

CAKE



CAKE VR

Air-handling Units with Rotary Heat Exchangers

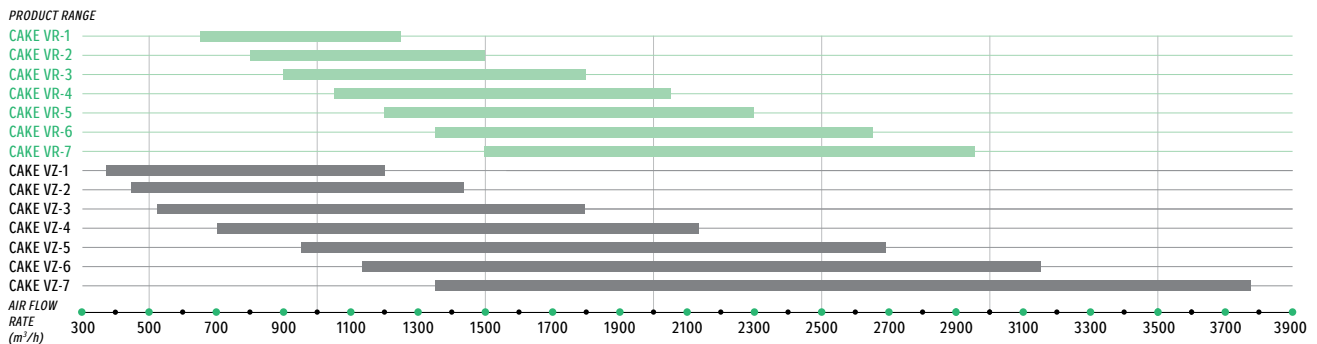
CAKE VZ

Air-handling Units with Plate Heat Exchangers

REMAK

COMPACT AIR-HANDLING UNITS WITH HEAT RECOVERY

PROPERTIES



SIMPLICITY

- Plug and Play solution for the variant with an integrated control unit
- Option of remote control using the Remak mobile application

VARIABILITY

- Optional integration of a water or DX cooler
- Optional internal dampers
- Optional wide range of different types and classes of filters
- Both rectangular and round connecting apertures
- Both left-hand and right-hand versions, side variability of inlets and outputs
- Optional type and wave height of the rotary heat exchanger's wheel
- Option for the air-handling unit to be situated outdoors (suitable roofing required)
- Optional control unit: integrated into the air-handling casing/outside the air-handling casing/without control

QUALITY

- Zero content of silicon-based compounds (provably health and bacteriologically safe solution)
- Precision workmanship of condensate trays
- Lockable safety door closures
- Thermally insulated inter-channel partition walls prevent undesirable heat transfer in the unit and condensation in unwanted places.
- Sophisticated design solution
- Complies with the Ecodesign 2018 requirements
- Heat recovery up to 91 %
- Excellent acoustic and thermal performance of the 50 mm thick casing
- Allowed temperature range -40 °C to +50 °C

CASING PARAMETERS (in accordance with EN 1886)

Mechanical strength	D1
Casing air leakage	L1
Filter bypass leakage	F9
Thermal transmittance	T2
Thermal bridging	TB2
Sound insertion loss (dB/octave band [Hz])	18/125; 22/250; 28/500; 38/1000; 42/2000; 45/4000; 46/8000

SOPHISTICATED FEATURES OF THE CONTROL SYSTEM

Control using an energy administration system and optional remote control by the Remak mobile application is based on the Siemens controller and provides features such as adjustable time schedules and temperature modes, night cooling, temperature start-up, boost, constant air-flow or constant pressure dependent output control, control based on the CO₂ content in the room or connection to the building management system.

OVERVIEW OF FEATURES

VARIABILITY OF CUSTOM MADE SOLUTIONS

Optional accessories, dimensions and prices of customised air-handling units can be optimised using the AeroCAD design application.

INTERNAL COMPONENTS OF THE UNIT

Heat recovery method	Counter Flow plate heat exchanger, Rotary heat exchanger
Inlet and outlet fan	EC motors, backward curved fan blades
One-stage inlet filtration	Bag and frame filters Coarse 60%, ePM10 60%, ePM2.5 65%, ePM1 70%
Outlet filtration	Bag and frame filters Coarse 60%, ePM10 60%, ePM10 65%, ePM2.5 65%
Heating	Water heater, heat pump condenser

OPTIONAL ACCESSORY COMPONENTS INSTALLED INSIDE THE UNIT

Cooling	Water cooler, DX cooler
Inlet/outlet dampers	ON/OFF, 0-10 V Rectangular, round
Heat exchanger bypass	ON/OFF, 0-10 V
Mixing*	0-10 V
Auxiliary condensate tray*	On the inlet side behind the heat exchanger Preparation for cooler

** Only air-handling units with plate heat exchangers*

OPTIONAL ACCESSORY COMPONENTS INSTALLED OUTSIDE THE UNIT

Elastic connections	Rectangular, round
Inlet/outlet dampers	ON/OFF, 0-10 V Rectangular, round
Condensate drainage siphon	Lower condensate drainage from the unit, optionally heated
Base frame	Fixed, adjustable
Mixing set	Standard or inverted connection
Pre-heating	Water/electric
Two-stage inlet filtration	F9 Bag filter
Noise attenuator	Splitter attenuator
Humidifier	Steam humidifier
Electric heating*	ON/OFF, 0-10 V
Filtration of coarse dirt and aerosols	Grease filter (metal) with a collection tray

** depending on the choice of control unit*

„OUR COMPACT UNIT IS SMALL,
SIMPLE AND COST-EFFECTIVE.
WE DELIVER CATALOGUE
AS WELL AS CUSTOMISED
SOLUTIONS, AND THIS UNIT
CAN BE ADAPTED TO SPECIFIC
SHAPE AND DIMENSION
REQUIREMENTS.”

