

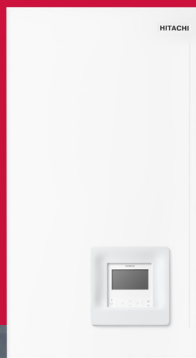
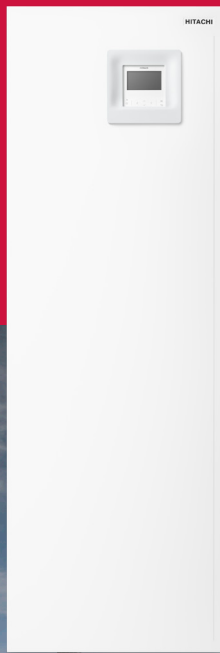
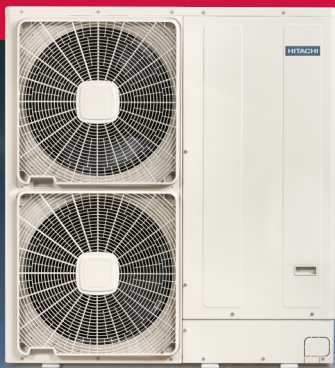
HITACHI

Yutaki H Yutaki HCombi

R32 Hydrosplit air-to-water heat pumps



Plug & Play R32 units from 11 to 16kW



Cooling & Heating





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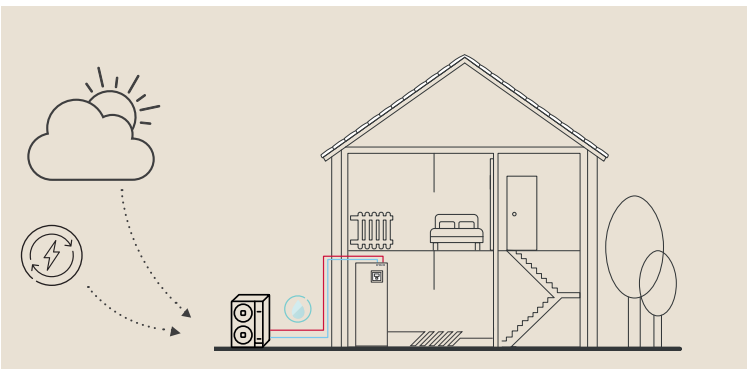
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- 04 Hydrosplit air-to-water heat pumps
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Hydrosplit air-to-water heat pump

Renewable energy solution

Using air as a renewable energy source together with a more environmentally friendly R32 refrigerant, the new Yutaki Hydrosplit air-to water heat pump range provides large energy savings with a low environmental impact.

Our products are the most suited to supporting the green transition towards net zero and a sustainable low carbon energy future. Hitachi Cooling & Heating air-to-water heat pumps are suited to all types of properties and can save considerable amounts of energy by using such a low amount of electricity.



Hydrosplit benefits

In a **hydrosplit system**, the refrigerant cycle is integrated within the outdoor unit (ODU), which is connected to the indoor unit (IU) via **hydraulic connections**. Depending on the IU, it can provide **Heating, Cooling** or **Domestic Hot Water** through an integrated or external tank.



Plug & play: Installation without refrigerant handling, only electrical and hydraulic connections, compatible with existing emitters.

YUTAKI H / HCOMBI R32: LINE-UP

ALL MODELS are available in **Heating only** or **Heating & Cooling**

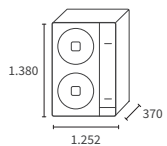
COMBI MODEL with a **220L** integrated tank



Model	kW	11	12	13	16
1 phase		●	●	●	
3 phase		●	●	●	●

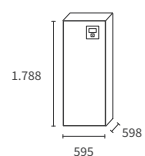
DIMENSIONS

Outdoor unit



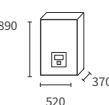
RASM-4(V)NE
RASM-5(V)NE
RASM-6(V)NE
RASM-7NE

YUTAKI H COMBI (floor-standing IU)



HWD-WE-220S(K)

YUTAKI H (wall-mounted IU)



