DAIKIN

altherma

Daikin Altherma HPC

Heat pump convectors
A fresh approach to comfort

FWXV-ATV3(R)
FWXT-ATV3(C)(L)
FWXM-ATV3(R)

reddot winner 2020

Heat pump convectors Daikin Altherma HPC

What is a heat pump convector?

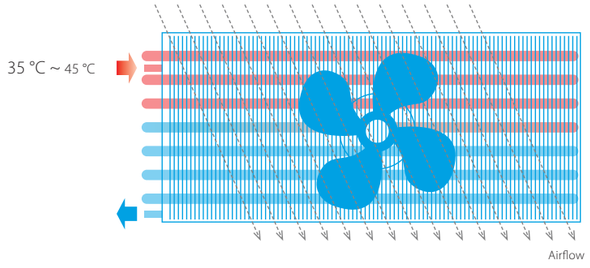
Daikin Altherma HPC provides both cooling and heating. The system is compatible with underfloor piping and radiators in a multi-zoning installation, or can replace radiators in combination with low temperature heat pumps. Thanks to its silent operation, the unit is suited for use in bedrooms and living rooms.

How does it work?

A heat pump works in a similar way to a radiator, as both use convection to heat a room. A radiator creates convection by running water through its pipes. With a heat pump convector, the convection process is faster because there is a small fan behind it, speeding up the heating cycle.

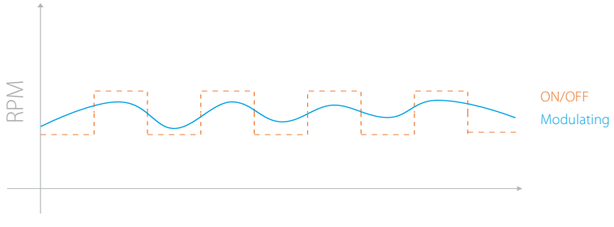
A heat pump convector creates the same room temperature as a traditional radiator, but with lower water temperatures inside the radiator. In the long run, this contributes to direct energy savings for end users.

› Optimised for newly built houses.
› Can be set at low water temperature (35 °C) which makes it ideal for heat pump applications.



Modulated airflow

When there is less heating demand, the unit modulates its airflow to slow down the fan rate, and in the process, lowers the operational sound. A standard ON/OFF fan running simultaneously at full speed can increase sound pressure.



DC Inverter

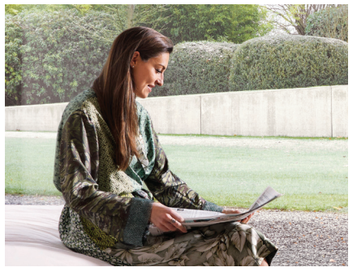
Daikin Altherma HPC uses the latest technologies to consume less electricity down to 3W of standby power input.

Natural symbiosis with heat pumps

By running on low temperature, Daikin Altherma heat pump convectors naturally fit with Daikin heat pumps. The heat pump convector range consists of three models:

1. Floor standing model with indoor air quality control (optional)
2. Wall mounted model with remote control
3. Concealed model hidden in the ceiling or wall

Floor standing model



The floor standing heat pump convector offers an impressively low sound operation, and its slim design received the RedDot Award 2020 for its compact good looks. Next to heating and cooling, the unit can also provide indoor air quality control.

Why Indoor Air Quality Matters

Indoor Air Quality (IAQ) refers to the air quality in a building or structure, breathed in every day by the building's occupants.

