

Zehnder ComfoSpot 50

Single room heat recovery

Product data sheet

always the best climate



ComfoSpot 50

The Zehnder ComfoSpot 50 is a decentralised ventilation unit with heat and humidity recovery using synchronous supply and extract air operation. It is often used in apartment renovations as well as in new PassivHaus residential builds. The ventilation unit is suitable for venting individual rooms. An enthalpy exchanger, which ensures a high degree of heat and humidity recovery, is standard in the unit, which has a positive effect on the room humidity and therefore provides a comfortable indoor climate.



Key Benefits

- Exceptionally good indoor climate, high energy efficiency and maximum cleanliness due to washable enthalpy exchanger
- Continuous supply air/extract air operation for continuous heat and humidity recovery and demand control using optional humidity and CO2 sensors
- Quiet operation due to high-quality radial fans and good insulation
- Great flexibility due to range of optional components
- Simple and quick installation with minimal intrusion into the living space
- Attractive and discreet appearance: the outside wall panel can be painted over to match the colour of the wall.
- No condensate drain required due to the enthalpy exchanger
- Intuitive operating convenience due to integrated control panel and/or external control panel Zehnder ComfoLED

Article Numbers

Description	Product Code
Unit	
Zehnder ComfoSpot 50, with stainless steel external wall panel	527 007 220
Zehnder ComfoSpot 50, with plastic external wall panel and humidity sensor board	527 008 770
Zehnder ComfoSpot 50, with plastic external wall panel and humidity / CO2 sensor board	527 007 980
Zehnder ComfoSpot 50, with plastic external wall panel	527 007 210
Controls	
Controls, ComfoLED controller for Zehnder ComfoSpot 50 and ComfoAir 70	528 009 050
Controls, RFZ module for networking ComfoSpot 50 and ComfoAir 70	527 010 550
Humidity Sensor for Zehnder ComfoSpot 50 and ComfoAir 70	527 007 260
Humidity/CO2 Sensor for Zehnder ComfoSpot 50 and ComfoAir 70	527 007 280
Filters	
Filter for Zehnder ComfoSpot 50, ISO Coarse (G4), 2 Pieces	527 005 390
Filter for Zehnder ComfoSpot 50, ISO Coarse / ISO ePM1 (G4/F7), 2 Pieces	527 005 400
Filter for Zehnder ComfoSpot 50, ISO Coarse (G4), 10 Pieces	527 005 410
Filter for Zehnder ComfoSpot 50, ISO Coarse / ISO ePM1 (G4/F7), 10 Pieces	527 005 420
Filter for Zehnder ComfoSpot 50, ISO Coarse / ISO ePM10 (G4/M5), 2 Pieces	400 102 092
Wall mounting duct for Zehnder ComfoSpot 50, Ø 315 mm, L600 mm	527 005 440
Wall mounting duct for Zehnder ComfoSpot 50, Ø 315 mm, L900 mm	527 009 130
Extension set for Zehnder ComfoSpot 50, L285 mm	527 009 150

Passive House Certification

	Enthalpy heat exchanger
Air flow range	15–25 m³/h
Heat recovery rate	HR = 80%
Specific electric power	Pel,spec = 0.3 Wh/m³
Humidity recovery	x = 54%



SEC Class



Based on average climate with local demand control

Sound Data

Setting	Test area	Octave Band (Hz) Sound Power Level, dB							dB(A) @ 3 m
		125	250	500	1000	2000	4000	8000	
15 m³hr	Casing	28.3	25.2	21.4	13.0	12.2	6.3	11.4	5.2
25 m³hr	Casing	38.3	33.8	33.2	22.1	16.0	6.8	11.4	14.8
40 m³hr	Casing	41.2	36.8	35.2	23.8	17.9	7.9	11.5	17.1
55 m³hr	Casing	48.5	44.2	40.1	31.4	24.2	13.8	11.0	23.3

