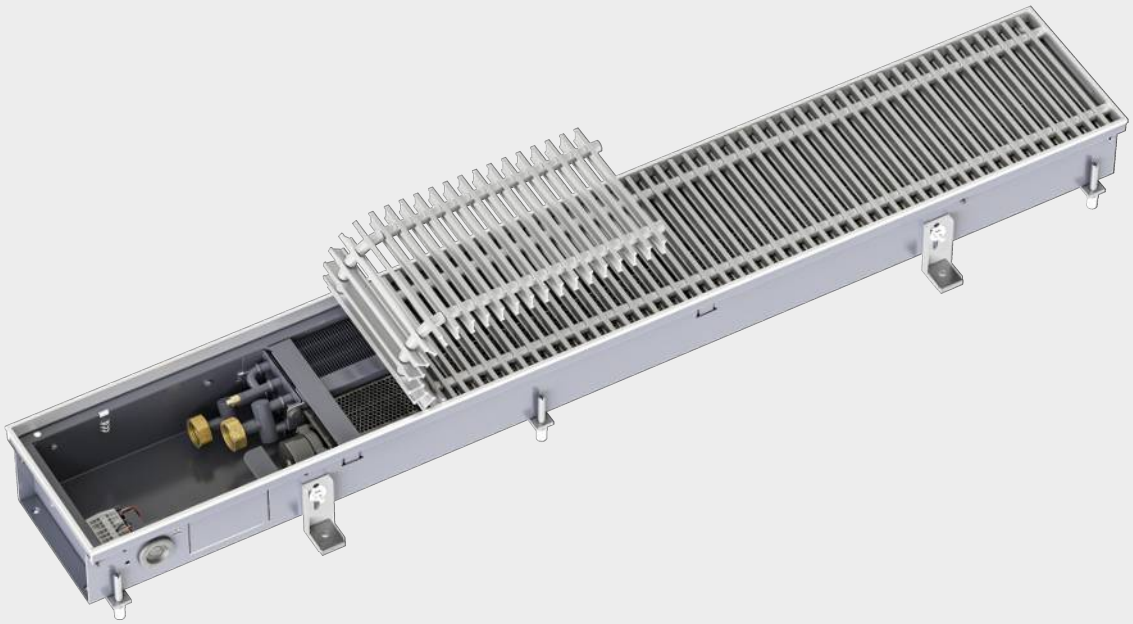

Katherm QK

► Assembly, installation and operating instructions

Keep these instructions in a safe place for future use!

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KAMPMANN

Table of contents

1 General 5

1.1 About these instructions 5

1.2 Explanation of Symbols 5

2 Safety 6

2.1 Correct use 6

2.2 Limits of operation and use 6

2.3 Risk from electrocution! 8

2.4 Personnel requirements - Qualifications 9

2.5 Personal Protective Equipment 9

3 Transport, storage and packaging 10

3.1 General transport instructions 10

3.2 Scope of delivery 10

3.3 Storage 11

3.4 Packaging 11

4 Technical data 12

5 Construction and function 13

5.1 Overview 13

5.2 Brief description 13

6 Installation and wiring 14

6.1 Requirements governing the installation site 14

6.2 Installation 14

6.2.1 Installation steps 14

6.2.2 Screed work 19

6.3 Installation 20

6.3.1 Connection to the pipe network 20

6.4 Katherm QK supply air modules (optional) 22

7 Electrical connection 24

7.1 Maximum electrical rating values 24

7.2 Electromechanical connection, 24 V (*24) 24

8 Pre-commissioning checks 26

9 Maintenance 27

9.1 Securing against reconnection 27

9.2 Maintenance Schedule: 27

9.3 Maintenance work 27
9.3.1 Clean the inside of the unit 27
10 Faults 28
10.1 Fault table 28
11 Certificates 29

1 General

1.1 About these instructions

These instructions ensure the safe and efficient handling of this equipment. These instructions form an integral part of the equipment and have to be kept in the direct vicinity of the equipment and available to personnel at all times.

All personnel must have carefully read through these instructions prior to commencing all work on the equipment. A fundamental prerequisite for safe working is compliance with all the stated safety instructions and other instructions contained in this manual.

In addition all local occupational health and safety at work regulations apply, as do general safety provisions governing the use of the equipment.

Illustrations in this guide are intended to provide a basic understanding and may differ from the actual model.

Ongoing tests and further developments may result in small variations between the unit supplied and the instructions.

1.2 Explanation of Symbols

DANGER!
This combination of symbol and signal word indicates an immediately dangerous situation caused by electrical power, which will cause death or serious injury if not avoided.

WARNING!
This combination of symbol and signal word indicates a possible hazardous situation.

IMPORTANT NOTE!
It represents a potentially hazardous situation, which could lead to damage to property or for a measure to optimise workflows.

IMPORTANT NOTE!
This symbol highlights useful hints, recommendations and information for efficient and trouble-free operation.

2 Safety

This section provides an overview of all important safety aspects to ensure optimum protection of personnel as well as safe and trouble-free operation. In addition to the safety instructions in these operating instructions, the valid safety, accident prevention and environmental protection regulations must be observed for the area of use of the unit. It is the duty of the operator to ensure that instructions relating to maintenance (e.g. relating to hygiene) are complied with.

2.1 Correct use

Intended use of the unit also includes adherence to these instructions.

Any use beyond or other than the stated intended use is considered as misuse.

Any change to the unit or use of non-original spare parts will cause the expiry of the warranty and the manufacturer's liability.

Information in accordance with UL60335-1

- This unit can be used by children aged 8 years or more and also by people with reduced physical, sensory or mental capabilities or a lack of experience and knowledge, if they are supervised or have been instructed in the safe use of the unit and the resulting dangers. Do not allow children to play with the unit. Do not allow children to clean and maintain the unit without supervision.
- The unit is not intended for operation above 2,000 m.a. s.l.
- This unit is not intended for permanent connection to the drinking water supply system. This unit is intended for permanent connection to a heating water circuit, and may not be connected using hose sets.
- The water network needs to include safety measures to prevent the danger of overpressure.
- This unit is not intended to be accessible to the general public. The water network needs to include safety measures to prevent the danger of overpressure.

2.2 Limits of operation and use

Operating limits		
Min./max. water temperature	°C/°F	15-90 / 59-194
Min./max. air intake temperature	°C/°F	15-40 / 59-104
Min./max. air humidity	%	15-75
Min. operating pressure	bar/kPa	-
Max. operating pressure	bar/kPa/psi	10/1000 / 145
Min./max. glycol content	%	25-50

Tab. 1: Operating limits

Operating voltage	24 V/ 50/60 Hz
Power/Current consumption	On the typeplate

Tab. 2: Operating voltage

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

Water quality		
pH value (at 20 °C/68°F)		8-9
Conductivity (at 20 °C/68°F)	µS/cm / ppm	<700 / <350
Oxygen content (O_2)	mg/l / (lb/gal)	<0.1 / (<0.00000083)
Hardness	°dH / ppm $CaCO_3$	4-8.5 / 0.224-0.476
Sulphur ions		not measurable
Sodium ions (Na^+)	mg/l / (lb/gal)	<100 / (<0.00083)
Iron ions (Fe^{2+})	mg/l / (lb/gal)	<0.1 / (<0.00000083)
Manganese ions (Mn^{2+})	mg/l / (lb/gal)	<0.05 / (<0.000000415)
Ammonia ions (NH^{4+})	mg/l / (lb/gal)	<0.1 / (<0.00000083)
Chlorine ions (CI)	mg/l / (lb/gal)	<100 / (<0.00083)
CO_2		<50
Sulfate ions (SO_4^{2-})	mg/l / (lb/gal)	<50 / (<0.000415)
Nitrite ions (NO_{2+})	mg/l / (lb/gal)	<50 / (<0.000415)
Nitrate ions (NO_{3+})	mg/l / (lb/gal)	<50 / (<0.000415)

Tab. 3: Water quality

IMPORTANT NOTE!

Danger of frost in cooling mode!

There is a risk of the heat exchanger freezing when used in unheated rooms.

- Make sure that the unit is equipped with a frost protection sensor and/or thermostat in this case.

IMPORTANT NOTE!

