

DAPHNE FLAT

Residential heat recovery unit

2VW PARTNER
IN VENTILATION
2VV.CZ



SMART & SLEEK

Goddess of heat recovery units



FAMILY HOUSES



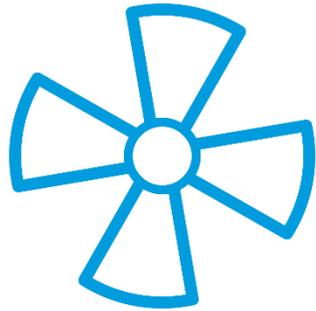


LOW-ENERGY & PASSIVE HOUSES

FLATS & APARTMENTS



DAPHNE FLAT



**High
efficiency**



**Smart
construction**



**Intelligent
control**

HIGH EFFICIENCY

Great comfort with minimized
operation cost



AIRFLOW PERFORMANCE



Size 030

350m³/h

@100Pa

Energy class **A**

AIRFLOW PERFORMANCE



Size 030

350m³/h

@100Pa

Energy class **A**



Size 050

520m³/h

@100Pa

Energy class **A+**

AIRFLOW PERFORMANCE



Size 030

350m³/h

@100Pa

Energy class **A**



Size 050

520m³/h

@100Pa

Energy class **A+**



Size 070

770m³/h

@100Pa

Energy class **A+**

HEAT RECOVERY

Heat recovery ensured by **counter-flow aluminium** cell, which strength is a high thermal efficiency and air tightness.



HEAT RECOVERY

Heat recovery efficiency
up to 96%



HEAT RECOVERY

Heat recovery efficiency
up to 96%

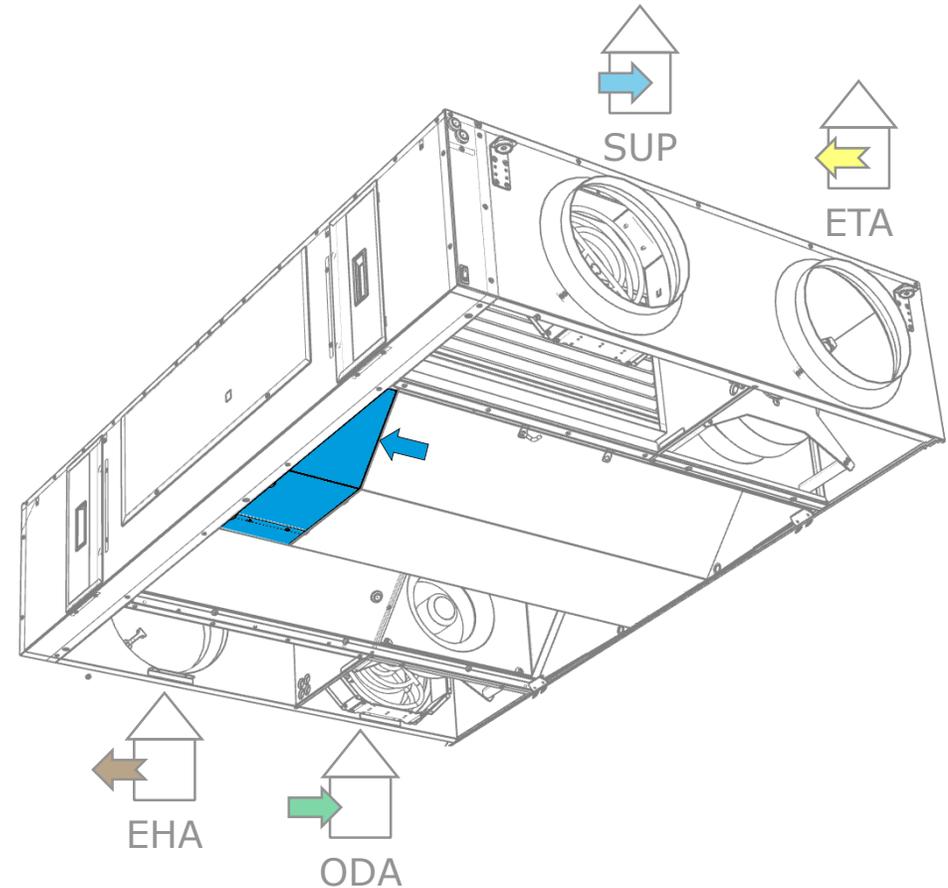
At nominal speed it is
more than 81% (EN13141-7)



FLUENT BY-PASS

0-10V control secures temperature comfort at any time.

Even during anti-freeze protection mode it ensures partial **heat recovery whenever possible.**



EC FANS

Highly-efficient centrifugal EC fans with backward curved impellers and a variable speed drive motor.

Significant for its **low energy consumption** and quiet operation.



