

# FCH

TRENCH FAN COILS  
FCH and FCHV

Created for modern buildings and  
heat-pump systems



HEATING



COOLING



VENTILATION



**EC FANS**

MAXIMUM EFFICIENCY,  
MINIMUM NOISE



**10 YEARS**

WARRANTY

QUALITY | RELIABILITY | INNOVATION

MADE IN EUROPE

## ABOUT FCH

# Created for modern buildings to work with heat pumps

FCH and FCHV trench fan coils with EC fans provide powerful heating, efficient cooling and maximum comfort all year round.

Elegant design, advanced technology and smart control allow these units to blend harmoniously into modern architecture and meet the highest requirements of contemporary buildings.

QUALITY | RELIABILITY | INNOVATION

MADE IN LITHUANIA

## WHY FCH?

# Created for modern buildings

FCH and FCHV trench fan coils are designed to ensure maximum comfort, efficiency and aesthetics. The recessed construction helps maintain clean interior lines, and advanced EC fan technology - quiet operation and high energy efficiency even in low-temperature systems.

FCHV additionally has a ventilation function, allowing fresh air from the ventilation system to be supplied directly into the room.



### STAINLESS STEEL

Premium quality and exceptional corrosion resistance



### EC FANS

Maximum efficiency, minimum noise, low energy consumption



### 10 YEARS WARRANTY

Durability, reliability and peace of mind for many years



### VENTILATION FUNCTION

FCHV models provide fresh-air supply from the ventilation system

## WHERE DOES FCH FIT?

# One solution - many different spaces



Residential houses



Offices



Hotels



Restaurants

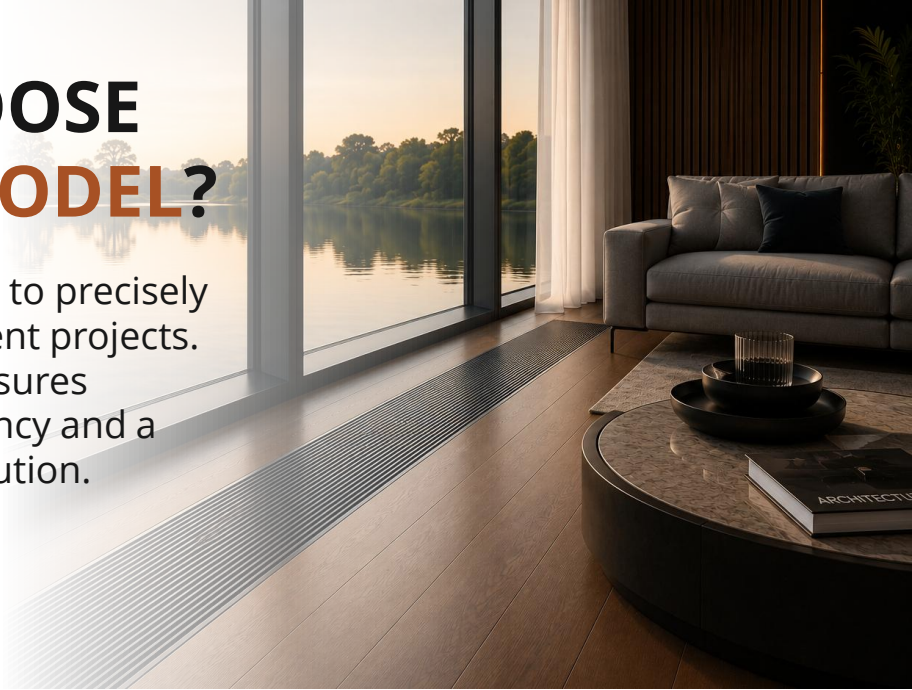


Glazed buildings

Fan coils FCH and FCHV are perfect for A++ class buildings, heat-pump systems and any projects where aesthetics, comfort and energy efficiency matter

# HOW TO CHOOSE THE RIGHT MODEL?

FCH fan coils are designed to precisely match the needs of different projects. The right model choice ensures maximum comfort, efficiency and a seamless architectural solution.



