

# Table of content

## convectors

Daikin Altherma HPC .....	166
---------------------------	-----

# The Daikin Altherma HPC a fresh approach to home comfort



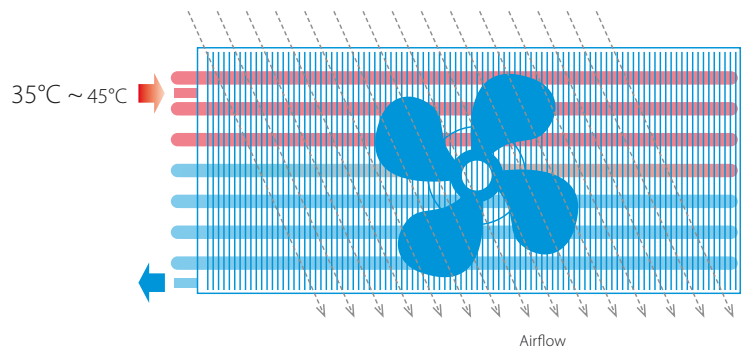
By providing cooling and heating, Daikin Altherma HPC is combinable with underfloor piping and can replace outdated radiators. The unit fits in bedrooms and living rooms thanks to its silent operation and elegant design.



## What is a heat pump convector

The way a heat pump convector works is similar 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, a radiator's 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 in the radiator, and in the long run, contribute to direct energy savings for users.

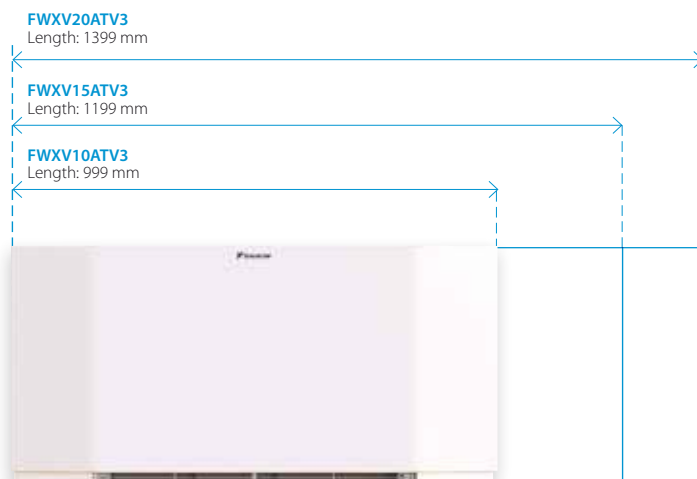


- > Optimized for new build houses
- > Can be selected at low water temperature (35°C) which makes it ideal for heat pump applications.



## Slim design

Measuring 135 mm (depth), this heat pump can fit in any house or apartment.



## Fast and high capacity

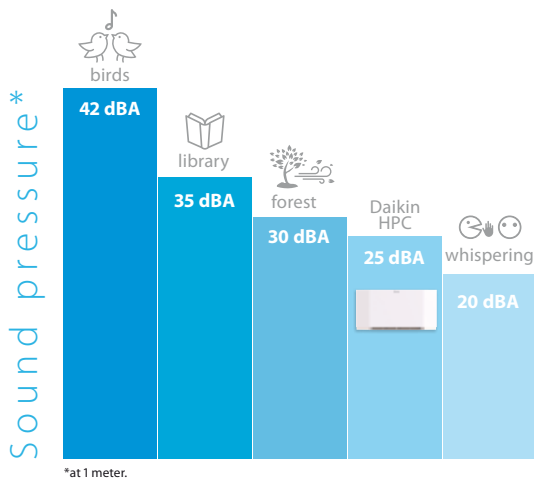
The Daikin Altherma HPC combines the advantages of residential underfloor heating and radiators. It delivers high capacity heating or cooling faster and can be selected at ultra-low temperatures (35/30°C regime).





## Silent

As the unit reaches its set point, a continuous modulating fan gradually reduces its speed and creates less noise. The unit's sound pressure measures 25db(A) at 1m when the fan is on a low-speed setting.



## DC Inverter

Daikin Altherma HPC uses the latest technologies to consume less electricity down to 3W of standby power input while maintaining its reliable performance.



## 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 selection

### EKWHCTRL1



- > Wall controller
- > Fully modulating
- > In combination with EKWHCTRL0

### EKPCBO

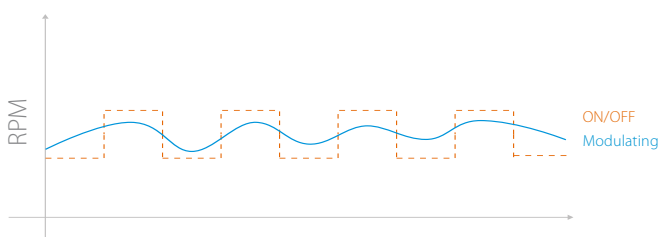


- > Built-in controller
- > ON/OFF
- > In combination with external thermostats



## 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.



\* Only applicable for EKRTCTRL1, EKWHCTRL1



## Perfect combination

This heat pump convector fits perfectly within the Daikin Altherma 3 range.



