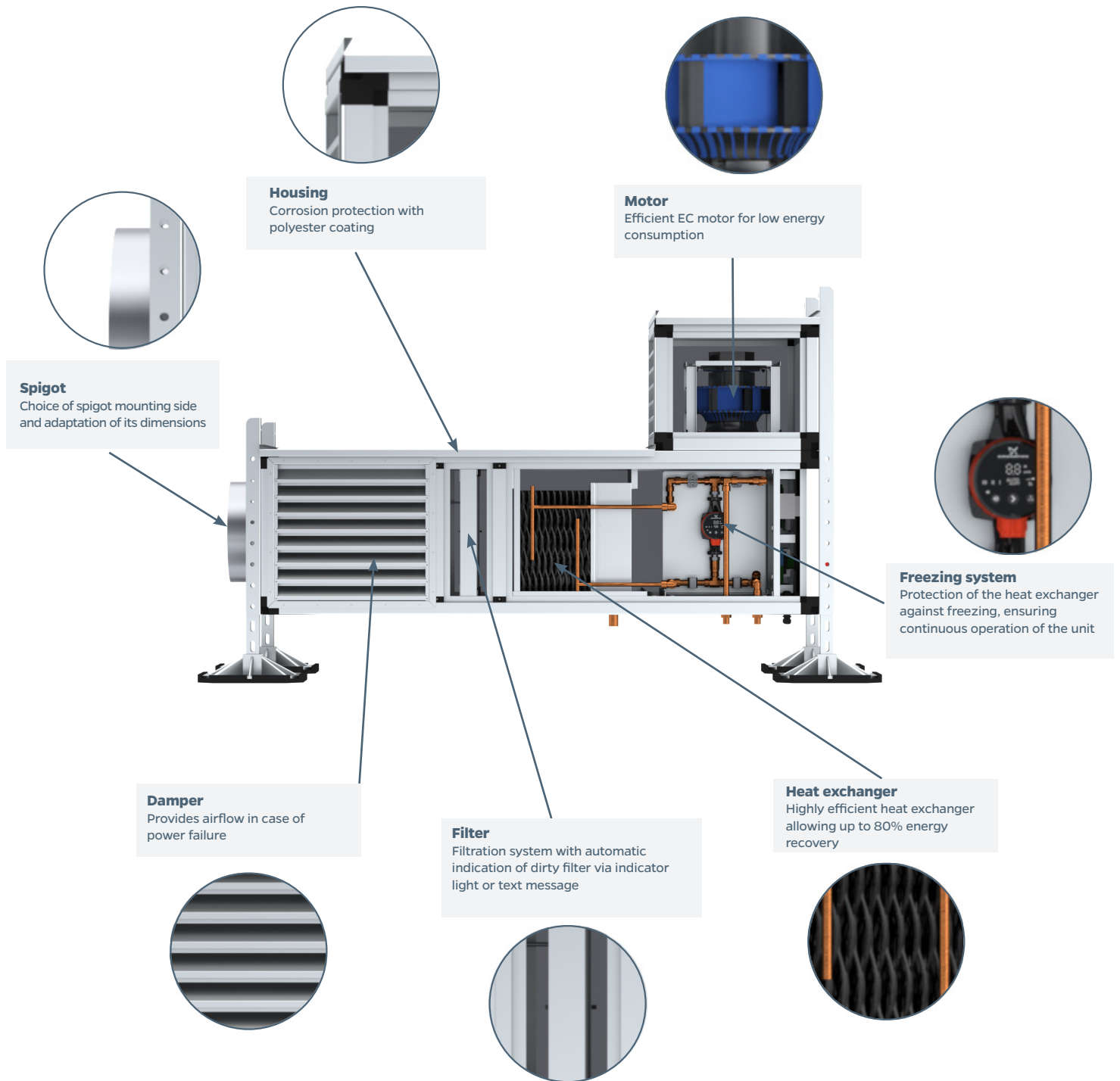




BHR - exhaust unit with heat recovery

The technology was developed in collaboration with Prof Demis Pandelidis. The device was comprehensively tested by an independent team of scientists from the Wrocław University of Technology, who confirmed its energy characteristics.