Warning of misuse!

In the event of misuse, as itemised below, there is a danger of limited or failing operation of the unit. Ensure that the airflow can circulate freely.

- Never operate the unit in humid areas, such as swimming pools, wet areas etc.
- Never operate the unit in rooms with an explosive atmosphere.
- Never operate the unit in aggressive or corrosive atmospheres (e.g. sea air).
- Never operate the unit above electrical equipment (such as switch cabinets, computers or other electrical units, or contacts that are not drip-proof).
- Never use the unit as a construction site heater.
- Never operate the unit in areas with a high dust content.

2.3 Risk from electrocution!

DANGER!

Risk of fatal injury from electrocution!

Contact with live parts will lead to fatal injury from electrocution. Damage to the insulation or individual components can lead to a fatal injury.

- Only permit qualified electricians to work on the electrical system.
- Immediately disconnect the system from the power supply and repair it in the event of damage to the insulation.
- Keep live parts away from moisture. This can cause a short circuit.
- Properly earth the unit.

2.4 Personnel requirements - Qualifications

Specialist knowledge

The installation of this product requires specialist knowledge of heating, cooling, ventilation, installation and electrical engineering. This knowledge, generally learned in vocational training in one of the fields mentioned above, is not described separately.

Damage caused by improper installation is the responsibility of the operator or installer. The installer of these units should have adequate knowledge of the following gained from specialist vocational training

- Safety and accident prevention regulations
- Guidelines and recognised technical regulations, e.g. National Electric Code (NEC) and Canadian Electric Code (CEC).

The installation, operation and maintenance of this unit must comply with the applicable laws, standards, provisions and regulations in the respective country and the current state of the art.

2.5 Personal Protective Equipment

Personal protective equipment is used to protect people from impaired safety and health when working with the unit. The applicable accident prevention regulations at the place of use apply in all cases.

Personnel have to wear personal protective equipment during maintenance and troubleshooting on and with the unit.

3 Transport, storage and packaging

3.1 General transport instructions

Check on delivery for completeness and transport damage.

Proceed as follows in the event of visible damage:

- Do not accept delivery or only accept with reservations.
- Record any transport damage on the transportation documents or on the transport company's delivery note.
- Submit a complaint to the freight forwarder.

IMPORTANT NOTE!

Warranty claims can only be made within the applicable period for complaints. (More information is available in the T&Cs on the Kampmann website)

IMPORTANT NOTE!

2 people are needed to transport the unit. Wear personal protective clothing when transporting the unit. Only lift the unit on both sides and not by the pipes / valves.

IMPORTANT NOTE!

Material damage caused by incorrect transport!

Units being transported can drop or topple over if transported wrongly. This can cause serious material damage.

- Proceed carefully when unloading the equipment on delivery and when transporting it on site and note the symbols and instructions on the packaging.
- Only use the holding points provided.
- Only remove packaging shortly before assembling the unit.

3.2 Scope of delivery

IMPORTANT NOTE!

Check the scope of delivery!

- Check the delivery for damage.
- Check that the articles and type numbers are correct.
- Is the delivery and number of items delivered correct?

3.3 Storage

Store packaging under the following conditions:

- Do not store outdoors.
- Store in a dry and dust-free place.
- Store in a frost-free place.
- Do not expose to aggressive media.
- Protect from direct sunlight.
- Avoid mechanical vibrations and shocks.

IMPORTANT NOTE!
Under certain circumstances, packages can carry storage instructions that exceed the requirements listed here. Comply with these instructions accordingly.

3.4 Packaging

Handling packaging materials

IMPORTANT NOTE!
Dispose of packaging materials in line with the applicable statutory requirements and local regulations.

IMPORTANT NOTE!
The packaging is also use to protect the product from site dust and dirt. Only remove packaging shortly before assembling the unit.

4 Technical data

Unit	Katherm QK (performance values for roll-up grille)	
Size	QK 190	QK 215
Trench width [mm]	190	215
Trench roll-up grille [mm]	96	96
Trench linear grille [mm]	112	112
Trench length [mm]	780 - 3140	780 - 3140
Air volume flow [m³/h]	33 - 1002	33 - 1002
Heat output [W] [1]	213 - 9336	241 - 10608
Sound pressure level [dB (A)] [2, 3]	<20 - 51	<20 - 51
Sound power level [dB(A)] [3]	<28 - 59	<28 - 59
Power consumption [W]	0.7 - 36.4	0.7 - 36.4
Current consumption [mA]	30 - 310	30 - 310
Water content [l]	0.31 - 1.95	0.42 - 2.65
Weight [kg]	8.7 - 36.0	9.6 - 39.6

Unit	Katherm QK (performance values for roll-up grille)	
Size	QK 190	QK 215
Trench width [inch]	7.5	8.5
Trench height with roll-up grille [inch]	3.8	3.8
Trench height with linear grille [inch]	4.4	4.4
Trench length [inch]	30.1 - 123.6	30.1 - 123.6
Air volume flow [m³/h]	19 - 590	19 - 590
Heat output [BTU/h] [4]	727 - 31856	822 - 36196
Sound pressure level [dB (A)] [5, 3]	<20 - 51	<20 - 51
Sound power level [dB(A)] [3]	<28 - 59	<28 - 59
Power consumption [W]	0.7 - 36.4	0.7 - 36.4
Current consumption [mA]	30 - 310	30 - 310
Water content [gal]	0.31 - 1.95	0.42 - 2.65
Weight [lbs]	8.7 - 36.0	9.6 - 39.6

1 at LPHW 75 / 65 °C, t_{L1}= 20°C, with fan-assisted convection

2 The sound pressure level was calculated with an assumed room insulation of dB(A). This corresponds to a distance of m, a room volume of m³ and a reverberation time of s (in accordance with VDI 2081).

3 Sound pressure level < 20 dB (A) and sound power level < 28 dB (A) outside the usual measuring and audible range.

4 at LPHW 167 / 149 °F, t_{L1} = 68 °F

5 The sound pressure level was calculated with an assumed room insulation of 8 dB(A). This corresponds to a distance of 6.6 inches, a room volume of 3532 cft and a reverberation period of 0.5 s.

5 Construction and function

5.1 Overview

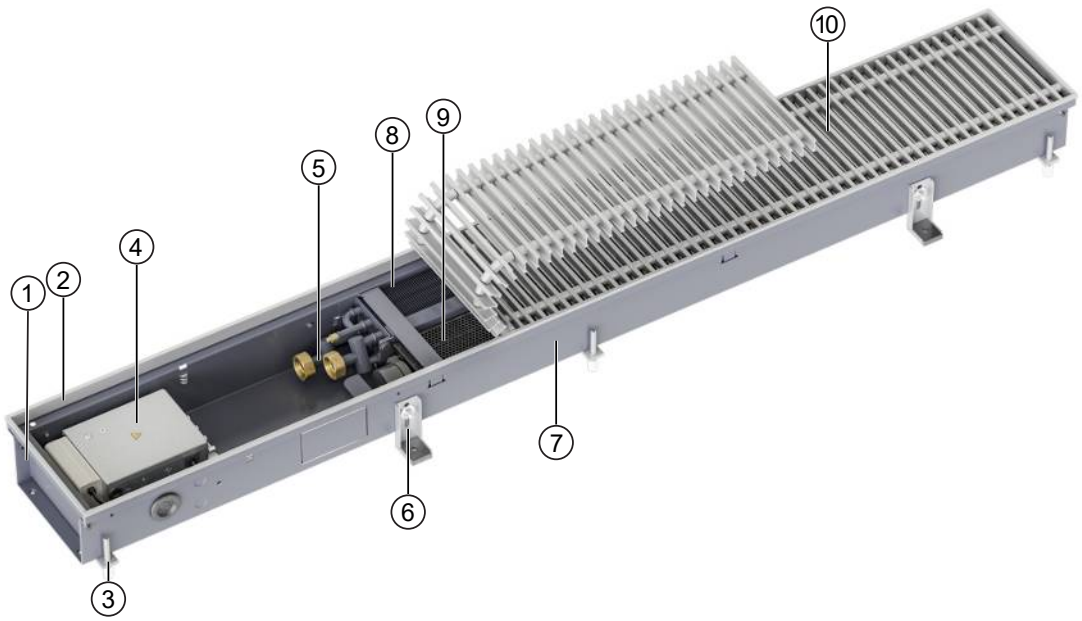


Fig. 1: Katherm QK at a glance

1	Easy to connect	2	Frame edge (matches grille colour)
3	Load-bearing height adjustment feet	4	Connection-ready control box
5	Eurokonus valve connection	6	Height adjustment feet with sound insulation
7	Floor trench	8	Coil
9	EC fan	10	Roll-up grille (example)

5.2 Brief description

Katherm QK are decentralised units for the heating of room air, for use in hotels, offices and business premises, among others. Secondary air is drawn in by the fan and passed through the copper/aluminium heat exchanger. The temperature-controlled air rises up the façade of the building to create a pleasant indoor climate.

