|
| Heating capacity at A7/W35 | 33.4kW |
| Power input at A7/W35** | 7.59 |
| COP at A7/W35 | 4.4 |
| Heating capacity at A-10/W35 | 17.98kW |
| Power input at A-10/W35** | 6.56 |
| COP at A-10/W35 | 2.74 |
| SCOP at Water 35 | 4.83 |
| SCOP at Water 55 | 3.58 |
| Seasonal efficiency at Water 35 | 190% |
| Seasonal efficiency at Water 55 | 140% |
| **ERP data** | |
| Energy label rating at Water 35 | A+++ |
| Sound power rating at A7/W35 | 65 dB(A) |
| **Refrigerant** | |
| Refrigerant type | R32 |
| Refrigerant weight | 5.6kg |
| Refrigerant GWP | 675 |
| Equivalent $CO_2$ | 3.78 Tn |
| **Hydraulics** | |
| Nominal volume flow rate | 1.61 l/s |
| Minimum volume flow rate | 0.97 l/s |
| Water temperature min/max | +25/+60°C |
| Available water pressure | 5.5 mwc |
| Max operating pressure | 6 bar |
| Min operating pressure | 0.5 bar |
| Max supply temperature | +60°C |
| Flow connection size*** | 1 ½ inch |
| Return connection size*** | 1 ½ inch |
| Circulated pump integrated | Yes |
| Pressure relief valve integrated | Yes |
| Expansion vessel integrated | No |
| **Source data** | |
| Operating limits, source (air) | -20 to +40°C |
| Nominal volume flow rate, source | 10,300 m³/h |

| **Electrical** | **33T** |
|---|---|
| Protection class | IP24 |
| **Power source** | |
| Power supply compressor | 3 Phase + Neutral |
| | 50 Hz |
| Nominal voltage compressor | 400 V |
| Nominal voltage fans | 400 V |
| Number of compressors | 1 x scroll inverter |
| Number of fans | 2 x DC inverter |
| Starting current | 8.1 A |
| Minimum cable size**** | 10mm² |
| Max operating current FLC | 40 A |
| Circuit protection type | 40 A Type C |
| **General** | |
| Nominal sound power level LwA* | 71 dB(A) |
| Nominal sound pressure LpA @5m | 49 dB(A) |
| Unit dimensions (mm) | 1,581 Height |
| | 1,882 Width |
| | 683 Depth |
| Unit weight dry | 361 kg |
| Service clearances (mm) | 1,500 front |
| | 600 rear |
| | 800 left side |
| | 800 right side |
| | 600 top |

* In accordance with EN 9614-2 under condition A7/W55.

** Calculated from Line to Line voltage of 400V and a Power Factor of 0.85.

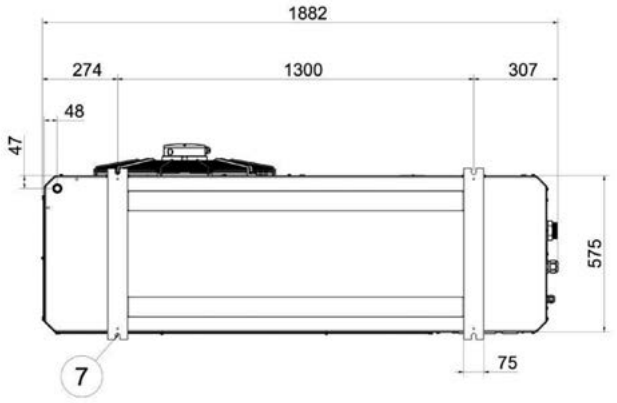
*** Ensure a flexible pipe is utilised for the flow and return connections to prevent vibration transmission. A water filter must be installed on the return line to the appliance.

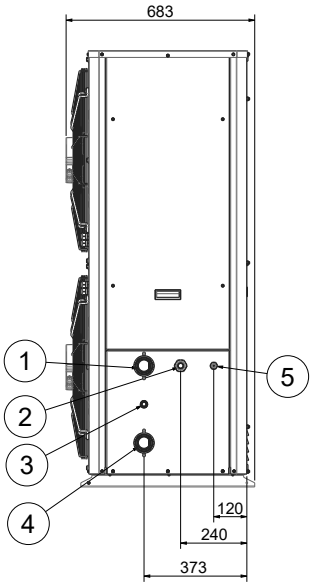
**** The wiring installation must comply with BS 7671, cable size may need to be increased depending on length of cable, cable type and any other installation factors that need to be taken into account.

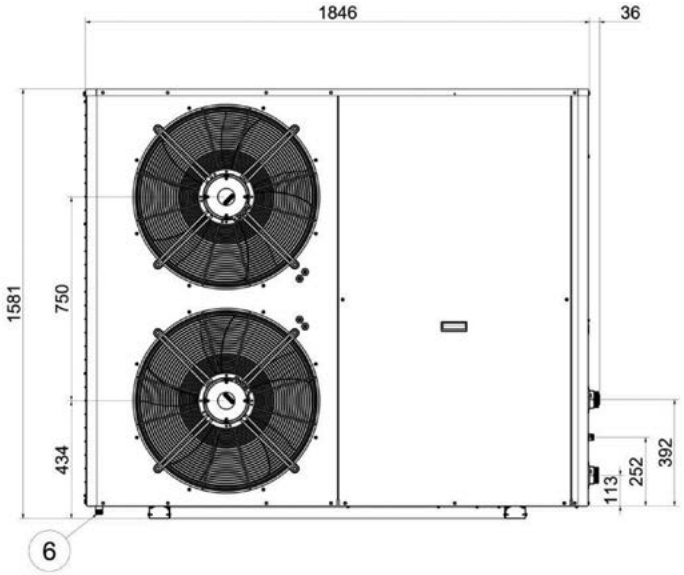
# Auriga HP 33T
# Auriga HP/TX 33T

## Dimensions

| Marker | Description | Dimension |
|---|---|---|
| 1 | BSPP male thread hydraulic connection - water outlet | Ø 1 1½" |
| 2 | Electrical connection - power supply | - |
| 3 | Safety valve drain connection (BSPP male thread) | Ø ½" |
| 4 | BSPP male thread hydraulic connection - water inlet | Ø 1 1½" |
| 5 | Communication connection - control | - |
| 6 | Condensate drain connection (BSPP male thread) | Ø ¾" |
| 7 | Anti-vibration feet housing† | Ø 16mm |



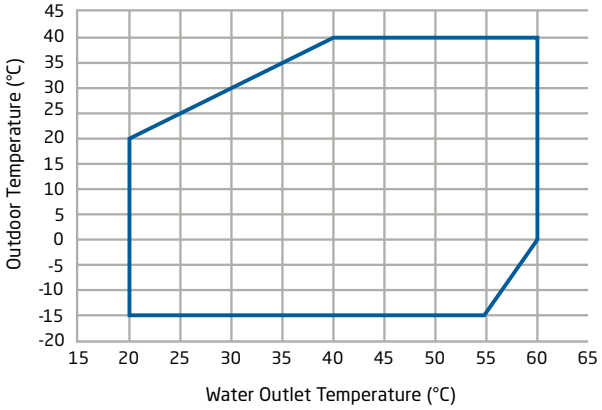



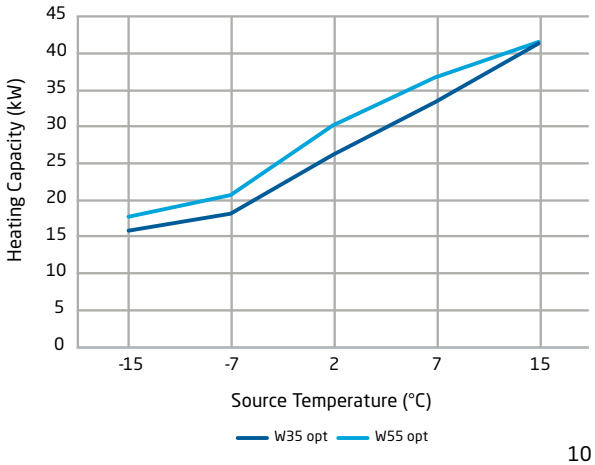

† Support rail is prepared for housing the anti-vibration feet. The given diameter information corresponds to the metal rod of the anti-vibration feet.

