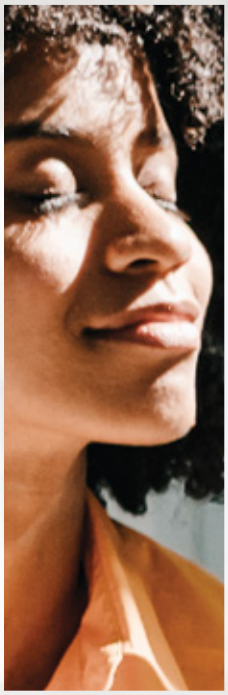
HITACHI

# Air to water heat pumps

## Yutaki range

Cooling & Heating


# Welcome to Hitachi climate control solutions



# Time for change

With the ever increasing awareness of climate change, Hitachi has launched a range of renewable heating solutions for homes called Yutaki.

It is clear that our planet is changing and changes need to be made to the way in which we heat our homes.

Hitachi's Yutaki range of air to water heat pumps can provide that alternative.

With the support of Government schemes, changes in the way we build homes and homeowners wanting a better solution to high fossil fuel prices, there is a clearly a need for something different. Something renewable.

With a variety of outputs and water temperatures, the Yutaki range can provide the perfect solution no matter the type of property.

Hitachi has developed simple to install, simple to commission and most importantly **simple to operate** units that are of the highest quality, efficiency and have low noise levels - so we think we have ticked every box!

HITACHI



# .air

Cooling & Heating

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EASY TO INSTALL AND
SIMPLE TO MAINTAIN
**BECAUSE THEY SHARE**
**THE SAME COMPONENTS**

UP TO
**70% ENERGY SAVINGS**
MORE ENERGY, LESS
ELECTRICITY

**COMPACT ALL IN ONE**
**PRODUCT**
DESIGNED FOR SMALLER
SURFACE AREAS WITHOUT
SACRIFICING POWER AND
EFFICIENCY




ENERGY CLASS A+++*

*Depends on model

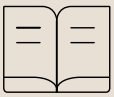
# Heating and DHW

## Need extra help?



### For further information on compatible controls and accessories

see page 28



### Yutaki Applications Book

Download hydraulic circuit diagrams, detailed information on accessories and junction box connections for the entire Yutaki range.

Using the Yutaki Applications Book, you will optimise the installation process and save time

www.yutaki-applications.com

### Hi-ToolKit for Home

Specifying, commissioning and installing air source heat pumps can be a challenge but Hitachi's helpful online tools aim to make the process that much easier for installers.

Register for the new Hi-ToolKit for Home software to help with product selection and specification of the most economical domestic heating solution for your customer in just a few clicks - generating a bespoke report that can be personalised with your contact details and logo

www.hitachi-hitoolkit.com/heating time

The Yutaki range has been completely redesigned to achieve greater savings on your fuel bill, as well as easier installation and maintenance.

### Significant savings on power consumption

Even in winter, Yutaki absorbs heat present in the outside air to transform it into energy useful for heating. In Cooling mode, it draws heat from the indoor air and expels it outside. That way, significant energy savings are achieved.

### Maximum comfort, maximum technology

It avoids unnecessary consumption as Hitachi DC inverter technology accurately adjusts power to your heating requirements at any given time.

### Single control

and common commissioning set-up for all ranges. Yutaki can handle up to three remote controls per installation.

### Set your home temperature wherever you are

You only need the Yutaki Hi-Box pack and to download the **Hi-Kumo App** to turn the unit on and off and set the temperature wherever you are using a mobile device.

### Easy and simple to install

Pipes are perfectly aligned at the rear of the unit, which makes for much easier installation compared to other manufacturers.

### Remote maintenance

Remotely consult the operational data of the Yutaki range for online troubleshooting and preventative maintenance.

# How does it work?

The Yutaki heat pump utilises energy in the outside air and transforms it into usable heat. This is performed through a refrigeration process and a vapour compression cycle, which sounds very complicated, but it's basically how a fridge works, but in reverse.



## Heating

The water temperature leaving the heat pump is usually lower than the temperature of a fossil fuel boiler, so radiators will need to be sized correctly or use a low temperature heat emitter such as underfloor heating.

## Domestic Hot Water

A dedicated heat pump hot water cylinder which has a larger coil surface area (which will provide a better heat transfer) will need to be used to complement the Yutaki heat pump. A full range is available through Hitachi such as the Yutaki S Combi which is a pre-plumbed and pre-wired solution.

## The Yutaki range consists of five products:

**Yutaki S** (Low temperature - Split)
**Yutaki S Combi** (Low temperature - Split Pre-plumbed)
**Yutaki S80** (High temperature)
**Yutaki M** (Low temperature - Monobloc)
**Yutaki T** (Hot water only)

A **"Split"** unit does exactly that. It splits the refrigeration process between the outdoor fan unit and the indoor unit. So, the compressor is in the outdoor unit and two pipes containing refrigerant connects to the indoor unit where the heat exchanger and water side is contained as well as the main controller.

The benefits of a Split unit is that the outdoor unit can be located further away from the property (typically up to 50m) with little or no heat loss. Also the outdoor units tend to be smaller and quieter.

A **"Monobloc"** has the compressor, heat exchanger and water side of the refrigeration cycle all contained in the outdoor unit. Therefore, this requires no special qualifications to install as this is much like a boiler installation.

These five products come in a range of outputs with the smallest capacity at 4.3kW and the largest at 24kW.

Flow temperatures range from 30°C to 80°C.

So, as you can see, the range is extensive and depending on the application, Yutaki will have the answer!

# Heating, domestic hot water (DHW) and cooling with renewable energy

Yutaki S



Yutaki S Combi



Yutaki S80



Yutaki M



Yutaki T



# Yutaki S

Compact, highly efficient system:
heating, hot water and cooling



## Satisfies all demands

Extensive range of outputs from 1.85 kW to 32.00 kW for heating, and from 3.80 kW to 20.60 kW for cooling.

25.50 and 32.00 kW models are unique on the market.

## Compact dimensions

Its compact size and easy installation make it the perfect system for confined spaces. Models from 4.30 to 7.50 kW, even fitting in a kitchen cabinet. (Fig. 1)

## Best performance on the market*

The Yutaki S has the highest COP compared to competing systems, which translates into lower energy consumption and bigger savings. All units have up to A+++ maximum energy efficiency.

*Depends on model.

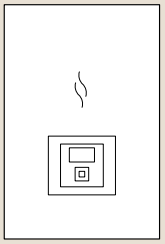
## Exclusive design to work in the most extreme conditions

Its broad operating range means the system can work in extreme outdoor conditions: from -25°C to +46°C.

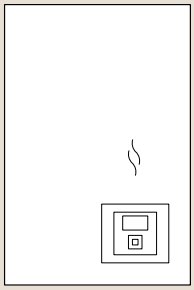
## Reduced consumption

Unique on the market - water temperature up to 60 °C without the need for a backup heating element, achieving significant savings compared to other manufacturer models.

