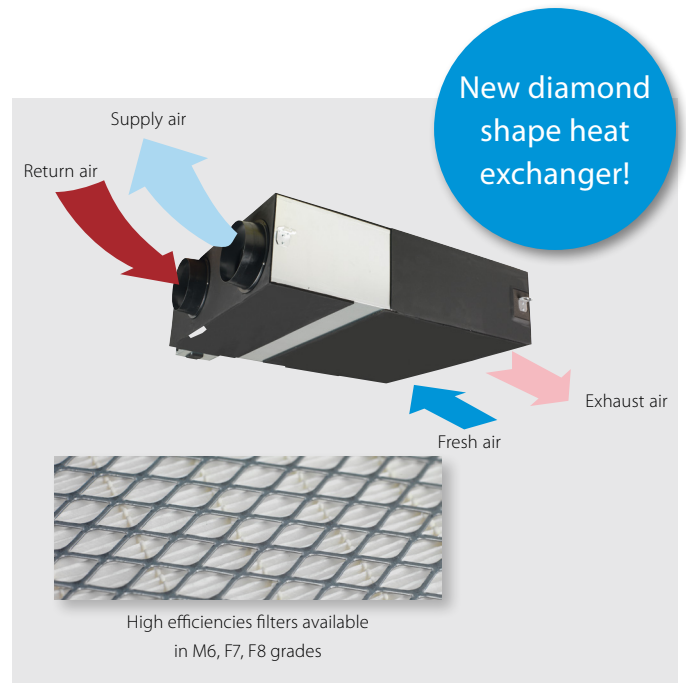


Heat reclaim ventilation

Ventilation with heat recovery as standard

- › **NEW** Thinnest High Efficiency Enthalpy Heat Exchanger in the market (J-series)
- › Energy saving ventilation using indoor heating, cooling and moisture recovery
- › Ideal solution for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- › Free cooling possible when outdoor temperature is below indoor temperature (eg. during nighttime)
- › Prevent energy losses from over-ventilation while improving indoor air quality with optional CO₂ sensor
- › **NEW** Possibility to change ESP via wired remote control allows optimisation of the supply air volume (J - series)
- › Can be used as stand alone or integrated in the Sky Air or VRV system
- › Wide range of units: air flow rate from 150 up to 2,000 m³/h
- › Optional medium and fine dust filters M6, F7, F8 to meet customer request or legislation
- › Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installation.