BROOKVENTTM



Other elements of the unit

• **Insulation**

Protect against heat loss and improve acoustics

• **Controller**

Control of the unit's operation as a function of the constant pressure level in the air duct with the possibility of setting individual operating schedules

• **Revision**

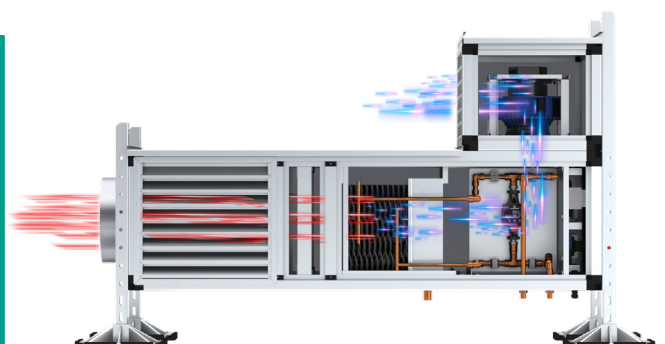
Easy installation and servicing due to the framework construction of the casing with revision door

The BHR unit can be integrated into the ventilation system of different types of facilities - from industrial production halls to smaller plants and service facilities

To adapt the unit to specific operating conditions, we offer additional accessories such as:

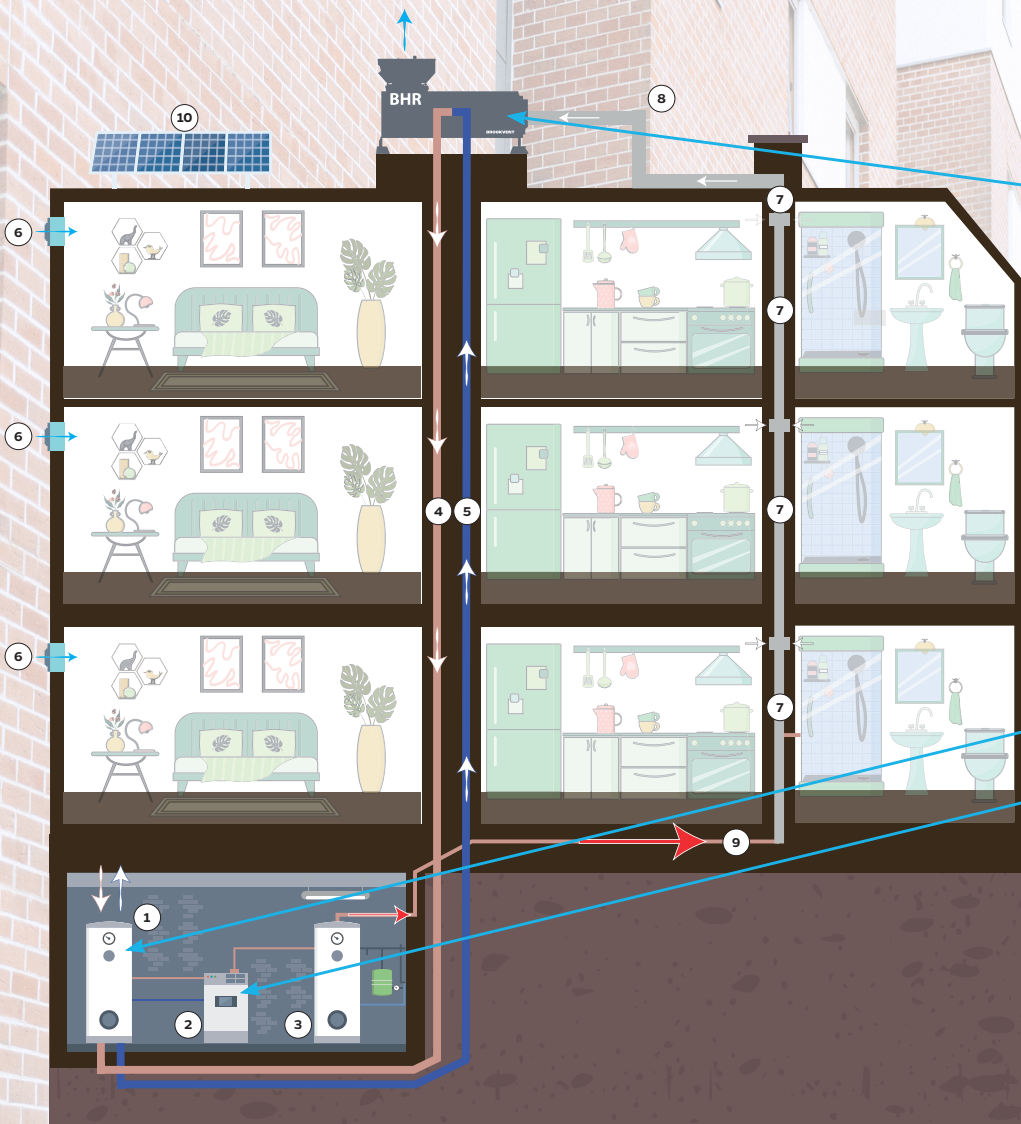
Grease filters: ideal for facilities where the air is contaminated with greasy vapours, such as in the food industry.

