

# THERMONOVA

## INDUSTRIAL AIR/AIR HEAT PUMP



A+++

R32  
ECO  
REFRIGERANT

No  
heating  
pipes

# Natural savings

## Innovation

KITA is equipped with the steam injection technology “smart injection” with an inverter-controlled brushless DC scroll compressor and two electronic expansion valves, which ensure the heat pump’s operation down to  $-33\text{ }^{\circ}\text{C}$  outdoor temperature.

## Quiet technology

With attention to comfort and a low noise level, KITA is equipped with two oversized German A-class quality fans with low rotation speed, which ensures an impressively low noise level.

## Demand-driven

Thanks to full inverter control, where KITA automatically adapts to the actual heat demand, more stable and quiet heating is achieved.

## Efficiency

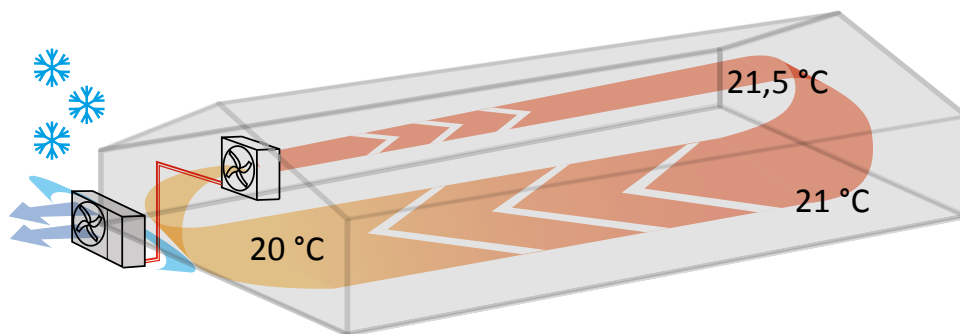
The heat pump is built of oversized components, which ensure long service life and high efficiency among other things via an advanced defrosting technology, which ensures that defrosting only starts when necessary.

## Reliability

Capacity regulation, safety automation, good components, and software ensure a reliable and dependable heat pump.

## Environmentally friendly

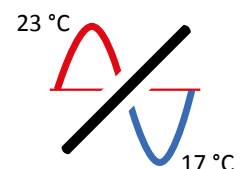
KITA is in all aspects designed to achieve maximum energy efficiency to reduce energy consumption. KITA is an environmentally friendly heat source for the future with minimal environmental impact. It uses refrigerant R32, which has a low environmental impact.



# Highest comfort

With a low installation price, KITA Air is our customers’ preferred heating and comfort cooling system in large halls. The comfort exceeds traditional oil and gas heaters as well as water-borne systems on all fronts, among other things due to a good heat distribution and the combined heat/cooling function.

- Stable and consistent temperature
- Exceptional heat distribution
- Avoid draft problems in high halls
- Low air flow at person level
- Consistent room temperature



# Replace oil and gas with efficient heat pumps

Our society needs to be electrified to ensure the world's climate goals. Therefore, the electricity taxes are gradually reduced compared to the previous high electricity tax. The low electricity prices combined with the KITA air/air heat pump's impressive efficiency achieve the lowest possible heating price. Switching from oil or gas to heat pumps often results in large savings on the energy bill.

## Five reasons to choose an air/air heat pump

- Simple installation
- Good heat distribution
- Low cost heat
- Better for the environment
- No need for traditional system piping



Outdoor unit mounted on a wall bracket.



Outdoor unit with legs.

