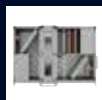
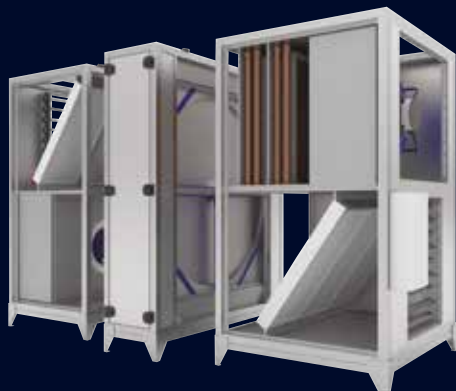


# Duplexvent Rotary DV5000



## PERFORMANCE

| Ventilation                        |            | Supply Air  | Extract Air |
|------------------------------------|------------|-------------|-------------|
| Air volume @ 200 Pa                | m³/h / l/s | 5000 / 1389 | 5000 / 1389 |
| Nominal voltage                    | V          | 400         | 400         |
| Nominal power (at operation point) | kW         | 1.1         | 1           |
| Max power input                    | kW         | 2.5         | 2.5         |
| Max current                        | A          | 3.8         | 3.8         |
| Fan Type                           |            | EC          | EC          |

Note: The figures above have been measured at 5000 m³/h and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

| Heat Recovery                              |            | Supply Air           | Extract Air |
|--------------------------------------------|------------|----------------------|-------------|
| Air volume @ 200 Pa                        | m³/h / l/s | 5000 / 1389          | 5000 / 1389 |
| Temperature at inlet                       | °C         | -15                  | 20          |
| Temperature at outlet                      | °C         | 12                   | -4          |
| Humidity at inlet                          | % RH       | 90                   | 40          |
| Humidity at outlet                         | % RH       | 50                   | 100         |
| Heat recovery efficiency winter/summer     | %          | 77 / 74              |             |
| Humidity recovery efficiency winter/summer | %          | 71 / 0               |             |
| Total heat gain winter/summer              | kW         | 60.6 / 9.5           |             |
| Sensible heat gain winter/summer           | kW         | 45.7 / 8             |             |
| Latent heat gain winter/summer             | kW         | 14.9 / 2             |             |
| Heat exchanger speed                       | RPM        | 10-13                |             |
| Type of heat exchanger                     |            | Thermal Rotary Wheel |             |
| Part No.                                   |            | 90000727             |             |
| EAN No.                                    |            | 5019009321158        |             |

Note: The figures above have been measured at 5000 m³/h and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

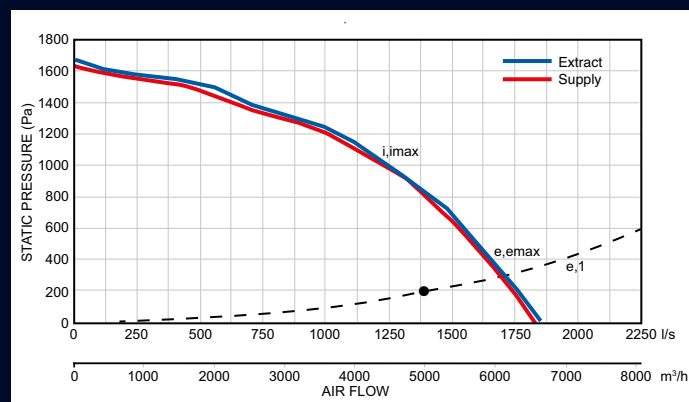
| Sound Power Level L <sub>w</sub>                   | Total | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
|----------------------------------------------------|-------|-------|--------|--------|--------|-------|-------|-------|-------|
| dB (A)                                             |       |       |        |        |        |       |       |       |       |
| Outdoor air e1                                     | 67    | 41    | 61     | 62     | 60     | 57    | 53    | 48    | 28    |
| Supply air e2                                      | 91    | 64    | 72     | 82     | 88     | 86    | 80    | 73    | 67    |
| Extract air i1                                     | 66    | 42    | 61     | 61     | 60     | 57    | 53    | 48    | 28    |
| Exhaust air i2                                     | 91    | 64    | 72     | 82     | 88     | 86    | 79    | 73    | 66    |
| Breakout noise                                     | 65    | 46    | 49     | 63     | 60     | 54    | 42    | 35    | <25   |
| Sound Pressure Level L <sub>p</sub> measured at 3m | 45    | 25    | 28     | 42     | 40     | 34    | <25   | <25   | <25   |

