

Rotary regenerative heat exchangers

MRW AL HE – recuperation heat exchangers aluminum



Technical details
see K 3.2



energy efficient
system

■ Cabinet

The housing is made of galvanized sheet metal with round necks on the front sides of the recuperator. There are removable circular covers on the sides of the recuperator, which can be replaced with circular necks as needed. Condensate drains are installed at the bottom of the recuperator on the waste branch (the condensate drain on the air side before recuperation can be blinded).

■ Recuperation

The aluminum plate heat exchanger meets the requirements of EC Regulation No. 1253/2014 and is built into the recuperator cabinet. Sizes 280, 350 and 500 can be supplied with a bypass flap on the fresh supply air side. The bypass valve actuator is not included in the delivery.

■ Installation

Installation only in a horizontal position (under the ceiling) with an inclination of 1° to the waste sewer pipe. The condensate drain must be connected to the sewer pipe via a siphon. For the variant of the recuperator with a bypass flap, it is necessary to provide a service space for access to the servo drive of the bypass flap. The power cable of the servo drive must be routed through the rubber grommet to the outer casing. A position other than horizontal must be consulted with the technical department of Elektrodesign ventilatory s.r.o.

■ Variants

- **MRW-AL H / ØD HE** – recovery heat exchanger without bypass valve, H – type designation, ØD – throat size
- **MRW-AL H / ØD BP HE** – recovery heat exchanger with bypass valve, H – type designation, ØD – throat size

In the case of the variant with a bypass flap, the bypass is located on the supply air side. The servo drive of the bypass valve is located on the waste side of the recuperator. The position of the servo drive with the bypass flap can be changed

as needed. Access to the actuator is through a blinded unused throat opening. If the recuperator is covered by a ceiling, it is necessary to create a service hole in the ceiling for possible servicing of the bypass valve actuator. The minimum dimension of the service hole is shown in the figure below.

■ Instructions

The exchanger is resistant to corrosion and humid environments. It cannot be used in explosive environments, environments with chemical vapors, solvents and aggressive substances. To reduce the risk of clogging the exchanger with dirt, it is necessary to install air filters on the side of fresh (outdoor) air and exhaust (indoor) air.

■ Information

Aluminum recovery heat exchangers are suitable for modular systems with fans MIXVENT-TD, RM N, RK, CVB, CVAB N, CAB. The exchangers are universally applicable for central and decentralized ventilation systems. Regarding the design, they are particularly suitable for assembly systems into circular piping.

- low acquisition costs
- high corrosion resistance for humid environments without aggressive substances
- easy maintenance
- cannot be used for explosive atmospheres and solvent vapors
- temperature resistance –25 to +80 °C

IRW AL HE – recuperation heat exchangers aluminum



Technical details
see K 3.2



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■ Cabinet

The cabinet is made of galvanized sheet metal and is equipped with square sockets in the opposite walls. The drainage screw is included loosely and is mounted in the exhaust air discharge chamber during installation.

■ Recuperation

The aluminum cross plate heat exchanger is hermetically built into the cabinet. Sizes

250 HE, 285 HE, 315 HE, 355 HE, 400 HE and 450 HE are also supplied with a bypass valve.

■ Installation

Installation in any position, but in such a way that it is possible to drain the resulting condensate. Condensate drainage is carried out with the enclosed DN 14 hollow screw through the siphon into the sewer. If possible, the heat exchanger should be installed at a 1° slope to the waste sewer pipe.

■ Variants

- **IRW AL xxx HE** recuperative aluminum heat exchanger, where xxx is the heat exchanger size
- **IRW AL xxx BP HE** recuperative aluminum heat exchanger with bypass, where xxx is the heat exchanger size

■ Instructions

The exchanger is resistant to corrosion and humid environments. The exchanger cannot be used in explosive environments,

environments with vapors of solvents, chemicals and aggressive substances. Antifreeze protection must be provided for the heat exchanger.

■ Information

IRW AL HE recovery heat exchangers are suitable for modular systems with IRB and IRT fans. Recuperative heat exchangers of the “air-air” system in a cross configuration are universally applicable for central and decentralized ventilation and technological extraction systems. Structurally, they are particularly suitable for assembly systems into square piping.

- low pressure loss even with significant operational pollution
- low acquisition costs
- high corrosion resistance for wet environments without aggressive substances
- easy maintenance
- cannot be used for explosive atmospheres and solvent vapors
- temperature resistance –25 to +80 °C