

FILTERS

Compact heat recovery unit with cross-flow heat exchanger in 8 sizes from 500 m<sup>3</sup>/h to 5.400 m<sup>3</sup>/h. The casing is made from aluminium profile frame with simple skinned galvanized steel panels with internal insulation. It is designed to be as compact as possible for false ceiling applications. The casings incorporate top, bottom and side access panels for maintenance. The units are available only in horizontal version.

**Applications**


Public buildings, commercial offices, stores, schools and restaurants.

**Motors**

IP44, Class F (Models 500,900,4400 and 5200).

IP20, Class F (Models 1200, 1900, 2400 and 3300).

**Fans**

All fans installed in ENERGY BOX models, comply with the efficiency requirements of the ErP Directive 

**Filters**

- G4: Low pressure G4 filters for supply and extract air.

**Additional information**


Single phase and three phase models.

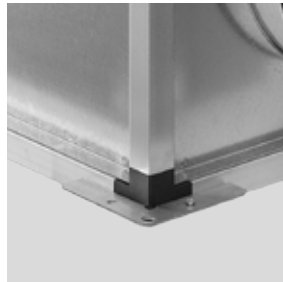
Horizontal version.

Highest mounting flexibility given by the interchangeable side panels.

**Specific applications**



All fans installed in CADB/T-N models, comply with the efficiency requirements of the ErP Directive. 



**Easy mounting**  
Single phase models with integrated mounting feet (from 500 to 3200).



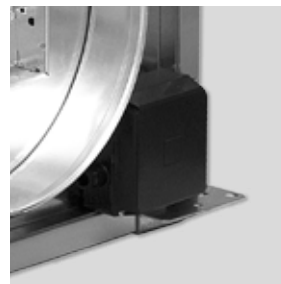
**Airtight connectors**  
Inlet and discharge connection flanges with EPDM rubber seal strip.



**Robust construction**  
High quality finishing with aluminium profile and Nylon corners.



**Condensation drain**  
Units include the drain pipe to evacuate the condensate.



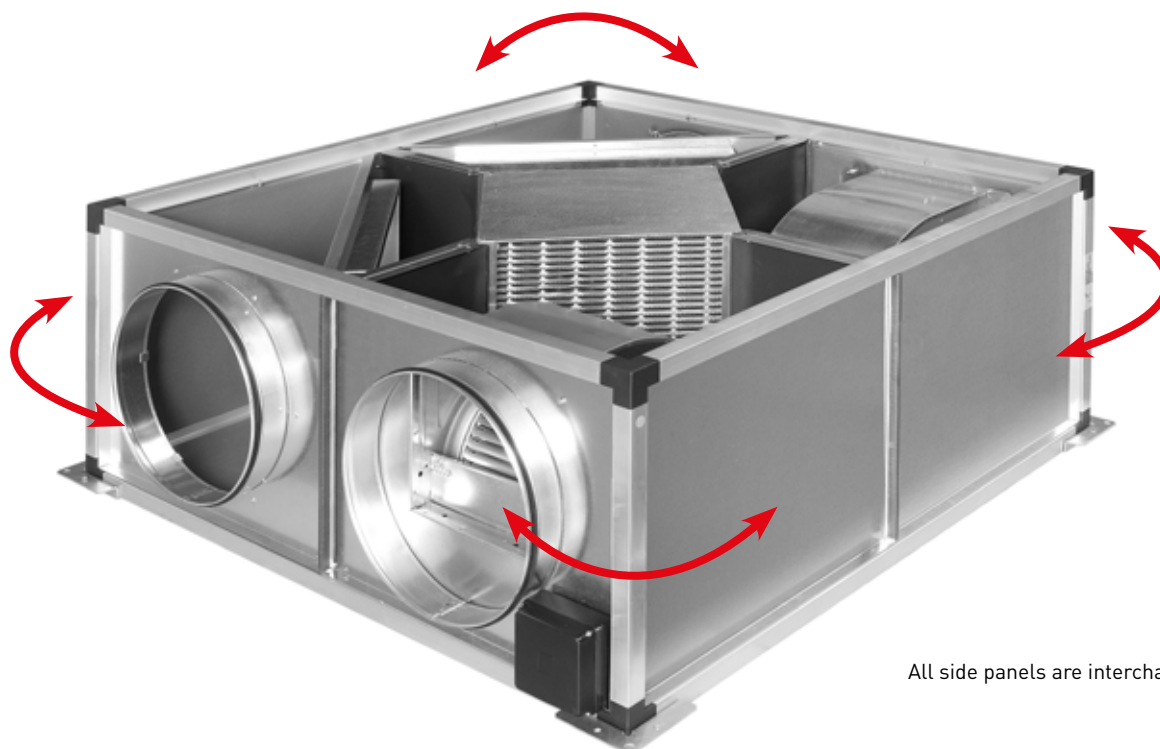
**External terminal box**  
IP65 terminal box fixed on the casing for easy wiring access.