## KEY SELECTION CRITERIA



### HEATING - COOLING NEED

Choose a model according to the required heating and cooling output



### DIMENSIONS

Assess the installation conditions and the possible location by the window



### DESIGN NEEDS

Grille type, frame finish and visibility in the interior



### ACOUSTIC COMFORT

FCH and FCHV models emit the same sound level - their fans are identical



### INTEGRATION

The ability to integrate control into BMS systems and smart solutions

## MODEL SELECTION PROCESS

01

### ASSESS ROOM NEEDS

Determine the room heat losses

02

### CHOOSE A MODEL

Choose a model whose output matches the determined losses

03

### ASSESS THE INSTALLATION LOCATION

Assess whether the chosen model fits the designated installation location

04

### CHOOSE GRILLES AND FRAMES

Choose the grille material and colour according to the interior design requirements

05

### INTEGRATE THE CONTROL

Choose the control method: local or integrated into the building management system



### NEED HELP?

Our team will help select the optimal solution for your project - from technical analysis to implementation

### CONSULTATION AND TECHNICAL SUPPORT

+370 607 06303 | sales@konveka.lt | konveka.com

# FCH



# FCHV

## TWO MODELS. DIFFERENT DIMENSIONS. THE SAME COMFORT.

Both models are intended for heating and cooling, have identical fans and the same sound level. The main difference is that FCHV has an integrated fresh-air supply function.

### FCH

WITHOUT VENTILATION FUNCTION



## 319 mm

WIDTH

## 139 mm

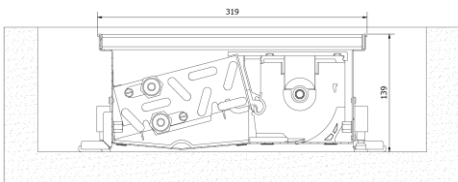
HEIGHT

**WITHOUT  
INTEGRATED**  
AIR SUPPLY FUNCTION

**THE SAME**  
HEATING AND COOLING  
OUTPUT

### CHOOSE FCH, IF

- ✓ Ventilation is provided by a separate system
- ✓ Narrower installation space



### FCHV

WITH VENTILATION FUNCTION



## 363 mm

WIDTH

## 160 mm

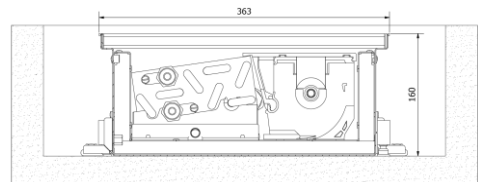
HEIGHT

**WITH INTEGRATED**  
AIR SUPPLY FUNCTION

**THE SAME**  
HEATING AND COOLING  
OUTPUT

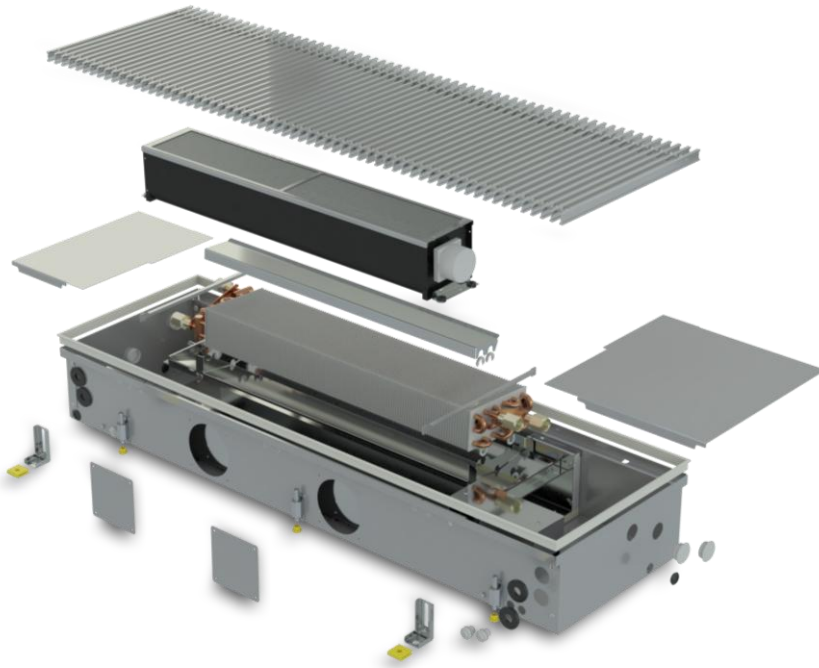
### CHOOSE FCHV, IF

- ✓ Fresh-air supply is required directly into the room
- ✓ You have a ventilation system with ducts
- ✓ You want a single compact solution for heating, cooling and ventilation



# ENGINEERING, THAT YOU CAN FEEL

Fan coils FCH are designed to ensure quiet operation, maximum comfort and durability in modern buildings



## FANS

- ✓ 24 V DC motors
- ✓ Extremely low energy consumption
- ✓ Precise control technology
- ✓ Long service life



## ACOUSTIC INSULATION

- ✓ Acoustically insulated floor-fixing parts stop noise from spreading to the rooms below



## STAINLESS STEEL

- ✓ The casing parts are made of stainless steel - corrosion-resistant and durable.