## Performance

### Heating Operation Limits




### Heating Capacity



# Auriga HP 40T - 7832032
# Auriga HP/TX 40T (Coastal Protection) - 7837263

## Technical specification

| Performance | 40T |
|---|---|
| Heating capacity at A7/W35 | 40.2kW |
| Power input at A7/W35** | 9.35 |
| COP at A7/W35 | 4.3 |
| Heating capacity at A-10/W35 | 22.74 kW |
| Power input at A-10/W35** | 8.45 |
| COP at A-10/W35 | 2.69 |
| SCOP at Water 35 | 4.80 |
| SCOP at Water 55 | 3.61 |
| Seasonal efficiency at Water 35 | 189% |
| Seasonal efficiency at Water 55 | 142% |
| **ERP data** | |
| Energy label rating at Water 35 | A+++ |
| Sound power rating at A7/W35 | 65 dB(A) |
| **Refrigerant** | |
| Refrigerant type | R32 |
| Refrigerant weight | 5.6kg |
| Refrigerant GWP | 675 |
| Equivalent $CO_2$ | 3.78 Tn |
| **Hydraulics** | |
| Nominal volume flow rate | 1.94 l/s |
| Minimum volume flow rate | 1.17 l/s |
| Water temperature min/max | +25/+60°C |
| Available water pressure | 2.8 mwc |
| Max operating pressure | 6 bar |
| Min operating pressure | 0.5 bar |
| Max supply temperature | +60°C |
| Flow connection size*** | 2 inch |
| Return connection size*** | 2 inch |
| Circulated pump integrated | Yes |
| Pressure relief valve integrated | Yes |
| Expansion vessel integrated | No |
| **Source data** | |
| Operating limits, source (air) | -20 to +40°C |
| Nominal volume flow rate, source | 11,200 $m^3/h$ |

| Electrical | 40T |
|---|---|
| Protection class | IP24 |
| **Power source** | |
| Power supply compressor | 3 Phase + Neutral |
| | 50 Hz |
| Nominal voltage compressor | 400 V |
| Nominal voltage fans | 400 V |
| Number of compressors | 1 x scroll inverter |
| Number of fans | 2 x DC inverter |
| Starting current | 8.4 A |
| Minimum cable size**** | 10$mm^2$ |
| Max operating current FLC | 45 A |
| Circuit protection type | 50 A Type C |
| **General** | |
| Nominal sound power level LwA* | 71 dB(A) |
| Nominal sound pressure LpA @5m | 49 dB(A) |
| Unit dimensions (mm) | 1,581 Height |
| | 1,882 Width |
| | 683 Depth |
| Unit dry weight | 363 kg |
| Service clearances (mm) | 1,500 front |
| | 600 rear |
| | 800 left side |
| | 800 right side |
| | 600 top |

* In accordance with EN 9614-2 under condition A7/W55.

** Calculated from Line to Line voltage of 400V and a Power Factor of 0.85.

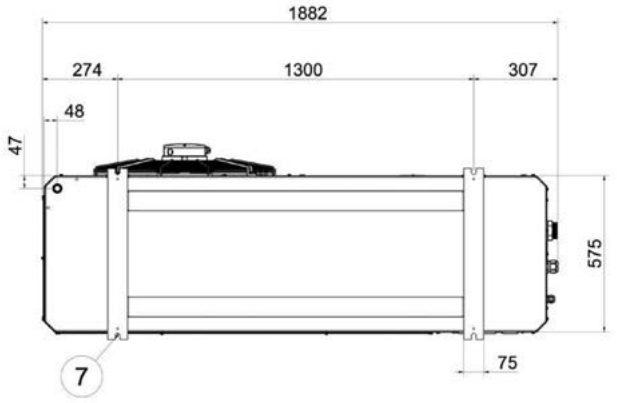
*** Ensure a flexible pipe is utilised for the flow and return connections to prevent vibration transmission. A water filter must be installed on the return line to the appliance.

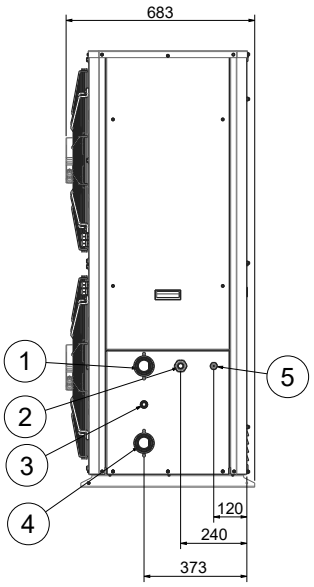
**** The wiring installation must comply with BS 7671, cable size may need to be increased depending on length of cable, cable type and any other installation factors that need to be taken into account.

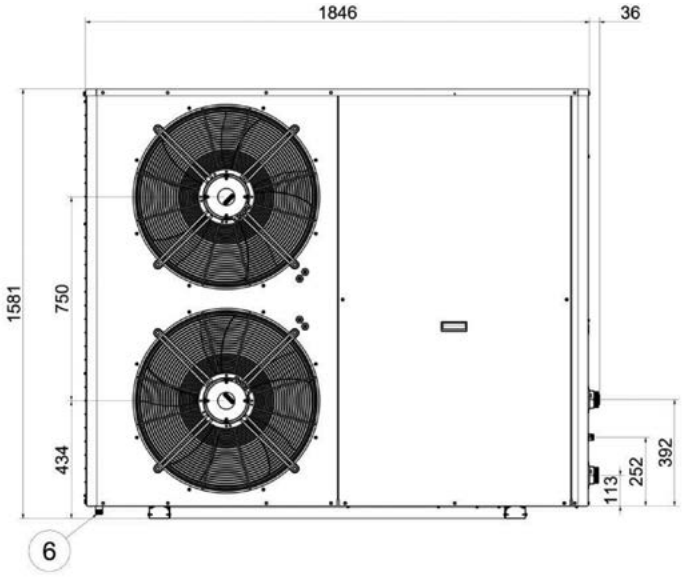
# Auriga HP 40T
# Auriga HP/TX 40T

## Dimensions

| Marker | Description | Dimension |
|---|---|---|
| 1 | BSPP male thread hydraulic connection - water outlet | Ø 2" |
| 2 | Electrical connection - power supply | - |
| 3 | Safety valve drain connection (BSPP male thread) | Ø ½" |
| 4 | BSPP male thread hydraulic connection - water inlet | Ø 2" |
| 5 | Communication connection - control | - |
| 6 | Condensate drain connection (BSPP male thread) | Ø ¾" |
| 7 | Anti-vibration feet housing† | Ø 16mm |



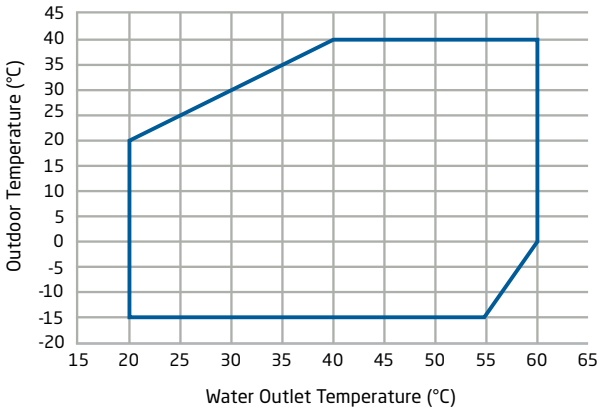



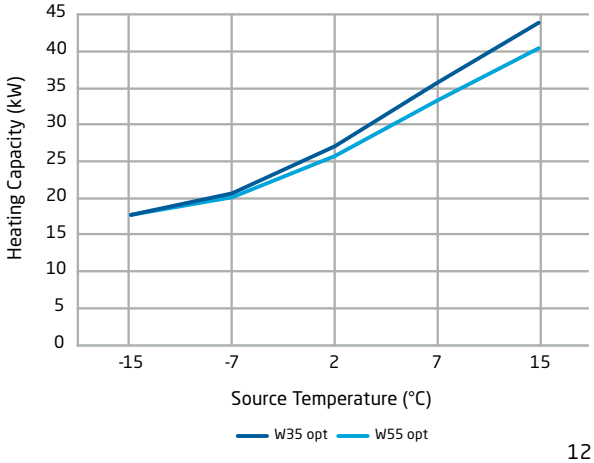

† Support rail is prepared for housing the anti-vibration feet. The given diameter information corresponds to the metal rod of the anti-vibration feet.