Cyclone filters: effectively removing larger particles from the air.



COMMERCIAL BUILDINGS

blocks of flats



BHR unit
in place of the existing exhaust fan. Warm air from the building flows through the exchanger, heating the aqueous glycol solution.

The buffer tank
stores the heat recovered from the exhaust air, which would have dissipated without the BHR system.

The heat pump
covers the DHW demand of the building and can also support the building's central heating system.

- 1. Glycol buffer tank
- 2. Water source heat pump
- 3. DHW tank
- 4. Return
- 5. Heated glycol
- 6. Ventilation unit

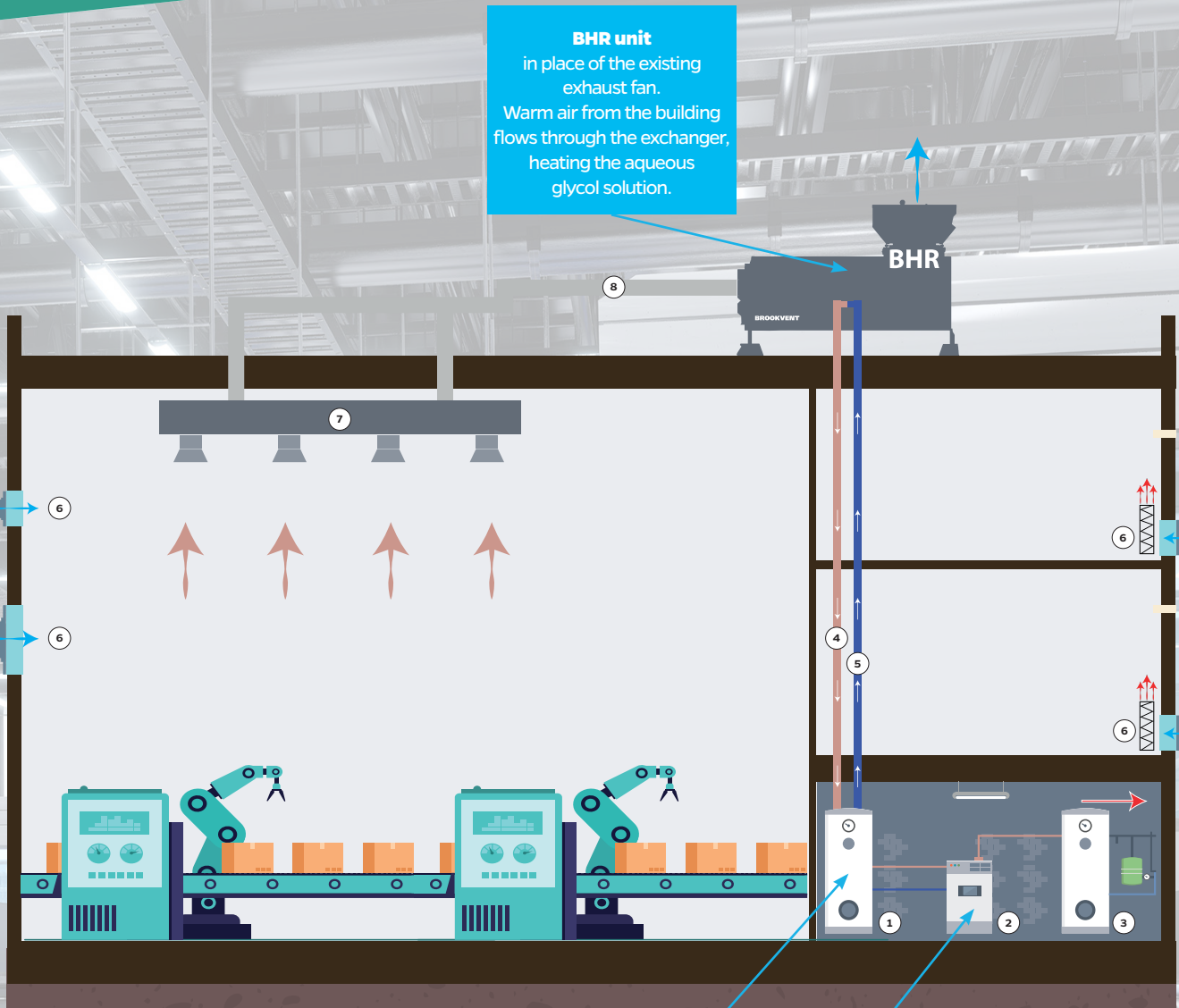
- 7. Ventilation grilles
- 8. Exhaust air grille
- 9. User hot water
- 10. PV powering a heat pump

