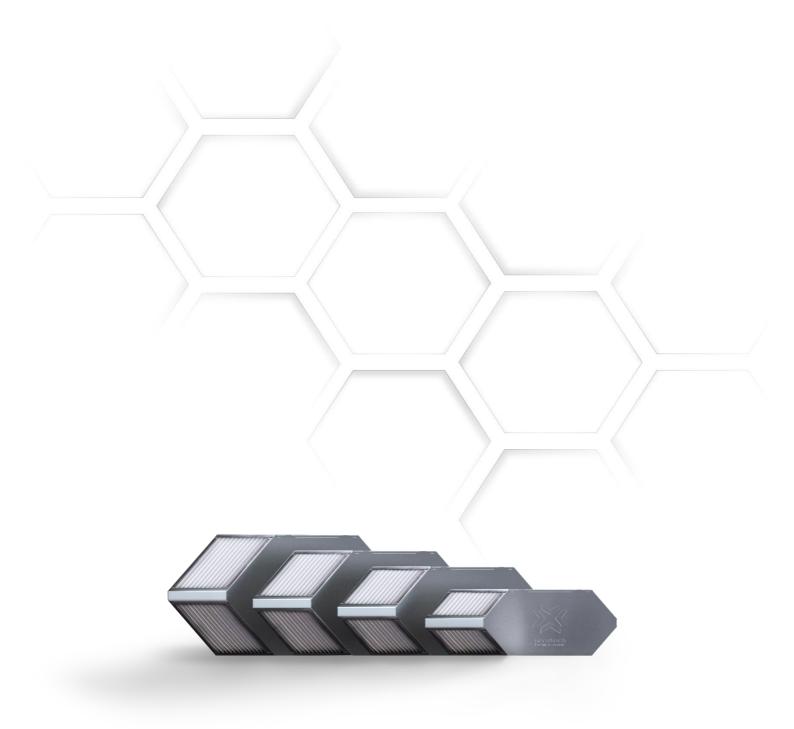
# **INSTRUCTIONS REP+ / RED+**







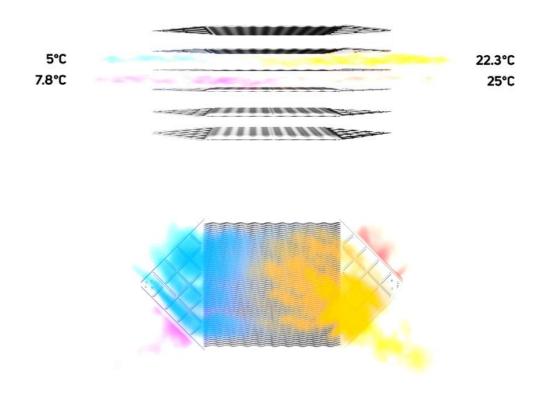
#### **USE**

The heat exchanger is used in heat recovery units, where it returns the exiting heat. The accumulated heat returns and thus significantly affects energy consumption. The efficiency of the heat exchanger is proportional to the outside temperature.

#### DESCRIPTION

The countercurrent air-to-air heat exchanger is made of durable materials. The casing is made of sheet aluminium and sealed with hot glue. The faces are glued using MS polymer. The heat exchangers do not contain silicone and they comply with the REACH 1907/2006 and RoHS 2011/65/EU Directives. It is composed of individual HIPS plastic plates, which are joined together by ultrasonic welding and are coated with sheet aluminium. The outgoing and incoming air flows between the plates and transfers energy to each other.

The outgoing and incoming air does not mix in the heat exchanger. Only the heat is transferred.







## **TECHNICAL DATA AND OPERATING CONDITIONS**

Operating temperatures -20°C to +60°C.

Relative humidity 0% to 100%.

Maximum recommended flow through the faces is 3 m/s on the inlet.

We recommend using a heat exchanger with a balanced ratio between the outlet and inlet, or with a maximum imbalance of  $\pm$ - 50%. The maximum pressure difference between the inlet and the outlet is 800 Pa.

The use of ultrasonic welding technology on all sizes ensures maximum tightness.