## AIR FILTER

- ✓ Continuous filtering of the air passing through the units protects them from contamination



## DRAIN PANS

- ✓ Integrated condensate collection and drainage trays
- ✓ Allows the unit to work both above and below the dew point
- ✓ Reliable condensate drainage and protection against mould



## 2- AND 4-PIPE VERSIONS

- ✓ 2-pipe and 4-pipe connection options are available
- ✓ Suitable for heating, cooling or combined mode
- ✓ Easy to integrate in both new and renovated buildings



## EFFICIENT WITH LOW-TEMPERATURE SOURCES

- ✓ Works efficiently with heat pumps and condensing boilers
- ✓ Optimised operation at low water temperature
- ✓ Reduces energy consumption and increases system efficiency

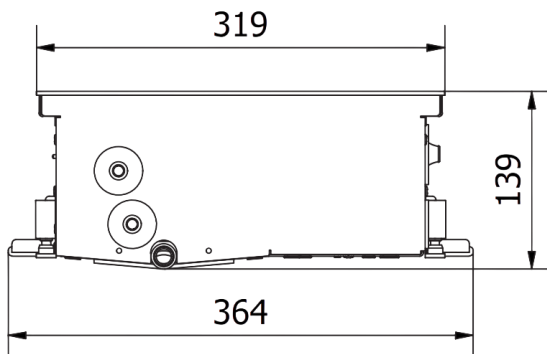
# TECHNICAL DATA

## KEY PARAMETERS

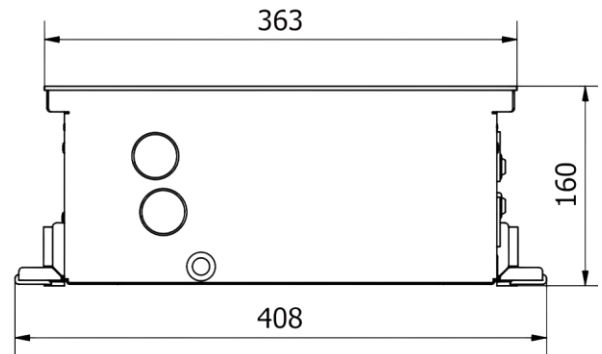
PARAMETER	FCH WITHOUT AIR SUPPLY FUNCTION	FCHV WITH AIR SUPPLY FUNCTION
Cooling output (7/12/27 °C)	up to 3649 W	up to 3649 W
Air flow	up to 1040 m <sup>3</sup> /h	up to 1040 m <sup>3</sup> /h
Width	323 mm	363 mm
Height	139 mm	160 mm
Length	1200 - 3000 mm	1200 - 3000 mm
Fans	Tangential, with EC motors	Tangential, with EC motors
Sound pressure	up to 43 dB(A)	up to 43 dB(A)
Working pressure	25 bar	25 bar
Maximum temperature	110 °C	110 °C

## DIMENSIONS

### FCH



### FCHV



### WE RECOMMEND

Fan coils FCH match perfectly with modern heating, cooling, ventilation and control systems, ensuring maximum comfort and energy efficiency