HWM-WE

Eco-friendly Yutaki R32 range

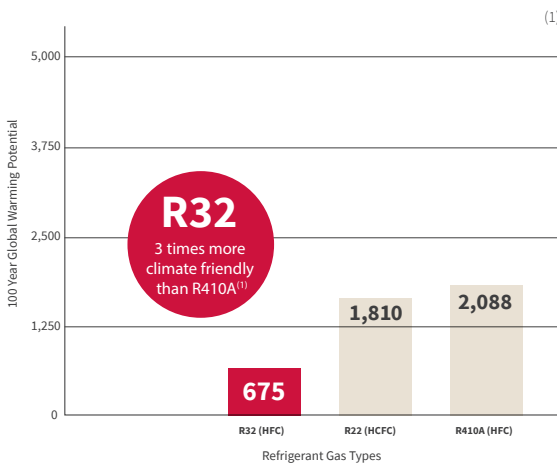
Perfect solution for cold climates



COMPLETE LINE-UP WITH "GREEN" R32 REFRIGERANT

Hitachi continues to meet the growing demand for energy efficient technologies and reduction of greenhouse emissions by expanding its Yutaki range of R32 models, which is in line with the current F-gas regulations.

R32 refrigerant has a low GWP (global warming potential) and a zero ozone layer depletion potential (ODP), and therefore, has a lower impact on the environment and CO₂ emissions. The update of the Yutaki line-up from R410a to a more environmentally friendly R32 refrigerant has increased the sustainability of the units and contributed to the greenhouse emissions reduction:



(1) Source: IPCC Forth Assessment Report

Eco-friendly refrigerant

- Better seasonal efficiency
- Wider working range
- Low environmental impact



2 956

houses' electricity saved for 1 year!

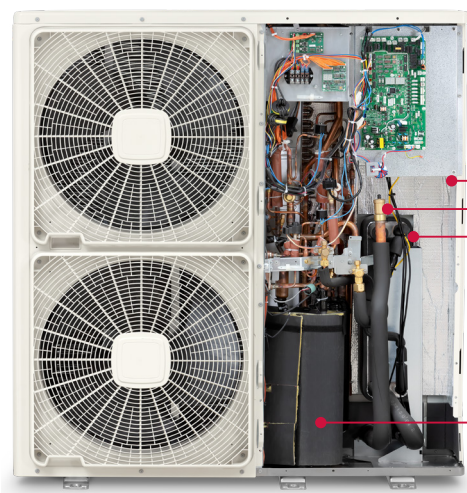


(2) Switching all Yutaki monobloc range to R32 represents a reduction of Teq CO₂ equal to 2956 houses electricity consumption for 1 year of sales.

