



## Heat-X<sup>®</sup> air-water heat exchanger from 25 to 75 kW

at 30° room temperature – Heating without CO<sub>2</sub> production in the poultry stable

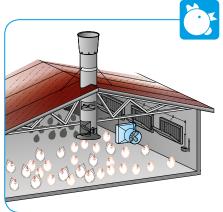


The "Heat-Xa® air-water-heat exchangers are amongst the most powerful on the market. When compared with similar devices Reventa® has succeeded in halving the power consumption with the same heating capacity. Thus the "Heat-Xa® heat exchangers are the perfect choice for using the exhaust heat from biogas plants or CHP plants.

Hot-water driven heat exchangers are always advantageous compared to gas canons because they do not burn oxygen and produce  ${\rm CO}_2$  and water vapour in the stable during heat generation.

The Reventa® heat exchangers are available in many different configurations – vertical / horizontal / sucking / blowing as well »Heat-X«® compact. As such they fulfil numerous requirements. Flexible fastening options facilitate variable application within the stable. A connection set for the heat exchanger completes the product range.

Easy cleaning at the end of the cycle is possible due to the optimum lamella spacing on the heat exchanger. The complete heat exchanger range "Heat-X«® impresses with its energy efficiency.



#### **ADVANTAGES**

• Resistant lamella - easy to clean

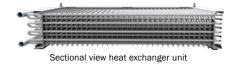


- Stainless steel pipe system
- Universal applicability: Horizontal and vertical air guidance
- ziehl-ABEGG Fan

  Durable and efficient

### »Heat-X«® heating capacity

| Capacity at 30 °C $/$ 86 °F room temperature. Supply $/$ return temperature 80/60 °C (176/140 °F) |                                     |                                     |                                     |  |  |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--|--|
| Capacity  | 25 kW   85,000 Btu                  | 40 kW   136,000 Btu                 | 75 kW   256,000 Btu                 |  |  |
| Fan performance   | 3.000 m <sup>3</sup> /h   1,800 cfm | 5.000 m <sup>3</sup> /h   3,000 cfm | 7.500 m <sup>3</sup> /h   4,500 cfm |  |  |



# »Heat-X«® horizontal installation



## »Heat-X«® vertical installation



# »Heat-X«® vertical air guidance



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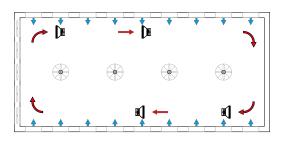


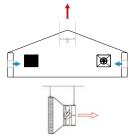




### »Heat-X«® air-water heat exchanger

### Type H: Horizontal installation / Heat exchanger with side intake





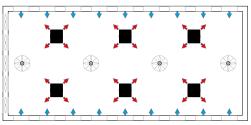
The air is taken in at the sides.

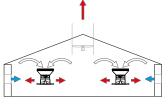
This concept is used with very long stable units, the supply air inserts from the longitudinal side in the stable. The heat exchanger is very robust, as it is manufactured exclusively from noncorroding stainless steel or plastic materials with smooth surfaces, which are easy to clean.

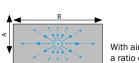
| Installation horizontale                   | Type 2 H                               | Type 3 H                               | Type 4 H                                       |
|--|--|--|--|
| Fan capacity                               | 3.000 m <sup>3</sup> /h   1,800 cfm    | 5.000 m <sup>3</sup> /h   3,000 cfm    | 7.500 m <sup>3</sup> /h   4,500 cfm            |
| Fan connected load                         | 400V; 0.75A; 350W                      | 400V; 1.1A; 530W                       | 400V; 1.25A; 630W                              |
| Fan type                                   | E450-ST-D4-4                           | E500-ST-D4                             | E630-FN-D6                                     |
| Fan Ø                                      | 450 mm   17.7 inch                     | 500 mm   19.7 inch                     | 630 mm   24.8 inch                             |
| Air intake/capacity                        | 30 °C / ~ 25 kW   86 °F / 85,000 Btu   | 30 °C / ~ 40 kW   86 °F / 136,000 Btu  | 30 °C/~ 75 kW   86 °F/ 256,000 Btu             |
| Heating medium flow and return temp.       | 80/60 °C   176 / 140 °F                | 80/60 °C   176 / 140 °F                | 80/60 °C   176 / 140 °F                        |
| Water pressure drop                        | 0,24 bar   3.48 psi                    | 0,34 bar   4.93 psi                    | 0,25 bar   3.62 psi                            |
| Water flow-through                         | 1,10 m <sup>3</sup> /h   0.64 cfm      | 1,76 m³/h   1.03 cfm                   | 3,36 m <sup>3</sup> /h   1.97 cfm              |
| Heat exchanger dimens.<br>HxWxD horizontal | 700 x 700 x 766 mm   28 x 28 x 30 inch | 800 x 964 x 996 mm   32 x 38 x 39 inch | 1.025* x 1.147 x 1.095 mm   40* x 45 x 43 inch |
| Pipe thread connection                     | 3/4"                                   | 3/4"                                   | 1"   |
| Pipe thread connection**                   | ca. 30 m                               | ca. 45 m                               | ca. 45 m                                       |