## HIGHEST FLEXIBILITY

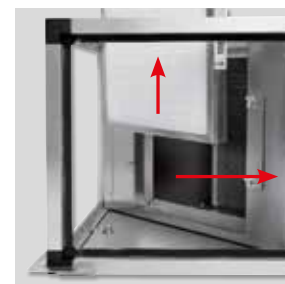


### Versatile assembly

The design of our heat recovery units makes it possible for the user to configure them on site. All side panels are interchangeable, which makes it possible to directly position the intake and outtake connections on site depending on the specific requirements.



All side panels are interchangeable.



### Easy maintainance

Rapid access to the filters from top, bottom and side.



Easy access for cleaning the cross-flow exchanger from top and bottom. The cross-flow exchangers are certified by EUROVENT.

## TECHNICAL CHARACTERISTICS

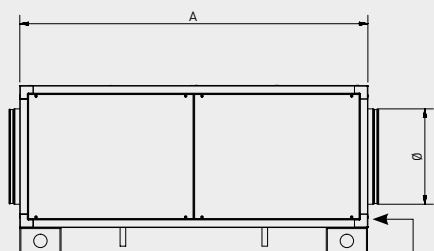
Model	Maximum airflow (m <sup>3</sup> /h)	Motor power (kW)	Maximum absorbed current (A)		Speed (rpm)	Protection (IP)	Efficiency* (%)	Sound pressure level at 3m** (dB(A))		
			230V 50Hz	230/400V 50Hz				Inlet	Outlet	Radiated
ENERGY BOX 500	500	2 x 0,29	2 x 1,32	-	2880	IP44	53,9	42	55	41
ENERGY BOX 900	890	2 x 0,3	2 x 1,38	-	2880	IP44	57,9	42	55	41
ENERGY BOX 1200	1.420	2 x 0,373	2 x 2,75	-	1357	IP20	57,5	54	66	52
ENERGY BOX 1900	2.000	2 x 0,373	2 x 2,75	-	1357	IP20	52,0	54	66,5	52,5
ENERGY BOX 2400	2.400	2 x 0,55	2 x 4,44	-	1324	IP20	52,8	55	67	53
ENERGY BOX 3300	3.350	2 x 0,55	2 x 4,4	-	1251	IP20	51,7	55	67,5	53
ENERGY BOX 4400	4.600	2 x 1,5	-	2 x 10,1/5,8	1462	IP44	50,6	57	70	56
ENERGY BOX 5200	5.400	2 x 1,5	-	2 x 10,1/5,8	1462	IP44	51,5	58	71	57

\* Values referring to the following conditions: Outdoor temperature -5°C, Indoor temperature +20°C and RH 50% / Airflow = 70% of maximum airflow.

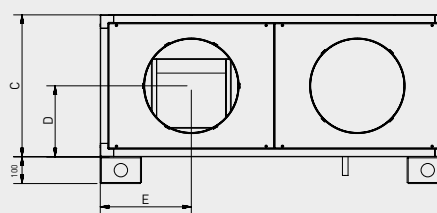
\*\* Sound pressure level in free field conditions.

## DIMENSIONS (mm)

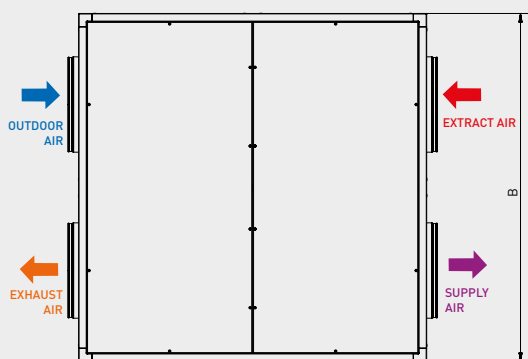
### VERSION D - Horizontal configuration (H)



Mounting bracket (models 500 to 3300)



