



Katherm QK nano

Ultra-small trench heater with EC tangential fan

► Assembly and installation instructions

Keep these instructions in a safe place for future use!



[Kampmann.de/installation_manuals](https://kampmann.de/installation_manuals)

4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

Ready-to-install convector-based floor trenches

Assembly and installation instructions

Key to symbols:



Caution! Danger!

Non-compliance with this information can lead to serious personal injuries or damage to property.



Danger from electrocution!

Non-compliance with this information can lead to serious personal injuries or damage to property by electrocution.

Carefully read these instructions in full prior to any assembly and installation work!

Anyone involved with the installation, commissioning and use of this product is obliged to pass these instructions on to trades people who are involved at the same time or subsequently, as well as to end users or operators. Retain these instructions until final decommissioning!

We reserve the right to make content or design-related changes without prior notice!

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1. Intended use

Kampmann **Katherm** QK nano are built in line with the state of the art and recognised safety regulations. Nevertheless their use can result in danger to people or damage to the unit or other material property if they are not properly installed or properly used.

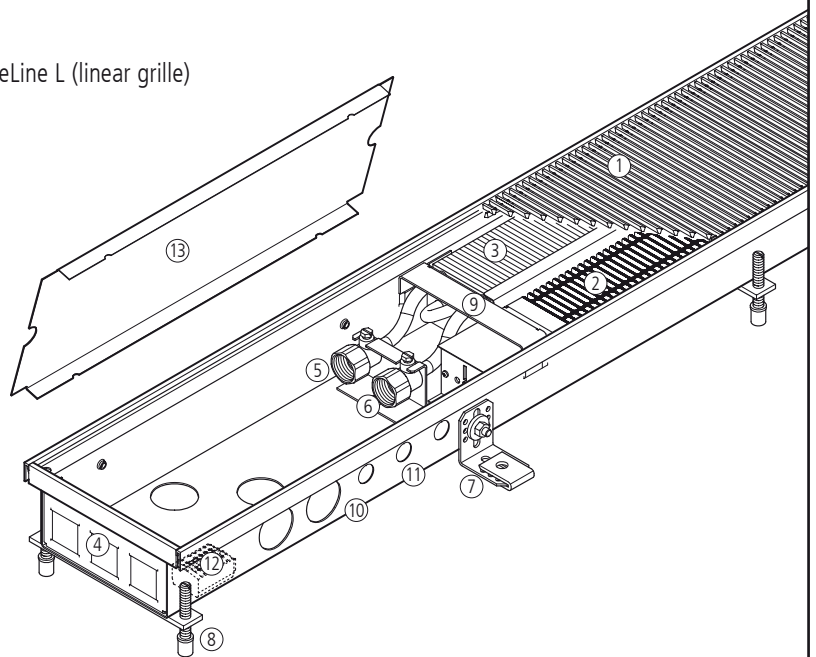
Katherm QK nano are solely intended for use indoors (e.g. residential and commercial properties, showrooms etc.). They are not suitable for use in humid environments, such as swimming pools or outdoors. Protect the products from any moisture during installation. Check the intended use with the manufacturer in case of any doubt. Any use other than the use specified above is deemed not to be correct and proper. The operator of the unit is solely responsible for any damage arising as a result of this. Correct and proper use is deemed to include compliance with the installation instructions described in these instructions.

The installation of this product requires specialist knowledge of heating, cooling, ventilation and electrical engineering. This knowledge, generally learned in vocational training in the fields mentioned in section 2, is not described separately. Errors caused by connection or modifications can lead to the unit being damaged! The manufacturer is not liable for any damage caused by the wrong connection and/or improper handling.

Important: The grilles can be walked on. However, avoid point loads (for instance caused by chair legs) as they can result in permanent damage to the grille.

Katherm QK nano

- ① FineLine Q grille (orthogonal grille) or alternatively FineLine L (linear grille)
- ② EC tangential fan
- ③ Cu/Al heat exchanger
- ④ Floor trench
- ⑤ Flow, 1/2" female
- ⑥ Return, 1/2" female
- ⑦ Height adjustment feet with sound insulation
- ⑧ Raised floor feet with sound insulation
- ⑨ Cross bracing
- ⑩ Water pipe opening
- ⑪ Cable openings
- ⑫ 24 V terminal strip
- ⑬ Junction box cover



Caution: Do not remove bracing

Example: **Katherm** QK nano, 24V model

Limits of operation and use

Limits of operation		
Min./max. water temperature	°C	15-90
Min./max. air intake temperature	°C	15-40
Min./max. air humidity	%	15-75
Max. operating pressure	bar	10
Min./max. glycol percentage	%	25-50

We would refer to VDI-2035 Sheets 1 & 2, DIN EN 14336 and DIN EN 14868 with regard to the properties of the medium used to protect the equipment. The following values provide further guidance.

The water used should be free of contamination, such as suspended substances and reactive substances.

Water quality		
pH value*1		8-9
Conductivity*1	µS/cm	< 700
Oxygen content (O ₂)	mg/l	< 0.1
Hardness	°dH	4-8.5
Sulphur ions (S)		not measurable
Sodium ions (Na ⁺)	mg/l	< 100
Iron ions (Fe ²⁺ , Fe ³⁺)	mg/l	< 0.1
Manganese ions (Mn ²⁺)	mg/l	< 0.05
Ammonia ions (NH ₄ ⁺)	mg/l	< 0.1
Chlorine ions (Cl)	mg/l	< 100
CO ₂	ppm	< 50
Sulphate ions (SO ₄ ²⁻)	mg/l	< 50
Nitrite ions (NO ₂ ⁻)	mg/l	< 50
Nitrate ions (NO ₃ ⁻)	mg/l	< 50

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2. Safety Information

Only allow a qualified electrician to perform installation, assembly and maintenance work on electrical units in compliance with VDE guidelines. Wiring should comply with the applicable VDE regulations and provisions laid down by the regional electricity providers. Non-compliance with the regulations and operating instructions can result in the units malfunctioning with consequential damage and danger to people. There is a danger of fatal injury caused by wires being swapped due to incorrect wiring! Disconnect all parts of the system from the mains power supply and prevent them from being reconnected before starting any connection and maintenance work! The unit should only be connected to fixed cabling.

Please read this manual in full to ensure correct and proper installation.

Please note the following safety-relevant information:

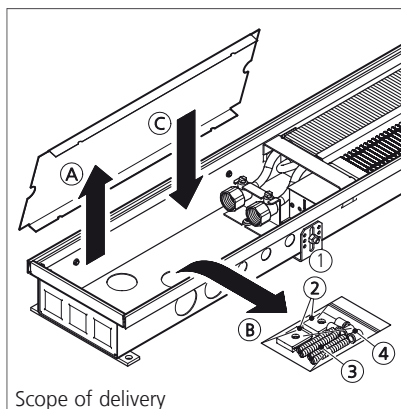
- Disconnect all parts of the system that are being worked on.
- Ensure that the system cannot be accidentally re-connected!
- Before commencing installation/maintenance work, wait until the fan has come to a standstill after the unit has been switched off.
- Caution! Pipes, casings and fittings can become very hot depending on the operating mode!
- Qualified personnel must have undergone training to provide them with adequate knowledge of the following:
- Safety and accident prevention regulations
- Guidelines and recognised technical regulations, i.e. Association of German Electricians (VDE)
- DIN and EN standards
- Accident prevention regulations VBG, VBG4, VBG9a
- DIN VDE 0100, DIN VDE 0105
- EN 60730 (Part 1)
- Technical wiring regulations (TABs) issued by the regional electricity providers

Modifications to the unit

Do not undertake any modifications or upgrades on Katherm QK nano without discussing them with the manufacturer as they can impair the safety and operation of the unit. Do not carry out any measures on the unit not described in this manual. Make sure that on-site systems and cabling are suitable for connection to the intended system!

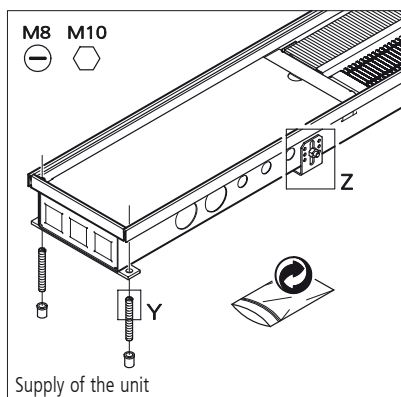


The floor duct has openings provided for the installation of a potential compensation line.



