



PARTNER
IN VENTILATION
2VW.CZ

HEAT RECOVERY UNITS

Since 2005

FRESH AIR AND WELFARE



DISTRIBUTORS IN 45 COUNTRIES AROUND THE WORLD

- A leading European manufacturer of Air Curtains, Air Handling and Heat Recovery Units and wide range of HVAC products
- Creating efficient solutions since 1995
- Innovative, specialized, focused
- In-house R&D
- European quality
- Worldwide presence



2VV HEAT RECOVERY UNITS – FRESH AIR AND WELFARE

HEAT RECOVERY UNIT is a system where outdoor air is brought into buildings and indoor air is exhausted from the building without any heat losses. Heat is transferred from interior air to incoming outside air via a heat recovery exchanger.

HEAT RECOVERY UNIT EFFECTS:

- Greater and improved indoor air quality – constant supply of fresh air
- No heating losses – reduced heating cost
- Healthier indoor environments – effective help and prevention for allergy and asthma sufferers

2VV HEAT RECOVERY UNITS

Long term experience – development and manufacturing since 2005...

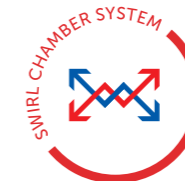
- High efficiency fans protected by air filters
- Top-class quality of heat recovery cells (counter-flow, rotary, enthalpy)

- Intuitive and innovative control ensuring maximized efficiency at the lowest operation cost
- Super quiet operation
- Highest quality with 3 years warranty

COUNTER FLOW HEAT RECOVERY CORE

Top quality heat recovery...

- Aluminum heat recovery cells
- High efficiency heat recovery
- Top-class air-tightness



EC TECHNOLOGY

2VV Heat Recovery Units continuously progressive and focused...

- Low energy consumption
- High level of controllability
- Maximized efficiency, minimized operating cost



ROTARY HEAT RECOVERY WHEEL

Top quality heat regeneration...

- High regeneration heat recovery
- Humidity recovery
- Double-sided seal for wheel tightness



ENTHALPY RECOVERY CORE

Outstanding relative humidity recovery...

- Innovative combination of heat recovery and relative humidity regeneration
- Top quality air-tightness
- Without or reduced condensation



