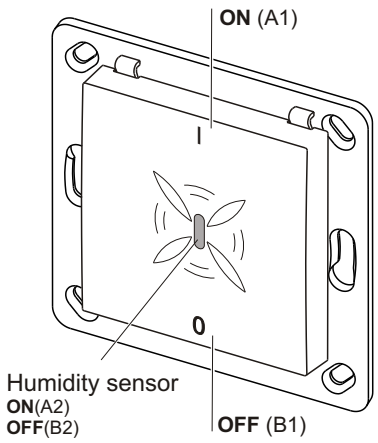
GB Radio humidity sensor SH01

Model



SH01E5002-01

Technical Details

Frequency:	868,30 MHz
Radiated power:	0.54 mW
Modulation:	FSK
Coding:	Easywave A/B
Power supply:	1x 3-V-battery, CR2032 or alternatively 12-24 V AC/DC SELV
Current consumption:	approx. 15 mA
Measuring range:	1-99 % rH
Accuracy:	+-5 % (with 30 % - 70 % rH)
Switching value:	1. >74 % rH 2. fast rise at 4 % starting from >40 % rH
Data logging:	all 2 min
Operating temperature:	-20 °C to +60 °C
Range:	free-field: approx. 150 m buildings: approx. 30 m
Degree of protection:	IP30
Dimensions:	button: 55x55x10 mm plate: 71x71x1,5 mm
Weight:	32,0 g incl. battery

Scope of Delivery

Sensor module, battery CR2032, mounting plate, button, attachment set, operating instructions

Intended Use

Only use the Radio humidity sensor SH01 in indoor rooms to switch Easywave receivers.

The manufacturer shall not be liable for any damage caused by improper or non-intended use.

Safety Advice

Before using the Radio humidity sensor, carefully read through the operating instructions!

Also note the operating instructions of the receiver!

Have faulty Radio humidity sensor checked by the manufacturer!

Do not make any unauthorized alterations or modifications to the Radio humidity sensor!

Keep the batteries out of the reach of children!

Function

The wireless sensor SH01 is a combination of humidity sensor and push button.

Both the humidity sensor and the push button have their own transmission code. The transmission code of the push button is referred here hereafter as A1 and B1 and the transmission code of the sensor is referred to as A2 and B2.

The humidity sensor measures the relative air humidity in cycles and sends a switching signal to an Easywave wireless receiver when exceeding and/or reaching defined values. This can then switch connected ventilation devices like e.g. fans or electric window openers.

The push button function is a standard Easywave application for turning electric consumers ON or OFF.

The sensor is compatible to several frames, having internal dimensions of 55x55 mm. Please find a choice of compatible in the data sheet.

Monitoring of air humidity

The wireless humidity sensor has three operating ranges.

Range 1 is the range below 40% rH (relative humidity). The humidity sensor does not react in this range.

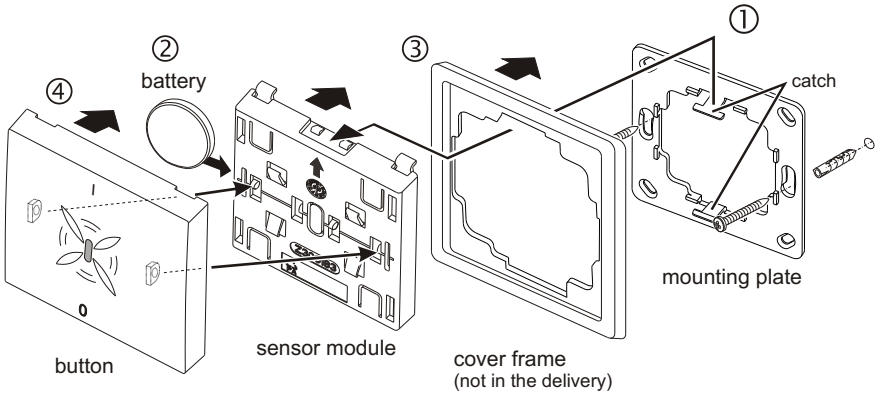
Range 2 is the range from 40% rH to 74% rH. In this range the humidity sensor reacts to a sudden rise in air humidity. If the relative humidity rises 4% rH within two minutes (e.g. when showering), an A2 switch signal (ON) is sent. Once the humidity level approaches the initial value again, a B2 switch signal (OFF) is sent.

Range 3 is the range above 74 % rH. If this range is reached, the sensor sends an A2 switch signal (ON). If the relative humidity drops below 72% rH, the humidity sensor sends a B2 switch signal (OFF). If the relative humidity does not drop below 72% rH within four hours, the sensor will also send a B2 switch signal (OFF).

