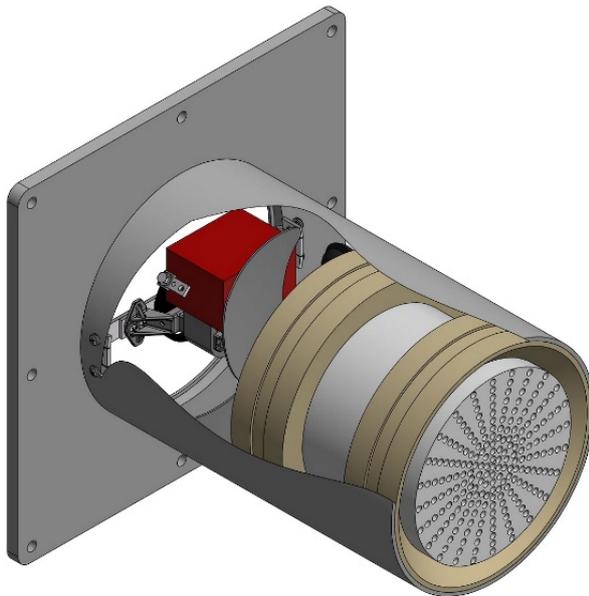


# Data sheet ExVENT Reco

## Ex-protected thermal recovery system



Installation example



### 1 Application

If flammable gases or liquids can be released inside a housing, a technical ventilation system must dilute them with clean air to such an extent that the lower explosion limit is not exceeded. According to IEC 61285:2015: Industrial-process control - Safety of analyser houses, the air must be exchanged at least 10 times per hour.

If there are large temperature differences between the inside of a housing and the environment, the air exchange causes a high energy loss (heat/cold).

ExVENT Reco reduces the energy consumption for heating or cooling the inside of the enclosure by means of heat recovery while providing explosion-proof ventilation.

### 2 Description

The system consists of 2 ExVENT Reco units and one control unit. Each ExVENT Reco unit is equipped with an Ex-proof fan and a recuperator. To ensure a better flow, the ExVENT Reco units must be installed on opposite walls. According to DIN 61285, any stagnant zones must be avoided. The installation must be designed accordingly.

The control unit operates the ExVENT Reco units in such a way that an energy recovery of up to 80% is possible despite a 10-fold air exchange. This applies to both heated and cooled environments.

The cycle times are determined by the volume of the housing.

The ExVENT Reco system can easily be integrated in other control units. Optionally, we will provide an own control unit.

# Data sheet ExVENT Reco

## Ex-protected thermal recovery system

### 3 Technical data (for each ExVENT Reco unit)

Name	Design	Unit
Motor	ExVENT	
EU type examination certificate	PTB 10 ATEX 2023	
IEC scheme certificate	IECEX PTB 11.0016X	
Marking	Ex mb IIC T4	
Housing, ventilator, filter	HT-ExVENT	
EU type examination certificate	PTZ 18 ATEX 0050 X	
IEC scheme certificate	IECEX PTZ 18.0012X	
Marking	II2G Ex h mb IIB+H <sub>2</sub> T4 Gb	
Heat exchanger	Ceramic carrier	
Max. permitted operating ambient temperature	-40 ... +55	°C
Protecting class	IP55	
Temperature class	T4	
Dimensions without filter H x W x D	300 x 300 x 285	mm
Dimensions filter (outside) H x W x D	252 x 252 x 6	mm
Minimum wall thickness for filter installation *	40	mm
Cut-out	223 x 223	mm
Air flow direction per unit	Blowing in	
Airflow	50	m <sup>3</sup> /h
Installation position	Horizontal and vertical	
Rated voltage	230	V AC
Rated current (in compliance with VDE 0298)	max. 1	A
Rated output	25	W
Housing	GRP	
Connecting cable	Silicon tube conductor, resistant to notching and oil 3 x 1,5 mm <sup>2</sup> , Ø 8,4 mm	
Clock rate	Depending on the internal volume of the housing	

\* For smaller wall thicknesses a spacer must be used (optional)

### 4 Options

- Control unit
- Spacer
- further national Ex certificates & operating voltages

### 5 Scope of delivery

2 x ExVENT Reco  
Technical documentation