



SWEGON CASA GENIUS R

Intelligent residential
ventilation unit with
rotary heat exchanger



Swegon

Swegon CASA Genius

Intelligent ventilation system monitors air quality in the background and adjusts itself according to need. It saves energy and guarantees healthy indoor air automatically under all conditions.

Healthy indoor air

The ventilation removes the dirty air and replaces it with fresh, cleaned and filtered air, so that the indoor air at home is always pleasant and healthy to breathe.

Prevents moisture problems

The ventilation removes excess humidity to prevent moisture problems and mould. Uncontrolled pressure differences can transfer moisture into structures. A well-balanced ventilation system can handle pressure balance, even in cold conditions, and when a wood burning stove or cooker hood is used!

Very low sound level

Tested and verified sound level performance

Saves energy

An energy-efficient ventilation system does not waste heat energy, but instead transforms it into free heating. The heat is recovered from dirty extract air and transferred into incoming fresh supply air.

Energy labelling

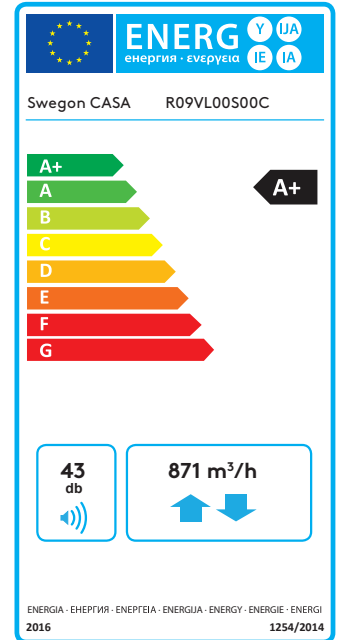
Swegon CASA ventilation units have at least energy class A or A+. The energy class according to the Ecodesign directive can be checked via the official EU energy label.

Eurovent certified

The official certification guarantees that the units' performance values and energy consumption are measured in accordance with European standards, and that they have been verified in test laboratories approved by Eurovent.

EPD and LCA

Swegon CASA is the first ventilation unit to have been awarded a certified environmental product declaration (EPD) and life cycle assessments (LCA).



R-Series

Air handling units with rotary heat exchanger



Energy saving

Swegon CASA ventilation units with rotary heat exchangers boast a very high level of efficiency (up to 86%). When the dirty indoor air is removed from the home, the thermal energy is utilised and the fresh outdoor air that flows in is heated up by the residual heat energy. During the heating season, the ventilation unit creates "free" heating energy equivalent to up to 36°C, by heating -20°C outdoor air to +16°C supply air. A rotary heat exchanger also returns some of the moisture to the supply air. This is an advantage, particularly in the winter, when excessively dry indoor air can cause problems for the home and the residents.

Balanced ventilation

Modern homes are built to be energy-efficient and simultaneously airtight. However, large pressure differences can cause a risk of moisture in the building's structures and give rise to everyday problems, such as difficulty lighting a fire or poor function in the cooker hood. Intelligent compensating features strive to balance the house's ventilation to prevent harmful pressure differences. They also help in the lighting and combustion of fires, and with the efficiency of the cooker hood or central vacuum cleaner function.

Anti-freeze protection

The defrost function ensures continuous ventilation, even in cold conditions. With the aid of preheating (optional equipment), balanced ventilation can be maintained and the occurrence of excessive negative pressure can be prevented, even in the case of cold outdoor conditions.

Reheating (optional equipment)

The extract air's heating energy is usually sufficient to heat up the supply air. In periods of very cold outdoor conditions, it is possible to use an electric or waterborne heat exchanger for reheating, which guarantees pleasantly warm indoor air. The air heater for reheating can be placed inside the unit or outside in the ventilation duct (see technical brochure).

Preheating (optional equipment)

With the aid of preheating, balanced ventilation can be maintained and the occurrence of excessive negative pressure can be prevented, making lighting the fire and compensation functions for the cooker hood possible, even in the case of cold outdoor conditions.

Summer functions

An intelligent summer function automatically regulates the ventilation to keep the temperature in the home at a pleasant level. At night, the air passes the heat exchanger and the home is cooled with fresh outdoor air. On warm days, the heat exchanger utilises the cool indoor air to cool down the warmer incoming air. This is all managed by an advanced automatic system that can be set according to the resident's requirements. By making smart use of the temperature differences and the heat exchanger, increases in the indoor temperature can be prevented or delayed economically.

Cooling

If there is a cold water circuit (e.g. ground source system) in the home, a separate air cooler can be obtained as optional equipment and be installed in the supply/extract air duct to produce efficient cooling in the home. The ventilation unit's control system adjusts the supply air temperature automatically.