Features & benefits

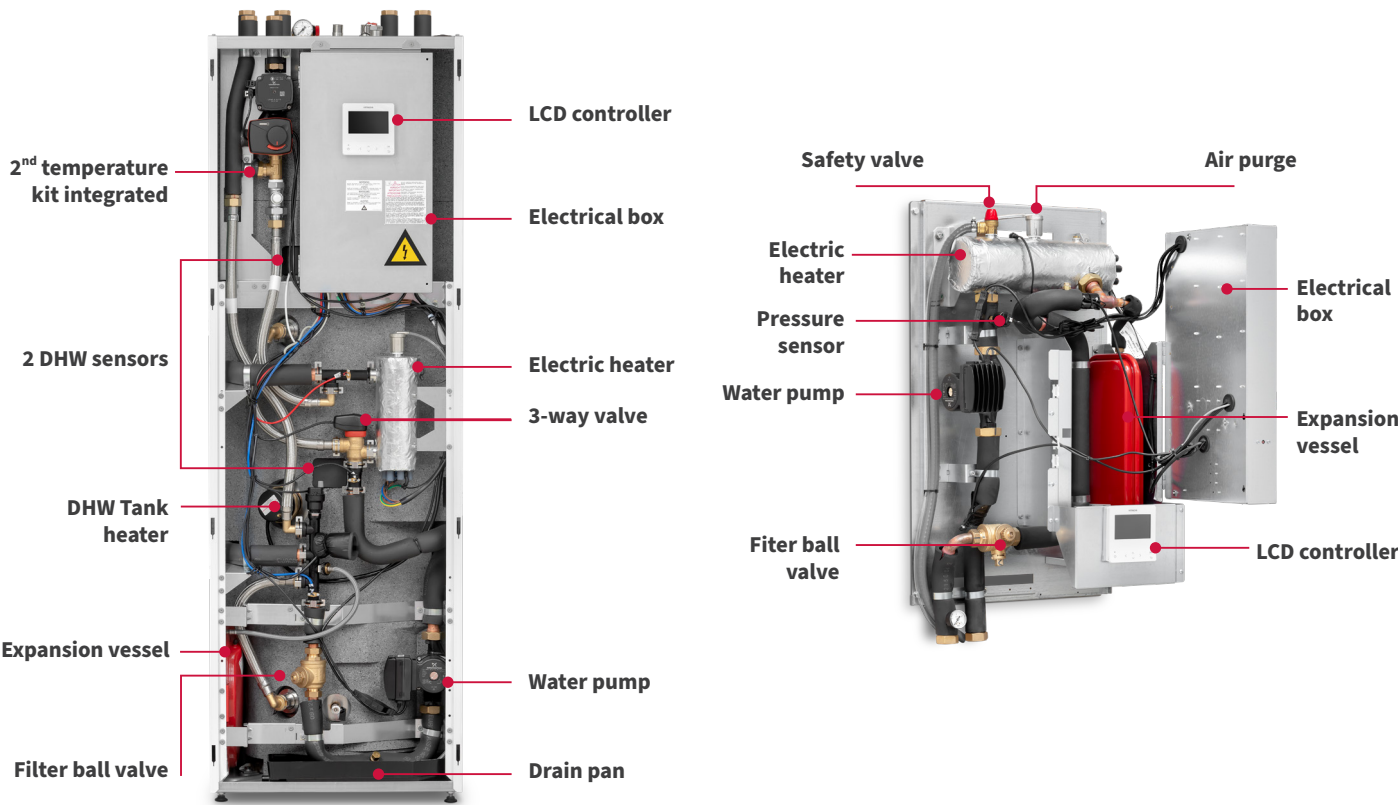
Technology & higher performances

YUTAKI HYDROSPLIT: OUTDOOR UNIT KEY COMPONENTS



- Insulation**
Almost all the cabinet is insulated with an exclusive material considered one the best to improve acoustic performances.
- Air purge**
- Cross flow plate heat exchanger**
Efficient design for low pressure drop.
- Compressor**
New rotary compressor for exceptional performances.

YUTAKI HYDROSPLIT: INDOOR UNITS KEY COMPONENTS



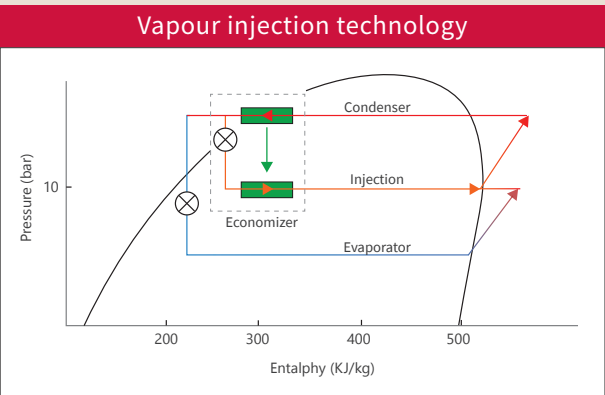
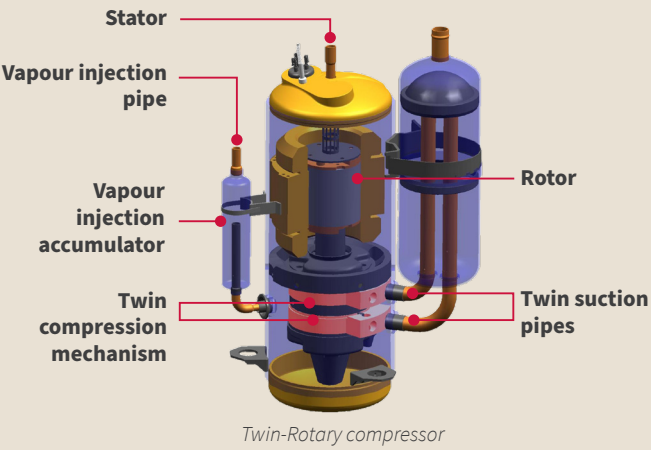
ENHANCED VAPOUR INJECTION TECHNOLOGY

Yutaki Hydrosplit outdoor units are equipped with a new high tech twin-rotary compressor, which provides high capacities at low ambient temperatures.