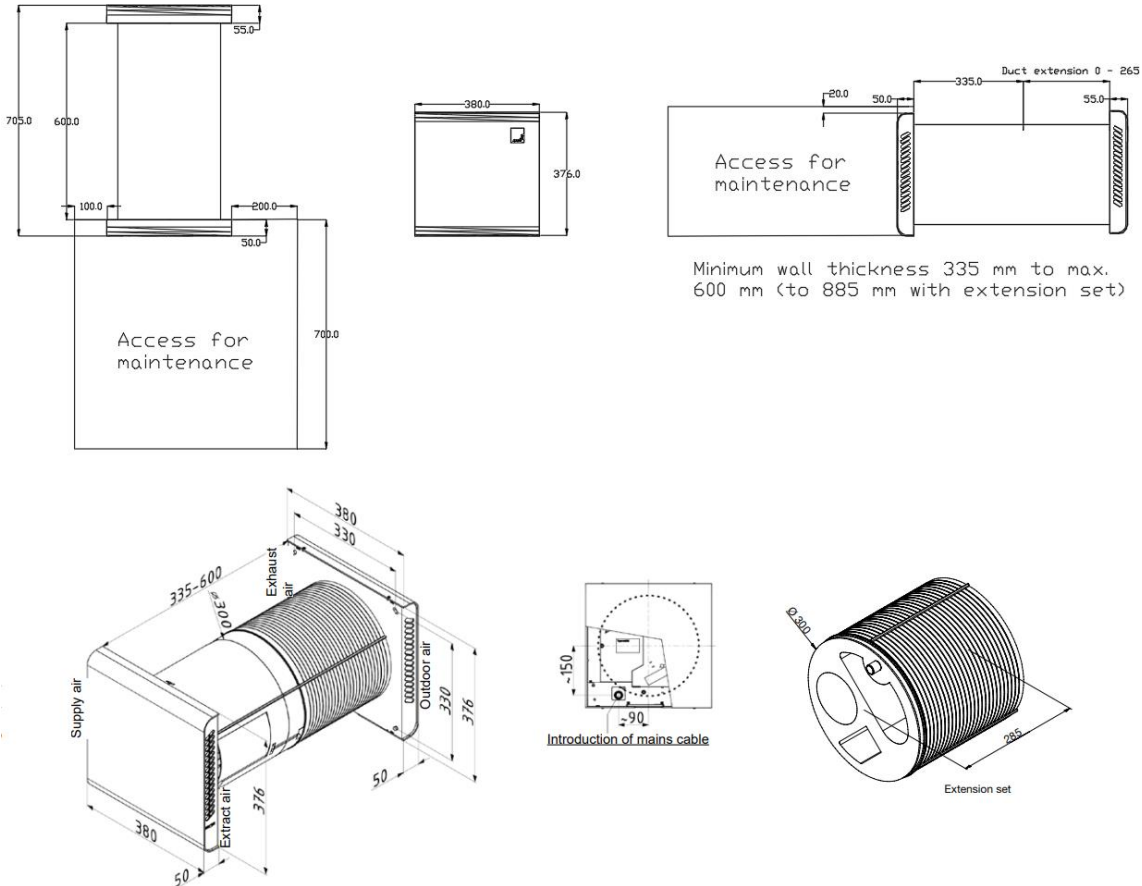
Casing tested according to [ISO 3741:2010](#). Environment dB(A) @ 3m given as hemispherical.

Technical Specification

Weight	5 Kg
Filter grade	Standard - ISO Coarse (G4) Optional - ISO ePM10 (F7)
Materials	EPP / ABS
External wall panel options	Stainless steel / plastic (RAL 9016)
Supply voltage	230 V / single-phase / 50Hz
Maximum power consumption	15 W
Current draw	0.07 A
Fuse rating	3 amp
Maximum cable size Ø	1.5 mm²
Energy Recovery Efficiency	Up to 85% heat recovery Up to 74% humidity recovery
IP Rating	IPX11
Mounting	Wall

