

The new intelligent ventilation

RH + CO₂ + VOC
= SMART



Swegon
Home Solutions

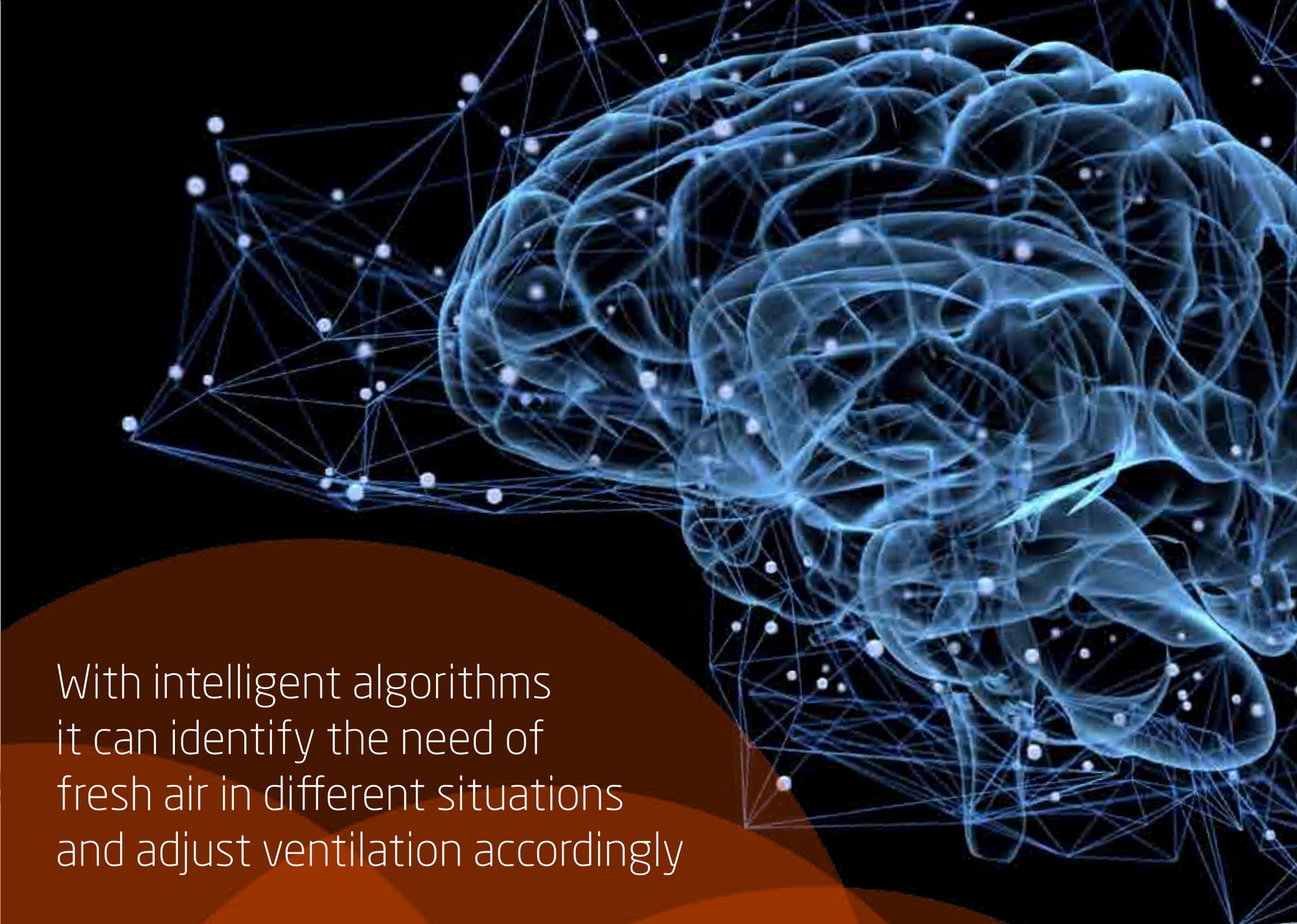
T 0320 - 28 61 81 | www.aerhaan-klimaatechniek.nl

Als het om lucht gaat.

**AUERHAAN**
KLIMAATTECHNIEK

Smart measures indoor CO₂ and humidity with inbuilt sensors and can even sense different smells and odours!

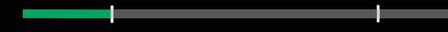




With intelligent algorithms
it can identify the need of
fresh air in different situations
and adjust ventilation accordingly



Ventilation level



Humidity



CO₂



VOC



It knows when
you leave home...



Ventilation level



Humidity



CO₂



VOC



and when you
come back!



Ventilation level



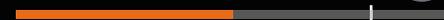
Humidity



CO₂



VOC



When you do the laundry...