Enhanced Vapour Injection Twin-Rotary compressor

The Economizer EV is adjusted to control the discharge temperature by injecting vapour into the compression chamber.

Performance at very low ambient temperature is enhanced and the unit can supply 55°C water even at -20°C ambient temperature.



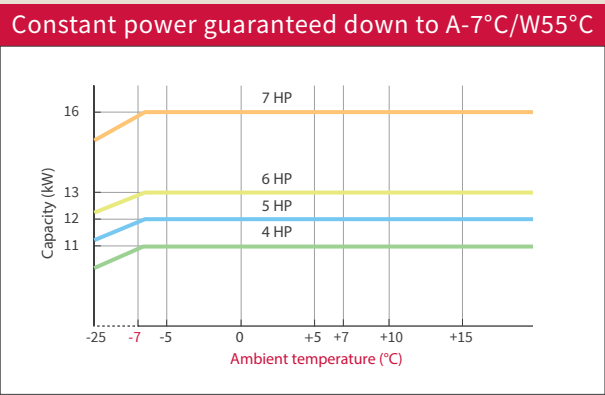
- Improved efficiency**
- Economizer circuit controlled by a dedicated Expansion Valve
 - Improved capacity at low ambient temperature
 - Higher water outlet temperature at very cold ambient

GUARANTEED COMFORT EVEN IN EXTREME WEATHER CONDITIONS

New Yutaki Hydrosplit heat pumps are the best choice for all residential refurbishment projects. They meet Heating and DHW needs even at very low ambient temperatures.

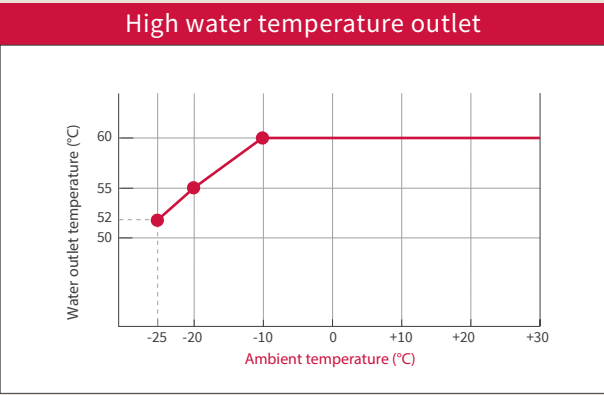
Constant power

Hitachi exclusivity : New twin-rotary compressor with enhanced vapour injection port maintains high capacities down to sub-zero temperatures!



Working range

Additionally to high capacities, new Yutaki units guarantee a **high water temperature outlet** even at very low ambient temperatures.



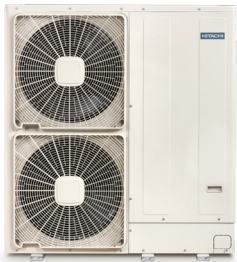
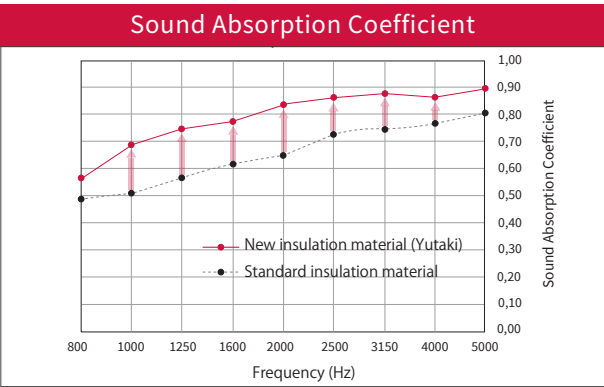
DISCREET UNITS FOR BETTER COMFORT

Hitachi wants to offer high performances and, at the same time, create a quiet and peaceful environment for customers. Therefore, design of the new outdoor unit was improved to guarantee to end-users discreet operation of the system.