Dimensions

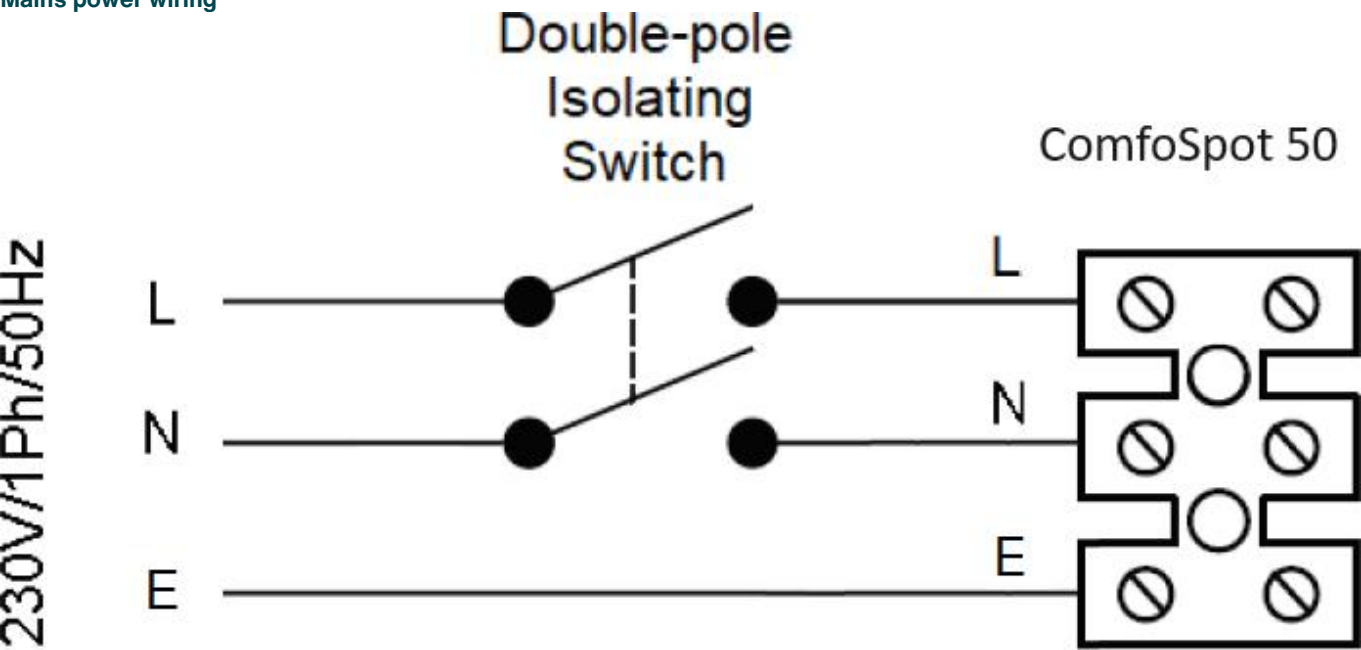
Height	376 mm
Width	380 mm
Depth	50 mm
Duct diameter Ø	315 mm
Duct length	600 mm (optional 900 mm)
Core drill diameter Ø	~340 mm



Wiring

Electrical connections should be carried out in accordance to [IEE regulations](#) by a qualified electrician. The unit is supplied with a flying lead for connection to the mains supply.

Mains power wiring



Compact and discreet

The ComfoSpot 50 has a slim profile and an extremely flat design, making it unobtrusive in any setting. Interior and exterior wall panels can be painted over to match the colour of the wall, ensuring a harmonious appearance. The control panel is integrated into the unit panel, providing intuitive operation. Installation is straightforward, requiring only one drilled core hole and a connection to a 230V power supply.



Efficient ventilation and comfort

The Zehnder ComfoSpot 50 is an energy-efficient ventilation unit with an enthalpy exchanger for heat and humidity recovery. Its hygienic membranes prevent odour transfer, and the slim design integrates seamlessly into any room. Users can control it via the built-in panel or an optional external control panel.



