

# **sMove**

s4 • s8

Installation and operating instructions





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#### Disclaimer

This documentation is a translation of the original German operating instructions. After completion of the installation it must be given to the user (tenant, owner, property management, etc.). The content of this documentation has been checked for compliance with the described hardware and software. Nevertheless deviations may still occur, therefore no guarantee of compliance can be provided. This documentation describes the functionality of the standard scope. The documentation does not purport to cover all details on all types of the product and cannot cover every conceivable scenario for operation, cleaning and maintenance. The illustrations in this document may differ slightly from the design of the product that you have purchased. The same functionality is ensured despite any design deviations.

This documentation is updated regularly. Necessary corrections and appropriate supplements are always included in subsequent editions.

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Version 2.0

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# 1 User and safety instructions

#### 1.1 User information

#### Concept of safety instructions

The safety and warning instructions in these operating instructions have a uniform structure and are marked with a symbol on the left side of the instruction. A signal word in front of the text also indicates the hazard level. If several hazard levels exist, the highest level safety instruction is always used.

The safety and warning instructions contain the following information.



SIGNAL WORD: Type and origin of the hazard. Possible consequences of the hazard!

· Measures to avoid the hazard.

The signal word indicates the severity of the potential hazard unless the preventative measures are taken.



**DANGER** indicates imminent danger of serious injury or death.



**CAUTION** indicates possible danger of minor/significant injury.



**NOTE** indicates: Imminent or possible damage to property due to an adverse event/state.

If you see this sign, ensure you observe the described measures to prevent possible hazards and/or damage.

# Other symbols and notices used in this documentation

In addition to the safety instructions, the following symbols are used:



A **TIP** symbol indicates practical and useful tips for handling the sMove controller.



A **tool symbol** before an installation sequence lists any additional tools and materials required for the described task.

- ▶ Action required: this requires the user to perform a specific action.
- ⇒ **Check the results:** this requires you to check the results of the action you have performed. The graphics in section 6 show the interior wall. The installation displayed in the documentation is based on the flush-mounted box. Follow the same procedure for the plasterboard wall box.

# 1.2 Safety instructions

These installation and operating instructions are part of the ventilation unit and must be permanently available. When handing the equipment/system to a third party, the instructions must be handed over also. Before performing any work on the system, read the installation and operating instructions carefully and observe all notices that refer to the process in this section. Also note the safety instructions that precede the described handling instructions. Non-observance of safety warnings could result in injury and/or property damage.

#### Intended use

The sMove controller is used to control in VENTer® ventilation systems with heat recovery.

- When installing the controller, ensure compliance with the current building regulations, fire
  protection regulations and accident prevention regulations of the relevant professional association.
- Use the controller exclusively for the applications that are described in this documentation
  and only in conjunction with components that are recommended, authorised and described
  by inVENTer GmbH in this documentation. Changes or modifications to the controller are not
  permitted.
- Trouble-free and safe operation of the controller depends upon proper transportation, proper storage and installation as well as careful operation and maintenance. These instructions are part of the controller and must be permanently available.
- These installation instructions are only valid in conjunction with the installation and operating instructions for the corresponding ventilation unit of the iV-Smart<sup>+</sup>, iV14-Zero, iV-Light, iV-Compact, iV25 oder iV-Twin+ product ranges, as well as the USTS wall vent ventilation system, which it supplements. All legal notices that are listed in the documentation, also apply to this document without restriction.



- DANGER: Installation of the sMove controller may only be carried out by qualified electricians.
- DANGER: when laying the power supply cable, observe the requirements of protection
  class II. Do not lay live cables. The mains power supply must correspond to the specifications
  on the device information plate. Before working on electrical installations, disconnect all affected equipment from the power supply. Connect all controllers for one ventilation systemon
  the same circuit breaker.



CAUTION: Operation and/or maintenance of the ventilation unit and its controllers must not
be carried out by children and/or persons who are not fully capable of doing so due to their
physical, sensory or mental capabilities, inexperience or lack of knowledge. Young children
should be supervised to ensure that they do not play with the device.



 NOTE: Lay cables without a plaster-resistant cable sheath inside an empty conduit to avoid damage to property.

If your controller has a defect, contact your nearest distributor or our technical service.

Any kind of use other than the intended use will exclude all liability claims.

#### Improper use

The controller is exclusively designed to control the ventilation units mentioned in the intended use section. Any other use is strictly prohibited.

#### Qualified personnel

The sMove controller complies with the applicable technical safety requirements and standards for electrical equipment. It may only be set up and operated in conjunction with this documentation. Installation, electrical connection and commissioning of the controller may only be performed by qualified personnel.

Qualified personnel within the meaning of the safety notices in this documentation are persons who are authorised to install, put it into operation and identify equipment, systems and circuits in accordance with established safety procedures.

# 2 System overview

The sMove controller is an electronic programming unit for controlling inVENTer® ventilation devices with heat recovery. It is available in the sMove s4 and sMove s8 versions.

Each sMove controller can control the following maximum number of ventilation units:

	sMove s4	sMove s8
Ventilation units		
iV-Smart+ / iV14-Zero /	4 ventilation units	8 ventilation units
iV-Light / iV-Compact		
iV-Twin+ / iV25	2 ventilation units	4 ventilation units

It is characterised by a timeless and slim design, easy installation and a simple touch-based operating concept.

The controller is operated by touching the capacitive buttons and the slide controller on the control panel. The control panel also serves as a display surface due to integrated illuminated displays.

The sMove can be used either as a base module or with additional sensors connected.

When used as a basic control unit, it is possible to select the operating mode of the ventilation unit and to set the air volume flow, either continuously or in 4 predefined steps.

The connected ventilation unitss can be controlled in the following modes:

Heat recovery

Pause function

Continuous ventilation

Off (only sMove standard version)

An external interface extends the functional scope by connecting a potential-free switching contact: hygrostat, CO<sub>2</sub> sensor, VOC sensor<sup>1)</sup> (NO) or pressure switch (NC) or integration into an existing home automation system via an analogue input.

Optionally, a  $\mathrm{CO}_2$  sensor and a humidistat can be purchased as an accessory from inVENTer GmbH.

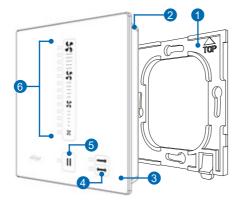
#### **Features**

- available with flush-mounted switching power supply or cabinet switching power supply.
- · available in Standard or Flat version.

<sup>1)</sup> VOC = Volatile organic compounds

#### 2.1 Construction

The sMove controller consists of a base plate for mounting on the inner wall and an operating unit. The operating unit contains the electronics of the sMove and the control panel (acrylic glass cover). With its integrated indicator lights, the control panel also serves as a display interface for the user.



- 1 Holding plate
- 2 Operating unit
- 3 Acrylic glass cover (control panel)
- 4 Mode button
- 5 Pause/Off button
- 6 Slide control for output levels 1 4

Figure 1: Front view of sMove controller operating unit

#### Models

The controller sMove is available in standard and flat versions.

**Flat version:** the controller switches off the ventilation device for one hour when in pause mode. Subsequently, the ventilation device continues to work in heat recovery mode at the lowest output level.

The use of the flat version is recommended in areas where it is desirable not to turn off the ventilation system in order to maintain humidity levels.

**Standard version:** in addition to pause mode, the standard version provides the option to switch off the ventilation device completely.

Die Leistungsstufen des Lüftungsgerätes lassen sich in allen Betriebsarten einstellen.

Output level	Flow rate (%) <sup>1)</sup>		
	Standard version	Flat version	
1		25	
2		35	
3		50	
4	100		

<sup>1)</sup> The figures refer to the paired operation of two ventilation units.

#### 2.2 Function

#### Regler sMove ohne angeschlossene Schnittstelle

#### sMove controller without connected interface

If the external interface is not connected, the mode and the intensity of the air flow can be set on the sMove controller.

The heat recovery and ventilation modes can easily be set by touching the Mode button. The OFF mode or the pause function can be selected by touching the Off/Pause button.

The intensity of the ventilation can be adjusted continuously by moving the slide control, or in four steps by touching the fan icons on the slide control. The fan symbols on the slide control serve as a guide.