BHR heat recovery exhaust unit

in residential buildings improves air quality by removing pollutants, moisture and unpleasant odours, contributing to the microclimate in the rooms, while minimising heat loss.

COMMERCIAL BUILDINGS

production halls / lines



BHR unit
in place of the existing exhaust fan.
Warm air from the building flows through the exchanger, heating the aqueous glycol solution.

- 1. Glycol buffer tank
- 2. Water heat pump
- 3. Hot water tank
- 4. Return
- 5. Heated glycol
- 6. Ventilation unit
- 7. Hood
- 8. Exhaust

The buffer tank stores the heat recovered from the exhaust air, which would have dissipated without the BHR system.

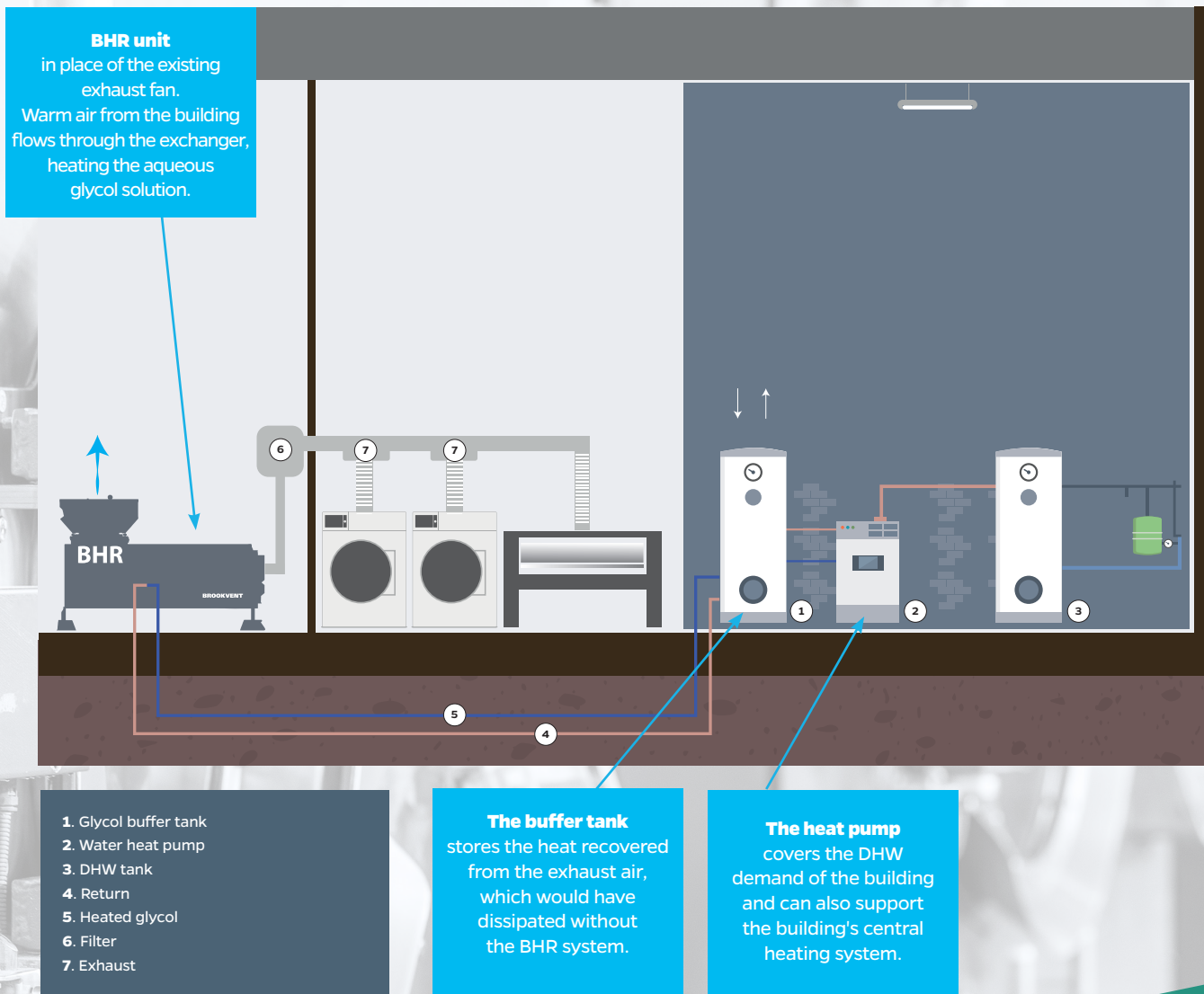
The heat pump covers the DHW demand of the building and can also support the building's central heating system.

The heat recovery exhaust unit BHR

in addition to its function of removing dust, gases and water vapour, helps to maintain the right temperature in the production hall.

COMMERCIAL BUILDINGS

industrial laundries



The heat recovery exhaust unit BHR

removes pollutants in the form of moisture and dust, generated during the industrial washing and drying process.