Scope of delivery

Example shown: **Katherm QK nano**,
24V model



Supply of the unit

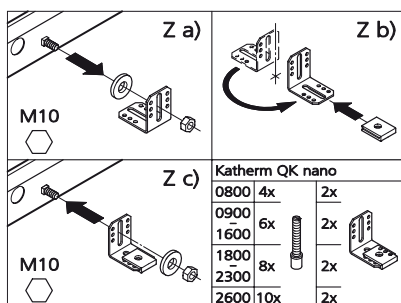
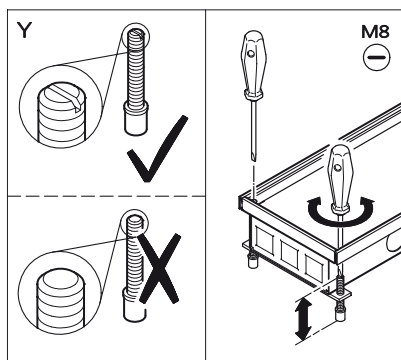
3. Scope of delivery

Trench heaters are delivered as standard with:

- Height adjustment feet ① with rubber pads for acoustic decoupling ②, screws and rawlplugs to be provided on site
- Raised floor feet with plastic cap for acoustic decoupling ③, ④

4. Levelling

- Remove the outer film and the packaging.
- Flap open the transparent protective cover.
- **Caution:** Do not remove bracing during installation and operation.
- Arrange the Katherm QK nano with the convector on the window side.
- **Caution:** The height adjustment feet are already fitted to the floor trench. They are fixed the wrong way round for transport reasons. To install and adjust the height of the trench, loosen the outer fixing nuts on the adjustment feet and turn the height adjustment feet 180° so that the foot is pointing outwards (see Fig.)
- Then level the trench heater and adjust the height using the adjustment feet and adjustment screws on the raised floor brackets ③.
- Please take care that the floor trench is installed in straight alignment and is not twisted. Otherwise it will not be possible to lay a rigid grille (e.g. the FineLine grille) flat into the trench.
- Use screws and dowels to fix the height-adjustment feet ① with rubber pads.



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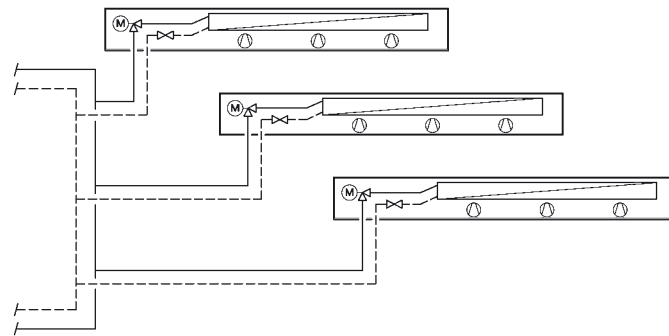
Assembly and installation instructions

5. Water connections

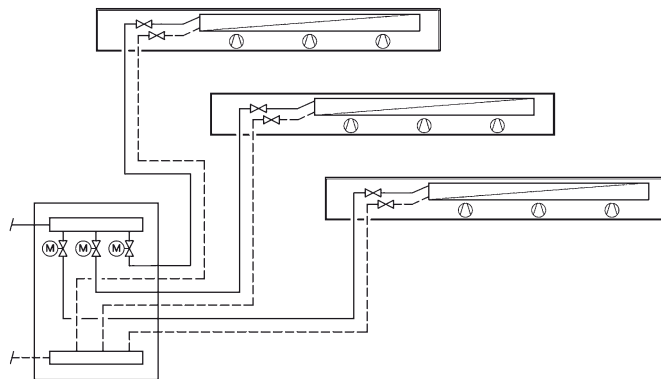
- Use the pipe openings for the water-side connection. Screw the connecting accessories until tight onto the convector connections.
- Then fit the flow and return pipes.
- Perform a pressure test.
- Adhere these installation instructions very visibly to the trench heater for subsequent trades.
- Cover the grille and trench with the installation cover to protect it from dirt or cement.

Caution: Grilles can be walked upon. However, avoid point loads (e.g. chair legs)!

Hydraulic set-up options

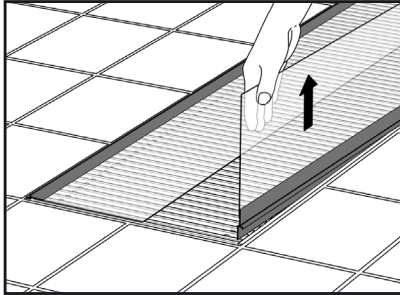


Decentralised valve control



Central heating circuit distributor

6. Screed works



Dust and protective cover:
(Remove the transparent dust and
protective cover before commissioning
the unit)

Before commencing screeding, check whether

- the water connection has been correctly done,
- the electrical connection has been correctly done,
- the height and distance of the trench from the window is correct,
- the grille is covered (Caution! Cement destroys the surface of the grille!),
- sound insulation (not with raised floors) is fitted underneath the trench heater,
- there are no sound bridges to the concrete slab, especially close to the height-adjustment feet,
- appropriate materials have been used to seal all openings and punched openings in the trench heater from the ingress of screed.
- the openings and punched openings on the trench are sealed when using screed or other low-viscosity floor coverings.

Caution: Do not allow screed or the floor to compress the floor trench. Provide expansion joints if necessary.

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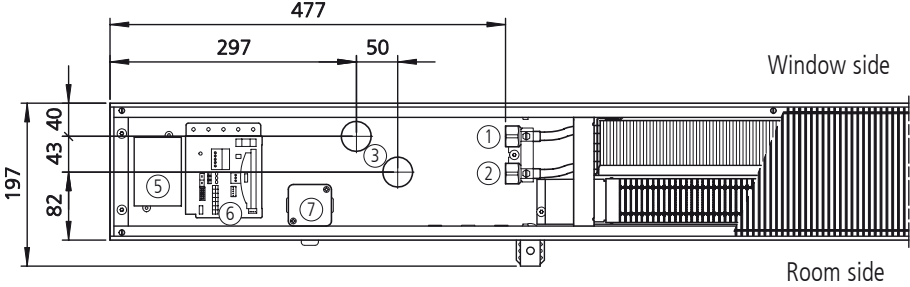
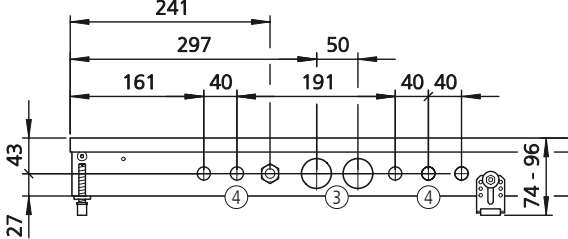
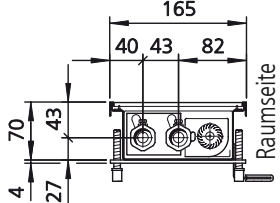
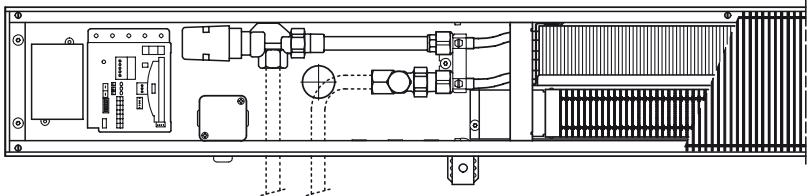
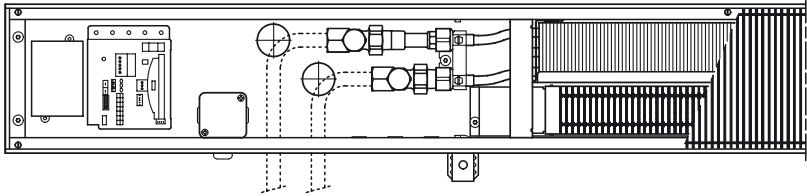
Assembly and installation instructions