Note: The figures above have been measured at 5000 m³/h and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

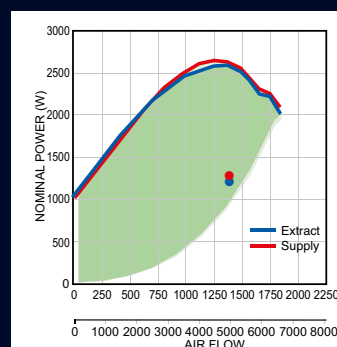
## KEY FEATURES

- Air volume up to 5000 m³/h at 200 Pa according to ErP 2018
- Highly efficient, certified by Eurovent rotary heat exchanger, up to 85% thermal efficiency
- Low SFP and energy saving EC fans
- Digital touchscreen or simple manual controller
- BMS connection
- VAV control compatibility
- Filters: ePM1 55 % (F7), ePM10 50 % (M5) or Coarse 90 % (G4)
- Optional equipment: recirculation damper, heating or cooling coils, purge chamber
- Optional constant flow / pressure mode
- 2 year warranty\*

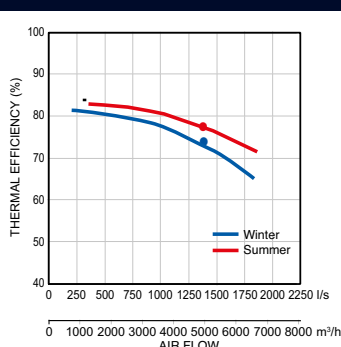
## AIRFLOW CURVE



## POWER CONSUMPTION



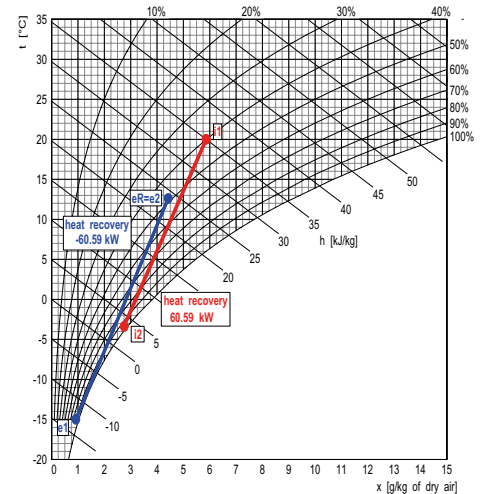
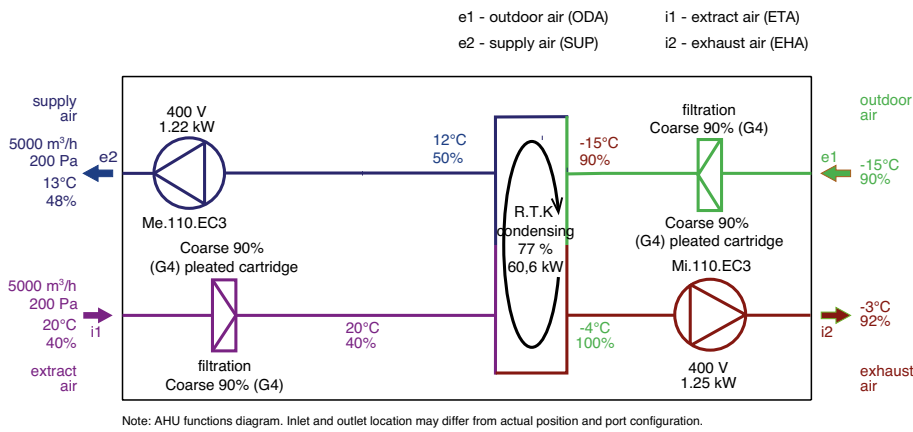
## HEAT RECOVERY EFFICIENCY