6 Installation and wiring

6.1 Requirements governing the installation site

Only install and assemble the unit if the following conditions are met:

- Make sure that the unit is securely suspended/standing.
- Ensure that the airflow can circulate freely.
- Provide adequate space for appropriately sized flow and return water connections on site (Connection to the pipe network [▸ 20]).
- There is a power supply on site (Maximum electrical rating values [▸ 24]).
- If need be, provide a condensation connection with a sufficient gradient on site.

6.2 Installation

2 people are needed to install the unit.

CAUTION!

Risk of injury from sharp metal housing!

The inner metal of the casing can have sharp edges.

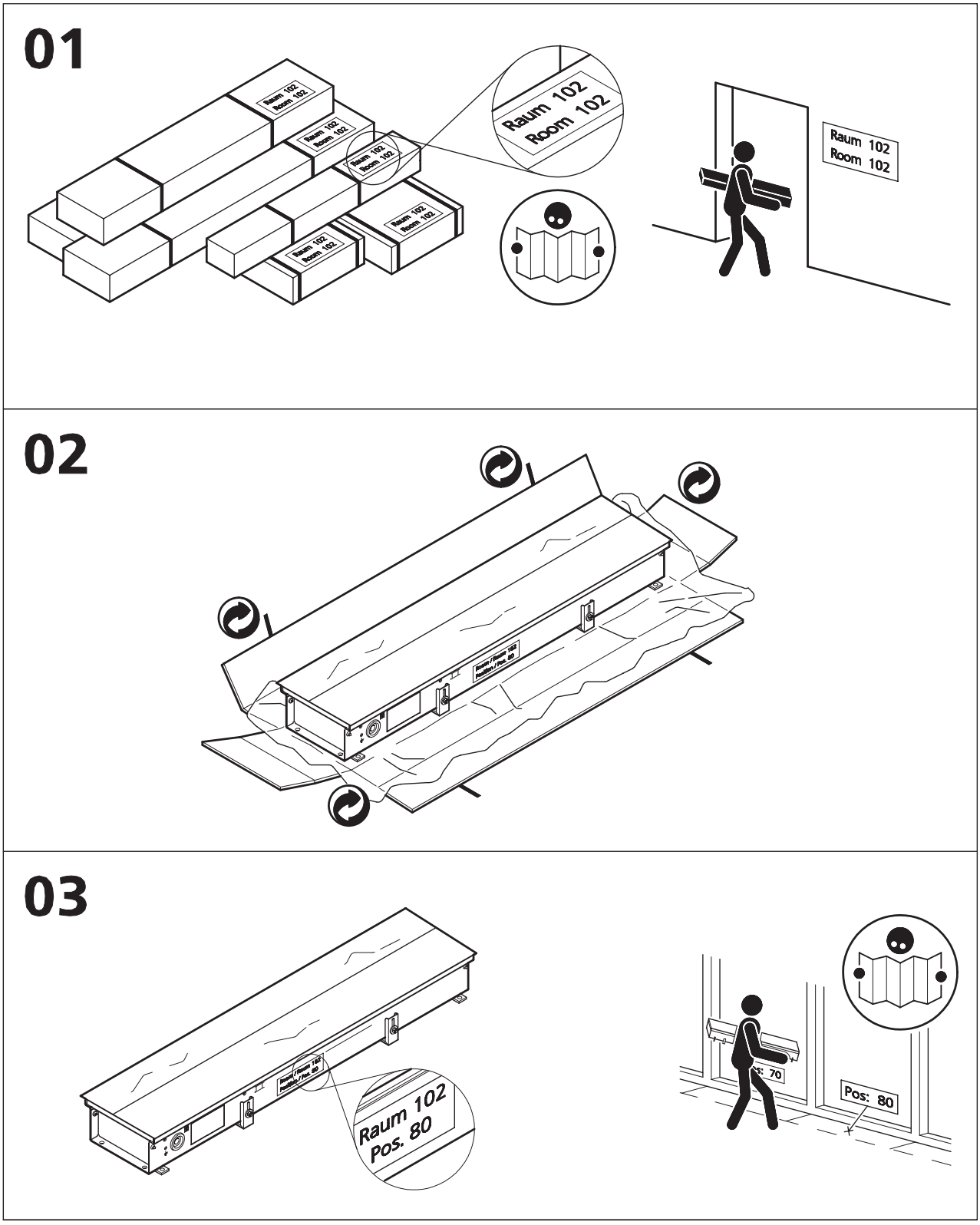
- Wear suitable protective gloves.

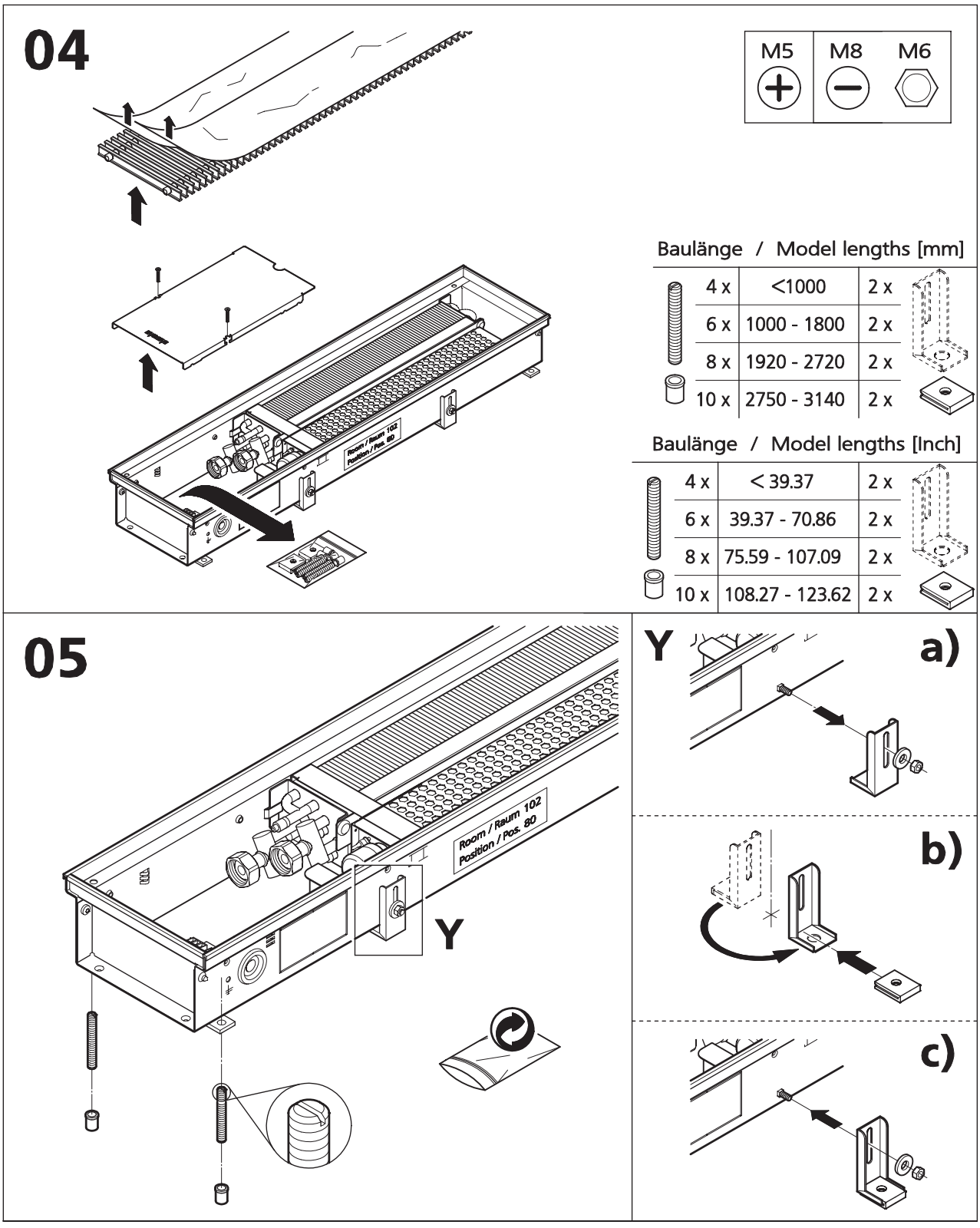
IMPORTANT NOTE!

