

# Heat recovery ventilator (HRV)

DC Series

220-240/1/50-60



*VRF Systems*



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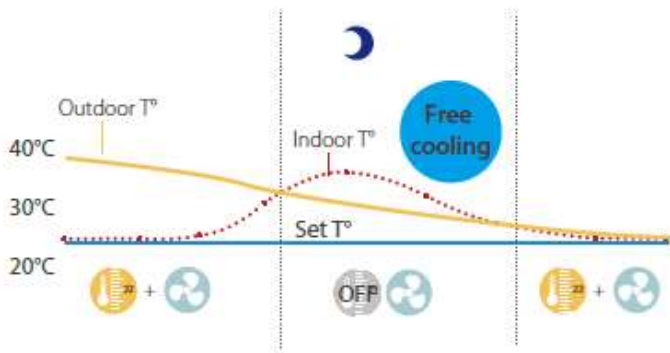
## DC Series

### 220-240/1/50-60



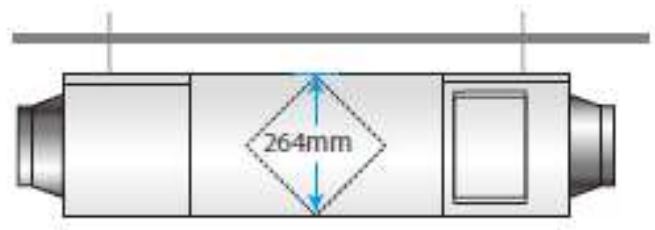
### Free Cooling Mode

Free cooling mode is only available for DC Series HRV. Free cooling operation is an energy saving function operating when outdoor ambient temperature is below indoor ambient temperature, it uses low temperature fresh air to cool down indoor temperature, reducing the running costs.



### Easy Installation

Slim and compact design of units, making the installation more convenient.



### High Efficiency Filter

Standard Built-in G4-class dust filter, optional F7-class filter for air supply side and M5-class filter for exhaust air side in line with EU legislations can be customized.



F7-class filter



M5-class filter

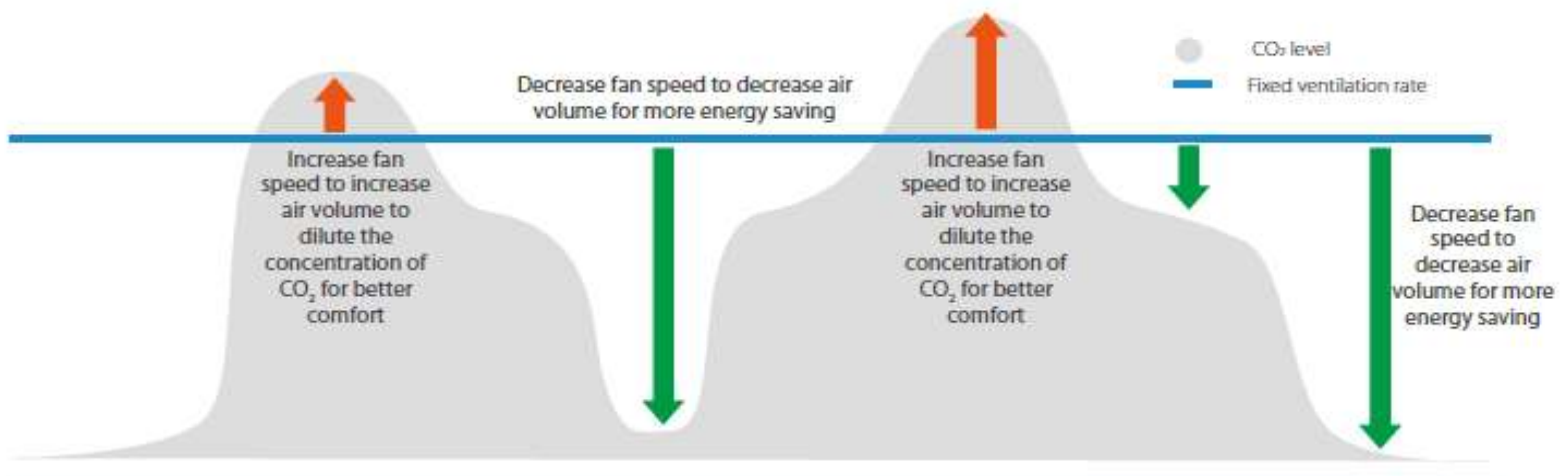
### Wide Range of Controllers

The HRV has its special wired controller KJR-27B for standard functions control and compatible with group controller WDC-120G/WK for new functions (CO2 sensor function, differential pressure sensor function) control. It also can be centralized control with VRF system through centralized controller and network control with VRF system through Comfort Time BMS gateways.



### CO2 Sensor Option

Enough fresh air is needed to create an enjoyable environment but ventilating constantly is leading to energy waste. Therefore, an optional CO2 sensor can be installed which switches off the ventilation system when there is enough fresh air in the room, thus saving energy.