Night shift

Sound power level can be reduced further thanks to the Night shift mode easily programmable directly on the LCD controller.

Set time period (for example, during the night) and capacity reduction of the heat pump and sound power level will be even lower.



Yutaki Hydrosplit R32



LCD controller

Discreet operation

- New technology for quiet operation
- Additional settings to increase comfort
- Sound power level: **61dB**
- **Every 3dB of noise reduction represents a halving of sound energy.*

ECO-FRIENDLY HEAT PUMP FOR HIGH PERFORMANCES

Easy installation

- **Plug & Play:** only hydraulic & electrical connections to be done. No refrigerant handling.
- **Easy access** to components and connections aligned on the top
- Included as **standard** (2nd circuits, boiler combination, SWP combination etc)
- Perfect integration inside a house: **small footprint** (floor standing unit is less than 600 x 600 mm)

Comfort

- **All-in-one** solution: Heating / Cooling / DHW with an external tank
- **High performances** all year long
- **Silent** outdoor units
- Compatible with **underfloor heating, radiators** and **fancoils**

Higher performances

- Wide line-up **from 11 to 16kW:** Exclusive **POWER+** models
- **Exclusive technology** for higher efficiency
- **Constant power:** Heating or Cooling capacities maintained
- Best working range on the market

Savings

- High seasonal efficiency **A+++**
- **High efficiency:** generates **more than 4 times more thermal energy** than electrical energy used
- **COP 4.66** and **EER 4.8**
- Contributes to **reduced energy consumption** and, therefore, costs

Controls

- Latest generation of **LCD controller** with exclusive functionalities
- Remote control and remote maintenance
- Wide range of room thermostats
- Exclusive **Cascade controller**

Best quality

- Designed and manufactured in JCH factory in **Europe**
- **HP KEYMARK** certification for all models



Exclusive compact design

Our compact Yutaki indoor unit with a modern design will integrate perfectly your home thanks to its small footprint (600 x 600 mm).



Compactness



Exclusive design



Accessories & online tools

ACCESSORIES



Cooling kit Yutaki H
ATW-CKS-02



Cooling kit Yutaki HCombi
ATW-CKSC-02



Cooling kit Yutaki HCombi
ATW-CKSC-03 (with drain pump)



2nd outdoor temp. sensor
ATW-2OS-02



Indoor wired temp. sensor
ATW-ITS-01



Universal water temp sensor
ATW-WTS-02Y



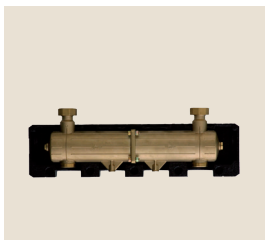
Active anode
ATW-CP-05



2nd temp. kit (integrated)
ATW-2TK-08



Drain pan heater⁽¹⁾
DH-SP280A



Hydraulic separator
ATW-HSK-01



DHW Tanks
DHWT-200/300S-3.0H2E



Aquastat
ATW-AQT-01



3-way valve
ATW-3WV-01



Water check valve
ATW-WCV-01



Diff. pressure valve
ATW-DPOV-01



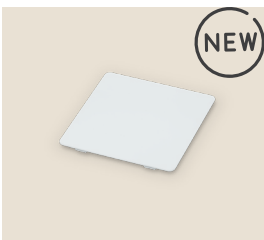
KNX gateway
ATW-KNX-02



Modbus gateway
ATW-MBS-02
HCA16MB



Auxiliary output signal box
ATW-AOS-02



Front cover panel
ATW-FCP-03

Accessories designed to protect outdoor units from severe climate conditions:

- Snow protections
- Air flow guide
- Wind protections

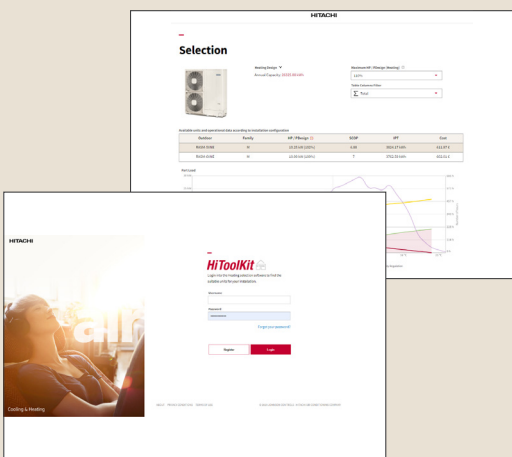
HITOOLKIT FOR HOME



The best selection software to help installers to make the most relevant proposal to customers.