Technical data

Brochures and technical documents
Swegon.com/casa



ProCASA®

Energy calculation and functional diagram
procasa.swegon.com

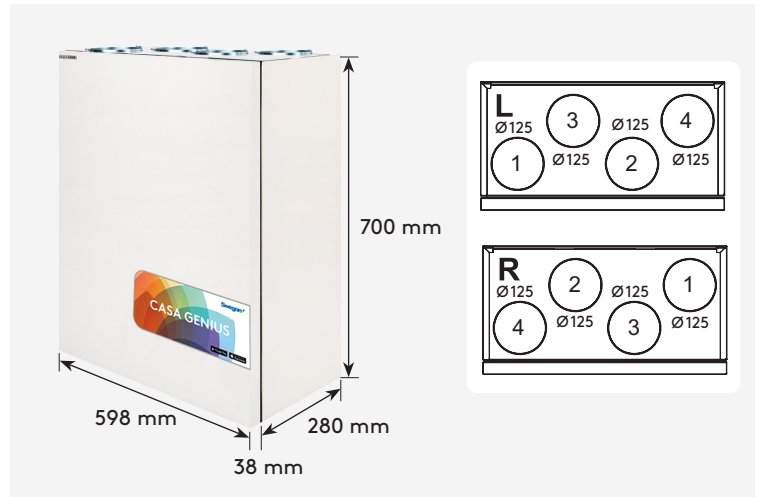


● Deliveries have started

CASA R2

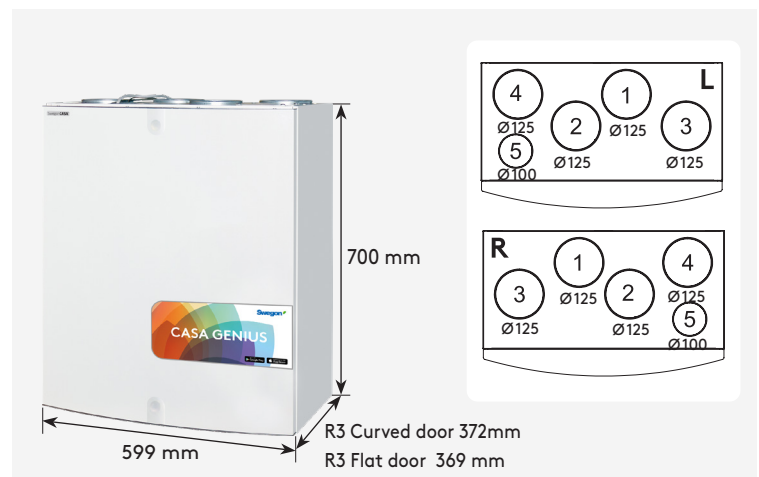
- 18-60 l/s | 65-216 m³/h
- Energy class A
- Wall mounting
- Can be mounted above the stove, in which case the cooker hood is mounted directly against the underside of the unit
- The door's cover plate is not included in the delivery and must be ordered separately
- White, black or stainless metal cover plates for the front hatch are available as an accessory
- Cabin door can be installed as the cover plate to fully integrate the unit into the kitchen furniture

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



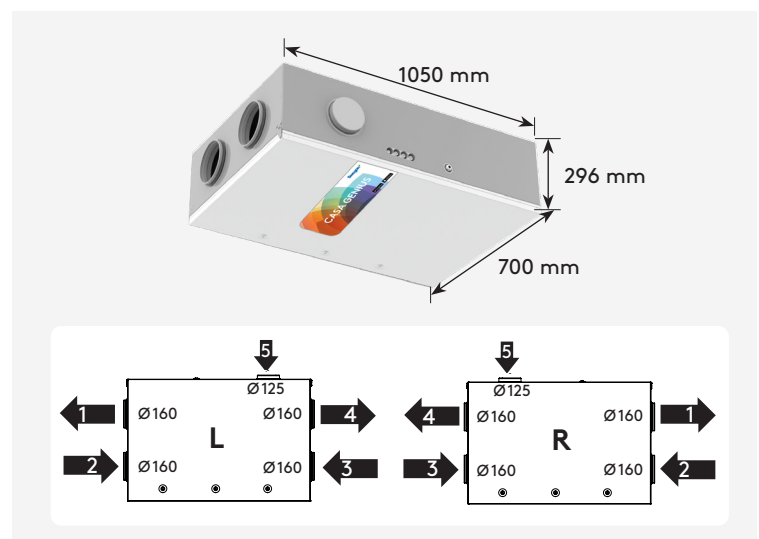
CASA R3 | R3 Flat ●

- 25-82 l/s | 90-295 m³/h
- Energy class A
- Wall or ceiling mounting
- Can be mounted above the stove, in which case the cooker hood is mounted directly against the underside of the unit
- The cooker hood can be connected to the ventilation unit with the aid of a separate kitchen duct connection
- Standard R3 is equipped with a curved white metal door. Stainless metal door is available as an accessory.
- R3 Flat has straight metal door with connection plates so that a kitchen cabin door can be mounted as a cover plate.