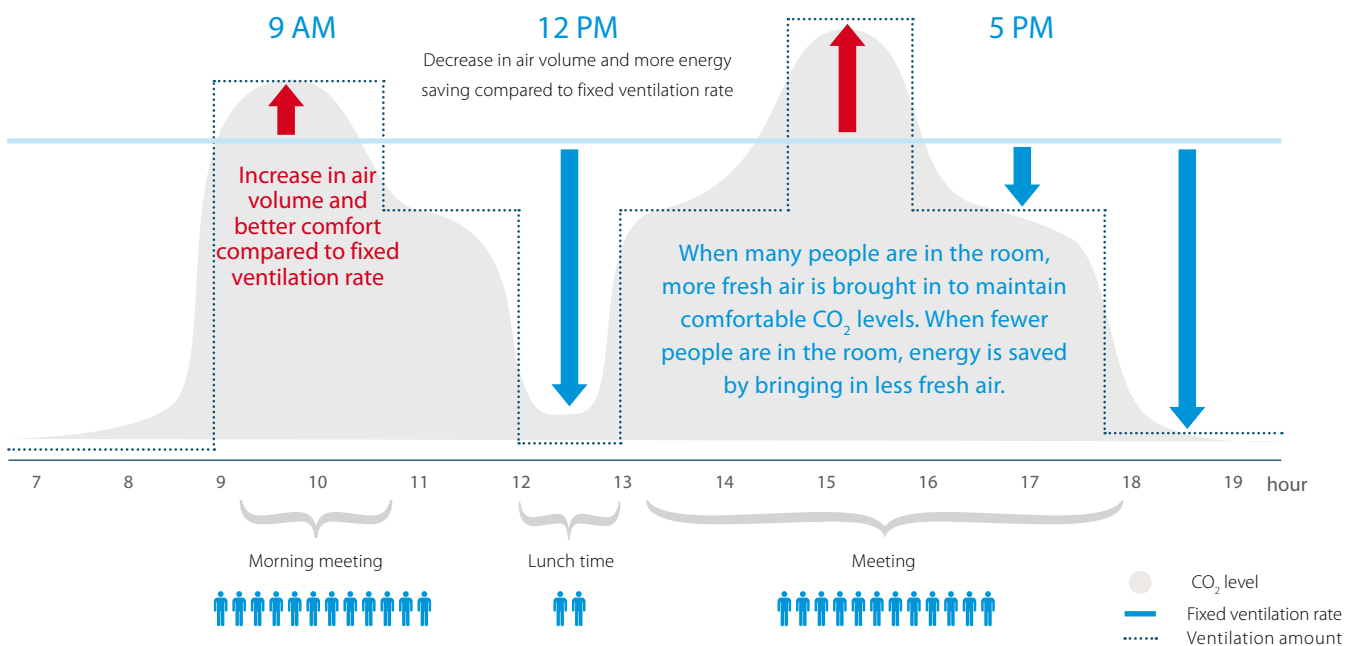


- › No drain piping needed
- › Can operate in over- and under pressure
- › Total solution for fresh air with Daikin supply of both VAM / VKM and electrical heaters

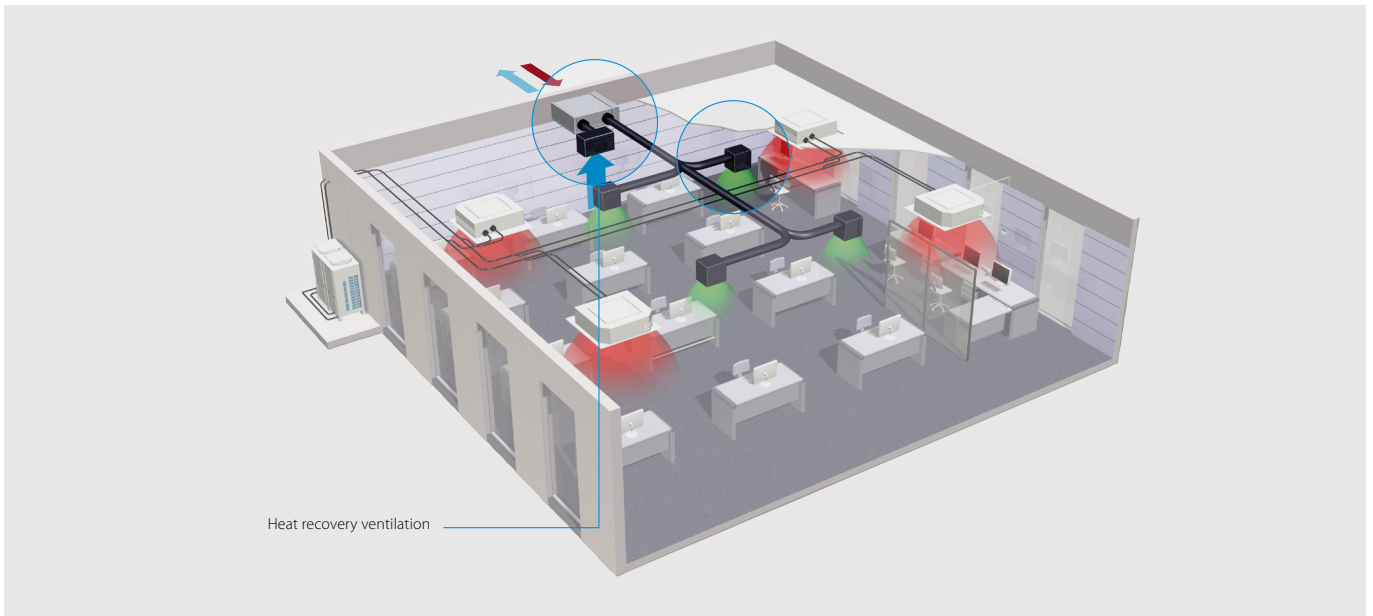
Prevent energy losses from over ventilation with CO₂ sensor