PRE-HEATER POST-HEATER

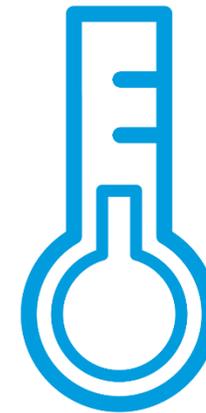
Electric (pre/post) heater with **fluent control** of the heat output.

Integral part of the unit when such option selected.

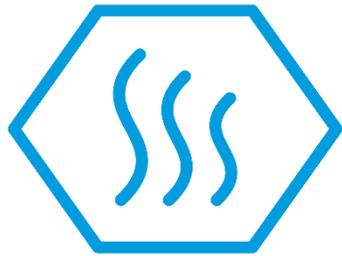


TEMPERATURE CONTROL

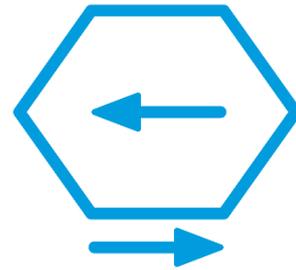
Integrated NTC temperature **sensors** (interior temperature control, fluent control of by-pass, anti-freeze protection) to ensure **most effective operation.**



HIGH EFFICIENCY



Thermal efficiency
up to 96% ensured
by aluminium
counterflow cell



Constant **thermal comfort** thanks to a
fluent control of
by-pass



Low energy consumption and
quiet operation

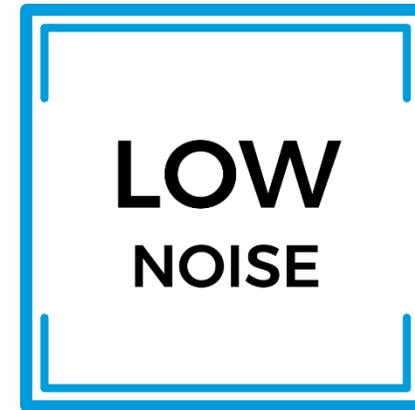
SMART CONSTRUCTION

Clever solution focused on your
needs



LOW SOUND

Sound-attenuating design, optimized air flow and attentive selection of components results in a **quiet operation** of the unit.



CEILING INSTALLATION

Valid for all 3 sizes:

030 (350m³/h @100Pa)

050 (520m³/h @100Pa)

070 (770m³/h @100Pa)



LOW PROFILE

Super slim fit for an under-ceiling
installation

Size 030 – **281mm**

Size 050 – 322mm

Size 070 – 364mm



WALL INSTALLATION

Only for size **030** (350m³/h
@100Pa)



LOW PROFILE

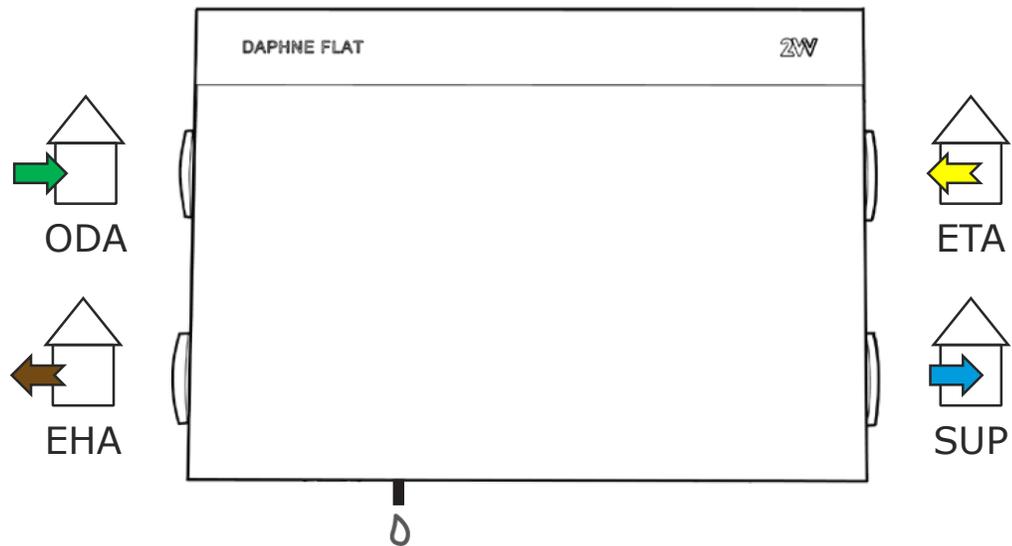
Super slim fit ideal for installation
with **limited space**