## Performance

### Heating Operation Limits



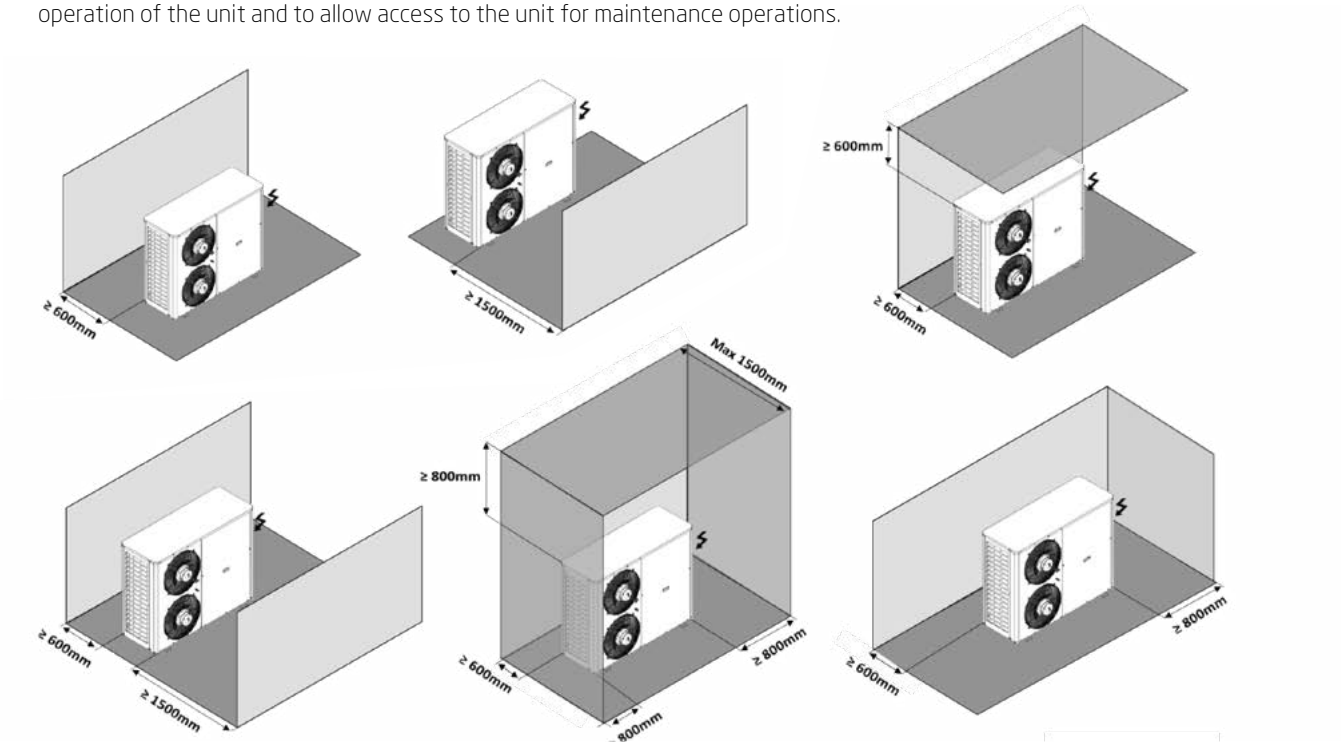

### Heating Capacity



# Baxi Auriga 20-40T

## Spatial requirements - outdoors

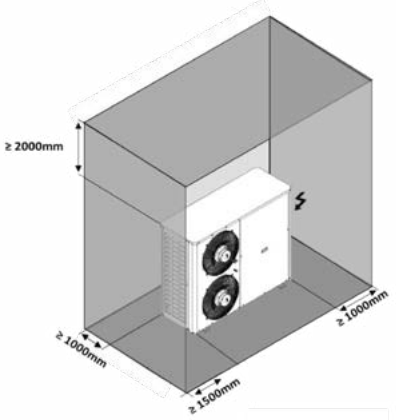
Make sure that you respect the following minimum distances to ensure the correct operation of the unit and to allow access to the unit for maintenance operations.



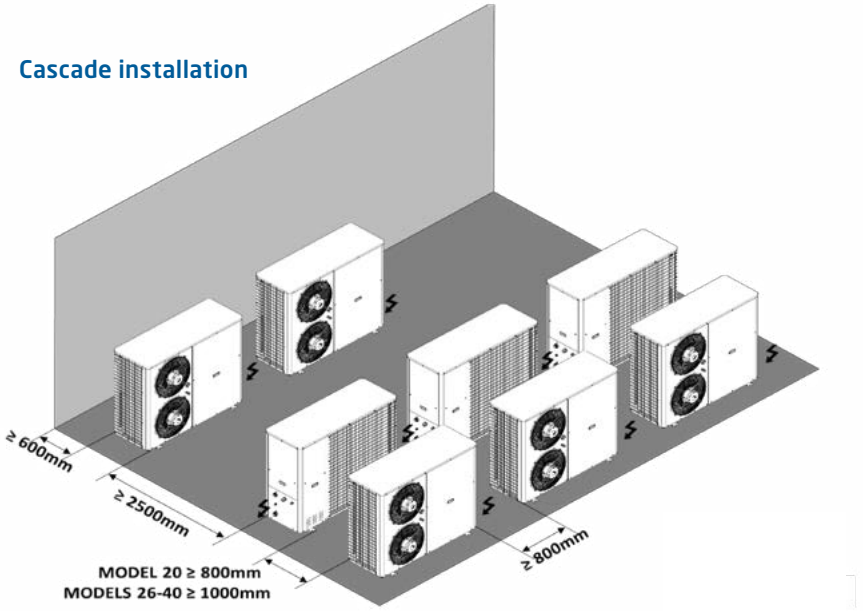

## Spatial requirements - indoors

Install a conduct at the outlet of the fans to transport the exhaust air outside the room.

In case of installation of the unit with the suction/return part facing a window, provide the window with a grill to prevent any foreign object/animal from entering the room.