7. Connection openings Pipe openings

Katherm QK nano, 24 V electromechanical model

Model	Room-side connection
<div>Katherm QK nano, 24 V electromechanical</div> <div> <div>① Flow</div> <div>② Return</div> <div>③ Pipe openings</div> <div>④ Cable openings</div> <div>⑤ Terminal strip</div> </div>	<div> <p>Top view (without cover panel)</p> <p>Connections: 1/2" female, same end, left</p> </div> <div> <p>Front view</p> <p>Side view (cross-section)</p> </div> <div> <p>Example shown: Valve control in trench with valve kit type 442100.</p> </div> <div> <p>Example shown: Valve control via central heating circuit distributor, connection kit type 442101 used to shut off the convector.</p> </div>

Katherm QK nano, KaControl or 230 V electromechanical model

Model	Room-side connection
<p>Katherm QK nano, KaControl or 230 V electromechanical model</p> <ul style="list-style-type: none"> ① Flow ② Return ③ Pipe openings ④ Cable openings ⑤ Power supply unit ⑥ Control PCB ⑦ Junction box 	 <p>Top view (without cover panel)</p> <p>Connections: 1/2" female, same end, left</p>  <p>Front view</p>  <p>Side view (cross-section)</p>  <p>Example shown: Valve control in trench with valve kit type 442100.</p>  <p>Example shown: Valve control via central heating circuit distributor, connection kit type 442101 used to shut off the convector.</p>

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8. Number of height-adjustment feet and raised floor feet

Trench length [mm]		Number	
24 V electromechanical	KaControl/230 V electromechanical	Height adjustment feet	Raised floor height adjustment feet
900	1100	2	3
1400	1600	2	3
1800	2000	2	4
2100	2300	2	4
2600	2700	2	5

9. Maintenance

Notes

Maintenance of the **Katherm** QK nano trench heater should only be carried out by qualified personnel trained in compliance with the installation and operating instructions as well as any regulations currently in force. Regularly maintain and inspect **Katherm** QK nano units to ensure their proper function and performance.

Fan

- Inspect the tangential fans every 6 months for dirt and damage (visual inspection).
- Clean the fan shafts carefully with a cloth if dirty.

Convector

- Inspect the integral convector every 6 months for dirt and possible damage. Visual inspection is sufficient here too.
- Carefully vacuum the convector if dirty.

Valves

- Inspect the valves every 12 months and check that they are leak-tight (visual inspection)!

10. Electrical wiring

Personnel:

- Installation personnel
- Qualified electrician

Protective equipment:

- Safety shoes
- Protective gloves
- Workwear



Only allow qualified electricians to perform electrical work. Further connections, for instance to building control systems or external controllers, may be necessary. Refer to the manufacturer's literature in this respect.

- Wire the unit in accordance with the enclosed wiring diagram.
- Only wire the unit in accordance with currently applicable VDE and EN guidelines, as well as Technical Wiring Regulations stipulated by the regional energy supply companies.
- Only connect the unit to fixed cables.

Only use the room or clock thermostat as a room control unit with the 230 V electromechanical model.

Only use the KaController in conjunction with the KaControl system.



Important note:

Provide an all-pole mains separator in the wiring on site that can be reliably secured to avoid the system being reconnected (e.g. a lockable switch with a contact opening of at least 3 mm up to a rated voltage of 480 V).

No protective measures are indicated in the Kampmann wiring diagrams. These must be provided additionally when installing the system and when connecting the units in accordance with VDE 0100 and the regulations of each of the respective energy supply companies.

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10.1 Overview of controls



The unit is available in a series of different electrical versions.
 Connect the unit via a terminal strip in the electrical junction box, located on the side of the unit's water connection.
 Wire the unit as per the wiring diagram, which is different for each version.

Model	Art. no. suffix
24 V electromechanical	_24
230 V electromechanical	_00
KaControl	_C1

Example of 24 V electromechanical:
 44217072211124

Ask a qualified electrician to determine the type of cable and cable cross-sections: the cable cross sections basically depend on the fuses for the cable length and the wiring capacity of the electric motors on site.

Lay control lines separately from supply lines.
 Use CAT5 (AWG 23) or similar as data cables.
 Wire the unit in series: star cabling is not allowed.

Electrical power consumption

Cable length [mm]			900	1100	1400	1600	1800	2000	2100	2300	2600	2700
Control	*24	Power consumption [W]	5		6		7		8		12	
	*00			6		7		8		9		13
	*C1			6		7		8		9		13

10.2 24 V electromechanical electrical model

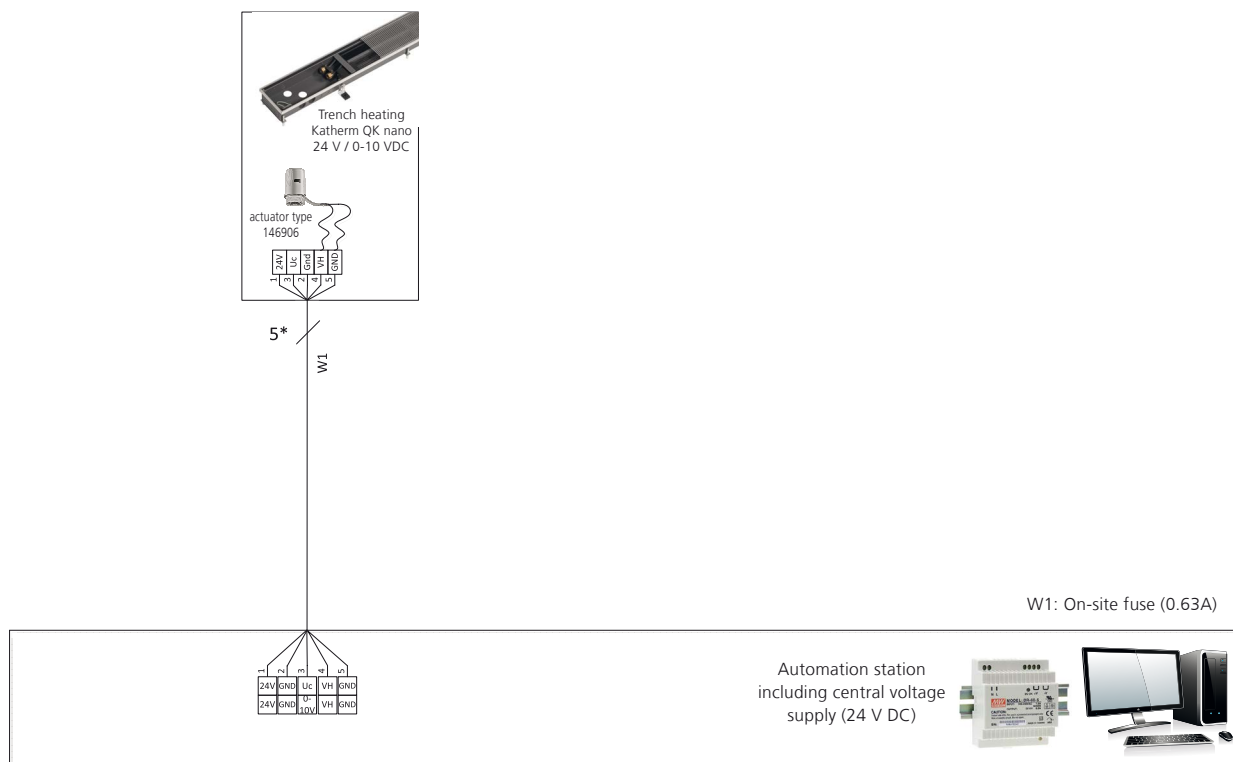
Product features

The operating voltage must be provided by a central on-site 24 V DC voltage supply.

Kampmann offers a range of switching power units in different output classes as accessories for the voltage supply (24 V DC).

The fan automatically switches off in the event of a motor fault.

Cabling - BMS control



* Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.

W1: Voltage supply and control signal for fan and actuator. Fuse for fan 0.63 A.

Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

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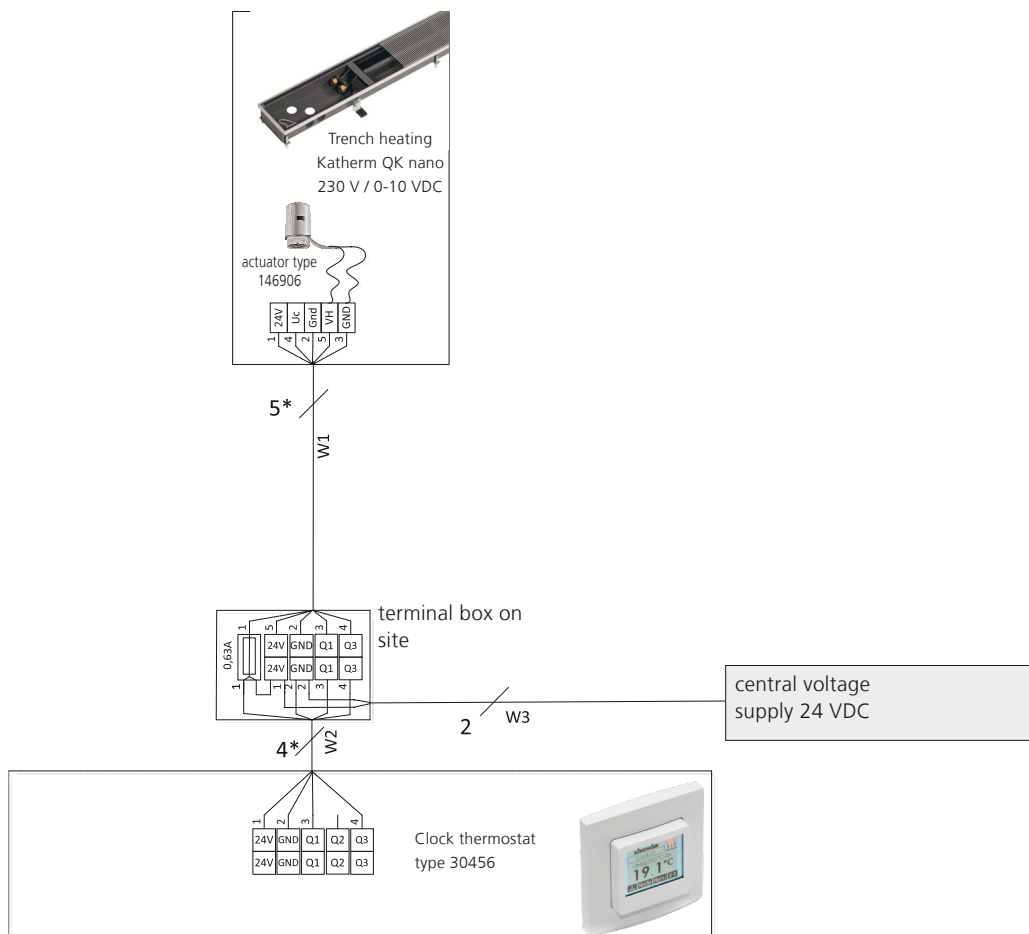
Fig.: Clock thermostat

The clock thermostat 30456 permits the operation and temperature control of 24 V electromechanical **Katherm** QK nano units.

The room temperature is set by sensor-controlled functional keys.

Complete with 10-stage fan speed adjustment in manual and automatic operating mode, including automatic summer/winter changeover and a day or week program.

Cabling - Clock thermostat control, type 30456



- * Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.
- W1: Voltage supply and control signal for fan (On-site fuse 0,63A) and actuator.
- W2: Voltage supply and control signal for fan and actuator.
- W3: Voltage supply (On-site fuse)

10.3 230 V electromechanical electrical model

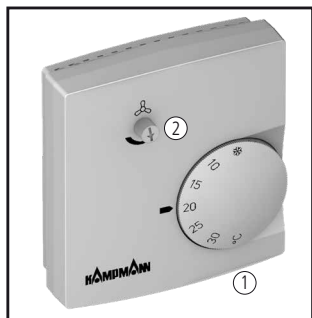


Fig.: Room thermostat

The required room temperature is set on the room thermostat. If this falls below the set value, the tangential fan starts up at the set speed and the thermoelectric actuator valve opens the water-side valve.

If the speed controller is switched to zero (Off), only the water-side valve opens (natural convection operation).

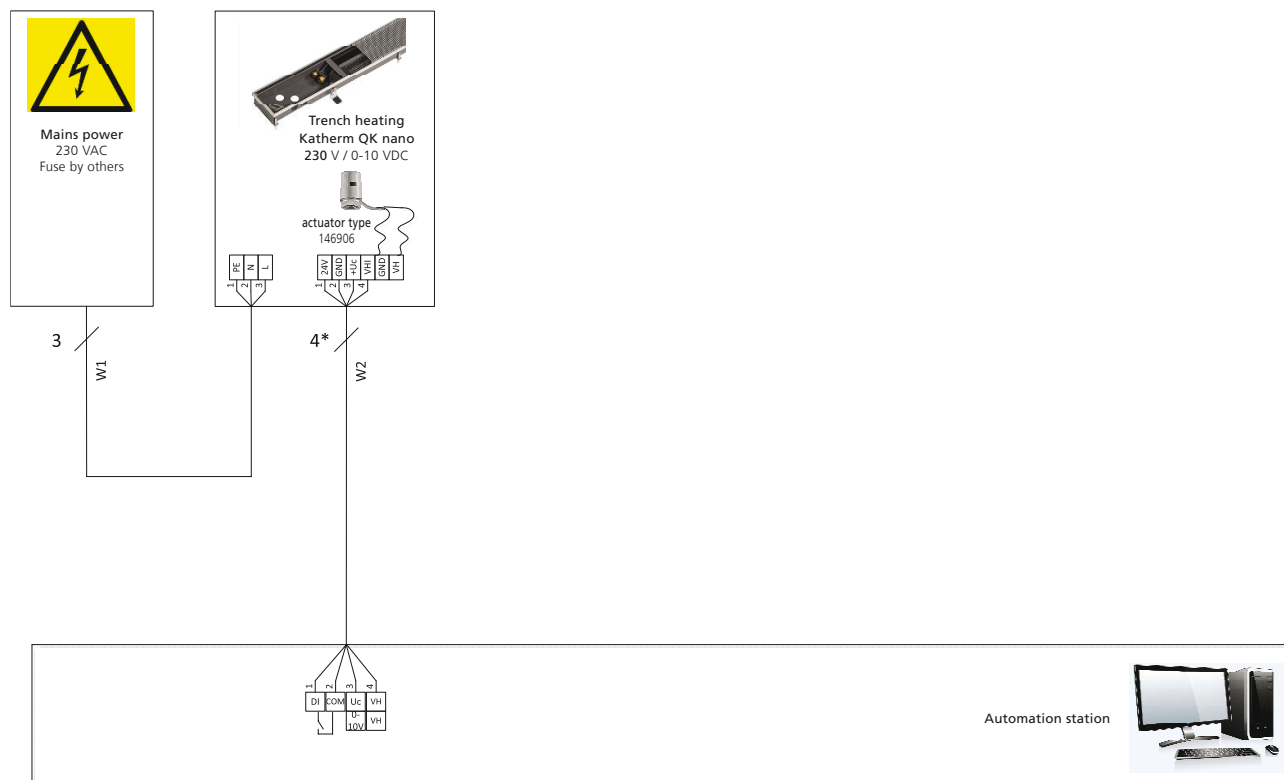
Room thermostat with infinitely continuous fan speed setting, in a flat surface-mounted housing, white, with thermal feedback; for the continuously variable parallel control of max. 10 **Katherm** QK nano 230 V electromechanical models, room temperature and fan presetting using dials; temperature setting range 5 - 30°C; IP30 rated, voltage 230V/50 Hz, max. current load 4 A, switching difference 0.5 K, temperature drop approx. 4 K, fuse and EMC in line with DIN EN 60730

Dimensions W x H x D: 78 x 83 x 27 mm

① Dial for temperature setting

② Dial for fan speed setting

Cabling - BMS control



* Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.