Size 030 – **281mm**



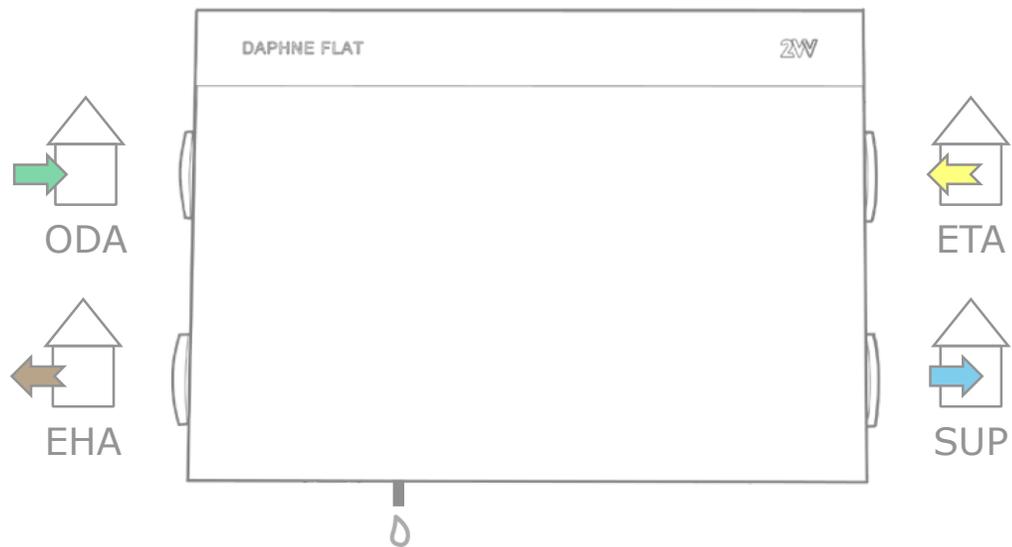
INSTALLATION SIDE

Right version (bottom view)

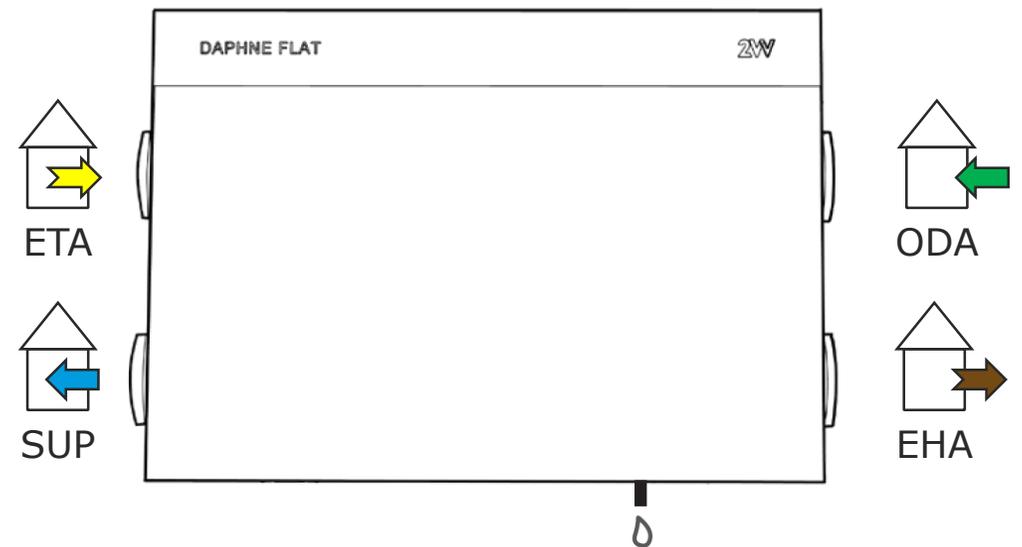


INSTALLATION SIDE

Right version (bottom view)



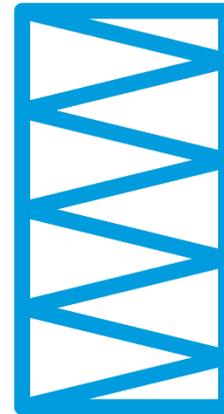
Left version (bottom view)



FILTERS

Inlet / Outlet filters are delivered with filter class: **Coarse 60%**.

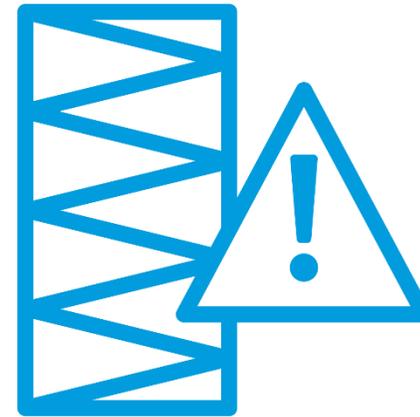
Available also filters with class **Coarse 90%** and **ePM 1 60%**.