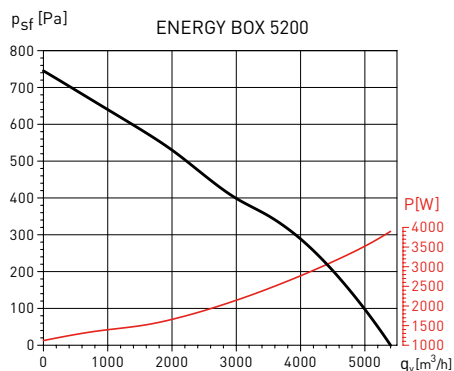
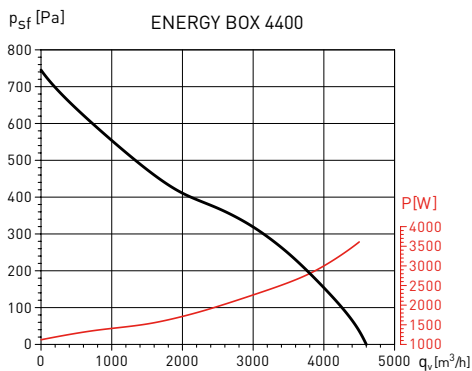
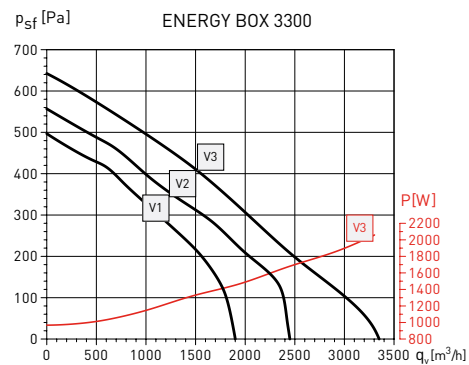
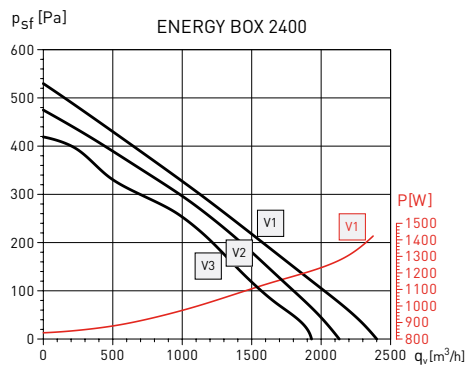
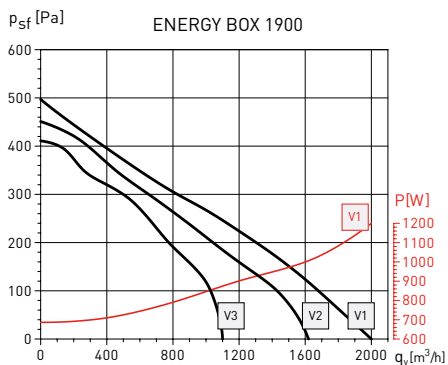
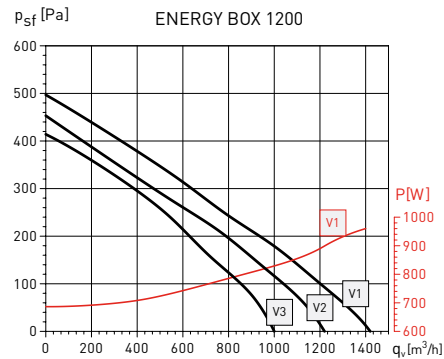
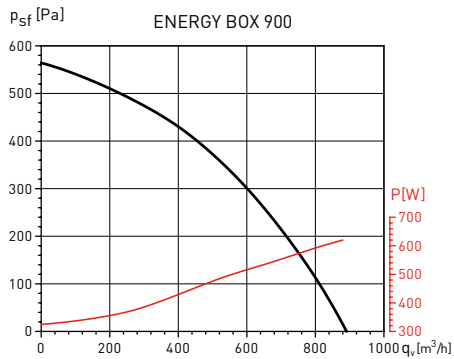
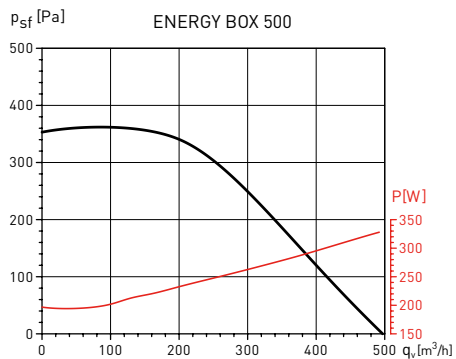
Support feet (models 4400 and 5200). Only location on flat surface.