Indoor unit				FWXV10ATV3	FWXV15ATV3	FWXV20ATV3	
Cooling capacity at 7/12°C	Min.		kW	0,66	1,30	1,82	
	Med.		kW	1,36	2,16	2,52	
	Max.		kW	1,77	2,89	3,20	
Sensible cooling capacity at 7/12°C	Min.		kW	0,39	0,99	1,22	
	Med.		kW	0,98	1,53	1,55	
	Max.		kW	1,33	2,10	1,78	
Heating capacity at 35/30°C	Min.		kW	0,41	0,45	0,93	
	Med.		kW	0,82	1,29	1,66	
	Max.		kW	1,14	1,73	2,15	
Heating capacity at 45/40°C	Min.		kW	0,95	1,26	1,90	
	Med.		kW	1,63	2,33	3,05	
	Max.		kW	2,18	3,11	3,88	
Power input	Min.		kW	0,003	0,004	0,005	
	Med.		kW	0,018	0,020	0,027	
	Max.		kW	0,018	0,020	0,027	
Fan speed	Min.		m³/h	118	180	246	
	Med.		m³/h	210	318	410	
	Max.		m³/h	294	438	566	
Casing	Colour			RAL 9003			
	Material			Metal sheet			
Dimensions	Unit	Height	mm		601		
		Width	mm	999	1199	1399	
		Depth	mm	135	135	135	
	Packed unit	Height	mm		690		
		Width	mm	1230	1430	1630	
		Depth	mm		210		
Weight	Unit		kg	20	23	26	
	Packed unit		kg	21	24	27	
Packing	Material			Carton			
	Weight		kg		1		
Heat exchanger	Quantity			1	1	1	
	Internal coil volume		l	0,8	1,13	1,46	
		Max Operating pressure		bar		10	
Water circuit	Piping connections diameter		inch		3/4" male		
	Piping material				EUROKONUS		
	Heating - Water pressure drop at 35/30°C	Min.		kPa	0,3	2,0	1,2
		Med.		kPa	1,3	7,5	4,0
		Max.		kPa	2,4	12,3	8,0
	Heating - Water pressure drop at 45/40°C	Min.		kPa	1,3	8,6	3,8
		Med.		kPa	4,2	3,3	11,2
		Max.		kPa	7,2	11,5	21,3
	Cooling - Water pressure drop at 7/12°C	Min.		kPa	1,2	4,3	2,1
		Med.		kPa	2,8	19,3	13,1
		Max.		kPa	2,9	27,0	24,0
	Heating - Water flow rate at 35/30°C	Min.		kg/h	69,9	73,6	160,2
		Med.		kg/h	141,4	221,1	285,3
		Max.		kg/h	195,2	297,2	369,9
	Heating - Water flow rate at 45/40°C	Min.		kg/h	163,5	212,5	327,0
		Med.		kg/h	280,3	401,1	524,6
		Max.		kg/h	374,1	534,5	667,5
Cooling - Water flow rate at 7/12°C	Min.		kg/h	113,5	223,7	313,0	
	Med.		kg/h	234,1	371,7	433,6	
	Max.		kg/h	303,6	496,6	550,6	
	Pressure	Heating/Max.	bar	10	10	10	
Sound power level	Super silent		dBA	29	31	32	
	Min.		dBA	34	35	35	
	Max.		dBA	51	53	55	
Sound pressure level	Super silent		dBA	20	22	23	
	Min.		dBA	25	26	26	
	Max.		dBA	42	44	45	
Operation range	Heating	Water side	Min.	°C	30		
			Max.	°C.	85		
	Cooling	Water side	Min.	°C.	5		
			Max.	°C	20		
	Indoor installation	Ambient	Min.	°CDB	0		
			Max.	°CDB	45		
Control systems	Infrared remote control			no			
	On board control			yes			
	Wired remote control			yes			
Installation place				Indoor			
<b>Electrical specifications</b>				<b>FWXV10ATV3</b>	<b>FWXV15ATV3</b>	<b>FWXV20ATV3</b>	
Power supply	Phase			1			
	Frequency		Hz	50			
IP class	IP		V	XO			
Electrical power consumption	Max.		W	0,019	0,02	0,029	
	Standby		W	0,003	0,004	0,005	
Current	Zmax	Text	Ω	2556	2300	1643	
	Maximum running current		A	0,16	0,18	0,26	
Current - 50 Hz	Nominal running current		A	0,09	0,1	0,14	