Output level	Symbol	Flow rate (%)
1	sç	25
2	<b>3</b> 5	35
3	35	50
not specified	LED 10	70
4	Şς	100

The new setting takes effect immediately, so that adjustments can be made purely by listening to changes in the sound level.

An indicator light next to the button indicates the selected mode. The position of the illuminated display on the left side of the slide control indicates the currently set output level.

#### sMove controller with connected interface (advanced features)

The external interface is a bi-functional port on the back of the operating unit. It enables the connection of a sensor with a potential-free switching contact (NO/NC) or the use of an analogue input to integrate the ventilation system into an existing home automation system.

Connecting the external interface changes the functionality of your controller as follows:

#### A. Interface as external switching contact (sensors)

The sensor used must have a potential-free relay contact. The function settings of the interface are adjusted via the jumper on the back of the operating unit ( 4.4: Electrical connection).

The connection of a **pressure monitor** is necessary in rooms with air-ventilated fireplaces. Please consult a chimney sweep/construction planner about this.

If the interface is used for a pressure switch, the air pressure in the interior is measured continuously. Once the air pressure exceeds or falls below the safety threshold, the sensor reacts and turns off all connected ventilation unitss. The function remains active until the air pressure falls below the safety-relevant limit value again.

If the external interface is used to connect a

- CO, sensor, the CO, content in the interior is measured continuously.
- hygrostat, the relative humidity in the interior is measured continuously.
- VOC¹) sensor, the composition of the air and the resulting air quality are measured continuously.

A CO<sub>2</sub> sensor and a hygrostat are optionally available as accessories.

Once the respective value exceeds the upper limit or falls below the lower limit, the sensor reacts and switches all connected ventilation units to ventilation mode, output level 3.

Sensor	Switch	Upper limit exceeded / Switch opened	Lowerlimit exceeded / Switch closed
Pressure monitor (4 Pa)	Opener contact (NC)	Switch all ventilation devices connected to the controller to the OFF mode.	Switch all ventilation devices- connected to the controller to the originally set mode.
CO <sub>2</sub> sensor	Closer	Switch all ventilation devices	Switch all ventilation devices
VOC sensor	contact (NO)	connected to the controller to ventilation mode, output level 3.	connected to the originally set mode.
Hygrostat	(110)	ventulation mode, output level o.	mode.

#### B. Interface as analogue input

If the interface is used as an analogue input, the ventilation system can be integrated into an existing home automation system. To do so, a predefined direct voltage level is set in the home automation control unit, depending on the desired function.

Depending on the control voltage, the operating modes continuous ventilation and heat recovery are possible in output levels 1 – 4, as well as switching off the connected ventilation units (for control voltages, see chapter 4.4: Electrical connection – jumper).

<sup>1)</sup> VOC = volatile organic compounds

# 2.3 Design and features

#### Control panel

The control panel is located on the front of the control unit and also serves as a display surface. It is composed of capacitive buttons and various indicator lights. It is operated by touching the various buttons (marked in grey in figure 2).

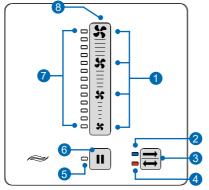


Figure 2: Operating and display elements on the control panel

- 1 Marker for output levels 1 4
- Continuous ventilation mode
   (blue) indicator light /
   filter change indicator (blue flashing)
- 3 Operating mode button
- 4 Heat recovery mode (orange) indicator light / filter change indicator (orange flashing)
- 5 Pause/Off indicator light
- 6 Pause/Off button
- 7 Output level indicator lights
- 8 Slide control

#### Slide control:

Briefly pressing the fan symbol allows you to select one of the four specific output levels. Touching the slide control for approx. one second lets you continuously adjust the output level by moving it. The position of the illuminated display on the left side of the slide control indicates the currently set output level.

#### Mode button:

Pressing repeqtedly lets you switch between the heat recovery and continuous ventilation modes. The indicator lights to the left of the Mode button displays the currently set mode.

#### Pause/Off button:

A brief press of the controller allows you to switch to the pause function for a chosen time. In the standard version, pressing the button for 5 seconds allows you to completely switch off all ventilation units connected to the controller. Pressing it again switches the connected ventilation units back on. In Flat version the ventilation unit cannot be shut off completely.

#### 3 Electrical connections



#### **DANGER**

#### Exposed electrical components.

Electric shock and injury due to live components (230V, 50Hz)!

- · Before working on electrical installations, disconnect all affected equipment from the power supply.
- Observe the requirements for protection class II when laying the power supply cable.
   Do not lay or connect live cables.
- · Lay the fan-BUS and power cables separately.
- The installation and connection must only be performed by qualified and trained personnel.



#### NOTE

#### Insufficient wire cross-section.

Excessive voltage drop and/or contact cannot be guaranteed!

· Only use the following cable cross-sections:

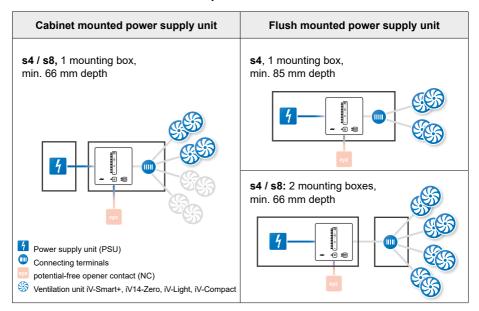
Fan-BUS: Min. 0.75 mm²
Operating voltage cable: 0.75 – 1.5 mm²
Power supply cable: 1.5 mm²



# TIP:

Connect the reversible fans in a star-shaped configuration and ensure sufficient clearance for the cables. Observe the maximum distances (maximum cable lengths).

#### Schematic sketches: Connection options for ventilation units to the sMove



#### 3.1 Controller sMove s4

#### Maximum cable lengths

#### Operating voltage cable, 2-wire, 24 V DC

Between power supply unit (PSU) and controller: Max. 100 m

#### Fan-BUS (cable LiYY3x0,75):

1. Star-shaped connection of the fans to the controller:

•	Between sMove s4 and iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact:	Max. 33 m
•	Between sMove s4 and iV25/iV-Twin+:	Max. 25 m

Connect the fans to the controller in series, maximum distance between controller and the last connected ventilation unit:

sMove s4 with 4 x iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact: Max. 15 m
 sMove s4 with 2 x iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact: Max. 25 m
 sMove s4 with 2 x iV25/ iV-Twin+: .....

#### Connection example for controller sMove s4 with cabinet mounted PSU

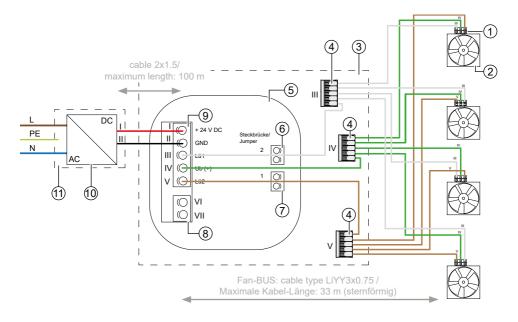


Figure 3: Connection example for controller sMove s4 with cabinet mounted PSU and distribution

# Connection example for controller sMove s4 with flush mounted PSU

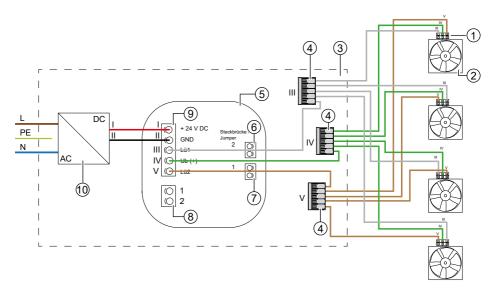


Figure 4: Connection example for controller sMove s4 with flush mounted PSU and distribution

#### Components

- 1 Plug-in connection
- ② Reversible fan
- (3) Mounting box
- 4 Connecting terminal block
- (5) Rear side of operating unit
- 6 Jumper for external interface
- 7 Jumper for service settings

- (8) Terminal, 2-pole (External interface)
- Terminal, 5-pole (fan-BUS/ controller operating voltage)
- (1) Control cabinet PSU NT17-s4 (fig. 3) / Flush mounted PSU NT17-s4 (fig. 4)
- (11) Control cabinet

#### Power cable

N	Neutral conductor	Blue
PE	Protective earth	Green/yellow
L	Phase conductor	Brown