Model	A	B	C	D	E	Ø	Weight (kg)
ENERGY BOX 500	650	650	360	180	178	200	46
ENERGY BOX 900	850	850	360	180	228	250	65
ENERGY BOX 1200	1050	1050	500	250	278	315	113
ENERGY BOX 1900	1150	1150	500	250	303	355	123
ENERGY BOX 2400	1300	1300	530	265	340	355	154
ENERGY BOX 3300	1500	1500	530	265	390	400	190
ENERGY BOX 4400	1600	1600	600	300	415	450	215
ENERGY BOX 5200	2000	2000	650	325	515	500	400

## PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$ .
- $p_{sf}$ : Static pressure in Pa.
- $P_{abs}$ : Absorbed power at maximum speed [W].
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

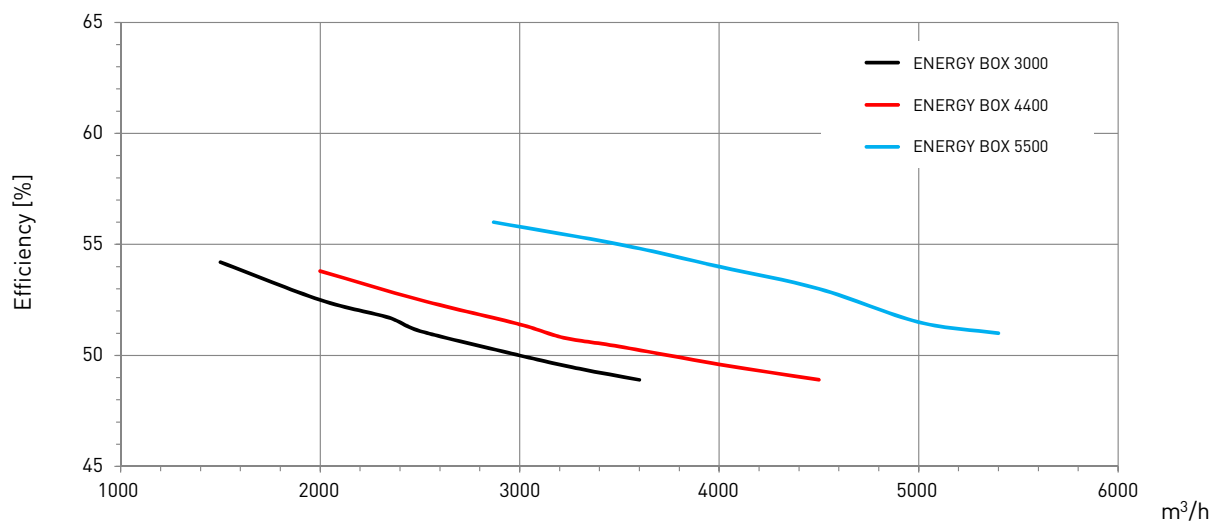
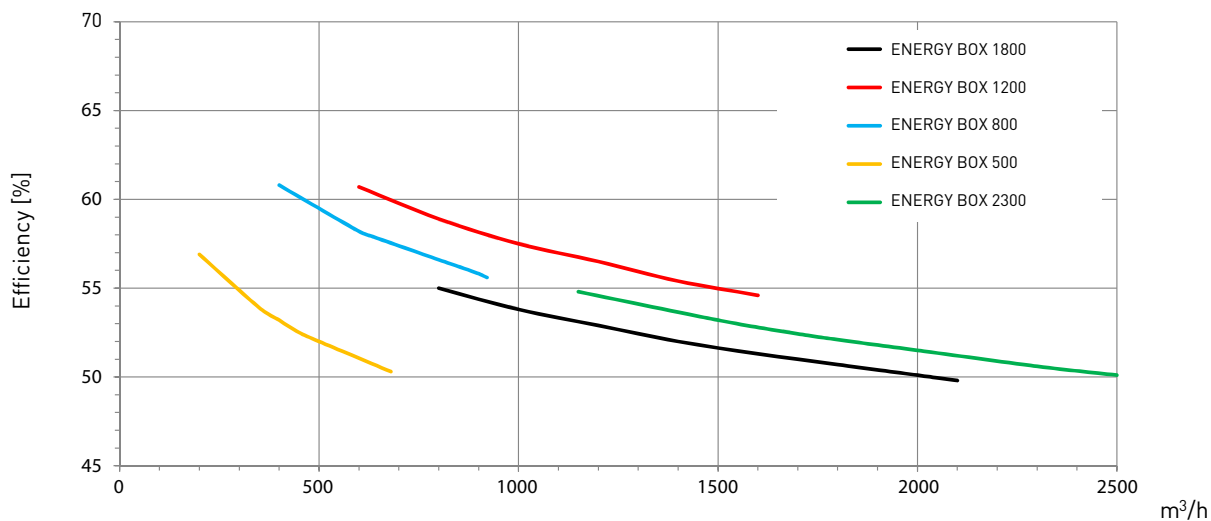


**EVOLUTION OF RECOVERY EFFICIENCY DEPENDING ON THE AIRFLOW**

Values with the following conditions:

Outside Air: Temperature= -5°C, HR = 80%.