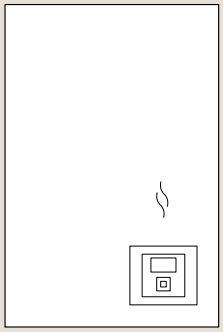
Fig. 1



Yutaki S Mini
4.30 kW ~ 7.50 kW

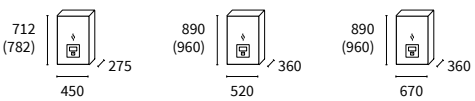


Yutaki S Medium
11.00 kW ~ 16.00 kW



Yutaki S Big
20.00 kW ~ 24.00 kW

**Indoor units**

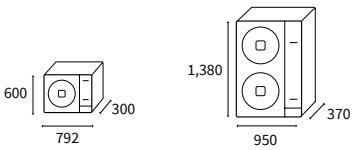



**RWM-2.0NE**
**RWM-2.5NE**
**RWM-3.0NE**

**RWM-4.0NE**
**RWM-5.0NE**
**RWM-6.0NE**

**RWM-8.0NE**
**RWM-10.0NE**

**Outdoor units**




**RAS-2WHVNP**
**RAS-2.5WHVNP**
**RAS-3WHVNP**

**RAS-4WH(V)NPE**
**RAS-5WH(V)NPE**
**RAS-6WH(V)NPE**
**RAS-8WHNPE**
**RAS-10WHNPE**

# Yutaki S

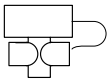
| System | | | Yutaki S 2 | Yutaki S 2.5 | Yutaki S 3 | Yutaki S 4 | Yutaki S 5 | Yutaki S 6 | Yutaki S 8 | Yutaki S 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity | Heating (Min/**Nom**/Max) | kW | 1.85/**4.30**/7.00 | 1.95/**6.00**/9.00 | 2.10/**7.50**/11.00 | 4.30/**11.00**/15.20 | 4.80/**14.00**/16.70 | 5.50/**16.00**/17.80 | 9.00/**20.00**/25.50 | 10.00/**24.00**/32.00 |
| | Cooling (**Nom**/Max) | kW | **3.80**/4.90 | **5.00**/5.80 | **6.00**/7.00 | **7.20**/11.80 | **9.50**/12.60 | **10.50**/13.70 | **14.00**/16.40 | **17.50**/20.60 |
| Consumption | Heating (**Nom**) | kW | **0.82** | **1.25** | **1.65** | **2.20** | **2.97** | **3.50** | **4.65** | **5.59** |
| | Cooling (**Nom**) | kW | **1.22** | **1.59** | **2.18** | **2.18** | **2.68** | **3.17** | **4.48** | **6.22** |
| Electrical power | | | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | - | - |
| | | | - | - | - | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz |
| COP (Water 35°C, Ambient 7°C) | Nominal | | 5.25 | 4.80 | 4.55 | 5.00 | 4.71 | 4.57 | 4.30 | 4.29 |
| EER (Water 7°C, Ambient 35°C) | Nominal | | 3.12 | 3.15 | 2.75 | 3.30 | 3.30 | 3.31 | 3.12 | 2.81 |
| Energy rating at 35°C | | | A+++ | A+++ | A++ | A+++ | A+++ | A++ | A++ | A+ |
| Seasonal efficiency at 35°C, SCOP / ηs | | | 4.80/194 | 4.50/180 | 4.20/167 | 4.75/189 | 4.45/176 | 3.90/153 | 3.83/152 | 3.60/142 |
| Energy rating at 55°C | | | A++ | A++ | A++ | A++ | A++ | A++ | A+ | A+ |
| Seasonal efficiency at 55°C, SCOP / ηs | Medium climate | | 3.58/140 | 3.38/132 | 3.25/127 | 3.50/137 | 3.43/134 | 3.23/126 | 3.13/122 | 2.98/118 |
| ESEER | | | 3.36 | 3.26 | 3.26 | 3.33 | 3.29 | 2.84 | 3.56 | 3.32 |
| SEER / ηs | | Single-phase | 4.11/162 | 4.13/162 | 3.95/155 | 4.93/194 | 4.83/190 | 4.70/185 | 4.29/169 | 4.06/159 |
| | | Three-phase | - | - | - | 5.05/199 | 4.92/194 | 4.78/188 | - | - |
| Outdoor operating temperatures | Heating (DB) | °C | -20 to 25 | -20 to 25 | -20 to 25 | -25 to 25 | -25 to 25 | -25 to 25 | -25 to 25 | -25 to 25 |
| | Hot water (DB) | °C | -15 to 35 | -15 to 35 | -15 to 35 | -25 to 35 | -25 to 35 | -25 to 35 | -25 to 35 | -25 to 35 |
| | Cooling (DB) | °C | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 |
| Water production temperatures | Heating | °C | 20 to 55 | 20 to 55 | 20 to 55 | 20 to 60 | 20 to 60 | 20 to 60 | 20 to 60 | 20 to 60 |
| | Hot water | °C | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 |
| | Cooling | °C | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 |
| Refrigerant pipe diameter | Liquid-gas | inches | 1/4-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-1 | 1/2-1 |
| Water pipe diameter | Input-output | inches | 1-1 | 1-1 | 1-1 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 |
| **Indoor unit** | | | **RWM-2.0NE** | **RWM-2.5NE** | **RWM-3.0NE** | **RWM-4.0NE** | **RWM-5.0NE** | **RWM-6.0NE** | **RWM-8.0NE** | **RWM-10.0NE** |
| Minimum water volume of the installation | | l | 28 | 28 | 28 | 38 | 46 | 55 | 76 | 79 |
| Water flow | (Min-Nom-Max) | m3/h | 0.50 - 0.77 - 1.90 | 0.60 - 1.03 - 2.00 | 0.60 - 1.29 - 2.10 | 1.00 - 1.89 - 2.90 | 1.10 - 2.41 - 3.00 | 1.2 - 2.75 - 3.00 | 2.00 - 3.44 - 4.50 | 2.20 - 4.13 - 4.60 |
| Emergency heating element in primary | Steps/Capacity | n°/kW | 3 / 1 - 1 - 1 | 3 / 1 - 1 - 1 | 3 / 1 - 1 - 1 | 3 / 2 -2 -2 | 3 / 2 -2 -2 | 3 / 2 -2 -2 | 3 / 3 -3 -3 | 3 / 3 -3 -3 |
| Sound power | | dB(A) | 37 | 37 | 37 | 39 | 39 | 39 | 47 | 47 |
| Dimensions (H (with connections) x W x D) | | mm | 712(782) x450x275 | 712(782) x450x275 | 712(782) x450x275 | 890(960) x520x360 | 890(960) x520x360 | 890(960) x520x360 | 890(960) x670x360 | 890(960) x670x360 |
| Weight | | kg | 35 | 36 | 37 | 46 | 48 | 48 | 60 | 62 |
| Maximum current | Single-phase | A | 28.9 | 28.9 | 28.9 | 43.4 | 43.4 | 43.4 | - | - |
| | Three-phase | A | - | - | - | 24.2 | 24.2 | 24.2 | 29.2 | 29.2 |
| **Outdoor unit** | | | **RAS-2WHVNP** | **RAS-2.5WHVNP** | **RAS-3WHVNP** | **RAS-4WH(V)NPE** | **RAS-5WH(V)NPE** | **RAS-6WH(V)NPE** | **RAS-8WHNPE** | **RAS-10WHNPE** |
| Air flow | | m3/h | 2,460 | 2,460 | 2,700 | 4,800 | 5,400 | 6,000 | 7,620 | 8,040 |
| Sound pressure | | dB(A) | 46 | 47 | 50 | 49 | 50 | 50 | 59 | 60 |
| Sound power | | dB(A) | 61 | 63 | 64 | 64 | 65 | 67 | 73 | 74 |
| Minimum pipe length | | m | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Maximum pipe length | | m | 50 | 50 | 50 | 75 | 75 | 75 | 70 | 70 |
| Maximum height difference (highest OU/lowest OU) | | m | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 |
| Compressor | | | Scroll DC Inverter | Scroll DC Inverter | Rotary DC Inverter | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter |
| Refrigerant | | | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A |
| **Refrigerant charge (length without additional charge)** | | kg (m) | 1.4 (15) | 1.5 (15) | 1.7 (15) | 3.3 (15) | 3.4 (15) | 3.4 (15) | 5.0 (15) | 5.3 (15) |
| Additional refrigerant charge | | g/m | 30 | 30 | 40 | 60 | 60 | 60 | 65 | 65 |
| Dimensions (H x W x D) | | mm | 600x792x300 | 600x792x300 | 600x792x300 | 1,380x950x370 | 1,380x950x370 | 1,380x950x370 | 1,380x950x370 | 1,380x950x370 |
| Weight | | kg | 43 | 43 | 44 | 103 | 103 | 103 | 137 | 139 |
| Maximum current | Single-phase | | 14 | 16 | 18 | 30 | 30 | 30 | - | - |
| | Three-phase | | - | - | - | 14 | 14 | 16 | 24 | 24 |

## Compatible controls and accessories:



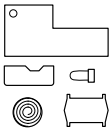
Remote control

PC-ARFHE



3-way valve

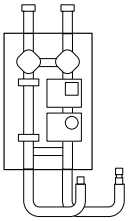
ATW-3WV-01



Cooling Kit

Can be used to switch machine operation to cold.

ATW-CKS-01
ATW-CKS-02/ ATW-CKS-03

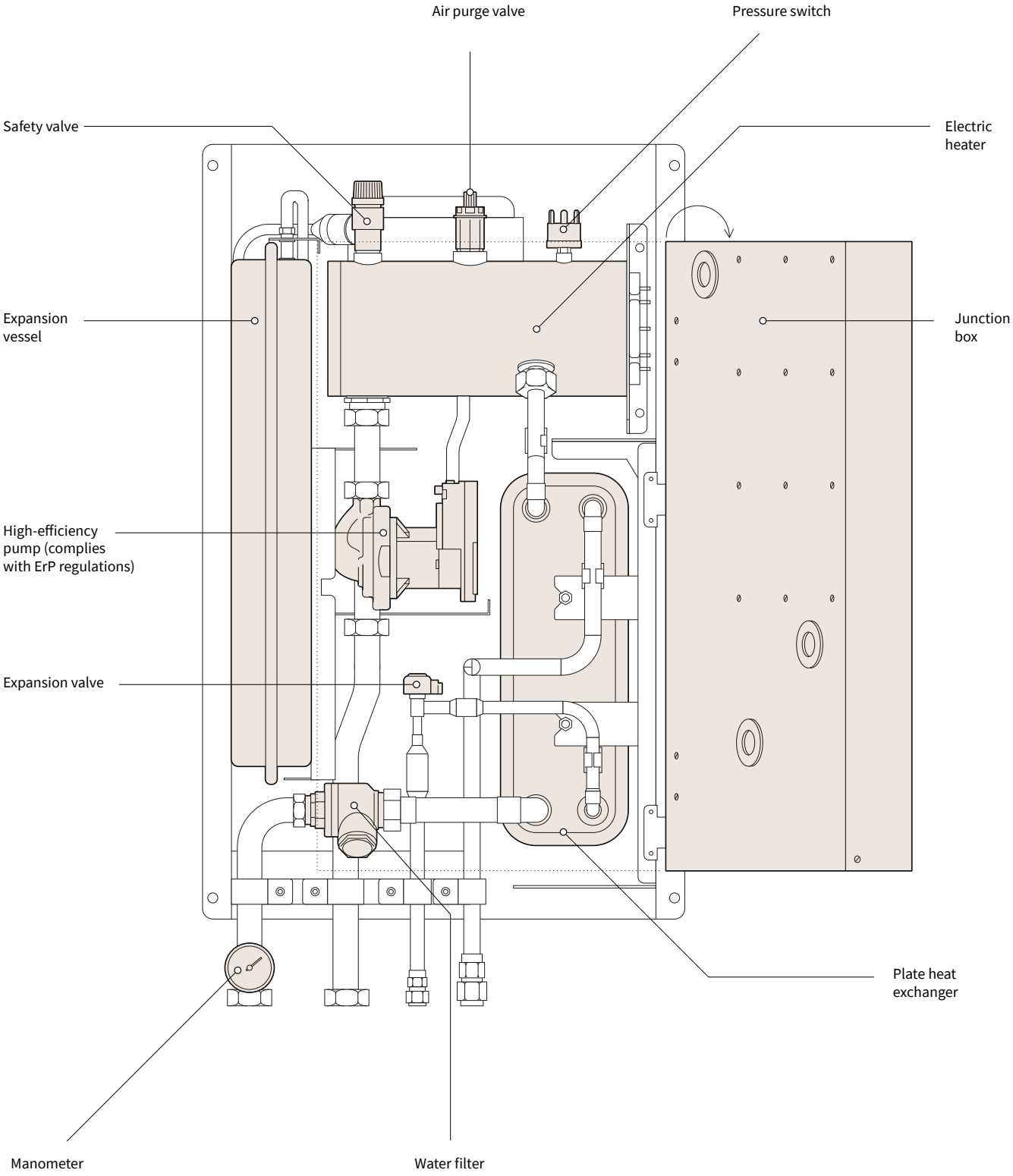


2nd temperature kit

For wall-mounting

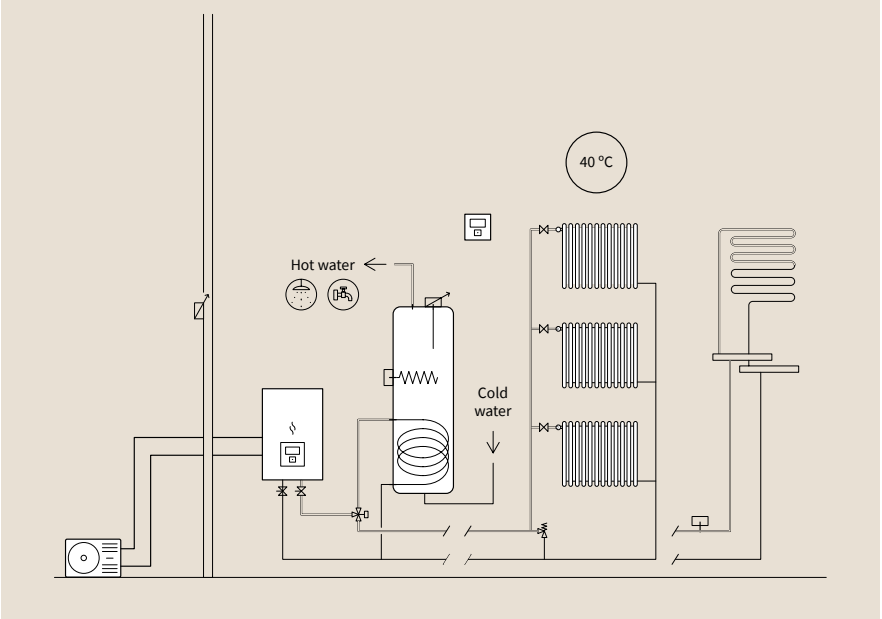
ATW-2TK-07

# Internal design

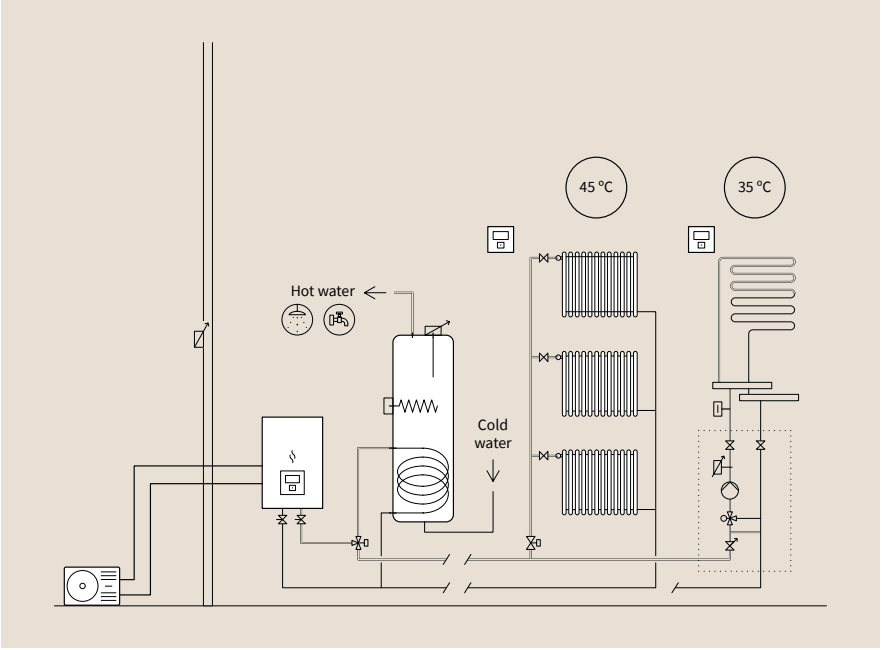


# Configurations

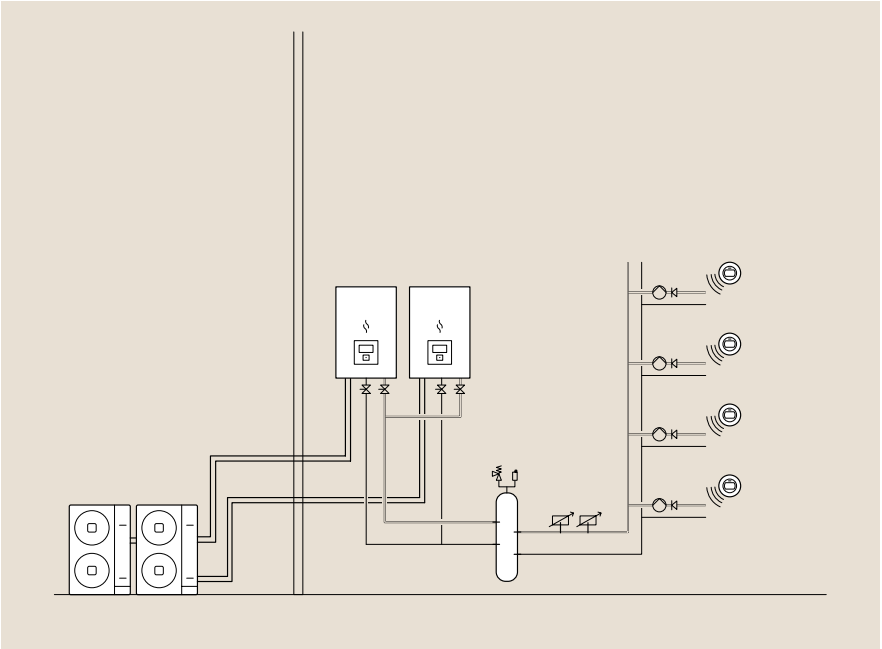
Radiator and underfloor heating at the same temperature; one zone + hot water by external tank.