I Controller operating voltage (+) Red
II Controller operating voltage (-) Black

#### Fan-BUS (cable: LiYY3x0.75 - max. 33 m with star-shaped connection)

III	Ground 1	(Lu1, –)	vvnite
IV	Fan operating voltage	(Ub (+))	Green
V	Ground 2	(Lü2.–)	Brown

# External interface (potential-free switching contact or analogue control cable 0 – 10 V)

1	Switching contact 1	Sk1	Analogue input (+)
2	Switching contact 2	Sk2	Analogue input (-)

#### 3.2 Controller sMove s8

#### Maximum cable lengths

#### Operating voltage cable, 2-wire, 24 V DC

Between power supply unit (PSU) and controller:

Max. 100 m

#### Fan-BUS (cable LiYY3x0,75):

1. Star-shaped connection of the fans to the controller:

•	Between sMove s8 and iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact:	Max. 33 m
•	Between sMove s8 and iV25/iV-Twin+:	Max. 20 m

Connect the fans to the controller in series, maximum distance between controller and the last connected ventilation unit:

sMove s8 with 8 x iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact: Max. 10 m
 sMove s8 with 4 x iV-Smart+/ iV14-Zero/ iV-Light/ iV-Compact: Max. 20 m
 sMove s8 with 4 x iV25/ iV-Twin+: ...... Max. 10 m

# Connection example for controller sMove s8 with cabinet mounted PSU

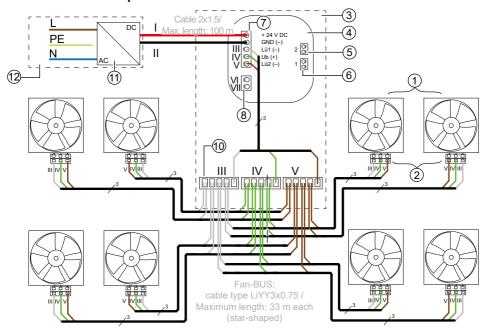


Figure 5: Connection example for controller sMove s8 with cabinet mounted PSU and distribution

# Connection example for controller sMove s8 with flush-mounted PSU

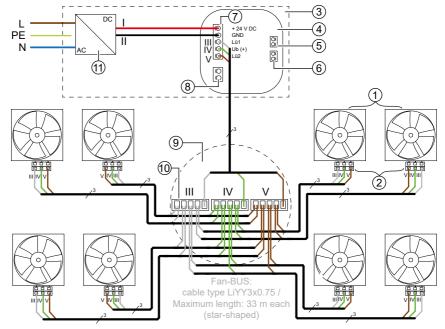


Figure 6: Connection example for controller sMove s8 with flush mounted PSU and distribution

#### Components

- (1) Reversible fan
- ② Plug-in connection
- 3 Mounting box for operating unit
- A Rear side of operating unit
- (5) Jumper for external interface
- 6 Jumper for service settings
- (7) Terminal, 5-pole (Fan-BUS / Controller operating voltage)

Switching contact 2

- 8 Terminal, 2-pole (External interface)
- Mounting box for PSU
- 10 Connecting terminal block
- (1) Cabinet mounted PSU NT17-s8 (fig. 5)/ Flush mounted PSU NT17-s8 (fig. 6)
- 12 Control cabinet

#### Versorgungskabel

#### Power cable

2

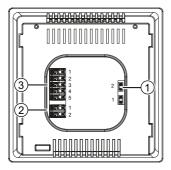
N	Neutral conductor		Blue
PE	Protective earth		Green/yellow
L	Phase conductor		Brown
I	Controller operating voltage	(+)	Red
II	Controller operating voltage	(-)	Black
Fan-BUS	(cable: LiYY3x0.75 - max. 33 m with star-s	haped conn	ection)
III	Ground 1	(Lü1, –)	White
IV	Fan operating voltage	(Ub (+))	Green
V	Ground 2	(Lü2,–)	Brown
External	interface (potential-free switching contact	t or analogue	e control cable 0 - 10 V)
1	Switching contact 1	Sk1	Analogue input (+)

Analogue input (-)

Sk2

# 3.3 Terminal assignments

The terminals on the circuit board are finger-operated spring-loaded terminals. The terminals have a connection capacity of 0.1 to 1.5 mm². They are suitable for solid and stranded wires. The use of wire ferrules is not necessary. If wire ferrules are used, they must increase the cross-section (their material thickness is thereby not included).



- 1 2-pin plug for Jumper
- (2) Terminal, 2-pole
- 3 Terminal, 5-pole

Figure 7: Rear of sMove operating unit: PCB interfaces

Connector			Ter- minal block	Name	Description	
Switching power s	upply u	nit				
Power supply cabl	e (main	s)/	L	AC/L	Phase conductor	
Input cable for flus	h moun	ited PSU	N	AC/N	Neutral conductor	
Controler operating	g voltag	je	+	+ 24 V	Controller enerating valtage	
Output cable for flu	ush moi	unted PSU	_	GND (-)	Controller operating voltage	
Rear side of sMov	e contro	oller operating u	nit			
	Controller operating voltage Fan-BUS connection		I	+ 24 V	Controller enerating voltage	
			II	GND (-)	Controller operating voltage	
Terminal, 5-pole			III	– (Lü1)	Ground 1	
			IV	Ub+	Fan operating voltage	
			V	– (Lü2)	Ground 2	
Tamainal Onala	External interface (optional)		VI	Sk1	Switching contact 1, analogue (+)	
Terminal, 2-pole			VII	Sk2	Switching contact 2, analogue (–)	
	NO	attached		on switch	witching: normal operation	
	INO	not attached	2	on switch	ning: ventilation mode, level 3	
Jumpers		attached	~	on switching: OFF		
	NC	not attached		on switch	ing: normal operation	
	_		1	Only for service sttings		

# 3.4 Jumper

Jumper 2<sup>1)</sup> is used to assign functions to the external interface when a potential-free switching contact is connected (pressure monitor: Opener (normally closed NC) / other sensors: Closer (normally open NO) and for integration into a house control system.

The position of the jumper may only be changed in a voltage-free state.

#### Function assignment depending on switching contact

	NO (Closer)	NC (Opener)	Sensor
Position of Jumper 2	Function at switch actuation / switching		
attached	Normal operation	OFF (fireplace function)	Opener: Pressure mo- nitor (4 Pa)
not attached	Continuous ventilation Output level 3	Normal operation	Closer: Hygrostat CO <sub>2</sub> VOC
	Interface used as analogue input		

The 2-pin plug for jumper 2 is located on the rear side of the operating unit. The jumper 2 is not plugged in at the factory and is located inside the accessories pack of the controller. It must be attached if necessary. Jumper 1 is used for service settings and must be left as delivered to ensure correct functioning of the controller.

If a pressure monitor with normally open contact is connected, e.g. if the sMove controller is exchanged, it must be configured as a normally closed contact (switch with changeover contact) or, if this is not possible, it must be replaced by a pressure monitor with normally closed contact.



It is not possible to connect a potential-free switch and an analogue input simultaneously. A connected analogue input always has priority over a potential-free switching contact. If a pressure monitor is connected, the pressure monitor has priority to other connected sensors.

If Jumper 2 is not attached and the sMove controller is integrated into an home automation system, the following direct voltages must be set:

Function	Control voltage [V DC]
Ventilation output level 3	0.00 V ≤ U ≤ 0.25 V
Ventilation output level 4	0.75 V ≤ U ≤ 1.25 V
Ventilation output level 2	1.75 V ≤ U ≤ 2.25 V
Ventilation output level 1	2.75 V ≤ U ≤ 3.25 V
OFF	3.75 V ≤ U ≤ 4.25 V
Heat recovery output level 1	4.75 V ≤ U ≤ 5.25 V
Heat recovery output level 2	5.75 V ≤ U ≤ 6.25 V
Heat recovery output level 3	6.75 V ≤ U ≤ 7.25 V
Heat recovery output level 4	7.75 V ≤ U ≤ 8.25 V

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# 4 Preparing for installation

# 4.1 Mounting instructions and installation locations

- Read the Installation and Electrical Connection chapters carefully before installation to avoid installation errors. Installation and connection of the controller must be carried out by qualified and trained personnel.
- · Observe the following steps before mounting the sensor:
  - Step 1: Disconnect all effected electronical components/live parts from power supply.
  - Step 2: Secure all effected electronical components against being switched on again.
  - Step 3: Check all effected electronic components for voltage.
- Mount the flush-mounted box / cavity/plasterboard wall box for mounting the operating unit preferably at a height of 1.50 m above the floor edge (accessibility for operation).
- NOTE: Always use stranded wires to connect the fan-BUS to the ventilation unit. The connection terminal for the fan-BUS can connect strands up to 1.5 mm².