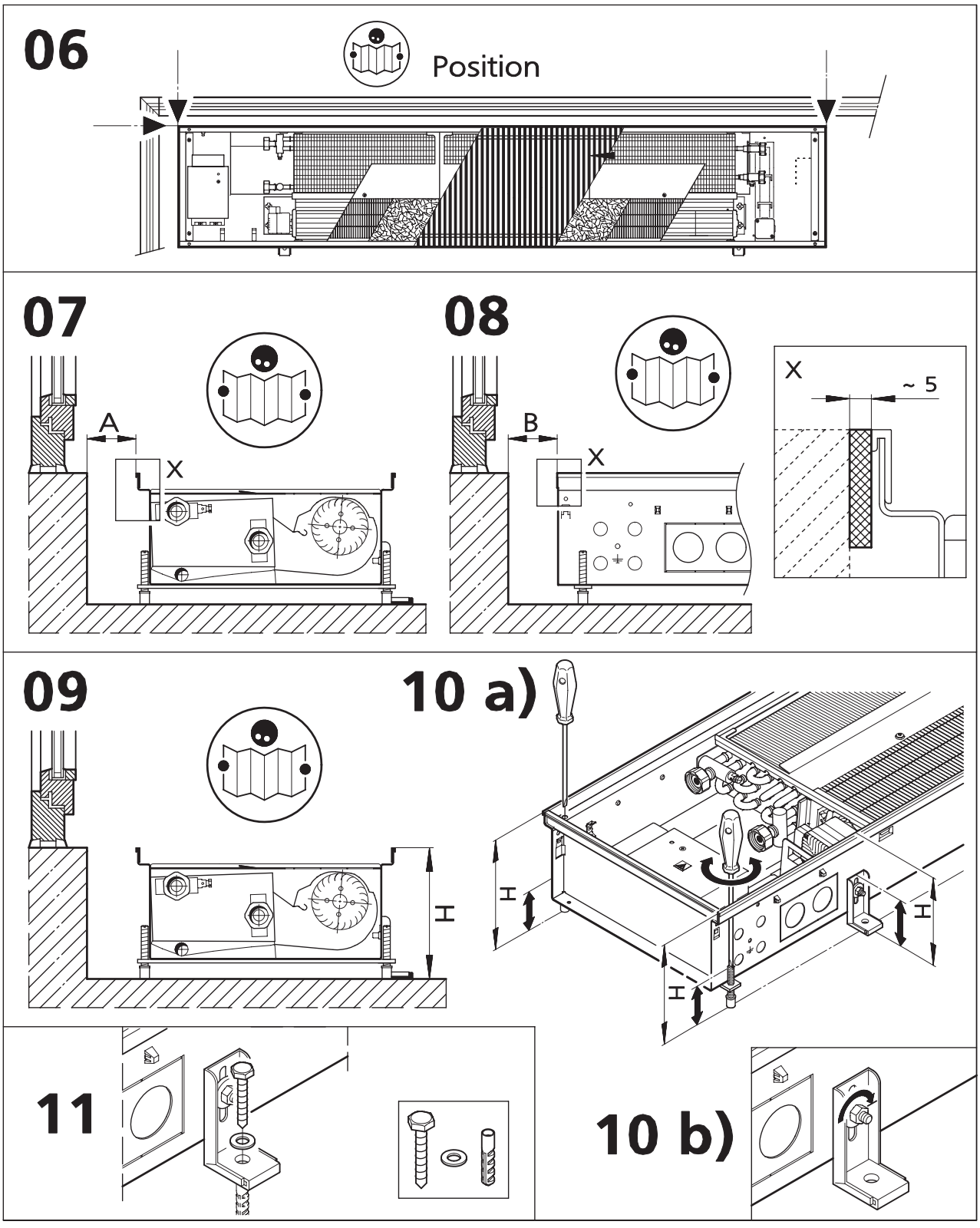
Horizontal installation of units!

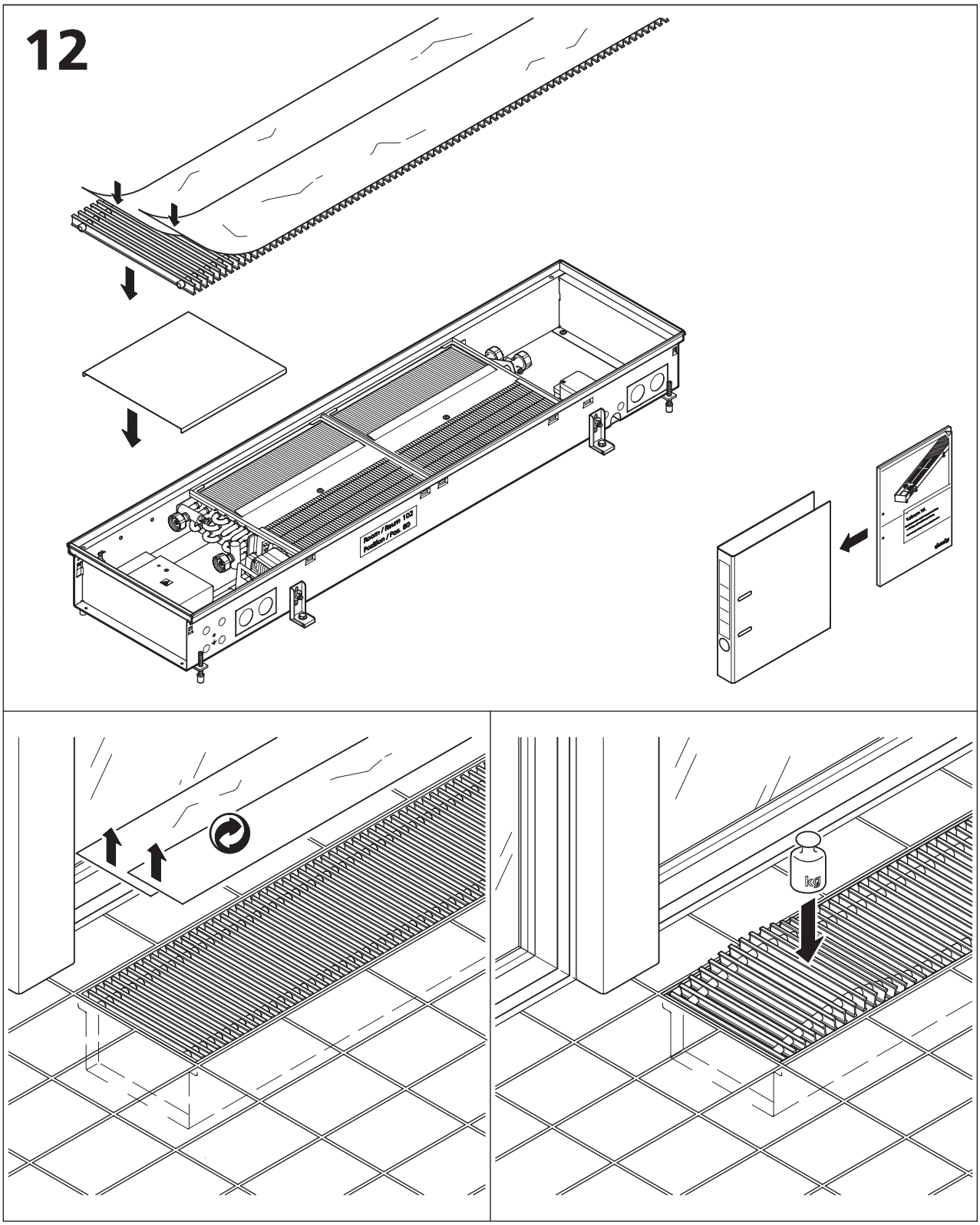
When installing the units, ensure that they are completely horizontal to ensure proper operation.