| Data sheet KITA AIR/AIR     |  |                           |              | KITA AIR<br>35 kW AIR/AIR   |                 | KITA AIR PLUS<br>45 kW AIR/AIR  |                 |
|-----------------------------|--|---------------------------|--------------|---|-----------------|---|-----------------|
|                             |  |                           | Unit         | Nom.  | Max             | Nom.  | Max             |
| Heating                     | Outdoor air 7°C<br>Indoor air 20°C                       | Heat capacity             | kW           | 24.55   | <b>36.47 KW</b> | 32.33   | <b>46.70 KW</b> |
|                             |  | Absorbed electrical power | kW           | 4.56  | 8.81 KW         | 6.09  | 11.59 KW        |
|                             |  | COP                       | -            | 5.39  | 4.14            | 5.31  | 4.03            |
|                             | Outdoor air -7°C<br>Indoor air 20°C                      | Heat capacity             | kW           | 16.82   | <b>26.75 KW</b> | 23.18   | <b>39.80 KW</b> |
|                             |  | Absorbed electrical power | kW           | 4.40  | 7.99 KW         | 5.96  | 12.25 KW        |
|                             |  | COP                       | -            | 3.82  | 3.35            | 3.89  | 3.25            |
|                             | Energy labelling   |                           |              |   | A+++            |   | A+++            |
| SCOP heat (average climate) |  |                           |              | 4,69  |                 | 4,61  |                 |
| Cooling                     | Outdoor air 30°C<br>Indoor air 22°C                      | Cooling capacity          | kW           | 21.20   | 29.49           | 30.24   | 41.40           |
|                             |  | Absorbed electrical power | kW           | 4.57  | 7.76            | 5.93  | 9.98            |
|                             |  | COP                       |              | 4.60  | 3.80            | 5.10  | 4.15            |
|                             | Energy label/seasonal performance factor, cooling        |                           |              |   | A+ / 5.15       |   | A+ / 5.15       |
| Supply data                 | Power supply   |                           | VHz          | 3x400V 50Hz<br>25A automatic circuit breaker<br>type C<br>Earth-leakage circuit breaker<br>300mA Type A |                 | 3x400V 50Hz<br>32A automatic circuit breaker<br>type C<br>Earth-leakage circuit breaker<br>300mA Type A |                 |
|                             | Power consumption maximal/nominal                        |                           | kW           | 13.3  |                 | 16.6  |                 |
|                             | Maximum power  |                           | A            | 23  |                 | 30  |                 |
| Working range               | Heat function  |                           | Min ~ Max °C | -33°C ~ 35°C  |                 | -33°C ~ 35°C  |                 |
|                             | Cooling function   |                           | Min ~ Max °C | -10°C ~ 50°C  |                 | -10°C ~ 50°C  |                 |
|                             | Ambient temperature indoor                               |                           | Min ~ Max °C | +12-30°C  |                 | +12-30°C  |                 |
| Compressor                  | Type/quantity  |                           |              | Scroll Inverter EVI/1 piece   |                 | Scroll Inverter EVI/1 piece   |                 |
| Outdoor fan                 | Model  |                           |              | EBMPAPST  |                 | EBMPAPST  |                 |
|                             | Motor type   |                           |              | EC  |                 | EC  |                 |
|                             | Nominal diameter   |                           | mm           | 910   |                 | 910   |                 |
|                             | Maximum power consumption                                |                           | kW           | 0.625   |                 | 0.625   |                 |
|                             | Speed (max)  |                           | rpm          | 610   |                 | 610   |                 |
|                             | Air volume   |                           | m³/h         | 15,000  |                 | 15,000  |                 |
| Indoor fan                  | Brand  |                           |              | EBM PABST   |                 | EBM PABST   |                 |
|                             | Type   |                           |              | Inverter EC   |                 | Inverter EC   |                 |
|                             | Quantity   |                           |              | 1   |                 | 1   |                 |
|                             | Nominal diameter   |                           | mm           | 800   |                 | 800   |                 |
|                             | Maximum electrical power                                 |                           | kW           | 0.44  |                 | 0.44  |                 |
|                             | Maximum power  |                           | A            | 1.9 (230V)  |                 | 1.9 (230V)  |                 |
|                             | Maximum rotational speed                                 |                           | rpm          | 600   |                 | 600   |                 |
| Maximum air volume          |  | m³/h                      | 6,000        |   | 6,000           |   |                 |
| Outdoor air heat exchanger  | Number of pipe rows                                      |                           | rows         | 3   |                 | 3   |                 |
|                             | Fin spacing  |                           | mm           | 2.5   |                 | 2.5   |                 |
|                             | Surface treatment  |                           |              | Hydrophobic (water repellent)   |                 | Hydrophobic (water repellent)   |                 |
| Sound level                 | Sound pressure level outdoor unit in 10 m nom. operation |                           | dB(A)        | 38  |                 | 38  |                 |
|                             | Sound pressure level indoor unit in 5 m nom. operation   |                           | dB(A)        | 30  |                 | 30  |                 |
| Indoor heat exchanger       | Number of pipe rows                                      |                           | rows         | 3   |                 | 3   |                 |
|                             | Fin spacing  |                           | mm           | 1.6   |                 | 1.6   |                 |
| Expansion valve             | Main valve   |                           |              | Electronic (EEV)  |                 | Electronic (EEV)  |                 |
|                             | Injection valve (EVI)                                    |                           |              | Electronic (EEV)  |                 | Electronic (EEV)  |                 |
| Pipe connection             | Gas/liquid   |                           | ø mm         | 22 (7/8") / 12 (1/2")   |                 | 28 (1-8") / 16 (5/8")   |                 |
| Parts in set                | Indoor unit/Outdoor unit                                 |                           | pcs.         | 1 / 1   |                 | 1 / 1   |                 |
| Refrigerant                 | Type   |                           |              | R32   |                 | R32   |                 |
|                             | Filling  |                           | kg           | 7.0   |                 | 7.4   |                 |
| Weight                      | Indoor unit + Outdoor unit                               |                           | kg           | 140 + 260   |                 | 140 + 320   |                 |
| Dimensions                  | Outdoor unit Height x Width x Depth                      |                           | mm           | 1292 (1516) x 1790 x 641<br>(incl. factory fitted feet)   |                 | 1414 x 2021 x 956   |                 |
|                             | Indoor unit Height x Width x Depth                       |                           | mm           | 1090 x 1250 x 765   |                 | 1090 x 1250 x 765   |                 |