HEAT PUMPS



SMART CONTROL



VENTILATION SYSTEMS

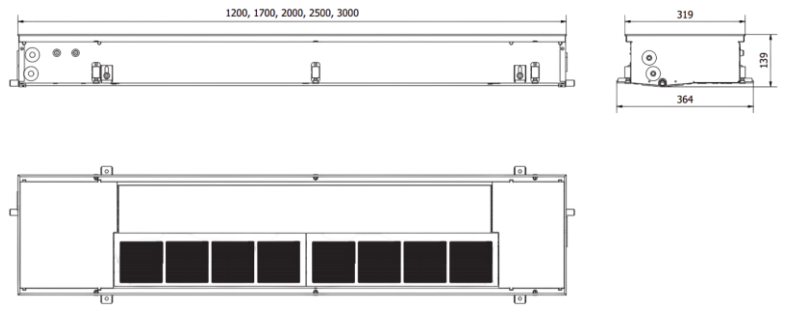


LOW-TEMPERATURE SYSTEMS

# FCH2

## TECHNICAL DATA

Trench fan coils FCH2 designed for 2-pipe heating and cooling systems

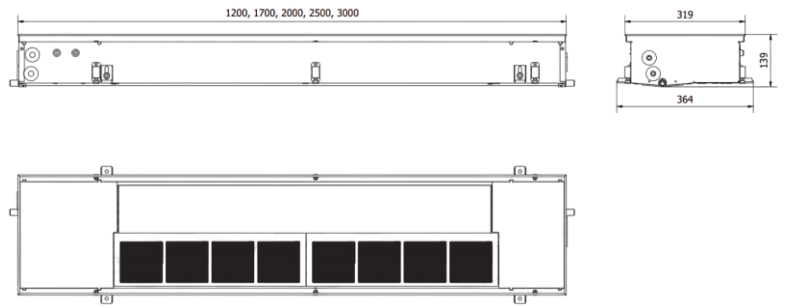


Model		Fan speed	FCH2 120	FCH2 170	FCH2 200	FCH2 250	FCH2 300
Air flow	m³/h	100%	383	520	766	903	1 040
		80%	306	416	613	722	832
		60%	230	312	460	542	624
		40%	153	208	306	361	416
		20%	77	104	153	181	208
Sensible cooling capacity at 7/12/25 °C	W	100%	1 014	1 824	2 027	2 838	3 649
		80%	837	1 507	1 674	2 344	3 014
		60%	654	1 178	1 308	1 832	2 355
		40%	462	832	924	1 294	1 664
		20%	255	459	510	714	918
Heating output at 55/45/20 °C	W	100%	2 072	3 730	4 144	5 802	7 460
		80%	1 851	3 332	3 702	5 182	6 663
		60%	1 530	2 754	3 060	4 284	5 508
		40%	1 110	1 997	2 219	3 107	3 995
		20%	590	1 061	1 179	1 651	2 123
Supply voltage	V	24 DC					
Max. el. power (with actuator)	W	15	18	30	33	36	
Max. el. current (with actuator)	A	0,63	0,75	1,25	1,38	1,5	
Sound pressure level	dB(A)	100%	41	42	44	43	43
		80%	36	41	39	40	42
		60%	28	34	31	33	33
		40%	23	29	24	26	27
		20%	20	25	22	24	24
Max. water flow	l/h	Cooling	156	280	311	436	560
	l/h	Heating	294	529	588	823	1058
Max. pressure loss	kPa	Cooling	1,1	6,6	9,1	25,5	54,7
	kPa	Heating	4,1	24,4	33,6	93,3	199,6
Max. working pressure	Mpa	2,5					
Fan type	Tangential						
Motor type	Brushless EC						
Casing material	Stainless steel						
Heat exchanger type	2-pipe						
Heat exchanger material	Copper - aluminium						
Pipe connections	1/2" internal thread						
Unit dimensions	mm	1200x320x130	1700x320x130	2000x320x130	2500x320x130	3000x320x130	
Package dimensions	mm	1210x330x150	1810x330x150	2010x330x150	2610x330x150	3010x330x150	
Weight net	kg	22,4	30,1	35,1	43,4	52,7	
Gross weight	kg	23,3	31,1	36,2	44,6	54,0	