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### Multiple Operation Modes

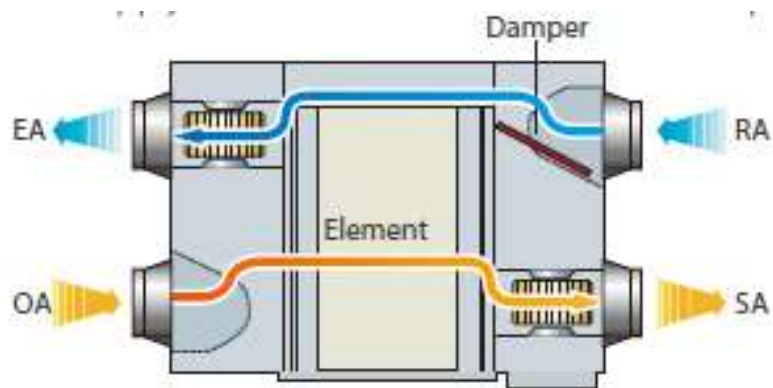
Multiple operation modes: Auto, Bypass, Heat recovery, Free cooling mode (available for DC Series Only)

#### Energy Saving, Heat Recovery for Both Heat and Humidity

The heat recovery ventilator (HRV) can greatly reduce energy loss and room temperature fluctuations caused by the ventilation process. The Comfort Time 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. It prevents energy being wasted by recovering waste heat from the outgoing air, thus offering much greater levels of efficiency, while improving comfort levels too.

#### 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

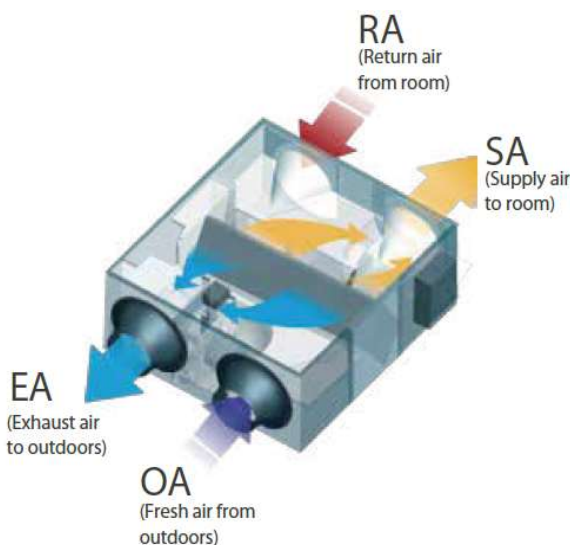
Air supply mode is where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.

#### Exhaust mode

Exhaust mode is 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.



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		Model			
		CTVS-IHR-X-800-A-CE-DC-1	CTVS-IHR-X-1000-A-CE-DC-1	CTVS-IHR-X-1500-A-CE-DC-1	CTVS-IHR-X-2000-A-CE-DC-1
Power supply		220-240/1/50-60			
Input power (H/M/L)(F7+M5)	w	320/170/80	420/230/100	680/320/200	950/500/230
Nominal Temperature Efficiency (standard G4) (H/M/L)	%	78.7/82.1/86.8	82.8/84.0/87.4	755/78.6/80.2	77.2/79.5/83.4
Nominal Enthalpy Efficiency (standard G4) (H/M/L)	%	72.3/75.4/79.0	76.0/76.0/80.1	69.4/71.2/74.8	74.7/77.0/80.6
Nominal Temperature Efficiency (F7+M5) (H/M/L)	%	74.9/77.1/80.8	75.4/78.0/81.4	83.8/84.6/86.2	78.8/80.5/83.4
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)	%	71.1/74.4/78.0	67.3/71.1/75.0	74.6/76.2/78.8	71.1/75.0/79.6
Fresh air external static pressure (H speed +F7+M5)	Pa (in.wg.)	100(0.4)	110(0.44)	150(0.6)	160(0.64)
Discharge air external static pressure (H speed +F7+M5)	Pa (in.wg.)	155(0.62)	145(0.58)	180(0.72)	180(0.72)
Nominal air flow	m <sup>3</sup> /h	800	1000	1500	2000
Sound pressure level (H/M/L)	dB(A)	48.5/43.1/36.4	50.2/44.8/37	525/47.8/43.5	54.1/49.2/43.3
Sound power level (H)	dB	55	54	69	70
Net dimensions (WxDxH)	mm	1,311 x 1,286 x 390	1,311 x 1,526 x 390	1,740 x 1,375 x 615	1,811 x 1,575 x 685
	inch	51-39/64"x50-5/8"x15-23/64"	51-39/64"x60-5/64"x15-23/64"	68-1/2"x54-9/64"x24-7/32"	71-19/64"x62-1/64"x26-31/32"
Packed dimensions (WxDxH)	mm	1,390 x 1,424 x 540	1,390 x 1,670 x 540	1,830 x 1,520 x 770	1,900 x 1,720 x 845
	inch	54-23/32 x56-1/16x21-17/64)	(54-23/32 x65-3/4 x21-17/64)	(72-3/64 x59-27/32 x30-5/16)	(74-51/64x67-23/32 x33-17/64)
Net/Gross weight	kG	80/104	90/112	181.5/213	208.5/245
	Lbs	176/228.8	198/246.4	399.3/468.6	458.7/539
Duct diameter	mm	244		346 x 326 (Rectangle)	
	inch	9-39/64"		13-5/8" x 12-53/64" (Rectangle)	
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			
	°F	(19.4 to 109.4) DB, RH 80% or lower			
Note:		1. For the units model of CTVS-IHR-X-200-A-CE-DC-1 ~ CTVS-IHR-X-2000-A-CE-DC-1, there are 3-speed adjustable air-volume (Hi, Med, Low). 2. The parameters in the above table are measured at high speed.			