CASA R4-C ●

- 20-92 l/s | 72-331 m³/h
- Energy class A
- Low installation height (296 mm) allows ceiling installation flush in suspended ceilings
- Can also be mounted on a wall or the floor



Technical data

Brochures and technical documents
Swegon.com/casa



ProCASA®

Energy calculation and functional diagram
procasa.swegon.com

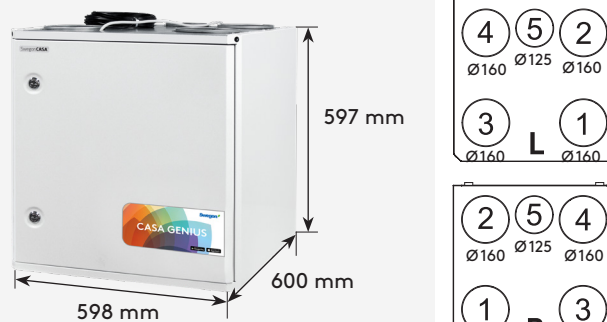


1. Supply air
2. Extract air
3. Outdoor air
4. Exhaust air
5. Extract air from the cooker hood

CASA R5 ●

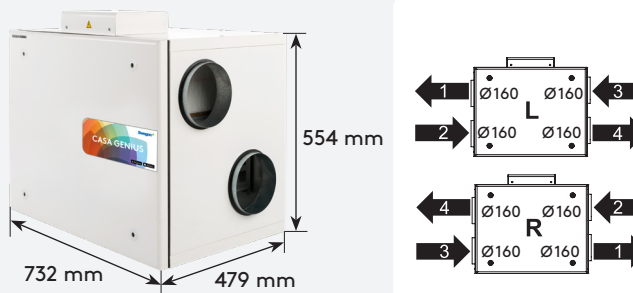


- 30-117 l/s | 108-421 m³/h
- Energy class A
- Wall or ceiling mounting
- Separate connection for cooker hood



CASA R5-H

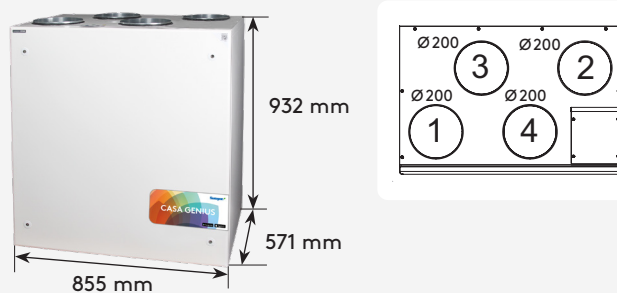
- 30-122 l/s / 108-439 m³/h
- Energy class A
- Mounted on firm surface, e.g. in the attic



CASA R7 ●

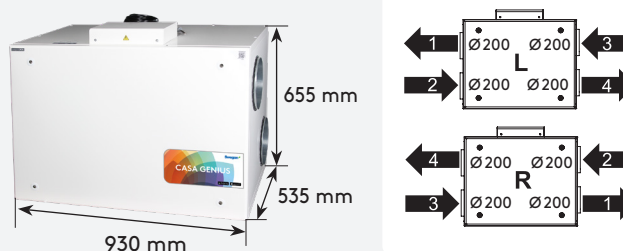


- 60-188 l/s | 216-677 m³/h
- Energy class A
- Passive House -certified
- Mounted on firm surface



CASA R7-H

- 60-208 l/s | 216-749 m³/h
- Energy class A
- Mounted on firm surface



Technical data

Brochures and technical documents
Swegon.com/casa



ProCASA®

Energy calculation and functional diagram
procasa.swegon.com

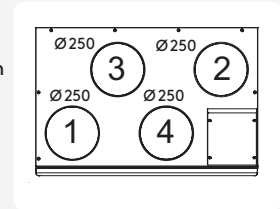


1. Supply air
2. Extract air
3. Outdoor air
4. Exhaust air
5. Extract air from the cooker hood

CASA R9 ●

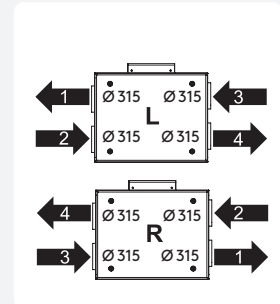
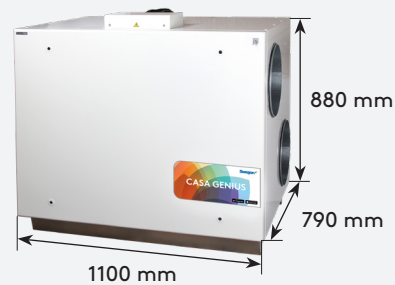