#### 4.2 Dimensions



**TIP:** ideally, install the flush-mounted box or flush-mounted plasterboard box for the operating unit at the same height as the existing light switches.

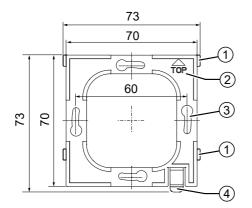
- sMove s4 / s8 incl. control panel PSU: 1 flush-mounted / plasterboard box, min. depth 66 mm
- sMove s4 incl. flush-mounted PSU: 1 flush-mounted box / 1 wall-installation box, min. depth 87 mm
- sMove s8 incl. flush-mounted PSU: 2 flush-mounted boxes / 2 wall-installation boxes, min. depth 66 mm:
  - 1 box for the flush-mounted PSU and for installation of the operating unit
  - 1 box for the fan-BUS distribution box

Designation	Width [mm]	Height [mm]	Depth [mm]	Ø [mm]
Mounting boxes				
Wall opening for flush-mounted box 60x66	_	_	66	82
Flush-mounted box 60x66	-	_	66	60
Wall opening for flush-mounted box 60x90	-	-	≥ 95	82
Flush-mounted box 60x90			91	60
Wall opening for wall installation 70x87	-	-	87	68
Wall-installation box 70x87(plasterboard wall)	-	-	87	69
Wall opening for plasterboard wall box 68x61	_	_	61	68
Plasterboardwall box 68x61	_	_	61	68
Controller				
sMove controller operating unit	86	86	24	_

Designation	Width [mm]	Height [mm]	Depth [mm]	Ø [mm]
Control panel switching PSU NT17-s4	25	93	56	_
Control panel switching PSU NT17-s8	78	93	56	_
Flush-mounted switching PSU NT17-s8	_	33	_	54
Flush-mounted switching PSU NT17-s4	-	32,5	_	54

# 4.3 Dimensioned drawings

#### sMove controller



- 1 Guides (4 x) for attaching the operating unit
- 2 Installation marking TOP
- 3 Box fixing points (4 x)
- 4 Locking lever for the operating unit

Figure 8: Dimensioned drawing - front view: base plate for sMove controller

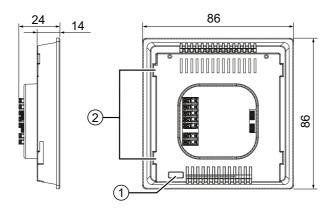
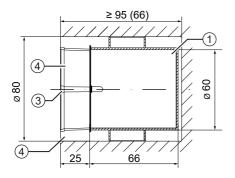


Figure 9: Dimensioned drawing - rear view: sMove controller operating unit

- 1 Receiver for locking lever
- 2 Receiver (4 x) for base plate guides

### **Mounting boxes**



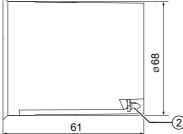
3 09 0 08

3 Base plate fixing points (2 x)

Figure 10: Flush-mounted box 60x92 (60x66)

- 1 Flush-mounted box 60x66
- 2 Putzausgleichsring (preassembled, box 60x92 only)



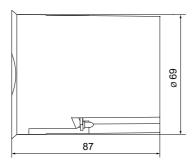


60 60 075

Figure 11: Plasterboard wall box 61x68

1 Fixing screw for plasterboard wall box

2 Fixing screw for operating unit (2x)



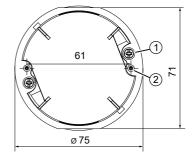


Figure 12: Plasterboard wall box 70x87

1 Fixing screw for plasterboard wall box

2 Fixing screw for operating unit (2x)

# 5 Installation and assembly



#### **DANGER**

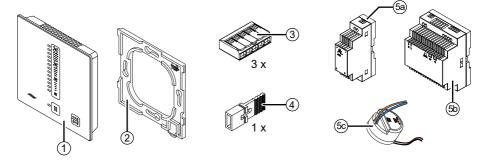
#### Exposed electrical components.

Electric shock and injury due to live components (230V, 50Hz)!

- · Before working on electrical installations, disconnect all affected equipment from the power supply.
- Observe the requirements for protection class II when laying the power supply cable.
   Do not lay live cables.
- · Lay the Fan-BUS and power cables separately.
- The installation and connection must only be performed by qualified and trained personnel.

# 5.1 Check the scope of supply

Check the delivery for completeness and transport damage upon receipt using the delivery note. Report missing items immediately, and at the latest within 14 days to your supplier, distributor or factory representative.



- 1 sMove operating unit
- 2 Base plate (rear side of operaing unit)
- 3 Terminal block for fan-BUS distribution, 5-pole
- 4 Jumper
- 5 a: Cabinet mounted PSU NT17-s41)
  - b: Cabinet mounted PSU NT17-s81)
  - c: Flush-mounted PSU s4 / s8 1)

<sup>1)</sup> only ordered PSU (selection)

# 5.2 Fitting the wall openings



#### **DANGER**

#### The wall contains electrical cables.

Electric shock and injury due to live components (230V, 50Hz)!

· Before fitting the wall openings, check for the presence of cables in the drilling area.



#### CAUTION

#### Falling masonry when fitting the wall opening.

Injury to persons and/or damage to property/flooring!

- · Protect flooring against falling masonry.
- Remove objects from the immediate vicinity of the drilling area in the interior.

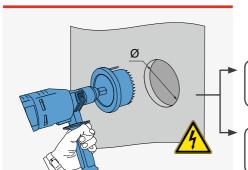


Milling drill

#### Requirements:

The masonry must be dry and in a load-bearing condition. The plasterboard wall must be finished.

No lintels in the location of the planned drill holes.



➤ Create a hole for the box in the interior wall.

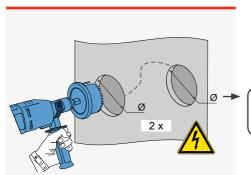
Observe the maximum cable lengths (□ 4).

#### sMove s4/s8 with cabinet mounted PSU

flush mounted box: Ø 82 mm, depth 66 mm plasterboard box: Ø 68 mm, depth 66 mm

#### sMove s4 with flush-mounted PSU

flush mounted box: Ø 82 mm, depth 90 mm plasterboard box: Ø 68 mm, depth 90 mm



- Create two holes for the boxes in the interior wall:
  - first one for mounting the PSU and the operating unit;
  - · second one as distribution box for fan cables

#### sMove s8 with flush-mounted PSU

flush mounted box: Ø 82 mm, depth 66 mm plasterboard box: Ø 68 mm, depth 66 mm

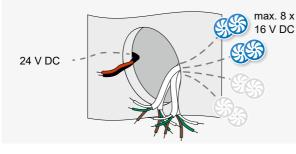
⇒ The wall openings for the boxes are created.

### 5.3 Laying the cables

#### Requirement:

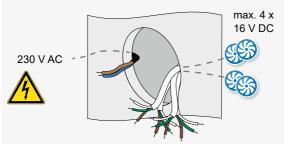
The wall openings are created.

#### sMove s4 / s8 with cabinet mounted PSU



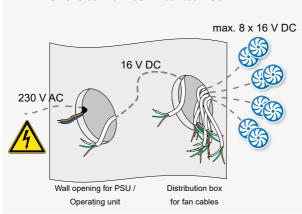
- Lay the operating voltage cable, 2-wire, to the wall opening for the operating unit's connection.
- Lay the fan cables, 3-wire, between ventilation unit and wall opening for the operating unit's connection.
- ⇒ You have laid the cables.

#### sMove s4 with flush mounted PSU



- Lay the power supply cable (mains), 230 V AC, to the wall opening for the connection to the flush-mounted PSII
- ► Lay the fan cables, 3-wire, between ventilation unit and wall opening for the operating unit's connection.
- ⇒ You have laid the cables.

