

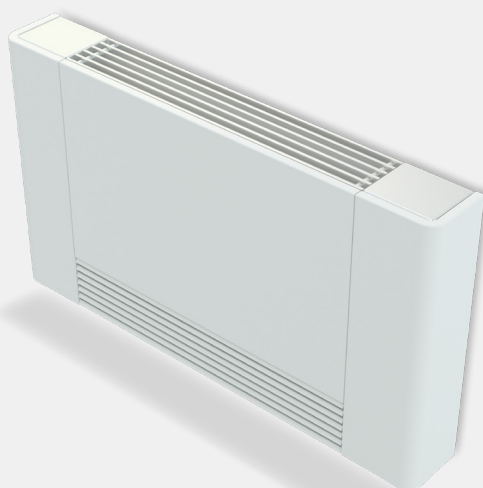


WALL-MOUNTED FAN COILS WFN

 FOR HEATING

 FOR COOLING

- 5 models
- 2-pipe system
- Remarkably low noise level
- EC fans with brushless DC motors
- Built-in unique algorithm controller
- Controlled on screen or by mobile application via WiFi
- Week programming
- Modbus interface for connection to a centralized building management system
- Inlet air filters
- Fully metallic casings
- Many colour options
- Created for work with heat pumps



2023





WALL-MOUNTED FAN COILS **WFN**

Wall-mounted fan coils WFN are **created to work with heat pumps** however can work with all kinds of heat or cold sources.

Controlled by room thermostat or by **mobile app via Wifi**. There is possibility of **week programming**.

With **included smart thermostats**, with unique operating algorithm they ensure highest level of thermal comfort throughout the year, maintaining the desired **temperature with accuracy of 0,5°C**.

High quality fans with brushless DC motors **enable the WFN to work extremely quietly** – they can be installed even in bedrooms.

Being fast-responding, they can heat up or cool down the rooms **using exactly as much energy as needed and when it's needed, avoiding unnecessary overheating or overcooling**. This quality makes fan coils WFN one of the most efficient and economy heating – cooling devices.

A classic design and **wide range of colour options** allow it to be adapted to a wide range of the interior designs and styles.



10-year warranty for the heat exchangers

10-year warranty for the heat exchangers. We fully trust the quality of our products, so we give them such a guarantee.



Especially quiet operation

We have achieved exceptionally low noise levels using **extremely quiet EC fans** and by the **optimisation** of their **rotational speed** and **design** of the devices.



Work perfectly with low-temperature energy carriers

Due to their high efficiency, WFN are very **suitable for** operating with low-temperature energy carriers, such as **heat pumps** and **condensing boilers**.



Efficient energy use

A unique controller algorithm ensures that the fans operate only as needed and at the minimum required speed, meaning they use only as much energy as is necessary to heat or cool the room, and the modulated fan speed does not cause uncomfortable sudden changes in airflow for the occupants.



Color selection

The standard color is white RAL9016. It is possible to choose any color from the RAL palette.



Maximum operating pressure – 25 bar

All the devices are **factory-tested** for leaks at a pressure of **30 bar**. The maximum maintained pressure (strength limit) is **110 bar**. Konveka devices easily withstand hydraulic tests and hydraulic shocks and can be installed in extremely tall buildings.