- Easy to use and modern interface
- Wide range of functionalities:
 - ✓ Selection according to heating and cooling needs
 - ✓ Accessories' automatic selection
 - ✓ Installation cost
 - ✓ Complete report etc.
- Cascade configuration with all Yutaki available, with cascade controller option

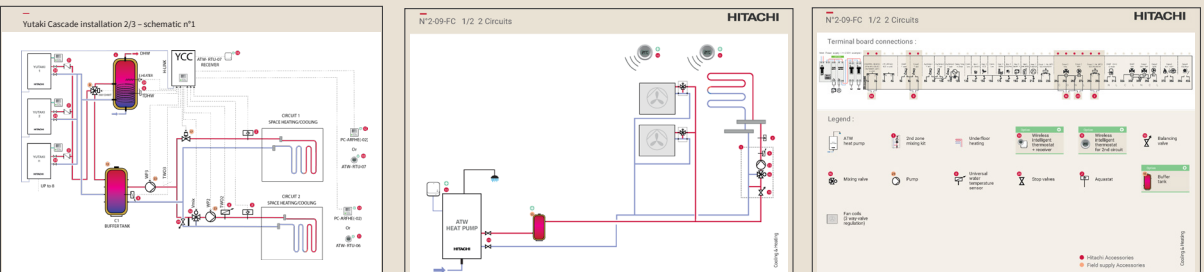
For more details, please visit:
<https://www.hitachi-hitoolkit.com/yutaki/login>



YUTAKI APPLICATIONS

Exclusive online schematic library for Yutaki air-to-water heat pumps.

- Answering fewer than 10 questions, a simple hydraulic schematic is generated
- Numerous information on hydraulic installation, electrical connections to Yutaki terminal board and accessories needed for the installation (Hitachi / field supply)
- Single or cascade installations



For more details, please visit:
www.yutaki-applications.com

Technical data

Yutaki H

Model		YUTAKI H 11kW	YUTAKI H 12kW	YUTAKI H 13kW	YUTAKI H 16kW
Heating performances <small>(preliminary data)</small>					
Min./nom./max. heating capacity (A7/W35)	kW	4.3 / 11 / 14	4.8 / 12 / 15	5.5 / 13 / 16	6 / 16 / 18
Nom./max. heating capacity (A-7/W35)	kW	11 / 11	12 / 12.5	13 / 14	16 / 16
Nom./max. heating capacity (A-7/W55)	kW	11 / 11	12 / 12	13 / 13	16 / 16
COP (A7/W35) according to EN14511	-	4.66	4.48	4.48	4.42
SCOP average climate according to EN14825 (35°C) 1~/3~	-	4.45 / 4.24	4.45 / 4.13	4.45 / 4.15	- / 3.97
SCOP average climate according to EN14826 (55°C) 1~/3~	-	3.38 / 3.21	3.40 / 3.26	3.41 / 3.28	- / 3.21
Seasonal heating energy efficiency ηs (35°C) 1~/3~	%	175 / 166	175 / 162	175 / 163	156
Seasonal heating energy efficiency ηs (55°C) 1~/3~	%	132 / 125	133 / 127	133 / 128	125
Energy class 35°C 1~/3~	-	A+++ / A++			A++
Energy class 55°C 1~/3~	-	A++ / A++			A++
Water outlet temperature range (heating mode)	°C	20 / 60°C			
Max. water temperature outlet in thermodynamic mode only	°C	60°C down to -10°C outside			

Cooling performances (optional) <small>(preliminary data)</small>					
Nom./max. cooling capacity (A35/W7)	kW	11 / 12	12 / 13	13 / 14.7	14 / 16
EER 1~/3~		3.37 / 3.32	3.30	3.22	3.16
Nom./max. cooling capacity (A35/W18)	kW	11 / 15	12 / 16	14 / 17	15 / 18
EER 1~/3~	-	4.82 / 5.04	4.71	4.65	4.60

