

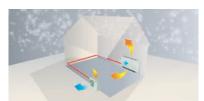


# HITACHI Inspire the Next

# Things to know

## ▶ How does a heat pump work?

A heat pump moves the heat energy from outside to inside and heats a room even at low temperatures of up to -20°C. And if it is hot during the summer it works exactly the other way round. In contrast to all other heating systems, this thermodynamic system generates more energy than it uses. And as an added bonus it also protects the environment.







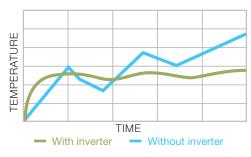
In summer heat is removed from the inside and vented to the outside.

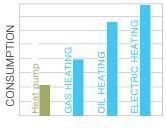
## DC INVERTER - Technology for more comfort and greater energy savings.

HITACHI is one of the first manufacturers to integrate DC INVERTER technology in the construction of heat pumps. That way the output for heating a house can be adapted exactly to actual requirements. The YUTAKI heat pump can give off 60% to 130% of its nominal power.

What it means for you is:

- lower electricity consumption because of load-dependent output.
- low space requirement for the heating system (footprint for thermae and flue is not necessary),
- extremely low-noise heating system.





1 kW consumption = 3 kW heat output This is on average more than 60% free energy!<sup>(1)</sup>

In comparison to an electric heating system.

Non-binding example,

Deviations are possible, depending on installation, operating conditions and

HITACHI uses up-to-date control engineering for the water-sided control of the YUTAKI heat pump. For example the flow temperature of the heating circuits will be adapted to the outside temperature in order to save energy.

## Simple Operation

Thanks to the ergonomically designed room thermostat, the control of your YUTAKI heat pump is extremely easy: the temperature can be adjusted at any time at the touch of the button. You have the choice of many different programming options to automatically control the temperature in your house. Week and month programmes, weekend modus and night shut-off make energy saving almost child's play.

## > HITACHI delivers extremely efficient solutions

In accordance with EU Guidelines, the energy class specifies the level of performance of air conditioning units and heat pumps, taking energy consumption and sound pressure levels into account. Due to the fact that the HITACHI systems achieve an operation factor of up to 5 at part load working, most of these systems belong to energy class A - the best energy class. In doing so the HITACHI systems are setting standards on the air handling unit market.

Also use the output options for heat pumps – ask your energy advisor!







# HITACHI and the protection of the environment

- HITACHI uses the environmentally friendly refrigerant R410A that does not harm the ozone layer.
- ➤ The production process of the HITACHI systems corresponds to the environmental regulations.
- ➤ The HITACHI systems comply with the European RoHS Directive, which limits the use of certain environmentally unfriendly substances such as lead and mercury.
- As a member of ECOLOGIC, HITACHI is committed to taking back and recycling its end-oflife devices as well any replaced systems. That way, HITACHI fulfils the European WEEE Directive.

Further information about the recycling process is available under www.hitachi.com



The heat pump

YUTAKI – Japanese for

"hot waterfall" –

is a modern and

efficient heating system.

# YUTAKI-

# a unique concept with a multitude of advantages

As a so-called AIR/WATER heat pump...

YUTAKI transforms naturally resources into cost-effective heating energy. In its capacity as a heating boiler, YUTAKI is therefore able to supply different types of heating systems, such as low or high temperature radiators, underfloor heating, fan convectors and hot water boiler.



#### A YUTAKI heat pump offers you many advantages:

- **Economy:** 1 kW consumption = up to 4 kW heat output under nominal conditions.
- **Eco-friendliness:** no CO<sub>2</sub> emissions.
- Simple and fast installation: only one device is installed outside.
- Minimal space requirement and sound development: the heat pump is installed outside.
- **Unproblematic use:** a programmable room thermostat controls the heat pump.
- ▶ Adapting to your requirements: many programming options, depending on the seasons and how the house is used (week programme, weekend programme, holidays, night reduction etc.).
- ▶ Ease of use: the display of the thermostat is intuitive and quick to use. The heat pump automatically controls your entire heating system and hot water boiling. This also includes operating your old heating boiler, if you do not completely replace it with a YUTAKI.