2VW HEAT RECOVERY UNITS



VENUS



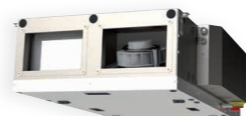
DAPHNE



DAPHNE XL



WHISPER AIR



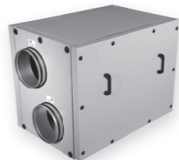
ALFA 95
FLAT



ALFA 95
VERTICAL



ALFA 95
HORIZONTAL



ALFA 85
VERTICAL



ALFA 85
UPPER



ALFA 85 XL
VERTICAL

Application	Flats, residential houses, family houses and low-energy houses	Flats, residential houses, family houses and low-energy houses	Residential houses, shops, offices, restaurants, coffee bars, sport facilities	School rooms, conference rooms, offices, homes	Offices, coffee bars, restaurants, hotels and sport facilities	Offices, coffee bars, restaurants, hotels and sport facilities	Offices, coffee bars, restaurants, hotels and sport facilities	Offices, coffee bars, restaurants, hotels and sport facilities	Offices, coffee bars, restaurants, hotels and sport facilities	Offices, coffee bars, restaurants, hotels and sport facilities
Type of fans	AC/EC fans	EC fans	EC fans	EC fans	EC fans	EC fans	EC fans	EC fans	EC fans	EC fans
Nominal airflow	5 sizes with air flows: 140, 150, 300, 500 and 700 m³/h	3 sizes with air flow: 200, 300 and 500 m³/h	2 sizes with air flow from 700 to 900 m³/h	3 sizes with air flow: 400, 700 and 1,000 m³/h	4 sizes with air flows: 400, 700, 1,500 and 2,000 m³/h	6 sizes of vertical version with airflows from 800 to 5,500 m³/h	4 sizes of horizontal version with airflows from 800 to 3,500 m³/h	8 sizes of vertical version with air flows from 700 to 7,500 m³/h	6 sizes of version with upper outlets with air flows from 700 to 4,500 m³/h	2 sizes of vertical version with air flows 9,000–12,000 m³/h
Type of heat recovery	Counterflow Heat Exchanger (AL)	Counterflow Heat Exchanger (AL)	Counterflow Heat Exchanger (AL)	Counterflow Heat Exchanger (AL) Enthalpic Counterflow optionally	Counterflow Heat Exchanger (AL)	Counterflow Heat Exchanger (AL)	Counterflow Heat Exchanger (AL)	Rotary Heat Exchanger Sorption optionally	Rotary Heat Exchanger Sorption optionally	Rotary Heat Exchanger Sorption optionally
Efficiency	up to 93%	up to 93%	up to 93%	up to 90%	up to 93%	up to 93%	up to 93%	up to 85%	up to 85%	up to 85%
Control panel										
Controller type	Venus Comfort/AirGENIO Comfort	AirGENIO Comfort	AirGENIO Comfort	AirGENIO Superior	AirGENIO Superior	AirGENIO Superior	AirGENIO Superior	AirGENIO Superior	AirGENIO Superior	AirGENIO Superior
Installation	Ceiling	Wall	Wall/Standing	Under-ceiling	False-ceiling	Standing	Standing	Standing	Standing	Standing
Outdoor/Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor
Noise specification Sound pressure (L _{PA}) at 3 m	37,3 dB(A)	31,3 dB(A)	39,0 dB(A)	28,3 dB(A) at 1m, Q4: 34,9 dB(A)	37,2 dB(A)	34,2 dB(A)	41,2 dB(A)	33,5 dB(A)	33,5 dB(A)	52,6 dB(A)
By-Pass	Electronic	Fluent By-Pass	Fluent By-Pass	Fluent By-Pass	Fluent By-Pass	Fluent By-Pass	Fluent By-Pass	Electronic	Electronic	Electronic
Filter class (Supply/Extract)	M5/G4 (AC fans) F7/G4 (EC fans)	G4, G4	G4, G4	F7, G4	F7, G4	G4+F7/G4	G4+F7/G4	M5/M5	M5/M5	M5/M5
Integrated electric Pre-Heater	✓ / Optionally	✓	✓	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✗	✗	✗
Integrated electric Post-Heater	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
Integrated LPHW coil	✗	✗	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
Integrated Change-Over coil	✗	✗	✗	✓	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
Integrated DX coil	✗	✗	✗	✗	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
External Change-Over coil	✗	✗	✗	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
External DX coil	✗	✗	✗	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally
External electric Post-Heater	✓ (External control)	✓ (External control)	✓ (External control)	✗	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally	✓ / Optionally

AirGENIO CONTROL SYSTEM



2VV AirGENIO is the exceptional control system loaded with smart features that minimize energy consumption while providing maximal comfort in the interior.

INTUITIVE

INNOVATIVE

INTELLIGENT

=

AirGENIO control system

INTUITIVE

Instructive and easy to understand menu together with the modern look of the control panel makes the AirGENIO intuitive and easy-to-operate control system. This starts with a clear icons in User's menu and well-organized and clearly set up Service menu.

- Clear icons
- Coloured touch-screen display
- Systematic Service Menu

INNOVATIVE

Commission, control and service the 2VV device remotely with the AirGENIO control system. Choose your way for remote control:

- Building Management System (network protocols Modbus RTU/TCP, BACnet)
- AirGENIO application
- Service Software

INTELLIGENT

Complex and refined algorithms, excellent controllability and supplementary modes, work together to make AirGENIO highly intelligent control system.

In automatic mode it continuously senses inside and outside conditions, evaluating the data and subsequently, thanks to the programmed logic, operates the ventilation device in the best possible way. AirGENIO control system is a master of highly efficient operation and minimal energy consumption without compromising on interior comfort. It achieves this by way of:

- Sophisticated and smart logic
- Fluently controlled by-pass
- Temperature Sensors
- Pressure Sensors (Fan flow, Filter management)
- Air Quality Sensors

Each building has a different demand for ventilation. AirGENIO control system can handle any requirement, it can operate the device in various ventilation modes:

- Constant airflow (CAV)
- Variable airflow (VAV)
- Demand control ventilation (DCV)
- Constant pressure in the room (PCO)

Possibility to connect an air quality sensor or other supplementary sensors is plain and simple. Furthermore the AirGENIO control system provides other supplementary modes such as Night mode, Boost, Free-cooling, Fire mode, etc.





