Manufacturer's warranty

The supplier grants limited warranty ("Warranty") under this Warranty statement for new manufactured under this warranty statement, which covers defects in materials- and manufacturing fault of the equipment covered by the warranty that do not materially comply with it's written product description. The product description does not include marketing materials.

The customer must perform an acceptance inspection of the device within seven (7) days of the customer receiving the device.

The customer must immediately notify the supplier in writing of any defects or deficiencies found in the device and the delivery.

WARRANTY PERIOD

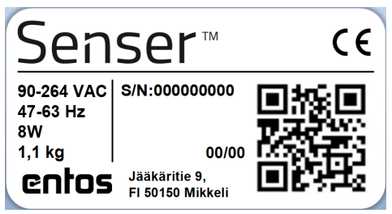
The warranty period is twenty-four (24) months from the date of first purchase of the device. If the date of purchase cannot be verified, the warranty period begins on the date of manufacture of the device.

WARRANTY CONDITIONS

The warranty is conditional on the device being defective in material or manufacturing when used in accordance with the operating and maintenance instructions. And that:

- the fault has occurred under normal conditions of the use and the fault can be repeated under such conditions:
- the device has been transported and stored in accordance with the instructions given by the supplier;
- the device been installed in accordance with the supplier's installation instructions;
- the supplier has been provided with an installation report on the installation of the device and on the installation in accordance with the installation instructions for device;
- original spare parts and accessories have been used to service and repair the device and the device as not been disassembled or otherwise altered
- the warranty claim and the defect are presented by customer or his authorized representative during the warranty period; and
- the supplier will be notified in connection with the warranty claim, the order number, delivery date, installation report, description of the defect and a description of the operating conditions of the device.

Nameplate:



CE

This QR code takes you to the help page

Senser™

Introduction

This manual includes the techical data of the Senser device, the installation and operating instructions. Read the safety requirements and the installation and operating instructions carefully.

Applications

The Senser smart control device is mainly used in residential buildings such as apartment buildings. The device measures the indoor air quality from the exhaust air with carbon dioxide, temperature, VOC, NOX and humidity sensors. When the concentration of any of the above-mentioned in the exhaust air increases above the set values, the Senser increases the speed of the EC fan and thus increases the ventilation. In this way ventilation is created which becomes more effective as needed. The demand controlled ventilation prevents the loss of heat energy through ventilation, living comfort improves, and the efficiency is sufficient and timely. Night ventilation is also possible in the summertime.

Contents of the package

The Senser is delivered in a 255 mm x 200 mm x 180 mm recyclable cardboard package.

Contents of the package:

- Senser device
- Manual

Safety requirements

When installing and using the device, you must notice the safety requirements given in the user and the general safety instructions and standards for the buildings and the use of electrical equipment. Before connecting the device to the electrical grid, make sure that the device is not visibly damaged and there are no loose parts inside.

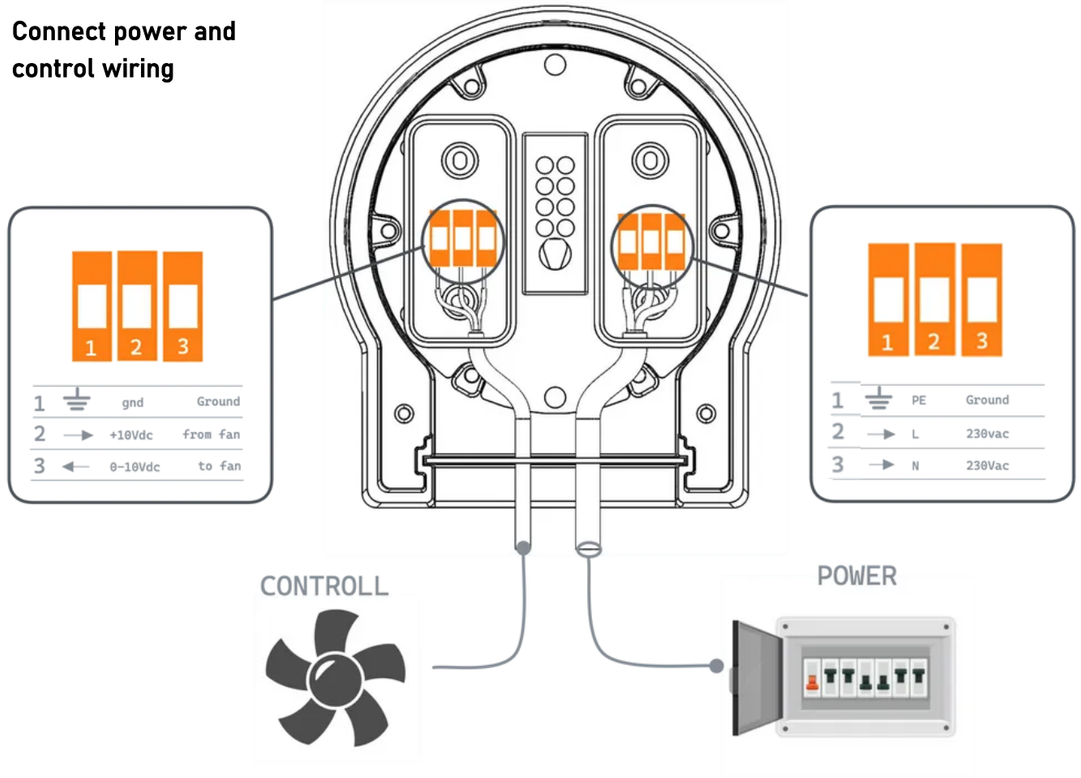
Ground the device before use!