Radiator and underfloor heating at different temperatures; two zones + hot water by external tank.




Cascade operation. Heating or cooling.



# Yutaki S Combi

Compact all-in-one system: heating, hot water and cooling with integrated stainless steel tank



## Extensive range of models

The Yutaki S Combi is designed for any type of installation thanks to its wide range of models.

From 1.85 kW to 17.80 kW for heating, and from 3.80 kW to 13.70 kW for cooling.

## Space-saving and ultraquiet

The Yutaki S Combi unit can be installed in the kitchen thanks to its compact size and low noise level.

The large space saving of up to 70 % compared to other system is due to the innovative hot water tank integrated into the indoor unit.

## Choose your size

The Yutaki S Combi includes 2 tank models: 200 and 260 L

Moreover, the 2nd temperature kit can be incorporated into the 200 L unit.

## Easy installation and maintenance

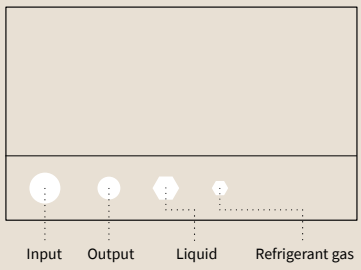
Compared to a split system (indoor unit-hot water tank), the Yutaki S Combi allows fast installation with minimal costs since:

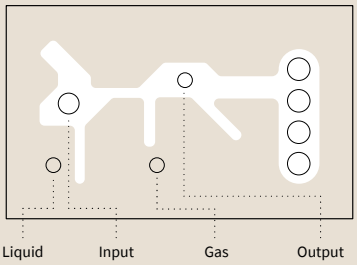
- All water and refrigerant connections are aligned at the top. (Fig. 1)
- Most components are accessible from the front of the unit.
- Easy access to information from the LCD control without having to open the indoor unit.

## Stainless steel tank with built-in heating element

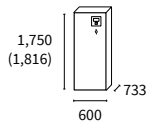
The only compact model fitted with a hot water tank with backup heating element for emergency hot water, activated with a single button.

Fig. 1



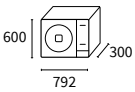




**Indoor units**

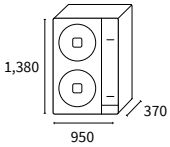



RWD-2.0NW(S)E
RWD-2.5NW(S)E
RWD-3.0NW(S)E
RWD-4.0NW(S)E
RWD-5.0NW(S)E
RWD-6.0NW(S)E

**Outdoor units**




RAS-2WHVNP
RAS-2.5WHVNP
RAS-3WHVNP




RAS-4WH(V)NPE
RAS-5WH(V)NPE
**RAS-6WH(V)NPE**

# Yutaki S Combi

| System | | | Yutaki S 2 Combi | Yutaki S 2.5 Combi | Yutaki S 3 Combi | Yutaki S 4 Combi | Yutaki S 5 Combi | Yutaki S 6 Combi |
|---|---|---|---|---|---|---|---|---|
| Capacity | Heating (Min/Nom/Max) | kW | 1.85/**4.30**/7.00 | 1.95/**6.00**/9.00 | 2.10/**7.50**/11.00 | 4.30/**11.00**/15.20 | 4.80/**14.00**/16.70 | 5.50/**16.00**/17.80 |
| | Cooling (**Nom**/Max) | kW | **3.80**/4.90 | **5.00**/5.80 | **6.00**/7.00 | **7.20**/11.80 | **9.50**/12.60 | **10.50**/13.70 |
| Consumption | Heating (**Nom**) | kW | **0.82** | **1.25** | **1.65** | **2.20** | **2.97** | **3.50** |
| | Cooling (**Nom**) | kW | **1.22** | **1.59** | **2.18** | **2.18** | **2.68** | **3.17** |
| Electrical power | | | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz |
| | | | - | - | - | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz |
| COP (Water 35°C, Ambient 7°C) | Nominal | | 5.25 | 4.80 | 4.55 | 5.00 | 4.71 | 4.57 |
| EER (Water 7°C, Ambient 35°C) | Nominal | | 3.12 | 3.15 | 2.75 | 3.54 | 3.54 | 3.31 |
| Hot water energy rating (Profile L- 200l) | Medium climate | | A+ | A+ | A+ | A+ | A+ | A+ |
| Seasonal efficiency hot water, $COP_{DHW}$ / ηs (Profile L - 200l) | | | 3.30/132 | 3.30/132 | 3.30/132 | 3.25/130 | 3.25/130 | 3.25/130 |
| Hot water energy rating (Profile XL- 260l) | | | A+ | A+ | A+ | A+ | A+ | A+ |
| Seasonal efficiency hot water, $COP_{DHW}$ / ηs (Profile XL - 260l) | | | 3.40/136 | 3.40/136 | 3.40/136 | 3.35/134 | 3.35/134 | 3.35/134 |
| Energy rating at 35°C | | | A+++ | A+++ | A++ | A+++ | A+++ | A++ |
| Seasonal efficiency at 35°C, SCOP / ηs | | | 4.93/194 | 4.58/180 | 4.25/167 | 4.80/189 | 4.48/176 | 3.90/153 |
| Energy rating at 55°C | | | A++ | A++ | A++ | A++ | A++ | A++ |
| Seasonal efficiency at 55°C, SCOP / ηs | | | 3.58/140 | 3.38/132 | 3.25/127 | 3.50/137 | 3.43/134 | 3.23/126 |
| ESEER | | | 3.36 | 3.26 | 3.26 | 3.33 | 3.29 | 2.84 |
| SEER / ηs | | Single-phase | 4.11/162 | 4.13/162 | 3.95/155 | 4.93/194 | 4.83/190 | 4.70/185 |
| | | Three-phase | - | - | - | 5.05/199 | 4.92/194 | 4.78/188 |
| Outdoor operating temperatures | Heating (DB) | °C | -20 to 25 | -20 to 25 | -20 to 25 | -25 to 25 | -25 to 25 | -25 to 25 |
| | Hot water (DB) | °C | -15 to 35 | -15 to 35 | -15 to 35 | -25 to 35 | -25 to 35 | -25 to 35 |
| | Cooling (DB) | °C | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 |
| Water production temperatures | Heating | °C | 20 to 55 | 20 to 55 | 20 to 55 | 20 to 60 | 20 to 60 | 20 to 60 |
| | Hot water | °C | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 |
| | Cooling | °C | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 |
| Refrigerant pipe diameter | Liquid-gas | inches | 1/4-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 |
| Water pipe diameter | Input-output | inches | 1-1 | 1-1 | 1-1 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 |
| Hot water pipe diameter | Input-output | inches | 3/4-3/4 | 3/4-3/4 | 3/4-3/4 | 3/4-3/4 | 3/4-3/4 | 3/4-3/4 |

| Indoor unit | | | RWD-2.0NW(S)E | RWD-2.5NW(S)E | RWD-3.0NW(S)E | RWD-4.0NW(S)E | RWD-5.0NW(S)E | RWD-6.0NW(S)E |
|---|---|---|---|---|---|---|---|---|
| Minimum water volume of the installation | | l | 28 | 28 | 28 | 38 | 46 | 55 |
| Water flow | (Min-Nom-Max) | m3/h | 0.50 - 0.77 - 1.80 | 0.60 - 1.03 - 1.90 | 0.60 - 1.03 - 1.90 | 1.00 - 1.89 - 2.70 | 1.10 - 2.41 - 2.80 | 1.20 - 2.75 - 2.80 |
| Emergency heating element in primary | Steps/Capacity | n°/kW | 3 / 1 - 1 - 1 | 3 / 1 - 1 - 1 | 3 / 1 - 1 - 1 | 3 / 2 -2 -2 | 3 / 2 -2 -2 | 3 / 2 -2 -2 |
| Hot water emergency heating element | Steps/Capacity | n°/kW | 1 / 2.7 | 1 / 2.7 | 1 / 2.7 | 1 / 2.7 | 1 / 2.7 | 1 / 2.7 |
| Sound power | | dB(A) | 37 | 37 | 37 | 39 | 39 | 39 |
| Dimensions (H (with connections) x W x D) | | mm | 1,750(1,816) x600x733 | 1,750(1,816) x600x733 | 1,750(1,816) x600x733 | 1,750(1,816) x600x733 | 1,750(1,816) x600x733 | 1,750(1,816) x600x733 |
| Tank weight 200l / 260l / 260l solar | | kg | 121/131/131 | 122/132/132 | 122/132/132 | 120/130/130 | 122/132/132 | 122/132/132 |
| Solar pipe diameter (260l solar tank) | Input-output | inches | 1/2-1/2 | 1/2-1/2 | 1/2-1/2 | 1/2-1/2 | 1/2-1/2 | 1/2-1/2 |
| Solar exchange surface (260l solar tank) | | $m^2$ | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Maximum current | Single-phase | A | 27 | 27 | 27 | 41.5 | 41.5 | 41.5 |
| | Three-phase | A | - | - | - | 22.4 | 22.4 | 22.4 |

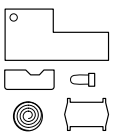
| Outdoor unit | | RAS-2WHVNP | RAS-2.5WHVNP | RAS-3WHVNP | RAS-4WH(V)NPE | RAS-5WH(V)NPE | RAS-6WH(V)NPE |
|---|---|---|---|---|---|---|---|
| Air flow | m3/h | 2,460 | 2,460 | 2,700 | 4,800 | 5,400 | 6,000 |
| Sound pressure | dB(A) | 46 | 47 | 50 | 49 | 50 | 50 |
| Sound power | dB(A) | 61 | 63 | 64 | 64 | 65 | 67 |
| Minimum pipe length | m | 5 | 5 | 5 | 5 | 5 | 5 |
| Maximum pipe length | m | 50 | 50 | 50 | 75 | 75 | 75 |
| Maximum height difference (highest OU/lowest OU) | m | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 | 30/20 |
| Compressor | | Scroll DC Inverter | Scroll DC Inverter | Rotary DC Inverter | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter |
| Refrigerant | | R410A | R410A | R410A | R410A | R410A | R410A |
| Refrigerant charge (length without additional charge) | kg (m) | 1.4 (15) | 1.5 (15) | 1.7 (15) | 3.3 (15) | 3.4 (15) | 3.4 (15) |
| Additional refrigerant charge | g/m | 30 | 30 | 40 | 60 | 60 | 60 |
| Dimensions (H x W x D) | mm | 600x792x300 | 600x792x300 | 600x792x300 | 1,380x950x370 | 1,380x950x370 | 1,380x950x370 |
| Weight | kg | 43 | 43 | 44 | 103 | 103 | 103 |
| Maximum current | Single-phase/ Three-phase | 14/- | 16/- | 18/- | 30/14 | 30/14 | 30/16 |

## Compatible controls and accessories:



### Remote control

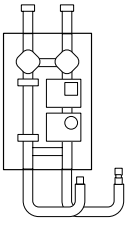
PC-ARFHE



### Cooling Kit

ATW-CKM-01

Can be used to switch machine operation to cold.