The Eurovent certification guarantees up to 92% efficiency.

## **MARKING**

Туре	Dimension [mm]				Model case with EN 308:2022				
	A	В	С	Plate distance	Lenght	Air velocity	Air volume	Pressure drop	Efficiency
REP+17	397	172	100 - 600	3,0	300 mm	1,7 m/s	200 m <sup>3</sup> /h	135 Pa	79 %
REP+23	455	230	100 - 600	3,0	300 mm	1,7 m/s	260 m <sup>3</sup> /h	132 Pa	81 %
REP+27	496	271	100 - 600	3,2	300 mm	1,7 m/s	310 m³/h	123 Pa	81 %
RED+39	500	394	100 - 600	2,6	300 mm	1,7 m/s	480 m <sup>3</sup> /h	273 Pa	82 %

REP+27-152-H-F-32 / REP+27-152-H-T-32 Key to coding for REC+ range

REP+27-152-H-F-32

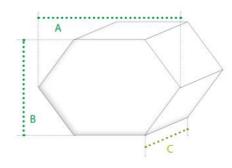
H = High impact polystyrene (HPS)

REP+27-152-H-F-32

F = flat exchanger without "T" profile

REP+27-152-H-T-32

T = exchanger with "T" profile







### **INSTALLATION**

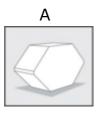
The heat exchanger can be installed in the unit in any position.

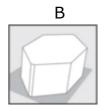
A – wide tray installation, a 3-5° exchanger slope is recommended for condensate drainage

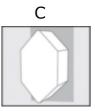
B – installation on the face surface, a  $3^{\circ}$  -  $5^{\circ}$  exchanger slope is recommended for condensate drainage

C – narrow tray installation, this position is allowed only if the entire weight of the exchanger does not rest on the narrow tray

Both faces of the heat exchanger must be firmly fixed and secured over the entire area so that they do not bend in the air flow.







Handle the exchangers carefully. The exchanger is tested for tightness of the individual chambers and care must be taken to avoid damaging the heat exchanger plates!!!

Handle the heat exchanger with the handling tape; if the heat exchanger is not equipped with a handling tape, handle the heat exchanger by grasping the wide trays.

For large heat exchangers it is possible to use vacuum attachments attached to the wide trays. The heat exchanger is bonded with a special hot glue, therefore do not expose the exchanger to radiant heat above 80°C.

# MAINTENANCE AND CLEANING

If filters approved by the ventilation unit manufacturer are used and regularly replaced, the heat exchanger doesn't require special maintenance. If the heat exchanger still gets dirty, carefully remove the heat exchanger and clean it with a soft brush. It is possible to use a brush attachment for a vacuum cleaner and vacuum the dirt. Blow out the cleaned heat exchanger with air (from a vacuum cleaner) so that there is no fine dust in it. If necessary, the heat exchanger can be treated with a disinfectant or antibacterial agent, which is suitable for cleaning and disinfecting aluminum and plastic. Allow the heat exchanger to dry thoroughly before inserting it into the unit!





**Important:** For cleaning do not use sharp tools neither hard brushes. Beware of pressure washing and chemicals. There is a risk of permanent damage to the heat exchanger!

### **DELIVERY AND PACKAGING**

The heat exchangers are delivered in non-transparent wrapped stackable pallets with information about the type of order and a briefing on the basics of handling and storage.

Pallet dimensions: 89 x 89 cm

80 x 110 cm 117 x 117 cm 140 x 140 cm 170 x 170 cm



#### **STORAGE**

Stored exchangers must be properly and visibly marked in the warehouse to avoid confusion. Marking must be performed in a manner that does not damage the products. The temperature in the warehouse must not fall below 5°C or exceed 25°C. The exchangers must be stored in a dry and dust-free environment. The distance from any heat source must be at least 1 m. When storing the heat exchangers or wrapped pallets in layers, the stacking height must be proportional to their load capacity and stability. Storing together with organic solvents, products containing solvents and other chemicals, which are not guaranteed to be inert to the stored products is not permitted. The exchangers must not be exposed to direct sunlight.

# **CERTIFICATION**

















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