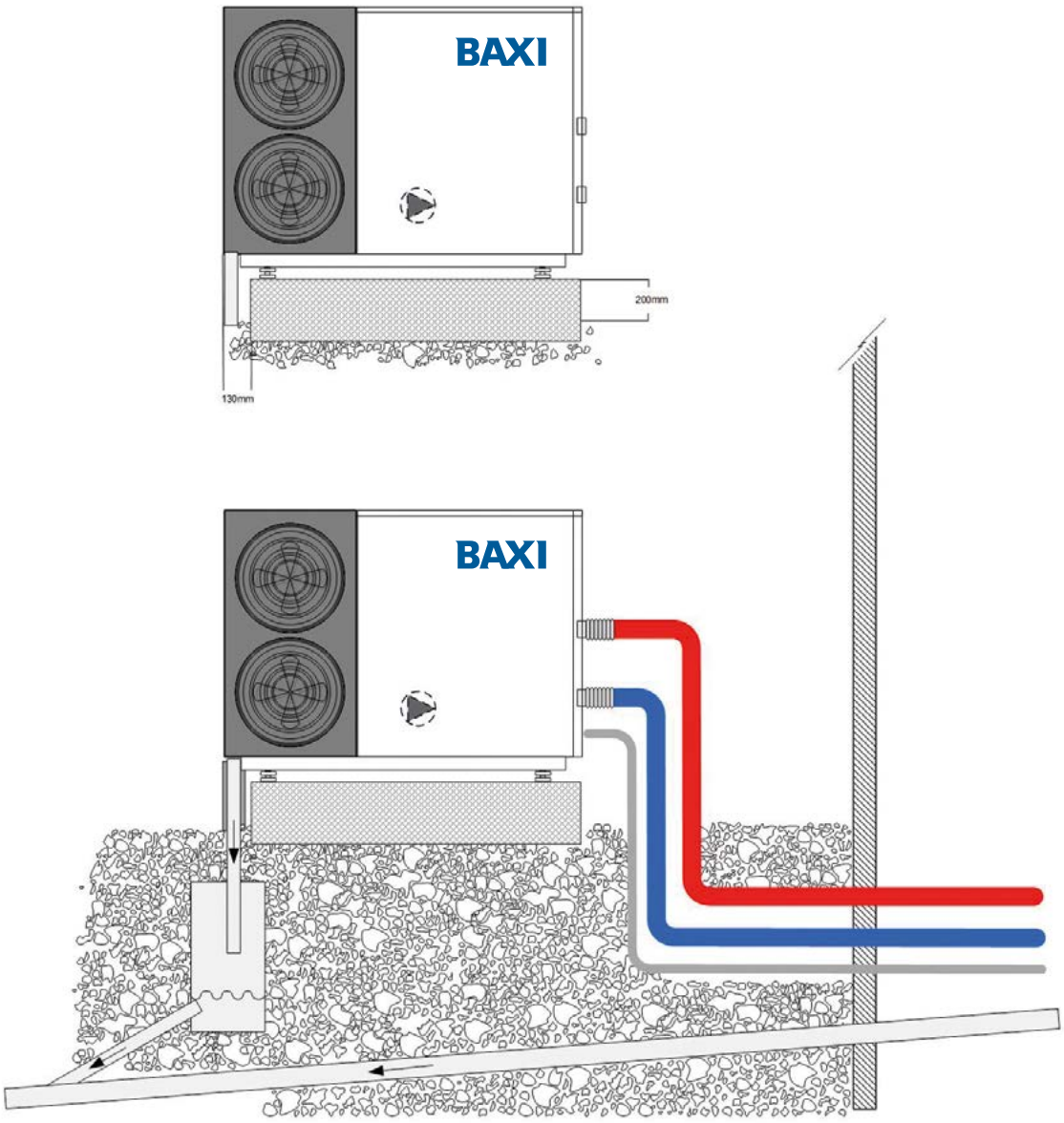



## Cascade installation



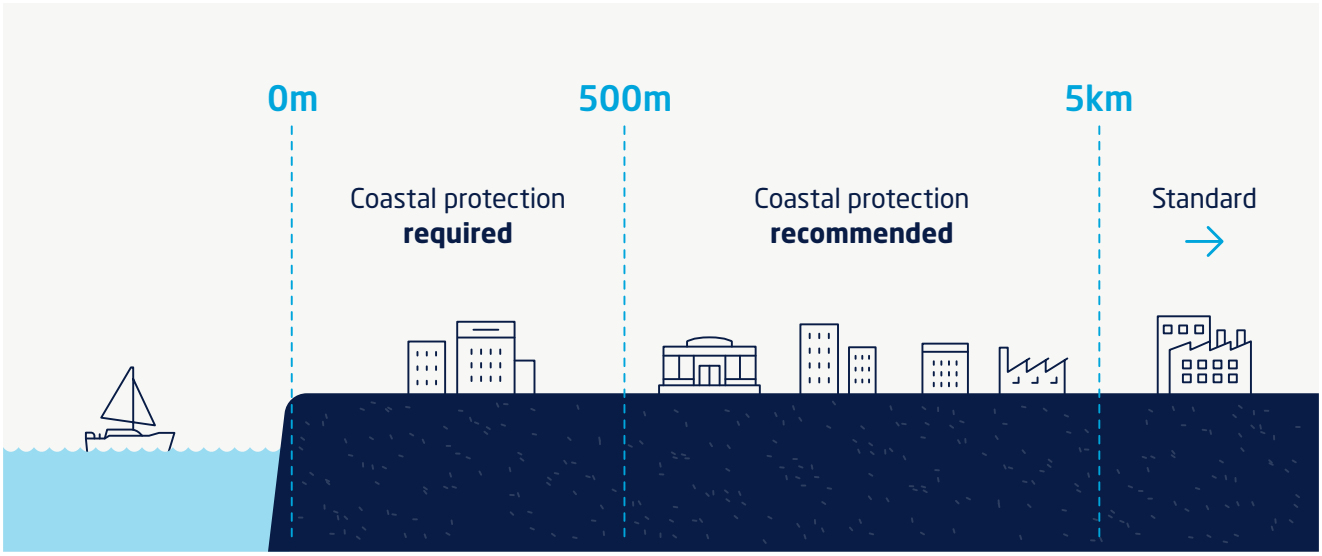
## Condensate piping, hydraulic piping and cable ducting detail

- Flexible connections for the flow and return pipes are available as optional extras. We recommend that the flexible pipes or vibration absorbers are fitted to avoid the emission of vibrations to the pipework.
- The flow and return pipework should be well insulated.
- The condensate drainage connection for each unit is underneath the ASHP. In most cases further piped drainage of the condensate will be required.
- ASHP condensate can be connected to rainwater drainage as the water is clean.
- Install trace heating on the condensate pipework to avoid freezing.
- The ASHPs require both a single phase (230V) and a 3 phase (400V) electrical supplies.
- The ASHPs come with a soft starter installed as standard.
- Ensure that the building's existing or proposed electrical supply is suitable for the installation of ASHP(s).
- The ASHP (or cascade of) requires electrical metering. An application to the District Network Operator (DNO) will also be required.



# Coastal Protection

| Distance from the of the coast | Units required |
|---|---|
| Within 0-0.5 kilometres | Coastal units required |
| Between 0.5-5 kilometres | Coastal units recommended<br>Standard units can be used but ONLY if Heat Pump(s) are sheltered from sea breezes by a protective surround |
| Over 5 Kilometres | Standard units suitable |

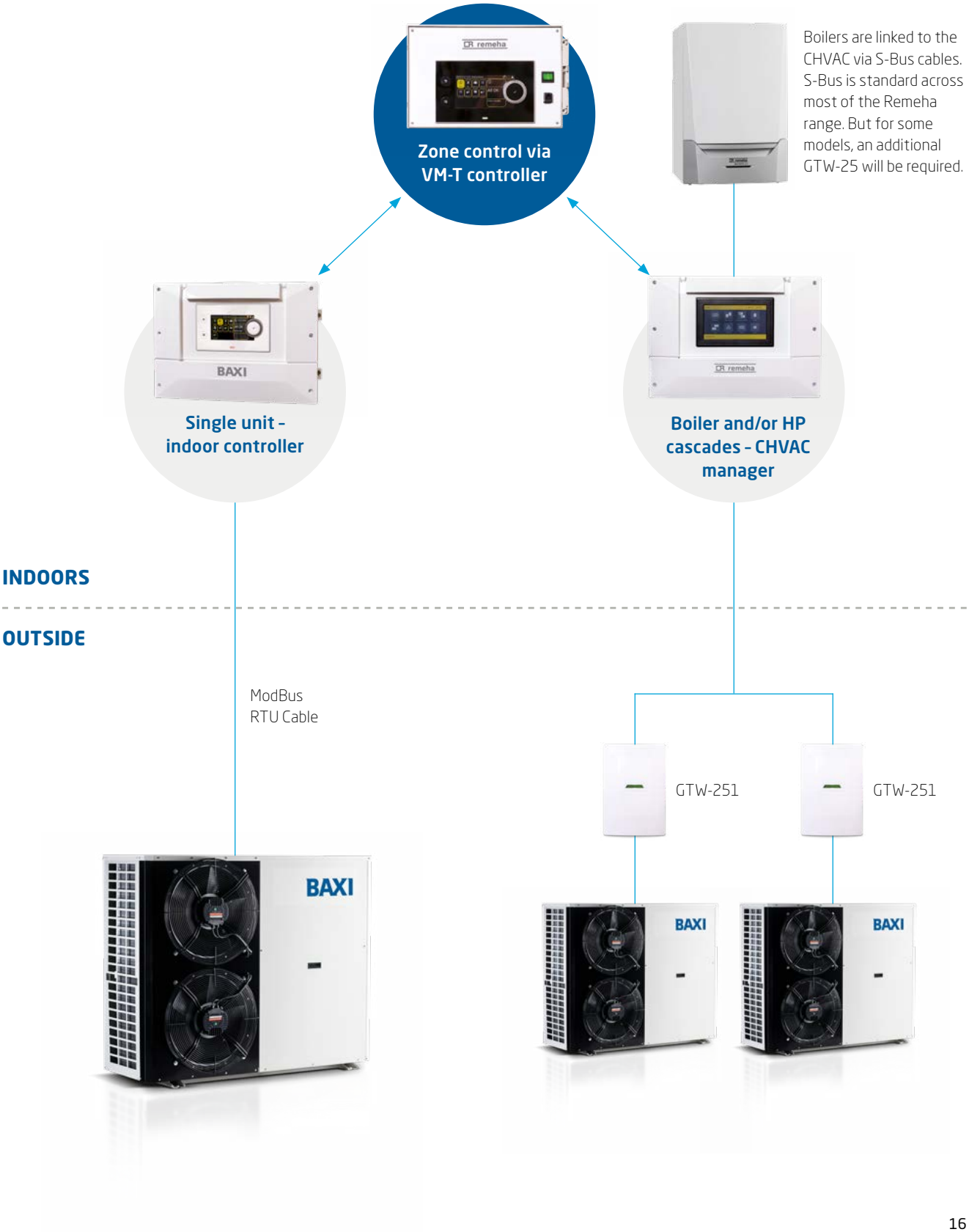



## Remember...

- Coastal units should be inspected and maintained at least every 6 months.
- Any detected damage should be repaired as soon as possible by qualified professionals only.