W1: Power supply

W2: Control signal for fan and actuator

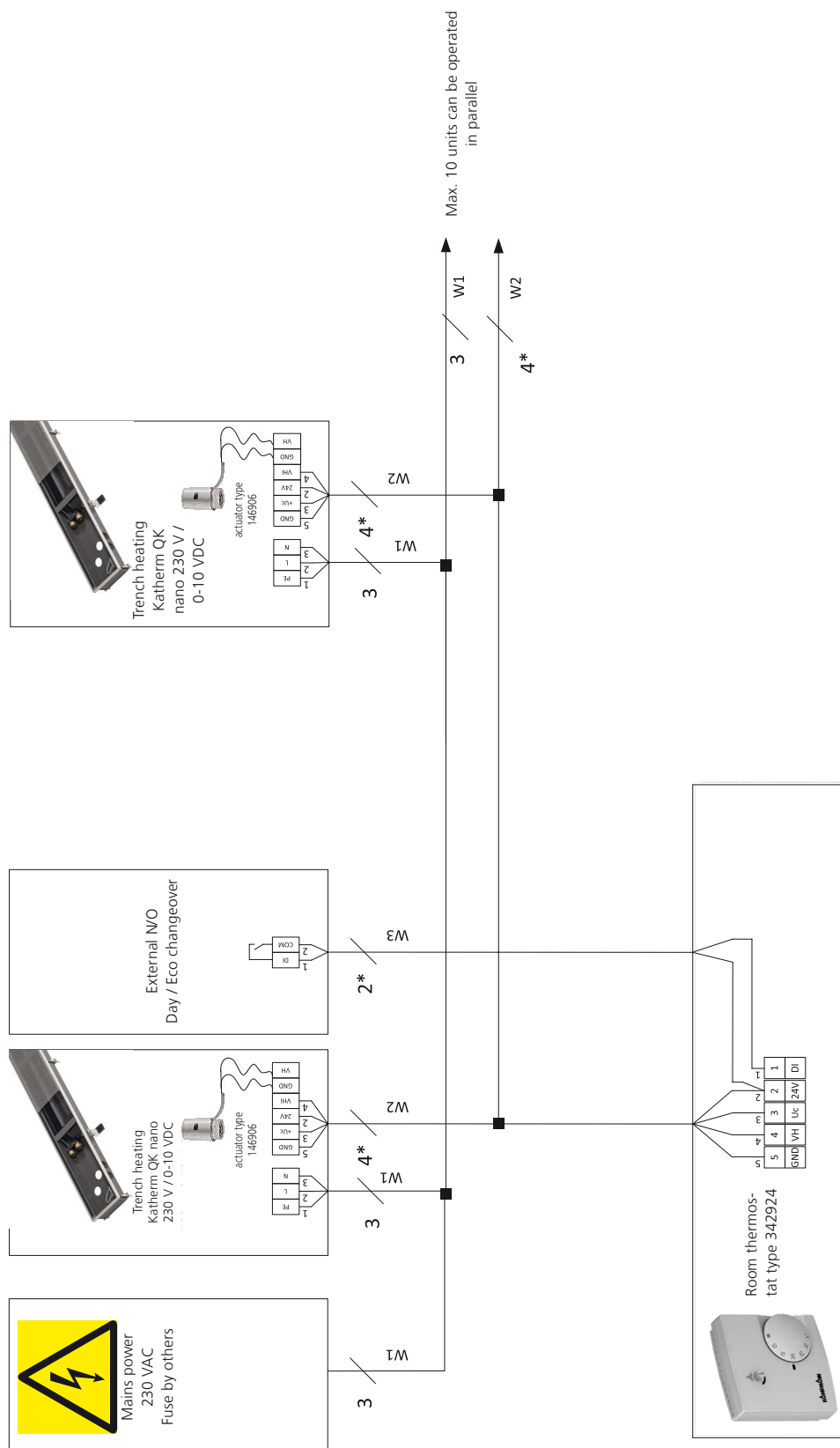
Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

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Cabling - Room thermostat control, type 342924



* Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.

W1: Power supply

W2: Control signal for fan and actuator

W3: Operating mode changeover (optional)

Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

10.4 KaControl model

Applications of the KaController

The **Katherm** QK nano and associated room control units can only be used:

- indoors
(for instance in residential properties and offices, showrooms etc.)

KaControllers should not be used

- outdoors,
- in humid areas, such as swimming pools, in wet rooms,
- in areas where there is a risk of explosion,
- in areas with a high dust content,
- in areas with an aggressive atmosphere

Description of control, Basic settings

The KaControl version provides the option of controlling **Katherm** QK nano units by means of a control unit supplied separately or on-site building management technology.

A number of different settings and configurations are possible using the DIP switches on the PCB and parameters that can be set by the control unit.

This manual provides only a brief overview. Please refer to the separate KaControl instruction manual for further setting options.

The KaControl system offers the possibility of grouping, although an extension board (CANbus), available as an accessory, then needs to be provided.

Lay control lines separately from supply lines.

Use CAT5 (AWG 23) or similar as data cables.

Wire the unit in series: star cabling is not allowed.

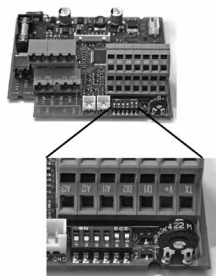


4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

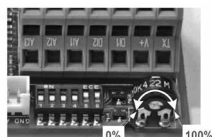
Ready-to-install convector-based floor trenches

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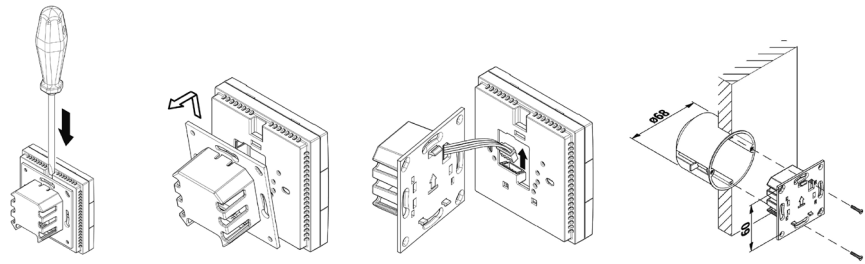
Configuration



DIP	Function	Position	Factory settings	Description
1	---	OFF	OFF	Changing to ON means that the unit is no longer controlled by the KaControl unit, rather by means of a 0-10V signal on the AI2/GND and AI3/GND input (see separate KaControl instructions).
	External control 0-10 V	ON		
2	---	OFF	OFF	Changing to ON means that the unit is no longer controlled by the KaControl unit, rather by means of an external 0-100 kOhm potentiometer signal on the AI2/GND and AI3/GND input (see separate KaControl instructions).
	Activation by potentiometer 0-100 kOhm	ON		
3	Clip-on sensor fitted	ON	OFF	The clip-on sensor is available as an accessory and can be used as a changeover sensor. If used, set the DIP switch to ON.
	No clip-on sensor fitted	OFF		
4	Heating/Cooling/ External changeover	ON	ON	If the function is activated, the operating mode of the unit can be changed by an external potential-free contact. The contact acts on input DI2/GND.
	---	OFF		
5	4-pipe	ON	OFF	
	Katherm QK nano is configured as a 2-pipe heating unit.			
6	Temperature detection on the unit	OFF	OFF	The units have an air intake temperature sensor for room temperature setting. Set the DIP switch to ON if the temperature is to be detected at the control unit. If several units are integrated in a group, the DIP switch has to be set to ON.
	Temperature detection on the control unit	ON		
Potentiometer	The maximum speed can be set using the potentiometer. The maximum speed and thus also the air volume and sound pressure level can be reduced, for example if a maximum sound level is not to be exceeded. The maximum cooling and/or heating output is correspondingly reduced by this.			



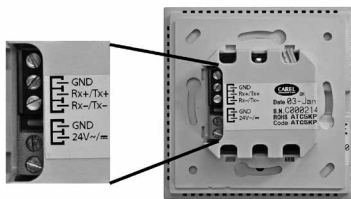
Installation of the control unit



Installation/Dismantling

Electrical wiring

- Connect the KaController to the nearest **Katherm QK nano** in line with the wiring diagram. The maximum BUS length between the KaController and the unit is 30 m.
- The respective **Katherm QK nano** automatically becomes the master unit in the control circuit when a KaController is connected to it.



KaController terminals

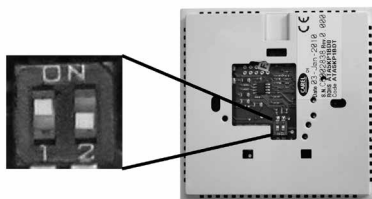


DANGER!

Disconnect the unit prior to embarking on any wiring work!
Only connect the bus lines when the unit is fully disconnected.