FILTERS

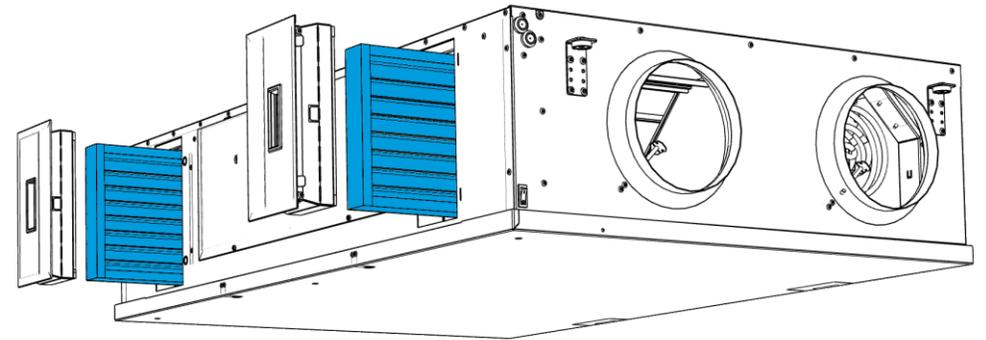
Time indication for clogged filters settable in service menu.

Clogged filters **signalization** displayed on the **control panel**.



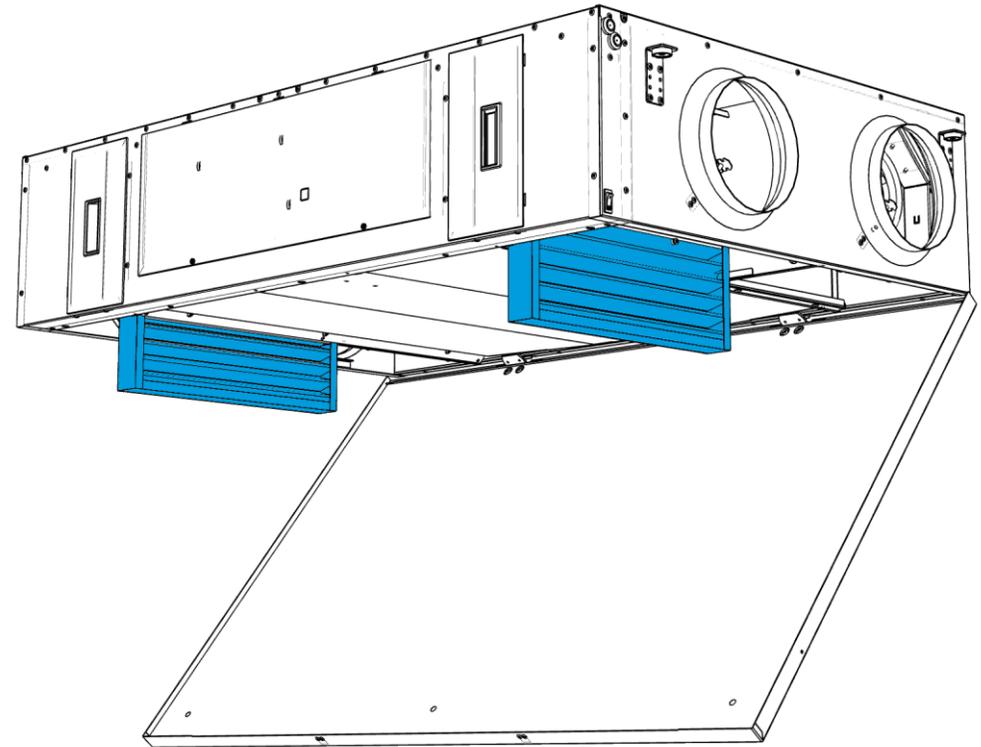
FILTERS

Side access to the filters exchange is through the filter doors (inlet / outlet).



FILTERS

Bottom access to the filters exchange is through the service door.



SMART CONSTRUCTION



Sound-attenuating design, optimised airflow and high-quality components



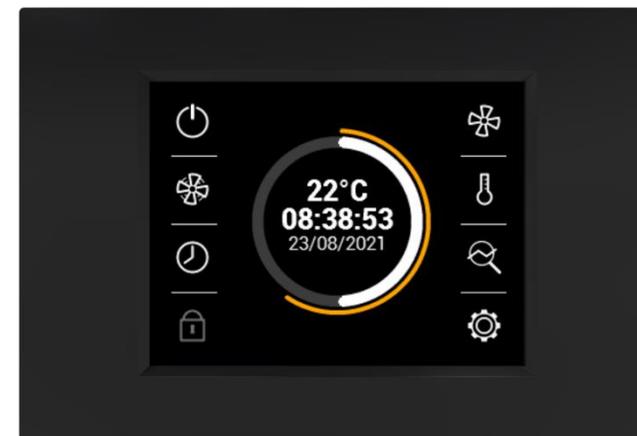
Ceiling installation and wall installation for size 030
Left / right version