Inside Air: Temperature= 20°C, HR = 50%.



## ACCESSORIES TABLE

For more information see "Heat recovery accessories" and/or "Mounting accessories".  
Mounting accessories supplied with a finish of galvanized sheet without painting.



Model	Ø (mm)	AFR-N (spare filter for CADB/T-N)				APC Inlet/outlet protection guards	ACOPEL F400 N Circular flexible connector	SIL Circular sound attenuators
		AFR-N G4	AFR-N M5	AFR-N F7	AFR-N F9			
ENERGY BOX 500	200	AFR-N-200/05 G4	AFR-N-200/05 M5	AFR-N-200/05 F7	AFR-N-200/05 F9	APC-200	ACOPEL F400-200/160 N	SIL-200
ENERGY BOX 900	250	AFR-N-250/08 G4	AFR-N-250/08 M5	AFR-N-250/08 F7	AFR-N-250/08 F9	APC-250	ACOPEL F400-250/160 N	SIL-250
ENERGY BOX 1200	315	AFR-N-315/12 G4	AFR-N-315/12 M5	AFR-N-315/12 F7	AFR-N-315/12 F9	APC-315	ACOPEL F400-315/160 N	SIL-315
ENERGY BOX 1900	355	AFR-N-355/18 G4	AFR-N-355/18 M5	AFR-N-355/18 F7	AFR-N-355/18 F9	APC-355	ACOPEL F400-355/160 N	SIL-355
ENERGY BOX 2400	355	AFR-N-355/23 G4	AFR-N-355/23 M5	AFR-N-355/23 F7	AFR-N-355/23 F9	APC-355	ACOPEL F400-355/160 N	SIL-355
ENERGY BOX 3300	400	AFR-N-400/30 G4	AFR-N-400/30 M5	AFR-N-400/30 F7	AFR-N-400/30 F9	APC-400	ACOPEL F400-400/160 N	SIL-400
ENERGY BOX 4400	450	AFR-N-450/45 G4	AFR-N-450/45 M5	AFR-N-450/45 F7	AFR-N-450/45 F9	APC-450	ACOPEL F400-450/160 N	SIL-450
ENERGY BOX 5200	500	AFR-N-500/55 G4	AFR-N-500/55 M5	AFR-N-500/55 F7	AFR-N-500/55 F9	APC-500	ACOPEL F400-500/160 N	SIL-500

## TPP-N

### Rain Protection Cowls

Rain protection cowls are supplied with a finish of galvanized sheet without painting.

Heat recovery unit model	Rain protection cowl model TPP-N
ENERGY BOX 500	TPP-N D-H 05
ENERGY BOX 900	TPP-N D-H 08
ENERGY BOX 1200	TPP-N D-H 12
ENERGY BOX 1900	TPP-N D-H 18
ENERGY BOX 2400	TPP-N D-H 23
ENERGY BOX 3300	TPP-N D-H 30
ENERGY BOX 4400	TPP-N D-H 45
ENERGY BOX 5200	TPP-N D-H 55

## ELECTRICAL ACCESSORIES

### Required control elements for regulating the fan speed.

For more information see "Heat recovery accessories" and/or "Electrical accessories".



Model	Accessories for manual speed control			
	3 speed switch	Electronic speed control	Autotransformer	Variable frequency inverter
ENERGY BOX 500	-	REB-5	RMB-3,5	-
ENERGY BOX 900	-	REB-5	RMB-3,5	-
ENERGY BOX 1200	COM-3	REB-10	RMB-8	-
ENERGY BOX 1900	COM-3	REB-10	RMB-8	-
ENERGY BOX 2400	COM-3	REB-10	RMB-10	-
ENERGY BOX 3300	COM-3	REB-10	RMB-10	-
ENERGY BOX 4400	-	-	-	VFTM TRI 4
ENERGY BOX 5200	-	-	-	VFTM TRI 4