# Controls

## Indoor controller and commercial HVAC manager



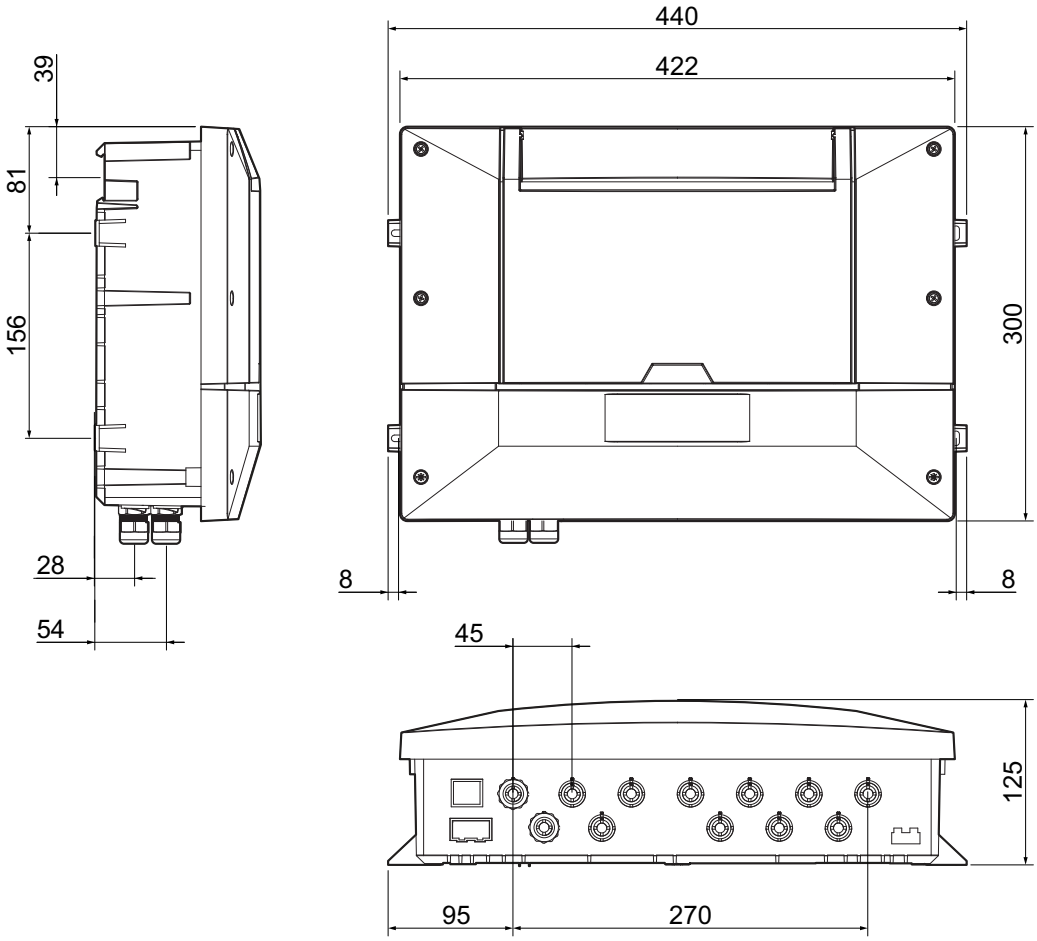
| | Small applications 2DU + 1 boiler | Larger applications or cascading up to 8 producers | Control of additional zones | Advanced multi-boiler control |
|---|---|---|---|---|
| | **Indoor Controller** | **CHVAC Manager** | **VM-T Controller** | **iSense Pro** |
| Heating | | Only control the producers, cannot control pumps, mixing valves etc: will need the VM-T | As standard 2 hydraulic circuits (VT/CT), directly controls pumps and mixing valves (optional AD249 for an additional hydraulic circuit) | As standard, 2 hydraulic circuits (VT/CT). Directly controls pumps and mixing valves |
| DHW | | With the use of an optional VM-T Control | As standard, 1 DHW circuit (optional AD249 for an auxiliary circuit) | As standard, 1 DHW circuit and an auxiliary circuit |
| Cooling | | | Not known to control cooling | Not known to control cooling |
| Hybrid | Only 1 boiler, max 2 HP | Max 8 producers | Only known to control boilers | Only known to control boilers |
| All electrics with electrical backup | Up to 2 stages | | Requires 230V, 50Hz, 6A power supply. Clock power reserve for 2 years, with values and programming saved in memory | Requires 230V, 50Hz, 6A power supply. Clock power reserve for 2 years, with values and programming saved in memory |
| **Producers management** | | | | |
| Direct connection to HP | | Need GTW 251 per HP that needs connection | Not known to control HP | Not known to control HP |
| Manage 2 ODU | | Need a GTW 251 per HP | Not known to control HP | Not known to control HP |
| Cascade up to 8 Producers (inc. ODU) | Cascade possible via a VM-T | Need a GTW 251 per HP | As master can control up to 7 boilers in cascade | Controls up to 10 boilers in cascade, not known to control HP |
| **Zone management** | | | | |
| Control 1 zone | | With VM-T | | |
| Control up to 5 zones, or 3 mixing zones | Only with additional accessory or VM-T | With VM-T | With the optional AD249 Controls 3 Mixing Zones + 1 DHW + 1 Aux | In a network with additional iSense Pro units |
| **Output management** | | | | |
| Cascade with different HP outputs - i.e. not identical | | Only for MB2C | Not known to control HP | Not known to control HP |
| Output control capacity up to 80kWs | | | Not known to be limited | Not known to be limited |
| Unlimited output control capacity | | Might need additional accessories inc. GTW 251 for HP | | |
| **Connection** | | | | |
| BACnet connection | Need GTW 21 | Need GTW 21 | | |
| ModBus connection | Need GTW 08 RTU ModBus | Need GTW 08 RTU ModBus | Mini - Din Connectors × 2 | Need ModBus interface AD 286 / AD 287 |
| Mandatory stable internet connection | Can have one, but is not mandatory | | | |
| Cloud access | With use of GTW-30 or RU2 | If a service contract is in place it's recommended it be mandatory to have access to the unit to do remote optimisation | | |
| **Setting** | | | | |
| Set by point set value for comfort - i.e. °C | | | | |
| Set by proportion for higher efficiency of the devices | | | | |
| **Other** | | | | |
| Connection to external PV | | With the use of an optional VM-T Control | | |
| Connection to solar modules | | | | Via SCU-C (not applied in UK) |
| Din rail connection | | | Mini - Din Connectors × 2 | Mini - Din Connectors × 2 |
| System distribution components | Need Low Loss Header | Need Buffer and Low Loss Header | Need Low loss Header (in circuit with > 2 boilers), motorised 3-way valve, pumps, sensors (Room, Flow (common and zone)) | Need Low Loss Header (in circuit with > 2 boilers), motorised 3-way valve, pumps, sensors |
| Boiler connection | Via: On/OFF, OpenTherm, BDR Bus 0-10V with an accessory | Limitation when retrofit on the boiler due to the connections please consult list | Via: OpenTherm, BDR Bus | Via: OpenTherm, BDR Bus |

**Key:** Integral Function | Function possible with additional item / accessory | Not possible with the device

# Indoor controller

## Dimensions

### For use in installations with a single ASHP




## Technical specifications

| General data | Auriga control |
|---|---|
| Operating temperature | 0 to 30°C |
| Storage temperature | -25 to 60°C |
| Relative humidity (non-condensing) | 0 to 95% |
| Weight | 3.08 kg |
| Power supply voltage | 230 VAC |
| Power consumption (maximum) | 14 W |

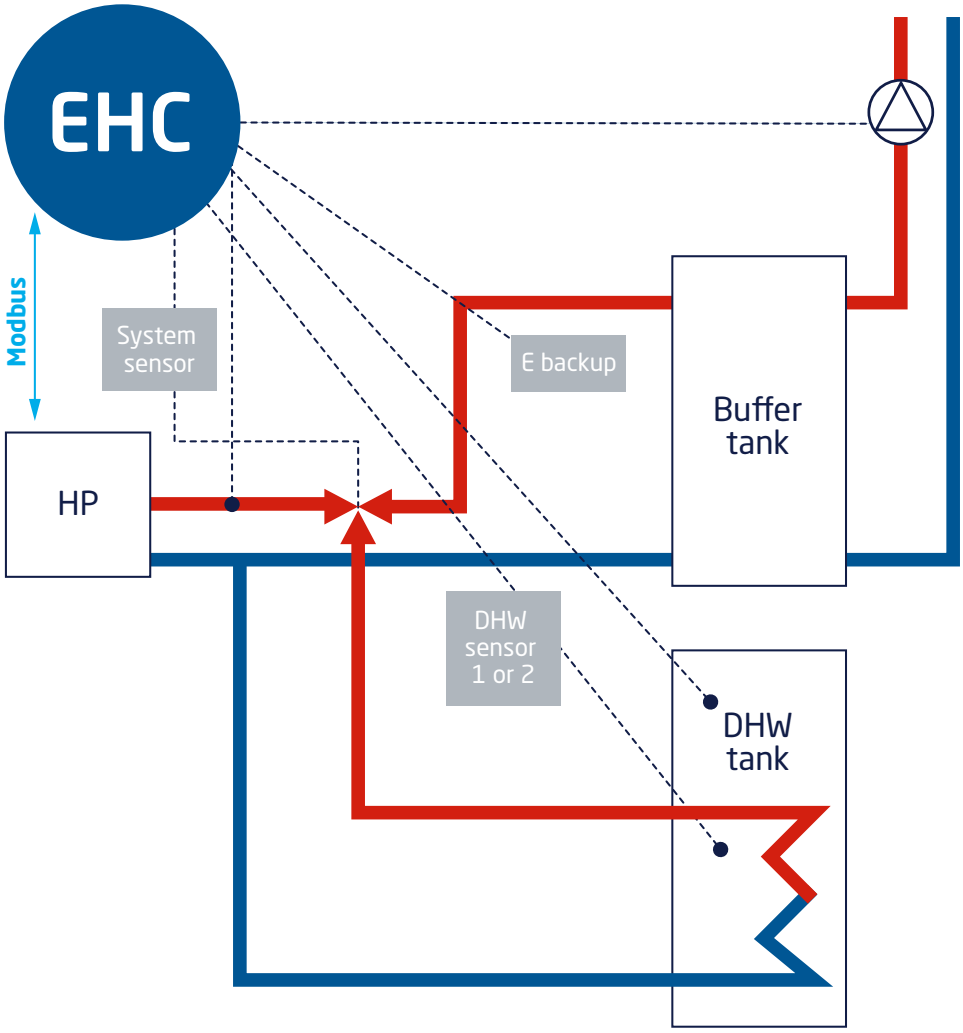
| NTC 10K heating flow sensor | Resistance (Ω) |
|---|---|
| 0°C | 32,014 |
| 10°C | 19,691 |
| 20°C | 12,474 |
| 25°C | 10,000 |
| 30°C | 8,080 |
| 40°C | 5,372 |
| 50°C | 3,661 |
| 60°C | 2,535 |
| 70°C | 1,794 |
| 80°C | 1,290 |
| 90°C | 941 |