DIP switch setting

- The DIP switches on the rear of the KaController should be set as per the adjacent figure:
DIP switch no. 1: **ON**
DIP switch no. 2: **OFF**



DIP switch setting

KaController

DIP switch no. 1: **ON**

DIP switch no. 2: **OFF**

PCB fault messages

Any fault messages are shown in the KaControl remote controller display.

Code	Alarm
A11	Control sensor faulty
A13	Room frost protection
A14	Condensation alarm
A15	General alarm
A16	Sensor AI1, AI2 or AI3 faulty
A17	Unit frost protection
A18	Faulty EEPROM
A19	Offline slave in the CANbus network
tAL1	Temperature sensor in KaController faulty
tAL3	Real-time clock in KaController faulty
tAL4	EEPROM in KaController faulty
Cn	Communication fault with the external control board (PCB)

4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

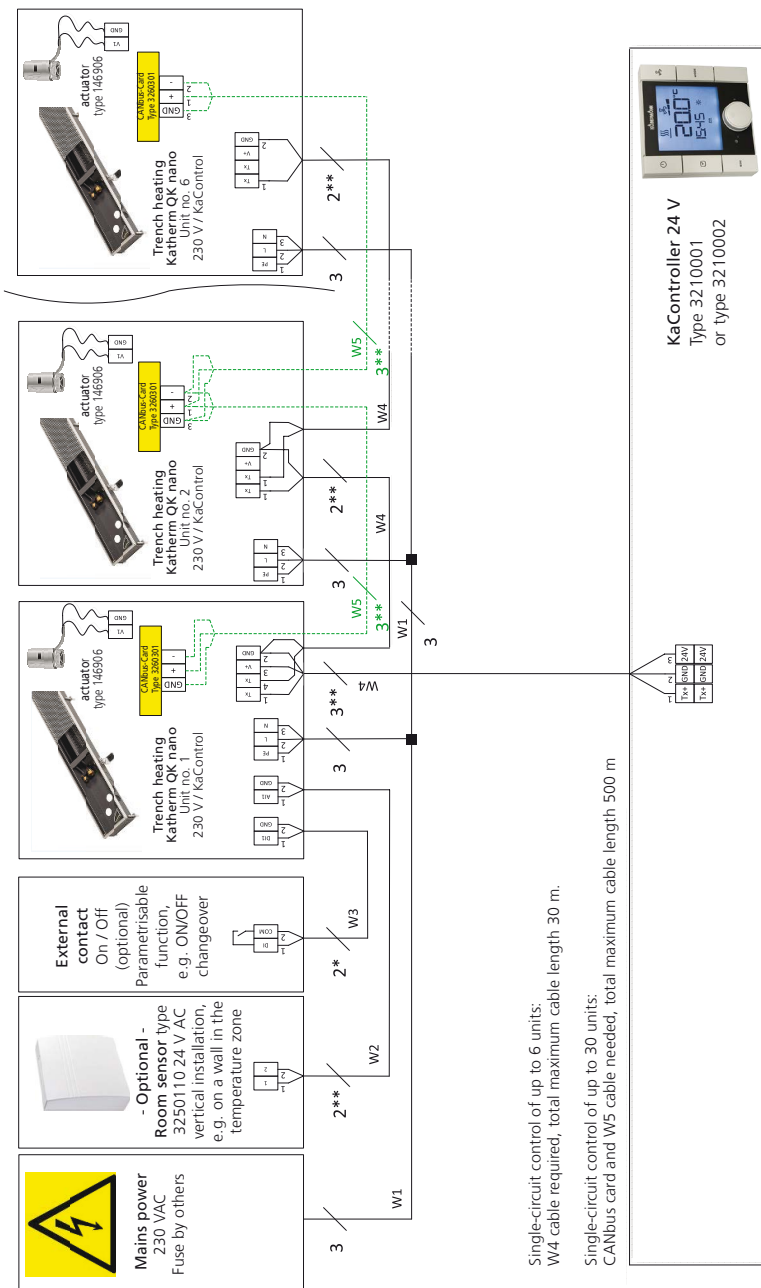
Ready-to-install convector-based floor trenches

Assembly and installation instructions

10.4 1 Single-circuit controls

Katherm QK nano with KaController
Single-circuit control, or maximum 30 Katherm QK nano units by CANbus.

Cabling - 24 V Open / Close valve, external KaController



- * Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.
 - ** Lay shielded, paired cables, e.g. CAT5 (AWG23) of at least the same value, separately from high-voltage cables.
 - W1: Power supply
 - W2: Analogue input AI1 (optional connection)
 - W3: Digital input DI1 (optional connection)
 - W4: Bus signal (I/Lan)
 - W5: Bus signal (CANbus) Only needed in a single-circuit control of up to 30 units.
- Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

Maximum cable lengths with a group of up to 6 individual units

Total length of BUS cables between the Katherm QK nano units	max. 30 m
Total length of BUS cable between the room control unit and master unit	max. 30 m
Total length between the Katherm QK nano and the external potential-free contacts e.g. window contact etc.	max. 10 m
Total lengths between Katherm QK nano and separate room temperature sensor	max. 10 m

Mains power
230 VAC
Fuse by others

KaController
type 3210001 or type 3210002
24 VAC
vertical installation, e.g. on a wall in the temperature zone

Optional -
Room sensor type 3250110
vertical installation, e.g. on a wall in the temperature zone

Trench heating
Katherm QK nano
24 V / 0-10 VDC

actuator
type 146906

Control electronics type 3231131

To more control electronics if needed. Total max. number 6 control electronics.

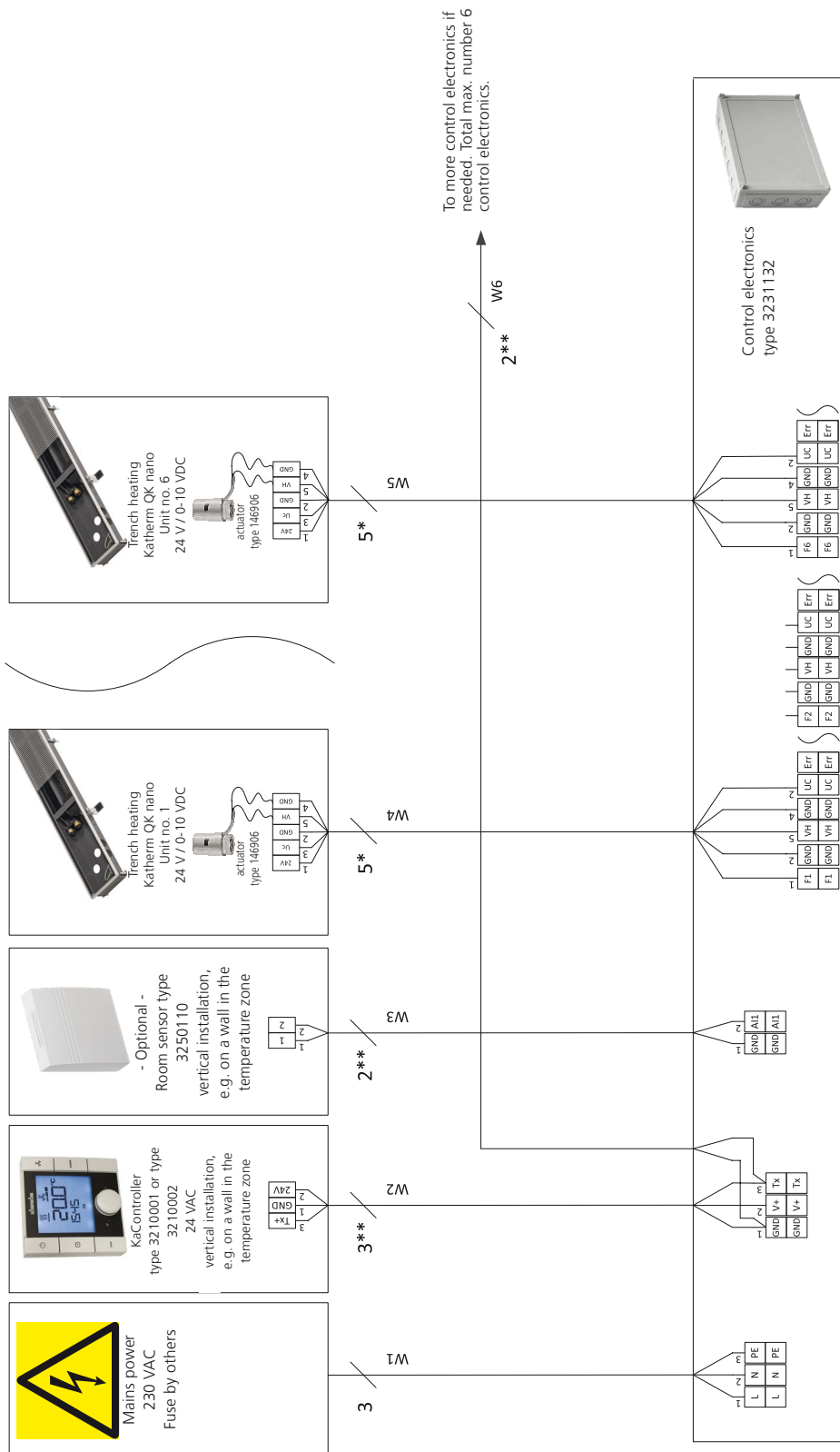
- Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