6.2.1 Installation steps




04
M5
M8
M6
Baulänge / Model lengths [mm]
4 x <1000 2 x
6 x 1000 - 1800 2 x
8 x 1920 - 2720 2 x
10 x 2750 - 3140 2 x
Baulänge / Model lengths [Inch]
4 x < 39.37 2 x
6 x 39.37 - 70.86 2 x
8 x 75.59 - 107.09 2 x
10 x 108.27 - 123.62 2 x
05
Room / Raum 102
Position / Pos. 80
Y
Y
a)
b)
c)


06
Position
07
A
X
08
B
X
X
~ 5
09
H
10 a)
H
H
H
11
10 b)



Separately packed roll-up grilles, for instance when using installation covers to protect the trenches from dirt, are rolled up in the factory. The grille can become slightly over-long due to the steel springs extending. Unrolling the grille and laying it flat for a few hours can return the grille to its original length. Laying the grille into the trench helps it to fit more easily into the frame.

6.2.2 Screed work

The following work needs to have been completed before screeding can begin:

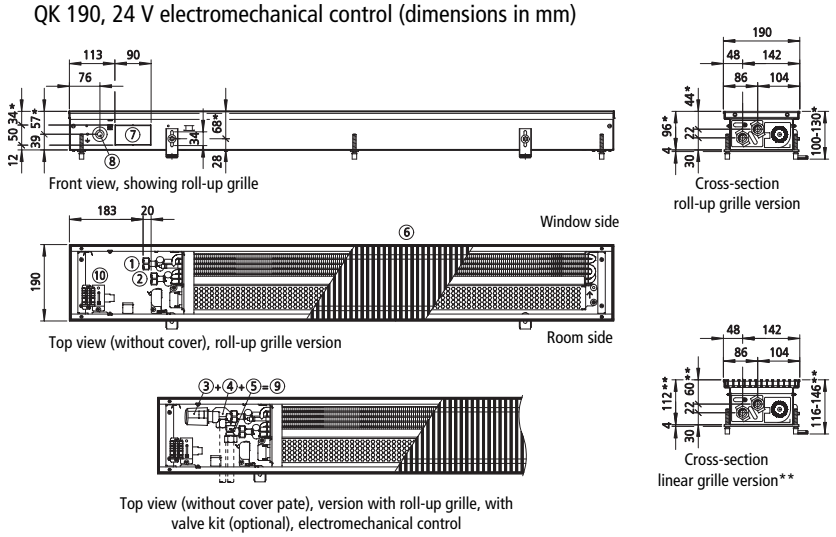
- Water has been correctly connected.
- The electrical connections have been correctly wired.
- The unit is correctly positioned and levelled.
- There are no sound bridges to the concrete slab, especially in the area of the height adjustment feet.
- Expansion joints have been provided on site to prevent the unit from being compressed by the floor or screed.
- All the appropriate cable conduits have been laid.
- Appropriate material has been used to seal all the openings and punched openings in the unit. They also need to be additionally sealed when using floating screed or other low-viscosity floor coverings!
- Cover the grille and floor trench with the transparent installation cover to protect the trench from dirt or cement.

6.3 Installation

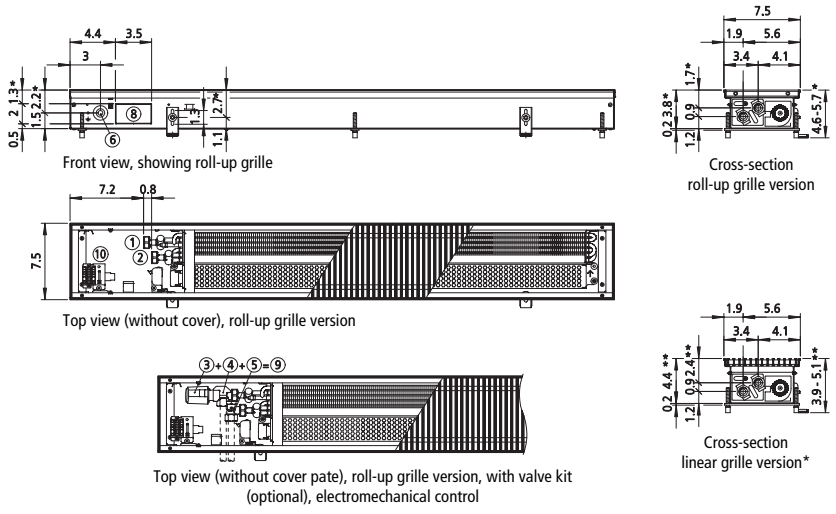
6.3.1 Connection to the pipe network

Katherm QK 190, trench height 96 mm (roll-up grille) / 112 mm (linear grille), 24 V electromechanical control (24)

QK 190, 24 V electromechanical control (dimensions in mm)



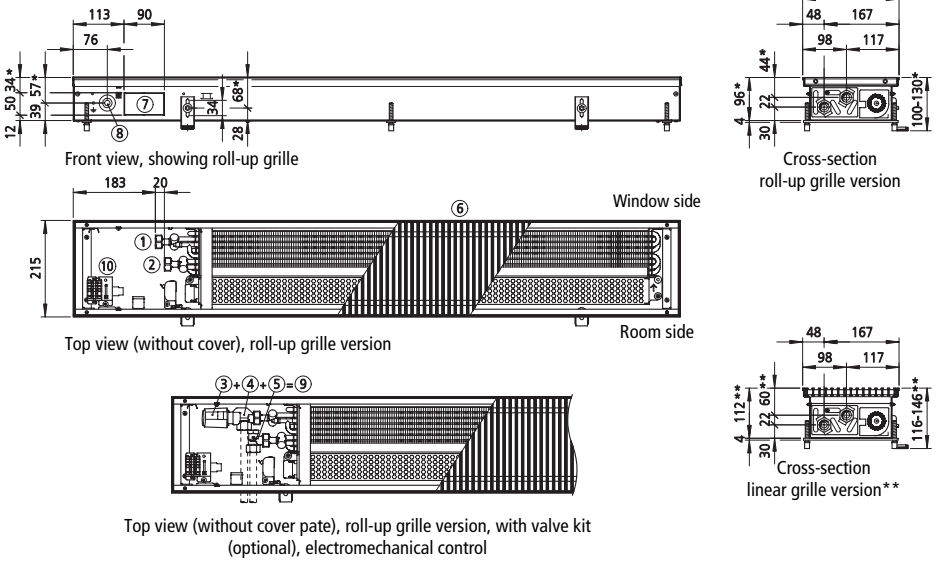
QK 190, 24 V electromechanical control (dimensions in inches)