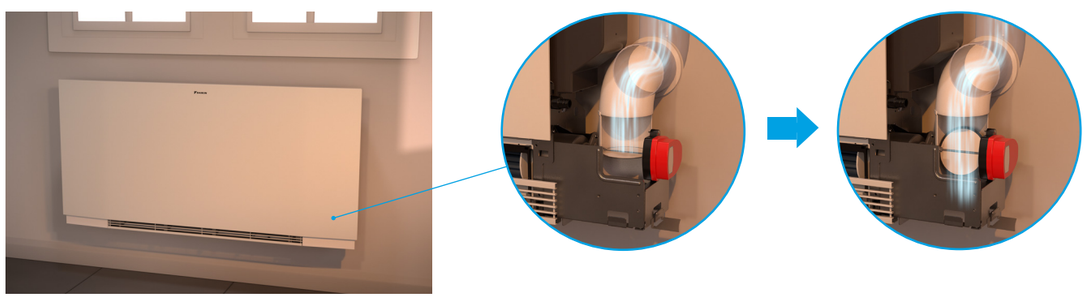
When planning new residential buildings, schools, offices or light commercial buildings, there are many factors to consider. Besides structural features, there are also the issues of heating, cooling, and something often neglected: indoor air quality.

Did you know that the indoor air we breathe, whether at home, at the office, or in a hotel room, could be much more polluted than the air outside?

› 90% of our lives are spent indoors
› Indoor air quality can be two to five times worse than outdoor air quality because of pollutants, such as pollen, bacteria, etc.

How does Daikin Altherma HPC ensure a healthy and comfortable indoor air quality?

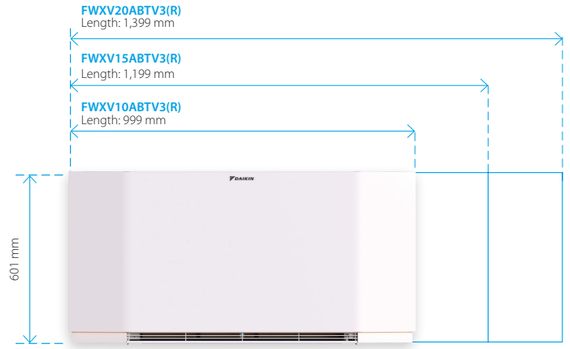
When a pollutant level of indoor air is reached, the IAQ sensor opens a damper, which allows fresh air to come in. The incoming fresh air is immediately heated or cooled (depending on the demand) by the heat pump convector. In this way the indoor air remains of good quality while comfort is ensured.



Slim design

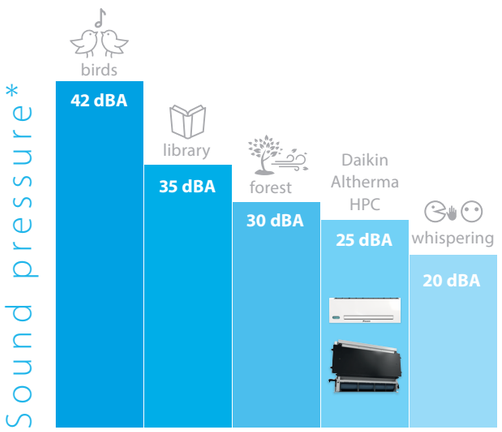
reddot winner 2020

The floor standing Daikin Altherma HPC has a depth of only 135 mm that fits any house or apartment. Its optimised design was rewarded with the Reddot Design Award 2020.



Low sound levels

As the unit reaches its set point, a continuous modulating fan gradually reduces its speed and creates less noise. For the wall mounted and concealed units, the sound pressure measures 25dB(A) at 1m when the fan is on low-speed setting. The unit uses even lower sound pressure in super-silent mode (night mode).



*at 1 meter

High capacity operation

The Daikin Altherma HPC combines the advantages of residential underfloor heating and radiators. It delivers high-capacity heating or cooling faster and can be set at ultra-low temperatures (35/30 °C regime).

Range of controls

Daikin offers a wide variety of controllers that are functional and have a great design.