INDOOR UNITS		HWM-WE			
Electric backup heater / 3 steps	kW	6			
Net weight	kg	48			
Dimensions (H x W x D)	mm	556 x 520 x 730			
Sound power	dB(A)	49			

Hydraulic data					
Expansion vessel	L	6			
Water flow (min./nom./max.)	m³/h	1.6 / 1.89 / 2.8	1.1 / 2.06 / 3	1.2 / 2.24 / 3	1.2 / 2.75 / 3
Shutdown valves (male/male valves supplied)	inches	1"1/4			
Min. installation water volume	L	50	55	55	65

Electrical data					
Power supply		-	230V / 1ph / 50Hz or 400V / 3ph / 50Hz		400V / 3ph / 50Hz
1~ 230V	Max. current with electric heater	A	27.6		
	Cable width (mm²) / max. length (m)	-	2 x 6 + GND		
	Max. current with electric heater + tank/ Yutaki H Optional	A	40.6		
	Cable width (mm²) / max. length (m)	-	2 x 10 + GND		
3~400V	Max. current with electric heater	A	10.1		
	Cable width (mm²) / max. length (m)	-	4 x 2.5 + GND		
	Max. current with electric heater + tank/ Yutaki S Optional	A	23.2		
	Cable width (mm²) / max. length (m)	-	4 x 6 + GND		

OUTDOOR UNITS		RASM-4(V)RW1E	RASM-5(V)RW1E	RASM-6(V)RW1E	RASM-7RW1E
Sound pressure level at 1m / Sound power level in Heating mode	dB(A)	61	63	63	65
Air flow rate	m3/h	7920	8280	8280	8640
Dimensions (H x W x D)	mm	1515 x 1252 x 370			
Net weight	kg	127	135	135	135
Operating ranges in Cooling / Heating / DHW	°C	+10~+46 / -25~+25 / -25~35			

Refrigerant data					
Refrigerant charge / Additional refri. charge needeed	kg	2.6	3	3	3
Refrigerant	-	R32			
Compressor	-	TWIN-ROTARY			

Electrical data					
Power supply		-	230V / 1ph / 50Hz or 400V / 3ph / 50Hz		400V / 3ph / 50Hz
1~230V	Max. current	A	28.5		
	Cable width (mm²) / max. length (m) ⁽¹⁾	-	2 x 6 + GND		
3~400V	Max. current	A	16		
	Cable width (mm²) / max. length (m) ⁽¹⁾	-	4 x 4 + GND		
Transmitting cables (shielded)		mm²	2 x 0.75		

⁽¹⁾Data given for reference purposes only. Compliant with the applicable electrical standards. (V) = mono.

Yutaki HCombi

Model		YUTAKI HC 11kW	YUTAKI HC 12kW	YUTAKI HC 13kW	YUTAKI HC 16kW
Heating performances <small>(preliminary data)</small>					
Min./nom./max. heating capacity (A7/W35)	kW	4.3 / 11 / 14	4.8 / 12 / 15	5.5 / 13 / 16	6 / 16 / 18
Nom./max. heating capacity (A-7/W35)	kW	11 / 11	12 / 12.5	13 / 14	16 / 16
Nom./max. heating capacity (A-7/W55)	kW	11 / 11	12 / 12	13 / 13	16 / 16
COP (A7/W35) according to EN14511	-	4.66	4.48	4.48	4.42
SCOP average climate according to EN14825 (35°C) 1~/3~	-	4.45 / 4.24	4.45 / 4.13	4.45 / 4.15	- / 3.97
SCOP average climate according to EN14826 (55°C) 1~/3~	-	3.38 / 3.21	3.40 / 3.26	3.41 / 3.28	- / 3.21
Seasonal heating energy efficiency ηs (35°C) 1~/3~	%	175 / 166	175 / 162	175 / 163	156
Seasonal heating energy efficiency ηs (55°C) 1~/3~	%	132 / 125	133 / 127	133 / 128	125
Energy class 35°C 1~/3~	-	A+++ / A++			A++
Energy class 55°C 1~/3~	-	A++ / A++			A++
Water outlet temperature range (heating mode)	°C	20 / 60°C			
Max. water temperature outlet in thermodynamic mode only	°C	60°C down to -10°C outside			