Note: Green area denotes power consumption range. Power consumption depends on system installation. \* excludes motors. Motor warranty one year from date of purchase.



## WINTER OPERATION



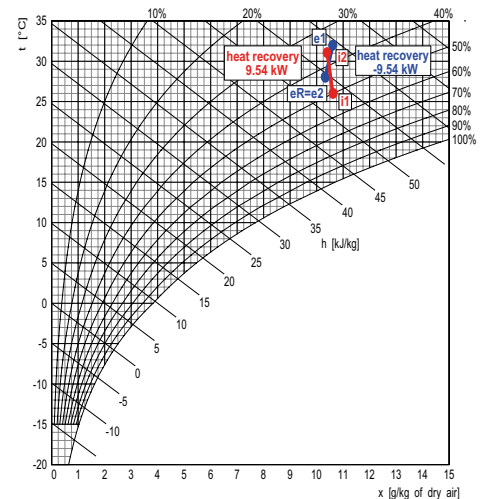
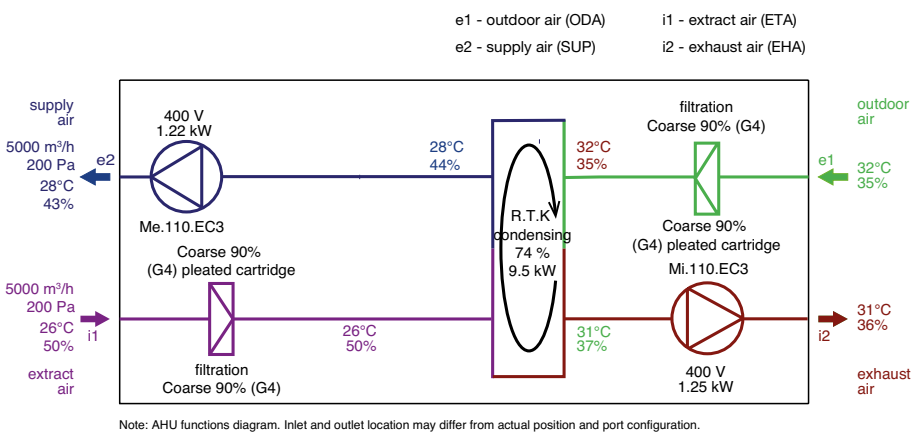
### Supply

|    | Description | t [°C] | RH [%] |
|----|-------------|--------|--------|
| e1 | Outdoor air | -15.0  | 90     |
| e2 | Supply air  | 14.1   | 37     |

### Exhaust

|    | Description | t [°C] | RH [%] |
|----|-------------|--------|--------|
| i1 | Extract Air | 20.0   | 40     |
| i2 | Exhaust Air | 2.5    | 92     |

## SUMMER OPERATION



### Supply

|    | Description | t [°C] | RH [%] |
|----|-------------|--------|--------|
| e1 | Outdoor Air | 32.0   | 35     |
| e2 | Supply Air  | 28.0   | 50     |

### Exhaust

|    | Description | t [°C] | RH [%] |
|----|-------------|--------|--------|
| i1 | Extract Air | 32.0   | 50     |
| i2 | Exhaust Air | 31.0   | 37     |