#### sMove s8 with flush mounted PSU



- Lay the power supply cable (mains), 230 V AC, between control cabinet and the wall opening for the connection to the flush-mounted PSU.
- Lay the fan cables, 3-wire, between ventilation unit and wall opening for the distribution box.
- Lay the fan-BUS connection cable, 3-wire, between the wall opening for the flush-mounted PSU and the wall opening for th distribution box.
- ⇒ You have laid the cables.

#### 5.4 sMove s4 / s8 controller: Installation with cabinted mounted PSU

When mounting the sMove controller with a control cabinet power supply, the power supply is mounted and connected on the top-hat rail of the control cabinet. The operating voltage cable and the fan cables are routed to the sMove mounting location (wall opening). The control unit is mounted on a flush-mounted or cavity wall box, which also serves as a distributor for the fan cables

# Installing the control cabinet switching PSU



#### **DANGER**

#### Exposed electrical components.

Electric shock and injury due to live components (230V, 50Hz)!

- · Before working on electrical installations, disconnect all affected equipment from the power supply.
- Observe the requirements for protection class II when laying the power supply cable.
   Do not lay live cables.
- · Lay the Fan-BUS and power cables separately.
- The installation and connection must only be performed by qualified and trained personnel.



Screw driver

#### Requirements:

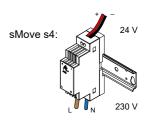
None

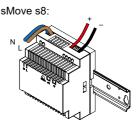
Attach the switching PSU to the top-hat rail of the control panel.

sMove s4: The switching power supply requires 1.5 TE space. sMove s8: The switching power supply requires 4.5 TE space.

 Connect the PSU. (see section 4: Electrical connections – Terminal assignments)

- Attach the phase conductor to terminal L.
- Attach the neutral conductor to terminal N.
- Attach the (red) conductor to the (+) terminal.
- Attach the (blue) conductor to the (–) terminal.
- ⇒ The switching PSU is connected.





#### Installing the wall box



#### NOTE

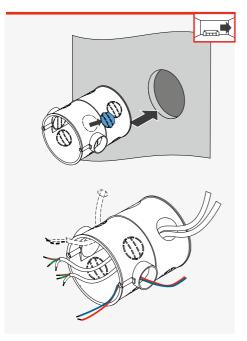
#### Laying cables whilst live

damages the sMove controller!

- Lay and connect the cable only while in a voltage-free state.
- The installation and connection must only be performed by qualified and trained personnel.



Filler for mounting the box, flush-mounted/ plasterboard box min. 66 mm depth (optional available)



#### Requirements:

The wall openings are created.

The cables are laid.

- ► Break out a cable entry
  - · for each pair of fans
  - for the operating voltage cable
  - for the connection cable for the optional sensor in the flush-mounted box.
- Insert the prepared flush-mounted box into the wall opening.
- ► Fill the space between the interior wall and the box with a suitable filler.
- Lay the
  - · fan-BUS cables each in pairs
  - · operating voltage cable
  - connection cable for the optional sensor into the flush-mounted box.

⇒ The wall box is mounted.

Proceed with installation of the operating unit (see section 5.7: Installing the operating unit)

# 5.5 sMove s4 controller: Installation with flush-mounted switching PSU

When mounting the sMove s4 with flush-mounted switching power supply unit, the operating unit is mounted on a flush-mounted or cavity/plasterboard wall box. The flush-mounted switching power supply unit in the box. The fan cables are distributed in the box. Make sure that the socket is deep enough ( $\leq$  85 mm) to accommodate all components (flush-mounted power supply unit, fan cable and operating unit).

#### Installing the flush-mounted PSU



#### DANGER

#### Exposed electrical components.

Electric shock and injury due to live components (230V, 50Hz)!

- Before working on electrical installations, disconnect all affected equipment from the power supply.
- Observe the requirements for protection class II when laying the power supply cable.
   Do not lay live cables.
- · Lay the Fan-BUS and power cables separately.
- The installation and connection must only be performed by qualified and trained personnel.

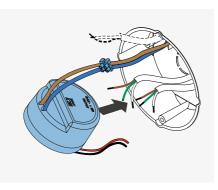


Filler for installing the box, deep flush-mounted/plasterboard wall box (min. 87 mm), insulated terminal, lustre terminal

#### Requirements:

The wall openings are created. The cables are laid.

- ▶ Break out a cable entry for the power supply cable at the bottom of the flush-mounted box.
- ► Break out a cable entry
  - · for each pair of fans
  - for the connection cable for the optional sensor in the flush-mounted box.
- ► Insert the prepared flush-mounted box into the wall opening.
- ► Fill the space between the interior wall and the box with a suitable filler.
- ► Lay the power supply cable, 230V AC, through the cable entry on the base of the flush-mounted box.
- Insulate the wire safety contact on the power supply cable with aa insulating terminal.
- ► Feed the
  - fan-BUS cables in pairs
  - connection cable for the optional sensor into the flush-mounted box through the cable entries at the top.



- Connect the PSU's input cable (blue/brown) via the lustre terminal:
  - Connect the phase conductor with cable L(brown).
  - Connect the neutral conductor with cable N (blue).
- Slide the connected PSU into the box. Ensure that the cable end protrudes into the interior space.
- ⇒ The flush-mounted switching PSU is connected.

Proceed with installation of the operating unit (see section 5.7: Installing the operating unit)

# 5.6 sMove s8 controller: Installation with flush-mounted switching PSU

When mounting the sMove s8 with flush-mounted switching power supply, 2 wall boxes are required. The fan cables are laid into one of the flush-mounted boxes which acts as a distributor. The cover of the flush-mounted box for distribution must be provided by the customer. We recommend the cover in the switch design used.

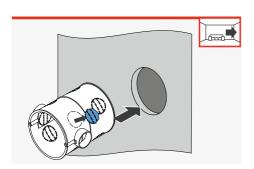
The flush-mounted power supply unit is mounted in a second box. The operating unit is connected and mounted on the flush-mounted box for the switching power supply unit.

To connect the fans, a 3-wire connecting cable is laid between the two boxes.

# Fitting the fan-BUS distribution box



Filler for installing the box, stripping tool, terminal blocks, 5-pole (3 x), cover for the box (e.g. cover in switch design)

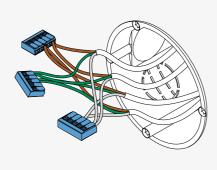


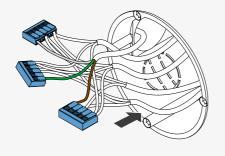
#### Requirements:

The wall openings are created.

The fan cables and the fan connecting cable are laid.

- Break out one cable entry
  - per fan pair
  - for the fan connecting cable in the flush-mounted box.
- Insert the flush-mounted box into the wall opening.





- ► Lay the fan-BUS cables in pairs into the flush-mounted box.
- ► Remove about 8.5 mm of insulation from each fan-BUS cable.
- ► Fill the space between the interior wall and the box with a suitable filler.
- Connect the fan-BUS cables to terminal blocks, 5-pole, as follows:

The cable ends

- · of the same colour
- of ventilation units in paired operation should be connected to the same pole of the terminal block
- ⇒ A maximum of 4 poles are assigned with 2 cables each.
- ► Attach the cable ends of the additional connecting cable, 3-wire, to the terminal block of the corresponding colour.
- ▶ Push the connected terminal blocks into the box.

⇒ The distribution box is fit

#### Connecting the flush mounted switching PSU



#### DANGER

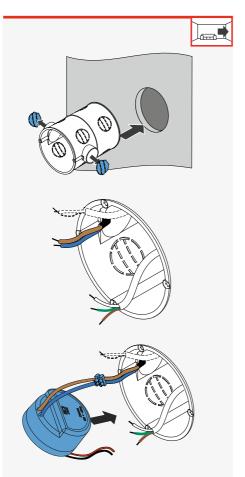
#### Exposed electrical components.

Electric shock and injury due to live components (230V, 50Hz)!

- · Before working on electrical installations, disconnect all affected equipment from the power supply.
- Observe the requirements for protection class II when laying the power supply cable.
   Do not lay live cables.
- · Lay the Fan-BUS and power cables separately.
- Connection of the power supply cable must only be performed by qualified and trained personnel.



Isolating terminal, filler for installing the box, cover for the box (e.g. cover with switch design)



#### Requirements:

The cables are laid. The power supply is disconnected.