- 75-242 l/s | 270-871 m³/h
- Energy class A +
- Passive House -certified
- Mounted on firm surface



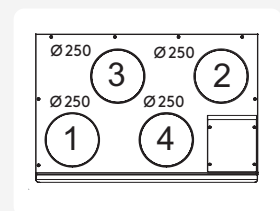
CASA R9-H

- 75-277 l/s | 270-997 m³/h
- Energy class A+
- Mounted on firm surface



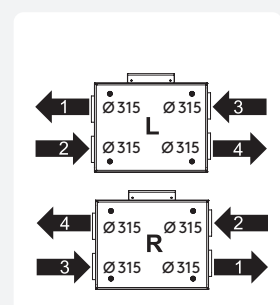
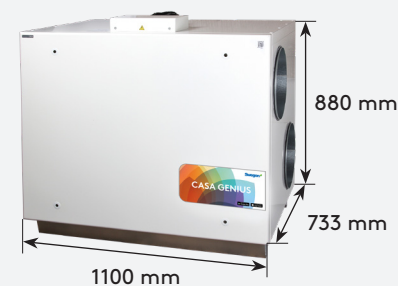
CASA R15 ●

- 100-475 l/s | 360-1710 m³/h
- Energy class NRVU*
- Mounted on firm surface



CASA R15-H

- 100-550 l/s | 360-1980 m³/h
- Energy class NRVU*
- Mounted on firm surface



* Defined as non-residential ventilation unit according to Ecodesign Lot 6.

References

Study the reference projects and read about our customers' experiences.



Swegon CASA R2 with interior cover and Jazz cooker hood



Swegon CASA R4-C installed in a suspended ceiling







Swegon CASA R5-H mounted in the attic



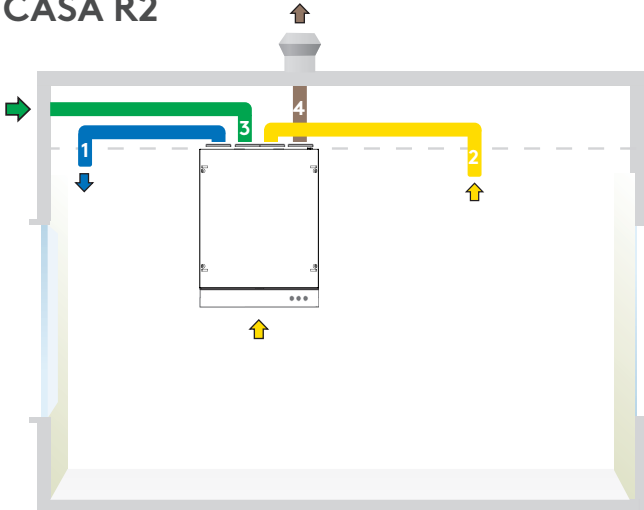
R-Series

Installation examples

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

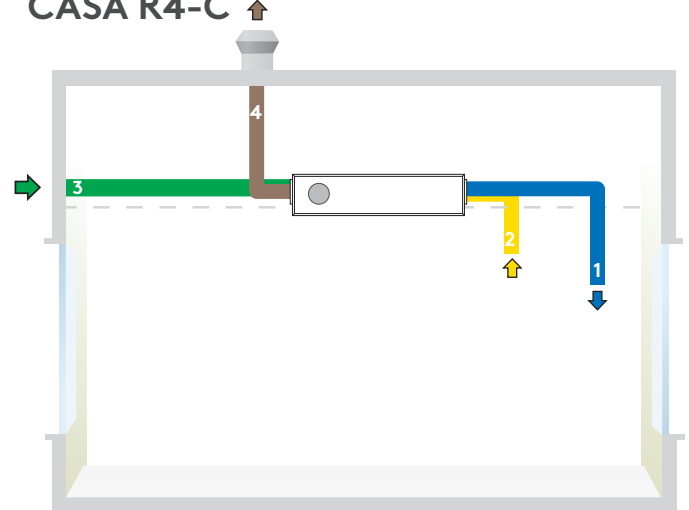
-  Outdoor air (3)
-  Supply air (1)
-  Extract air (2)
-  Exhaust air (4)