# FCH4

## TECHNICAL DATA

Trench fan coils FCH4 designed for 4-pipe heating and cooling systems

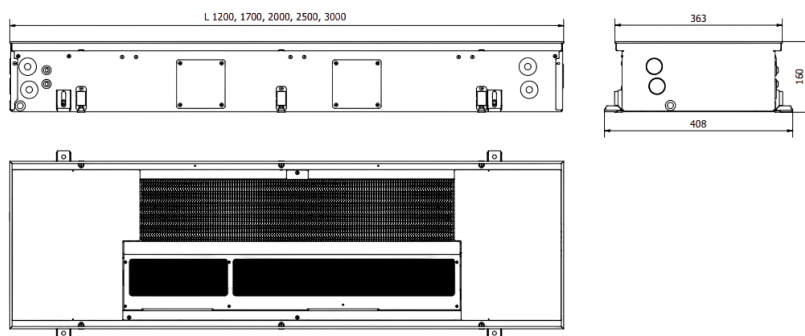


Model		Fan speed	FCH4 120	FCH4 170	FCH4 200	FCH4 250	FCH4 300
Air flow	m³/h	100%	383	520	766	903	1 040
		80%	306	416	613	722	832
		60%	230	312	460	542	624
		40%	153	208	306	361	416
		20%	77	104	153	181	208
Sensible cooling capacity at 7/12/25 °C	W	100%	960	1 728	1 920	2 688	3 456
		80%	808	1 454	1 616	2 262	2 909
		60%	647	1 165	1 294	1 812	2 329
		40%	473	852	946	1 325	1 703
		20%	277	499	554	776	997
Heating output at 55/45/20 °C	W	100%	1 196	2 152	2 392	3 348	4 305
		80%	1 104	1 988	2 208	3 092	3 975
		60%	986	1 775	1 972	2 761	3 550
		40%	820	1 476	1 640	2 295	2 951
		20%	535	964	1 071	1 499	1 927
Supply voltage	V	24 DC					
Max. el. power (with actuator)	W	15	18	30	33	36	
Max. el. current (with actuator)	A	0,63	0,75	1,25	1,38	1,5	
Sound pressure level	dB(A)	100%	41	42	44	43	43
		80%	36	41	39	40	42
		60%	28	34	31	33	33
		40%	23	29	24	26	27
		20%	20	25	22	24	24
Max. water flow	l/h	Cooling	147	265	295	413	531
	l/h	Heating	173	312	346	485	623
Max. pressure loss	kPa	Cooling	0,7	3,9	5,3	13,4	27,0
	kPa	Heating	2,0	10,9	14,6	38,0	77,5
Max. working pressure	Mpa	2,5					
Fan type	Tangential						
Motor type	Brushless EC						
Casing material	Stainless steel						
Heat exchanger type	2-pipe						
Heat exchanger material	Copper - aluminium						
Pipe connections	1/2" internal thread						
Unit dimensions	mm	1200x320x130	1700x320x130	2000x320x130	2500x320x130	3000x320x130	
Package dimensions	mm	1210x330x150	1810x330x150	2010x330x150	2610x330x150	3010x330x150	
Weight net	kg	22,4	30,1	35,1	43,4	52,7	
Gross weight	kg	23,3	31,1	36,2	44,6	54,0	

# FCHV2

## TECHNICAL DATA

Trench fan coils FCHV2 are designed for 2-pipe heating, cooling and ventilation systems

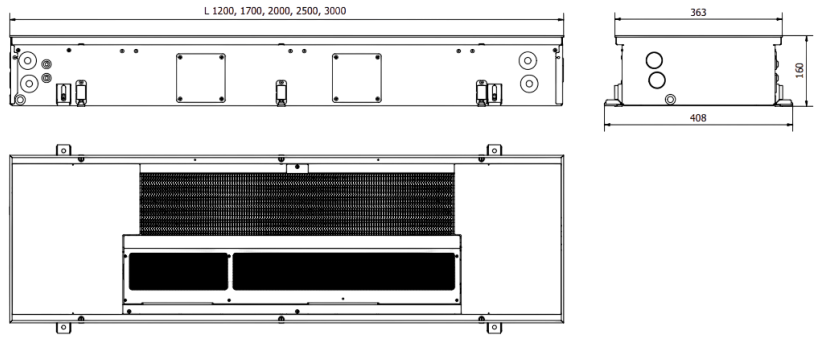


Model		Fan speed	FCH2 120	FCH2 170	FCH2 200	FCH2 250	FCH2 300
Air flow	m <sup>3</sup> /h	100%	383	520	766	903	1 040
		80%	306	416	613	722	832
		60%	230	312	460	542	624
		40%	153	208	306	361	416
		20%	77	104	153	181	208
Sensible cooling capacity at 7/12/25 °C	W	100%	1 014	1 824	2 027	2 838	3 649
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Heating output at 55/45/20 °C	W	100%	2 072	3 730	4 144	5 802	7 460
		80%	1 851	3 332	3 702	5 182	6 663
		60%	1 530	2 754	3 060	4 284	5 508
		40%	1 110	1 997	2 219	3 107	3 995
		20%	590	1 061	1 179	1 651	2 123
Supply voltage	V	24 DC					
Max. el. power (with actuator)	W	15	18	30	33	36	
Max. el. current (with actuator)	A	0,63	0,75	1,25	1,38	1,5	
Sound pressure level	dB(A)	100%	41	42	44	43	43
		80%	36	41	39	40	42
		60%	28	34	31	33	33
		40%	23	29	24	26	27
		20%	20	25	22	24	24
Max. water flow	l/h	Cooling	156	280	311	436	560
	l/h	Heating	294	529	588	823	1058
Max. pressure loss	kPa	Cooling	1,1	6,6	9,1	25,5	54,7
	kPa	Heating	4,1	24,4	33,6	93,3	199,6
Max. working pressure	Mpa	2,5					
Fan type	Tangential						
Motor type	Brushless EC						
Casing material	Stainless steel						
Heat exchanger type	2-pipe						
Heat exchanger material	Copper - aluminium						
Pipe connections	1/2" internal thread						
Unit dimensions	mm	1200x363x160	1700x363x160	2000x363x160	2500x363x160	3000x363x160	
Package dimensions	mm	1210x373x170	1810x373x170	2010x373x170	2610x373x170	3010x373x170	
Weight net	kg	26,0	36,3	42,5	52,8	63,1	
Gross weight	kg	27,1	37,5	43,8	54,2	64,6	