Fans with EC technology

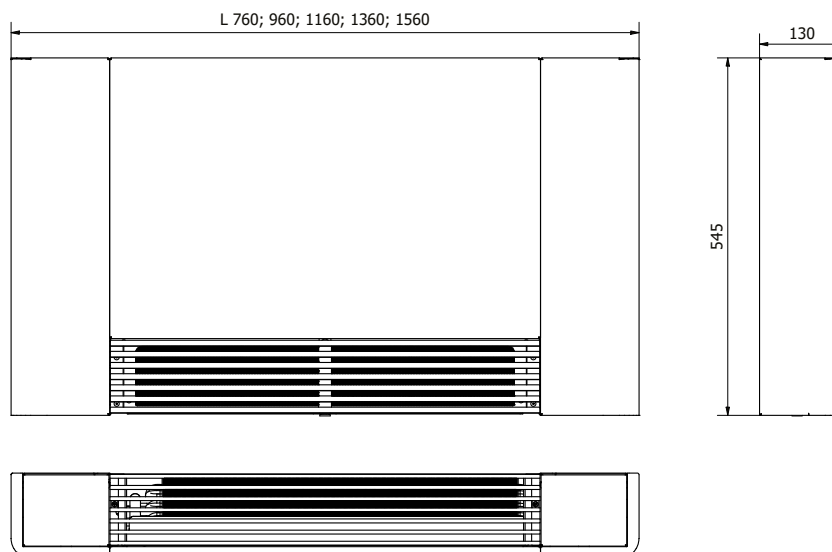
All Konveka forced convection devices are equipped with fans that employ **EC technology**. This is far superior to AC technology, as the fans:

1. Are **7 times more economical**.
2. Brushless motors are more durable and are **maintenance-free**.
3. Speed is **adjustable stepless**, using only as much power as required.
4. Starting currents do not exceed the operating currents.
5. Minimum rotation speed is 10% (from the max.)



Smart control

Integrated controllers allow remote control via a mobile app over WiFi. They have the ability for weekly programming and Modbus interface for connection to a centralized building management system.



TECHNICAL DATA

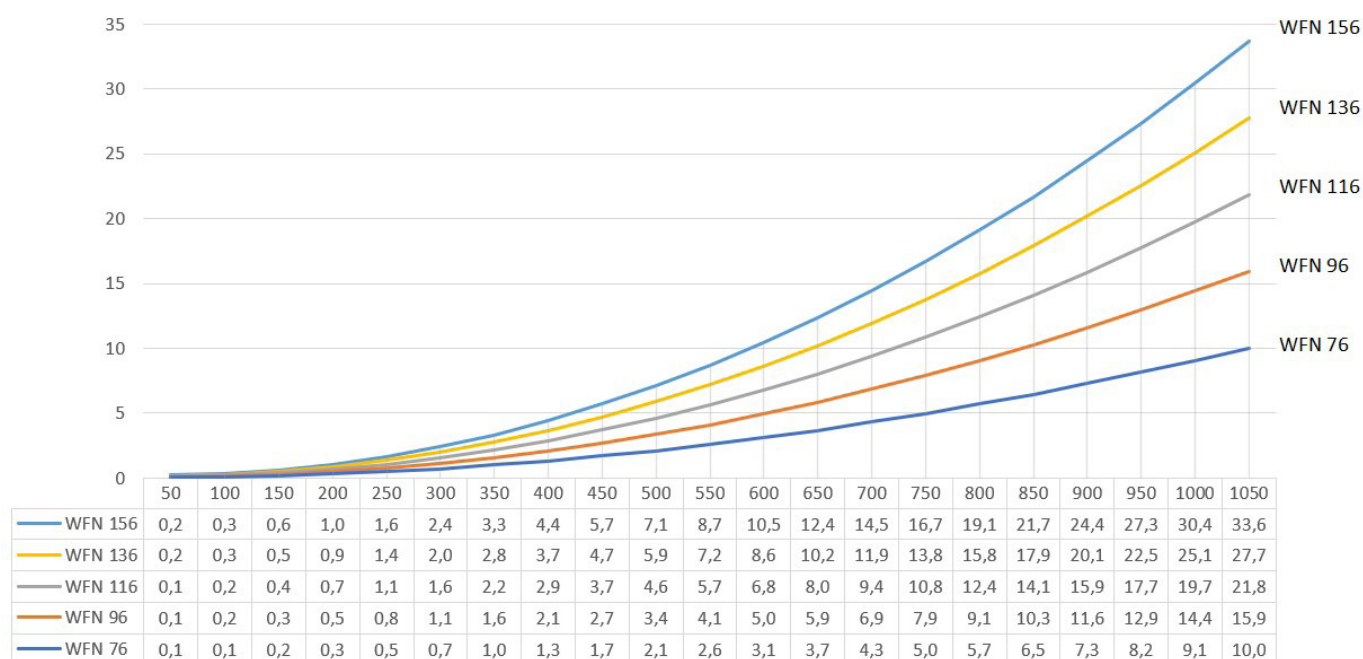
Length	760 - 1560 mm	Thread of hydr. connections	G 1/2"
Width	130 mm	Thread type of hydr. connections	inner
Height = installation height	545 mm	Standard connection side	left
Type of fan motors	brushless DC	Operating pressure	15 bar
Standard colour	white, RAL 9016	Operating temperature	2 - 120°C