- ▶ Break out a cable entry for the power supply cable at the bottom of the flush-mounted box.
- ► Break out a cable entry
  - · for the fan-BUS connection cable
  - for the connection cable for the optional sensor
  - at the opening in the flush-mounted box.
- Insert the prepared flush-mounted box into the wall opening.
- ▶ Lay the power supply cable, 230 V AC, through the cable entry on the base of the flush-mounted box.
- Insulate the wire safety contact on the power supply cable with a terminal.
- ► Feed the
  - fan-BUS connection cable
  - connection cable for the optional sensor into the flush-mounted box.
- Fill the space between the interior wall and the box with a suitable filler.
- Connect the PSU's input cable (blue/brown) via the lustre terminal:
  - Connect the phase conductor with cable L (brown).
  - Connect the neutral conductor with cable N (blue).
- Slide the connected PSU into the box.
   Ensure that the PSU's output cable protrudes into the interior space.
- ⇒ Das Unterputz-Schaltnetzteil ist angeschlossen.

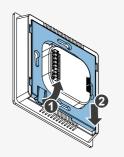
# 5.7 Installing the operating unit

The operating unit is mounted onto the installed flush-mounted or cavity wall box for the operating unit. The fan cables for the versions with cabinet power supply unit and for the sMove s4 with flush-mounted power supply unit are located inside the box and distributed in it.

To connect an optional sensor, e.g.  ${\rm CO}_2$  sensor or to a home automation system, follow the instructions in grey italics.



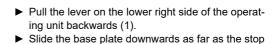
Stripping tool, fan-BUS connection cable, 3-wire, terminal blocks, 5-pole (3 x)



#### Requirements:

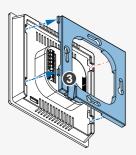
The mounting box is fitted.

The switching PSU is connected.

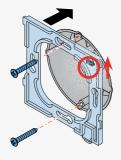


(2).

⇒ The operating unit is unlocked.

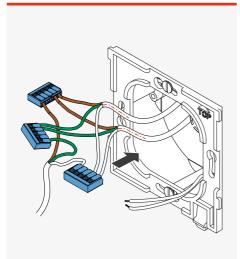


- ► Remove the base plate from the operating unit (3).
  - ⇒ The base plate has been removed from the operating unit.



► Screw the operating unit base plate to the box using fixing screws.

**Ensure that** the arrow above the word TOP is pointing upwards.



# sMove s4/s8 with cabinet mounted PSU and sMove s4 mit flush-mounted PSU:

- Remove about 8.5 mm of insulation from each fan-BUS cable.
- ► Connect the fan-BUS cables to terminal blocks, 5-pole, as follows:

#### The cable ends

- · of the same colour
- of ventilation devices in paired operation should be connected to the same pole of the terminal block
- ⇒ A maximum of 4 poles are assigned with 2 cables each.
- Attach the cable ends of the additional connecting cable, 3-wire, to the terminal block of the corresponding colour.
- ▶ Push the connected terminal blocks into the box.



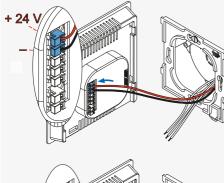
# NOTE: Incorrect connection of the terminals on the rear side of the operating unit.

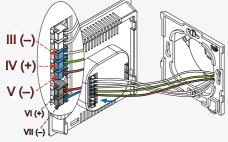
sMove or attached devices do not function!

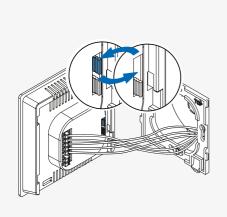
- Ensure that the terminal assignment when connecting the cables is correct. ( 4.3:)
- ► Attach the
  - Operating voltage cable (red, + / black, –) to the two upper terminals of the terminal block, 5-pole;
  - Fan-BUS wires to the three lower terminals of the terminal block, 5-pole,
  - connecting cable for the optional sensor, 2-wire, to the terminal block, 2-pole,

on the rear side of the operating unit.

	Terminal	Designation	Colour
I	+ 24 V	Operating voltage 24 V DC	Red
II	GND	GND (-)	Black
III	Lü1	Ground 1 (GND –)	White
IV	Ub+	Fan operating voltage	Green
٧	Lü2	Ground 2 (GND –)	Brown
VI	Sk1 (+)	External Interface	
VII	Sk2 (–)	(optional sensors)	









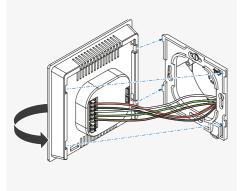
**NOTE:** If jumer 2 is set incorrect on the controller's rear side the controller does not fulfill the desired functions!

Observe the position of Jumper 2.

Attach Jumper 2 (upper Jumper, in accessories pack) in a way, that the desired function is activated (see electrical connection, page 17).

Interface	Jumper 2	Funktion at switching
Pressure mo- nitor (NC) <sup>1)</sup>	closed (attached)	OFF
other sensors (NO)	open (not attached)	Continuous ven- tilation, level 3
Analogue	open (not attached)	Integration into home automation system

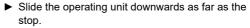
1) when retrofitting sMove controller observe information concerning pressure monitor, page 17



- ► Turn the operating unit around.
  - $\, \Rightarrow \,$  The cables are pointing backwards.
- Mount the operating unit behind the guides on the base plate.

**Ensure that** the vents are pointing upwards and downwards.

**Ensure that** the receiver for the locking lever on the base plate lines up with the locking lever on the operating unit.



⇒ The operating unit snaps audibly into place.

⇒ The operating unit of the controller is installed.

# 6 Operation

The sMove controller consists of a base plate for mounting on the inner wall and an operating unit. The operating unit contains the electronics of the sMove as well as the control panel (acrylic glass cover). The control panel serves as input and display surface for the user.

#### Control panel

The control panel is located on the front of the control unit and also serves as a display surface. It is composed of capacitive buttons and various indicator lights. It is operated by touching the various buttons (marked in grey in figure 2).

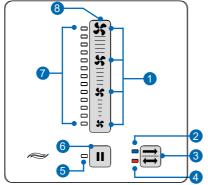


Figure 13: Vorderansicht Bedieneinheit Regler sMove

- 1 Marker for output levels 1 4
- Continuous ventilation mode
   (blue) indicator light /
   filter change indicator (blue flashing)
- 3 Operating mode button
- 4 Heat recovery mode (orange) indicator light / filter change indicator (orange flashing)
- 5 Pause/Off indicator light
- 6 Pause/Off button
- 7 Output level indicator lights
- 8 Slide control

#### Slide control:

Briefly pressing the fan symbol allows you to select one of the four specific output levels. Touching the slide control for approx. one second lets you continuously adjust the output level by moving it. The position of the illuminated display on the left side of the slide control indicates the currently set output level.

#### Mode button:

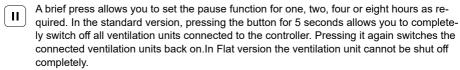


Pressing repeatedly lets you switch between the heat recovery and continuous ventilation modes. The indicator lights to the left of the Mode button displays the currently set mode.

The output level of the ventilation unit can be adjusted in all operating modes.

Output level	Symbol	Flow rate [%]
1	<b>3</b> ç	25
2	<b>5</b> 5	35
3	şç	50
4	35	100

#### Pause/Off button:



#### Indicator lights (LED)

The sMove controller also serves as a display interface. To the left of the buttons there are LEDs which indicate the currently set parameters:

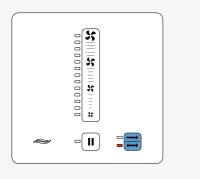
Position	LED			
Position	display time	Significance		
	permanent	Heat recorvery mode set, in pause function: nach der Pause schaltet der Reg- ler die Lüftungsgeräte in Wärmerückgewinnung		
	flashing	Filter change indication		
	permanent	Continuous ventilation mode set, in pause function: nach der Pause schaltet der Regler die Lüftungsgeräte in Durchlüftung		
	flashing	Filter change indication		
	permanent	OFF mode (only standard version)		
+ + + + + + + + + + + + + + + + + + + +	flashing	Pause function, LEDs on the left of slide control:  • when choosing pause function: Pause duration display  • in pause function: Pause remaining time display		
\$\$     \$\$     \$\$	any indicator light left of slide control, permanent	Indication of current set output level		
- <b>35</b>	flashing	Boost is activated		



After 30 seconds without any touching, the indicator lights switch off automatically. The display is reactivated by touching any button on the control panel.