### 2nd temperature kit

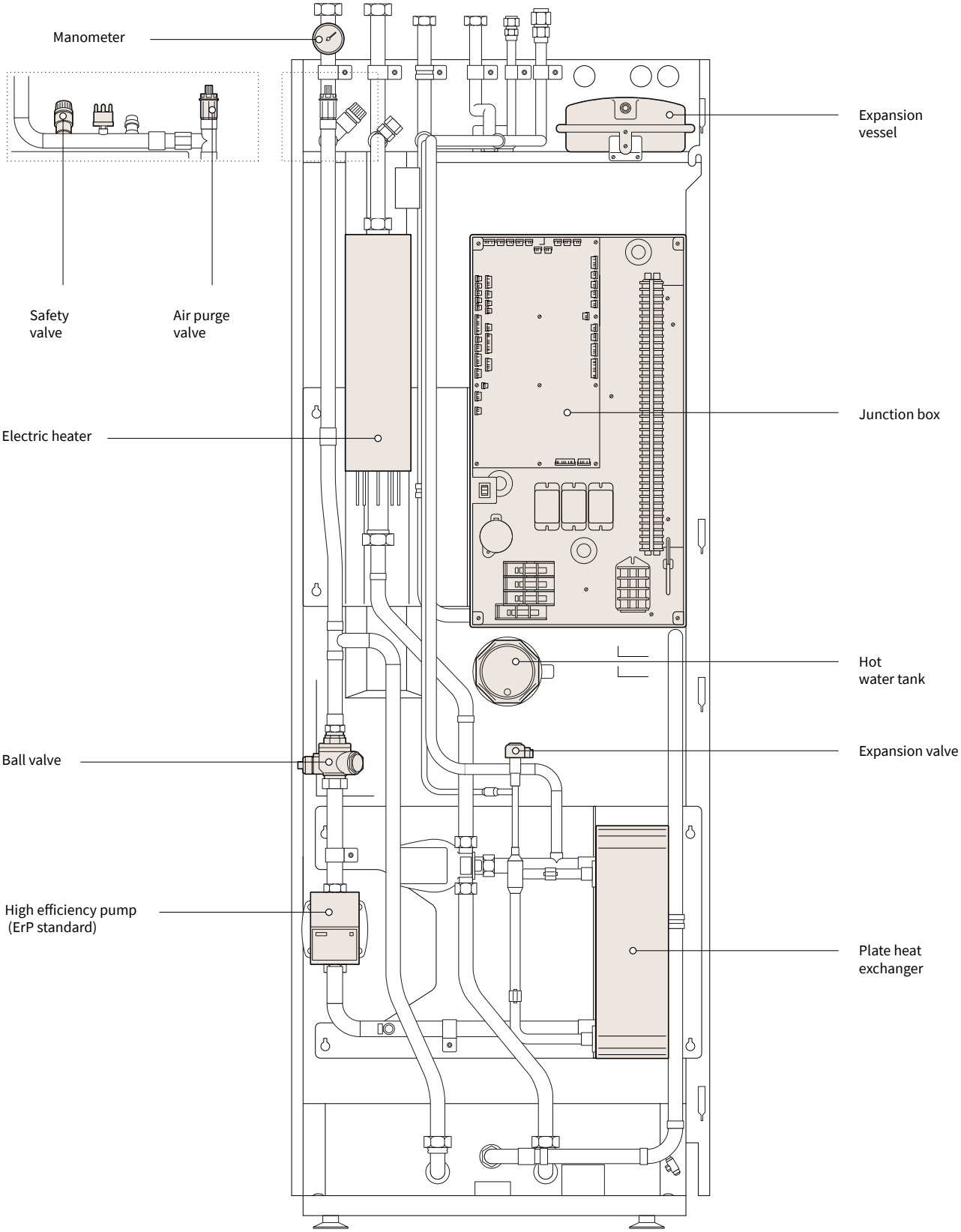
ATW-2TK-06

Only compatible with built-in Yutaki S Combi 200l.

ATW-2TK-07

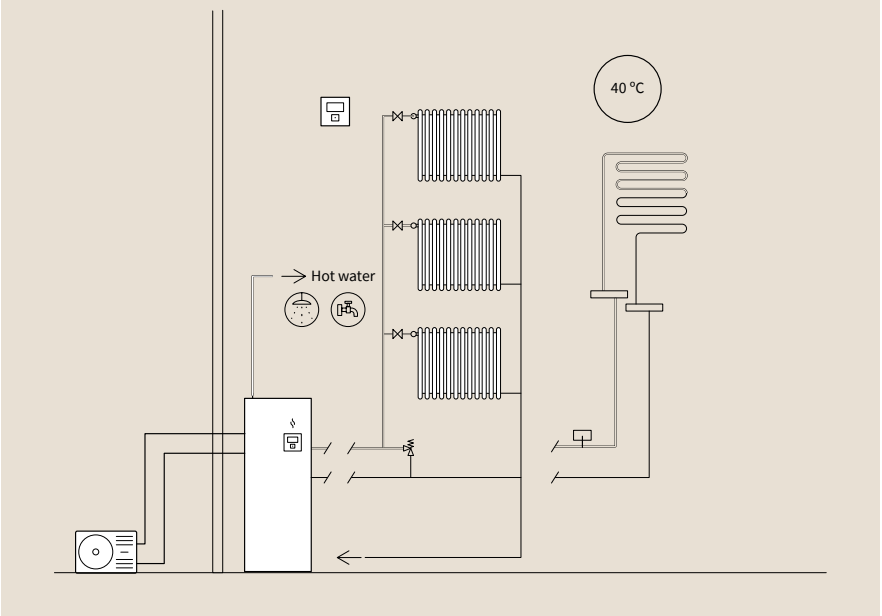
For wall-mounting. Compatible with the entire Yutaki range

# Internal design

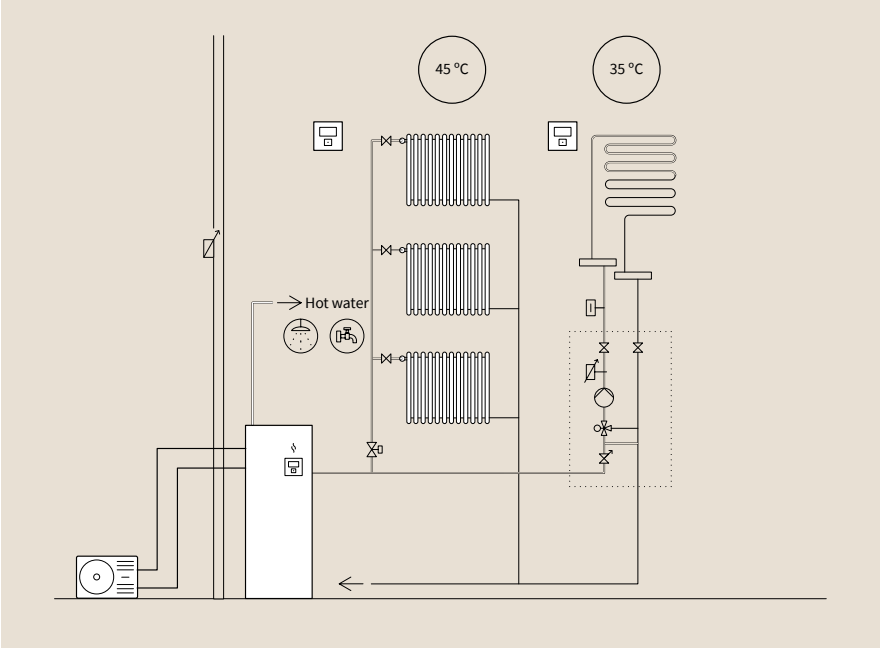


# Configurations

Radiator and underfloor heating at the same temperature; one zone + hot water by built-in tank.




Radiator and underfloor heating at different temperatures; two zones + hot water by built-in tank.



# Yutaki S80

Water temperature up to 80 °C for heating and hot water without an electric heater



## Maximum efficiency with smart cascade cycle

Yutaki S80 uses two refrigerants: R410A and R134a. Thanks to the unique Smart Cascade cycle, the equipment automatically adjusts operation according to heating requirements. When the heating requirement is lower (water temperature up to 53 °C), it only uses the R410A refrigerant; when this requirement increases (water temperature up to 80 °C), it activates the second cycle of R134a refrigerant. Consumption is under control and comfort is guaranteed at all times. (Fig. 1)

## Adapted to each installation

The Yutaki S80 is available in two models, adapting to any needs which may arise: one for heating, and one for heating and hot water.

There are two tanks, with 200 and 260-litre capacity, that can be installed as a built-in unit on or next to the indoor unit. (Fig. 2) *

## Maximum heating capacity

It can heat water up to 80°C using renewable energy, even at extreme temperatures down to -25°C.

## Easy installation and maintenance

Its design allows easy access to the water and refrigerant connections, which are fitted in the top of the indoor unit and at the back of the tank unit.

Fig. 1: Smart Cascade cycle configuration

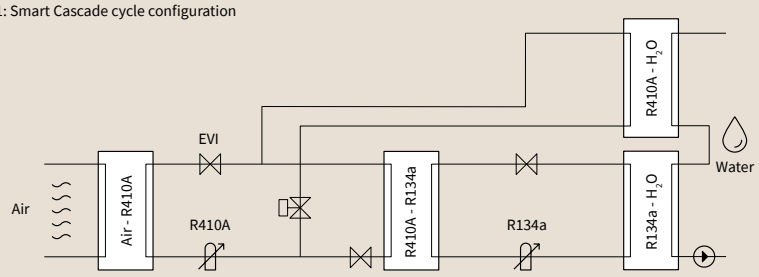
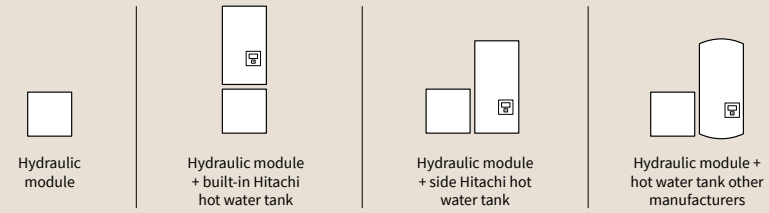
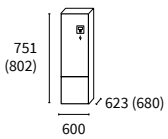