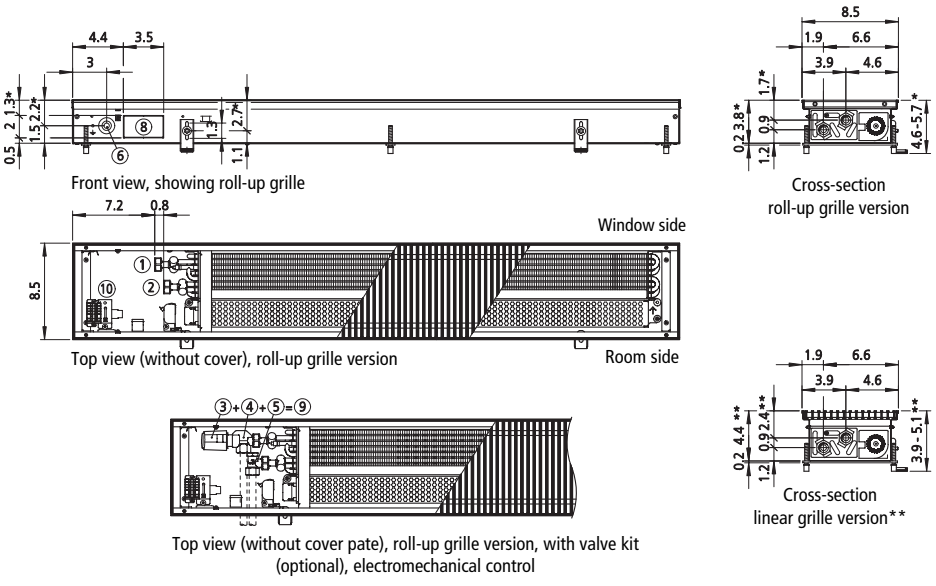
1	Supply	2	Return
3	Thermoelectric actuator 24 V, type 146906	4	Valve body, ½" axial, type 346911, pre-settable
5	½" return shut-off valve, angled, type 145953	6	Unit shown with roll-up grille
7	Pipe openings for water connection, punched	8	Cable entry, pre-punched
9	Alternatively: Valve kit type 143211, consisting of ½" valve body pre-settable, actuator 24 V and ½" return shut-off valve	10	Electrical junction box

Katherm QK 215, trench height 96 mm (roll-up grille) / 112 mm (linear grille), 24 V electromechanical control (24)

QK 215, 24 V electromechanical control (dimensions in mm)



QK 215, 24 V electromechanical control (dimensions in inches)



1	Supply	2	Return
3	Thermoelectric actuator 24 V, type 146906	4	Valve body, ½" axial, type 346911, pre-settable
5	½" return shut-off valve, angled, type 145953	6	Unit shown with roll-up grille
7	Pipe openings for water connection, punched	8	Cable entry, pre-punched
9	Alternatively: Valve kit type 143211, consisting of ½" valve body pre-settable, actuator 24 V and ½" return shut-off valve	10	Electrical junction box

6.4 Katherm QK supply air modules (optional)

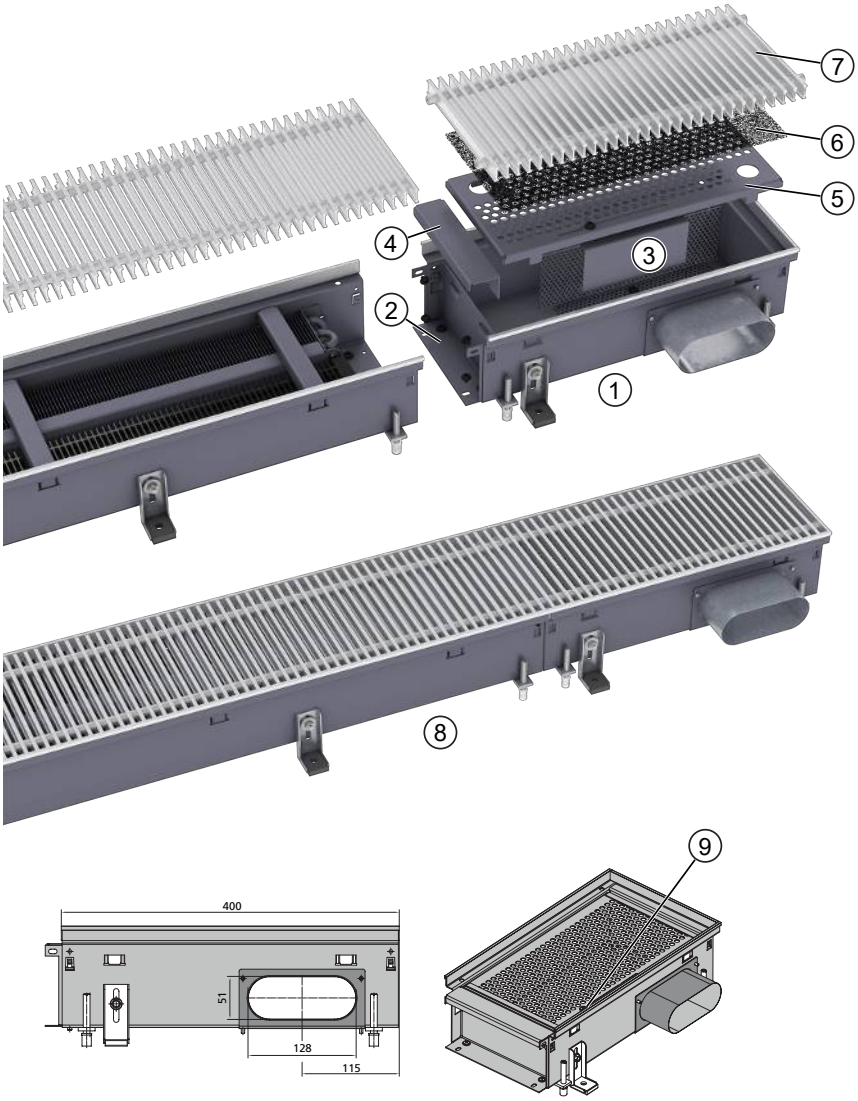
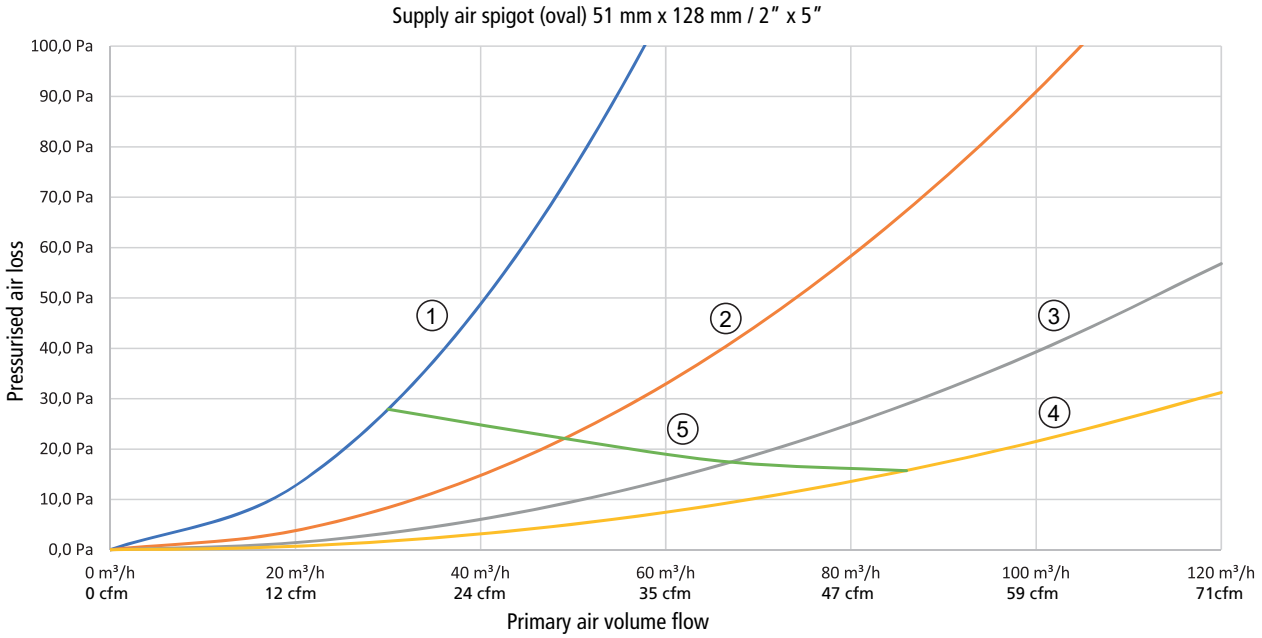


Fig. 2: QK supply air modules (example: trench height 112 mm / 4.4")

1	Supply air module with supply air spigot	2	Connecting bracket
3	Supply air slider	4	Reinforcing struts
5	Perforated plate	6	Filter
7	Example showing Optiline roll-up grille	8	Kampmann QK shown Optiline roll-up grille
9	Slider		

