

HEAT RECOVERY VENTILATOR

Fan Motor Options

AC and DC fan versions available.

Enhanced Efficiency

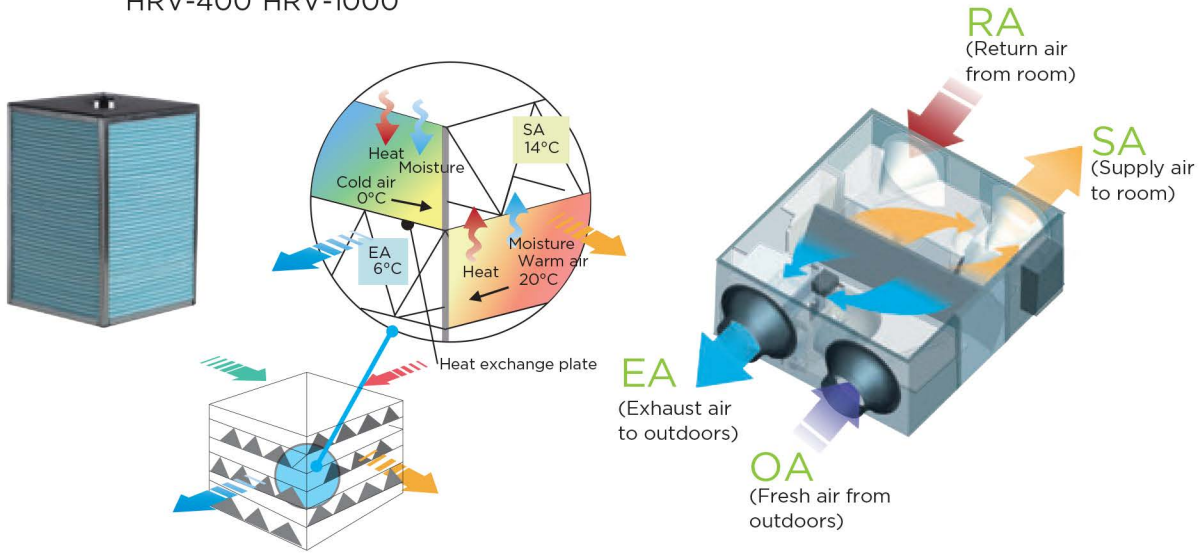
The Midea heat recovery ventilator (HRV) can greatly reduce energy losses and room temperature fluctuations caused by the ventilation process. The Midea HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially treated paper which gives enhanced temperature and humidity control. Temperature exchange efficiency is over 65% and enthalpy exchange efficiency is 50-65%.



HRV-200 HRV-500
HRV-300 HRV-800
HRV-400 HRV-1000



HRV-1500
HRV-2000

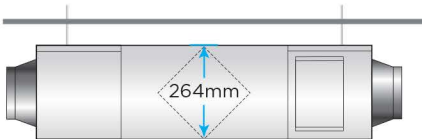


Low Noise

Soundproofing is used to guarantee quiet operation.

Flexibility

Heights starting from as little as 264mm and weights from as little as 23kg mean that the Midea HRV can be easily installed even where space is limited.



Multiple Modes

Heat exchange mode

The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels. During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.

Bypass mode

In mild climates or seasons, where temperature and humidity differences between indoors and outdoors are small, the HRV can work as a conventional ventilation fan. In standard bypass mode the supply and exhaust fans run at the same speed.

Air supply mode

Air supply mode is a form of bypass mode where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.

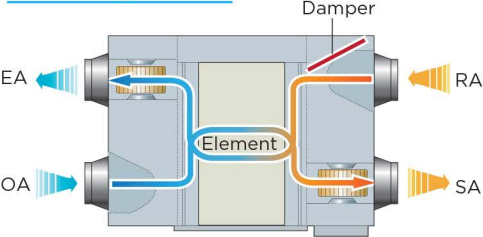
Exhaust mode

Exhaust mode is a form of bypass mode where the exhaust fan is set to run faster than the supply fan, which is useful in mild climate installations with large amounts of exhaust air to be expelled.

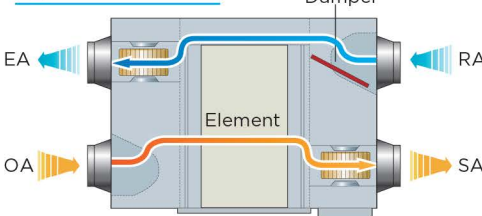
Auto mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoors and indoors. Both fans are set to run at low speed.