Ventilation level



Humidity



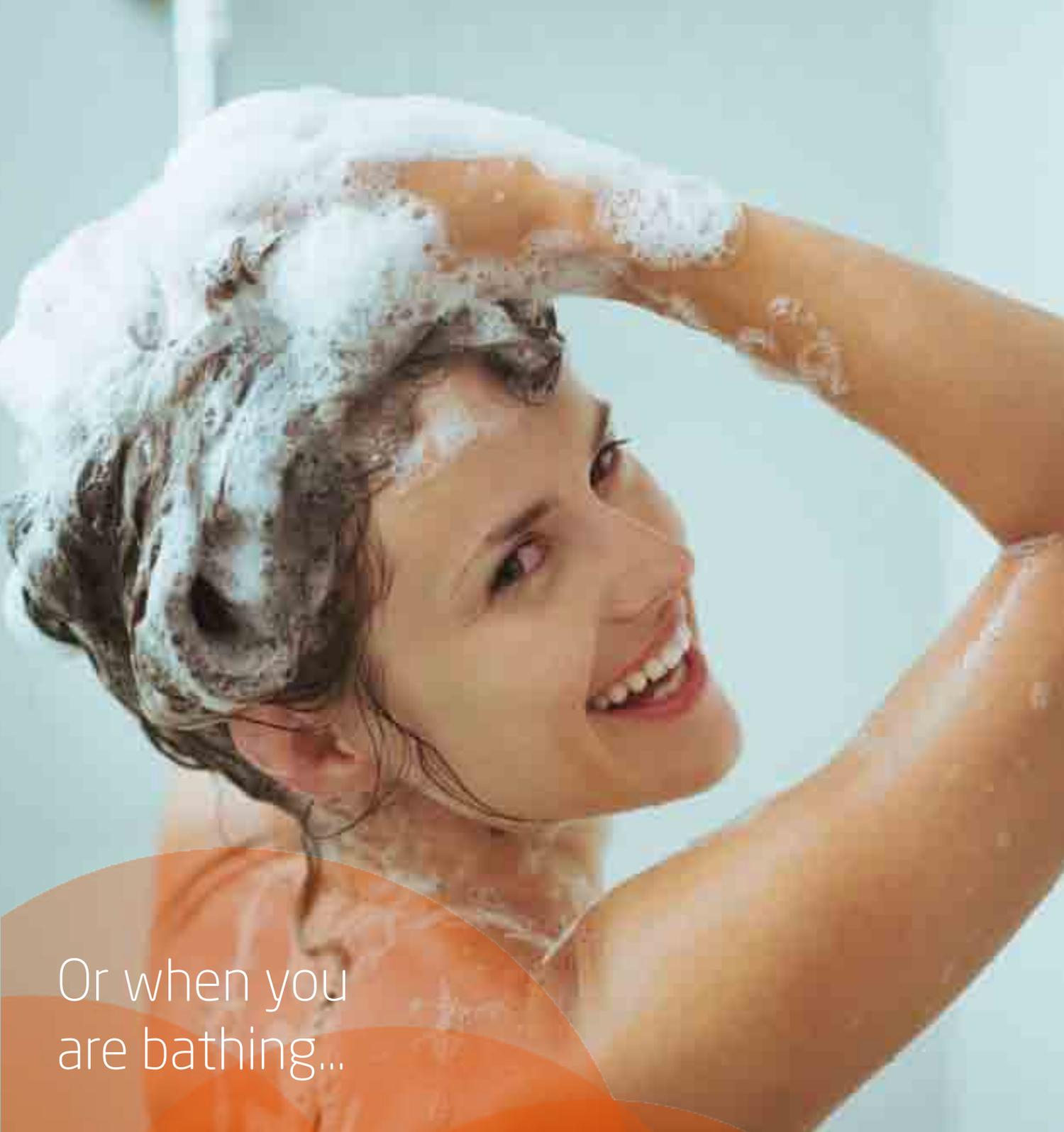
CO₂



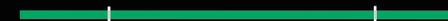
VOC



When you
are cooking...



Ventilation level



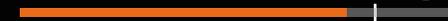
Humidity



CO₂



VOC



Or when you
are bathing...

AVAILABLE SMART AUTO FUNCTIONS



AUTO HUMIDITY CONTROL (RH)

In the morning and in the evening activities such as bathing and cooking increase humidity levels in the apartment Smart measures and calculates average humidity in the apartment and sets boost limits accordingly. Smart ventilation removes humidity efficiently but also simultaneously minimizes the sound effect of the fans. Once RH levels reach boost limits ventilation sets automatically to boost mode in order to remove excess humidity. Ventilation adjusts steplessly based on demand.