EKRTCTRL1

› Built-in controller
› Fully modulating
› Multicolor display

EKRTCTRL2

› Built-in controller
› 4 speed settings

EKWHCTRL1

› Wall controller
› Fully modulating
› In combination with EKWHCTRL0

EKPCBO

› Built-in controller
› ON/OFF
› In combination with external thermostats

EKWHCTRL1A

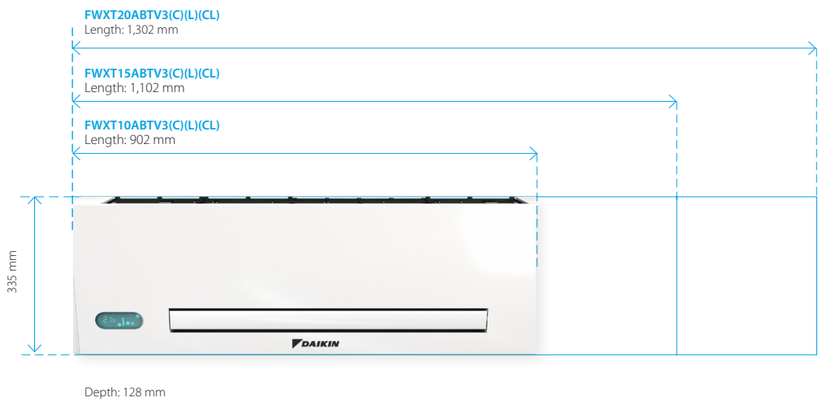
› Wall controller
› Fully modulating
› In combination with EKWHCTRL0
› Includes indoor air quality sensor

Wall mounted model

Thanks to its slim design, our wall mounted unit blends in with your interior discreetly while helping you save valuable floor space.

Slim design

Daikin Altherma HPC is a compact unit made of a design metal casing including all valves.



Depth: 128 mm

Controls

Choice of:

› Fully modulating controller allowing for remote control of the unit.
› Infrared remote controller and on-board touch panel.

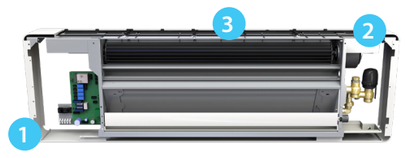
EKWHCTRL1

› Wall controller
› Fully modulating
› For models FWXT-ABTV3(L)

Infrared remote controller

› Remote
› Fully modulating
› For models FWXT-ABTV3C(L)

Compact dimensions



1 Slim depth

The depth of 128 mm is an outstanding technical achievement that ensures a perfect fit in any home.

2 More space for valves

Ease of installation: the space for hydraulic valves is wide and easily accessible.

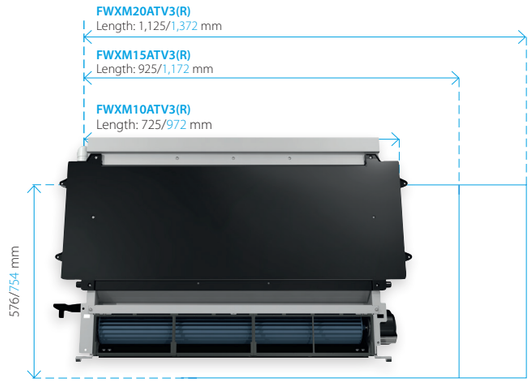
3 Modulated airflow

When there is less heating demand, the unit modulates its airflow to slow down the fan rate, and in the process, lowers the operational sound.

Concealed model

Now you can forget about your heating or cooling installation altogether. Our concealed model vanishes into the wall or ceiling for visual comfort while preserving its unique heating and cooling capabilities.

Slim design



Blue dimensions are for the front cover.

Depth: 126 mm

Controls

EKWHCTRL1

› Wall controller
› Fully modulating
› In combination with EKWHCTRL0

Flexible installation

Daikin Altherma HPC can be installed in four different ways, allowing you to install it in almost all conditions. The unit can be positioned horizontally or vertically. For horizontal, in-ceiling installation, three different possibilities are offered:

› Horizontal cover panel and vertical grille for air outlet
› Horizontal intake grille and vertical grille for air outlet
› Horizontal intake and outlet grilles