TECHNICAL PARAMETERS

	S	M	L	XL
Flow [m ³ /h]	1500	2200	3300	4800
Compression [Pa]	130	200	200	200
SFP (EN13779:2007) [kW/m ³ /s]	0,61	0,62	0,6s	0,61
Housing	Aluminium	Aluminium	Aluminium	Aluminium
Unit weight [kg]	226	235	330	406
Dimensions (L x W x H) [mm]	1700x500x1100	1700x730x1100	1800x730x1100	1800x995x1795
Exchanger power [kW]	6,07	7,75	10,77	17,2
Power consumption [kW]	0,26	0,45	0,63	0,93
Filter class	G4	G4	G4	G4
ISO 16890 filter class [%]	Coarse 70	Coarse 70	Coarse 70	Coarse 70
Fluid parameters [°C]	1 / 16	1 / 16	1 / 16	1 / 16
Fluid flow [l/s]	0,11	0,14	0,19	0,30
Type and content of glycol [%]	Ethylene 30	Ethylene 30	Ethylene 30	Ethylene 30
Connection diameter [∅]	1"	1/2"	1/2"	1/2"
Motor rated power [kW]	0,50	0,78	1,35	1,25
Motor rated current [A]	2,50	4,00	6,80	6,40
Motor power supply [V]	1-230	1-230	1-230	1-230
Motor protection class	IP54	IP54	IP54	IP54

AIR FLOW

 Air flow [m³/h]

0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800 4000 4200 4600 4800 5000

BHR S
BHR M
BHR L
BHR XL
DIMENSIONS

[mm]	S	M	L	XL
A	315	400	450	500
B	500	730	730	995
C	400	400	500	600
D	200	200	200	200
E	1700	1700	1800	1800
F	730	730	955	955
G	500	500	600	600