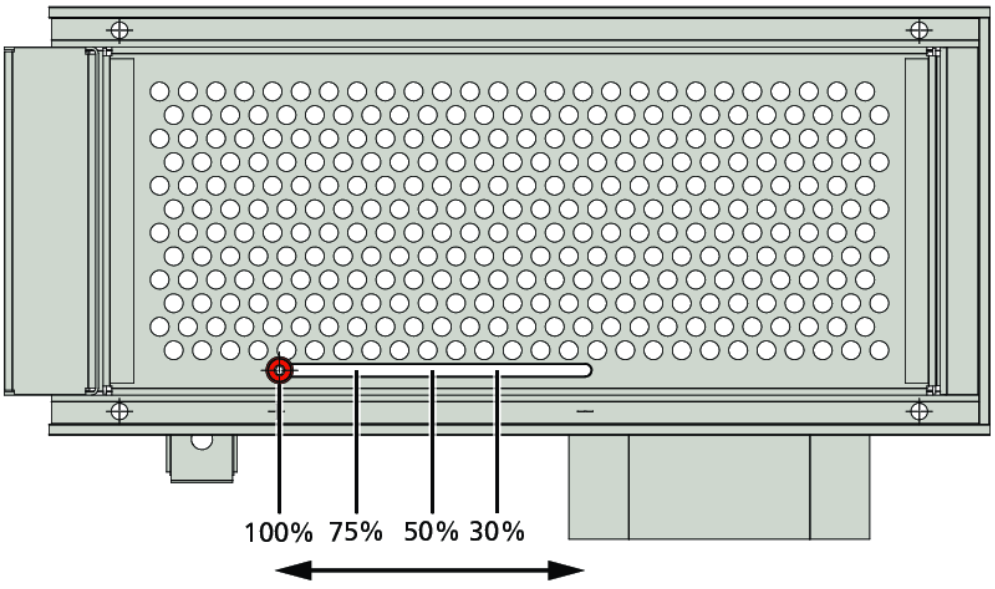
Trench width [mm / inch]	Trench length [mm / inch]	Trench height [mm / inch]	Supply air spigot [mm / inch]	Design air volume flow [m³/h / cfm]
190/7.5	450/ 17.7	96/ 3.8	51 x 128/ 2 x 5 (oval)	70/ 41.2
215/8.5	450/ 17.7	96/ 3.8	51 x 128/ 2 x 5 (oval)	70/ 41.2
190/7.5	400/ 15.7	112/ 4.4	51 x 128/ 2 x 5 (oval)	70/ 41.2
215/8.5	400/ 15.7	112/ 4.4	51 x 128/ 2 x 5 (oval)	70/ 41.2

Tab. 4: Technical data – Katherm QK supply air module



1	Slider position 30% open	2	Slider position 50% open
3	Slider position 75% open	4	Slider position 100% open
5	Sound power level 30dB(A)		

Adjusting the slider position



The height of the supply air module is adjusted using the threaded rods and connected by the installation brackets to the substrate. The slider can be moved into different positions to adjust the required volumetric flow at the supply air module. The figure shows four different slider positions (100%, 75%, 50% and 30% open). They are also shown in the design diagrams in which the required pressure losses, sound levels and air volume flows can be seen. Intermediate values can be interpolated.

7 Electrical connection

7.1 Maximum electrical rating values

Katherm QK, 24 V electromechanical version (*24)

Trench length [mm / inch]	Nominal voltage [V DC]	Mains frequency [Hz]	Nominal power [W]	Nominal current [A]	Leakage current [mA]	Ri analogue input [kΩ]	IP class	Protection class
780/ 30.7	24	50	6.4	0.268	-		IP00	III
1000/ 39.4	24	50	9.6	0.402	-		IP00	III
1200/ 47.2	24	50	9.8	0.407	-		IP00	III
1410/ 55.5	24	50	12.1	0.504	-		IP00	III
1620/ 63.8	24	50	14.7	0.611	-		IP00	III
1920/ 75.6	24	50	17.1	0.712	-		IP00	III
2120/ 83.5	24	50	19.5	0.814	-		IP00	III
2340/ 82.1	24	50	22	0.916	-		IP00	III
2540/ 100	24	50	24.4	1.018	-		IP00	III
2750/ 108.3	24	50	27	1.125	-		IP00	III
2960/ 116.5	24	50	29.3	1.221	-		IP00	III

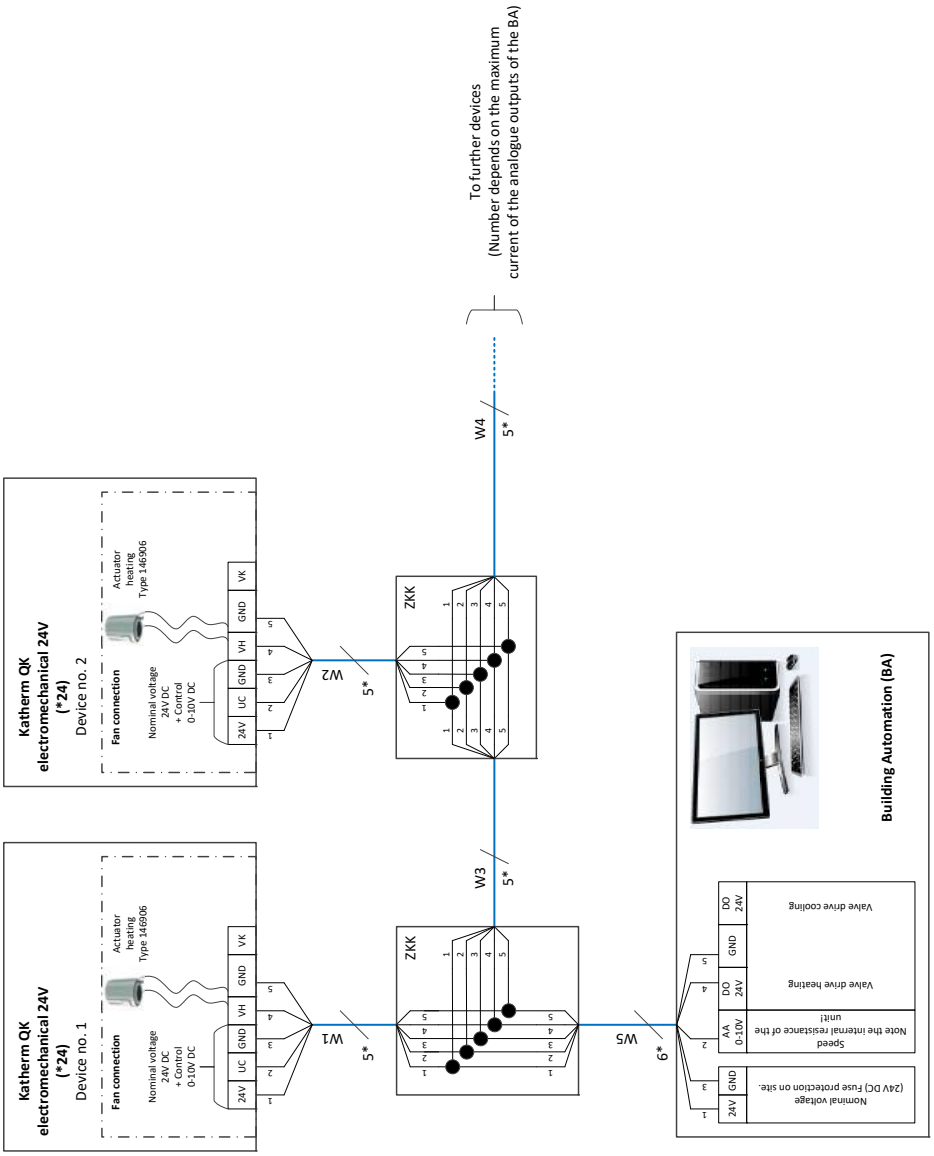
Tab. 5: Maximum electrical rating values Katherm QK

7.2 Electromechanical connection, 24 V (*24)

Note these points in the following wiring diagrams for Katherm QK **with electromechanical control:**

- Comply with the details on cable types and cabling with due consideration of NEC and CEC.
- Without *: NYM-J. The requisite number of wires, including PE conductor, is stated on the cable. Cross-sections are not stated, as the cable length is involved in the calculation of the cross-section.
- With *: J-Y(ST)Y 0.8mm. Lay separately from power lines.
- If other types of cables are used, they must be at least equivalent.
- The terminals on the unit are suitable for a maximum wire cross-section of AWG14.
- Note the electrical data when rating the in-situ mains power supply and fuse.