Fan speed	Heat outputs, W		Sensible cooling capacity, W		Air flow, m³/h	Sound pressure level, dB(A)
	45/40/20°C Δt = 22,5°C	35/30/20°C Δt = 12,5°C	7/12/27°C Δt = 17,5°C	14/17/25°C Δt = 9,5°C		
WFN 76						
100%	1 824	966	1 157	587	290	41
80%	1 638	905	975	525	251	36
60%	1 486	800	829	431	214	28
40%	1 187	659	652	353	160	23
20%	866	475	492	262	121	20
Water flow l/h	314	166	199	168	—	—
WFN 96						
100%	2 693	1 426	1 708	867	428	42
80%	2 418	1 335	1 439	775	371	41
60%	2 194	1 181	1 223	636	315	34
40%	1 752	972	962	521	236	29
20%	1 278	701	726	387	179	25
Water flow l/h	463	245	294	249	—	—
WFN 116						
100%	3 562	1 886	2 259	1 147	566	44
80%	3 197	1 766	1 903	1 025	490	39
60%	2 902	1 562	1 618	841	417	31
40%	2 317	1 286	1 272	690	312	24
20%	1 691	927	960	512	237	22
Water flow l/h	613	324	388	329	—	—

Fan speed	Heat outputs, W		Sensible cooling capacity, W		Air flow, m³/h	Sound pressure level, dB(A)
	45/40/20°C Δt = 22,5°C	35/30/20°C Δt = 12,5°C	7/12/27°C Δt = 17,5°C	14/17/25°C Δt = 9,5°C		
WFN 136						
100%	4 431	2 346	2 810	1 427	704	43
80%	3 977	2 197	2 367	1 275	610	40
60%	3 609	1 944	2 013	1 047	519	33
40%	2 882	1 600	1 582	858	388	26
20%	2 103	1 153	1 194	637	295	24
Water flow l/h	762	403	483	409	—	—
WFN 156						
100%	5 300	2 806	3 361	1 706	842	45
80%	4 757	2 628	2 831	1 525	729	42
60%	4 317	2 325	2 407	1 252	621	35
40%	3 447	1 913	1 893	1 026	464	28
20%	2 516	1 379	1 428	762	353	25
Water flow l/h	911	483	578	489	—	—

Heat outputs at other temperatures are available at www.konveka.it

Pressure losses, kPa



Model	Length, cm	Operating voltage of fans, V	Maximum el. power, W	Maximum current, A	Weight, kg	Volume of water, l
WFN 76	760	24V DC	16	0,7	14,68	0,64
WFN 96	960		24	1,0	18,08	0,93
WFN 116	1 160		32	1,3	21,44	1,21
WFN 136	1 360		39	1,6	23,71	1,50
WFN 156	1 560		47	2,0	25,97	1,78