# Benefits of KITA Air heat pump

## Simple installation

With the air/air system, the installation of a water-based heating system in new construction or when converting from gas or oil heaters (furnace) is avoided. The connection between the air/air heat pump's outdoor and indoor unit is simple and inexpensive.

## High-performance indoor unit distributes heat

The indoor unit has a high-performance fan with a long adjustable throwing capability, which ensures minimal temperature difference even in large halls. The temperature difference is normally less than 1 °C.

## High-tech heat pump ensures low heating price

The outdoor unit consists of one of the most innovative heat pumps on the market and is equipped with both EVI technology and inverter. The EVI technology ensures

that the system has a higher heating effect even at extreme outdoor temperatures down to -33 °C and the inverter technology regulates the scroll compressor's heating effect from 25-100% (9-35 kW). This demand control ensures that the heat pump always adapts precisely to the room's heating needs and provides an even heat distribution. At the same time, the heating method provides a very quiet and undisturbed heat output compared to gas and oil heaters. The heat pump is, just like all other KITA models, designed for maximum energy efficiency via the oversized evaporator surface, EVI technology and at the same time a minimal noise level thanks to the oversized inverter-controlled A-class fan (910 mm in diameter) from German Ebm Pabst.

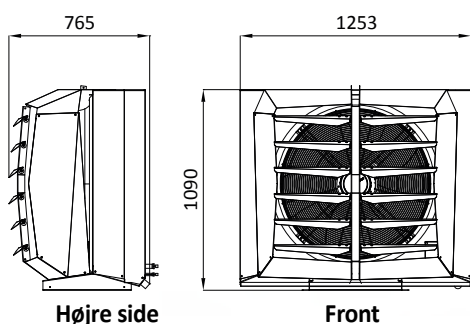
## The heating method of the future

KITA air/air is the ideal and modern replacement for heating systems for large rooms and halls, which are typically heated with oil or gas, often with noisy and inefficient fans. With a modest investment large savings are achieved for heating, and at the same time, the system provides the possibility of cooling function.

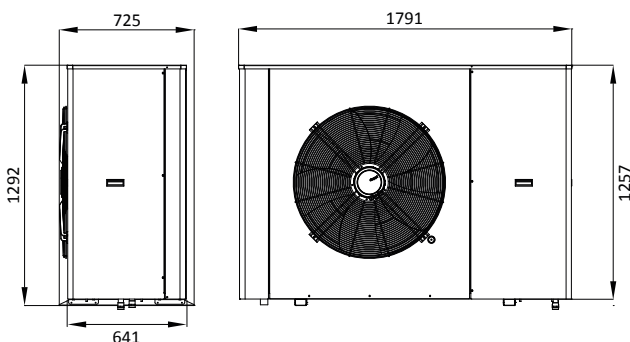
## Unbeatable total economy

In addition to a simple and inexpensive installation, KITA air/air is the absolutely most economical heat source for large rooms and halls. With KITA air/air, the heating price is lower than the cheapest district heating plants.

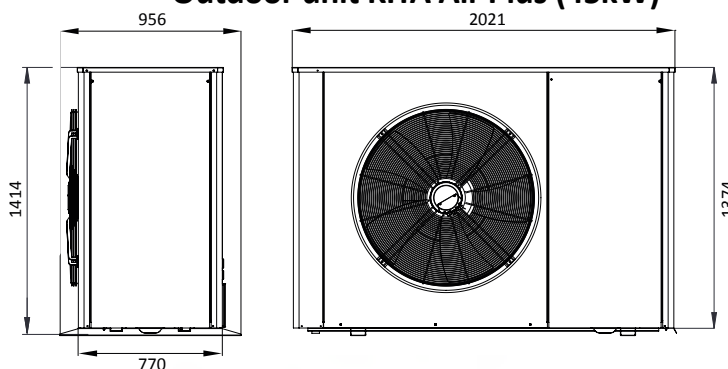
### Indoor unit 35/45 kW



### Outdoor unit KITA Air (35 kW)



### Outdoor unit KITA Air Plus (45kW)



## MANUFACTURER:

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