# Indoor controller

## Typical installations

### Single Heat Pump providing heat and Domestic Hot Water (DHW) with 3 way valve

## Outdoor sensor



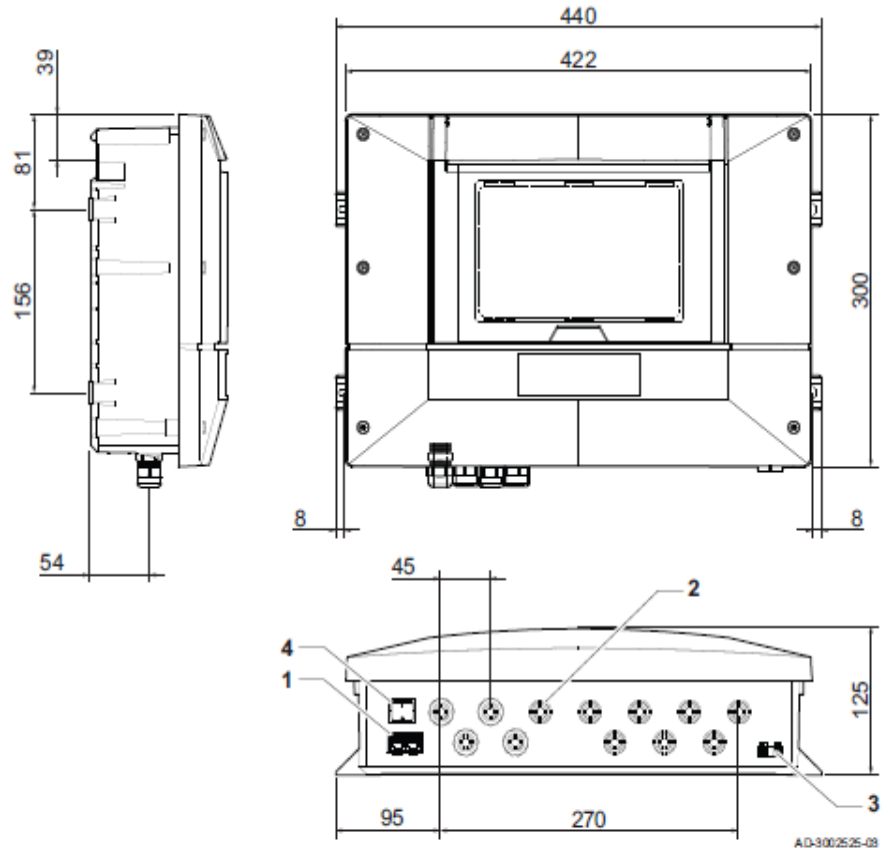

**General information:**

- The system will supply heating and Domestic Hot Water.
- The producer is a single Auriga ASHP.

# Commercial HVAC manager

## Dimensions

Fig.1 Dimensions and connections




1 S-Bus connectors
2 Cable glands
3 L-Bus connectors
4 On/off switch

The centre of the DIN rail is 39 mm from the top of the wall box.

## Technical specifications

| General data | CHVAC main controller |
|---|---|
| Allowed ambient temperature | 0 to 40°C |
| Width x height x depths (maximum dimensions) | 440mm x 300mm x 125mm |
| Storage temperature | -25 to 60°C |
| Relative humidity (non-condensing) | 0 to 95% |

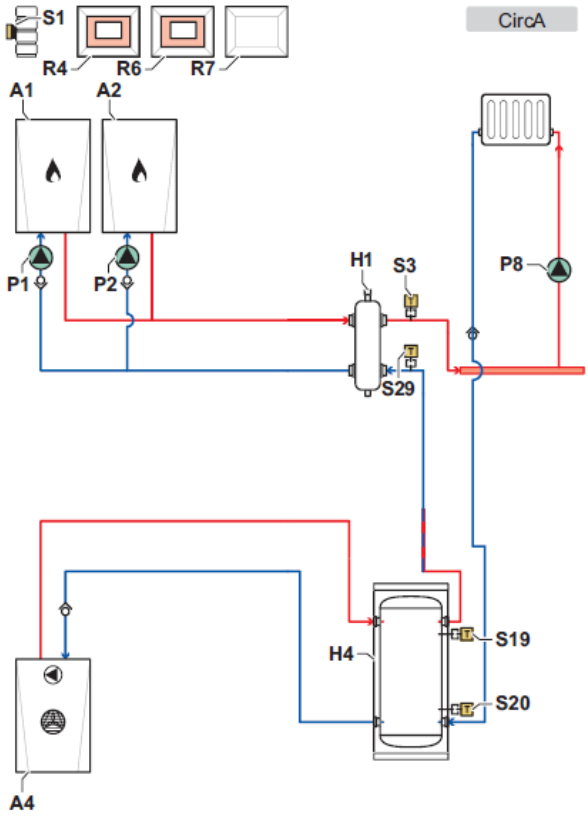
| Electrical data | CHVAC main controller |
|---|---|
| Supply voltage | 230 VAC |
| Power consumption (of CHVAC main controller only) | 14 W |

# Commercial HVAC manager

## Typical installations

### Cascade of two boilers and single heat pump - 1 circuit (direct)

Fig.9 Diagram and components - 6000098




| | |
|---|---|
| CircA | Circuit A (Direct circuit) |
| A1 | Boiler with CB-03 and GTW-25 |
| A2 | Boiler with CB-03 and GTW-25 |
| A4 | Heat pump connected via Modbus |
| H1 | Low loss header |
| H4 | Buffer tank with two sensors |
| P1 | Appliance A1 pump |
| P2 | Appliance A2 pump |
| P8 | Circuit A pump |