AirGENIO
COMFORT



AirGENIO
SUPERIOR



VENUS
STANDARD

Remote control	Touch screen display	Touch screen display	Touch buttons
Control connection	Wire	Wire	Wire
CAV mode	✗	✓	✗
DCV mode	✓ (0–10V)	✓ (0–10V)	✓ (ON/OFF)
VAV mode	✗	✓	✗
Fan speeds	Fluent	Fluent	3 speeds
Fan offset adjustment	✓	✓	✓
By-Pass control	✓ (Auto)	✓ (Auto)	✓ (Manual)
Free-Cooling	✓ (Auto)	✓ (Auto)	✓ (Electronic with time delay)
External control	✓	✓	✓
Timer	✓	✓	✗
Boost	✓ (Fully adjustable)	✓ (Fully adjustable)	✓ (Adjustable delay)
Flap control	✓	✓	✓
Error indication	✓ (On screen)	✓ (On screen)	✓
Autonomous Pre-Heater control	✓	✓	✓
Anti-freeze protection	✓	✓	✓
Integrated electric Post-Heater control	✓ (PWM)	✓ (PWM)	✗
Integrated LPHW coil control	✗	✓ (0–10V)	✗
Integrated Change-Over coil control	✗	✓ (0–10V)	✗
Integrated DX coil control	✗	✓ (Adjustable)	✗
External heater control (Electric, LPHW, Change-Over, DX)	✗	✓ (Adjustable)	✗
Fire mode	✓ (Adjustable)	✓ (Adjustable)	✗
Clogged filter signalization	✓ (Time)	✓ (Pressure)	✓ (Time)
Easy FW update	✓	✓	✗
QR code	✓	✓	✗
BMS connection	✓ ModBUS RTU/TCP or BACnet	✓ ModBUS RTU/TCP or BACnet	✗
Service Software	✓	✓	✗

2V SELECTION SOFTWARE ChooseGO

Essential product selecting tool for project design...

- Precise and reliable data
- Right product selection from 2V wide range
- Final result and one-click into PDF
- Supplementary documents available (technical catalogue, 2D drawings, schemes...)



MagiCAD - 3D MODELS

Building design with 2V has never been easier...

2V BIM DATABASE

MagiCAD offers designers, engineers and architects access to over 1 million intelligent 3D product models including the complete 2V's range of **Air Curtains**, **Air Heaters** and selection of **Heat Recovery Units**. MagiCAD can be used with either AutoCAD or Revit.



2V AirGENIO APPLICATION

2V product fully under your control and right at your hands...

- Product control on your smartphone
- Info about operation status
- Notifications – request for service, filter exchange, error status, etc.

Download the **2V AirGENIO application** and have it under your control!

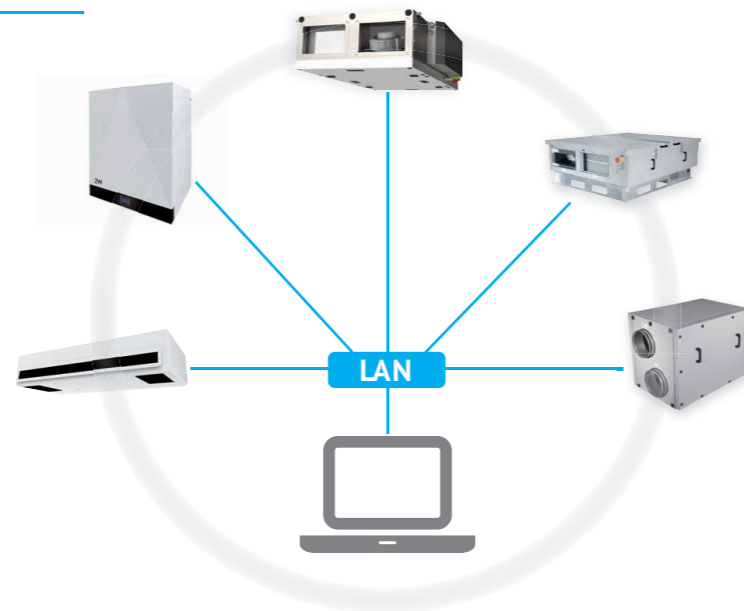


2VV SERVICE SOFTWARE

Commissioning has never been easier...

Do the 2VV device settings and testing comfortably on your computer.

- Easy and quick commissioning
- Error log – error display and identification
- Easy service (device status loading/ reset to backup setting)
- Fast FW update
- OFFLINE version



It is that easy...

- Connect your PC and the 2VV device
- Open the 2VV Service software
- ...and start the setting up process



REFERENCES

WHISPER AIR

University of Pilsen
Pilsen, Czech Republic



ALFA 85

Health Care Center
Drunen, Netherlands



ALFA 95

Medical Centre
Capelle aan den IJssel, Netherlands



WHISPER AIR

GRIFTLAND COLLEGE
Soest, Netherlands



ALFA 85

Logistics Centre
Winterswijk, Netherlands



ALFA 85

Office complex
Huh Vvastgoed, Netherlands



ALFA 85 XL

Health Care Centre
Hellevoetsluis, Netherlands



WHISPER AIR

Gemeentelijke Basisschool
Niel-bij, Belgium