Fig. 2



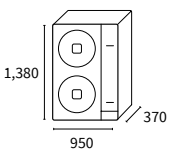

**Indoor units**




**RWH-4.0VNFE**
**RWH-5.0VNFE**
**RWH-6.0VNFE**

**RWH-4.0VNFWE**
**RWH-5.0VNFWE**
**RWH-6.0VNFWE**

**Outdoor units**




**RAS-4WH(V)NPE**
**RAS-5WH(V)NPE**
**RAS-6WH(V)NPE**

* Two tank options not available in the UK

# Yutaki S80

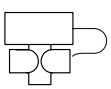
| System | | | Yutaki S80 4 | Yutaki S80 5 | Yutaki S80 6 |
|---|---|---|---|---|---|
| Capacity | Heating (Min/Nom/Max) | kW | 4.30/**11.00**/15.20 | 4.80/**14.00**/16.70 | 5.50/**16.00**/17.80 |
| Consumption | Heating (**Nom**) | kW | **2.12** | **2.90** | **3.43** |
| Electrical power | | | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz |
| | | | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz |
| COP | Nominal | | 5.00 | 4.71 | 4.57 |
| Energy rating at 35°C | Medium climate | | A+++ | A++ | A++ |
| Seasonal efficiency at 35°C, SCOP / ηs | | | 4.75/187 | 4.43/174 | 3.88/152 |
| Energy rating at 55°C | | | A++ | A++ | A++ |
| Seasonal efficiency at 55°C, SCOP / ηs | | | 3.63/142 | 3.35/131 | 3.23/126 |
| Outdoor operating temperatures | Heating (DB) | °C | -25 to 25 | -25 to 25 | -25 to 25 |
| | Hot water (DB) | °C | -25 to 35 | -25 to 35 | -25 to 35 |
| Water production temperatures | Heating | °C | 20 to 80 | 20 to 80 | 20 to 80 |
| | Hot water | °C | 30 to 75 | 30 to 75 | 30 to 75 |
| Refrigerant pipe diameter | Liquid-gas | inches | 3/8-5/8 | 3/8-5/8 | 3/8-5/8 |
| Water pipe diameter | Input-output | inches | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 |
| Hot water pipe diameter | Input-output | inches | 3/4-3/4 | 3/4-3/4 | 3/4-3/4 |
| **Indoor unit (without tank)** | | | **RWH-4.0VNFE** | **RWH-5.0VNFE** | **RWH-6.0VNFE** |
| **Indoor unit (with hot water tank)** | | | **RWH-4.0VNFWE** | **RWH-5.0VNFWE** | **RWH-6.0VNFWE** |
| Minimum water volume of the installation | | l | 40 | 50 | 50 |
| Water flow | (Min/Nom/Max) | m3/h | 1.00 - 1.26 - 2.80 | 1.10 - 1.64 - 3.20 | 1.20 - 1.83 - 3.20 |
| Sound power | | dB(A) | 57 | 57 | 58 |
| Refrigerant | | | R-134A | R-134A | R-134A |
| Refrigerant charge | | kg | 1.90 | 1.90 | 1.90 |
| Compressor | | | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter |
| Dimensions model S80 (H (with connections) x W x D) | | mm | 751(802)x600x623 | 751(802)x600x623 | 751(802)x600x623 |
| Dimensions model S80 COMBI (H x W x D (with connections) | | mm | 751x600x623(680) | 751x600x623(680) | 751x600x623(680) |
| Model weight without tank | Single-phase | kg | 125 | 129 | 129 |
| | Three-phase | | 127 | 136 | 136 |
| Model weight with tank | Single-phase | kg | 135 | 139 | 139 |
| | Three-phase | | 137 | 146 | 146 |
| Maximum current | Single-phase | | 36 | 40 | 43 |
| | Three-phase | | 22 | 22 | 22 |
| **Outdoor unit** | | | **RAS-4WH(V)NPE** | **RAS-5WH(V)NPE** | **RAS-6WH(V)NPE** |
| Air flow | | m3/h | 4,800 | 5,400 | 6,000 |
| Sound pressure | | dB(A) | 49 | 50 | 50 |
| Sound power | | dB(A) | 61 | 63 | 64 |
| Minimum pipe length | | m | 5 | 5 | 5 |
| Maximum pipe length | | m | 75 | 75 | 75 |
| Maximum height difference (highest OU/lowest OU) | | m | 30/20 | 30/20 | 30/20 |
| Compressor | | | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter |
| Refrigerant | | | R410A | R410A | R410A |
| Refrigerant charge (length without additional charge) | | kg (m) | 3.3 (15) | 3.4 (15) | 3.4 (15) |
| Additional refrigerant charge | | g/m | 60 | 60 | 60 |
| Dimensions (H x W x D) | | mm | 1,380x950x370 | 1,380x950x370 | 1,380x950x370 |
| Weight | | kg | 103 | 103 | 103 |
| Maximum current | Single-phase | | 20 | 25 | 25 |
| | Three-phase | | 14 | 14 | 16 |

## Compatible controls and accessories:



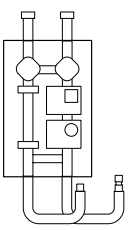
Remote control

PC-ARFHE



3-way valve

ATW-3WV-01



2nd temperature kit

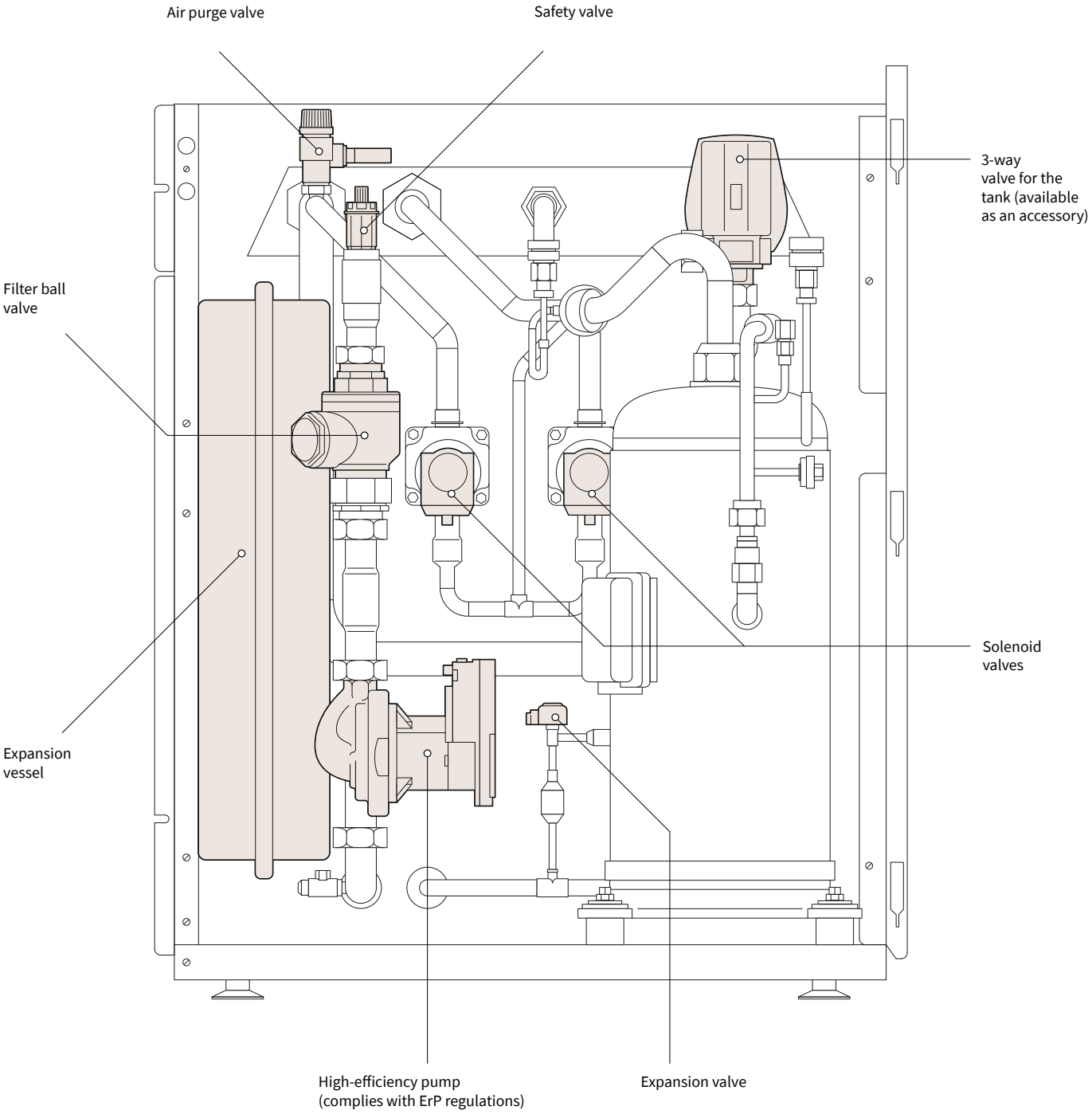
ATW-2T-07

For wall-mounting

Others:

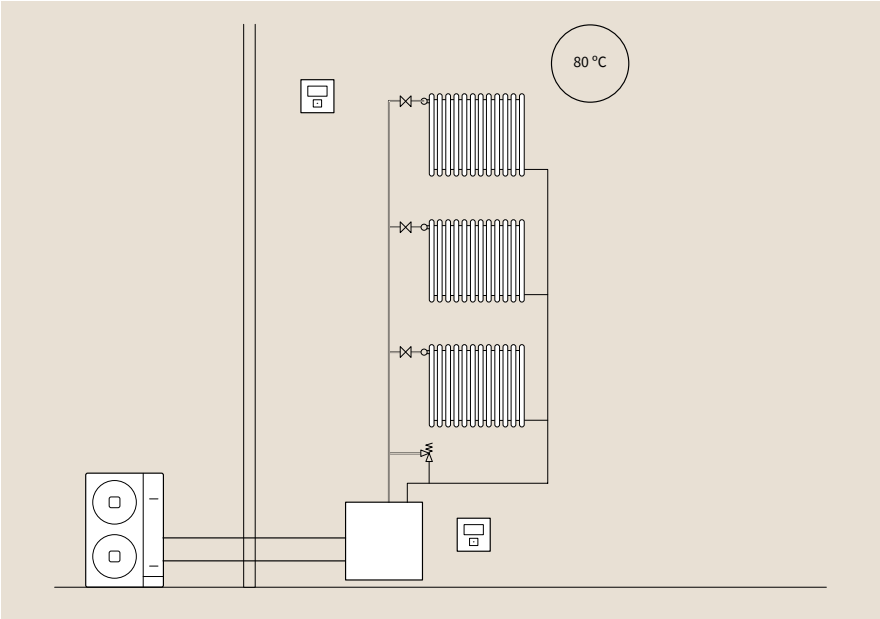
- Heating element. WEH-6E.
- Kit for installation with tank next to the S80 indoor unit. mod. ATW-FWP-02

# Internal design

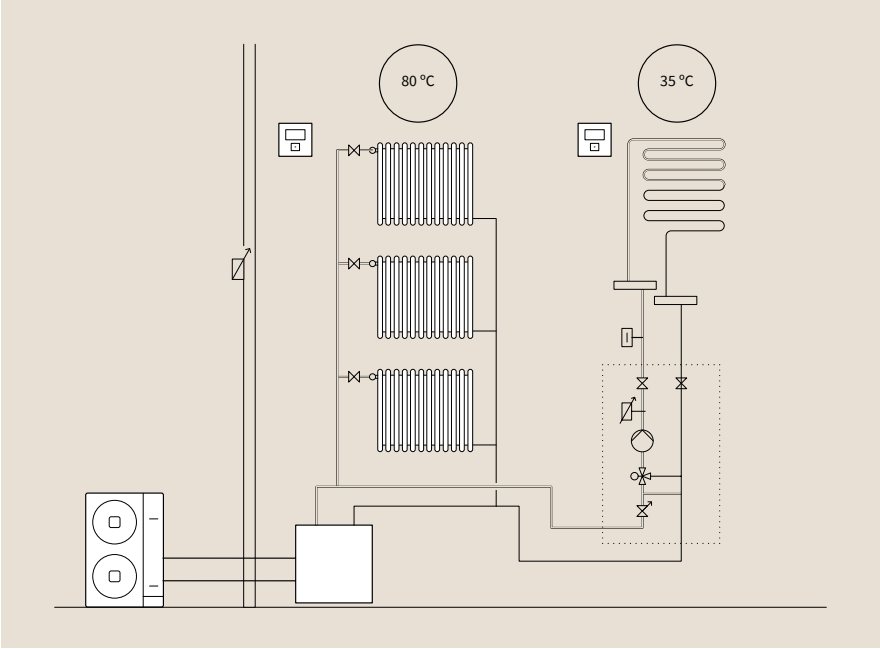



Its flexible design allows different installation possibilities and flexible pipe connection.
– Hydraulic module.
– Hydraulic module + built-in Hitachi hot water tank (not available in the UK).
– Hydraulic module + Hitachi hot water tank on one side (not available in the UK).
– Hydraulic module + third-party hot water tank.