ORDER CODE

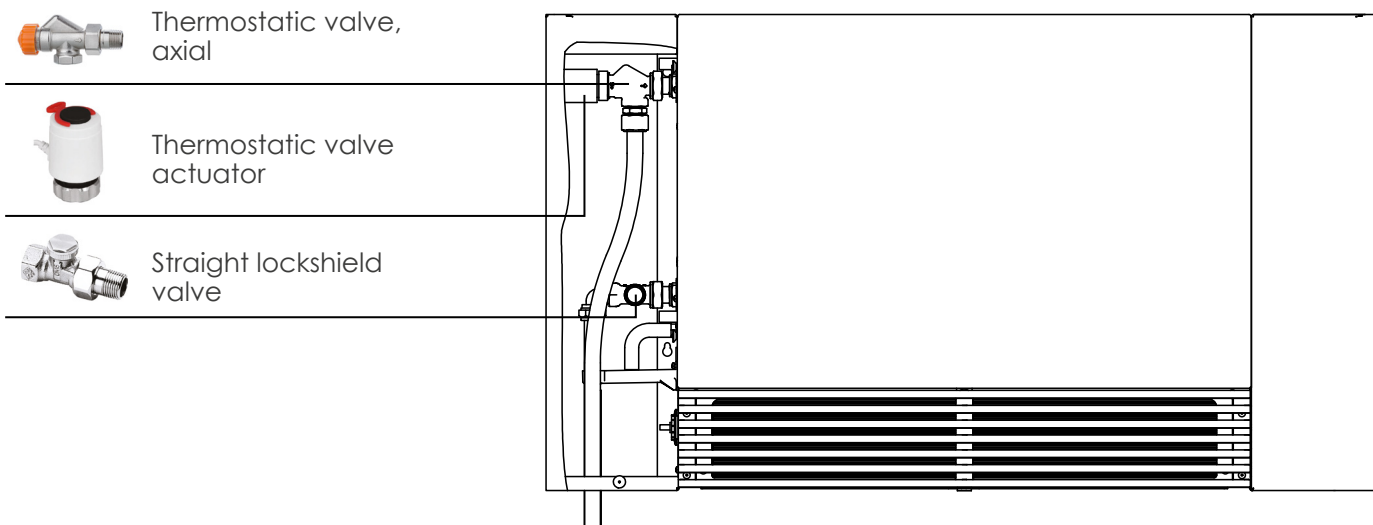
Type	Length, cm	Width, cm	Example
WFN	96	13	WFN 96