Room thermostat



A heat pump tailor-made to meet your requirements



# FLEXIBLE solution for REFURBISHMENTS

The YUTAKI heat pump is suitable:

- as an addition to an existing system
- as a replacement for a heating system

# 1 YUTAKI heat pump

Due to its intelligent control it is possible, that the YUTAKI pump automatically switches on the old heating system if required.

- 2 Heating system
- 3 Radiator
- 4 Room thermostat

# A COMPLETE SOLUTION for NEW BUILDINGS

YUTAKI is a heat pump that adapts to any of your requirements, independent of the type of your heating system.

- 1 YUTAKI heat pump
- 2 Hot water boiler
- 3 Underfloor heating
- 4 Radiator
- **5** Room thermostat





YUTAKI is the ideal heating solution for you: efficient and comfortable

Now you cannot only individually control your room temperature but also use heating energy efficiently. That is good for our environment – and you can save money.

Simply perfect!



The YUTAKI heat pump is suitable for a wide range of heating systems:





#### **RADIATORS**

Simple installation (to all usable radiators)



#### **UNDERFLOOR HEATING**

- Concealed installation
- Comfort and consistent, optimal temperature



HYDRAULIC MODULES					
	Unit	RHUE3AVHN	RHUE4AVHN	RHUE5AVHN	RHUE5AHN
Heat output (7°C outside temp. / 35°C water)	kW	5.00 - <b>7.10</b> - 8.20	5.00 - <b>9.50</b> - 10.90	6.90 - <b>11.50</b> - 15.00	6.90 - <b>11.50</b> - 15.00
Heat output (7°C outside temp. / 45°C water)	kW	5.00 - <b>7.10</b> - 8.10	5.00 - <b>9.20</b> - 10.20	6.80 - <b>11.40</b> - 14.00	6.80 - <b>11.40</b> - 14.00
Heat output (-7°C outside temp. / 35°C water)	kW	3.70 - <b>5.30</b> - 6.10	3.70 - <b>7.10</b> - 8.10	5.10 - <b>8.60</b> - 11.20	5.10 - <b>8.60</b> - 11.20
Heat output (-7°C outside temp. / 35°C water)	kW	3.80 - <b>5.50</b> - 6.20	3.80 - <b>7.10</b> - 7.90	5.30 - <b>8.80</b> - 10.80	5.30 - <b>8.80</b> - 10.80
Nominal power drain <sup>(1)</sup> (7°C outside temp. / 35°C water)	kW	1.66	2.34	2.83	2.94
Heating COP <sup>(2)</sup> (7°C outside temp. / 35°C water)		4.28	4.06	4.06	3.91
Weight	kg	150	150	150	150
Size (H x L x W)	mm	1480 x 1250 x 444			
Electric supply		230 V / 1PH / 50 Hz 400 V / 3PH / 50 Hz			
Remote control		Radio thermostat			
Electronic peripheral resistance (option)		6 kW (2,4,6) verfügbar in 230 V oder 400 V			
Sound level <sup>(2)</sup>	dB(A)	48	49	51	51
Guaranteed performances	°C	-20°C BH / +37.5°C BH (-19.8°C BS / +40°C BS)			

- (1) Nominal Heating Capacity, Power Input and Sound Level are based on following condition.

   Hot Water Inlet/Outlet Temperature: 30°/35°

   Air Side Heat Exchanger Inlet Air Temperature: 7°(DB), 6°(WB)

  - \*Power Input does not include the water pump.
- (2) The Sound Data (A Scale) is based on the following condition.
   1 meter from the unit surface and 1.5 meter from the floor level

  - The data is measured in an anechoic chamber, so that reflected sound should be taken into consideration in the field.

Specifications in this catalogue are subject to change without notice in order that HITACHI may bring the latest innovations to their customers, omitting type errors.

#### CERTIFICATIONS OF HITACHI

- European Certificate of Conformity for low pressure equipment.
- · Certification of product performance standards by an independent test laboratory.

Hitachi Europe GmbH Am Seestern 18 D-40547 Düsseldorf Postfach 11 05 36 D-40505 Düsseldorf

www.hitachiaircon.com

YUTENG-01-2008



Ask your installation specialist:











