



PANASONIC'S ENERGY RECOVERY VENTILATOR UNIT OFFERS MAXIMUM COMFORT AND GREATER ENERGY SAVINGS



Energy recovery ventilators offer ventilation which increases comfort and saves energy. They efficiently recover the heat lost in ventilation during the heat recovery process.

20% energy saving

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

Lightweight structure

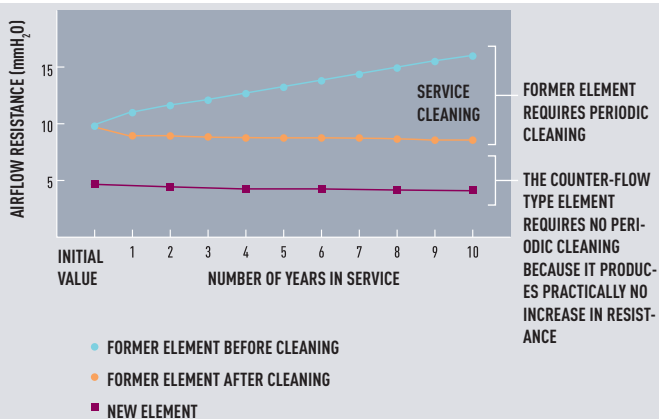
The lightweight structure makes installation easier.

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).

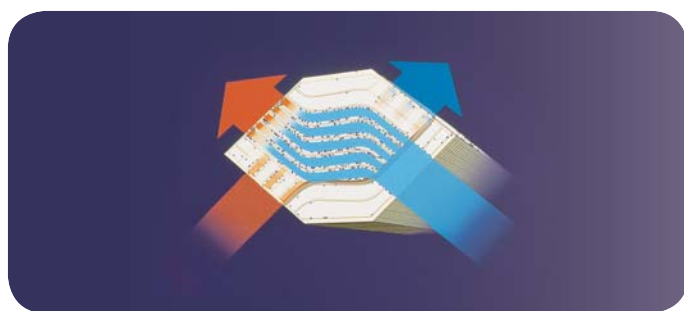
Long heat-exchange element service life

CHANGES IN AIRFLOW RESISTANCE BASED ON NUMBER OF YEARS IN SERVICE

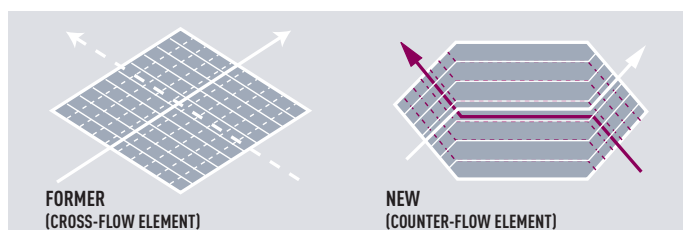




The heat exchanger is made up of a membrane manufactured from a special material covered in resin for optimal heat transmission. The nylon/polyester fibre filter offers high dust retention capacity. We have also redesigned the air ducts to obtain a long-lasting heat exchange system which does not need periodic cleaning.



Heat exchanger characteristics



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.

Characteristics common to all models

- Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.
- All maintenance can be performed through a single inspection hole.
- Straight air supply / exhaust system used for easier installation.
- Each unit can be mounted in reverse position.
- Equipped with an Extra-High setting.
- Can incorporate a medium performance filter (optional, installed on site).

Slim shape and easier installation

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



REVERSE-MOUNTABLE UNIT





TECHNICAL ZOOM

- HIGH ENERGY SAVING, UP TO 20%
- COUNTER CROSS FLOW TECHNOLOGY FOR BETTER EFFICIENCY
- LONG LIFE ELEMENT CORE
- EASY INSTALLATION AND 20% LESS THICKNESS
- EASY CONNECTION TO AIR CONDITIONING UNITS
- SUPER QUIET UNITS

ENERGY RECOVERY VENTILATION SYSTEM

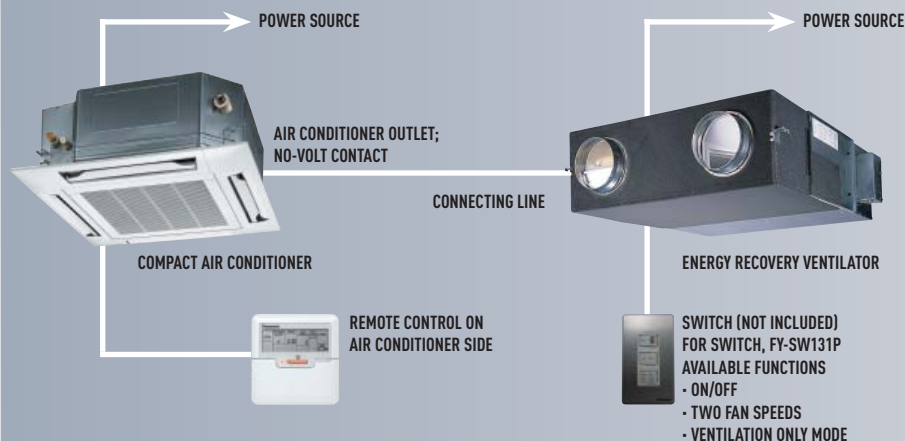
Recovers up to 77% of the heat in the outgoing air, for an ecological and energy saving building

ENERGY RECOVERY VENTILATION SYSTEM

Rated flow rate			250 m ³ /h	350 m ³ /h	500 m ³ /h	800 m ³ /h	1000 m ³ /h
Models			FY-250ZDY2	FY-350ZDY2	FY-500ZDY2	FY-800ZDY2	FY-01KZDY2A
Power Source	V A.C		220 - 240	220 - 240	220 - 240	220 - 240	220 - 240
Frequency	Hz		50	50	50	50	50
Heat Exchange Ventilation							
Input	Extra High	W	104 - 119	137 - 154	188 - 214	316 - 347	399 - 445
	High	W	99 - 114	124 - 137	169 - 188	309 - 329	360 - 399
	Low	W	79 - 90	117 - 128	151 - 166	302 - 327	332 - 367
Current	Extra High	A	0.48 - 0.50	0.63 - 0.65	0.86 - 0.90	1.51 - 1.54	1.97 - 2.04
	High	A	0.46 - 0.48	0.59 - 0.60	0.79 - 0.81	1.48 - 1.50	1.85 - 1.93
	Low	A	0.37 - 0.39	0.56 - 0.57	0.72 - 0.73	1.44 - 1.46	1.68 - 1.76
Air Volume	Extra High / High / Low	m ³ /h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1000 / 1000 / 810
Air Volume	Extra High / High / Low	ft ³ /min	148 / 148 / 100	207 / 207 / 165	295 / 295 / 218	472 / 472 / 384	590 / 590 / 478
External Static Pressure	Extra High / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
Temperature Exchange Efficiency	Extra High / High / Low	%	75 / 75 / 77	75 / 75 / 77	75 / 75 / 77	75 / 75 / 76	75 / 75 / 76
Enthalpy Exchange Efficiency	Extra High / High / Low	Cooling %	63 / 63 / 66	66 / 66 / 69	62 / 62 / 67	65 / 65 / 68	65 / 65 / 68
	Extra High / High / Low	Heating %	70 / 70 / 73	69 / 69 / 71	67 / 67 / 71	71 / 71 / 74	71 / 71 / 73
Normal Ventilation							
Input	Extra High	W	103 - 119	133 - 151	184 - 210	309 - 337	392 - 438
	High	W	98 - 114	119 - 132	161 - 182	300 - 325	358 - 392
	Low	W	79 - 90	113 - 125	145 - 164	297 - 316	329 - 362
Current	Extra High	A	0.47 - 0.50	0.61 - 0.63	0.84 - 0.88	1.47 - 1.50	1.95 - 2.03
	High	A	0.46 - 0.48	0.57 - 0.60	0.76 - 0.77	1.45 - 1.48	1.84 - 1.92
	Low	A	0.37 - 0.39	0.54 - 0.56	0.71 - 0.73	1.41 - 1.43	1.67 - 1.74
Air Volume	Extra High / High / Low	m ³ /h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1000 / 1000 / 810
External Static Pressure	Extra High / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
Noise	Extra High	dB	27 - 28	31 - 32	34 - 35	38.5 - 39.5	38 - 39
	High	dB	26.5 - 27.5	30 - 31	32 - 33	37 - 38	36.5 - 37.5
	Low	dB	21.5 - 22.5	26 - 27	26.5 - 27.5	33.35	31.5 - 33.5
Product Weight		Kg	29	37	43	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 1.5m below the center of the unit.
- The temperature exchange efficiency averages that of when cooling and when heating.

TYPICAL SYSTEM LINKED TO A CASSETTE TYPE AIR CONDITIONER



USE CONDITIONS

OUTDOOR AIR CONDITIONS
 TEMPERATURE RANGE: -10 °C – 40 °C
 RELATIVE HUMIDITY: 85% OR LESS

INDOOR AIR CONDITIONS
 TEMPERATURE RANGE: -10 °C – 40 °C
 RELATIVE HUMIDITY: 85% OR LESS

REQUIREMENTS FOR INSTALLATION

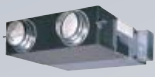
USE IS TO BE AVOIDED IN REFRIGERATED CHAMBERS OR OTHER PLACES WHERE THE TEMPERATURE MAY UNDERGO SIGNIFICANT FLUCTUATIONS, EVEN WHEN THE TEMPERATURE RANGE IS ACCEPTABLE.



FY-250ZDY2



FY-350ZDY2



FY-500ZDY2



FY-800ZDY2



FY-01KZDY2A

FY-10ESPNAH // FY-10ELPNAH

HEALTHY AIR

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

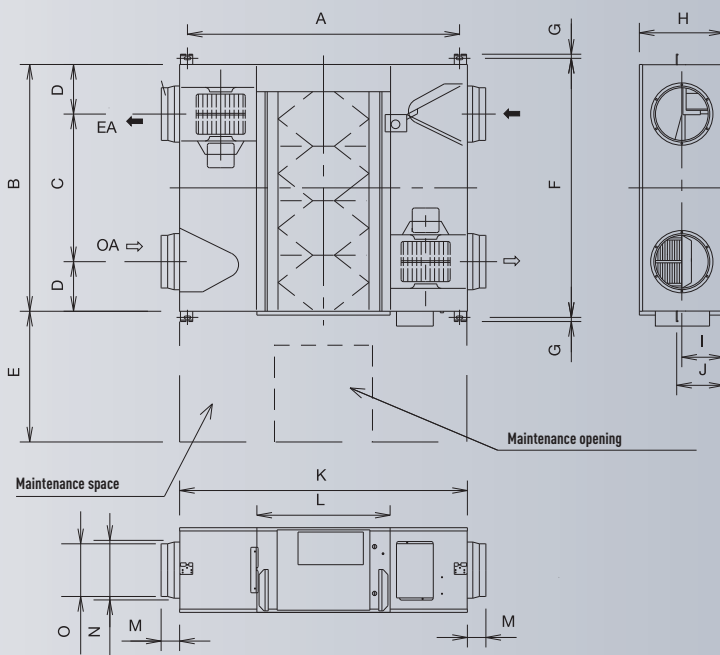
COMFORT

- Quiet units (21,5 dB for the FY-250ZDY2)
- Cleaning reduced due to the revolutionary structure of the exchanger (recommended every 6 months)
- Ideal for indoor spaces without windows

EASY INSTALLATION AND MAINTENANCE

- Five 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 - 240V
- High static pressure for easier installation

INDOOR UNIT DIMENSIONS



	FY-250ZDY2	FY-350ZDY2	FY-500ZDY2	FY-800ZDY2	FY-01KZDY2A
A	810	810	890	1,250	1,250
B	599	804	904	884	1,134
C	315	480	500	428	678
D	142	162	202	228	228
E	600	600	600	600	600
F	655	860	960	940	1,190
G	19	19	19	19	19
H	270	270	270	288	388
I	135	145	145	194	194
J	159	159	159	218	218
K	882	882	962	1,322	1,322
L	414	414	414	612	612
M	95	95	107	85	85
N	219	219	246	258	258
O	144	144	194	242	242