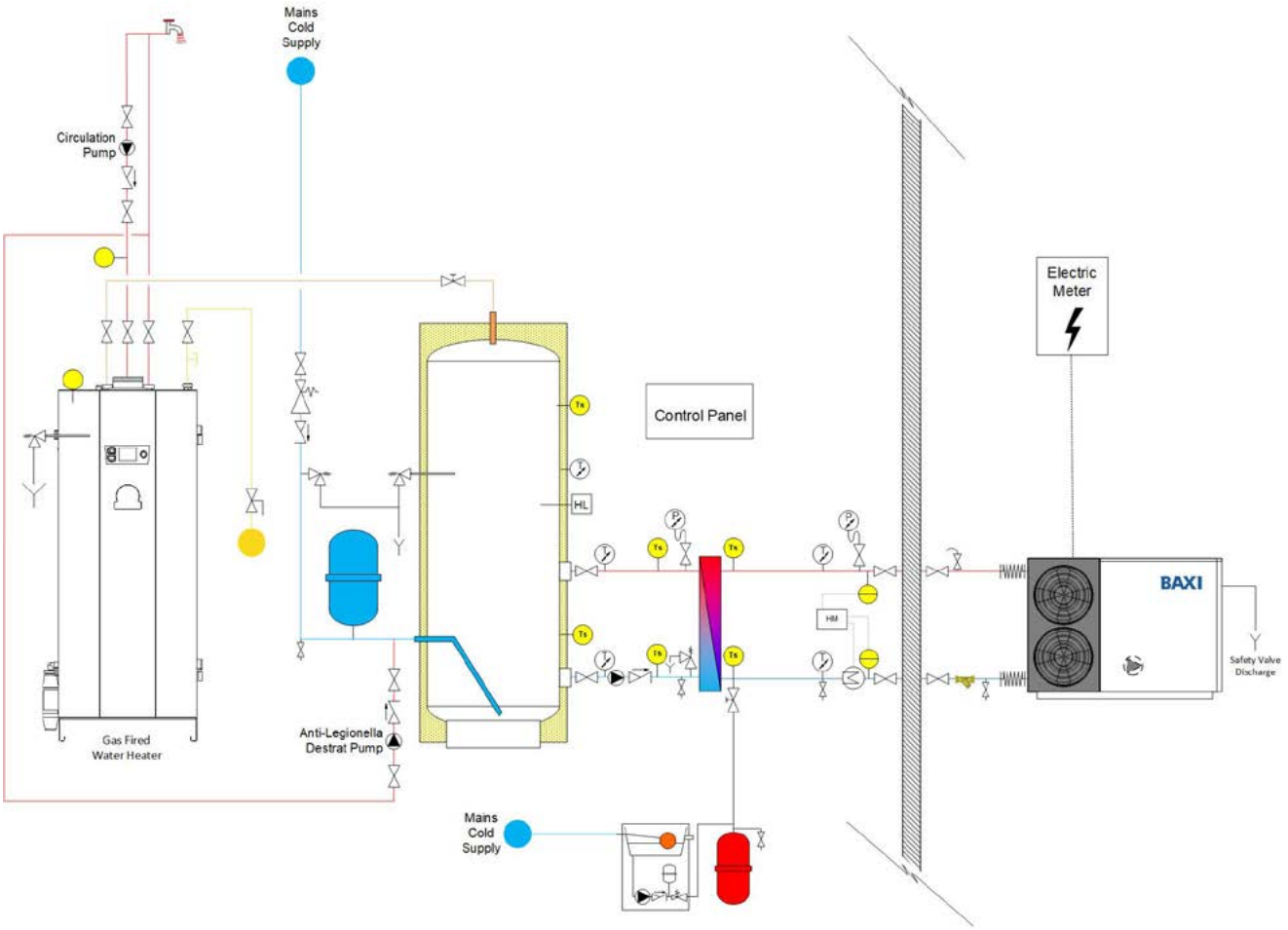
| | |
|---|---|
| R4 | Cascade manager with CHVAC-01, IO-01, CB-05 and CB-20 |
| R6 | External zone controller with EEC-01 and CB-05 |
| R7 | Wall box with GTW-251 |
| S1 | Outdoor temperature sensor |
| S3 | Low loss header flow temperature sensor |
| S19 | Heating buffer tank top temperature sensor |
| S20 | Heating buffer tank bottom temperature sensor |
| S29 | Low loss header return temperature sensor |

**General information:**

- The system will only supply heating water. Domestic hot water is decentralised and therefore not included in this system.
- The design supply temperature is 70 °C at an outdoor temperature of -10°C.
- The producers are a combination of two gas fired boilers and a heat pump, managed by the Remeha CHVAC system manager.
- The heat pump and the boilers are in series and can both deliver energy for heating.