Ready-to-install convector-based floor trenches

Assembly and installation instructions

Cabling with control electronics type 3231132



* Lay shielded cables (e.g. IY(ST)Y, 0.8 mm), separately from high-voltage cables.
 ** Lay shielded, paired cables, e.g. CAT5 (AWG23) of at least the same value, separately from high-voltage cables.

W1: Power supply

W2: Bus signal (tLan)

W3: Analogue input AI1 (optional connection)

W4: Control signal for fan and actuator, total maximum cable length 10 m

W5: Control signal for fan and actuator, total maximum cable length 10 m

W6: Bus signal (tLan)

Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

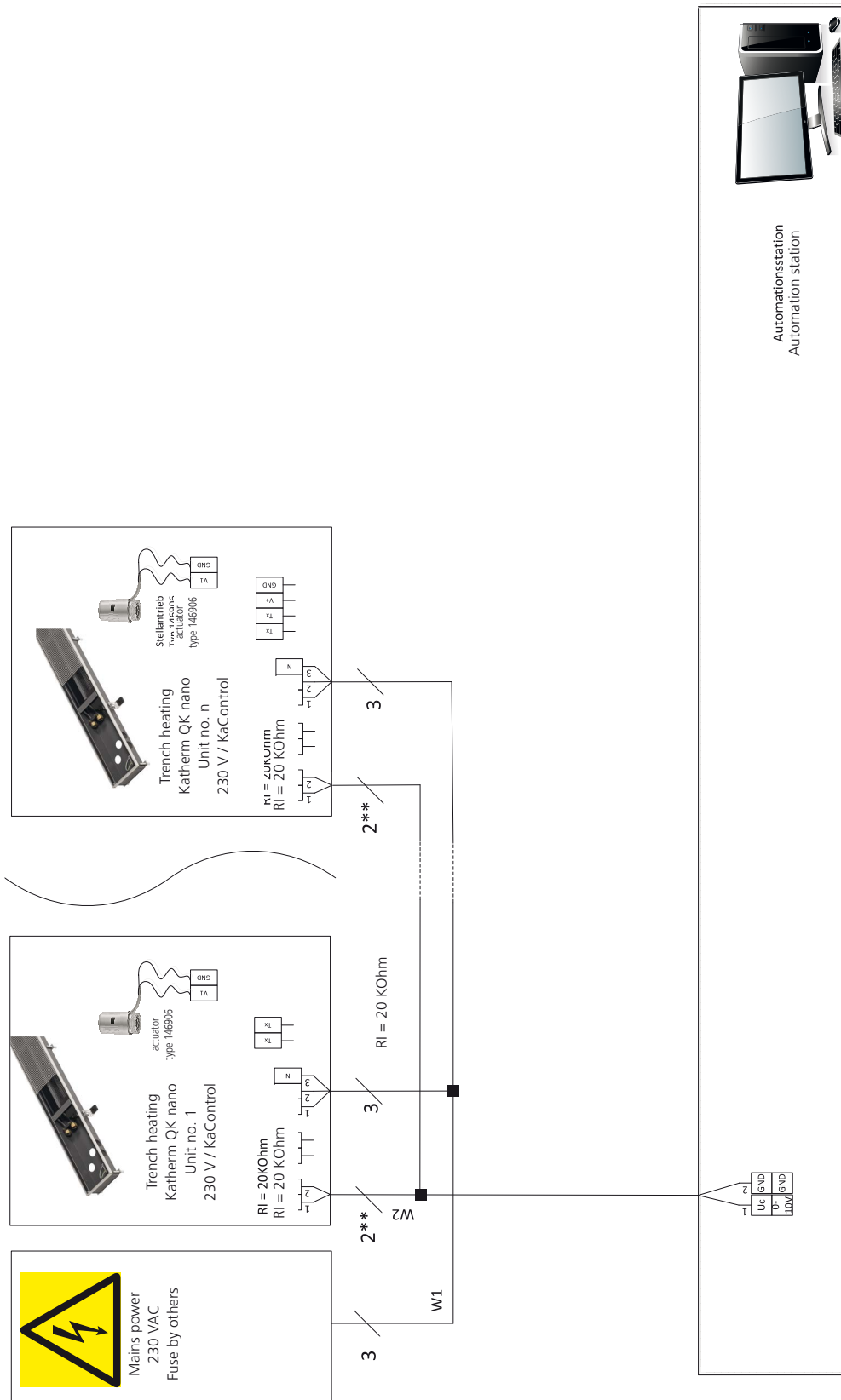
Katherm QK nano – Ultra-small trench heater with EC tangential fan

4.42

Ready-to-install convector-based floor trenches

Assembly and installation instructions

KaControl cabling - BMS control



** Lay shielded, paired cables, e.g. CAT5 (AWG23) of at least the same value, separately from high-voltage cables.

W1: Power supply

W2: Control signal for fan and actuator.

Subject to technical modifications: Refer to the control accessory documentation in the event of deviation from the circuit diagrams!

4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

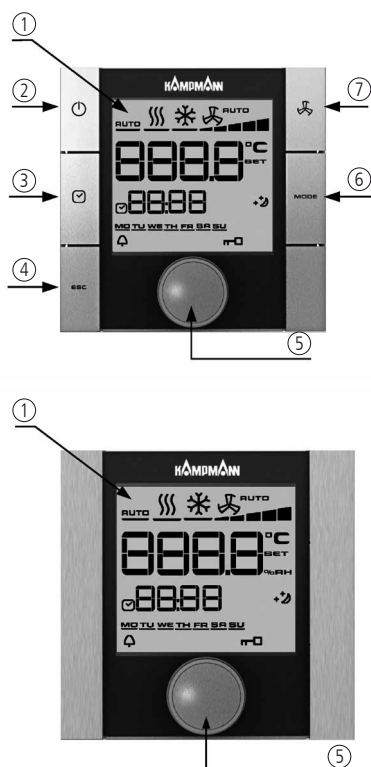
Ready-to-install convector-based floor trenches

Assembly and installation instructions

EC fans KaControl

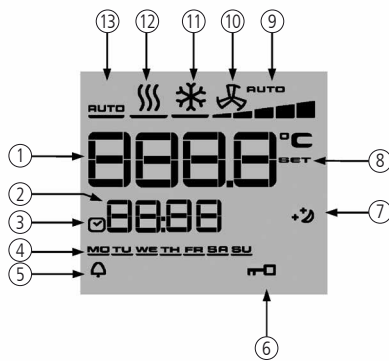
Operation of control unit

The operation of the unit can be changed using the control unit. There are two models of control unit. One with side keys and one without. Both control units can be used to call up all functions, with the keys offering the possibility of quick access to some functions.