Katherm QK, electromechanical 24V,
2-pipe, valve drive 24V AC/DC open/close, Control via GA



8 Pre-commissioning checks

When commissioning the device for the first time, ensure that all the necessary requirements are met so that the device can function safely and in accordance with its intended use.

Structural tests
▸ Check that the unit is securely standing and fixed.
▸ Check the horizontal installation/suspension of the unit.
▸ Check whether all components are properly fitted.
▸ Check whether all dirt, such as packaging or site dirt, has been removed.

Electrical tests
▸ Check whether all lines have been properly laid.
▸ Check whether all lines have the necessary cross-section.
▸ Is the earth wire connected and wired throughout?
▸ Check all external electrical connections and terminal connections are fixed in place and tighten if necessary.

Water-side checks
▸ Check whether all supply and drainage lines have been properly connected.
▸ Fill pipes and unit with water and bleed.
▸ Check whether all bleed screws are closed.
▸ Check leak tightness (pressure test and visual inspection).
▸ Check whether the parts carrying water have been flushed through.
▸ Check whether any shut-off valves fitted on site are open.
▸ Check whether any electrically actuated shut-off valves have been properly connected.
▸ Check whether all valves and actuators are working properly (note permitted mounting position).

Air-side checks
▸ Check whether there is unimpeded flow at the air inlet and outlet.
▸ Check whether the air inlet filter is fitted and dirt-free.

Once all checks have been completed, initial commissioning can be carried out in line with Chapter 9 "Operation".

9 Maintenance

9.1 Securing against reconnection

DANGER!

Risk of death by unauthorised or uncontrolled restart!

Unauthorised or uncontrolled restarting of the equipment can result in serious injury or death.

- Before restarting, ensure that all safety devices are fitted and working properly and that there is no hazard to humans.

Always follow the procedure described below to prevent accidental restart:

1. de-energise.
2. Prevent accidental re-connection.
3. Check that the equipment is de-energised.
4. Cover and cordon off adjacent live parts.

WARNING!

Risk of injury from rotating parts!

The fan impeller can cause severe injuries.

- Switch off the unit and prevent it from reconnection before commencing any work on moving components of the fan. Wait until all parts have come to a standstill.

9.2 Maintenance Schedule:

The sections below describe maintenance work needed for the proper and trouble-free operation of the equipment.

If there are signs of increased wear during regular checks, shorten the required maintenance intervals to the actual wear and teat. Contact the manufacturer with any questions about maintenance work and intervals.

Interval	Maintenance task	Personnel
As required	Regular visual checks and acoustic checks for damage, dirt and function.	User
every six months	Clean unit components (heat exchanger, condensate tray, condensate pump, float switch).	User
every six months	Check the electrical wiring.	Qualified personnel
every six months	Clean components/surfaces that come into contact with air.	Qualified personnel
quarterly	Check the heat exchanger for dirt, damage, corrosion and leak-tightness. Carefully vacuum the heat exchanger if dirty.	User

9.3 Maintenance work

9.3.1 Clean the inside of the unit

Check all elements that come into contact with air (internal surfaces of the unit, outlet elements etc.) for dirt or deposits during maintenance and use a commercially available product to remove.

10 Faults

The following chapter describes possible causes of faults and the work needed to rectify them. Should faults occur frequently, shorten the maintenance intervals in line with the actual loading on the unit.

Contact the manufacturer with any faults that cannot be rectified using the following information.

Behaviour in the event of faults

The following applies:

1. Immediately switch off the unit with faults that pose an immediate danger to persons or property!
2. Determine the cause of the fault!
3. Switch off the unit and prevent it from being reconnected if rectifying the fault requires work in the hazard area. Immediately advise a supervisor on site about the fault.
4. Either rectify the fault yourself or have it repaired by authorised personnel, depending on the nature of the fault.

The Fault table [▷ 28] provides information on who is authorised to rectify and remedy faults.

10.1 Fault table

Fault	Possible cause	Remedy
No function.	No power supply.	Check voltage, switch on repair switch.
		Replace fuse.
Unit not heating or cooling sufficiently (LPHW/ CHW)	Fan is not switched on.	Switch on fan at controller.
	Air volume is too low.	Set a higher speed.
	Filter is dirty.	Replace filter.
	No heating or cooling medium.	Switch on heating and/or cooling system, switch on circulation pump, vent unit/system.
	Valves not operating.	Replace faulty valves.
	Water volume too low.	Check pump output, check hydraulics.
	Setpoint temperature on the controller set too low/high.	Adjust temperature setting on the controller.
	Operating unit with integral sensor and/or external sensor is exposed to direct sunlight or positioned over a heat source.	Place operating unit with integral sensor and/or external sensor in a suitable position.
	Air cannot blow out or in freely.	Remove obstacles at the air outlet/air inlet.
	Heat exchanger dirty.	Clean heat exchanger.
	Air in the heat exchanger.	Vent heat exchanger.
Unit too loud	Speed too high.	Set a lower speed, if possible.
	Air inlet/outlet opening is obstructed.	Free air ducts.
	Filter dirty.	Replace filter.
	Rotating parts unbalanced	Clean and/or replace impeller. Please make sure that no balancing clips are removed during cleaning.
	Fan dirty.	Clean dirt from fan.
	Heat exchanger dirty.	Clean dirt from Heat exchanger.

11 Certificates

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Party Authorized To Apply Mark: Same as Manufacturer
Report Issuing Office: Intertek Deutschland GmbH, Kaufbeuren

Control Number: ***5012818*** **Authorized by:**

for L. Matthew Snyder, Certification Manager

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545 East Algonquin Road, Arlington Heights, IL 60005
Telephone 800-345-3851 or 847-439-5667 Fax 312-283-1672

Standard(s):	Heating and Cooling Equipment>Valid without technical revision: 01Jan2024< [UL 1995:2015 Ed.5+R:17Aug2018] Heating And Cooling Equipment [CSA C22.2#236:2015 Ed.5]
Product:	Trench Heating / Cooling convectors
Brand Name:	KAMPMANN
Models:	Katherm QK may be followed by nano; followed by one to four numbers; followed by 24; followed by three numbers; followed by /; followed by three numbers; followed by /; followed by two to five numbers; followed by R-Rost, L- Rost; followed by one to three numbers; followed by alu. natur elox, steel, wood or brass. Katherm HK may be followed by 2-Lt., 4-Lt.; followed by 24; followed by three numbers; followed by /; followed by three numbers; followed by /; followed by two to five numbers; followed by R-Rost, L- Rost; followed by one to three numbers; followed by alu. natur elox, steel, wood or brass. Baseboard HK. Baseboard QK.

ATM for Report 2244588KAU-001 Page 1 of 2 ATM Issued: 10-Mar-2022
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Telephone 800-345-3851 or 847-439-5667 Fax 312-283-1672

Standard(s):	Heating and Cooling Equipment>Valid without technical revision: 01Jan2024< [UL 1995:2015 Ed.5+R:17Aug2018] Heating And Cooling Equipment [CSA C22.2#236:2015 Ed.5]
Product:	Trench Heating / Cooling convectors
Brand Name:	KAMPMANN
Models:	Katherm QK may be followed by nano; followed by one to four numbers; followed by 24; followed by three numbers; followed by /; followed by three numbers; followed by /; followed by two to five numbers; followed by R-Rost, L- Rost; followed by one to three numbers; followed by alu. natur elox, steel, wood or brass. Katherm HK may be followed by 2-Lt., 4-Lt.; followed by 24; followed by three numbers; followed by /; followed by three numbers; followed by /; followed by two to five numbers; followed by R-Rost, L- Rost; followed by one to three numbers; followed by alu. natur elox, steel, wood or brass. Baseboard HK. Baseboard QK.

Table

Tab. 1 Operating limits 7
Tab. 2 Operating voltage 7
Tab. 3 Water quality..... 7
Tab. 4 Technical data – Katherm QK supply air module..... 22
Tab. 5 Maximum electrical rating values 24

https://www.kampmann.ca/en/hvac/products/trench-technology/katherm-qk

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