



# SHI PRODUCT PASSPORT

Find products. Certify buildings.

SHI Product Passport No.:

**14136-10-1000**

## Swegon CASA W3xs

Product group: Technical building equipment / Sanitary facilities - Ventilation



bluMartin GmbH  
Argelsrieder Feld 1b,  
82234 Wessling



### Product qualities:



*Köttner*  
Helmut Köttner  
Scientific Director  
Freiburg, 02 February 2026

Product:

**Swegon CASA W3xs**

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The SHI Database is the first and only database for construction products whose comprehensive processes and data accuracy are regularly verified by the independent auditing company SGS-TÜV Saar





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## SHI Product Assessment 2024

Since 2008, Sentinel Holding Institut GmbH (SHI) has been establishing a unique standard for products that support healthy indoor air. Experts carry out independent product assessments based on clear and transparent criteria. In addition, the independent testing company SGS regularly audits the processes and data accuracy.

| Criteria               | Product category | Harmful substance limit  | Assessment                   |
|------------------------|------------------|--|------------------------------|
| SHI Product Assessment | Other products   | TVOC $\leq 300 \mu\text{g}/\text{m}^3$<br>Formaldehyd $\leq 24 \mu\text{g}/\text{m}^3$ | Indoor Air Quality Certified |

Valid until: 11 September 2026



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## ■ **QNG - Qualitätssiegel Nachhaltiges Gebäude**

The Qualitätssiegel Nachhaltiges Gebäude (Quality Seal for Sustainable Buildings), developed by the German Federal Ministry for Housing, Urban Development and Building (BMWSB), defines requirements for the ecological, socio-cultural, and economic quality of buildings. The Sentinel Holding Institut evaluates construction products in accordance with QNG requirements for certification and awards the QNG ready label. Compliance with the QNG standard is a prerequisite for eligibility for the KfW funding programme. For certain product groups, the QNG currently has no specific requirements defined. Although classified as not assessment-relevant, these products remain suitable for QNG-certified projects.

| Criteria   | Pos. / product group | Considered substances | QNG assessment                             |
|--|----------------------|-----------------------|--|
| 3.1.3<br>Schadstoffvermeidung in<br>Baumaterialien | not applicable       | not applicable        | QNG ready - Not relevant for<br>assessment |



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## **DGNB New Construction 2023**

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings. The 2023 version sets high standards for ecological, economic, socio-cultural, and functional aspects throughout the entire life cycle of a building.

| Criteria   | No. / Relevant building components / construction materials / surfaces | Considered substances / aspects | Quality level               |
|--|--|---------------------------------|-----------------------------|
| ENV 1.2 Local environmental impact, 03.05.2024 (3rd edition) |  |                                 | Not relevant for assessment |

| Criteria   | No. / Relevant building components / construction materials / surfaces | Considered substances / aspects | Quality level               |
|--|--|---------------------------------|-----------------------------|
| ENV 1.2 Local environmental impact, 29.05.2025 (4th edition) | not applicable   |                                 | Not relevant for assessment |



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## DGNB New Construction 2018

The DGNB System (German Sustainable Building Council) assesses the sustainability of various types of buildings. It can be applied to both large-scale private and commercial projects as well as smaller residential buildings.

| Criteria                           | No. / Relevant building components / construction materials / surfaces | Considered substances / aspects | Quality level               |
|------------------------------------|--|---------------------------------|-----------------------------|
| ENV 1.2 Local environmental impact |  |                                 | Not relevant for assessment |

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## **BNB-BN Neubau V2015**

The Bewertungssystem Nachhaltiges Bauen (Assessment System for Sustainable Building) is a tool for evaluating public office and administrative buildings, educational facilities, laboratory buildings, and outdoor areas in Germany. The BNB was developed by the former Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and is now overseen by the Federal Ministry for Housing, Urban Development and Building (BMWSB).

| Criteria                            | Pos. / product type | Considered substance group | Quality level               |
|-------------------------------------|---------------------|----------------------------|-----------------------------|
| 1.1.6 Risiken für die lokale Umwelt |                     |                            | Not relevant for assessment |



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## EU taxonomy

The EU Taxonomy classifies economic activities and products according to their environmental impact. At the product level, the EU regulation defines clear requirements for harmful substances, formaldehyde and volatile organic compounds (VOCs). The Sentinel Holding Institut GmbH labels qualified products that meet this standard.

| Criteria  | Product type | Considered substances           | Assessment            |
|---|--------------|---------------------------------|-----------------------|
| DNSH - Pollution prevention and control                 |              | Substances according to Annex C | EU taxonomy compliant |
| <b>Verification:</b> Herstellererklärung vom 25.03.2025 |              |                                 |                       |

Product:

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## BREEAM DE Neubau 2018

BREEAM (Building Research Establishment Environmental Assessment Methodology) is a UK-based building assessment system that evaluates the sustainability of new constructions, refurbishments, and conversions. Developed by the Building Research Establishment (BRE), the system aims to assess and improve the environmental, economic, and social performance of buildings.

| Criteria                  | Product category | Considered substances | Quality level               |
|---------------------------|------------------|-----------------------|-----------------------------|
| Hea o2 Indoor Air Quality |                  |                       | Not relevant for assessment |



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## Product labels

In the construction industry, high-quality materials are crucial for a building's indoor air quality and sustainability. Product labels and certificates offer guidance to meet these requirements. However, the evaluation criteria of these labels vary, and it is important to carefully assess them to ensure products align with the specific needs of a construction project.



This product is SHI Indoor Air Quality certified and recommended by Sentinel Holding Institut. Indoor-air-focused construction, renovation, and operation of buildings is made possible by transparent and verifiable criteria thanks to the Sentinel Holding concept.



Products bearing the Sentinel Holding Institute QNG-ready seal are suitable for projects aiming to achieve the "Qualitätssiegel Nachhaltiges Gebäude" (Quality Seal for Sustainable Buildings). QNG-ready products meet the requirements of QNG Appendix Document 3.1.3, "Avoidance of Harmful Substances in Building Materials." The KfW loan program Climate-Friendly New Construction with QNG may allow for additional funding.

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## Legal notices

(\*) These criteria apply to the construction project as a whole. While individual products can positively contribute to the overall building score through proper planning, the evaluation is always conducted at the building level. The information was provided entirely by the manufacturer.

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Find our criteria here: <https://www.sentinel-holding.eu/de/Themenwelten/Pr%C3%BCfkriterien%20f%C3%BCr%20Produkte>

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# CASA W3 xs Genius

## Technical catalogue



## QUICK FACTS

- CASA Genius control system
- Demand-controlled humidity function as standard
- Automatic summer function and passive cooling
- Anti-frost protection ensures continuous ventilation
- External coils for heating and cooling as an option
- Can be connected to the automated building management system (I/O/Modbus, connection box as standard)
- Mounted on the wall or ceiling

| UNIT TECHNICAL CONTENT                |   |
|---------------------------------------|---|
| Air flow range                        | 10-80 l/s 36-288 m <sup>3</sup> /h  |
| Dimensions, w x l x h                 | 597 x 599 x 446 mm  |
| Duct outlets                          | 4 x Ø 125 mm  |
| Cooker hood outlet                    | Ø 125 mm  |
| Energy calculations and acoustic data | <a href="http://procasa.swegon.com">procasa.swegon.com</a>                  |
| Connection power                      | 1240 W   1740 W   |
| Power connection                      | 230 V, 50 Hz, 10 A  |
| Fans                                  | 220 W, EC   |
| Filters                               | ISO ePM1 50% (F7) filter for supply air and ISO coarse (G3) for extract air |
| Colour                                | Exterior White, RAL 9016<br>(corresponds to NCS S0502-G50Y)                 |

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# Technical description

## Swegon CASA W3 xs Genius

Air handling unit with counterflow heat exchanger (597 x 599 x 446 mm, Ø 125 mm) suitable installation in homes (150 m<sup>2</sup>). The unit's sound level is low. The intelligent demand-controlled humidity function is standard.



## Indoor environmental quality

### Ventilation control

The unit is controlled steplessly with automation functions to guarantee the best indoor environmental quality. The user can select five operating modes home, away, boost, travelling and home+ by using control panel, cooker hood or Swegon CASA app. Operation modes can be automated with unit's weekly programs.

### Temperature control

The supply air temperature is controlled with heat exchanger and if needed with optional heating or cooling element.

The unit has automatic summer time detection. The function sets lower supply air temperature setpoint and boost ventilation in order to bring more fresh outdoor air to the apartment during summer nights.

## Available variants

Standard units are available in following variants:

- Unit with RH-sensor, connection power 1240 W  
**L** (exhaust air left) / **R** (exhaust air right)
- Unit with RH- and CO<sub>2</sub>-sensor,  
connection power 1240 W  
**L** (exhaust air left) / **R** (exhaust air right)
- Unit with RH- and VOC-sensor,  
connection power 1240 W  
**L** (exhaust air left) / **R** (exhaust air right)
- Unit with RH-sensor, connection power 740 W  
**L** (exhaust air left) / **R** (exhaust air right)



## Components

### Fans

CASA W3 xs is equipped with energy efficient EC fans.

### Filter

The ventilation unit is equipped with ISO ePM1 50% (F7) filter for supply air and ISO coarse (G3) for extract air. The need of filter replacement is indicated on the control panel and on the CASA cooker hood.

### Heat exchanger

The ventilation unit is equipped with **a plate heat exchanger which is based on the counterflow technology**. The incoming and outgoing air flows in a counterflow plate heat exchanger use separate channels, and thanks to this the heat exchanger does not return any odours back into the room air. It also does not return moisture and is therefore very well suited to dwellings with high humidity (eg abundant sauna and laundry).

The heat exchanger operates with the best possible efficiency in all conditions. This is possible with the demand and learning defrosting technology, which steplessly controls the heaters. Intelligent defrosting never leads cold outdoor air past the heat exchanger, keeping the supply air temperature constantly at a comfortable level.

### External connections

All connections can be made without opening the electrical box. Plug-in modules are available for external connections. Wide variety of IO functions are available.

The ventilation unit is equipped with In-build Modbus and connection box.

Modbus cabling can also be made easily with external cable (SEC) or module (SEM). Unit can be fully controlled with Modbus and all external IO's can be configured to Modbus usage.

## Protective functions

### The heat exchanger freeze protection

The defrosting function guarantees continuous ventilation and maintains units performance even during extreme conditions. If reheat can't maintain sufficient supply air temperature, the air flows are reduced.

### The fan overheating protection

The fan overheat protection stops the fan if the temperature rises too high and is reseted automatically. If protection stops the fans an alarm is generated.

### Electric air heaters

The electric heater is equipped with automatic and manual overtemperature protection. Overheat cuts the heating circuit and generates an alarm.

### Cold supply air

The ventilation unit has built-in condensation protection. If the supply air is too cold, the ventilation unit stops and an alarm is generated

### High temperature

If supply air or units internal temperature is detected dangerously high the unit is stopped and an alarm is generated.

### Temperature sensors

If a sensor fault is detected, an alarm is generated. If the faulted sensor is critical the ventilation unit is stopped. The ventilation unit returns to normal mode once the fault has been corrected.

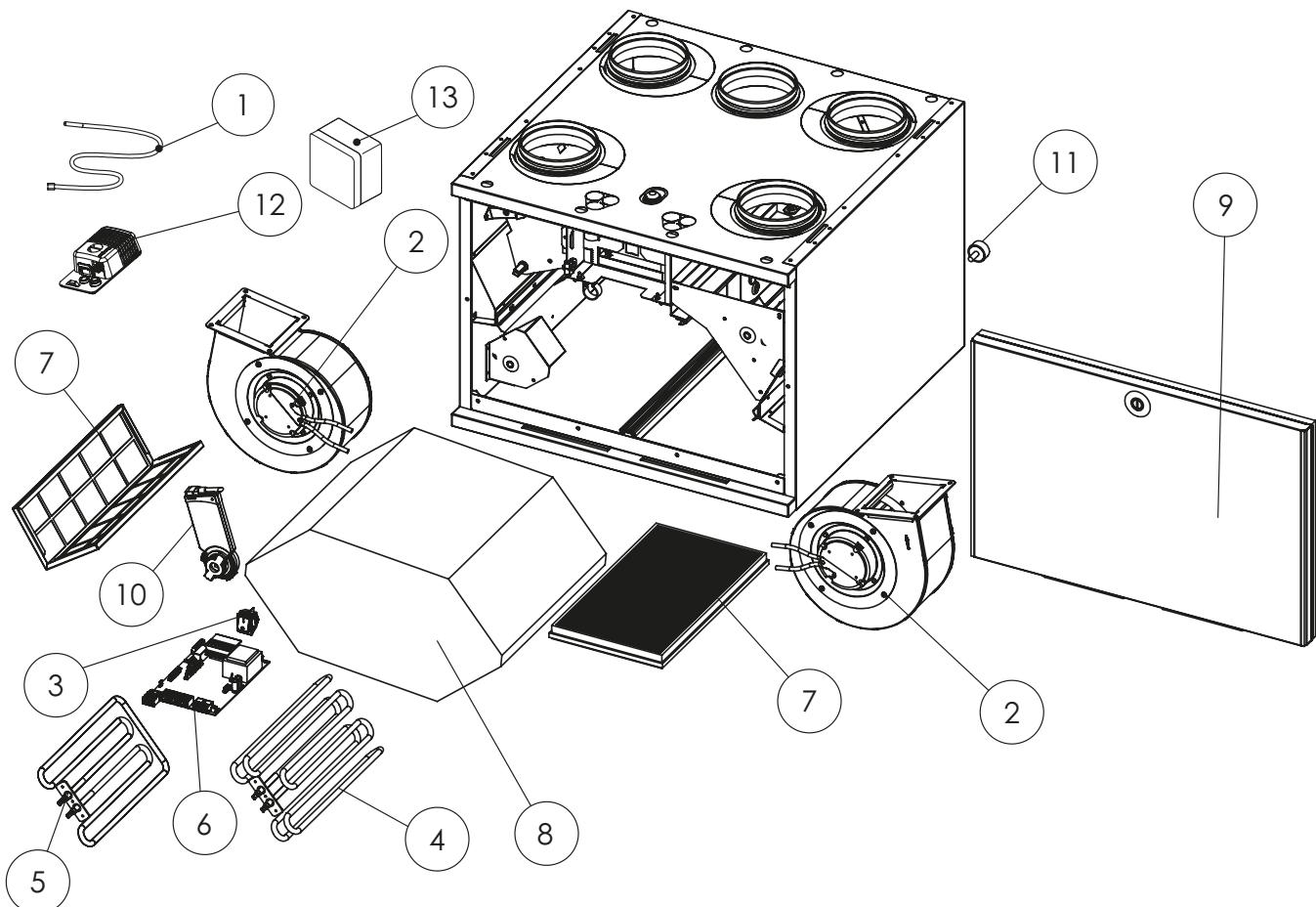


## The delivery includes

- Ventilation unit
- Anti-vibration mountings (2 pcs.)
- Quick Guide
- Installation and commissioning instruction
- Product fiche

## Standard connections

- Power cord with earthed plug (2 m)
- SEM connection module with cable (2 m)
- Modular cable with RJ9 connector (1.5 m)
- Freely configurable I/O contacts for connection of accessories (2 pcs.)



1. Temperature sensor
2. Fan (left + right)
3. Operating switch
4. Pre-heating module
5. Reheating module
6. Genius control board
7. Set of filters: ISO ePM1 50% (F7) for supply air, ISO coarse (G3) for extract air
8. Heat exchanger
9. Door
10. Damper motor
11. Anti-vibration mountings (2 pcs.)
12. Sensor package, RH
13. Connection box

# Swegon CASA Genius

## Intelligent control of the ventilation

With Swegon CASA Genius residents can monitor the indoor air quality (RH, CO<sub>2</sub>, VOC, °C), adjust ventilation to their wishes or let the intelligent control to adjust ventilation automatically while saving energy and providing fresh and healthy indoor air.



### The Swegon CASA control panel (GC10)

Wall-mounted touch screen for external or flush mounting. From the touch screen user can monitor ventilation, change ventilation mode, change the settings and commission the ventilation unit. The screen can be connected to the home WLAN, enabling the ventilation to be controlled remotely from a Swegon CASA mobile app.



### The Swegon CASA app

With Swegon CASA app residents can use all the control functions remotely from their own smartphone. Users get more information about their home's air quality as well as valuable instructions and advice about the ventilation (requires Swegon Genius control panel).



### The CASA Service app

for quick and easy commissioning. The app works locally together with the ventilation unit and doesn't require connection to network. The app defines the I/O connections, presets the fan speeds that correspond to specified air volumes, as well as automatically sets air volumes for home and boost mode. Finished settings can be saved in the app and copied to the next apartment (requires Swegon Genius control panel).



### Swegon CASA cooker hood

With cooker hoods, it is possible to control the ventilation unit's operating mode (home, away, boost), the cooker hood's shut-off damper and the lighting in the hood. The system balances the ventilation automatically when using the cooker hood.



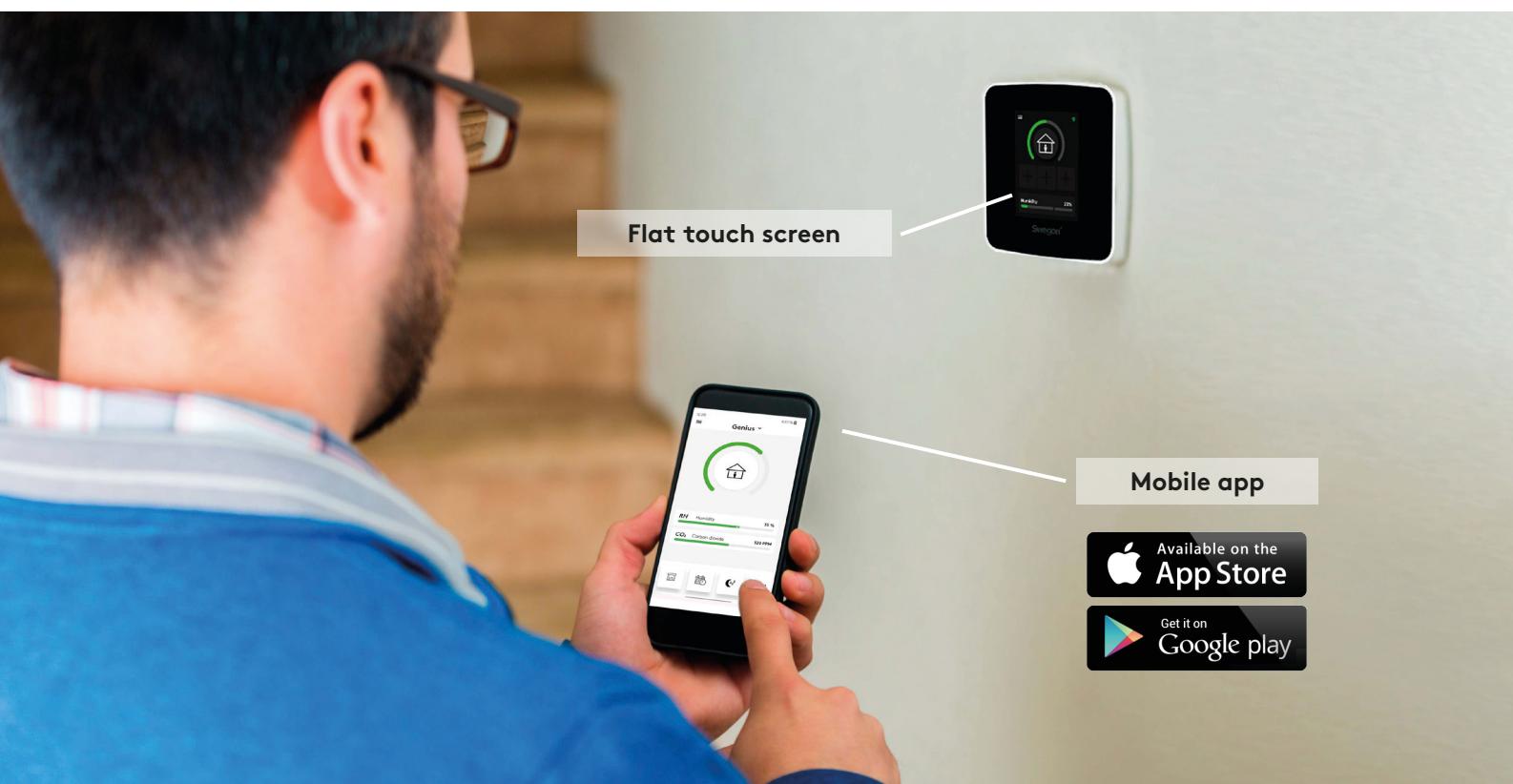
### The Swegon CASA HOME/AWAY/BOOST control switch (GC04)

Wall-mounted control switch for selecting boost, home and away modes.



### Home automation

Can be connected to the home automation for centralised monitoring and control, either directly via configurable I/O or with the aid of a separate Modbus connection module (SEM).



## Basic modes

You can switch as required to an appropriate operating mode or let the pre-programmed weekly clock switch operating mode according to the diurnal rhythm you want.



### Home

Normal air flow. Sufficient amount of fresh indoor air to ensure the wellbeing of the residents and the structural building elements when there are people in the home.



### Home+

Higher air flow. Can be used when more ventilation is required. The home owner can change the efficiency of the operating mode from the settings.



### Boost

High air flow. Used if the ventilation requirement increases, for example, when cooking, taking a bath or drying laundry, or when an unusually large number of people are in the home.



### Away

Low air flow. Reduces the energy consumption when nobody is present in the home.



### Travelling

Very low air flow and lower supply air temperature. Used when nobody is present in the home.

## Automatic functions

The intelligent ventilation monitors the quality of the indoor air and adjusts the ventilation automatically.



RH Humidity

35%

### Automatic RH system included as standard

Humidity automation removes damaging moisture. The intelligent control analyses the indoor air continuously and regulates the ventilation steplessly so that excess moisture is removed, for example when you are washing.



CO<sub>2</sub> Carbon dioxide

520 PPM

### Automatic CO<sub>2</sub> system as optional equipment

Automatically lowers the ventilation and saves energy when nobody is in the home. When the residents are at home, the ventilation is automatically boosted to bring exactly the right amount of fresh air into the home.



VOC Air quality

950 PPM

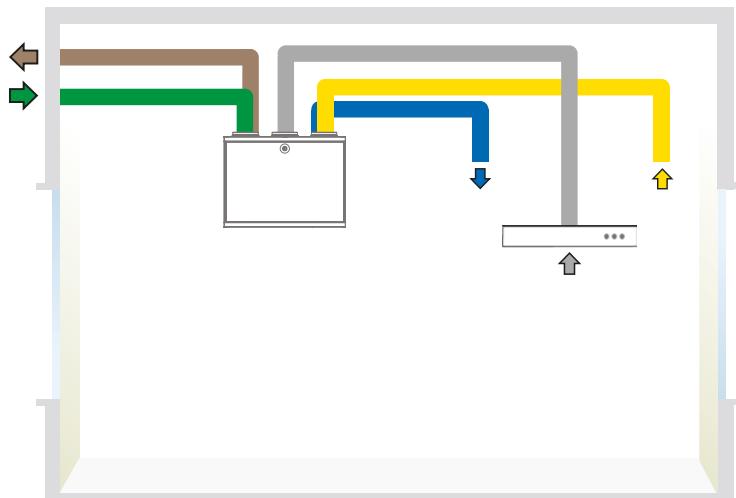
### Automatic VOC system as optional equipment

The automatic air quality system boosts the ventilation if pollution, odours or vapours (evaporating organic compounds) are detected in the indoor air.

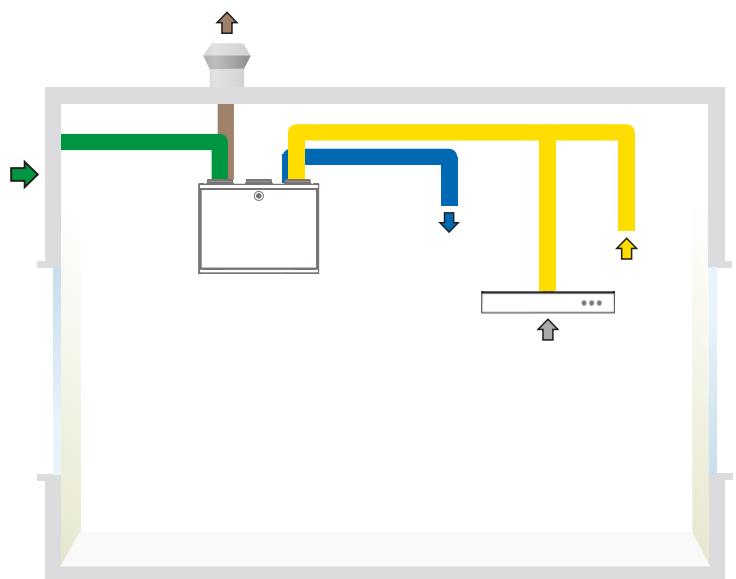




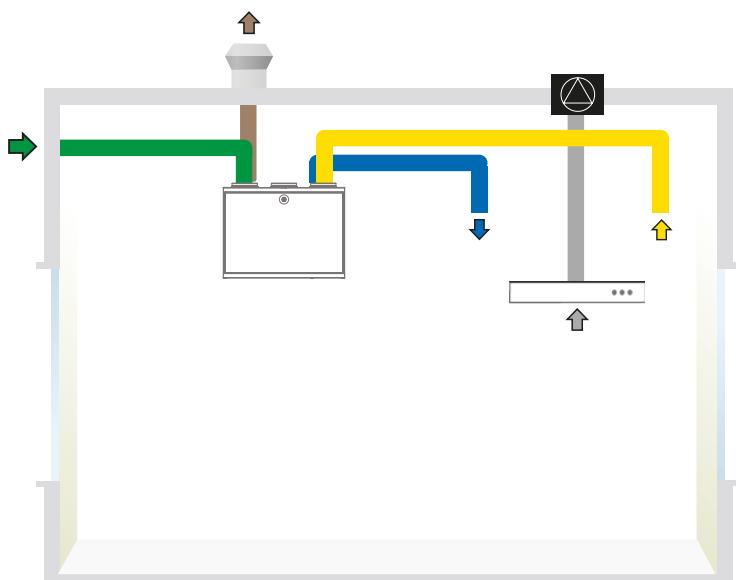
# Design data



CASA W3 xs L, duct connections and cooker hood connected to the ventilation unit's kitchen duct connection.



CASA W3 xs L, duct connections and cooker hood connected to the extract air duct.



CASA W3 xs L, duct connections and cooker hood connected to external ceiling fan.



Outdoor air



Supply air



Extract air



Exhaust air

*Note! Always check the unit design (L/R) and correct duct sequence in the installation instructions.*

# ProCASA®

Energy calculation, functional diagram and acoustic data on ProCASA.

[procasa.swegon.com](http://procasa.swegon.com)



## Energy calculator

Select area  
CAN - Ottawa

-33°C ... 28°C  
Source: ASHRAE Fundamentals 2021

Select and print pages  
 Energy calculation and dimensions

Project  
Customer  
Designed by  
Location

Default values  
Metric  
l/s

|            |             |
|------------|-------------|
| Supply air | Extract air |
| 50 l/s     | 50 l/s      |

|               |       |       |
|---------------|-------|-------|
| Duct pressure | 80 Pa | 80 Pa |
|---------------|-------|-------|

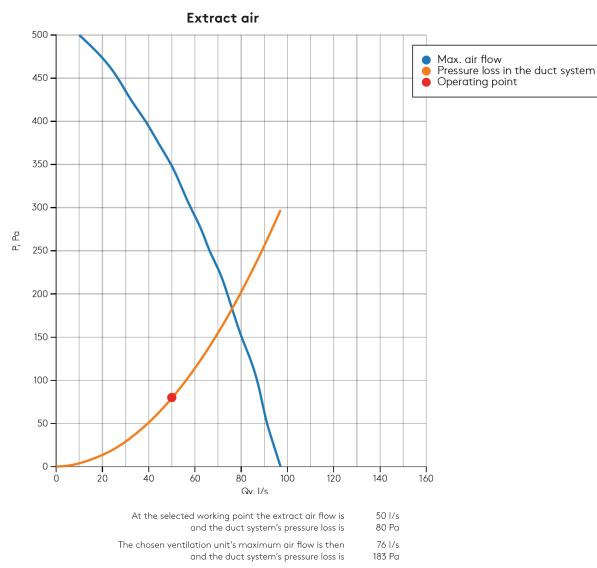
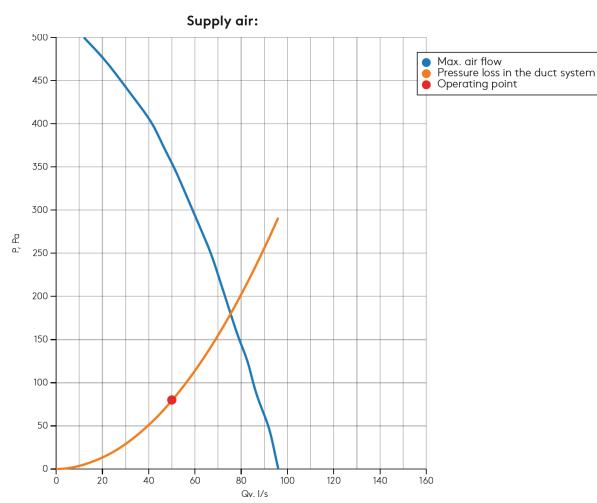
Cooker hood airflow  
0 l/s  
usage time per day  
0 h/d

Indoor temperature 27°C  
Minimum supply air temperature (+10°C...+27°C)  
+10 +11 +12 +13 +14 +15 +16 +17 +18 +19 +20 +21

\* Additional accessories may be needed  
Max airflow rate: 82 l/s  
Sound power level: 39 dB(A)

**R3 is ventilation unit with rotary heat exchanger  
The minimum air flow is 25 l/s**

| Fan power and energy use EN13141-7          |                |                |                |                |                |                |                |                |                        |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|
| Supply air                                  |                |                |                |                |                |                |                |                | 36 W                   |
| Extract air                                 |                |                |                |                |                |                |                |                | 36 W                   |
| SPF   |                |                |                |                |                |                |                |                | 0.45 W / (m³/s)        |
| SFP   |                |                |                |                |                |                |                |                | 1.63 kW / (m³/s)       |
| Annual energy use of fans                   |                |                |                |                |                |                |                |                | 631 kWh                |
| Energy used to heat the air EN13141-7       |                |                |                |                |                |                |                |                |                        |
| Reheating to 17 °C                          |                |                |                |                |                |                |                |                | 314 kWh 367W peak load |
| Energy used without heat recovery           |                |                |                |                |                |                |                |                | 7016 kWh               |
| Annual energy efficiency for AHU (17 °C)    |                |                |                |                |                |                |                |                | 96 %                   |
| Temperature efficiency of heat exchanger    |                |                |                |                |                |                |                |                | 84 %                   |
| Temperature efficiency of air handling unit |                |                |                |                |                |                |                |                | 80 %                   |
| Acoustic data                               |                |                |                |                |                |                |                |                |                        |
| Octave band (Hz)                            | 63             | 125            | 250            | 500            | 1k             | 2k             | 4k             | 8k             | 10k                    |
| Sound emitted to:                           | l <sub>w</sub>         |
| Supply air duct                             | 81             | 74             | 68             | 64             | 61             | 57             | 49             | 39             | 67                     |
| Extract air duct                            | 49             | 45             | 57             | 51             | 42             | 34             | 21             | 22             | 54                     |
| Outdoor air duct                            | 71             | 66             | 58             | 47             | 45             | 31             | 21             | 22             | 54                     |
| Exhaust air duct                            | 74             | 74             | 69             | 65             | 61             | 54             | 48             | 34             | 67                     |
| Kitchen bypass duct                         | 64             | 65             | 57             | 52             | 46             | 38             | 33             | 19             | 54                     |
| Surroundings                                | 49             | 50             | 42             | 35             | 35             | 17             | 0              | 15             | 40                     |
| Surroundings at -4dB sound attenuation      |                |                |                |                |                |                |                |                |                        |
| l <sub>pn</sub> , dB(A)                     |                |                |                |                |                |                |                |                |                        |
| 36  |                |                |                |                |                |                |                |                |                        |



# MagiCAD

3D models and CAD dimension sketches for all Swegon CASA products are available from MagiCloud. You can download DXF files directly from MagiCloud or use a MagiCAD plugin to transfer dimension sketches to the Revit and AutoCAD software packages.

[www.magicloud.com](http://www.magicloud.com)

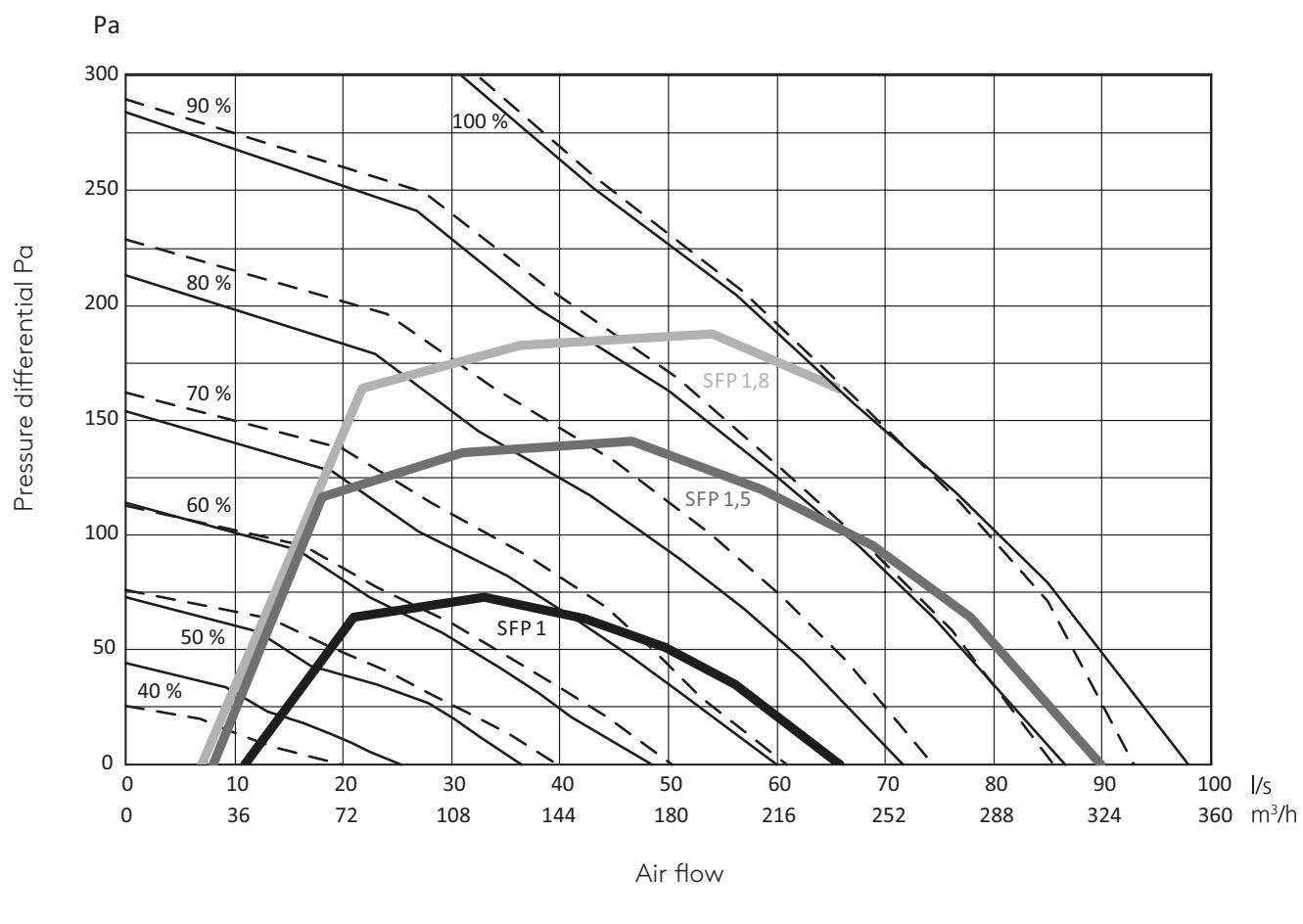


## Air flows

Air flows EN 13141-4

**W3 xs**

- Supply airflow
- - Extract airflow



## Acoustic data

See acoustic data on ProCASA.

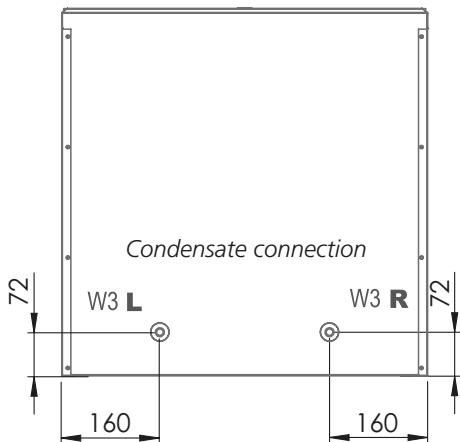
[procasa.swegon.com](http://procasa.swegon.com)



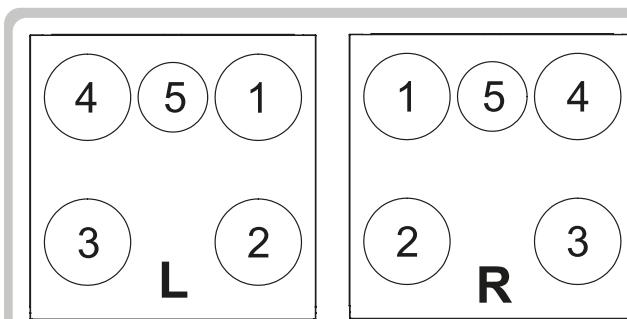
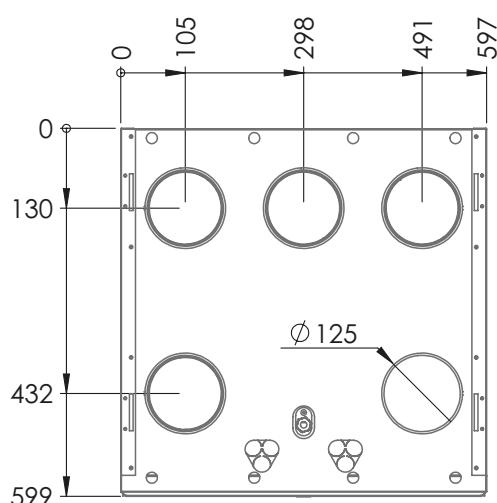
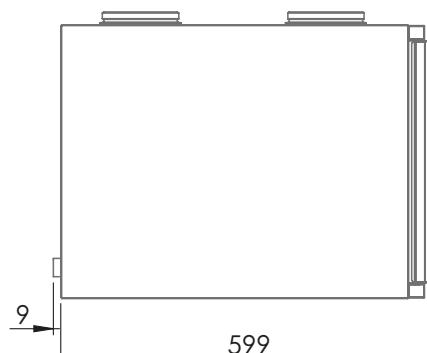
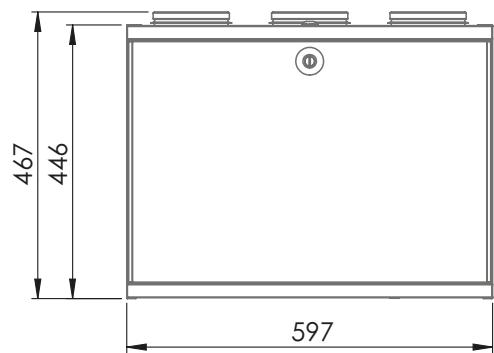
# Dimensions and weight

## Dimensions

### W3 xs



Weight of the unit: **45 kg**



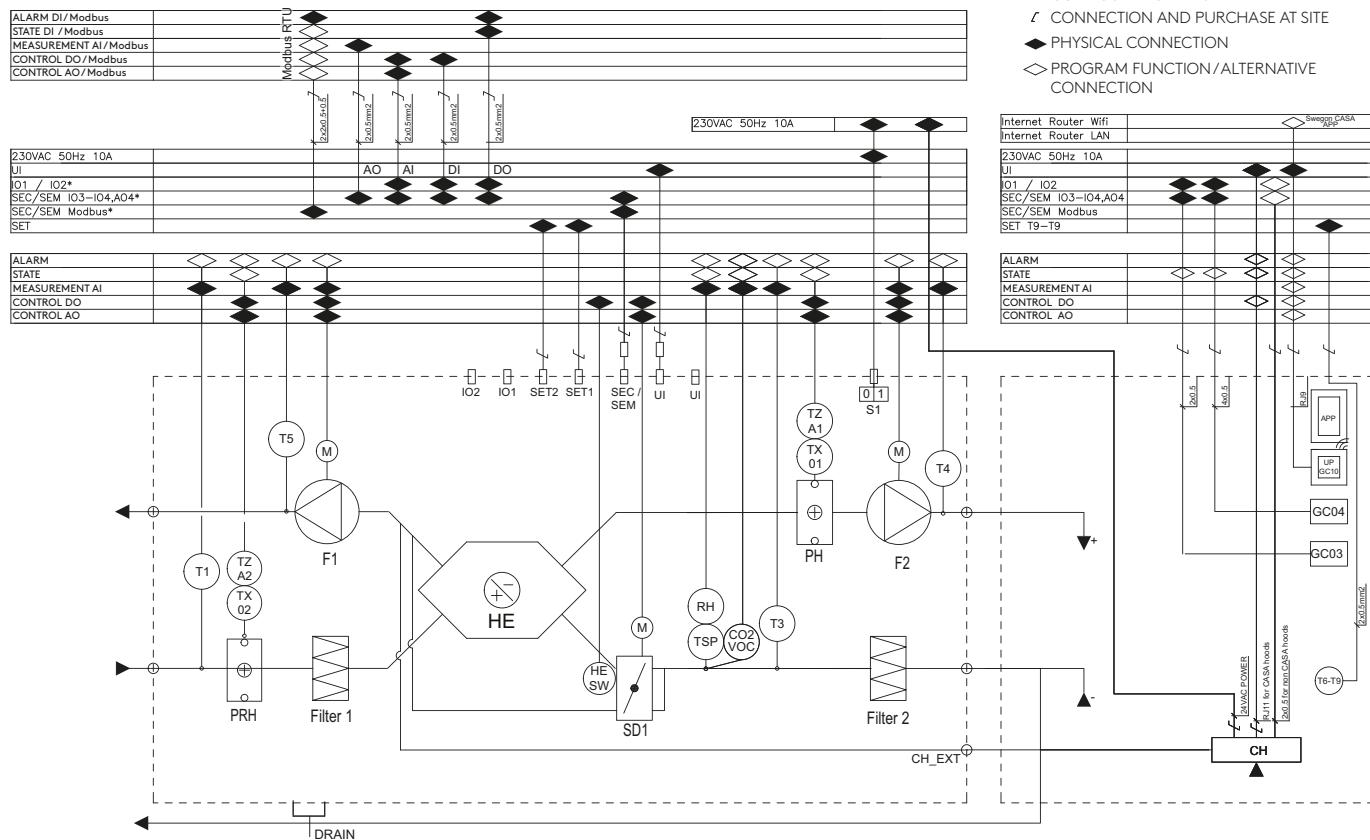
1. Supply air
2. Extract air
3. Outdoor air
4. Exhaust air
5. Extract air from the cooker hood



# Functional diagram

## Functional diagram

### W3 xs

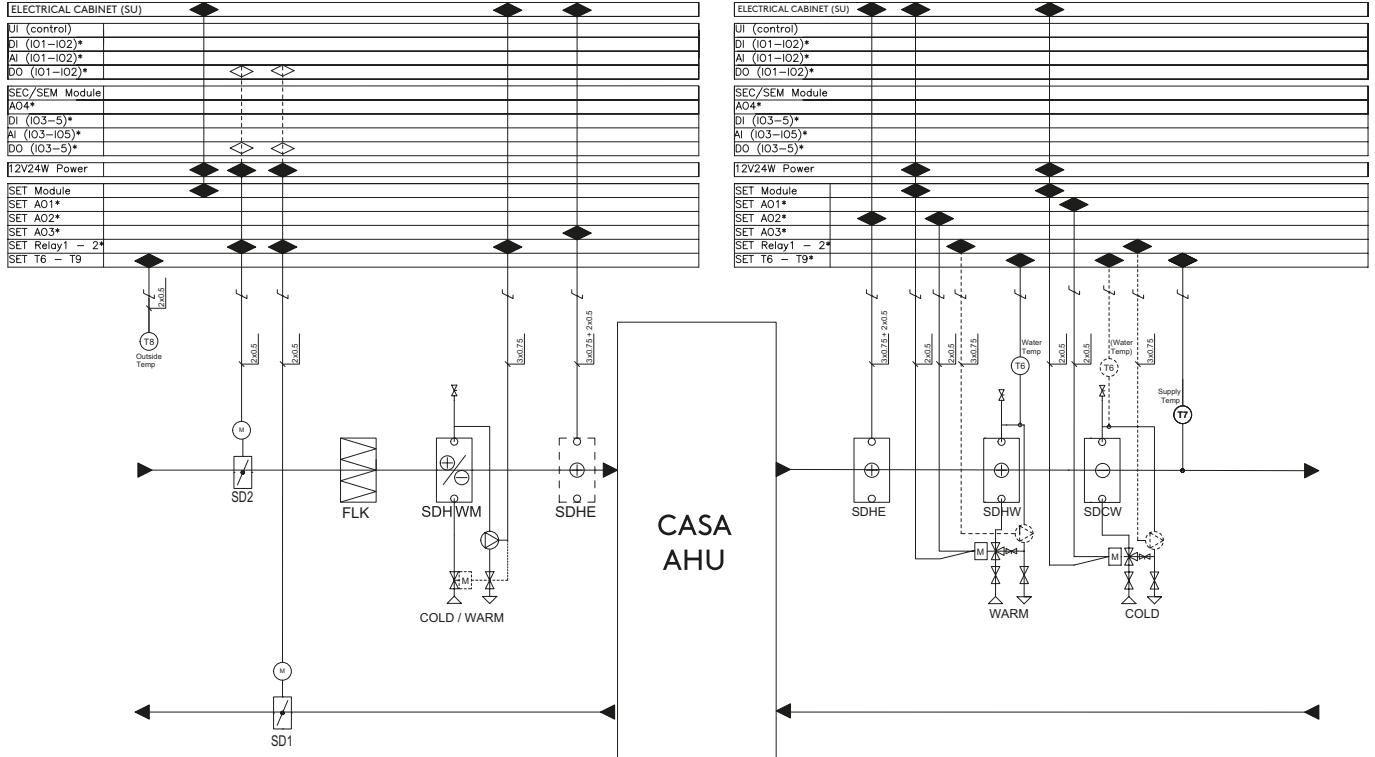


| Device     | Description   | Modbus register               |
|------------|---|-------------------------------|
| T1         | Temperature sensor, outdoor air   | 3x6201 (0,1°C)                |
| T3         | Temperature sensor, extract air   | 3x6204 (0,1°C)                |
| T4         | Temperature sensor, supply air  | 3x6203 (0,1°C)                |
| T5         | Temperature sensor, exhaust air   | 3x6205 (0,1°C)                |
| TZ01, TZ02 | Manual overheat protection 70°C   | Alarm 3x6117                  |
| TZA1, TZA2 | Automatic overheat protection 55°C  | Alarm 3x6117                  |
| Filter 1   | Fresh air filters ISO ePM1 50% (F7)   | Service reminder info 3x6129  |
| Filter 2   | Extract air filter ISO coarse (G3)  | Service reminder info 3x6129  |
| F1         | Extract fan including internal overheat protection.   | Control 3x6304(%), RPM 3x6306 |
| F2         | Supply fan including internal overheat protection.  | Control 3x6303(%), RPM 3x6305 |
| PRH        | Pre heater, controlled steplessly according to demand   | Control 3x6344 (%)            |
| PH         | Post heater, controlled steplessly according to demand. Ignored if the preheater is on.   | Control 3x6317 (%)            |
| HE         | Heat exchanger  |                               |
| SD1        | Heat exchanger bypass damper and damper motor. Note, the wiring according to the handiness of the unit.   | Control 3x6348 (%)            |
| S1         | Use Switch. Note! power off the unit by removing the socket from the Mains when Service   |                               |
| RH         | Humidity sensor for RH automation   | RH 3x6214                     |
| TSP        | Extract air temperature sensor for humidity measurement   |                               |
| CH_EXT     | Extra duct connection for the cooker hood. Duct bypasses the heat exchanger. Note! Do not connect the general ventilation of the kitchen here. Connect the hood status information to the ventilation unit. (Duct connection is plugged at the factory) |                               |
| DRAIN      | Condensate discharge drain. Connect the water trap and drain hose to the condensate connection. Check the operation of the water trap.  |                               |

## Functional diagram

## Duct actuators

- FIELD CONFIGURATION AU
- ✓ FIELD CONNECTION SU
- ◆ PHYSICAL CONNECTION
- ◇ ALTERNATIVE CONNECTION  
(Note: an additional relay is required for DO outputs)



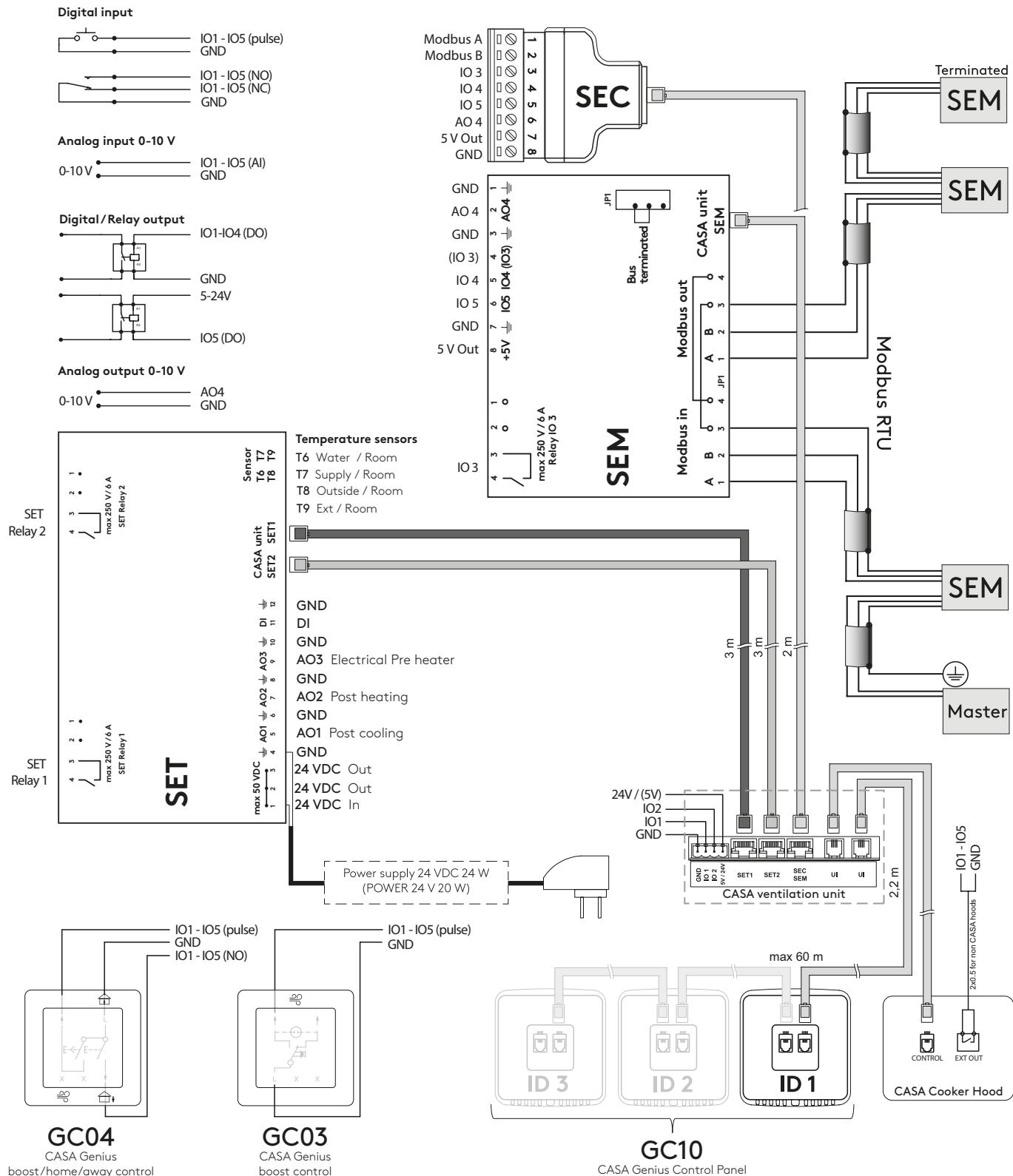
| Device   | Description   |
|----------|---|
| T6-T9    | Temperature sensor. Connection to the SET module. The sensor must be defined on the control panel.  |
| SD1, SD2 | Duct Plate for Outdoor/Exhaust duct.  |
| FLK      | Duct filter in combination with an electric pre heater (SDHE)   |
| SDHWM    | Ground Liquid preheating/cooling coil for outdoor air duct. (Inc SET, heating/cooling coil, sensor)   |
| SDHE     | Electrical duct heater for Supply/Outdoor air duct (Inc. SET, duct heater and sensors) Note! A duct filter (FLK) is required for the preheater.   |
| SDHW     | Heating coil for supply air duct (Inc. SET, three-way valve + actuator, heating coil, sensors).   |
| SDCW     | Cooling coil for supply air duct (Inc. SET, three-way valve + actuator, cooling coil, sensors).   |
| CO2      | CO2 sensor for CO2 automation   |
| VOC      | VOC sensor for VOC automation   |
| SEM      | Modbus module (Inc. 2m RJ-45 cable)   |
| SEC      | IO extension module (Inc. 2m RJ-45 cable)   |
| SET      | Connection module for duct batteries and temperature sensors. (Inc. 2 x 3m RJ-45 cable)   |
| APP      | Swegon CASA mobile application for ventilation control and monitoring. Requires a Genius control panel (GC10) to operate.   |
| UP GC10  | Genius control panel that can be connected to Swegon CASA application via WiFi.   |
| GC04     | Control switch to select boost, home and away mode.   |
| GC03     | Control switch to select boost mode.  |
| CH       | Cooker hood. The CASA hood is connected to the ventilation unit with a modular cable. With other hoods, you can control the cooking function with a switch input that is determined for the function. |



# External connections

## External connections

### CASA Genius



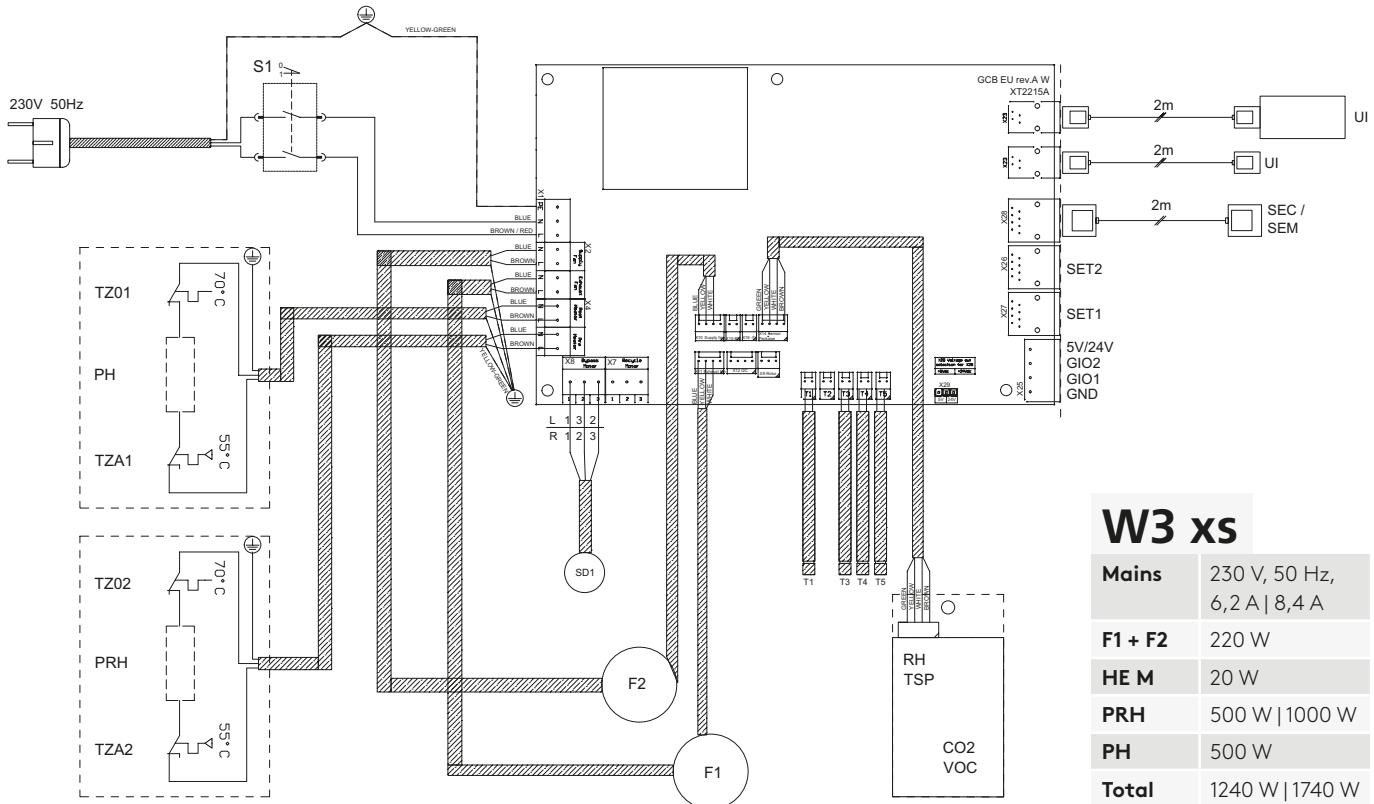
**SEC** IO extension cable with Modbus RTU

**SEM** IO extension module with relay and Modbus RTU (input and output connections)

**SET** IO extension module for control of external accessories

## Internal connections

## W3 xs



| Device     | Description  |
|------------|--|
| T1         | Temperature sensor, outdoor air  |
| T3         | Temperature sensor, extract air  |
| T4         | Temperature sensor, supply air   |
| T5         | Temperature sensor, exhaust air  |
| PRH        | Pre heater, controlled steplessly according to demand  |
| PH         | Post heater, controlled steplessly according to demand. Ignored if the preheater is on.                              |
| TZ01, TZ02 | Manual overheat protection 70°C  |
| TZA1, TZA2 | Automatic overheat protection 55°C   |
| F1         | Extract fan including internal overheat protection.  |
| F2         | Supply fan including internal overheat protection.   |
| SD1        | Damper motor. Note, the wiring according to the hardness of the unit.  |
| S1         | Use Switch. Note! power off the unit by removing the socket from the Mains when Service                              |
| RH         | Humidity sensor for RH automation  |
| TSP        | Extract air temperature sensor for humidity measurement  |
| CO2        | CO2 sensor for CO2 automation (accessory)  |
| VOC        | VOC sensor for VOC automation (accessory)  |
| UI         | Connectors for connecting the control panel and/or CASA cooker hood. One connection point is wired outside the unit. |
| SEC/SEM    | Connector for connecting the SEC or SEM module. The connection point is wired outside the unit.                      |
| SET 1&2    | Connectors for connecting the SET module   |
| 5V/24V     | 24V voltage output, which can be changed to 5V output with a jumper on the circuit board.                            |
| IO 1&2     | Two general-purpose IO connectors. Connectors must be configured for the desired functions.                          |
| GND        | Ground for IO connections.   |



# Installation options

## Ventilation unit installation site

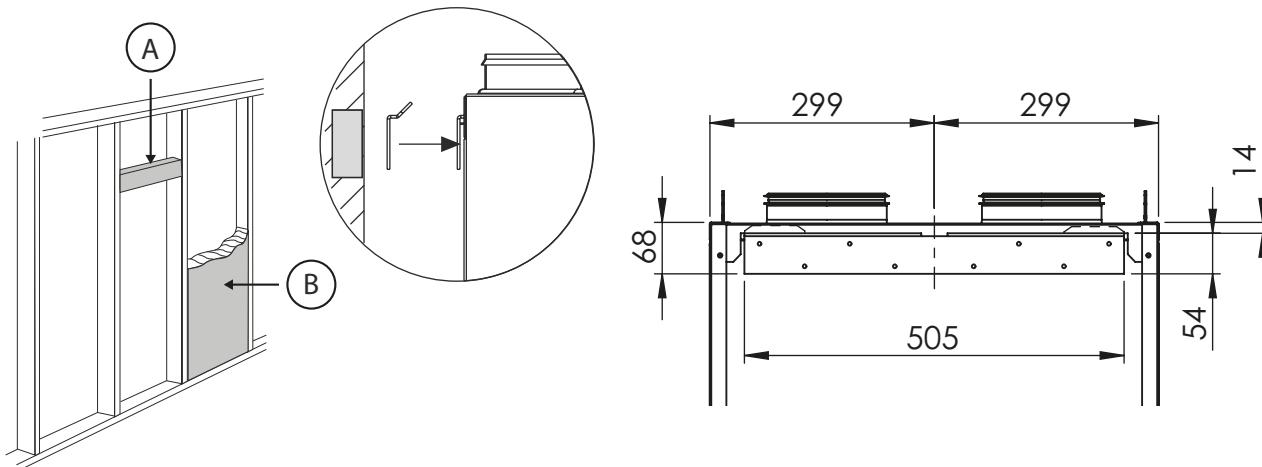
The temperature in the space where the unit will be installed must be more than +10 °C. Due to the risk of disruptive noise, the ventilation unit should not be installed on the wall towards the living room or bedroom.

## Wall mounting

A wall mountin bracket is an accessory.

If it is a question of a light partition wall, the wall must be reinforced with horizontal studs (A) that support the weight of the ventilation unit. In addition, Swegon also recommends that the wall be insulated with mineral wool or similar insulation (B) for preventing sound from propagating to other rooms.

Screw the wall mount firmly in horizontal position onto the wall where a wall stud will support the weight of the unit. Lift up the ventilation unit onto the wall mounting bracket so that the ears on the bracket engage in the corresponding notches at the top on the backside of the unit. Set the final position of the ventilation unit with the help of the adjustable anti-vibration mountings so that the ventilation unit tilts slightly backward.



## Ceiling mounting

The ventilation unit can also be mounted in a ceiling mounting frame (available as an accessory) on the ceiling.

The ceiling mounting frame must not be used as part of a support structure for the ducts, the duct support must be sufficient even without the support effect provided by the ceiling mounting frame.





## Product codes

### W3 xs

| Product                         | Part no.     | GTIN          |
|---------------------------------|--------------|---------------|
| W3xs Genius R 1240W A-bp RH MOD | W3SVR05G1YHA | 6430080090365 |
| CASA W3xs Genius L 1240W RH+CO2 | W3SVL05G10CA | 6430080090372 |
| CASA W3xs Genius L 1240W Abp RH | W3SVL05G10HA | 6430080090389 |
| CASA W3xs Genius L 1240W RH+VOC | W3SVL05G10VA | 6430080090396 |
| CASA W3xs Genius L 740W Abp RH  | W3SVL05GL0HA | 6430080090419 |
| W3xs Genius L 1240W A-bp RH MOD | W3SVL05G1YHA | 6430080090433 |
| CASA W3xs Genius R 1240W RH+CO2 | W3SVR05G10CA | 6430080090440 |
| CASA W3xs Genius R 1240W Abp RH | W3SVR05G10HA | 6430080090457 |
| CASA W3xs Genius R 1240W RH+VOC | W3SVR05G10VA | 6430080090464 |
| CASA W3xs Genius R 740W Abp RH  | W3SVR05GL0HA | 6430080090488 |

### Accessories

| Product  | Part no. | GTIN          |
|--|----------|---------------|
| Wall mounting bracket                                      | WRWMB    | 6415879067438 |
| Ceiling mounting frame                                     | W03CMB   | 6415879068275 |
| Cover plate for ceiling mounting frame, for flush mounting | W034CMP  | 6415879068299 |
| Frame with sound trap                                      | W034CNR  | 6415879069104 |
| Mounting frame with vapour barrier                         | PW080YP  | 6415879066097 |
| Water trap   | UVLL     | 6415879069302 |
| Condensate discharge tube                                  | CDH3     | 6415879066776 |

# CASA - Accessories

## Control accessories

|  | Part no. | GTIN          |
|--|----------|---------------|
| GC10 CASA Genius control panel and WiFi      | GC10     | 6430080090846 |
| GC10 control panel + 10 m long cable         | GC14     | 6430080090853 |
| GC10 control panel + 10 m long cable + frame | GC15     | 6430080090860 |
| GC10 control panel + frame                   | GC16     | 6430080090877 |
| Frame for control panel GC10                 | 102SAK   | 6415879066752 |
| CASA Genius boost/home/away control button   | GC04     | 6430080090013 |

## Building automation

|   | Part no. | GTIN          |
|---|----------|---------------|
| Modbus connection module  | SEM      | 6415879067346 |
| Connection cable (configurable I/O) for Genius ventilation units  | SEC      | 6415879067353 |
| Room temperature sensor, total package with connection unit for ventilation units. The sensor is installed on the wall or in a recessed junction box (60 mm between holes). | WSTC     | 6415879069395 |

## Automatic functions

|                     | Part no. | GTIN          |
|---------------------|----------|---------------|
| RH + CO2 automation | SRHCO2   | 6415879066936 |
| RH + VOC automation | SRHVOC   | 6415879066943 |

## Waterborne air coolers

|                            | Part no. | GTIN          |
|----------------------------|----------|---------------|
| Cooling coil package Ø 160 | SDCW160  | 6415879068053 |

## Waterborne air heaters

|                            | Part no. | GTIN          |
|----------------------------|----------|---------------|
| Heating coil package Ø 125 | SDHW125  | 6415879068039 |

## Brine air heater/cooling coil for ground source heat pump

|                               | Part no. | GTIN          |
|-------------------------------|----------|---------------|
| Heating/cooling coil Ø250, G4 | SDHW250F | 6415879068084 |

## Electric air heater

|                            | Part no.   | GTIN          |
|----------------------------|------------|---------------|
| Electric heater Ø 125      | SDHE125-1T | 6415879067230 |
| Prefilter box Ø 125 mm, G4 | FLK12      | 6415879067452 |

## Duct mounted shut-off dampers

|                 | Part no. | GTIN          |
|-----------------|----------|---------------|
| Damper Ø 125 mm | SDD125   | 6415879069890 |

## Other accessories

|   | Part no.    | GTIN          |
|---|-------------|---------------|
| Connection module for control of the duct mounted air heater/cooling coil / control of shut-off dampers | SET         | 6415879067339 |
| SET / power source for actuators  | POWER24V20W | 6415879068404 |
| PTH Regulation for constant duct pressure   | PTH         | 6415879067285 |



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