Floor Mounted HPC

Left Configuration				FWXV10ABTV3	FWXV15ABTV3	FWXV20ABTV3
Right Configuration				**FWXV10ABTV3R**	**FWXV15ABTV3R**	**FWXV20ABTV3R**
Function				Heating and Cooling*	Heating and Cooling*	Heating and Cooling*
Heating capacity	at 45/40°C	Max.	kW	2.18	3.11	3.88
	at 35/30°C	Max.	kW	1.14	1.73	2.15
Cooling capacity	at 7/12°C	Max.	kW	1.77	2.89	3.20
Sensible cooling capacity	at 7/12°C	Max.	kW	1.33	2.10	1.78
Power input		Max.	W	20	20	30
Dimensions	Height x Width x Depth		mm	601 x 999 x 135	601 x 1200 x 135	601 x 1400 x 135
Weight			kg	20	23	26
Water Pipe connections			inch	3/4" Male Eurocone	3/4" Male Eurocone	3/4" Male Eurocone
Sound pressure level		Min.	dBA	20	22	23
		Max.	dBA	42	44	46
Operating Range	Heating	Min.	°C	30	30	30
		Max.	°C	85	85	85
	Cooling	Min.	°C	5	5	5
		Max.	°C	18	18	18
Power supply	Phase/Voltage/Frequency			1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz
Running Current		Max.	A	0.2	0.2	0.3
Colour				RAL 9003	RAL 9003	RAL 9003

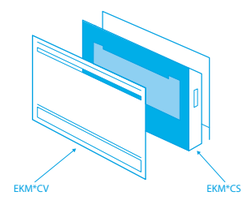
Wall Mounted HPC

Right Configuration				FWXT10ABTV3	FWXT15ABTV3	FWXT20ABTV3
Left Configuration				**FWXT10ABTV3L**	**FWXT15ABTV3L**	**FWXT20ABTV3L**
Right Configuration including IR remote				**FWXT10ABTV3C**	**FWXT15ABTV3C**	**FWXT20ABTV3C**
Left Configuration including IR remote				**FWXT10ABTV3CL**	**FWXT15ABTV3CL**	**FWXT20ABTV3CL**
Function				Heating and Cooling*	Heating and Cooling*	Heating and Cooling*
Heating capacity	at 45/40°C	Max.	kW	1.27	1.80	2.60
	at 35/30°C	Max.	kW	0.66	1.00	1.44
Cooling capacity	at 7/12°C	Max.	kW	1.07	1.65	2.31
Sensible cooling capacity	at 7/12°C	Max.	kW	0.95	1.49	1.94
Power input		Max.	W	10	10	20
Dimensions	Height x Width x Depth		mm	335 x 902 x 128	335 x 1100 x 128	335 x 1300 x 128
Weight			kg	14	16	19
Water Pipe connections			inch	3/4" Male Eurocone	3/4" Male Eurocone	3/4" Male Eurocone
Sound pressure level		Min.	dBA	25	25	26
		Max.	dBA	40	42	43
Operating Range	Heating	Min.	°C	30	30	30
		Max.	°C	85	85	85
	Cooling	Min.	°C	5	5	5
		Max.	°C	18	18	18
Power supply	Phase/Voltage/Frequency			1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz
Running Current		Max.	A	0.2	0.2	0.2
Colour				RAL 9003	RAL 9003	RAL 9003

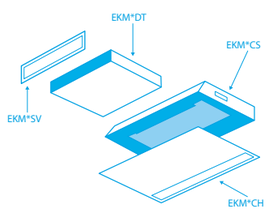
Concealed HPC

Left Configuration				FWXM10ATV3	FWXM15ATV3	FWXM20ATV3
Right Configuration				**FWXM10ATV3R**	**FWXM15ATV3R**	**FWXM20ATV3R**
Description				Concealed Models	Concealed Models	Concealed Models
Function				Heating and Cooling*	Heating and Cooling*	Heating and Cooling*
Heating capacity	at 45/40°C	Max.	kW	2.18	3.11	3.88
	at 35/30°C	Max.	kW	1.14	1.73	2.15
Cooling capacity	at 7/12°C	Max.	kW	1.77	2.89	3.20
Sensible cooling capacity	at 7/12°C	Max.	kW	1.33	2.10	1.78
Power input		Max.	W	20	20	30
Dimensions	Height x Width x Depth		mm	576 x 725 x 126	576 x 925 x 126	576 x 1125 x 126
Weight			kg	12	15	18
Water Pipe connections			inch	3/4" Male Eurocone	3/4" Male Eurocone	3/4" Male Eurocone
Sound pressure level		Min.	dBA	25	26	26
		Max.	dBA	42	44	46
Operating Range	Heating	Min.	°C	30	30	30
		Max.	°C	85	85	85
	Cooling	Min.	°C	5	5	5
		Max.	°C	18	18	18
Power supply	Phase/Voltage/Frequency			1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz
Running Current		Max.	A	0.2	0.2	0.3