Start-up

1. Screw or stick the mounting plate to the installation site with the screws and dowels or the adhesive pads.

   Caution: Make sure there is no interference with the wireless connection. Do not mount the device in a distribution box, in metal casings, in direct proximity to large metal objects, on the floor or close to it.
2. Legen Sie die Batterie in das Sensormodul ein (s. auch Abschnitt „Batterie wechseln“).
3. Place the cover frame onto the mounting plate and snap the transmission module to the catches on top and bottom. The arrow on the sensor module has to point upwards.
4. Snap the button onto the transmission module
5. Memorize the sendor code and additional the button code in the receiver. Please read the chapter „Memorizing the sensor code“ or „Memorizing the button code“ and the instructions supplied with the receiver.



Memorizing the sensor codes

There are two possibilities to teach the sensor code into an Easywave radio receiver.

A Two seconds after inserting the battery, the Easywave code B2 is sent automatically.

B Teaching in through button assignment

1. Press the button on the top for approx. 5 seconds (measuring point A1) until the LED in the humidity sensor lights up.
2. Put the radio receiver into teach-in mode and then press the button on the bottom. You have 10 seconds to complete this procedure. The sensor code (Easywave code B2) is transmitted to the receiver and the LED goes off after 10 seconds.

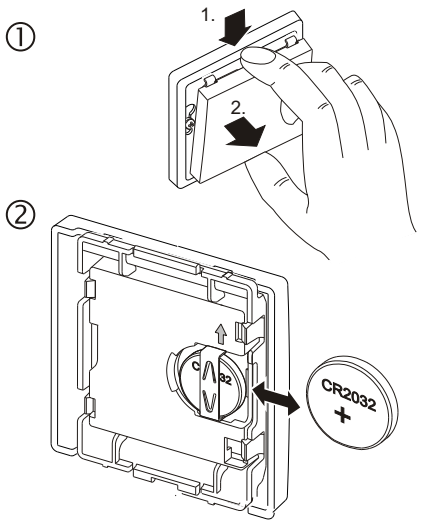
Memorizing the button code

1. Put the radio receiver into teach-in mode.
2. Press the button on the top briefly (measuring point A1), the tranmission code is sent.

Replacing the Battery

1. Lever off the transmission group.
2. Replace the battery. Only use batteries of the type CR2032. **Make sure the poling is correct. The positive pole has to be visible!**
3. Replace the transmission group back onto the catches.

Note: Two seconds after inserting the battery, the Easywave code B2 is sent automatically.



Trouble Shooting

If the radio receiver does not react to the Radio humidity sensor :

- Exchange the battery.
- Check that the wireless connection at the installation site is not impaired between the Radio humidity sensor and the receiver.
- Memorize the transmission code in the receiver.
- Other wireless devices using the same frequency or working in direct proximity may interfere with the device.

Connecting the protective low voltage

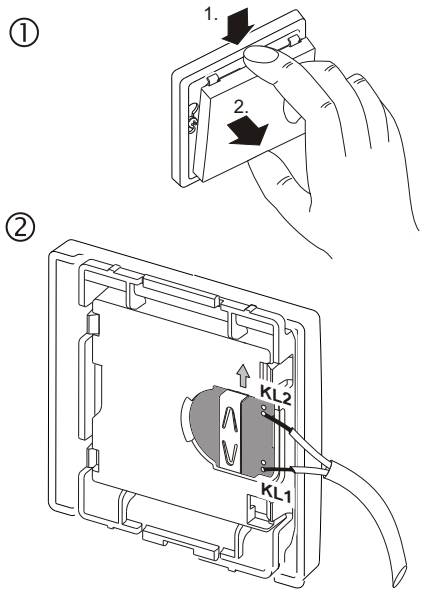
The humidity sensor can also be operated with 12-24 V AC/DC low voltage.

Use flexible equipment wires Ø 0.5 to 0.6 mm for this purpose. These must be stripped 8 mm.

1. Lever off the transmission group.
2. Remove the battery and insert the wires into one of the borings KL1 and KL2 on the circuit board. The wire is clamped into the spring contact on the rear and cannot be removed again without destroying it.

   The second boring KL1 or KL2 is intended for looping through, if applicable.
3. Re-attach the transmission group to the catches.

Note: Two seconds after activating the supply voltage, the Easywave send code B2 is sent automatically.



Disposal

Waste electrical products and batteries not be disposed of with household waste!

Dispose of the waste product via a collection point for electronic scrap or via your specialist dealer.

Dispose of used batteries in a recycling bin for batteries or via the specialist trade.

Put the packaging material into the recycling bins for cardboard, paper and plastics.

Warranty

Within the statutory warranty period we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults.

Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity

Hereby, ELDAT GmbH declares that the radio equipment type SH01 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de

Service

If, despite correct handling, faults or malfunctions occur or if the product was damaged, please contact your retailer or the manufacturer.

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