CASA R2

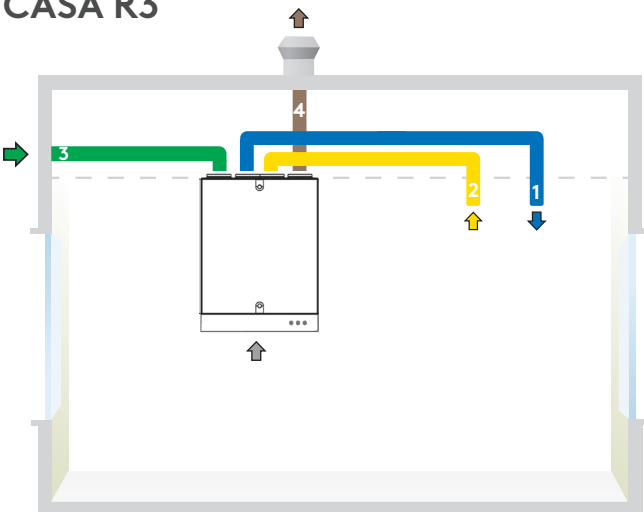


CASA R2 L, duct connections and cooker hood connected to the bottom of the ventilation unit.

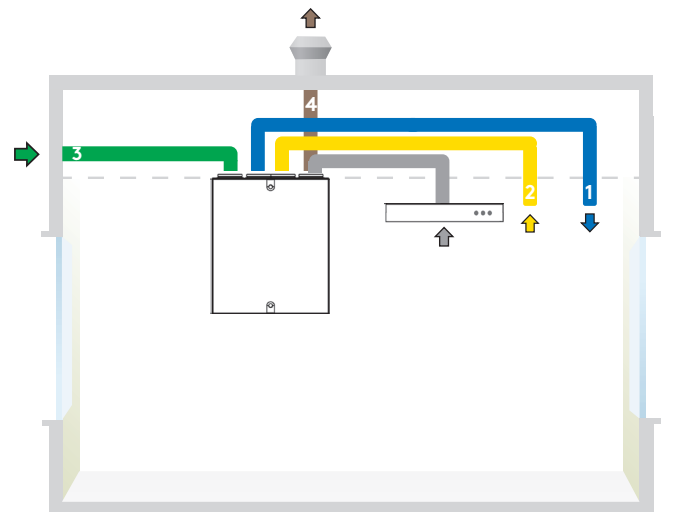
CASA R4-C



CASA R3



CASA R3 R, duct connections and cooker hood connected to the bottom of the ventilation unit.



CASA R3 R, duct connections and cooker hood connected to the kitchen duct connection on top the ventilation unit.







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

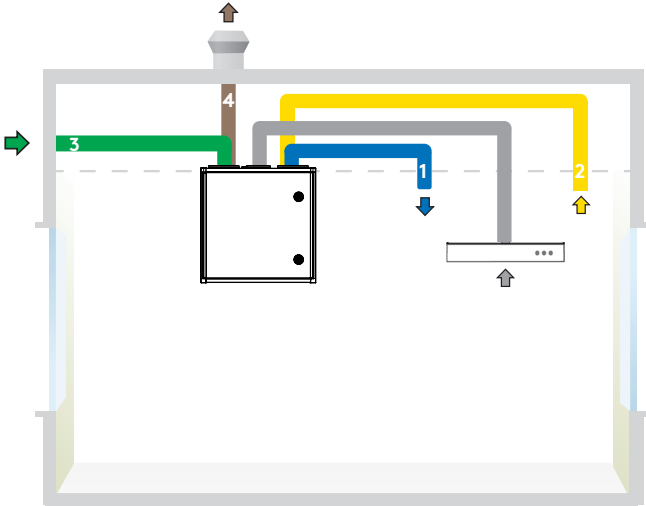
R-Series

Installation examples

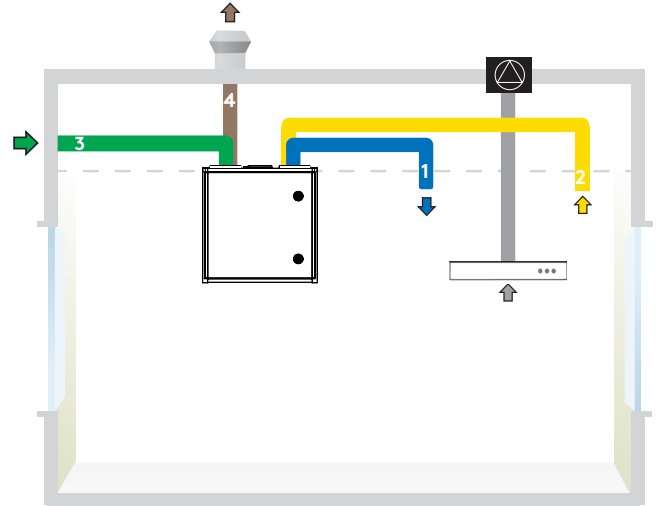
Note! Always check the unit design (L/R) and correct duct sequence in the installation instructions.

