



RECUPERATOR THE HEAT EXCHANGER



X SERIES

Recuperator designs and manufactures plate heat exchangers and thermal wheels, the “beating heart” of a heat recovery system. High efficiency brings drastic reductions in energy consumption and improved environmental sustainability.

Designing new structures that integrate heat recovery: nowadays a must, no longer an option.

Range

- › Air flow-rates over 100,000 m³/h.
- › High efficiency, up to 80%
- › Low pressure drop; recommended ΔP 200 Pa.
- › Max. differential pressure up to 2500 Pa.
- › Max working temperature 90°C (silicone-free). Option up to 200°C.

Characteristics

- › Aluminium fins, epoxy coated fins (Gold) and hydrophilic aluminium B-Blue
- › Aluminium and epoxy coated aluminium corner profiles. Galvanised steel, aluminium and epoxy coated galvanised steel side plates.
- › With optional bypass and damper

✓ Innovative fin geometry for high-efficiency and low pressure drop

✓ Premium tightness: air leakage less than 0.1%

✓ Lower carbon footprint

✓ Plug & Play with F, A, B Series

MAXIMUM
EFFICIENCY
UP TO
80%

(+) Software available free of charge.
For more information see www.recuperator.eu



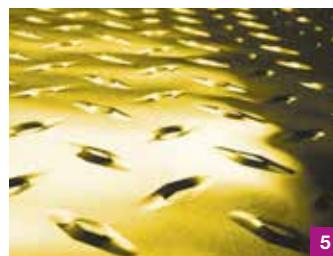
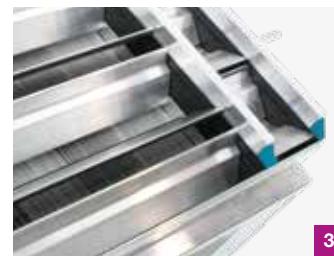
+ **Heat recovery gets lighter**
The innovative fin geometry of the **X Series** makes heat recovery much more cost-effective, with the same efficiency and pressure drop.

+ **Lower pressure drop**
Aletta X ensures very low pressure drop even at high performance levels (ErP-compliant), improving the overall efficiency of the air handling unit and reducing fan power consumption (SFP_{hrs}).

+ **Premium tightness**
Thanks to its special construction, the **X Series** guarantees air leakages below 0.1%, certified at a differential pressure of 1200 Pa. It also guarantees complete water tightness for evaporative cooling applications, thanks to the DC option.

+ **Lower carbon footprint**
The **X Series** is lighter than the F Series due to the self-supporting fin geometry without the typical structural ribbing. This ensures a reduction in the product's carbon footprint throughout its entire life cycle, helping improve the environmental impact of ventilation systems.

+ **Plug and play**
The **X Series** is fully backwards-compatible with the previous series, ensuring seamless integration and immediate benefits.



Bypass option

- › Bypass section only (1)
- › Bypass with central (2) or side (3) damper

Serrande Enginia

- › Bypass and recirculation dampers
- › Modular defrost dampers (sectional defrosting)
- › Aluminium, epoxy-coated aluminium and anodised aluminium
- › With or without plastic parts
- › With built-in (2) or external (3) control
- › ATEX dampers
- › Dampers to withstand high temperatures (180°C)

**ENGINIA**SOLUTIONS FOR THE
AIR HANDLING SECTOR

Material specifications

Aluminium (4)

Aluminium is used in most applications, being resistant to corrosion, easy to machine, non-flammable and durable.

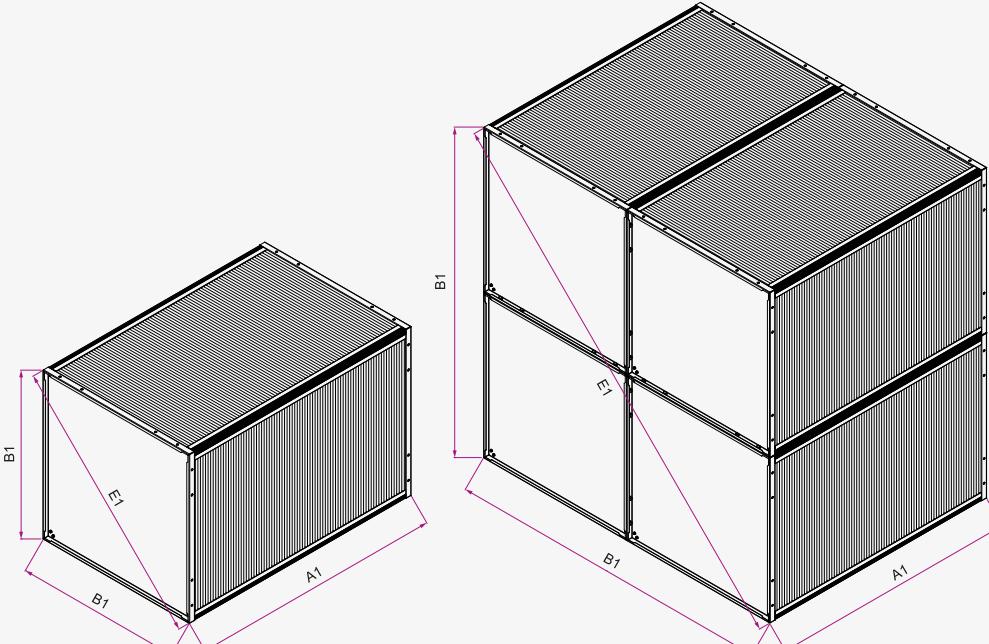
Aluminium with epoxy protection (Gold) (5)

In environments with aggressive atmospheres, aluminium protected by a non-toxic, corrosion-resistant epoxy coating (AC - GOLD version) is recommended.

B-Blue (6)

To reduce power consumption for cooling, the heat recovery unit can be incorporated into an indirect evaporative cooling system. For these applications, Recuperator has developed a new aluminium coating that improves system performance and ensures high resistance to corrosion.

For further information, please see the **B-Blue** technical documentation.



Type	Model	B1 x B1	E1	Max length	Fin spacing
■	07 - 08 - 09 10 - 11 - 12	705 - 805 - 905 1005 - 1105 - 1205	998 - 1139 - 1280 1421 - 1562 - 1705	2500	from 3 to 8
■■	14 - 16 - 18 20 - 22 - 24	1410 - 1610 - 1810 2010 - 2210 - 2410	1994 - 2277 - 2560 2843 - 3125 - 3409	2500	from 3 to 8
■■■	27 - 30 33 - 36	2715 - 3015 3315 - 3615	3840 - 4264 4688 - 5112	2500	from 3 to 8

* Greater flexibility with the new 11-22-33 models

NB: · Measurements in mm.

· Maximum lengths can be divided into multiple modules based on fins spacing and weight.



Recuperator S.p.A. reserves the right to make changes to its products to improve their performance or appearance, without prior notice and without obligation.

* Currently being certified



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CAREL

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