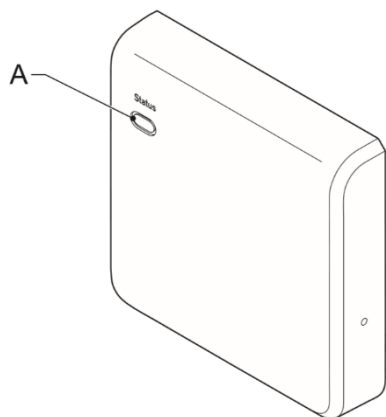


Installation and operation Instructions VMC-47VJ54 (RF-receiver)



A: Status-led

1. How to use this manual

This manual is intended as a reference book by which qualified installers can install the VMC-47VJ54 (henceforth called “device”) and users can use the device for its intended purpose. Make sure you have read and understood the manual before you install and/or use the device.

1.1 Admonitions



'Warning' identifies a hazard that could lead to personal injury, including death.



'Note' is used to highlight additional information.

1.2 Intended use

The device is designed for following purposes:
To set the speed level of ventilation through the fan speed, based on user input, measured humidity level, or measured CO₂ level.
Every other or further use is not in conformance with the intended use.

1.3 Working principle

The device outputs a 0-10V DC signal to control a ventilation system. To define how the ventilation system must be controlled, the device receives input from one or more control device(s) via wireless communications. Various control devices are available: push button controls, humidity sensors and CO₂ sensors. The device sends status information back to all connected control devices.

1.3.1 Ventilation speeds and modes

The ventilation system runs in one of the following modes.

Mode	Fan speed	Default
Away	Low	20%
Home	Medium	50%
Timer	High for restricted period	80%
Auto	Low-High based on measured values	
Party	High	100%

The device drives the fan based on the highest of values sent by the bound wireless sensor(s). You can use the bound wireless sensor(s) to modify the configured fan speeds.

2. Content delivery

- RF-receiver (VMC-47VJ54) 1
- Mounting screws 2
- Mounting plugs 2
- Manual 1

3. Visual signals

		Status led
Start up	Orange	Continuous
Status		
OK	Green	Continuous
Communication error	RED	1 flash
Fan error		3 flashes
Configuration		
Binding	Red / green	1 flash

4. Safety

The device meets the following EC directives:

- EMC directive: 2014/30/EC
- Low voltage directive: 2014/35/EU
- RTTE directive: 2014/53/EU
- RoHS directive: 2011/65/EU
- WEEE directive: 2012/19/EU

4.1 Signs on the device



Check the instructions for use for important cautionary.



Risk of electric shock.



IEC 61140 protection Class II (double insulated).



CE marking of conformity.



Dispose according to European Community Directive 2012/19/EU (WEEE).

General safety instructions

This product was designed and manufactured to ensure maximum safety during installation, operation, and service. Always read these safety instructions before installing, maintaining, or servicing the product, and strictly comply with these instructions. Parts of the device carry mains power, which is a potential lethal voltage. Disconnect power at supply line, circuit breaker or fuse before installing, servicing, or removing the device.

The device is designed for indoor use only. Do not expose the device to rain or moisture, to avoid short circuit. Short circuit may cause fire or electric shock hazard. Operate the device between 0°C and 40°C. For cleaning of the device use a soft damp cloth only. Never use any abrasive or chemical cleaner.

5. Installation

5.1 Preparation

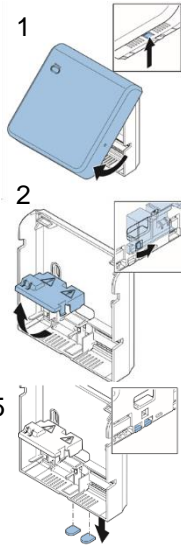


Disconnect power at supply line, circuit breaker or fuse before installing the device.



Do not place the device in a metal casing.

1. Press the clip and pull the top section from the bottom section.
2. Open the safety cover. Use a small flat-tip screwdriver to loosen the clip.
3. When using screws: Use the mounting plate as a marking template.
4. When using tape:
 - a. Make sure the surface is smooth, clean, and degreased.
 - b. Remove the foil from the double-sided tape.



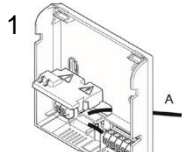
5. Remove the breakout plastic from the cable input of the housing.

5.2 Installation procedure

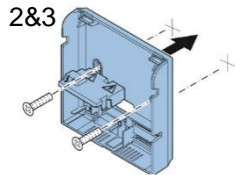


Make sure that the power supply is disconnected.

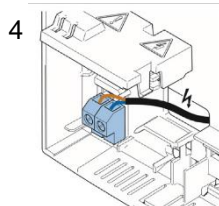
1. Lead the power and IO cables through the back hole (A) or cable entrances (B).



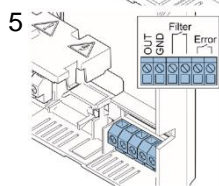
2. Place the bottom section of the device.
3. Fasten the bottom section using the screws or tape.



4. Connect the power cable in the screw terminals.



5. Connect the 0-10Vdc output cable in the screw terminals (OUT & GND).



6. Place the upper section of the receiver on the lower bottom section. Push until you hear a click.



5.3 Commissioning

1. Enable the 230V power supply. The led is orange for 3 seconds. After 3 seconds the led shows the binding mode. The ventilation starts at 100%. After a short time, the ventilation goes to the active ventilation mode. The mode of ventilation depends on the last used mode before switching off. Default is 50%.
2. Within 5 minutes, bind all wireless controls to the device. See the manual of the used device for specific instructions. After 5 minutes, the led shows the device status.



You can bind up to 20 devices.

6. Fault finding

Problem	Possible cause	How to Solve
Fan does not run	Connection(s) broken	Check wiring
	Configuration invalid	Make sure that medium level between high and low values
Control is not possible from a control device	The control device is not bound	Restart the device and bind the control device again

7. Technical data

7.1	Dimensions	
	Main dimensions (h x w x d)	100 x 100 x 28 mm
	Weight	+/- 125 g
7.2	Ambient conditions	
	Operating Temperature Range	0 to 40 °C
	Shipping & Storage Temperature Range	-20 to 55°C
	Relative Humidity	0 - 90%, non-condensing
	Ingress protection	IP30
7.3	Electrical specification	
	Mains Power Source	230VAC ± 10%, 50Hz
	Maximum power consumption	4VA
	Wire diameter	0.25 to 2.5 mm ²
7.4	Wireless connection specifications	
	Communication frequency	868.3 MHz
	Output Power	At least 0 dBm
		Multipoint communication Max 20 devices
		You are not allowed to use the device outside of Europe
7.5	Wired connection specifications	
	Output signal	0-10V