# FCHV4

## TECHNICAL DATA

Trench fan coils FCHV4 are designed for 4-pipe heating, cooling and ventilation systems



Model		Fan speed	FCH4 120	FCH4 170	FCH4 200	FCH4 250	FCH4 300
Air flow	m <sup>3</sup> /h	100%	383	520	766	903	1 040
		80%	306	416	613	722	832
		60%	230	312	460	542	624
		40%	153	208	306	361	416
		20%	77	104	153	181	208
Sensible cooling capacity at 7/12/25 °C	W	100%	960	1 728	1 920	2 688	3 456
		80%	808	1 454	1 616	2 262	2 909
		60%	647	1 165	1 294	1 812	2 329
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Supply voltage	V	24 DC					
Max. el. power (with actuator)	W	15	18	30	33	36	
Max. el. current (with actuator)	A	0,63	0,75	1,25	1,38	1,5	
Sound pressure level	dB(A)	100%	41	42	44	43	43
		80%	36	41	39	40	42
		60%	28	34	31	33	33
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		20%	20	25	22	24	24
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Fan type	Tangential						
Motor type	Brushless EC						
Casing material	Stainless steel						
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Heat exchanger material	Copper - aluminium						
Pipe connections	1/2" internal thread						
Unit dimensions	mm	1200x363x160	1700x363x160	2000x363x160	2500x363x160	3000x363x160	
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Weight net	kg	26,0	36,3	42,5	52,8	63,1	
Gross weight	kg	27,1	37,5	43,8	54,2	64,6	

# CONTROL AND DIGITAL INTEGRATION

FCH fan coils are fully compatible with modern building management systems. Integrated 24 V DC fan control ensures precise, quiet and energy-saving operation in any conditions.



Room thermostat  
**TW24**

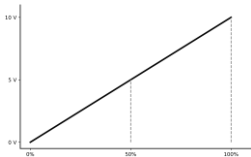


## CONTROL OPTIONS



### 0-10 V CONTROL

Integrated 0-10 V control allows precise fan-speed control across the whole range



### EC FANS

High efficiency EC fans with brushless 24 V DC motors



### SMART CONTROL

Controlled by WiFi room thermostats TW24 or BMS systems



### PRECISE COMFORT CONTROL

Precise temperature control on demand - this is maximum comfort and the lowest operating costs

## BIM AND DIGITAL DESIGN TOOLS



All Konveka products are available in BIM format (Revit) and in DWG drawings



All Konveka products are available and continuously updated on the MagiCAD and Sankom design platforms



Selection tables for all Konveka products are available at [konveka.com](http://konveka.com)

**konveka.com**

# ACCESSORIES

FCH fan coils are offered with a full range of accessories and control equipment, ensuring reliable operation, energy efficiency and easy integration into building management systems

## 01 THERMOSTATIC VALVE TVSP15



- Working temperature 10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 02 LOCKSHIELD VALVE (STRAIGHT) LS15



- Working temperature 10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 03 LOCKSHIELD VALVE (ANGLE) LA15



- Working temperature -10°C -120°C
- Thread 1/2"
- Pressure class PN10
- Kvs - 2,0

## 04 ACTUATOR A24NC



- Operating voltage 24 V DC
- El. power - 2.5 W
- Protection class - IP54
- Connection thread M30 x 1.5 mm
- Casing material PC/ABS

## 05 ROOM THERMOSTAT TW24



- Dimensions 88 x 88 x 43 mm
- Weekly temperature schedule programming
- Working temperature 5-35°C
- Operating voltage - 24V DC, current - 3A
- El. power - 1.5 W

## 06 CONTROL UNIT CB20



- 24V DC power supply
- Power - 20 W
- Current - 0.84 A
- Removable electrical connection terminals



### FULL SYSTEM INTEGRATION

Compatible with the most popular control systems



### ENERGY EFFICIENCY

Precise control ensures lower operating costs.