Effortless control

The Zehnder ComfoSpot 50 features an easy-to-use control panel that allows users to manage the unit effortlessly. By pressing the plus/minus buttons, you can select from four fan speeds or switch the unit to standby mode. Additionally, the automatic function can be activated by pressing the plus button from fan speed 4. The control panel also provides visual indicators for operating status, filter replacement reminders, and fault messages. Overall, it ensures convenient and uncomplicated control of the ventilation unit.



Controls

ComfoLED

Product code: 528 009 050



The Zehnder ComfoLED is a four position switch designed to enable the user to manually select the desired ventilation flow rate and provide system notification.

Key Benefits

- 4 separate ventilation flow rate options to select in 1 controller
- Temporary high speed activation setting
- Service and Maintenance alert

Technical Specification

Mounting options	Recessed
Supply voltage	Low voltage direct from the SRHR units plug-in connector
IP rating	IP30
Recommended cable	4 core cable, 1 mm Max. (up to 25 metres)
RAL colour	9010

Dimensions (recessed)

Height	80 mm
Width	80 mm
Depth	10 mm

RFZ module

Product code: 527 010 550



The Zehnder RFZ module enables to connect a network of units together into zones.

Key Benefits

- Create ventilation zones by connecting multiple ComfoSpot 50 or ComfoAir 70 units to work in parallel
- Paired unit will communicate with one another to ensure function synchronisation
- The units can still be adjusted using the internal or external control units
- Up to 32 units can be set per zones

Technical Specification

Mounting options	Directly to unit
Supply voltage	Low voltage direct from the SRHR units plug-in connector
IP rating	IP11
RAL colour	9016
Maximum number per unit	1

Dimensions (surface mounted)

Height	42 mm
Width	42 mm
Depth	22.5 mm

BIM/CAD Components

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

TO VISIT OUR BIM/CAD LIBRARY

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Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

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Our Informational Videos



Watch our video on the functionality, features and how to install the ComfoSpot 50

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Consultant Specification

Specification

The unit shall consist of a body manufactured in plastic. The unit shall be fully insulated using high quality EPP to maintain excellent thermal characteristics and prevent shrinkage over time. It shall have maintenance free EC motors. The fans impellers should be low pressure centrifugal type with backward curved blades within ABS scroll housing. The enthalpy exchanger shall be a multi-plate, counter flow design constructed from Polystyrene with laser welded joints and shall retain up to 85% of the temperature differential of outgoing air for sensible heat transfer plus up to 74% latent transfer of humidity, negating the need for a condensate drain. The unit shall function at temperatures as low as -5°C without the need for a preheater or frost protection.

The unit shall contain filters manufactured from material which has been tested to a minimum of [ISO Coarse](#) (G4) standard with the option to upgrade to [ISO ePM1](#) (F7). The filters shall be pleated to reduce the pressure drop and required cleaning time. The unit shall have a 315 mm duct connection, and be suitable for wall mounting.

The unit shall be constructed to have a removable cover to allow full maintenance access which can be painted using a solvent-free or interior paint. The removable cover shall enable access to the heat exchanger and access to EPP section with integrated power supply unit, control board and fans. The unit shall have spare parts available for a minimum of 10 years even after ceasing manufacture of the unit.

The unit shall conform to LVD and EMC standards and be CE Marked. The unit shall be manufactured by Zehnder.

Operation

The fresh filtered air from outside shall be supplied into the area the unit is located whilst synchronously being pre-heated by the warm extract air, via the plastic counter flow heat exchanger. The unit shall vary its speed of the EC motors automatically when it receives a signal from one of the inbuilt sensors or via external switches.

The unit shall have the ability to adjust the flow rate via the front mounted in-built interface.

Controls

All ComfoSpot 50 units shall contain the following functions:

- 100% variable motor control
- Heat exchanger frost protection
- Integral service, fault and operation indicators
- Tool free filter access
- Humidity sensor option to operate the unit in a stepped response to high humidity levels
- CO2 sensor option to operate the unit in a stepped response to high CO2 levels
- Remote activation utilising the optional wired ComfoLED controller
- RFZ module option to enable networking