-  Outdoor air (3)
-  Supply air (1)
-  Extract air (2)
-  Exhaust air (4)

CASA R5

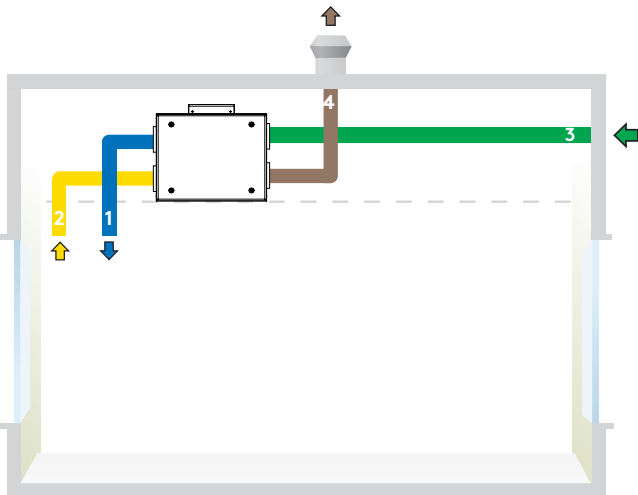


CASA R5 L, duct connections and cooker hood connected to the ventilation unit's kitchen duct connection.

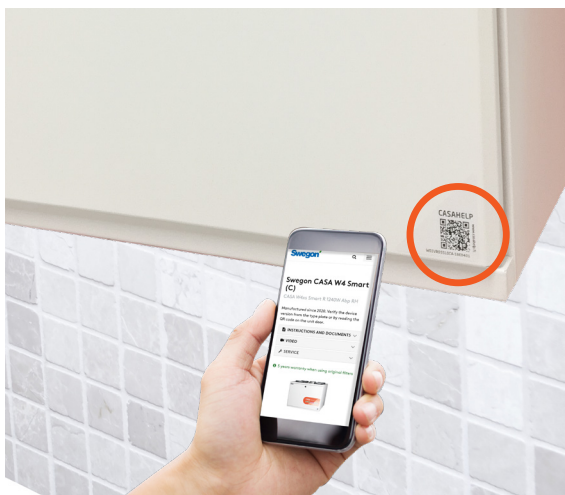
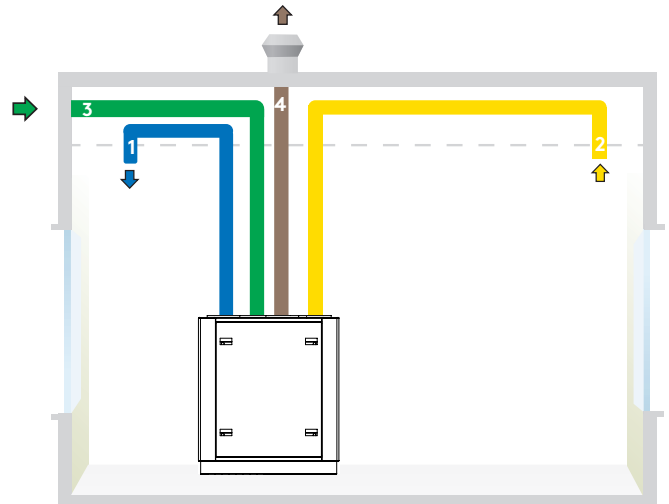


CASA R5 L, duct connections and cooker hood connected to external ceiling fan.

CASA R5-H/R7-H/R9-H/R15-H



CASA R7/R9/R15



Scan QR

- Service, operation and installation instructions
- See instruction videos
- Order spare parts and filter
- Solve problems using troubleshooting tools
- Search for your nearest service company
- Submit a service request

Swegon CASA Genius

Intelligent control of the ventilation

With Swegon CASA Genius residents can monitor the indoor air quality (RH, CO₂, 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).



Flat touch screen

Mobile app

Available on the
App Store

Get it on
Google play

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 daily 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 excess 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.



CO₂ Carbon dioxide 520 PPM



Automatic CO2 system as optional equipment

Automatically reduces 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.









The ventilation can be controlled from a Swegon CASA cooker hood









CASA R - Ventilation units

 Deliveries have started



CASA R2	Part no.	GTIN
CASA R2 Genius L 700W RH	R02VL07G00H	6430080090075
CASA R2 Genius R 700W RH	R02VR07G00H	6430080090105
CASA R2 Genius L 400W RH	R02VL04G00H	6430080090068
CASA R2 Genius R 400W RH	R02VR04G00H	6430080090099
CASA R2 Genius L 700W RH+CO2	R02VL07G00C	6430080090082
CASA R2 Genius R 700W RH+CO2	R02VR07G00C	6430080090112

CASA R3	Part no.	GTIN
 CASA R3 Genius L 500W RH	R03VL05G00H	6430080090143
 CASA R3 Genius R 500W RH	R03VR05G00H	6430080090181
 CASA R3 Genius L ex.el RH	R03VL00G00H	6430080090129
 CASA R3 Genius R ex.el RH	R03VR00G00H	6430080090167
 CASA R3 Genius L 500W RH Flat door	R03VL05G00HF	6430080090150
 CASA R3 Genius R 500W RH Flat door	R03VR05G00HF	6430080090198
CASA R3 Genius L ex.el RH Flat door	R03VL00G00HF	6430080090136
CASA R3 Genius R ex.el RH Flat door	R03VR00G00HF	6430080090174



CASA R4-C	Part no.	GTIN
 CASA R4-C Genius L 500W RH	R04CL05G00H	6430080090037
 CASA R4-C Genius R 500W RH	R04CR05G00H	6430080090044

CASA R5	Part no.	GTIN
 CASA R5 Genius L 800W RH	R05VL08G00H	6430080090235
 CASA R5 Genius R 800W RH	R05VR08G00H	6430080090259
 CASA R5 Genius L ex.el RH	R05VL00G00H	6430080090228
 CASA R5 Genius R ex.el RH	R05VR00G00H	6430080090242


CASA R5-H	Part no.	GTIN
CASA R5-H Genius L/R 700W RH	R05HL07G00H	6430080090211
CASA R5-H Genius L/R ex.el RH	R05HL00G00H	6430080090204

CASA R7	Part no.	GTIN
 CASA R7 Genius L 1400W RH	R07VL14G00H	6430080090297
 CASA R7 Genius L ex.el RH	R07VL00G00H	6430080090280

CASA R7-H	Part no.	GTIN
CASA R7-H Genius L/R 1400W RH	R07HL14G00H	6430080090273
CASA R7-H Genius L/R ex.el RH	R07HL00G00H	6430080090266

CASA R9	Part no.	GTIN
 CASA R9 Genius L ex.el RH	R09VL00G00H	6430080090334
 CASA R9 Genius L ex.el RHCO2	R09VL00G00C	6430080090327

CASA R9-H	Part no.	GTIN
CASA R9-H Genius L/R ex.el RH	R09HL00G00H	6430080090310
CASA R9-H Genius L/R ex.el RHCO2	R09HL00G00C	6430080090303

CASA R15	Part no.	GTIN
 CASA R15 Genius L ex.el RH	R15VL00G00H	6430080090341

CASA R15-H	Part no.	GTIN
CASA R15-H Genius L/R ex.el RH	R15HL00G00H	6430080090358

