

## **Rotary Heat Exchanger**

New: RRU eco





# **ROTOR 5.0**

# RRU eco

With the new **RRU** *eco* rotary heat exchanger, Klingenburg continues the product offensive it started with the Rotor 5.0

The new **RRU** *eco* rotor design offers you many advantages.

#### More power – less pressure loss

For housing dimensions from 550 to 2550 mm, the difference between the accumulator and the housing is only 50 mm, even with a minimum installation depth of just 290 mm.

For our customers, this means: Even more power and less pressure loss with the same cross-sectional area in the air conditioner.

#### **Compact housing**

We produce the **RRU** *eco* on the basis of a completely new design. Its housing is flush on the outside with no protrusions.

It has a particularly high torsional rigidity with no welded joints.

And you will continue to enjoy the full flexibility that Klingenburg has always offered in terms of external dimensions.

We manufacture the housings with millimetre precision, exactly according to customer requirements. There are no fixed grid dimensions.

#### **Optimised storage mass**

A new wave geometry provides optimal storage mass performance. It is based on our Rotor 5.0 software.

Choose from a total of six different wave heights to obtain the optimal solution for every application.

We also produce the storage mass with millimetre precision according to customer requirements.

#### Improved seals

The **RRU** *eco*'s new design has also allowed us to optimise our sealing concept. The standard brush seal rotates together with the storage mass – a particularly low-wear and low-resistance process.

#### Adjustable purge section

The **RRU***eco* has an adjustable purge section that you can adjust to the





respective pressure situation in two stages. This allows you to minimise the co-rotation of exhaust air into the supply air and thus keep fresh air losses as low as possible.

#### **Simplified handling**

We have significantly improved the handling. Units of all sizes can be moved with an overhead crane.

#### Intelligent drive system

The **RRU** *eco* is driven by a stepper motor as standard.

The control unit naturally has a Modbus interface. The power consumption needed to reach the drive torques is low.

### Quick-Check RRU eco – All benefits at a glance

#### **Compact housing**

- Optimal utilisation of the air conditioner crosssection (difference rotor Ø/housing 50 mm)
- Maximum torsional rigidity
- No protrusions, flush exterior

#### **Optimised storage mass geometry**

New wave heights based on our Rotor software 5.0 for the best possible performance data.

#### Adjustable purge sector

Purge sector adjustable in two stages (2.5° or 5°), suited to the pressure situation. Prevents corotation ratios and keeps fresh air loss as low as possible.

#### **Eco-design compliant**

The RRU eco easily meets the applicable requirements of the European Design Directive for ventilation units ErP Lot 6.

#### Hygiene-compliant

The RRU eco meets all hygiene requirements for ventilation air conditioning systems under VDI 6022.

#### **Customer-specific design**

Rotor diameter of 500 to 2500 mm and six different wave heights allow optimum operation for every application and air condition.

#### Intelligent drive systems

New generation of efficient stepper motors, control unit with Modbus interface.



## **Specifications**

#### Size

- 550 2550 mm housing in millimeter increments
- Square or rectangular housing
- Depth 290 mm

#### Housing

- Galvanized steel construction
- optionally complete enclosed housing with inspection chamber
- optionally liquid paint in all RAL colours
- optionally purge section (adjustable)

#### Installation position

vertical

#### Storage mass type

- Type P
- Condensation, aluminium storage mass (standard)
  Type K
- Epoxy-coated storage mass (improved corrosion protection)
- Type E

Hybrid storage mass zeolite/aluminium (increased moisture transfer)

Type N

Zeolite coated storage mass (maximum moisture transfer)

#### Wave heights

1,4, 1,6, 1,8, 2,0, 2,2, 2,4 mm

#### Sealing system

Brush seal (standard)

#### Drive systems

- Stepper motor system with Modbus-enabled controllers
- optionally frequency converter enabled geared motors (with controller or used as a constant drive)



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