Coarse 60%
Clogged filters time indication and easy exchange

AirGENIO CONTROL

Intuitive – Intelligent - Innovative



AirGENIO



Intuitive

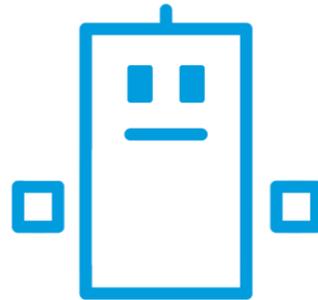
Easy to set up
and operate

AirGENIO



Intuitive

Easy to set up
and operate



Intelligent

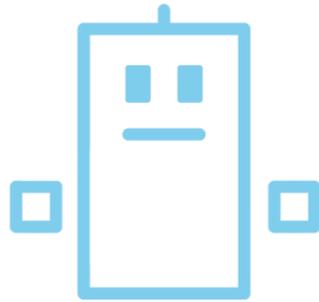
The brain of the
whole device

AirGENIO



Intuitive

Easy to set up
and operate



Intelligent

The brain of the
whole device

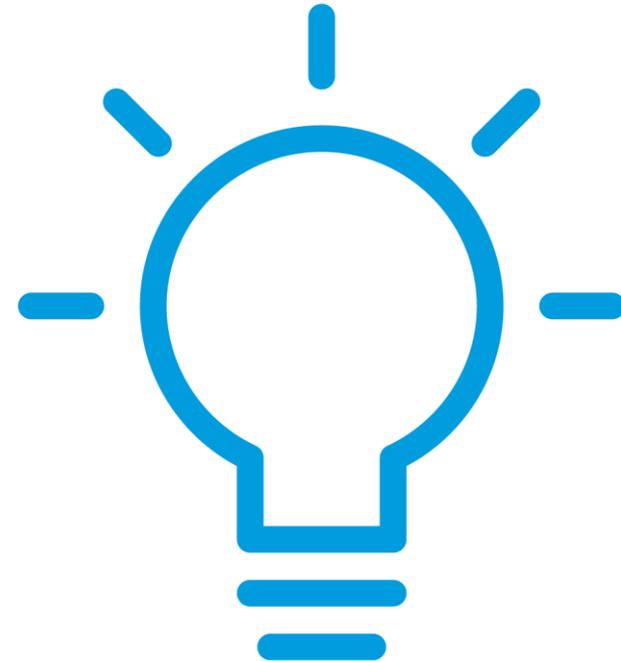


Innovative

Reflects market
trends

INTUITIVE

AirGENIO control

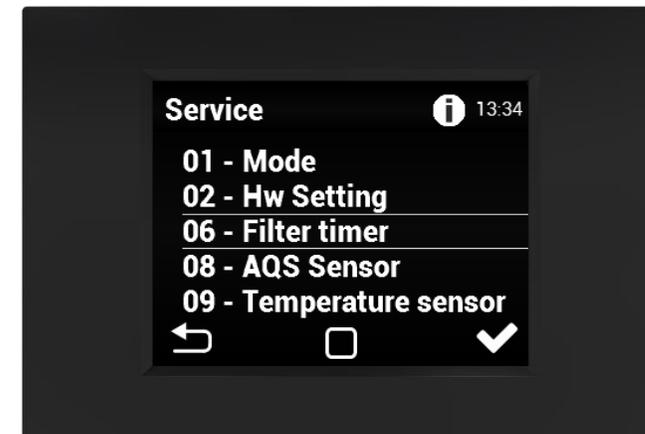
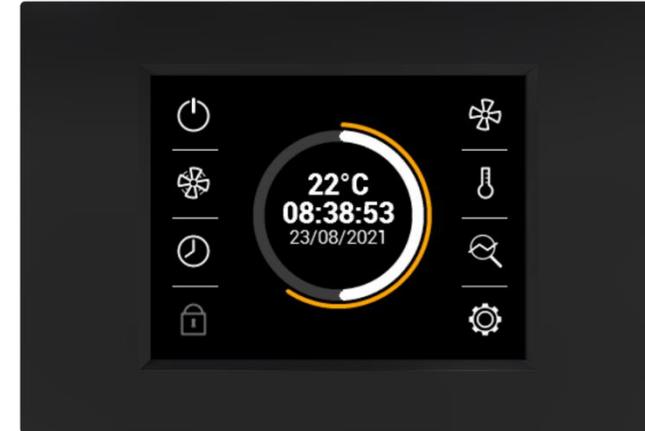