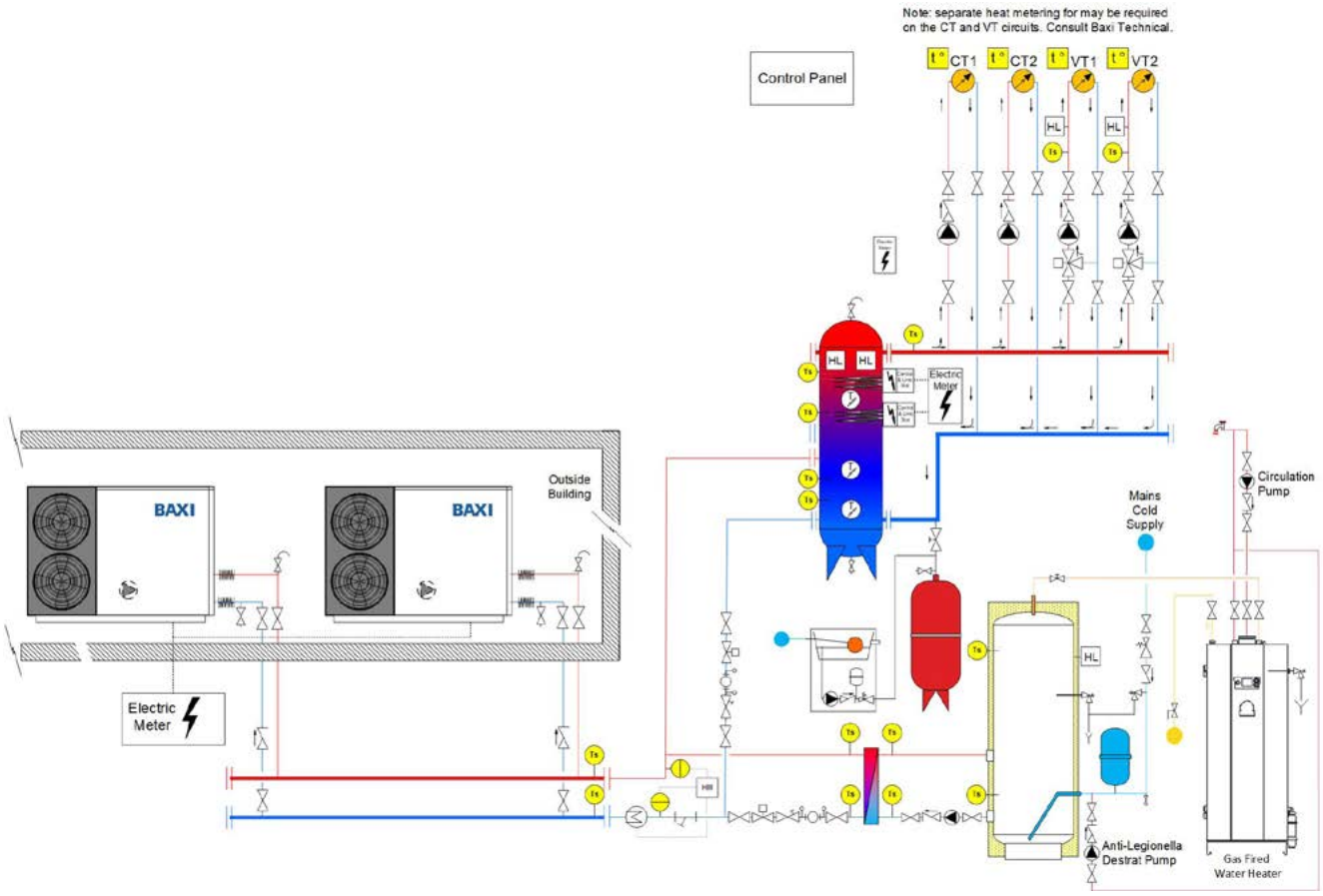
# Hydraulic schematics

## Schematic example of Domestic Hot Water pre-heat with gas-fired water heater



# Hydraulic schematics

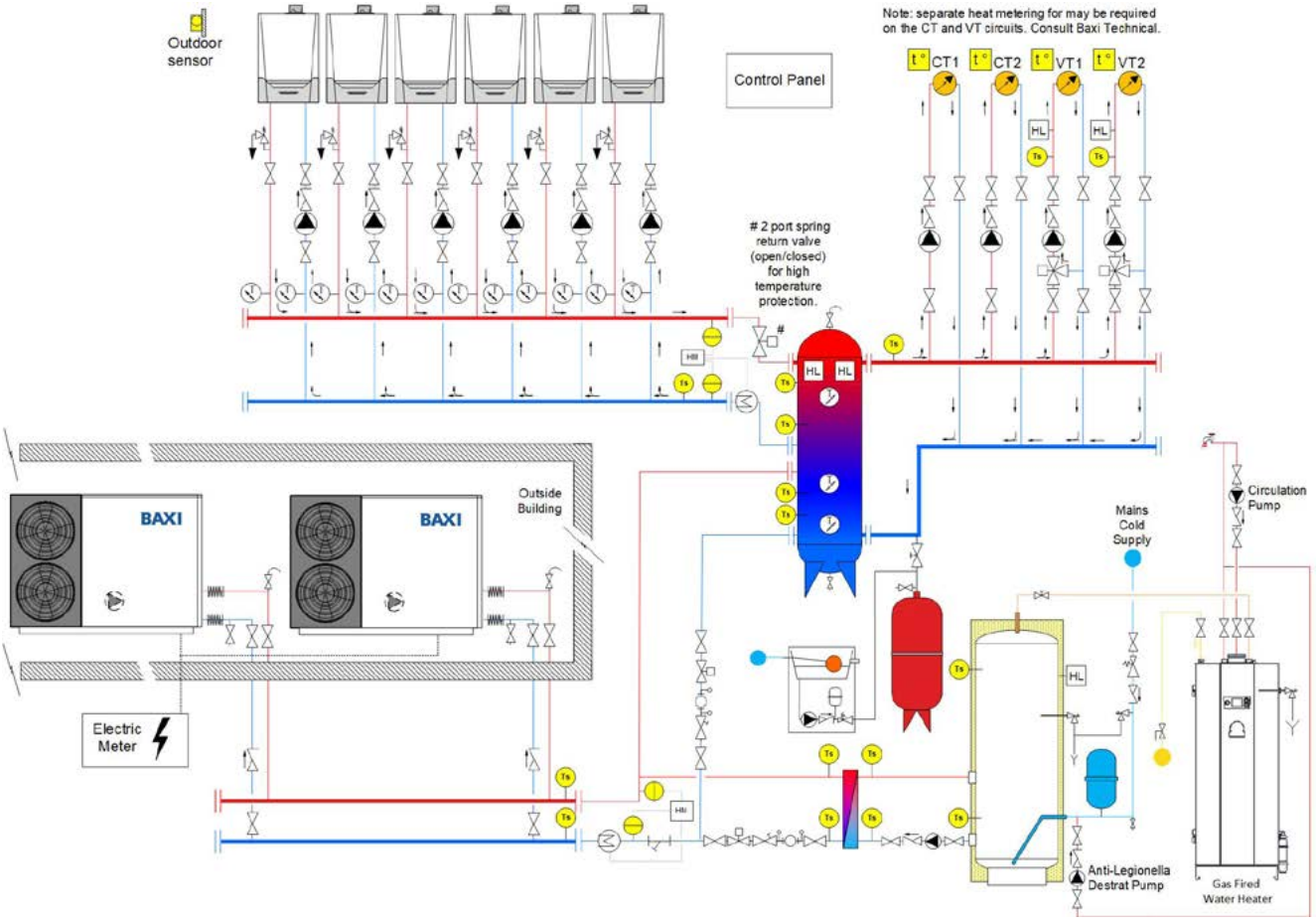
## Bivalent primary heating via boilers and ASHP




Suggested schematic, please consult your technical sales manager for more information

# Hydraulic schematics

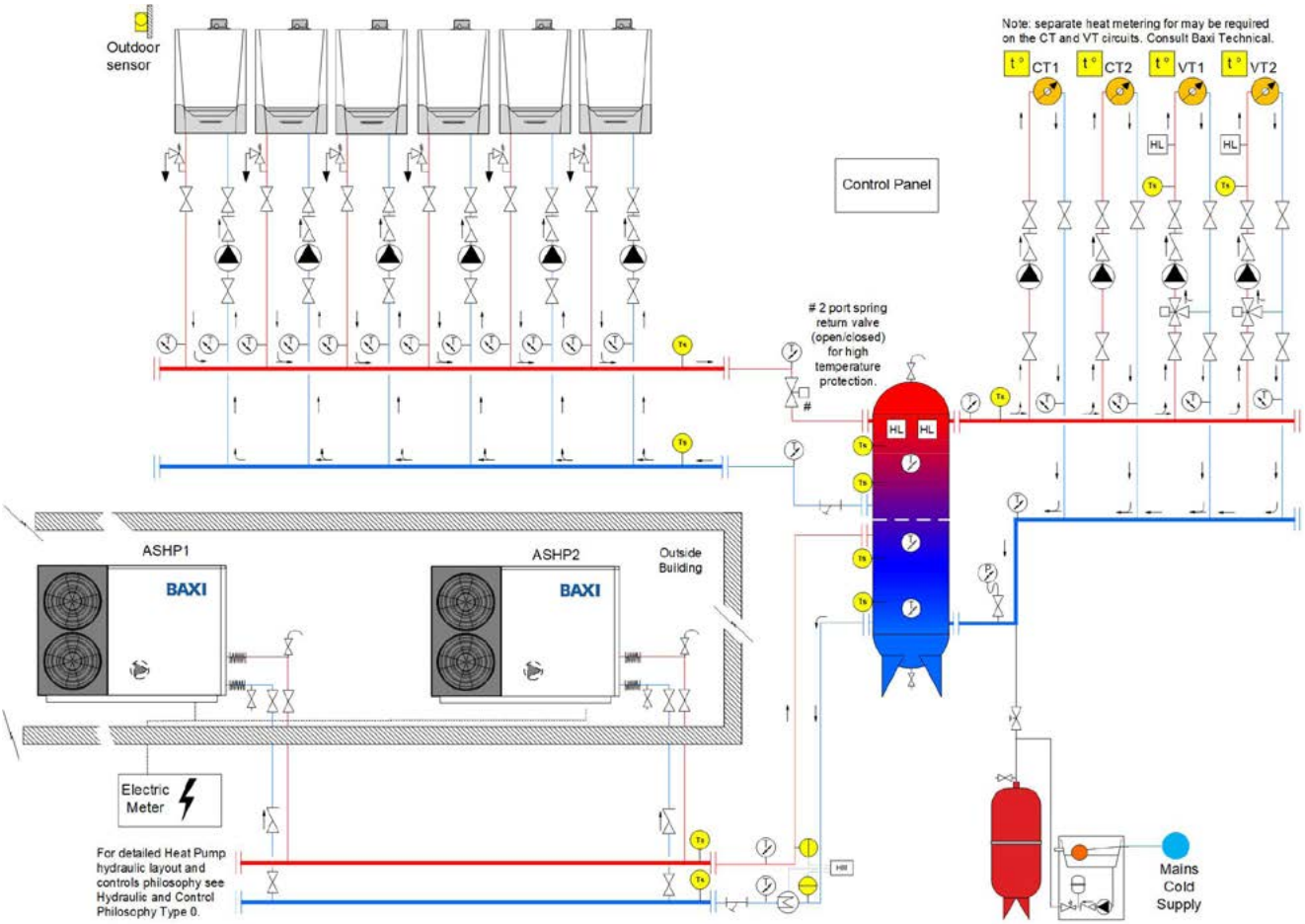
## Bivalent primary heating via boilers and ASHP with DHW pre-heat




Suggested schematic, please consult your technical sales manager for more information

# Hydraulic schematics

## Primary heating via ASHP with DHW pre-heat




Suggested schematic, please consult your technical sales manager for more information

# Technical **support**

From brochures to CAD drawings and BIM files, you can access all the information you need at **baxi.co.uk**

Or call our sales or technical departments on **0345 070 1055** We're always happy to help.

### We can provide you with:

- Brochures
- Technical specification sheets
- Case studies
- Installation manuals
- BIM files
- CAD files
- Energy-related products directive data
- Commissioning
- Technical information
- Spare parts (part of our sales service)

### Declaration of compliance

We hereby declare that the equipment is a product that complies with the following directives and standards. It has been manufactured and put into circulation in accordance with the requirements of the European Directives and the United Kingdom regulations. The full text of the EU declaration of conformity is supplied separately with your appliance.

### Applied standards, regulations and directives:

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility Directive 2014/30/EU
- Radio Equipment Directive 2014/53/EU
- Low Voltage Directive 2014/35/EU
- Ecodesign and Energy Labelling Directive 2009/125/EC
- Energy Labelling Regulation 2017/1369/EU: No. 811/2013 and No. 812/2013 Ecodesign No. 813/2013 and No. 814/2013
- Pressure Equipment Directive 2014/68/EU
- RoHS Directive 2011/65/EU Restriction of the use of certain hazardous substances
- Generic Standard: EN 60335-1
- Relevant Standards: EN 60335-2-40, EN 60335-2-89, EN14825
- Generic Standards: EN 61000-6-4, EN 61000-6-2
- Relevant Standard: EN 55014-1 and EN 55014-2
- SI 2016/1101 : UK Electrical Equipment (Safety) Regulations 2016
- SI 2016/1091 : UK Electromagnetic Compatibility Regulations 2016
- SI 2016/1105 : UK Pressure Equipment (Safety) Regulations 2016
- SI 2008/1597 : UK Supply of Machinery (Safety) Regulations 2008
- SI 2012/3032 : UK The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
- SI 2013/3113: UK The Waste Electrical and Electronic Equipment Regulations
- SI 2019/539: The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019