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 throttles or even switches off the ventilation system when there is enough fresh air in the room, thus saving energy.

Example of CO₂ sensor operation in a meeting room:



Using CO₂ sensors has the most energy-saving potential in buildings where occupancy fluctuates during a 24-hour period, is unpredictable and peaks at a high level. For example office buildings, government facilities, retail stores and shopping malls, movie theaters, auditoriums, schools, entertainment clubs and nightclubs. The ventilation unit's reaction to fluctuations in CO₂ can be easily adjusted through a field setting.

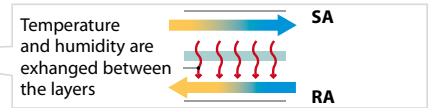
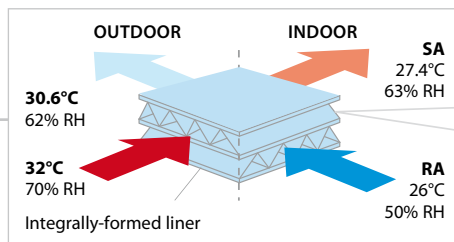


Heat recovery ventilation

High efficiency Paper Heat Exchanger

Operation of the high efficiency paper heat exchanger.

Cross flow of air to exchange heat and moisture.



RH: Relative Humidity SA: Supply Air (to room) RA: Return Air (from room)