INTUITIVE

Easy control, setting up and device service

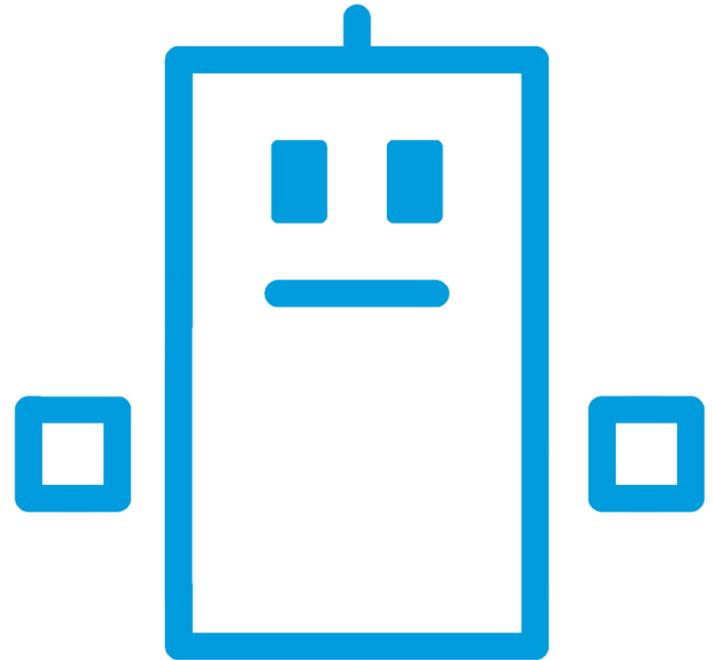
Clear icons

Users menu / Service menu



INTELLIGENT

AirGENIO control

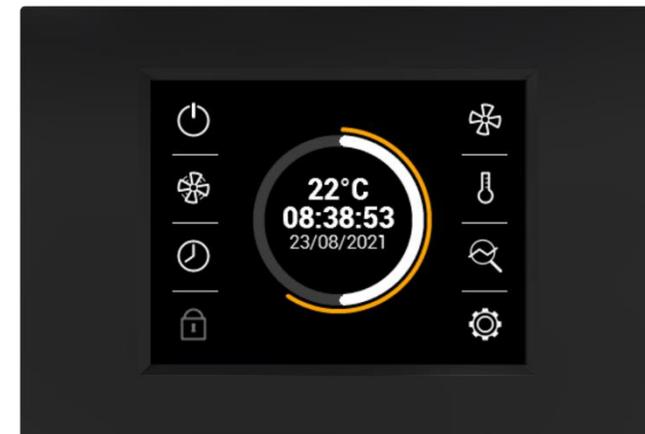


INTELLIGENT

Maximal comfort for minimal operation cost

Smart and complex algorithms

Integrated temperature sensors



INTELLIGENT

Manual / Automatic control

0-10V fan control

DCV mode when AQS connected



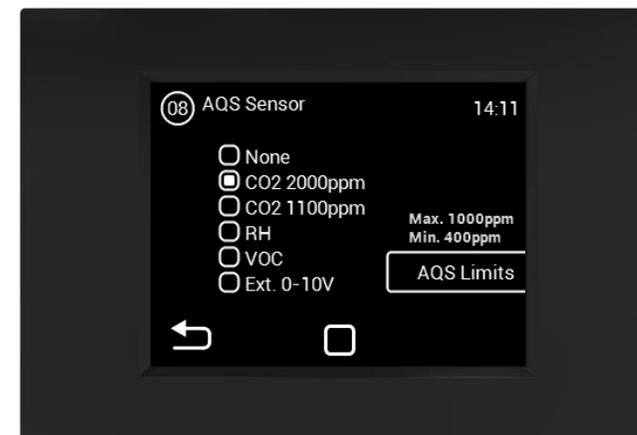
INTELLIGENT

Control based on AQS sensors

CO₂ sensor

RH sensor

Other 0-10V external sensor



INTELLIGENT

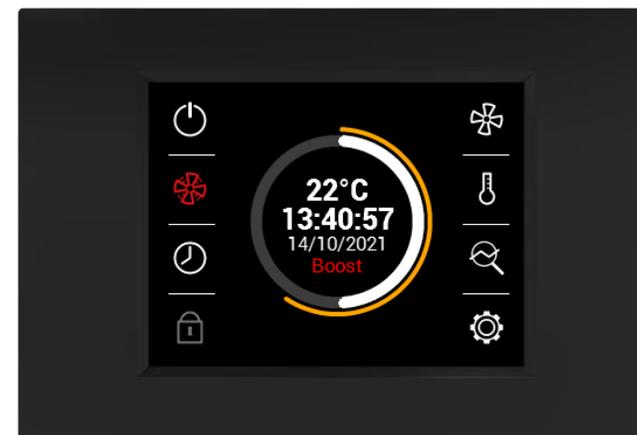
Supplementary modes:

BOOST

Free-cooling (Night mode)