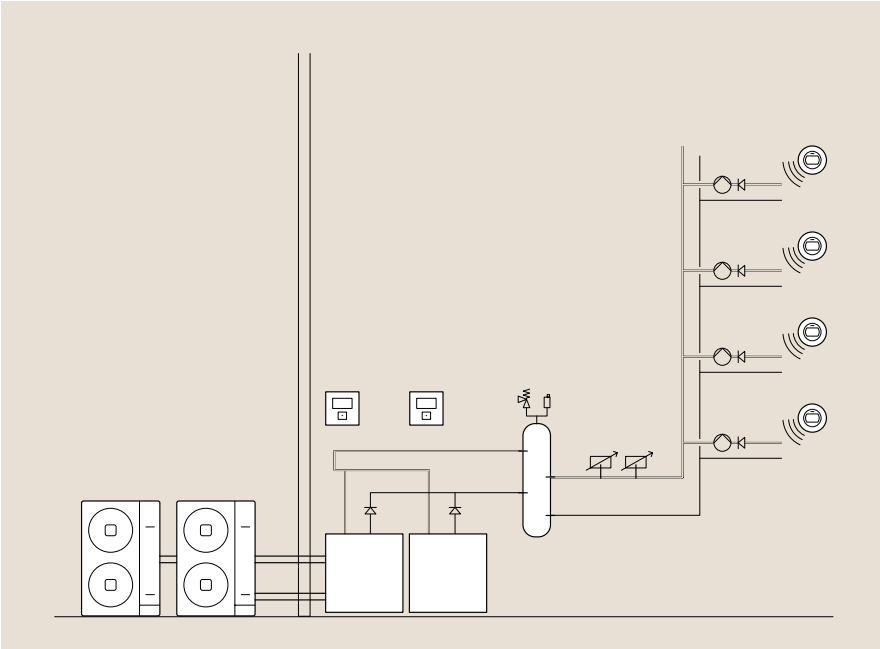
# Configurations




Heating, one circuit.




Heating, radiators and underfloor heating at different temperatures; two zones.



Heating, cascade operation.

# Yutaki M

Compact unit for heating, hot water and cooling without refrigeration connections



## Perfect for small spaces

The Hitachi monobloc system is designed for installation in any type of property, especially homes with limited space.

Being a compact system with a single unit installed outdoors means the available space indoors remains unchanged.

## Easy to install

The monobloc system ensures all functions are achieved with a single outdoor unit, bringing significant cost savings. Furthermore, installation time is much shorter since practically no pipes are required, there are no cooling connections, and the product is pre-charged at the factory.

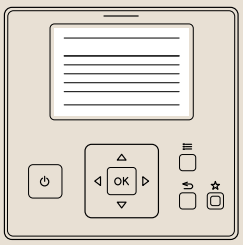
## Heating and cooling in a single system all year round

By combining the Yutaki M and the Cooling Kit, the accessory used to reverse heat pump operation ensures maximum comfort can be enjoyed all year round. The system therefore offers heating in winter and cooling in summer, all with straightforward installation.

## Easy, smart control

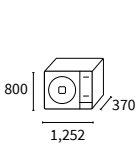
The control with LCD screen can be used for daily and weekly programming, managing water production temperature, operating modes, etc. (Fig. 1)

Fig. 1

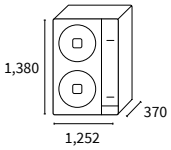



PC-ARFHE control

**Outdoor units**




RASM-3VNE




RASM-4(V)NE
RASM-5(V)NE
RASM-6(V)NE

# Yutaki M

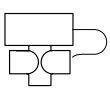
| Name of the system | | | Yutaki M 3 | Yutaki M 4 | Yutaki M 5 | Yutaki M 6 |
|---|---|---|---|---|---|---|
| **Outdoor unit** | | | **RASM-3VNE** | **RASM-4(V)NE** | **RASM-5(V)NE** | **RASM-6(V)NE** |
| Capacity | Heating (Min/**Nom**/Max) | kW | 2.10/**7.50**/11.00 | 4.30/**11.00**/15.20 | 4.80/**14.00**/16.70 | 5.50/**16.00**/17.80 |
| | Cooling (**Nom**/Max) | kW | **6.00**/7.00 | **7.20**/11.80 | **9.50**/12.60 | **10.50**/13.70 |
| Consumption | Heating (**Nom**) | kW | **1.65** | **2.20** | **2.97** | **3.50** |
| | Cooling (**Nom**) | kW | **2.18** | **2.18** | **2.68** | **3.17** |
| Electrical power | Single-phase | | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz | 1 ~230V 50Hz |
| | Three-phase | | - | 3N ~400V 50 Hz | 3N ~400V 50 Hz | 3N ~400V 50 Hz |
| EER (Water 7°C, Ambient 35°C) | Nominal | | 2.75 | 3.54 | 3.54 | 3.31 |
| COP (Water 35°C, Ambient 7°C) | Nominal | | 4.55 | 5.00 | 4.71 | 4.57 |
| Energy rating at 35°C | | | A++ | A+++ | A+++ | A++ |
| Seasonal efficiency at 35°C, SCOP / ηs | | | 4.18/164 | 4.75/187 | 4.45/175 | 3.90/153 |
| Energy rating at 55°C | | | A++ | A++ | A++ | A++ |
| Seasonal efficiency at 55°C, SCOP / ηs | Medium climate | | 3.20/125 | 3.48/136 | 3.40/133 | 3.30/125 |
| ESEER | | | 3.26 | 3.33 | 3.29 | 2.84 |
| SEER / ηs | | Single-phase | 3.90/153 | 4.93/194 | 4.83/190 | 4.70/185 |
| | | Three-phase | - | 5.05/199 | 4.92/194 | 4.78/188 |
| Outdoor operating temperatures | Heating (DB) | °C | -25 to 25 | -25 to 25 | -25 to 25 | -25 to 25 |
| | Hot water (DB) | °C | -25 to 35 | -25 to 35 | -25 to 35 | -25 to 35 |
| | Cooling (DB) | °C | 10 to 46 | 10 to 46 | 10 to 46 | 10 to 46 |
| Water production temperatures | Heating | °C | 20 to 55 | 20 to 60 | 20 to 60 | 20 to 60 |
| | Hot water | °C | 30 to 75 | 30 to 75 | 30 to 75 | 30 to 75 |
| | Cooling | °C | 5 to 22 | 5 to 22 | 5 to 22 | 5 to 22 |
| Maximum current | Single-phase | | 21.6 | 30.8 | 30.8 | 30.8 |
| | Three-phase | | - | 14.3 | 14.3 | 16.3 |
| Water pipe diameter | Input-output | inches | 1-1 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 | 1-1/4 - 1-1/4 |
| Minimum water volume of the installation | | l | 28 | 38 | 46 | 55 |
| Water flow | (Min/Nom/Max) | m3/h | 0.60 - 1.29 - 2.10 | 1.00 - 1.89 - 2.80 | 1.10 - 2.41 - 3.00 | 1.20 - 2.75 - 3.00 |
| Air flow | | m3/h | 2,700 | 4,800 | 5,400 | 6,000 |
| Sound power | | dB(A) | 64 | 64 | 65 | 69 |
| Compressor | | | Rotary DC Inverter | Scroll DC Inverter | Scroll DC Inverter | Scroll DC Inverter |
| Refrigerant | | | R410A | R410A | R410A | R410A |
| Refrigerant charge | | kg (m) | 2.40 | 2.80 | 3.10 | 3.10 |
| Dimensions (H x W x D) | | mm | 800x1,252x370 | 1,380x1,252x370 | 1,380x1,252x370 | 1,380x1,252x370 |
| Weight | Single-phase | kg | 87 | 131 | 133 | 133 |
| | Three-phase | | - | 130 | 132 | 132 |

## Compatible controls and accessories:



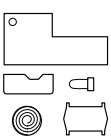
Remote control

PC-ARFHE



3-way valve

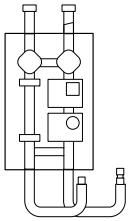
ATW-3WV-01



Cooling Kit

ATW-CKM-01

Can be used to switch machine operation to cold.