| Ventilation | | | VAM/VAM | 150FC | 250FC | 350J | 500J | 650J | 800J | 1000J | 1500J | 2000J | | | |
|--|--|---------------------|-------------------------|----------------------------------|---|---|-------------------------|---------------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|----------------------------|--|--|
| Power input - 50Hz | Heat exchange mode | Nom. | Ultra high/High/Low | kW | 0.132/0.111/0.058 | 0.161/0.079/0.064 | 0.097/0.070/0.039 | 0.164/0.113/0.054 | 0.247/0.173/0.081 | 0.303/0.212/0.103 | 0.416/0.307/0.137 | 0.548/0.384/0.191 | 0.833/0.614/0.273 | | |
| | Bypass mode | Nom. | Ultra high/High/Low | kW | 0.132/0.111/0.058 | 0.161/0.079/0.064 | 0.085/0.061/0.031 | 0.148/0.100/0.045 | 0.195/0.131/0.059 | 0.289/0.194/0.086 | 0.417/0.300/0.119 | 0.525/0.350/0.156 | 0.835/0.600/0.239 | | |
| Temperature exchange efficiency - 50Hz | Ultra high/High/Low | | | % | 770(1)/720(2)/783(1)/723(2)/828(1)/732(2) | 749(1)/695(2)/760(1)/700(2)/801(1)/720(2) | 85.1/86.7/90.1 | 80.0/82.5/87.6 | 84.3/86.4/90.5 | 82.5/84.2/87.7 | 79.6/81.8/86.1 | 83.2/84.8/88.1 | 79.6/81.8/86.1 | | |
| Enthalpy exchange efficiency - 50Hz | Cooling | Ultra high/High/Low | | % | 60.3(1)/61.9(1)/67.3(1) | 60.3(1)/61.2(1)/64.5(1) | 65.2/67.9/74.6 | 59.2/61.8/69.5 | 59.2/63.8/73.1 | 67.7/70.7/76.8 | 62.6/66.4/74.0 | 68.9/71.8/77.5 | 62.6/66.4/74.0 | | |
| | Heating | Ultra high/High/Low | | % | 66.6(1)/67.9(1)/72.4(1) | 66.6(1)/67.4(1)/70.7(1) | 75.5/77.6/82.0 | 69.0/72.2/78.7 | 73.1/76.3/82.7 | 72.8/75.3/80.2 | 68.6/71.7/77.9 | 73.8/76.1/80.8 | 68.6/71.7/77.9 | | |
| Operation mode | Heat exchange mode, bypass mode, fresh-up mode | | | | | | | | | | | | | | |
| Heat exchange system | Air to air cross flow total heat (sensible + latent heat) exchange | | | | | | | | | | | | | | |
| Heat exchange element | Specially processed non-flammable paper | | | | | | | | | | | | | | |
| Dimensions | Unit | HeightxWidthxDepth | mm | 285x776x525 | | | 301x1,120x868 | | 368x1,350x917 | | 368x1,350x1,170 | | 731x1,350x1,170 | | |
| Weight | Unit | | kg | 24.0 | | | 46.5 | | 61.5 | | 79.0 | | 157 | | |
| Casing | Material | | | Galvanised steel plate | | | | | | | | | | | |
| Fan | Air flow rate - 50Hz | Heat exchange mode | Ultra high/High/Low | m ³ /h | 150/140/105 | 250/230/155 | 350(1)/300(1)/200(1) | 500(1)/425(1)/275(1) | 650(1)/550(1)/350(1) | 800(1)/680(1)/440(1) | 1,000(1)/850(1)/550(1) | 1,500(1)/1,275(1)/825(1) | 2,000(1)/1,700(1)/1,100(1) | | |
| | | Bypass mode | Ultra high/High/Low | m ³ /h | 150/140/105 | 250/230/155 | 350(1)/300(1)/200(1) | 500(1)/425(1)/275(1) | 650(1)/550(1)/350(1) | 800(1)/680(1)/440(1) | 1,000(1)/850(1)/550(1) | 1,500(1)/1,275(1)/825(1) | 2,000(1)/1,700(1)/1,100(1) | | |
| | External static pressure - 50Hz | Ultra high/High/Low | Pa | 90/87/40 | 70/63/25 | 90(1)/70.0/50.0(1) | | | | | | | | | |
| Air filter | Type | | | Multidirectional fibrous fleeces | | | | Multidirectional fibrous fleeces (G3) | | | | | | | |
| Sound pressure level - 50Hz | Heat exchange mode | Ultra high/High/Low | dBA | 27.0/26.0/20.5 | 28.0/26.0/21.0 | 34.5(1)/32.0(1)/29.0(1) | 37.5(1)/35.0(1)/30.5(1) | 39.0(1)/36.0(1)/31.0(1) | 39.0(1)/36.0(1)/30.5(1) | 42.0(1)/38.5(1)/32.5(1) | 42.0(1)/39.0(1)/33.5(1) | 45.0(1)/41.5(1)/36.0(1) | | | |
| | Bypass mode | Ultra high/High/Low | dBA | 27.0/26.5/20.5 | 28.0/27.0/21.0 | 34.5(1)/32.0(1)/28.0(1) | 38.0(1)/35.0(1)/29.5(1) | 38.0(1)/34.5(1)/30.5(1) | 40.0(1)/36.5(1)/30.5(1) | 42.5(1)/40.0(1)/32.5(1) | 42.0(1)/39.0(1)/32.5(1) | 45.0(1)/41.0(1)/35.0(1) | | | |
| Operation range | Around unit | | °CDB | - | | | | 0°C~40°CDB, 80% RH or less | | | | | | | |
| Connection duct diameter | | | mm | 100 | 150 | 200 | 250 | | | 2x250 | | | | | |
| Power supply | Phase/Frequency/Voltage | | Hz/V | 15.0 | | | | 1~/50/60/220-240/220 | | | | | | | |
| Current | Maximum fuse amps (MFA) | | A | 15.0 | | | | 16.0 | | | | | | | |
| Specific energy consumption (SEC) | Cold climate | | kWh/(m ² ·a) | -56.0(5) | | | | - | | | | | | | |
| | Average climate | | kWh/(m ² ·a) | -22.1(5) | | | | - | | | | | | | |
| | Warm climate | | kWh/(m ² ·a) | -0.100(5) | | | | -5.30(5) | | | | | | | |
| SEC class | | | D / See note 5 | B / See note 5 | | | - | | | | | | | | |
| Maximum flow rate at 100 Pa ESP | Flow rate | | m ³ /h | 130 | 207 | - | | | | | | | | | |
| | Electric power input | | W | 129 | 160 | - | | | | | | | | | |
| Sound power level (Lwa) | | | dB | 40 | 43 | 51 | 54 | 58 | 61 | 62 | 65 | | | | |
| Annual electricity consumption | | | kWh/a | 18.9(5) | 13.6(5) | - | | | | | | | | | |
| Annual heating saved | Cold climate | | kWh/a | 41.0(5) | 40.6(5) | - | | | | | | | | | |
| | Average climate | | kWh/a | 80.2(5) | 79.4(5) | - | | | | | | | | | |
| | Warm climate | | kWh/a | 18.5(5) | 18.4(5) | - | | | | | | | | | |