Fire mode

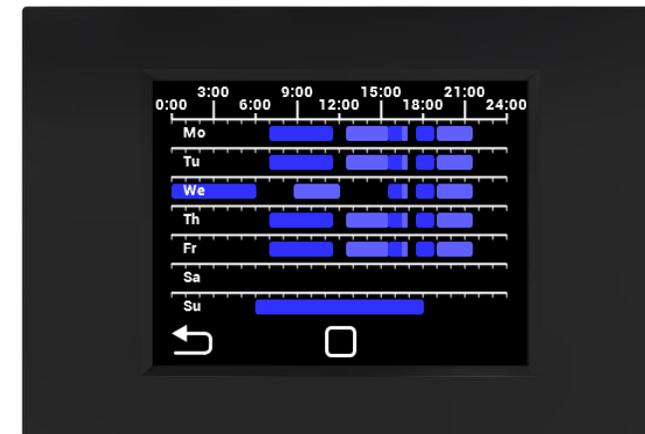
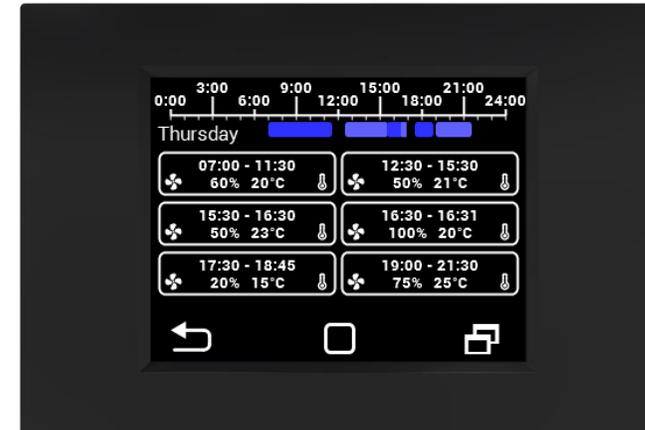
Occupancy mode



INTELLIGENT

Timer

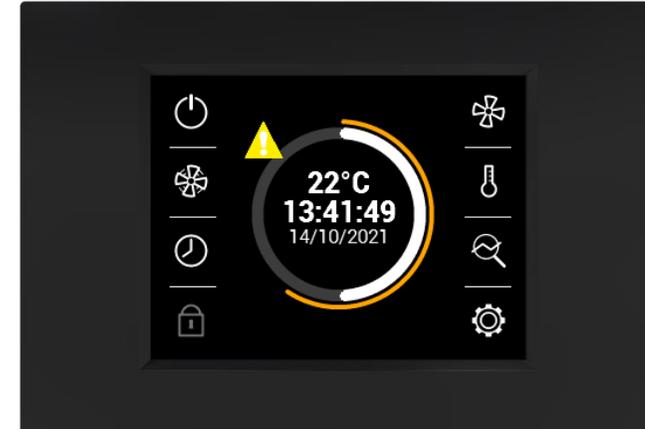
Settable 6 different time interval
for year / week / day



INTELLIGENT

Warning / Error messages

Notification displayed on the control panel

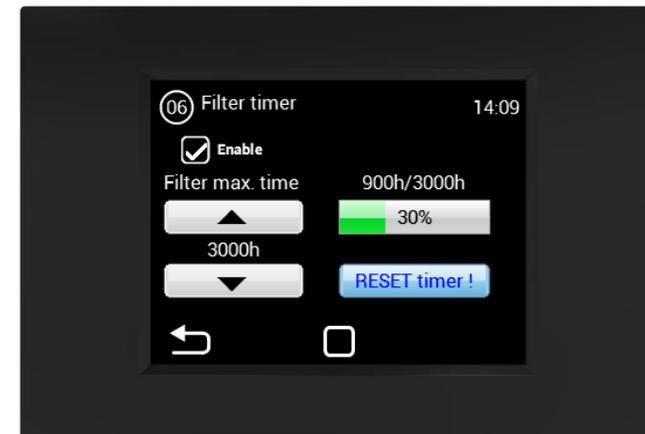


INTELLIGENT

Filter timer

Time period settable in the service menu.

Filter timer RESET in the same menu.



INNOVATIVE

AirGENIO control



INNOVATIVE

Easy unit operation via smart devices thanks to **2VV application**

Simple operation, display of run indication, error or warning messages (filter exchange, etc.)



INNOVATIVE

Possibility to connect to **BMS** via different network protocols:

ModBUS RTU/TCP, BACnet



INNOVATIVE

Easy commissioning and service thanks to **Service SW**

Restore setting from backup

Error display, identification and history list

Service Software 1.0.6.1 WA

2V HRDF HRDF1-030HPCBE44-EE1C-0A0 EAN:8595102247023

1 Mode Mode: CAV	2 He Setting Digital input (15-18): Fire input Digital output (19): NOClose	4 Fan calibration Max. flow: 900m ³ /h	8 AQ5 Sensor None	9 Temperature sensor Supply duct
10 Supply Duct limits Flow reduction under min.: enable Min.: 15°C	11 Bypass Temperature Min.: 15°C	12 Flow Offset Flow: 0%	13 Fire Flow Fire mode (flow supply + exhaust) Flow: 0%	14 Occupancy Time: 30min. Flow: 20%
15 Boost From OFF: enable Time: 1min. Flow: 100%	16 freecooling State: enable	17 PID params Preheater 1 - 20°C 60s 0min, Exchanger 1 - 20°C 60s 0min.	20 Modbus RTU Address: 1 Baudrate: 9600 Parity: Odd	21 Network DHCP server: enable DHCP: enable IP address: 192.168.0.105 Mask: 255.255.255.0 Gateway: 192.168.0.1
38 BACnet Port: B4CAC3 Unit ID: 1 Local broadcast: 192.168.0.255	40 Other settings Summer time: disable			