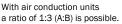
<sup>\*</sup>Measured up to pipe connection \*\*throwing ranges are circa-data depending on circumstances of the ambient temperature without consideration of built-in components.

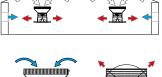
### Type V: Vertical suspended / Heat exchanger with top intake











With this version the air is taken in from above and distributed evenly radially. Thus the climate can be controlled in a stable with various zones. This means that the spot in the stable with the lowest temperature can be heated without having to increase the total temperature of the stable. Through this a better and more even heat distribution is achieved. The special geometry of the REVENTA® air distributor serves to minimise air speed. Through height adjustment of the distribution cone different throwing ranges are realised. In this configuration it is an ideal heating system for every stable width and length.

| Vertical suspended                       | Type 3 V                               | Type 4 A V                                 | Type 4 V                                   |
|--|--|--|--|
| Fan capacity                             | 5.000 m <sup>3</sup> /h   3,000 cfm    | 7.500 m <sup>3</sup> /h   4,500 cfm        | 7.500 m <sup>3</sup> /h   4,500 cfm        |
| Fan connected load                       | 400V; 1,45A; 840W                      | 400V; 2,2A; 1005W                          | 400V; 2,2A; 1005W                          |
| Fan type                                 | E500-FN-D4                             | E560-FN-D4                                 | E560-FN-D4                                 |
| Fan Ø                                    | 500 mm   19.7 inch                     | 560 mm   22 inch                           | 560 mm   22 inch                           |
| Air intake/capacity                      | 30 °C / ~ 40 kW   86 °F / 136,000 Btu  | 30 °C /~ 60 kW   86 °F /205,000 Btu        | 30 °C/~ 75 kW   86 °F/ 256,000 Btu         |
| Heating medium flow and return temp.     | 80/60 °C   176 / 140 °F                | 80/60 °C   176 / 140 °F                    | 80/60 °C   176 / 140 °F                    |
| Water pressure drop                      | 0,34 bar   4.93 psi                    | 0,31 bar   4.49 psi                        | 0,25 bar   3.62 psi                        |
| Water flow-through                       | 1,76 m³/h   1.03 cfm                   | 2,63 m <sup>3</sup> /h   1.55 cfm          | 3,36 m³/h   1.97 cfm                       |
| Heat exchanger dimens.<br>HxWxD vertical | 909 x 984 x 984 mm   36 x 38 x 38 inch | 935 x 1.052 x 1.197 mm   37 x 41 x 47 inch | 935 x 1.000 x 1.200 mm   37 x 39 x 47 inch |
| Pipe thread connection                   | 3/4"                                   | 1"   | 1"   |
| Pipe thread connection*                  | appr. 20 m   appr. 65 ft               | appr. 25 m   appr. 80 ft                   | appr. 25 m   appr. 80 ft                   |

<sup>\*</sup>throwing ranges are circa-data depending on circumstances of the ambient temperature without consideration of built-in components.

Do you have any questions or do you require advice concerning your own projects? - We shall be happy to assist you: REVENTA GmbH | Im Gewerbegebiet 3 | D-48612 Horstmar | Phone: +49(0)255893920 | www.reventa.de