THE CONTROLLER

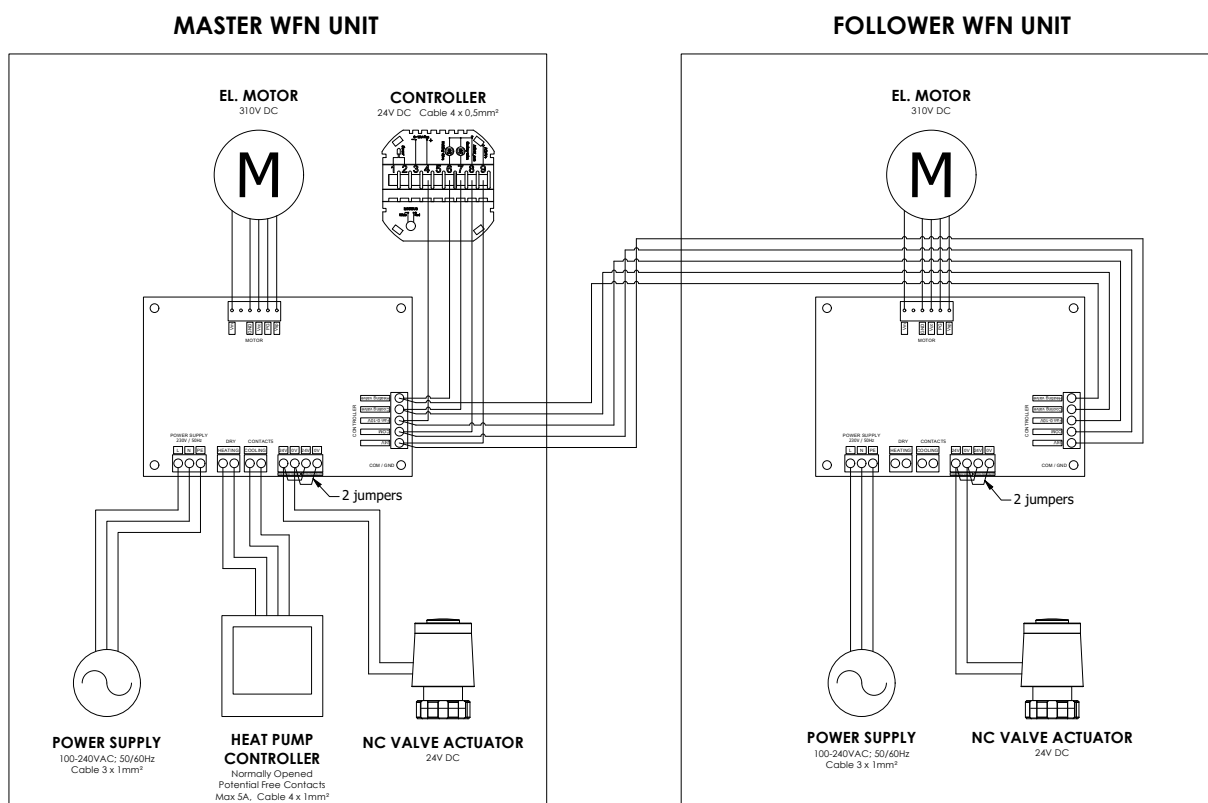


- Fan speed modulation
- Temperature control accuracy $\pm 0.5^{\circ}\text{C}$
- Week programming
- Controlled on screen or by mobile application via WiFi
- Can be installed on the wall
- Modbus interface for connection to a centralized building management system

EXAMPLE OF CONNECTIONS



WIRING DIAGRAM



ACCESSORIES

THERMOSTATIC VALVE (AXIAL) **TVA15**

Controls flow of energy carrier. Controlled by thermal actuator A24NC



Controls flow with thermoelectric actuator

Possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 2,00

LOCKSHIELD VALVE (STRAIGHT) **LS15**

Opens, closes or limits flow of energy carrier



For energy carrier opening, closing and presetting of maximal flow

Possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 1,74

DN20 Kvs = 1,93

LOCKSHIELD VALVE (ANGLE) **LA15**

Opens, closes or limits flow of energy carrier



For energy carrier opening, closing and presetting of maximal flow

Possibility to close flow and disconnect heat exchanger from heating system without draining

DN15 Kvs = 1,74

DN20 Kvs = 1,93

THERMOSTATIC VALVE ACTUATOR **A24NC**

Opens / closes thermostatic valve.



Opening/closing of thermostatic valves (ON/OFF)

Thermoelectric

Opened/Closed indicator

Voltage 24V DC

ORDER CODES

Accessory	Order code
Thermostatic valve (axial)	TVA15
Thermostatic valve actuator	A24NC
Lockshield valve (angle)	LA15
Lockshield valve (straight)	LS15

ABOUT KONVEKA

Konveka is a **full production cycle fan coil manufacturing company** engaged in this activity **since 2005**. The range of products we develop and manufacture is wide: from simple natural convection convectors to complex devices with fans for heating, cooling and ventilation.

Konveka is a manufacturer of high-quality and reliable products:

- We provide a **5 - 10 year warranty for all our products** (except their electrical part) without any additional fees, which is rarely found in world production practice.
- **The capacities of all our products are determined by independent accredited laboratories** according to current standards. With us, 1kW means 1kW.
- We **do not use cheap, unapproved solutions or use unreliable materials** when designing and manufacturing our devices.

Although we operate in a highly competitive international market, **we are at the forefront where quality, durability and reliability are valued.**

We are well known in **Eastern and Western Europe, Scandinavia, North America and Central Asia**. Konveka products can be seen in many prestigious buildings around the world: administrative buildings, shopping malls, airports, restaurants, theaters, universities, hotels, apartment buildings and individual homes.

Konveka consistently wins **national awards** (see below) for **reliability, consistency and business growth**.

Our slogan - **"More than you expected"** reflects the quality of our products and technical solutions, which often exceed customer expectations. We value our customers and are happy to be a part of their successful business.



NOTES

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