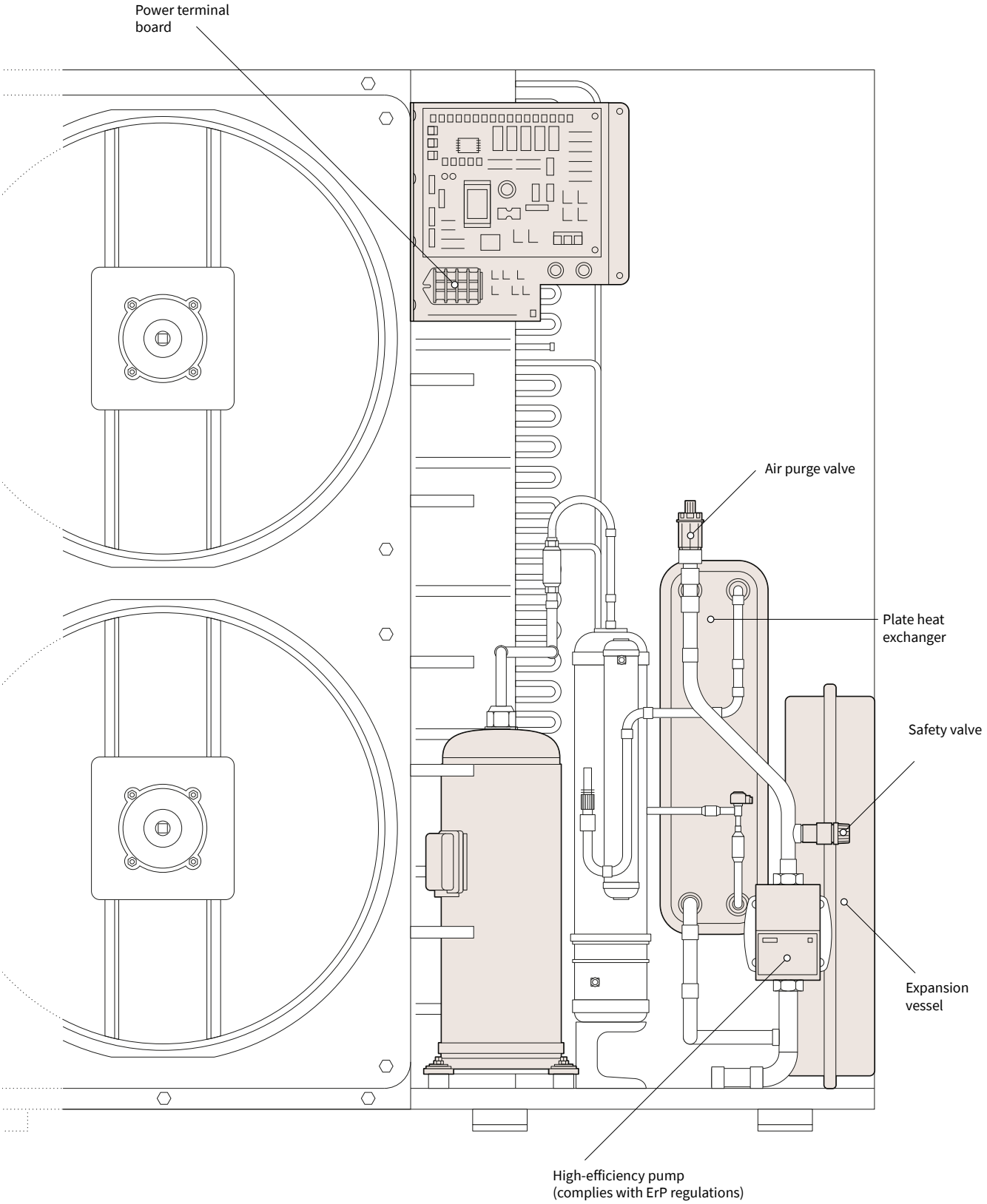


2nd temperature kit

ATW-2TK-07

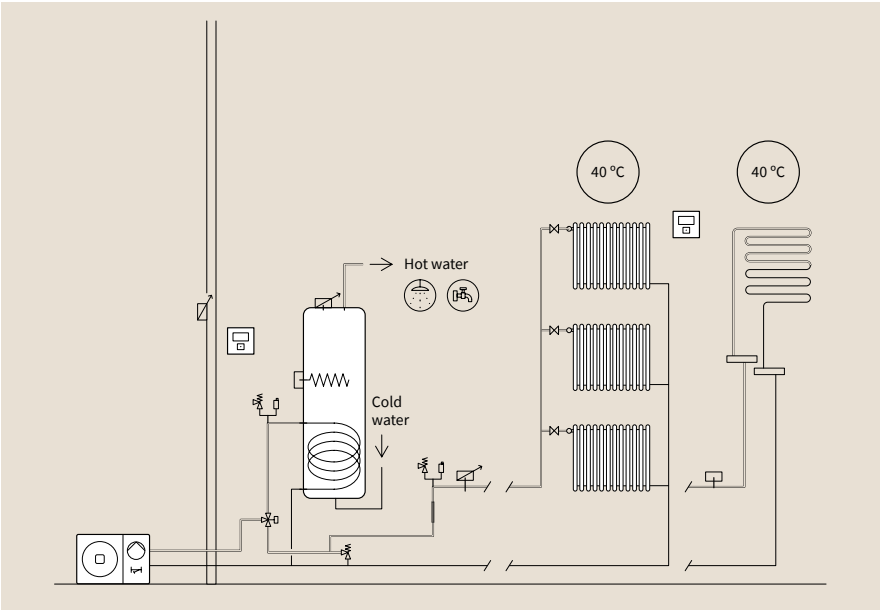
For wall-mounting

# Internal design

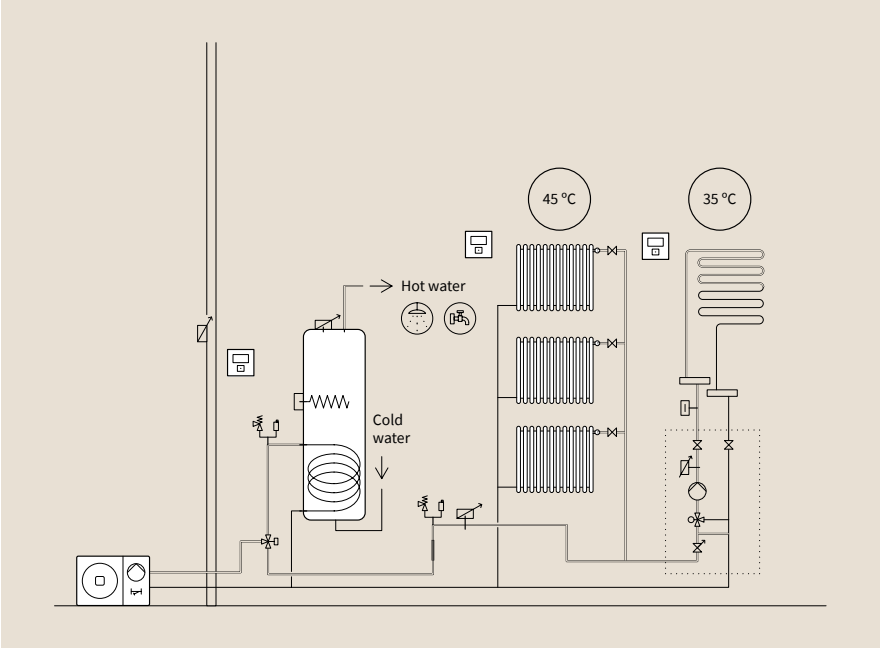


# Configurations

Radiator and underfloor heating at the same temperature; one zone + hot water by external tank.




Radiator and underfloor heating at different temperatures; two zones + hot water by external tank.



# Yutaki T

The simplest and most economical way to produce hot water



## Maximum comfort, minimum consumption

The unit absorbs heat from the outdoor air, and transfers it to the tank to heat the water up to 55 °C. This achieves savings of 70% compared to traditional heaters.

## Greater durability

Yutaki tanks are now coated with duplex stainless steel, a material that offers greater resistance to high temperatures and corrosion.

## More ecological

By using renewable energy to heat the water, it does not emit $CO_2$, and allows smart management of operation thanks to the weekly programmable clock.

## Bespoke tank

The Yutaki T range is made up of two models, 190 and 270 litre-capacity, tailored to the needs of each home. The compact 190 litre model can be installed in standard 600 x 600 mm cabinets.
It is now also 10 kilos lighter and has a refrigerant coil on the outside, thus increasing the volume of refrigerant.

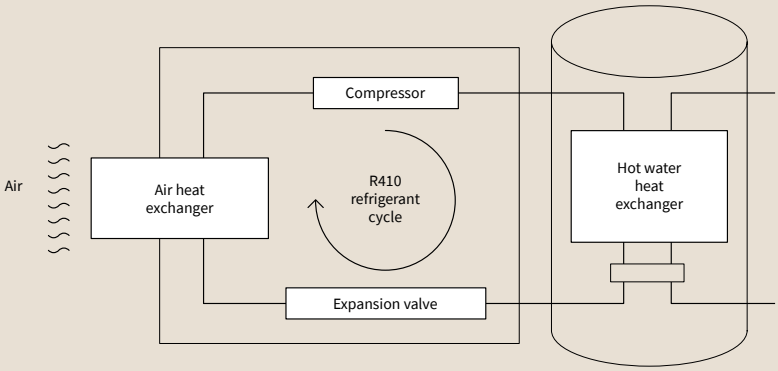
## Control operation from anywhere

The smart function allows operation to be programmed in advance, bringing significant savings in consumption. It can also be connected to MODBUS for home automation.

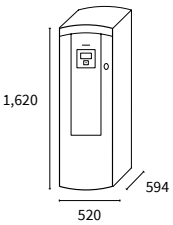
## Error identifier

The equipment has a self-diagnostic system, allowing errors to be identified easily thanks to the flashing LED on the indoor and outdoor units.

## Yutaki T configuration

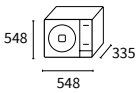



**Hot water tank**




**TAW-190NHB**
**TAW-270NHB**

**Outdoor units**



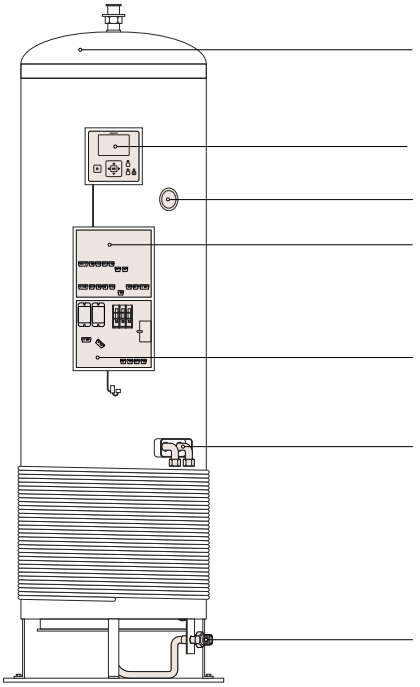

**RAW-35NHB**

* Product range is not currently available in the UK.

# Yutaki T

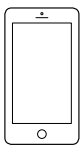
| Hot water tank | | | TAW-190NHB | TAW-270NHB |
|---|---|---|---|---|
| Capacity | | l | 190 | 270 |
| Hot water energy rating | | | A+ | A+ |
| Seasonal efficiency hot water, COP DHW /ηs | Medium climate | | 3.10/123 | 3.20/125 |
| Material | | | Duplex stainless steel | Duplex stainless steel |
| Declared charge profile | | | L | XL |
| Energy consumed in standby mode | | kWh | 24.90 | 20.00 |
| Maximum volume of usable water (At 40°C) | | l | 256 | 356 |
| Heating time | | h:min | 3:15 | 3:35 |
| Maximum water temp. (with heating element) | | °C | 55 (75) | 55 (75) |
| Electrical power | | | 1 ~230V 50Hz | 1 ~230V 50Hz |
| Electrical power | Liquid-gas | inches | 1/4-3/8 | 1/4-3/8 |
| Hot water pipe diameter | Input-output | inches | 3/4-3/4 | 3/4-3/4 |
| Dimensions (H x W x D) | | mm | 1,620x520x594 | 1,620x600x674 |
| Weight | | Kg | 49 | 54 |
| **Outdoor unit** | | | **RAW-35NHB** | **RAW-35NHB** |
| Air flow | | m3/h | 1,620 | 1,620 |
| Sound power | | dB(A) | 63 | 63 |
| Minimum pipe length | | m | 5 | 5 |
| Maximum pipe length | | m | 20 | 20 |
| Maximum height difference-highest OU | | m | 10 | 10 |
| Outdoor operating temperatures | Hot water (DB) | °C | -15 to 37 | -15 to 37 |
| Compressor | | | Rotary | Rotary |
| Refrigerant | | | R410A | R410A |
| Refrigerant charge (length without additional charge) | | kg (m) | 1.2 (20) | 1.2 (20) |
| Additional refrigerant charge | | g/m | not required | not required |
| Dimensions (H x W x D) | | mm | 548x841x335 | 548x841x335 |
| Weight | | kg | 33 | 33 |
| Electrical power | | | 1 ~230V 50Hz | 1 ~230V 50Hz |

## Internal design




Hot water tank shown is not currently available in the UK

## Compatible controls and accessories:



Hi-Kumo

# Controls



## Wireless thermostat ON/OFF

ATW-RTU-04

– Includes receiver.
– ON/OFF function.
– Easy to install.

Compatibility: Entire Yutaki range.

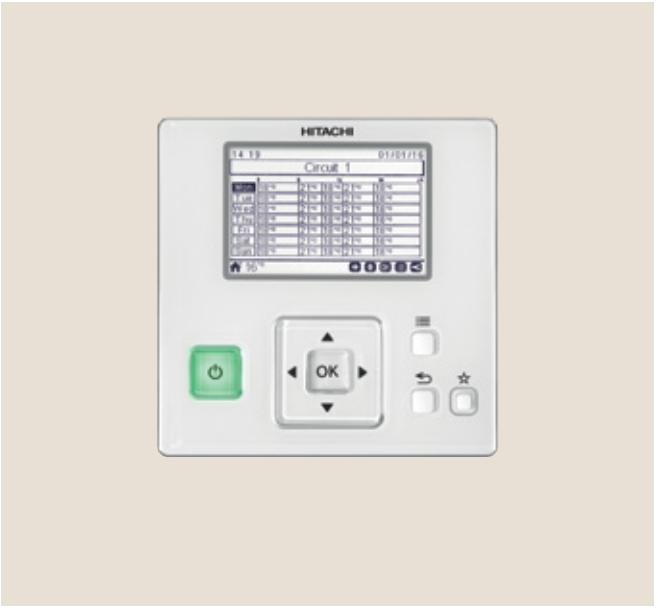


## Smart wireless thermostat

ATW-RTU-05

– Includes receiver.
– Multifunction.
– Easy to install.

Compatibility: Entire Yutaki range.




## Wired control

PC-ARFHE

– Weekly programming.
– Multifunction: modes, temperatures.
– Eco mode.
– Configure, set and display operating parameters.
– Several languages.
– Can work as a thermostat.
– On-screen error codes.

Compatibility: Entire Yutaki range.



## Wireless thermostat for second circuit

ATW-RTU-06

– Multifunction.
– Easy to install.
– To control the temperature of a second circuit.

Compatibility: Entire Yutaki range.



## KNX Interface

ATW-KNX-02

– Centralises the control.
– Allows the Yutaki range to be integrated in KNX home automation systems.

Compatibility: Entire Yutaki range.

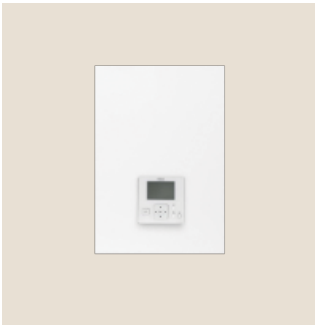



## Modbus for Yutaki

ATW-MBS-02

– Centralises the control.
– Allows the Yutaki range to be integrated in Modbus systems.