#### 6.1 First activation

When the sMove controller is put into operation for the first time, the reversing fans of the ventilation units automatically start at the lowest output level (25 %) in the heat recovery operating mode.



#### Requirements:

The controller is connected to the power supply.

- ► Touch any button on the control panel.
  - ⇒ The orange heat recovery indicator light is illuminated.
  - ⇒ The lower LED left of the slide control is illumintaed.
- ⇒ The controller is in heat recovery mode.
- ⇒ The output level is 25 %.

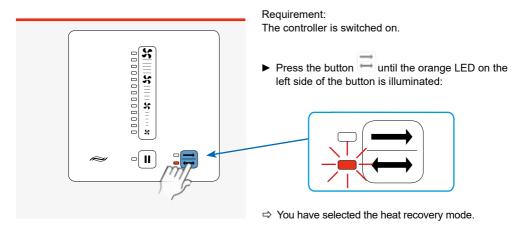
The sMove controller internally stores the last selected configuration of output level and operating mode. After the controller has been switched off, for example in the event of a power interruption, the sMove controller switches on again in the last stored configuration.

A configuration is stored in the internal memory as soon as it was active for an hour.

# 6.2 Setting heat recovery and continuous ventilation modes

#### Setting heat recovery mode

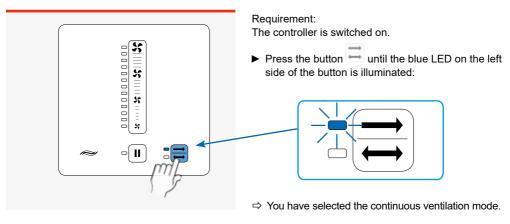
The ventilation unit operates on the generator principle. The fan changes direction at 70-second intervals. The integrated thermal accumulator charges itself with heat energy from the room's air as it flows to the exterior (extract air). When the reversible fan changes direction, it releases the stored heat energy into the incoming outside air (supply air).



# Setting contiuous ventilation mode

The ventilation unit's fan works without changing direction. Thus, no heat recovery takes place in this mode. The continuous ventilation unit must be set to supply air mode.

This mode is recommended for cooling the room during summer nights.



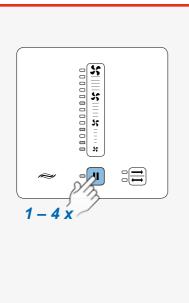


**TIP:** Pressing the button repeqtedly lets you switch between the heat recovery and continuous ventilation modes.

#### 6.3 Pause function

### Setting pause function mode

When setting the pause function, the controller will first switch off the connected ventilation units. Pause duration can be selected for one, two, four or eight hours. After the pause, all ventilation units connected to the controller will restart in the last stored configuration of output level and mode.



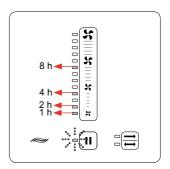
### Requirements:

The controller is in heat recovery or continuous ventilation mode.

► Press the button

<b>=</b> "	Pause duration	
one time	1 hour	
two times	2 hours	
three times	4 hours	
four times	8 hours	

⇒ The LEDs Pause/Off and the corresponding LED left to the slide control are flash alternately:



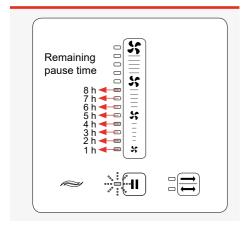
⇒ You have set the selected pause duration.

The pause can be overridden at any time by selecting a different output level.

If the controller is in pause function, the operating mode in which the ventilation units restart at the end of the pause can be changed. To do this, activate the display by touching any button. Then press the button \_\_\_\_ until the LED lights up in the colour of the desired operating mode.

## Display of remaining pause time

If the controller sMove is in pause, the remaining time in which the controller is in pause can be viewed



#### Requirements:

The controller is in pause function.

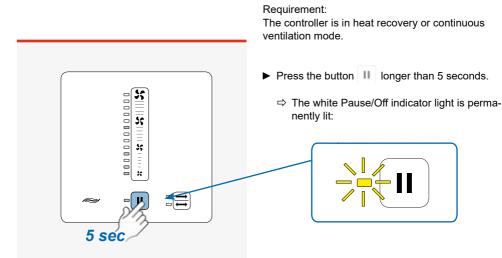
- ▶ Press any button on the control panel.
  - ⇒ The control panel is activated.
  - ⇒ The LED Pause/Off and the respective indicator light on the left of the slide control (fig. left) flash alternately.



TIP: In the standard version, when the button is pressed for longer than five seconds the controller will switch to OFF mode. The indicator light is permanently lit.

## Setting OFF mode (only standard version)

The ventilation unit's fan is switched off when the mode is selected. NOTE: In Flat version the ventilation unit cannot be shut off completely.

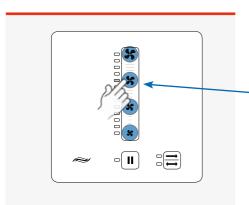


## 6.4 Set output level

The intensity of the ventilation can be adjusted continuously by moving the slide control, or in four steps by touching the fan icons on the slide control. The fan icons on the slide control indicate output levels 1 (25%), 2 (35%), 3 (50%) and 4 (100%). They serve as a guide.

The new setting takes effect immediately, so that adjustments can be made purely by listening to changes in the sound level.

### Setting the output with predefined levels



#### Requirement:

The controller is in heat recovery or continuous ventilation mode.

► Press the button with the symbol matching the desired output level, e.g. 3:

Fan output 100 % (level 4)

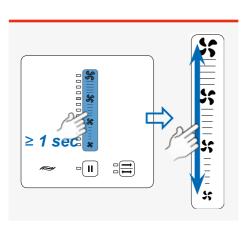
Fan output 50 % (level 3)

🦿 Fan output 35 % (level 2)

Fan output 25 % (level 1)

- ⇒ The indicator light to the left of the selected fan icon will be illuminated
- ⇒ You have set an predefined output level.

## Set continuous output adjustment



#### Requirement:

The controller is in heat recovery or continuous ventilation mode.

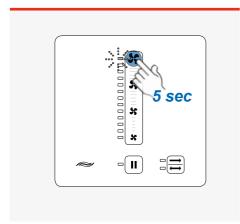
- ► Place your finger on the slide control for 1 second.⇒ The slide control is now active.
- Move your finger on the slide control to the desired output level.
  - ⇒ The indicator light to the left of the slide control displays the output level set.

⇒ You have set continuous output adjustment.

#### Set the Boost function

The controller can be manually set to Boost to quickly remove moisture or odour peaks. In the Boost function, the output of the reversing fan increases to 100 % for 15 minutes. The operating mode is maintained.

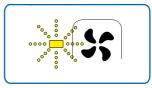
The output is then lowered back to the original level.



#### Requirement:

The controller is in heat recovery or continuous ventilation mode.

- ► Press the upper fan icon for at least 5 seconds.
  - ⇒ The upper LED on the left side of the slide control flashes in white:



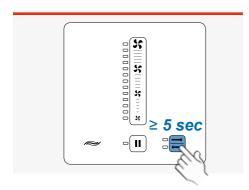
⇒ The controller is set to boost function.

## 6.5 Confirm filter change

After 180 days, the necessary filter change is indicated by a continuously flashing light next to the operating mode button. The colour is defined by the current operating mode:

- · Continuous ventilation mode is active: blue LED flashes.
- Heat recovery mode is active: orange LED flashes.

If the filter has been changed, this must be confirmed on the controller.



### Requirement:

The orange or blue LED flashes.

- ▶ Press the button ☐ for longer than 5 seconds.
  - ⇒ The LED stops flashing.
  - ⇒ The filter change interval is set to 180 days.

⇒ You have confirmed the filter change.

#### 6.6 View hours run

The sMove controller comes with an integrated hours-run counter. The operating time is displayed in days. The maximum displayable number is 4,000 days. One day corresponds to a calculation period of 24 hours. There is no further split within these 24 hours.

The operating time is displayed as a 4-digit number.

