



HEAT RECOVERY
UNITS

EBF





Up to 50% of thermal energy recovery

The horizontal heat recovery units in the EBF range are designed to reduce heat loss in plants where fresh air is brought in. The air extracted from the premises transfers its heat to the fresh air from outside, resulting in considerable energy saving.

The exchange recovers up to 50% of the thermal energy that would otherwise be expelled from the premises. All the external panels are interchangeable and may be easily removed for inspection and maintenance purposes.

The heat recovery units in the EBF range are available in 6 sizes with rated flow between 500 and 3000 m³/h.

FAN SECTIONS

Air supply and intake ventilation section with centrifugal double-inlet forward-curved blade fans directly coupled to the single-phase external rotor motor, 230V/50Hz, 2 poles (for the EBF01 and EBF02 models) or 4 poles (for the larger models), complete with vibration isolation mountings.

HEAT RECOVERY UNIT

Cross-flow air-to-air static type heat recovery unit. Plates and suitably sealed retaining frame in aluminium. Steel condensate collecting tray with drain pipe.

FILTERS

Polyester filters with average volumetric efficiency 86.5% Am and efficiency class G3 to EN779.

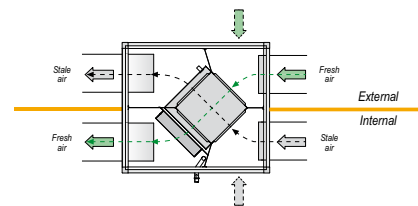
OPTIONAL ACCESSORIES

Water re-heat coil, re-heat electric heater, adjusting damper, speed selector, control panel for unit with water coil, control panel for unit with heater, servo control for adjusting damper, pressure switch for dirty filters, round pipe unions, frost protection thermostat.

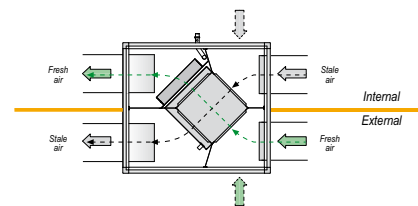
The product is made with panels in galvanised steel (basic version); in plastic-coated plate, colour RAL 9010, on request for exposed installations. The units are supplied with panels lined with 10 mm thick thermal/acoustic insulating material (other thickness on request).

CONFIGURATIONS

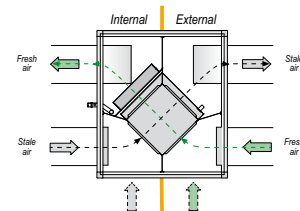
Type A



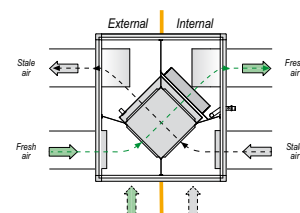
Type B



Type C standard



Type D



→ Shifting the closure

		1	2	3	4	5	6
Maximum absorption	A	2 x 0,95	2 x 1,5	2 x 1,5	2 x 3,1	2 x 3	2 x 5,9
Power available for ass.y	W	2 x 90	2 x 160	2 x 147	2 x 350	2 x 350	2 x 550

TECHNICAL DATA

Rated air flow (0 Pa)	m ³ /h	500	750	1.250	2.000	2.500	3.000
Maximum static pressure	Pa	125	200	100	150	100	105
Sound pressure level *	dB(A)	49	48	48	52	54	60

* According to ISO 3741 referring to the fresh air outlet side without re-heating coil.

Heat recovery

Recovery efficiency	%	46	46	46	46	49	49
Heat recovery capacity	kW	2,1	3,2	5,2	8,3	11	14
Air outlet temperature	°C	6,5	6,6	6,4	6,4	7,2	7,2

Performance with fresh air temperature -5°C and expelled air temperature 20°C.

Fan

Poles	n°	2	2	4	4	4	4
No. of fan speed	n°	1	1	3	3	3	3
Protection rating	IP	32	32	44	55	55	20
Insulation class		B	F	F	F	F	F

Water re-heat coil

Fittings	Ø	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Heating capacity	W	4.990	8.040	12.100	19.000	22.200	27.700
Rows	n°	3	3	3	3	3	3
Air outlet temperature	°C	45,9	44,7	42,4	39,0	39,6	39,5
Air side pressure loss	Pa	20	23	32	50	47	47
Water side pressure loss	kPa	11	13	14	13	19	16
Rated air flow	m ³ /h	375	625	1.000	1.750	2.000	2.500

Water re-heat coil conditions: water temperature 70-60°C; air inlet temperature 8°C; Rated air flow

Re-heat electric heater

Voltage rating	W	1.400 / 2.000	2.700 / 3.200	3.200 / 3.700	3.700 / 4.200	3.700 / 4.200	4.700 / 5.700
Voltage	V	230	230	230	230	230	230
Phase	n°	1	1	1	1	1	1
Input	A	6,1 / 8,7	11,7 / 13,9	13,9 / 16,1	16,1 / 18,3	16,1 / 18,3	20,4 / 24,8
Air outlet temperature	°C	17,1 / 21	19,7 / 21,8	16,3 / 17,6	14 / 14,9	12,8 / 13,4	13,1 / 14,2

Re-heat electric heater conditions: Inlet air temperature 8°C; Rated air flow

Air filters

Filtration efficiency		G3	G3	G3	G3	G3	G3
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Unit dimensions	Height	A	mm	290	390	390	490	490	590
	Width	B	mm	920	970	1120	1220	1370	1470
	Depth	C	mm	770	770	870	870	1020	1175
Intake aperture size	Base	D	mm	344	344	393	393	469	547
	Height	E	mm	232	333	333	433	433	533
Supply aperture size	Base	F	mm	221	222	230	232	298	265
	Height	G	kg	94	114	208	255	255	284

GENERAL DIMENSIONS