## FILTERS

| Filtration            |     | Supply            | Extract        | Accessories (part of delivery)                                                                      |
|-----------------------|-----|-------------------|----------------|-----------------------------------------------------------------------------------------------------|
| Type                  |     | Pleated Cartridge |                | Pfe dirty filter pressure switch for supply air<br>Pfi dirty filter pressure switch for extract air |
| Filtration class      |     | ePM1 55% (F7)     | ePM10 50% (M5) |                                                                                                     |
| Number of filters     | pcs | 2                 | 2              |                                                                                                     |
| Filter cartridge size | mm  | 750 x 495 x 96    | 750 x 495 x 96 |                                                                                                     |

# Duplexvent Rotary DV5000

## ELECTRIC HEATER

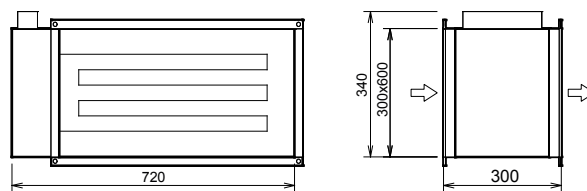
| Electric pre-heater      |            | Supply      |
|--------------------------|------------|-------------|
| Air volume               | m³/h / l/s | 5000 / 1389 |
| Maximum heating capacity | kW         | 13.5        |
| Voltage                  | V          | 400         |
| Connection ports         | mm         | 300 x 600   |

## WATER HEATING COIL

| Water heating coil                               |            | Supply      |
|--------------------------------------------------|------------|-------------|
| Heating medium                                   |            | Water       |
| Air volume                                       | m³/h / l/s | 5000 / 1389 |
| Temperature at inlet (after heat recovery)       | °C         | 13          |
| Temperature at outlet (downstream of the heater) | °C         | 20          |
| Heating capacity                                 | kW         | 12.6        |
| Heating medium temperature drop                  | °C         | 70 / 50     |
| Medium flow (from source)                        | l/h        | 545         |
| Connection dimension (hydraulic kit)             |            | 1" female   |

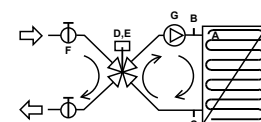
Note: The figures above have been measured at 5000 m³/h and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

## OPTIONAL ACCESSORIES



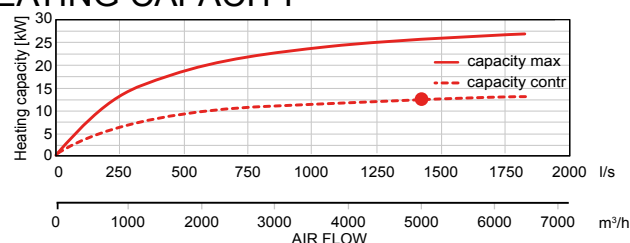
Weight: approx. 40 kg

- A Freeze protection thermostat 016-H6929-109-6m 2)
- B Sludge valve plug 2)
- C Sludge valve plug 2)
- Hydraulic kit: RE-TPO4. LM24A-SR
- D Mixing valve IVAR.MIX4, Kv 12, 1" 1)
- E Actuator LM24A-SR 1)
- F Globe valve 1" female 1)
- G Pump WILO YONOS PARA RS 20/6- RKC 1)



1 - Delivered separately 2 - Fitted and connected

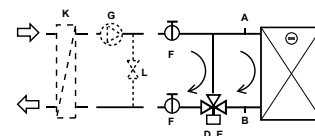
## HEATING CAPACITY



## WATER COOLING COIL

| Water cooling coil                                        |            | Supply              |
|-----------------------------------------------------------|------------|---------------------|
| Cooling medium                                            |            | 30% Ethylene glycol |
| Air volume                                                | m³/h / l/s | 5000 / 1389         |
| Temperature at inlet (after heat recovery)                | °C         | 28                  |
| Temperature at outlet (downstream of the cooling coil)    | °C         | 17                  |
| Inlet relative humidity (after heat recovery)             | % RH       | 44                  |
| Outlet relative humidity (downstream of the cooling coil) | % RH       | 81                  |
| Cooling capacity                                          | kW         | 17.4                |
| Condensate production                                     | l/h        | 1                   |
| Water temperature drop                                    | °C         | 6 / 13              |
| Medium flow (at max. capacity)                            | l/h        | 2430                |
| Medium-side pressure drop                                 |            |                     |
| in heat exchanger                                         | kPa        | 11.60               |
| in valve                                                  | kPa        | 0.64                |
| Connection dimension                                      |            | 1" female           |