Disconnect unit
FW update
Start-up protocol

Network
MAC Address: 08:80:39:5C:19:EF
App PIR: 4411
IP address: 192.168.0.105
Mask: 255.255.255.0
Gateway: 192.168.0.1
DHCP: 0
DHCP Server: 1
Modbus
Modbus TCP port: 502
Modbus RTU address: 1

Service Software 1.0.6.1 WA

2V HRDF HRDF1-030HPCBE44-EE1C-0A0 EAN:8595102247023

300m³/h
22°C

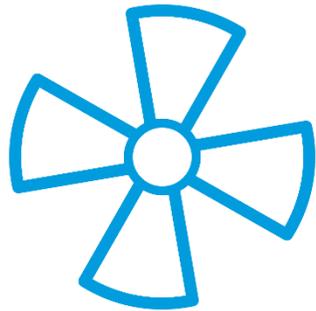
22,4°C 0% 0% 16Pa + 22,7°C 0% 4Pa
22,4°C 99% 302 m³/h 22,2°C 302 m³/h 22,2°C

Control HW test Error logg Service Error Relay

300 m³/h
Mode CAV
1 - Request filters calibration - service menu

Bootloader MB A: 107
CFG Unit id: 100
Firmware CP1: 145
Bootloader CP1: 107
User PIR: 0000
Network
MAC Address: 08:80:39:5C:19:EF
App PIR: 4411
IP address: 192.168.0.105
Mask: 255.255.255.0
Gateway: 192.168.0.1
DHCP: 0
DHCP Server: 1
Modbus
Modbus TCP port: 502

DAPHNE FLAT



High efficiency

Thermal efficiency and interior comfort at low operation cost



Smart construction

Quiet ventilation designed for ceiling (wall) installation



Intelligent control

Integrated control system optimizing the operation

2VV SUPPORT

Sales and after-sales assistance

TECHNICAL DOCUMENTATION

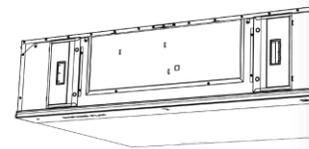
Technical sheet
Manuals

List of recommended accessories

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EN

DAPHNE F



INSTALLATION

wh131-05-21

DAPHNE FLAT | HRDF1
2VW

HEAT RECOVERY

ErP A+



ENERGY
SAVING

LOW
NOISE

ANTI
FREEZE

Choose
+CO

SERVICE
SW



BASIC FEATURES

DAPHNE FLAT is a highly energy-efficient heat recovery unit designed for either ceiling or wall mounting installation and thanks to its super-low profile the unit is highly convenient for interiors with limited space. **DAPHNE FLAT** is designed for installations in residential premises such as **family houses, apartment buildings, low-energy and passive houses.**

- Nominal airflow **350, 520, 770 m³/h** (at 100Pa)
- Energy class **A / A+**
- **Super quiet operation**
- **Ceiling and Wall installation**
- **Slim profile** convenient for use in premises with limited space
- **Energy-efficient EC fans** with low SFP and quiet operation
- **Aluminium counterflow heat exchanger** with recovery efficiency up to 96% (EN308)
- **Stepless fully automatic bypass-damper control** (temperature control, free-cooling, anti-freeze protection)
- **AIRGENO COMFORT** control system integrated
- **CAV or DCV ventilation** based on AQ5 sensors (CO₂, RH, VOC)
- **BMS control** via ModBUS RTU, ModBUS TCP or BACnet
- **Control** via Smart Device
- **Easy installation and maintenance**

The unit is designed to be operated in a dry indoor environment (relative humidity not exceeding 80%) and at an ambient temperature in the range from +5°C up to +40°C.
The unit is designed for transporting standard atmospheric air that is free of dust, grease, chemical emissions and other impurities. The unit has an IP rating of IP 20.
It is recommended that the heat recovery project always be designed by a qualified HVAC designer, engineer or architect.

AFTER-SALES SUPPORT

Technical support **hotline**

support@2vv.cz



Petr NEUMANN



Martin KRÁTKÝ



Lukáš BORŮVKA



Sergiy SHRAMKO

PRODUCT REFERENCES

DAPHNE FLAT heat recovery unit



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