Compatibility: Entire Yutaki range.

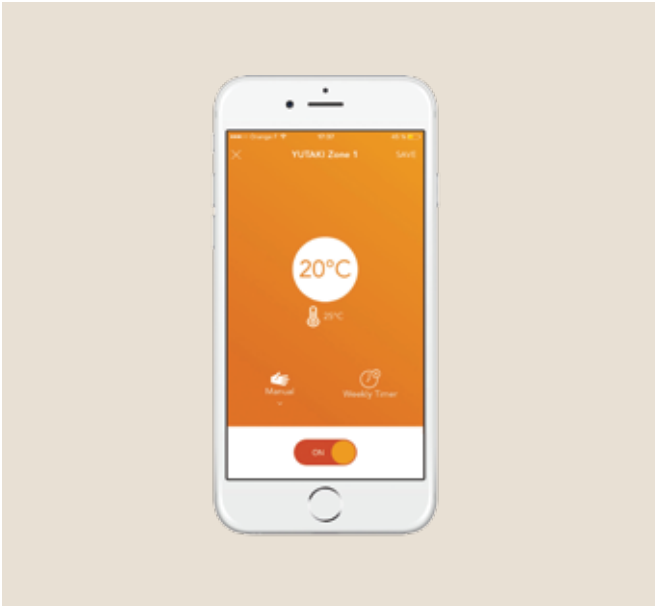


## Cascade control

ATW-YCC-01

– Suitable for high power installations.
– Centralised control of up to 8 Yutaki units.
– Different control options: cascade, rotary, smart defrost...

Compatibility: The entire Yutaki range except for Yutaki T






## Wi-Fi adapter for Hi-Kumo app

ATW-TAG-02

- Connect the Yutaki range using the Hi-Kumo app in order to manage it from any mobile device.
- Requires Hi-Box AHP-SMB-01.




## Hi-Box Yutaki

AHP-SMB-01

- Accessory for the ATW-TAG-02 Wi-Fi adapter.
- Ensures compatibility with the Hi-Kumo app, in order to manage the Yutaki system from any mobile device.

## How to enjoy Hi-Kumo

1. Connect the Hi-Box to the router and the adapter to the Yutaki.
2. Download the app to your smartphone, tablet or computer.
3. Configure by simply searching for connected units and pairing them with the app.

# Accessories



## Hydraulic separator

ATW-HSK-01

- Non-corrosive (brass).
- 4 connection paths.
- With insulation.

Compatibility: Entire Yutaki range.



## Second temperature kit

ATW-2TK-06

- Incorporated into 200 L hot water tank.

Compatibility: Yutaki S Combi with 200 L hot water tank.



## Second temperature kit

ATW-2TK-07

- Wall-mounted model.

Compatibility: Entire Yutaki range.

# Accessories



## Safety aquastat

ATW-AQT-01

– Recommended for underfloor heating applications.

Compatibility: Entire Yutaki range.



## 3-way valve

ATW-3WV-01

– Valve to allow operation in heating/ hot water.

Compatibility: Entire Yutaki range.



## Proportional discharge valve

ATW-DPOV-01

– Proportional for variable flow installations.
– Included as standard in UK version tanks.

Compatibility: Entire Yutaki range.



## Second outdoor ambient temperature sensor

ATW-2OS-02

– Used to measure outside temperatures in the area where the outdoor unit is installed.

Compatibility: Entire Yutaki range.



## Wired wall-mounted sensor for indoor ambient temperature

ATW-ITS-01

Compatibility: Entire Yutaki range.



## Universal water temperature sensor

ATW-WTS-02Y

Compatibility: Entire Yutaki range.



## Backup heating element

WEH-6E

– 6 kW single/three phase.
– 3 x 2 kW stages.
– Built-in power relay.
– Steel body with external insulation.

Compatibility: Yutaki S80, Yutaki M.



## Unit controller cover

ATW-FCP-01

– Used to cover the gap left in the indoor unit when removing the programmer control and using it as a thermostat in any area.

Compatibility: Entire Yutaki range.



## Mirror box

ATW-YMM-01

– Simplifies installation when the Yutaki M is far from the property, avoiding the need to install large cable runs, using just two communication cables.

Compatibility: Yutaki M.



## Auxiliary output signal box

ATW-AOS-02

– Relay box for additional output signals.

Compatibility: Entire Yutaki range.



## Yutaki Range Cooling Kit

ATW-CKS-01/ATW-CKS-02/ATW-CKS-03/ATW-CKSC-01/ATW-CKM-01

– Used to switch the Yutaki range to work in both heat and cold.

ATW-CKS-01 (Yukaki S 2-3HP)
ATW-CKS-02 (Yukaki S 4-6HP)
ATW-CKS-03 (Yukaki S 8-10HP)
ATW-CKSC-01 (Yukaki S Combi)
ATW-CKM-01 (Yukaki M)
Compatibility: The entire range except for Yutaki S80.



## Domestic hot water tank 200/300 L

DHWT-200/300 S-3.0H2E

Compatibility: Yutaki S, Yutaki S80, Yutaki M.

Hitachi tanks not currently available in the UK. G3 compliant Kingspan DHW cylinders are optional - speak to your Hitachi area sales manager or distributor for details.

## Hot water tanks

| | | | DHWT200S-3.0H2E | DHWT300S-3.0H2E |
|---|---|---|---|---|
| Water accumulator | Volume | L | 200 | 300 |
| | Maximum temperature | °C | 75 | 75 |
| | Maximum pressure | bar | 10 | 10 |
| Water heat exchanger | Maximum coil temperature | °C | 99 | 99 |
| | Maximum coil pressure | bar | 10 | 10 |
| | Exchanger surface | $m^2$ | 1.4 | 1.8 |
| Type of insulation | Polyurethane | mm | 50 | 50 |
| Auxiliary heating element | Power | kW | 3 | 3 |
| Hydraulic connection | In DHW | inches | 3/4 (f) | 3/4 (f) |
| | Out DHW | inches | 3/4 (f) | 3/4 (f) |
| | Recirculation DHW | inches | 3/4 (f) | 3/4 (f) |
| | In coil water | inches | 3/4 (f) | 3/4 (f) |
| | Out coil water | inches | 3/4 (f) | 3/4 (f) |
| Accessories | Thermometer | | Yes | Yes |
| | Safety thermostat | | Yes | Yes |



## Domestic hot water tank 200 and 260 L

DHWS200/260 S-2.7H2E

Compatibility: Yutaki S80.

| | | | DHWS200S-2.7H2E | DHWS260S-2.7H2E |
|---|---|---|---|---|
| Power | | | 1 ~ 230 V 50 Hz | 1 ~ 230 V 50 Hz |
| Dimensions | Separate tank height (Built-in tank height) | mm | 1282 (1980) * | 1591 (2289) * |
| | Width | mm | 600 | 600 |
| | Depth (with connections) | mm | 648 (675) | 648 (675) |
| Weight | | kg | 62 | 81 |
| Net capacity | | L | 200 | 260 |
| Maximum operating temperature | | | 75 | 75 |
| Pipe diameter | Water input | inches | G 3/4 male | G 3/4 male |
| | Water output | inches | G 3/4 male | G 3/4 male |
| Wired control | | | PC-ARFHE | PC-ARFHE |

Hot water tank shown is not currently available in the UK

# New R32 models for 2019
# Yutaki S

**RWM-2.0~3.0NRE**

Environmentally friendly refrigerant within a versatile heat pump range

Widest range on the market:
- From 4.3 to 24kW
- With three new R32 models

Top class performances:
- Best COP of the market up to 5.25

High seasonal efficiency:
- A+++ for R32 models

Operating range improved for R32 models

Easy installation & intuitive controls

R32 REFRIGERANT



| Capacity HP | 2.0 | 2.5 | 3.0 |
|---|---|---|---|
| | • | • | • |

Available from May 2019

# Yutaki S Combi

**RWD-2.0~3.0NRW(S)E-(200/260)S(-K)**

The all-in-one compact product and best seller of the heating range

Best in class performances for new housing market:
- With three new R32 models

High seasonal efficiency:
- A+++ for R32 models

Operating range improved for R32 models

Specific models:
- Solar version, standard version

Advanced controls:
- Common to all Yutaki models

R32 REFRIGERANT



| Capacity HP | 2.0 | 2.5 | 3.0 |
|---|---|---|---|
| | • | • | • |

Available from May 2019

# Yutaki M

RASM-2~3VRE

Plug and play solution requiring no indoor space

Larger range with one new capacity and R32 models:
–2 HP and 3 HP

Fully re-designed:
– New cabinet for R32 models

High seasonal efficiency:
– A+++ for R32 models

Operating range improved for R32 models

Design aligned with split system:
– Common components and controls

R32 REFRIGERANT



| Capacity HP | 2.0 | 3.0 |
|---|---|---|
| | • | • |

Available from September 2019

# HP Keymark

100% of air to water heat pump range is heat-pump keymark certified



Heat pump KEYMARK a single certification for a single European market:

– Voluntary and independent European certification mark

– Owned by the European committee for standardisation (CEN)

Third party measurement using test points from Ecodesign

All certificates and certified performances are available online:

https://www.heatpumpkeymark.com/

# IRE
# Regulations & incentives

Air to water heat pumps have become very popular in new build properties. This is because of stricter building regulations that discourage the use of fossil fuel boilers and encourage the take up of renewable energy heat solutions such as air to water heat pumps.



Up to
**€3,500.00**
government grant

## New Government Grants

With the introduction of a government grant of up to €3,500 (Introduced from April 2018) which is to replace inefficient fossil fuel boilers, it is clear that the direction of how to heat homes in Ireland is changing to a more renewable heat solution.

The Yutaki range complies with Part L building regulations for heating and for hot water solutions, the Yutaki S Combi has been tested to EN 16147 as a packaged solution and therefore passes regulations for heating and hot water.

Yutaki also complies to the Energy Related Products (ErP) directive and more information can be obtained from Hitachi's ErP Active Tool http://erpactive.hitachiaircon.com/en/

For more information on Yutaki, please visit www.hitachi-hvac.co.uk or for any schematics, please visit www.yutaki-applications.com and for product selection software, please visit www.hitachi-hitoolkit.com

All information correct at time of printing.

# UK
# Regulations & incentives



## Renewable Heat Incentive (RHI):

The government launched the Domestic RHI scheme on 9th April 2014. In summary, the scheme was set up to displace existing fossil fuel boilers with a renewable energy heat source such as air to water heat pumps like Yutaki.

Since its inception, the tariff for air to water heat pumps has increased meaning for each kW/hr that the Yutaki unit generates, the owner of the unit gets paid a “deemed” amount each quarter for a duration of seven years which is administered by Ofgem.

The process starts with the obtaining of an Energy Performance Certificate (EPC) which determines the total heat demand for the property. This figure is what is used to calculate the RHI payment and this is why it is “deemed”, unless for a more complicated installation such as a bivalent or hybrid system where the heat from the heat pump needs to be measured.

The efficiency of the heat pump affects the amount paid. Please see example below of a standard property:

| | |
|---|---|
| **Total Heat Demand** | 14,805 kW/hrs |
| **Heat Pump installed** | RASM4.0VNE (11kW Yutaki M) |
| **Design Flow Temperature** | 45°C |
| **Tariff** | 10.49p/kW/hr |

Total RHI payment over 7 years

**£8,429.94**

assuming 1% inflation

To ensure qualification of the RHI scheme, the product and the installer need to be Microgeneration Certification Scheme (MCS) approved. The entire Yutaki range is MCS approved, so it qualifies for the RHI incentive.

Yutaki also complies with the Energy Related Products (ErP) directive and more information can be obtained from Hitachi’s ErP Active Tool http://erpactive.hitachiaircon.com/en/

For more information on Yutaki, please visit www.hitachi-hvac.co.uk or for any schematics, please visit www.yutaki-applications.com and for product selection software, please visit www.hitachi-hitoolkit.com

All information correct at time of printing.

Johnson Controls

HITACHI
Air conditioning solutions

air


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