Only an authorized electrician may connect the device to the electrical grid.

Attention!

Installation, maintenance, connection and repair work is only permitted when the device is disconnected from the mains.

Connect power and control wiring



Installation:

Comply with current electrical safety regulations.

The nameplate is located on the left side of the device.

The device has a single-phase power supply.

Senser must be installed on the north side, because the outdoor temperature sensor is located inside of the device.

Senser has a guided installation. Familiarize yourself with the instructions of the program carefully.

Commissioning and use:

Check that the Senser is installed according to the instructions.

When commissioning the device, it must be measured and set air volumes to the device.

Service and maintenance:

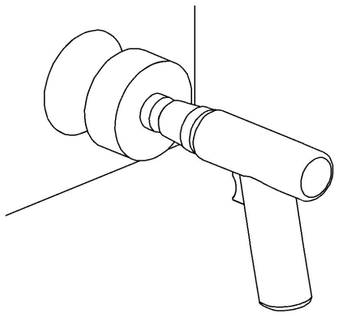
The maintenance of the Senser is done by web based remote control, which means that there is no need to make unnecessary maintenance visits. The values of the device can be monitored in real time the cloud service.

In case of failure, contact tekninentuki@entos.fi

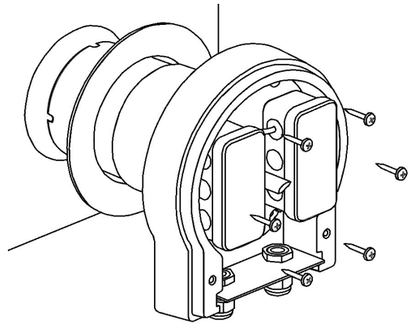
Storage and transport

Store the Senser in its original packaging at the temperature of +10 to +40 degrees (Relative humidity below 80%). The Senser must be protected damages caused mechanical and weather conditions.

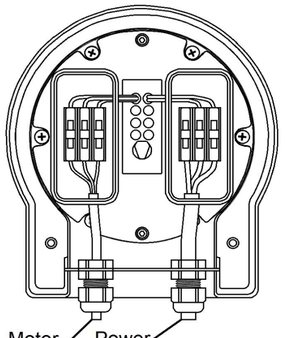
Installation:



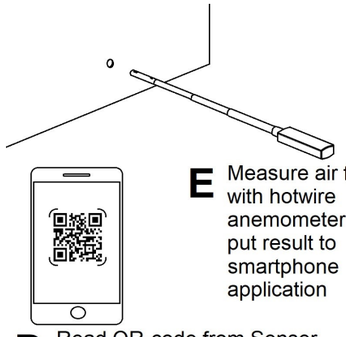
A Drill ø100mm hole



B Fasten Senser with 6x screws and seal the joint



C Fasten power and motor driver cables



D Read QR-code from Senser identification plate to go smartphone application

E Measure air flow with hotwire anemometer and put result to smartphone application

Main specs

Voltage/ Power/ Hz	90-264 VAC/ 8W/ 47-63 Hz
IP class	4_
Dimension (d x w x h)	230 x 170 x 200 mm
Weight	0,5 kg
Working temperature	-34 … +85°C
Working humidity, RH	20 … 95 %
Operating conditions of humidity compensation	-10 … +50℃/ 0…90%
Storage temperature / humidity	-40 … +90℃/ 10 .. 95 %

Measurement

Voc, ppm	0…1000
CO2, ppm	0..1000
Me, Humidity element, RH	0..100 %
Te, Temperature element	-40…+70 ℃
NOx, ppm	0…500
Pe, Pressure element, Pa	0…2500 (250/500/1250/2500)
Te, Outside element, ℃	-40…+80 ℃ (Acc. ±0,5 ℃/ res. 0,1 ℃)
Me, Outside humidity, RH	0…99,9 % RH (Acc. ±3/ res. 0,1)
NO2	Optional
O3	Optional

Data/ Modem

RAT	LTE Cat M1/Cat NB1/EGPRS
Frequency (MHz)	LTE-FDD: B1/2/3/4/5/8/12/13/18/19/20/26/28; EGPRS: 850/900/1800/1900 MHz
Sertificates	Vodafone/ Deutsche Telekom/ Telefónica/ Verizon/ AT&T/ T-Mobile/ Telus/ Rogers/ SKT/ LGU+/ NTT DOCOMO/ SoftBank/ KDDI/ Telstra/ GCF/ CE/ FCC/ PTCRB/ IC/ IFETEL/ CCC/ KC/ NCC/ JATE/ TELEC/ RCM/ NBTC/ IMDA/ ICASA/ U.S._Cellular