CASA R - 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
Modbus and I/O connection box	SEMIO	*****
Connection cable (configurable I/O) for Genius ventilation units	SEC	6415879067353
Wall temperature sensor, total package with connection unit for ventilation units. This enables the room temperature to be added in same BMS communication	WSTC	6415879069395
PTH Regulation for constant duct pressure	PTH	6415879067285
Automatic functions	Part no.	GTIN
RH + CO2 automation	SRHCO2	6415879066936
RH + VOC automation	SRHVOC	6415879066943
Mounting accessories	Part no.	GTIN
R3 Ceiling mounting frame R	PR085RKA	6415879078335
R3 Ceiling mounting frame L	PR085LKA	6415879078342
R5 Ceiling mounting frame	10212KA	6415879063072
R4-C White roof mounting frame. Easy to get finalized outlook for installation.	R04CFRAME	6430080090051
R4-C Wall mounting bracket, for horizontal wall mounting	R04CWMB	6430080090938
R5 Floor mounting base	W05FMB	*****
R7 Floor mounting base	R07FMB	*****
Waterborne air coolers	Part no.	GTIN
Cooling coil package Ø160 (R2/R3/R4-C/R5/R5-H)	SDCW160	6415879068053
Cooling coil package Ø200 (R4-C/R5/R5-H/R7/R7-H)	SDCW200	6415879068060
Cooling coil package Ø250 (R5/R5-H/R7/R7-H/R9/R15)	SDCW250	6415879070025
Cooling coil package Ø250. Fully insulated + accompanying ceiling/wall installation frame. (R5/R5-H/R7/R7-H/R9/R15)	SDCW250F, insulated	6415879068077
Cooling coil package Ø315 (R9/R9-H/R15/R15-H)	SDCW315	6415879068923
Waterborne air heaters	Part no.	GTIN
Heating coil package Ø125 (R2/R3)	SDHW125	6415879068039
Heating coil package Ø160 (R3/R4-C/R5)	SDHW160	6415879068046
Heating coil package Ø200 (R5/R7/R7-H)	SDHW200	6415879068930
Heating coil package Ø250 (R5/R7/R7-H/R9/R15)	SDHW250	6415879070032
Heating coil package Ø315 (R9/R9-H/R15/R15-H)	SDHW315	6415879068947
Brine air heater/cooler for ground source heat pump	Part no.	GTIN
Heating/cooling coil Ø250, G4 (R3/R4-C/R5/R7/R7-H)	SDHW250F	6415879068084
Electric air heater	Part no.	GTIN
Electric heater Ø125 (R2/R3)	SDHE125-1T	6415879067230
Electric heater Ø160 (R3/R4-C/R5/R5-H)	SDHE160-1T	6415879067247
Electric heater Ø200 (R7/R7-H)	SDHE200-1T	6415879067452
Electric heater Ø250, 1200 W (R7/R7-H/R9/R15)	SDHE250-1T (1200W)	6415879068954
Electric heater Ø250, 2000 W (R7/R7-H/R9/R15)	SDHE250-2T (2000W)	6415879068961
Electric heater Ø250, 3000 W (R7/R7-H/R9/R15)	SDHE250-3T (3000W)	*****
Electric heater Ø315, 1200 W (R9/R9-H/R15/R15-H)	SDHE315-1T (1200W)	6415879068978
Electric heater Ø315, 2000 W (R9/R9-H/R15/R15-H)	SDHE315-2T (2000W)	6415879068985
Electric heater dia315, 4500 W, 3phase (R9/R9-H/R15/R15-H)	SDHE315-5T (4500W)	*****

CASA R - Accessories

Other accessories	Part no.	GTIN
R2 Extension/duct cover towards the ceiling, white	R02EPW	6430080091041
R2 Extension/duct cover towards the ceiling, stainless steel	R02EPS	6430080091058
R3 Vapour barrier for ceiling mounting frame (R/L)	PR085YP	6415879065946
R5 Vapour barrier for ceiling mounting frame (R/L)	10212YP	6415879063041
R3/R5 Very low water trap that is easy to clean	UVLL	6415879069302
Connection module for control of the duct mounted air heater/cooler / control of shut-off dampers. Belongs to standard delivery with duct heating and cooling elements	SET	6415879067339
SET / power source for actuators. Belongs to standard delivery with duct heating and cooling elements	POWER24V20W	6415879068404

Duct mounted shut-off dampers	Part no.	GTIN
Damper Ø125 mm (R2/R3)	SDD125	6415879069890
Damper Ø160 mm (R2/R3/R4-C/R5/R5-H)	SDD160	6415879069937
Damper Ø200 mm (R5/R5-H/R7/R7-H)	SDD200	6415879070049
Damper Ø250 mm (R7/R7-H/R9/R15)	SDD250	6415879070056
Damper Ø315 mm (R9/R9-H/R15/R15-H)	SDD315	6415879070070

CASA R - Filter

Filters	Part no.	GTIN
R2 filter set: filter class ISO ePM1 50% (F7) 2 pcs	R02FS	6415879071947
R3 filter set: filter class ISO ePM1 55% (F7) 2 pcs	PR085FS	6415879063119
R4-C filter set: filter class ePM1 50% 2 pcs	R04CFS	6430080090952
R5 filter set: filter class ISO ePM1 55% (F7) 2 pcs + ISO Coarse (G3)	10212RSS	6415879063126
R5-H filter set: filter class ISO ePM1 50% (F7) 2 pcs	R05HFS	6415879071954
R7, R7-H filter set: filter class ISO ePM1 50% (F7) 2 pcs	R07FS	6415879071961
R9, R9-H, R15, R15-H filter set: filter class ISO ePM1 50% (F7) 2 pcs	R0915FS	6415879071978

Feel good **inside**