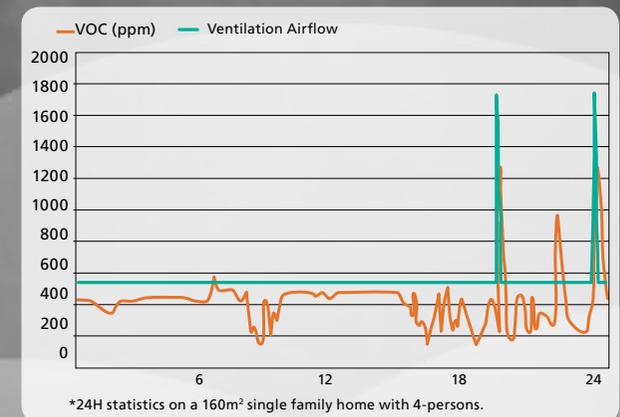
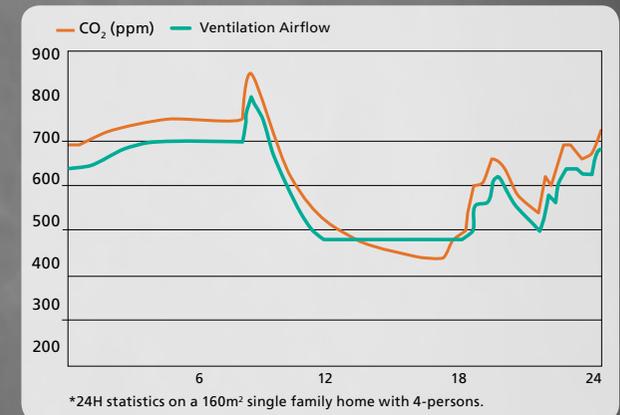
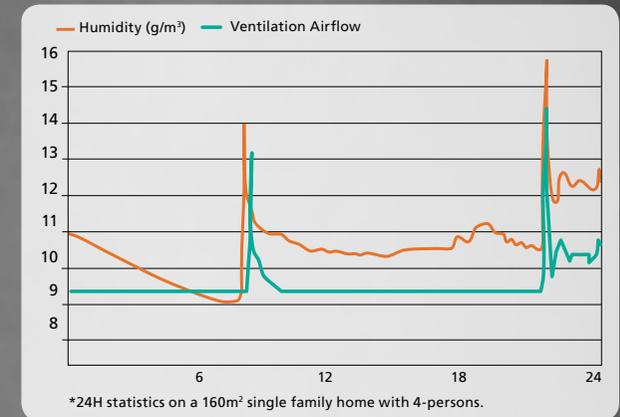
AUTO HUMIDITY CONTROL (RH) + AUTO HOME/AWAY/BOOST (CO₂)

In the morning and evening CO₂ levels increase due to increased activities in the house. During daytime when nobody is in the apartment the CO₂ levels decrease. Smart measures CO₂ levels with inbuilt sensors. Home and Away limits are calibrated and set in place. Ventilation level adjusts steplessly according to CO₂ levels down up to full boost and down to away limit.



AUTO HUMIDITY CONTROL (RH) + AUTO AIR QUALITY CONTROL (RH+VOC)

Inbuilt VOC sensor detects different organic compounds like smells and odours from exhaust air. Cooking and other activities create increased level of VOC and ventilation sets automatically to boost mode in order to remove excess humidity. By combining Auto Humidity Control and Auto Home Away Boost the Smart ventilation adjust ventilation level continuously based on CO₂ levels and increases ventilation to boost level when humidity increases above calculated average limits.



SMART BALANCING FUNCTIONS



FIREPLACE FUNCTION

- Modern buildings are built extremely air tight to gain maximum energy efficiency
- This will however cause problems when lighting up and burning a fireplace if there is not sufficient amount of compensation air available
- The purpose of fireplace function is to create over pressure in house when fireplace is light up. And when fireplace is on it compensates air drawn by fireplace.
- Fireplace function can be started with external switch or from user panel.
- Preheater can be configured on when fireplace function is active.
- Fireplace overpressure compensation work in 3 steps:
 - Defrost step if cold outdoor temperature
 - Fireplace light up step (max overpressure)
 - Burning step (compensate air needed in burning)
 - Overpressure decreases while the burning proceeds up to maximum length of 60 minutes.
- When the functionality is being used in temperatures below -10°C the ventilation unit must be equipped with a preheater.





COOKERHOOD FUNCTION

- The purpose of cooker hood functions is to compensate air pressures when cooker hood is used.
- Pressure compensation is done by increasing the supply air flow. (or/and decreasing the exhaust air flow.)
- Cooker hood function is started when damper is opened from Smart hood, or when configured input is activated.
- When the functionality is being used in temperatures below -10°C the ventilation unit must be equipped with a preheater.



CENTRAL VACUUM CLEANER FUNCTION

- The purpose of CVC functions is to compensate air pressures when CVC is used.
- Pressure compensation is done by increasing the supply air flow. (or/and decreasing the exhaust air flow.)
- CVC function is started manually from User Panel or when configured input is activated
- When the functionality is being used in temperatures below -10°C the ventilation unit must be equipped with a preheater.

THE SMART ADVANTAGES IN A NUTSHELL



- Saves energy by lowering ventilation automatically when not needed
- Guarantees healthy indoor and fresh air by increasing ventilation automatically when CO₂, RH or VOC levels increase
- Helps to prevent moisture problems by increasing ventilation automatically when needed
- Quarantees balanced ventilation in your apartment.

Above all, you don't need to worry about ventilation. You can just relax and let Smart do it all automatically!