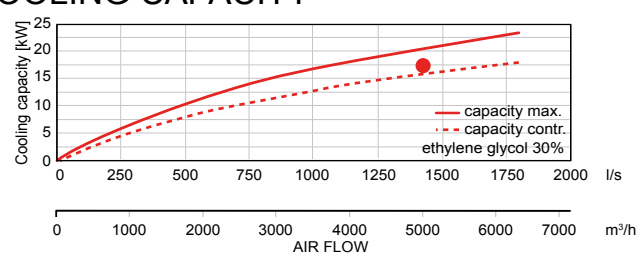
- A Sludge valve plug 2)
- B Sludge valve plug 2)
- Hydraulic kit: R-CHW3.E.TR 24-SR
- D 3-way ball valve R3020-B1 2)
- E Actuator TR 24-SR 2)
- F Globe valve 1" female 2)



- Others:
- G Pump 3)
- L Water bypass 3)
- K Coil water/ethylene glycol 3)

1 - Delivered separately 2 - Fitted and connected 3 - Not part of delivery

## COOLING CAPACITY

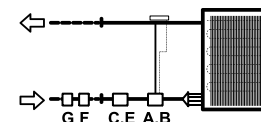


## DX COIL

| DX coil                                              |            | Supply      |
|------------------------------------------------------|------------|-------------|
| Air volume                                           | m³/h / l/s | 5000 / 1389 |
| Temperature at inlet (after heat recovery)           | °C         | 28          |
| Temperature at outlet (downstream of the DX coil)    | °C         | 17          |
| Inlet relative humidity (after heat recovery)        | % RH       | 44          |
| Outlet relative humidity (downstream of the DX coil) | % RH       | 82          |
| Cooling capacity                                     | kW         | 16.62       |
| Condensate production                                | l/h        | 0           |
| Refrigerant type                                     |            | R32         |
| Evaporating temperature                              | °C         | 12          |

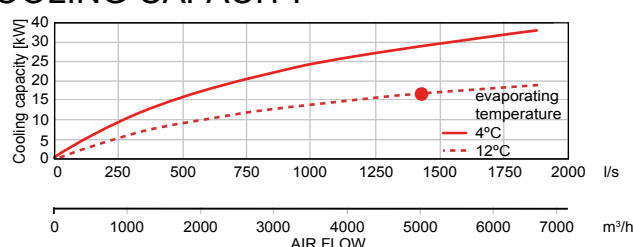
Note: The figures above have been measured at 5000 m³/h and 200 Pa. Please use the Duplexvent Selection Software to calculate measurements at other performance levels.

- A Expansion valve 3)
- B Nozzle 3)
- C Magnetic valve 3)
- E Coil 3)
- F Sight glass 3)
- G Drier 3)