DHW performances <small>(preliminary data)</small>					
1~ 230V	DHW COP (220L) according to EN16147	-	2.7		
	Seasonal energy efficiency ηwh (L cycle)	%	110		
	Energy class	-	A		
	Heat up time	h:min	01:10		
	Stand-by power input (Pes)	W	41		
	Max. volume of usable hot water (Vmax)	L	288		
	Temperature range of water outlet (DHW mode)	°C	30~55		
	DHW COP (220L) according to EN16147	-	2.3		
3~ 400V	Seasonal energy efficiency ηwh (L cycle)	%	94		
	Energy class	-	A		
	Heat up time	h:min	01:10		
	Stand-by power input (Pes)	W	56		
	Max. volume of usable hot water (Vmax)	L	288		
	Temperature range of water outlet (DHW mode)	°C	30~55		
	DHW COP (220L) according to EN16147	-	2.3		
	Seasonal energy efficiency ηwh (L cycle)	%	94		

Cooling performances (optional) <small>(preliminary data)</small>					
Nom./max. cooling capacity (A35/W7)	kW	11 / 12	12 / 13	13 / 14.7	14 / 16
EER 1~/3~		3.37 / 3.32	3.30	3.22	3.16
Nom./max. cooling capacity (A35/W18)	kW	11 / 15	12 / 16	14 / 17	15 / 18
EER 1~/3~	-	4.82 / 5.04	4.71	4.65	4.60

INDOOR UNITS		HWD-WE-220S(-K)			
Electric backup heater / 3 steps	kW	6			
Net weight	kg	48			
Dimensions (H x W x D)	mm	556 x 520 x 730			
Sound power	dB(A)	49			

Hydraulic data					
Expansion vessel	L	6			
Water flow (min./nom./max.)	m3/h	1.6 / 1.89 / 2.8	1.1 / 2.06 / 3	1.2 / 2.24 / 3	1.2 / 2.75 / 3
Shutdown valves (male/male valves supplied)	inches	1"1/4			
Min. installation water volume	L	50	55	55	65

Electrical data					
Power supply		-	230V / 1ph / 50Hz or 400V / 3ph / 50Hz		400V / 3ph / 50Hz
1~ 230V	Max. current with electric heater	A	27.6		
	Cable width (mm²) / max. length (m)	-	2 x 6 + GND		
	Max. current with electric heater + tank	A	39.5		
	Cable width (mm²) / max. length (m)	-	2 x 10 + GND		
3~400V	Max. current with electric heater	A	18.9		
	Cable width (mm²) / max. length (m)	-	4 x 6 + GND		
	Max. current with electric heater + tank	A	18.9		
	Cable width (mm²) / max. length (m)	-	4 x 6 + GND		

OUTDOOR UNITS					
Sound pressure level at 1m / Sound power level in Heating mode	dB(A)	61	63	63	65
Air flow rate	m3/h	7920	8280	8280	8640
Dimensions (H x W x D)	mm	1515 x 1252 x 370			
Net weight	kg	127	135	135	135
Operating ranges in Cooling / Heating / DHW	°C	+10~+46 / -25~+25 / -25~35			

Refrigerant data					
Refrigerant charge	kg	2.6	3	3	3
Refrigerant	-	R32			
Compressor	-	TWIN-ROTARY			

Electrical data					
Power supply		-	230V / 1ph / 50Hz or 400V / 3ph / 50Hz		400V / 3ph / 50Hz
1~ 230V	Max. current	A	28.5		
	Cable width (mm²) / max. length (m) ⁽¹⁾	-	2 x 6 + GND		
3~ 400V	Max. current	A	16		
	Cable width (mm²) / max. length (m) ⁽¹⁾	-	4 x 4 + GND		
Transmitting cables (shielded)		mm²	2 x 0.75		

⁽¹⁾Data given for reference purposes only. Compliant with the applicable electrical standards. (V) = mono.

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HITACHI. CERTIFIED QUALITY



HP Keymark certified performance

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