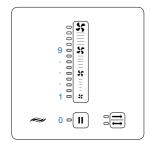
Every digit, beginning with the first place, will be individually displayed by an indicator light to the left of the slide control/pause button

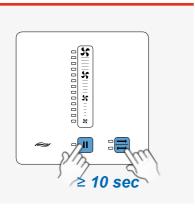
The indicator light to the left of the button corresponds to the number 0.

The indicator lights to the left of the slide control correspond to the numbers 1 (bottom) to 9 (top).

When the number is displayed, the end value will be permanently lit. To simplify the numbering, a number of running lights corresponding to the end value will move towards the end value.

The display disappears between the individual numbers





#### Requirement:

The controller is switched on.

- ► Press the buttons □ and □ simultaneously for 10 seconds until the display lights switch off.
- ▶ Note down the digits displayed.
- ► Combine the digits into a number:

  Number in 1st place = first digit displayed

  Number in 2nd place = second digit displayed

  Number in 3rd place = third digit displayed

  Number in 4th place = fourth digit displayed
- You have requested the days of operation for the controller.

## **Example**

Number's position	Indicator light	Digit
first place	left of the pause button	0
second place	End value: 4th indicator light to the left of slide control 4 running lights move to the end value	4
third place	left of the pause button	0
fourth place	End value: 7th indicator light to the left of slide control 7 running lights move to the end value	7

<sup>⇒</sup> The controller has been in operation for 0-4-0-7 days (407 days).

## 7 Cleaning and maintenance



## **CAUTION**

Cleaning by children and persons with limited abilities.

Injury to body parts and/or malfunction of the ventilation system!

Cleaning/maintenance of the controller must not be carried out by children and/or persons
who are not fully capable of doing so due to their physical, sensory or mental capabilities,
inexperience or lack of knowledge. Young children should be supervised to ensure that they
do not play with the device.



**TIP:** Before performing cleaning or maintenance tasks, disconnect the controller's power supply.

The sMove controller is virtually maintenance-free. Any necessary cleaning or maintenance work can be carried out by the user by following these instructions.

## **Detergents**



#### NOTE

The plastic/glass surface of the inner panel/controller is not scratch-resistant and may be damaged.

· Do not use sand, soda, acid or chlorine-based cleaning agents.

A commercially available detergent in warm water can be used for cleaning. The following tools may be used for cleaning:

- · lint-free, soft cloth
- · soft brush

#### Recommended maintenance

The maintenance tasks and intervals listed here are recommended by inVENTer GmbH to maintain the functionality and performance of the sMove controller.

Depending on requirements and/or air quality, your personal maintenance plan may deviate from these recommendations.

Interval	Assembly	Maintenance activity
Monthly	sMove operating unit	Clean the acrylic glass cover and side surfaces with a damp cloth. Brush the ventilation slots free.

# 8 Specifications

Feature	Value
Protection class (EN 61140) / Type of protecion (EN 60529)	IP20 / II
Input voltage Switching PSU / mains [V AC] [Hz]	230 / 50
Output voltage Switching PSU / operating voltage [V DC]	24
Power consumption (Standby) [W]	< 1
Maximum power consumption s4/s8 [W]	11 / 20
Output voltage fan-BUS [V DC]	6.7 – 15.3 ; 3-pole
Analogue input (optional) [V DC]	0 – 10, Control voltage Resolution: 10 Bit
External switching contact (optional)	
Pressure monitor	Potential free opener contact (NC)
Other sensors	Potential free closer contact (NO)
Operating temperature [°C]	5 – 50
Dimensions [W x H x D in mm]	86 x 86 x 24
Conformity	CE

# 9 Scope of supply

Überprüfen Sie die Lieferung bei Erhalt, anhand des Lieferscheines, auf Vollständigkeit und Transportschäden. Reklamieren Sie fehlende Positionen unverzüglich.

• sMove operating unit (white)

- · Switching PSU
- Accessories pack (incl. terminal blocks, Jumper)
- manual

Component	Item number
sMove controller s4 incl. cabinet mounted PSU	1003-0098
sMove controller s4-Flat incl. cabinet mounted PSU	1003-0099
sMove controller s4 incl. flush-mounted PSU	1003-0096
sMove controller s4-Flat incl. flush-mounted PSU	1003-0097
sMove controller s8 incl. cabinet mounted PSU	1003-0102
sMove controller s8-Flat incl. cabinet mounted PSU	1003-0103
sMove controller s8 incl. flush-mounted PSU	1003-0100
sMove controller s8-Flat incl. flush-mounted PSU	1003-0101

# 10 Accessories and spare parts

To order parts for your sMove controller, contact your nearest factory outlet or our service staff.

## **Accessories**

Component	Item number
CO <sub>2</sub> sensor CS1	1004-0145
Hygrostat HYG18	1002-0044
Hygrostat HYG12	1002-0015
Flush-mounted box 60x66	3002-0244
Flush-mounted box 60x90	1003-0104
Plasterboard wall box 61x68	1003-0084
Wall installation box 70x87	1004-0084
Round cable LiYY-O 3x0.75 (33m)	1004-0020

## Spare parts

Component	Item number
Control panel switching PSU NT17-s4	3002-0274
Flush-mounted switching PSU NT17-s4	3002-0273
Control panel switching PSU NT17-s8	3002-0275
Flush-mounted switching PSU NT17-MZ/s8	3002-0267

## 11 Troubleshooting and disposal

### **Troubleshooting**

If your ventilation units or controllers are not functioning properly, consult the following troubleshooting table. If the fault persists, contact your supplier, distributor or the technical service department at inVENTer GmbH (see chapter 11 – service)

Malfunction	Possible cause	Remedy
Wrong controller function when interface is connected	Upper jumper is incorrectly/not connected	Check position of the jumper on the back of the operating unit:  • attached: OFF (NC contact - pressure monitor)  • not attached: Continuous ventilation mode, level 3 (NO contact (Hygrostat, CO <sub>2</sub> sensor, VOC sensor)
Fans without function	Pressure monitor connected as an closer contact (NO) (e. g. exchange of operating unit)	Changeover of the pressure sensor as normally closed contact (changeover contact) or exchange for a pressure sensor with normally closed contact, if necessary.
Controller does not	Operating unit is incorrectly/not connected.	Check wiring.
function.	No electrical contact.	Check cables. Ensure cables are stripped sufficiently (approx. 8.5 mm).
Indicator lights do not light up.	Faulty controller.	Replace controller.
	There is no power.	Check power supply.
Slide control defective.		Replace controller.

## Disassembly and disposal



Dissassemble the controller in the opposite sequence to the assembly sequence. You can subsequently dispose of your old device. The products described in these installation and operating instructions contain valuable materials which can be recovered and recycled. The separation of waste materials into different varieties facilitates recovery of the recyclable materials. Contact an electronic appliance disposal company to arrange environmentally friendly recycling and disposal of your old system.

They will dispose of the product in compliance with the applicable national regulations.

Product	Material	Disposal
Operating unit casing	ABS	Plastic recycling
Operating unit glass plate	Acrylic glass	Residual waste
PCB/switching PSU	Electronics	Collection point for electrical appliances

## 12 Guarantee and warranty

### Warranty

Outside Germany, the national warranty provisions of the country in which the system is sold apply. Please contact the distributor for your country.

The warranty refers to the defect-free condition of the product at the time of purchase and covers all defects that were present at the time of purchase. Failure to observe the intended use will invalidate all warranty claims.

### Manufacturer guarantee

inVENTer GmbH provides a five-year guarantee for all electrical components and the wall mounting sleeve, as well as a thirty-year guarantee on the heat accumulator ceramic. This covers premature product wear.

Further information about the warranty is available at www.inventer.eu/warranty.

### 13 Service

#### Claims

Check the delivery for completeness and transport damage upon receipt using the delivery note. Report missing items immediately, and at the latest within 14 days to your supplier, distributor or factory representative.

## Warranty and guarantee claims

In the case of a warranty or guarantee claim, contact your local distributor or factory representative.

In all cases, please return the complete device to the manufacturer.

The guarantee is an additional offer by the manufacturer and in no way affects the applicable law.

## Accessories and spare parts

To order parts for your controller, contact your nearest factory outlet or our service staff.

#### Technical customer service

For technical support contact our service staff.



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Version 04/2019 Subject to changes Article number 5021-0016 © inVENTer GmbH 2014-19