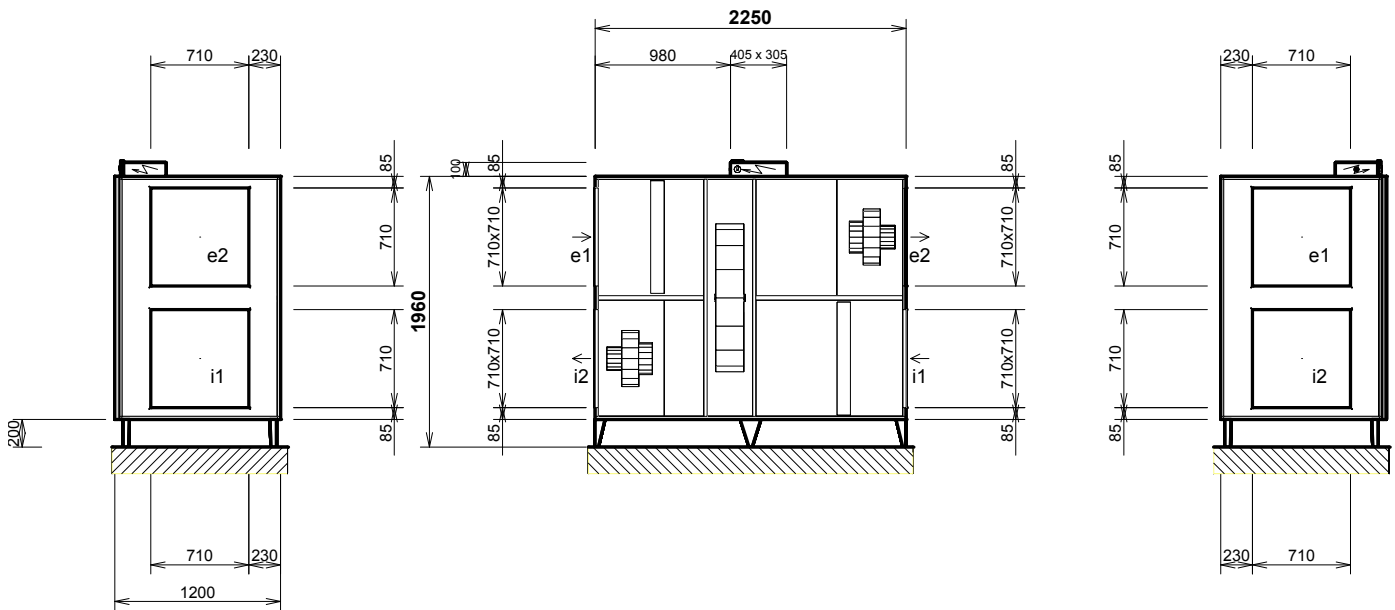
3 - Not part of delivery

## COOLING CAPACITY

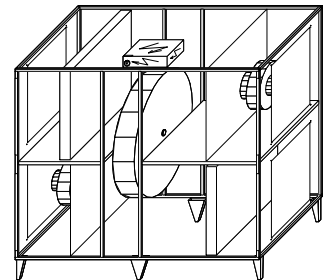
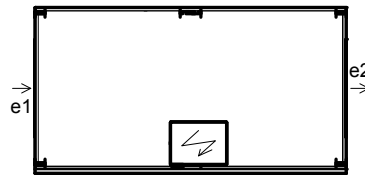


## DIMENSIONS (mm)

front view (from the door side)



Weight: approx. 575kg

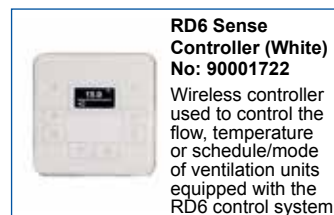


| Connections | Type                  | Dimensions     | Optional accessories                |
|-------------|-----------------------|----------------|-------------------------------------|
| e1          | e1- outdoor air (ODA) | 710 x 710 mm   | Shutoff damper                      |
| e2          | e2- supply air (SUP)  | 710 x 710 mm   | Flexible connection                 |
| i1          | i1- extract air (ETA) | 710 x 710 mm   | Shutoff damper, Flexible connection |
| i2          | i2- exhaust air (EHA) | 710 x 710 mm   | Flexible connection                 |
| K           | condensate drain      | Ø 32 mm /40 mm | Condensate pump                     |

Notice:

- Unit delivered as 1 piece
- Door is 3 parts
- Diagram is intended only for basic information, binding dimensions receive at device delivery, or on request from the manufacturer
- Bolt holes for duct connection (for one port): 4x M6

## CONTROLS & ACCESSORIES



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