### SIMPLE INSTALLATION

Compact accessories and convenient installation



### RELIABLE OPERATION

High-quality components for long, trouble-free operation

# DECORATIVE GRILLES THAT BECOME PART OF THE INTERIOR

Elegant design.  
The highest-quality materials.  
Colours that create the character of a space

Choose the grilles that  
best reflect your project

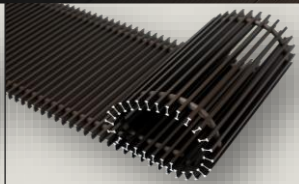
## COLLECTION OF COLOURS AND MATERIALS



### SILVER (ALS)

Natural aluminium colour

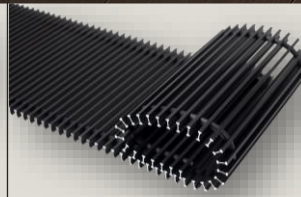
For bright, modern interiors.



### BROWN (AL 10)

A warm and elegant dark-brown coating

For cosy classic interiors



### BLACK (AL 50)

A matte black colour giving a character of luxury and modernity

For luxurious and modern interiors



### OAK

Natural oak solid-wood grille

For cosy and harmonious interiors



### PREMIUM QUALITY

Top-quality materials and coatings



### STRENGTH

Designed to withstand the weight of several adults



### DURABILITY

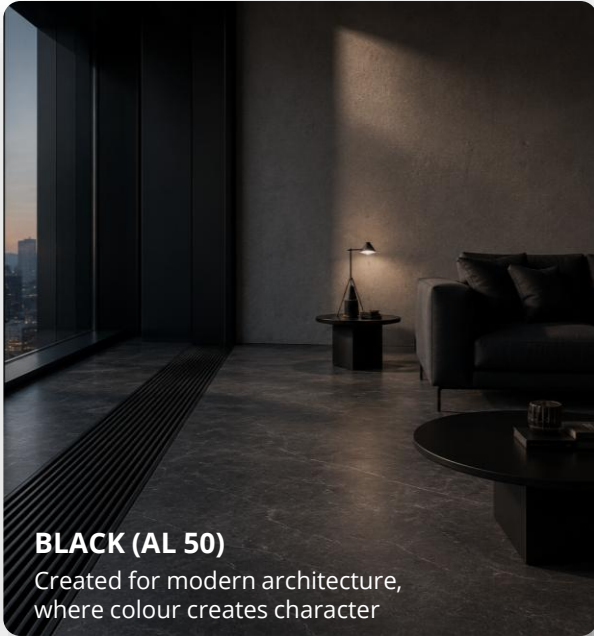
Materials and coatings resistant to corrosion and UV radiation



### EASY MAINTENANCE

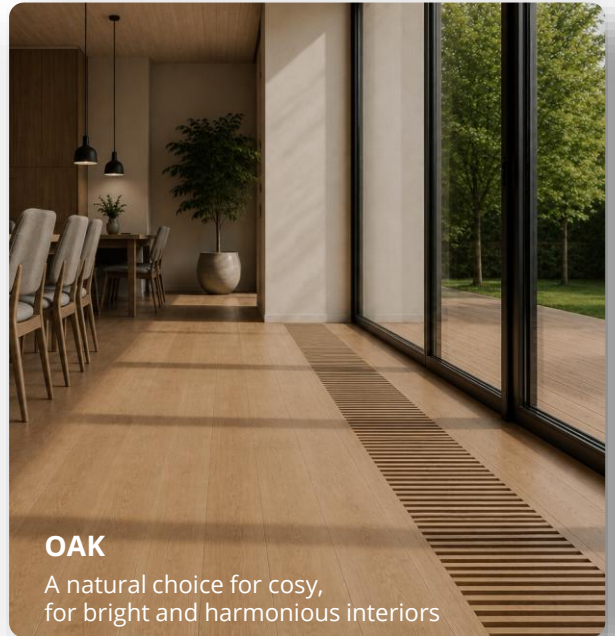
Easily removable - convenient to clean the inside of the fan coil