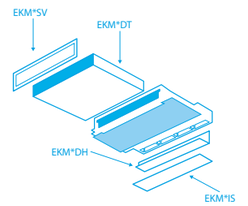
Installation: Options



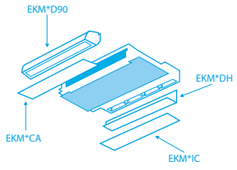
TYPE A
Vertical, in wall.



TYPE B
Horizontal, in ceiling. Console installation with full metal cover.



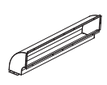
TYPE C
Horizontal, in ceiling. Console installation with intake grill.



TYPE D
Horizontal, in ceiling. Flat installation with intake grill.

HPC Accessories

																											
		EKRTCTRL1	EKRTCTRL2	EKPCBO	EKWHCTRL1	EKWHCTRL1A	EKFCD80	EKWHCTRL0	EKPCB4S	EKPCB10	EKFA	EK2VK0	EKT2VK0	EK3VK1	EKT3VK1	EKEUR90	EKDIST	EKM10COH	EKM15COH	EKM20COH	EKM10CS	EKM15CS	EKM20CS	EKM10CH	EKM15CH	EKM20CH
Concealed	FWXM10ATV3(R)			●	●			●	●	●		●		●		●	●				●			●		
	FWXM15ATV3(R)			●	●			●	●	●		●		●		●	●					●			●	
	FWXM20ATV3(R)			●	●			●	●	●		●		●		●	●						●			●
Floor	FWXV10ABTV3(R)	●	●	●	●	●	●	●	●	●	●	●		●		●	●	●								
	FWXV15ABTV3(R)	●	●	●	●	●	●	●	●	●	●	●		●		●	●		●							
	FWXV20ABTV3(R)	●	●	●	●	●	●	●	●	●	●	●		●		●	●			●						
Wall Mounted	FWXT10ABTV3(L)				●			●					●		●												
	FWXT15ABTV3(L)				●			●					●		●												
	FWXT20ABTV3(L)				●			●					●		●												
	FWXT10ABTV3C(L)												●		●												
	FWXT15ABTV3C(L)												●		●												
	FWXT20ABTV3C(L)												●		●												

																									
		EKM10CV	EKM15CV	EKM20CV	EKM10DH	EKM15DH	EKM20DH	EKM10D90	EKM15D90	EKM20D90	EKM10DT	EKM15DT	EKM20DT	EKM10IS	EKM15IS	EKM20IS	EKM10SV	EKM15SV	EKM20SV	EKM10IC	EKM15IC	EKM20IC	EKM10CA	EKM15CA	EKM20CA
Concealed	FWXM10ATV3(R)	●			●			●			●			●			●			●			●		
	FWXM15ATV3(R)		●			●			●			●			●			●			●			●	
	FWXM20ATV3(R)			●			●			●			●			●			●			●			●
Floor	FWXV10ABTV3(R)																								
	FWXV15ABTV3(R)																								
	FWXV20ABTV3(R)																								
Wall Mounted	FWXT10ABTV3(L)																								
	FWXT15ABTV3(L)																								
	FWXT20ABTV3(L)																								
	FWXT10ABTV3C(L)																								
	FWXT15ABTV3C(L)																								
	FWXT20ABTV3C(L)																								

Daikin Airconditioning UK Limited The Heights Brooklands Weybridge Surrey KT13 0NY Tel 01932 879000 daikin.co.uk

FSC

ECPEN22-793 08/22