Energy Recovery Ventilator

Suppresses indoor temperature changes while providing fresh air.

Energy efficiency and ecology

Energy consumption is dramatically reduced by using a counter-flow heatexchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings.

Comparison of former and current elements

With the cross-flow element, air moves in a straight line across the element; with the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.



Heat exchange ventilation and normal ventilation

Energy-saving ventilation can be achieved through the proper use of heatexchange ventilation and normal ventilation.

Heat exchange ventilation

When a room is cooled or heated, the exhausted cooling / heating energy is recovered by heat-exchange ventilation.

Normal ventilation

This is used in the spring and autumn, when rooms are not cooled or heated, that is, when there is little difference between the indoor and outdoor air conditions. In addition, at night during the hot season, when the outside air temperature drops the outside air is drawn inside without heat exchange, alleviating the load on the air conditioning equipment. The heat exchanger is made up of a membrane manufactured from a special material covered in resin for optimal heat transmission. The nylon/ polyester fibre filter offers high dust retention capacity. We have also redesigned the air ducts to obtain a long-lasting heat exchange system which does not need periodic cleaning.

Heat exchanger

With the cross-flow element, air moves in a straight line across the element. With the counter-flow element, airflows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.

More Comfort

Quiet operation

Low noise operation results in noticeably quieter units. All models with capacities below 500 m³/h run at noise levels below 32 dB (High setting) and even our largest 1,000 m³/h-capacity model runs at only 37.5 dB (High setting).

Long service life of heat-exchange element

We used a nonwoven cloth filter with a high dust collection efficiency and redesigned the air flow passages to achieve a durable heat-exchange element that requires no periodic cleaning.

$\label{eq:changes} \ensuremath{\mathsf{Changes}}\xspace \ensuremath{\mathsf{in}}\xspace \ensuremath{\mathsf{in}}\xspace \ensuremath{\mathsf{srvice}}\xspace \ensuremath{\mathsf{srvice}}\xspace \ensuremath{\mathsf{in}}\xspace \ensuremath{\mathsf{in}}\xspace \ensuremath{\mathsf{srvice}}\xspace \ensuremath{\mathsf{srvice}}\xspace$



Easy Installation and Maintenance

Slim shape and easier installation

Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.

270 mm Height: FY-250ZDY8 // FY-350ZDY8 // FY-500ZDY8 388 mm Height: FY-800ZDY8 // FY-01KZDY8A

Reverse mountable direct air supply / exhaust system

Adoption of straight air supply / exhaust system: Duct design is simplified because the air supply / exhaust ducts are straight.

Since each unit can be mounted in reverse position, only one inspection hole is needed for two units: Two units can share one inspection hole so duct work is easier and more flexible.



Balanced Ventilation



NEW / VRF SYSTEMS / VENTILATION



Recovers up to 77% of the heat in the outgoing air, for an ecological and energy efficient building.

Technical focus

- High energy saving, up to 20%
- Counter Cross Flow technology for better efficiency
- Long life element core
- \cdot Easy installation and 20% less thickness
- $\boldsymbol{\cdot}$ Easy connection to air conditioning units
- Super quiet units

Features

- Healthy Air
- The filter guarantees healthier air

Energy efficiency and ecology

- Up to 20% energy saving in the installation
- Recovers up to 77% of the heat in the outgoing air

Comfort

- Cleaning reduced due to the revolutionary structure of the exchanger (recommended every 6 months)
- · Ideal for indoor spaces without windows

Easy Installation And Maintenance

- 6 models for easier selection
- Reduced system height (270 mm and 388 mm)
- Side opening for cleaning (inspection of filter, motor and other parts)
- Installation can be reversed to share an inspection opening between 2 machines
- Easy connection to the air conditioning unit (without additional elements)
- Installation in false ceilings
- Units operate at 220 240 V
- High static pressure for easier installation

Rated flow rate	250 m ³ /h			350 m³/h			500 m³/h			800 m³/h			1000 m³/h			
Models	FY-250ZDY8			FY-350ZDY8			FY-500ZDY8			FY-800ZDY8			FY-01KZDY8A			
		0011			e er f			0 014			001			001		
Power Source		220 - 240 V - 50 Hz			220 - 240 V - 50 Hz			220 - 240 V - 50 Hz			220 - 240 V - 50 Hz			220 - 240 V - 50 Hz		
Heat Exchange Ventilation		E - High	High	Low												
Input	W	112 - 128	108 - 123	87 - 96	182 - 190	178 - 185	175 - 168	263 - 289	204 - 225	165 - 185	387 - 418	360 - 378	293 - 295	437 - 464	416 - 432	301 - 311
Air Volume	m³/h	250	250	190	350	350	240	500	500	440	800	800	630	1.000	1.000	700
External Static Pressure	Pa	105	95	45	140	60	45	120	60	35	140	110	55	105	80	75
Noise	dB	30.0 - 31.5	29.5 - 30.5	23.5 - 26.5	32.5 - 33.0	30.5 - 31.0	22.5 - 25.5	36.5 - 37.5	34.5 - 35.5	31.0 - 32.5	37.0 - 37.5	36.5 - 37.0	33.5 - 34.5	37.5 - 38.5	37.0 - 37.5	33.5 - 34.5
Temp. Exchange Efficiency	%	75	75	77	75	75	78	75	75	76	75	75	76	75	75	79
Normal Ventilation		E - High	High	Low												
Input	W	112 - 128	108 - 123	87 - 96	182 - 190	178 - 185	175 - 168	263 - 289	204 - 225	165 - 185	387 - 418	360 - 378	293 - 295	437 - 464	416 - 432	301 - 311
Air Volume	m³/h	250	250	190	350	350	240	500	500	440	800	800	630	1.000	1.000	700
External Static Pressure	Pa	105	95	45	140	60	45	120	60	35	140	110	55	105	80	75
Noise	dB	30.0 - 31.5	29.5 - 30.5	23.5 - 26.5	32.5 - 33.0	30.5 - 31.0	22.5 - 25.5	37.5 - 38.5	37.0 - 38.0	31.0 - 32.5	37.0 - 37.5	36.5 - 37.0	33.5 - 34.5	39.5 - 40.5	39.0 - 39.5	35.5 - 36.5
Temp. Exchange Efficiency	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimensions (W x D x H) mm		882 x 599 x 270			1,050 x 804 x 317			1,090 x 904 x 317			1,322 x 884 x 388			1,322 x 1,134 x 388		
Weight	kg	29			49			57			71			83		

This noise of the product is the value which was measured at the acoustic room. Actually, in the established condition, that undergo influence by the echoing of the room and so that become bigger than the display numerical value. The input, the current and the exchange efficiency are values at the time of the mentioned air volume. The noise level shall be measured 1,5 m below the centre of the unit. The temperature exchange efficiency averages that of when cooling and when heating.