# DESIGN OPTIONS, TAILORED FOR EVERY INTERIOR



## BLACK (AL 50)

Created for modern architecture, where colour creates character



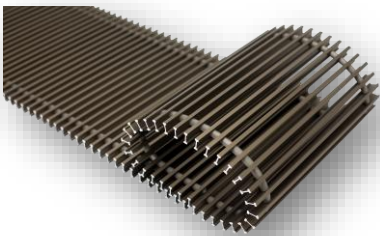
## OAK

A natural choice for cosy, for bright and harmonious interiors

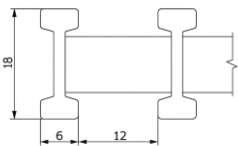
## GRILLE TYPES

### ROLL-UP ALUMINIUM GRILLES

A classic choice that ensures strength and timeless design



#### PROFILE CROSS-SECTION

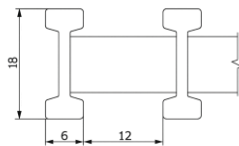


### LINEAR ALUMINIUM GRILLES

Elegant lines that visually extend the space and create a seamless look



#### PROFILE CROSS-SECTION

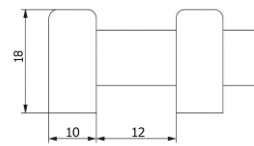


### WOODEN GRILLES

The natural beauty and warmth of wood, perfectly matching the highest-class interiors



#### PROFILE CROSS-SECTION

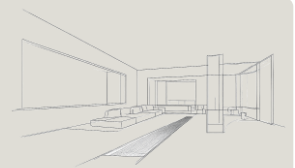


### CUSTOM SOLUTIONS

The length, width and colour of the grilles can be adapted to your project needs

### CREATED FOR ARCHITECTURE

Created for people who create exceptional spaces



# REAL PROJECTS

**KONVEKA** trench heaters are chosen in prestigious buildings worldwide, where comfort, reliability and architectural aesthetics matter most

## RIGA, LATVIA ADMINISTRATIVE BUILDING



**Application**  
Offices



**Product**  
FCH



**Grilles**  
Linear, aluminium



## PRIVATE HOUSE VILNIUS, LITHUANIA



**Application**  
Residential



**Product**  
FCH



**Grilles**  
Roll-up, aluminium



## HOTEL "BRITANIA" TRONDHEIM, NORWAY



**Application**  
Hotel



**Product**  
FCHV



**Grilles**  
Roll-up, aluminium



## RESTAURANT "THE PAVILION" LONDON, UK



**Application**  
Restaurant



**Product**  
FCH



**Grilles**  
Linear, aluminium

# ABOUT KONVEKA

**KONVEKA** is a Lithuanian engineering company that has been creating top-quality convectors and fan coils for contemporary architecture for more than 20 years.

Our solutions combine efficiency, reliability and aesthetics - so that buildings are not only functional but also inspiring



**20+**

**YEARS OF EXPERIENCE**

For two decades we have specialized in the field of convectors and fan coils



**30+**

**COUNTRIES**

Our products are used worldwide



**1 000+**

**COMPLETED PROJECTS**

Reliable solutions in residential, commercial and public buildings



**EUROPEAN ENGINEERING**

Created in Lithuania, to the highest quality standards

## OUR VALUES



**ARCHITECTURE FIRST**

We create products that naturally blend into modern architecture



**RELIABILITY**

Top-quality materials and strict quality control



**EFFICIENCY**

Maximum thermal efficiency and low energy consumption



**COMFORT**

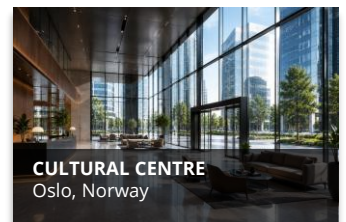
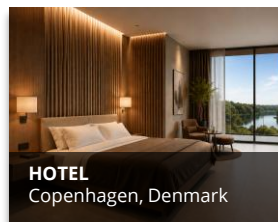
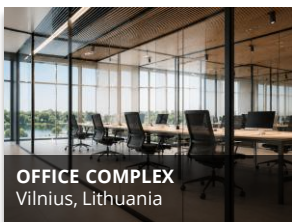
Quiet operation and even heat - for comfort every day



**FLEXIBLE SOLUTIONS**

A wide range for any project

## KONVEKA SOLUTIONS - FOR CONTEMPORARY ARCHITECTURE





**THE CULTURE OF HEAT**



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