Heat exchange mode



Bypass mode



Specifications

AC Series

Model		HRV-200	HRV-300	HRV-400	HRV-500
Power supply	V/Ph/Hz	220-240/1/50		220-240/1/50 & 220/1/60	
Cooling temp. exchange efficiency (H/M/L)	%	55/55/60	55/55/60	55/55/60	55/55/60
Cooling enthalpy exchange efficiency (H/M/L)	%	50/50/55	50/50/55	50/50/55	50/50/55
Heating temp. exchange efficiency (H/M/L)	%	60/60/65	60/60/65	60/60/65	65/65/70
Heating enthalpy exchange efficiency (H/M/L)	%	55/55/60	55/55/60	60/60/65	60/60/65
Sound pressure level in heat exchange mode (H/M/L)	dB(A)	27/26/20	30/29/23	32/31/25	35/34/28
Sound pressure level in bypass mode (H/M/L)	dB(A)	28/27/22	31/30/25	33/32/27	36/35/30
Airflow rate (H/M/L)	m ³ /h	200/200/150	300/300/225	400/400/300	500/500/375
External static pressure (H/M/L)	Pa	75/58/35	75/60/40	80/65/43	80/68/45
Motor type		AC			
Duct diameter	mm	Φ144	Φ144	Φ144	Φ194
Net dimensions (WxDxH)	mm	866×655×264	944×722×270	944×927×270	1038×1026×270
Packed dimensions (WxDxH)	mm	960×770×445	1020×810×452	1020×1020×452	1120×1120×452
Net weight	kg	23	26	31	41
Gross weight	kg	40	44	52	64
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Model		HRV-800	HRV-1000	HRV-1500	HRV-2000
Power supply	V/Ph/Hz	220-240/1/50 & 220/1/60		380-415/3/50 & 220/3/60	
Cooling temp. exchange efficiency (H/M/L)	%	55/55/60	55/55/60	55	55
Cooling enthalpy exchange efficiency (H/M/L)	%	50/50/55	50/50/55	50	50
Heating temp. exchange efficiency (H/M/L)	%	65/65/70	65/65/70	65	65
Heating enthalpy exchange efficiency (H/M/L)	%	60/60/65	60/60/65	60	60
Sound pressure level in heat exchange mode (H/M/L)	dB(A)	39/38/32	40/39/33	51	53
Sound pressure level in bypass mode (H/M/L)	dB(A)	40/39/34	41/40/35	52	54
Airflow rate (H/M/L)	m ³ /h	800/800/600	1000/1000/750	1500	2000
External static pressure (H/M/L)	Pa	100/82/54	100/85/58	160	170
Motor type		AC			
Duct dimensions	mm	Φ242	Φ242	346×326	346×326
Net dimensions (WxDxH)	mm	1286×1006×388	1286×1256×388	1600×1270×540	1650×1470×540
Packed dimensions (WxDxH)	mm	1380×1100×573	1400×1370×573	1710×1410×720	1760×1610×720
Net weight	kg	62	79	163	182
Gross weight	kg	88	110	224	247
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

- Note:
- Models HRV-200 to HRV-1000 each have have 3 airflow settings; the airflow rates of the HRV-1500 and HRV-2000 are not adjustable.
 - Sound level is measured 1.4m below the center of the unit in an semi-anechoic chamber.
 - Efficiency is measured under the following conditions:
Cooling: exhaust air temp 27°C DB, 19.5°C WB; fresh air temp. 35°C DB, 28°C WB.
Heating: exhaust air temp 21°C DB, 13°C WB; fresh air temp. 5°C DB, 2°C WB.

Specifications

DC Series

Model		HRV-D200	HRV-D300	HRV-D400	HRV-D500
Power supply	V/Ph/Hz	220-240/1/50(60)			
Cooling temp. exchange efficiency	%	76.1	74.8	76.2	76.1
Cooling enthalpy exchange efficiency	%	77.3	76.1	78.7	78.2
Heating temp. exchange efficiency	%	76.1	74.8	76.2	76.1
Heating enthalpy exchange efficiency	%	82.6	79.8	83.6	80.4
Sound pressure level	dB(A)	27	30	32	35
Airflow rate	m ³ /h	200	300	400	500
External static pressure	Pa	75	75	80	80
Motor type		DC			
Duct diameter	mm	Φ144	Φ144	Φ144	Φ194
Net dimensions (WxDxH)	mm	852×665×264	928×734×270	928×940×270	1020×1036×270
Packed dimensions (WxDxH)	mm	910×710×430	980×774×435	1010×1010×440	1120×1120×452
Net weight	kg	25	27	32	35
Gross weight	kg	37	40	46	51
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Model		HRV-D800	HRV-D1000	HRV-D1500	HRV-D2000
Power supply	V/Ph/Hz	220-240/1/50(60)			
Cooling temp. exchange efficiency	%	76.9	75.8	77.8	77.2
Cooling enthalpy exchange efficiency	%	78.1	76.9	79.2	78.7
Heating temp. exchange efficiency	%	76.9	75.8	77.8	77.2
Heating enthalpy exchange efficiency	%	80.1	78.6	80.5	80.3
Sound pressure level	dB(A)	39	40	51	53
Airflow rate	m ³ /h	800	1000	1500	2000
External static pressure	Pa	100	100	160	170
Motor type		DC			
Duct dimensions	mm	Φ242	Φ242	346×326	346×326
Net dimensions (WxDxH)	mm	1276×1020×388	1276×1269×388	1600×1270×540	1650×1470×540
Packed dimensions (WxDxH)	mm	1355×1045×560	1400×1370×573	1710×1410×720	1760×1610×720
Net weight	kg	58	69	151	165
Gross weight	kg	77	90	184	198
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Note:

1. All models each have have 3 airflow setting.
2. Sound level is measured 1.4m below the center of the unit in an semi-anechoic chamber.
3. Efficiency is measured under the following conditions:
Cooling: exhaust air temp 27°C DB, 19.5°C WB; fresh air temp. 35°C DB, 28°C WB.
Heating: exhaust air temp 21°C DB, 13°C WB; fresh air temp. 5°C DB, 2°C WB.