(1)Measured according to JIS B 8628 | (2)Measured at reference flow rate according to EN13141-7 | Measured according to EN308 : 1997 | In accordance with commission regulation (EU) No 1254/2014 | In accordance with commission regulation (EU) No 1253/2014 | At reference flow rate in accordance with commission regulation (EU) No 1254/2014 | Clean the filter when the filter icon appears on the controller screen. Regular filter cleaning is important for delivered air quality and for the unit's energy efficiency.

Electrical heater for VAM

- › Total solution for fresh air with Daikin supply of both VAM and electrical heaters
- › Increased comfort in low outdoor temperature thanks to the heated outdoor air
- › Integrated electrical heater concept (no additional accessories required)
- › Standard dual flow and temperature sensor
- › Flexible setting with adjustable setpoint
- › Increased safety with 2 cut-outs: manual & automatic
- › BMS integration thanks to:
 - Volt free relay for error indication
 - 0-10VDC input for setpoint control



| ELECTRICAL HEATER FOR VAM | VH | (VH) |
|--|----|--|
| Supply voltage | | 220/250V ac 50/60 Hz. +/-10% |
| Output current (maximum) | | 19A at 40°C (ambient) |
| Temperature sensor | | 5k ohms at 25°C (table 502 1T) |
| Temperature control range | | 0 to 40°C / (0-10V 0-100%) |
| Control fuse | | 20 x 5mm 250mA |
| LED indicators | | Power ON - Yellow Heater ON - Red (solid or flashing, indicating pulsed control) Airflow fault - Red |
| Mounting holes | | 98mm x 181mm centres 5 mm ø holes |
| Maximum ambient adjacent to terminal box | | 35°C (during operation) |
| Auto high temp. cutout | | 100°C Pre-set |
| Man. reset high temp. cutout | | 125°C Pre-set |
| Run relay | | 1A 120V AC or 1A 24V DC |
| BMS setpoint input | | 0-10VDC |

| | | VH | 1B | 2B | 3B | 4B | 4/AB | 5B(1) |
|-----------------|----|----|----------|----------|-------------|----------------------------|------|--------------------|
| Capacity | kW | | | 1 | | 1.5 | 2.5 | 2.5 |
| Duct diameter | mm | | 100 | 150 | 200 | 250 | | 300 |
| Connectable VAM | | | VAM150FC | VAM250FC | VAM350,500J | VAM650J, VAM800J, VAM1000J | | VAM1500J, VAM2000J |

(1) Available only with the optional plenum

(2) For the selection of the appropriate capacity, please refer to the VAM selection software.