No.	Description
①	Display of the operating mode set
②	QK nano On/Off (ECO/Day can be set)
③	Set timer
④	ESC, to move from a menu item to the basic view
⑤	"NAVIGATOR dial" – turn to the left or right to set values. Press to confirm the setting
⑥	Mode to change operating mode: heating, cooling, recirculation
⑦	Increase or lower fan speed

LCD display symbols



①	Display of setpoint room temperature
②	Current time
③	Timer program enabled
④	Weekday
⑤	Alarm
⑥	Selected function is locked
⑦	Eco mode
⑧	Setpoint setting enabled
⑨	Fan control setting Auto-0-1-2-3-4-5
⑩	Ventilation mode
⑪	Cooling mode
⑫	Heating mode
⑬	Automatic Heating/Cooling changeover mode

Operation of the basic functions

Function	Description
Switch On/Off	Switch on by pressing key 2 or the navigator dial. When switched on, the display shows a temperature. Switch off by pressing button 2 or the navigator dial. OFF is shown.
Change temperature	Turn the navigator dial to the left to lower, and to the right to raise, the required temperature. Confirm the entry by pressing the navigator dial.
Fan speed	Change by pressing the side fan button or using the navigator dial. Briefly press the navigator dial once. Turn the navigator dial to the left to lower, and to the right to increase the required fan speed. Press the navigator dial once more to confirm the display. In Automatic mode, the speed is adjusted when the room temperature deviates from the setpoint temperature.
Heating/Cooling/ Recirculation	Change by pressing the side fan button or using the navigator dial. To change using the navigator dial, first press the navigator dial for approx. 1 second to move to the Fan stage selection. Then press the navigator dial once again for 3 seconds to go to the Time setting. Press again for approx. 3 seconds to move to the Timer menu. Press again for approx. 3 seconds to move to the Mode menu. Press briefly to confirm the entry.
Timer program	The KaControl provides the option of setting a weekly timer. Refer to the separate KaControl instructions for this.

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11. Declaration of Conformity

Information requirements for fan coils according to regulation (EU) No 2016/2281
Informationsanforderungen für Fan Coils gemäß Verordnung (EU) Nr. 2016/2281

Katherm QK nano heating only nur heizen 2-pipe unit 2-Rohrsystem		cooling capacity (sensible)	Kühlleistung (sensibel)	cooling capacity (latent)	Kühlleistung (latent)	Heating capacity	Wärmeleistung	Total electric power input	Elektrische Gesamtleistungsaufnahme	Sound power level (per speed setting, if applicable)	Schallleistungspegel (ggf. je Geschwindigkeits-einstellung)
Version	length Länge	P _{rated,c} kW	P _{rated,c} kW	P _{rated,h} kW	P _{elec} kW	L _{WA} dB (A)					
Electromechanical Elektromechanisch 24V	900 mm	-	-	0,2	0,005	<28/<28/30/38/42					
	1400 mm	-	-	0,5	0,006	<28/<28/33/41/45					
	1800 mm	-	-	0,7	0,007	<28/<28/35/43/47					
	2100 mm	-	-	0,9	0,008	<28/28/36/44/48					
	2600 mm	-	-	1,1	0,013	<28/29/37/45/49					
Electromechanical Elektromechanisch 230V	1100 mm	-	-	0,2	0,006	<28/<28/30/38/42					
	1600 mm	-	-	0,5	0,007	<28/<28/33/41/45					
	2000 mm	-	-	0,7	0,008	<28/<28/35/43/47					
	2300 mm	-	-	0,9	0,009	<28/28/36/44/48					
	2700 mm	-	-	1,1	0,014	<28/29/37/45/49					
KaControl	1100 mm	-	-	0,2	0,006	<28/<28/30/38/42					
	1600 mm	-	-	0,5	0,007	<28/<28/33/41/45					
	2000 mm	-	-	0,7	0,008	<28/<28/35/43/47					
	2300 mm	-	-	0,9	0,009	<28/28/36/44/48					
	2700 mm	-	-	1,1	0,014	<28/29/37/45/49					

Standard rating conditions for fan coil units according to regulation (EU) No 2016/2281

Norm-Prüfbedingungen für Gebläsekonvektoren gemäß Verordnung (EU) Nr. 2016/2281

Cooling Test	Air temperature	27 °C (dry bulb) 19 °C (wet bulb)	Inlet water temperature	7 °C	Water temperature rise	5 °C
Test Kühlbetrieb	Luft-temperatur	27 °C (Trockenkugel) 19 °C (Feuchtkugel)	Wassertemperatur am Einlass		Anstieg der Wassertemperatur	
Heating Test	Air temperature	20 °C (dry bulb)	Inlet water temperature	45 °C for 2-pipe units 65 °C for 4-pipe units	Water temperature decrease	5 °C for 2-pipe units 10 °C for 4-pipe units
Test Heizbetrieb	Luft-temperatur	20 °C (Trockenkugel)	Wassertemperatur am Einlass	45 °C für 2-Rohrsysteme 65 °C für 4-Rohrsysteme	Sinken der Wassertemperatur	5 °C für 2-Rohrsysteme 10 °C für 4-Rohrsysteme
Sound power test	At ambient conditions without water flow					
Test Schallleistungspegel	Bei Umgebungsbedingungen ohne Wasserdurchsatz					

Contact Details	Kampmann GmbH
Kontaktinformationen	Friedrich-Ebert-Straße 128-130, D-49811 Lingen (Ems), Germany

4.42 Katherm QK nano – Ultra-small trench heater with EC tangential fan

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EU-Konformitätserklärung

EU Declaration of Conformity

Déclaration de Conformité CE

Deklaracja zgodności CE

EU prohlášení o konformite

Wir (Name des Anbieters, Anschrift):

We (Supplier's Name, Address):

Nous (Nom du Fournisseur, Adresse):

My (Nazwa Dostawcy, adres):

My (Jméno dodavatele, adresa):

KAMPMANN GMBH & Co. KG
Friedrich-Ebert-Str. 128-130
49811 Lingen (Ems)

erklären in alleiniger Verantwortung, dass das Produkt:

declare under sole responsibility, that the product:

déclarons sous notre seule responsabilité, que le produit:

deklarujemy z pełną odpowiedzialnością, że produkt:

deklarujeme, vědomi si své odpovědnosti, že produkt:

Type, Modell, Artikel-Nr.:

Type, Model, Articles No.:

Type, Modèle, N° d'article:

Typ, Model, Nr artykułu:

Typ, Model, Číslo výrobku:

Katherm QK 142***

Katherm HK 143***

Katherm QK nano 442***

auf das sich diese Erklärung bezieht, mit der / den folgenden Norm(en) oder normativen Dokumenten übereinstimmt:

to which this declaration relates is in conformity with the following standard(s) or other normative document(s):

auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou autre(s) document(s) normatif(s):

do którego odnosi się niniejsza deklaracja, jest zgodny z następującymi normami lub innymi dokumentami normatywnymi:

na který se tato deklarace vztahuje, souhlasí s následující(mi) normou/normami nebo s normativními dokumenty:

DIN EN 16430-1; -2; -3

DIN EN 442-1 ; -2

DIN EN 55014-1 ; -2

DIN EN 61000-3-2 ; -3-3

DIN EN 61000-6-1 ; -6-2 ; -6-3

DIN EN 60335-1 ; -2-40

Gebläseunterstützte Heizkörper, Konvektoren und Unterflurkonvektoren

Radiatoren und Konvektoren

Elektromagnetische Verträglichkeit

Elektromagnetische Verträglichkeit

Elektromagnetische Verträglichkeit

Sicherheit elektr. Geräte für den Hausgebrauch und ähnliche Zwecke

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Friedrich-Ebert-Straße 128–130
49811 Lingen (Ems)

Registergericht: Osnabrück, HRA 205688
USt-IdNr: DE313505294
Kampmann.de

Persönlich haftende Gesellschafterin:
Kampmann Beteiligungsgesellschaft mbH
Sitz: Lingen (Ems)

Registergericht: Osnabrück, HRB 211684
Geschäftsführer: Hendrik Kampmann





Gemäß den Bestimmungen der Richtlinien:

Following the provisions of Directive:

Conformément aux dispositions de Directive:

Zgodnie z postanowieniami Dyrektywy:

Odpovídající ustanovení směrnic:

2014/30/EU

2014/35/EU

EMV-Richtlinie

Niederspannungsrichtlinie

Hendrik Kampmann

Lingen (Ems), den 01.09.2020

Ort und Datum der Ausstellung

Place and Date of Issue

Lieu et date d'établissement

Miejsce i data wystawienia

Místo a datum vystavení

Name und Unterschrift des Befugten

Name and Signature of authorized person

Nom et signature de la personne autorisée

Nazwisko i podpis osoby upoważnionej

Jméno a podpis oprávněné osoby

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