

THE HIGH EFFICIENT  
SOLUTION FOR HEATING  
REFURBISHMENT  
IS IN THE

AIR!



## altherma™ HIGH TEMPERATURE HEATING SYSTEM

AIR TO WATER HEAT PUMPS  
Renovation – Heating – Domestic hot water



altherma™  
by **DAIKIN**

# DAIKIN

## altherma™ HIGH TEMPERATURE

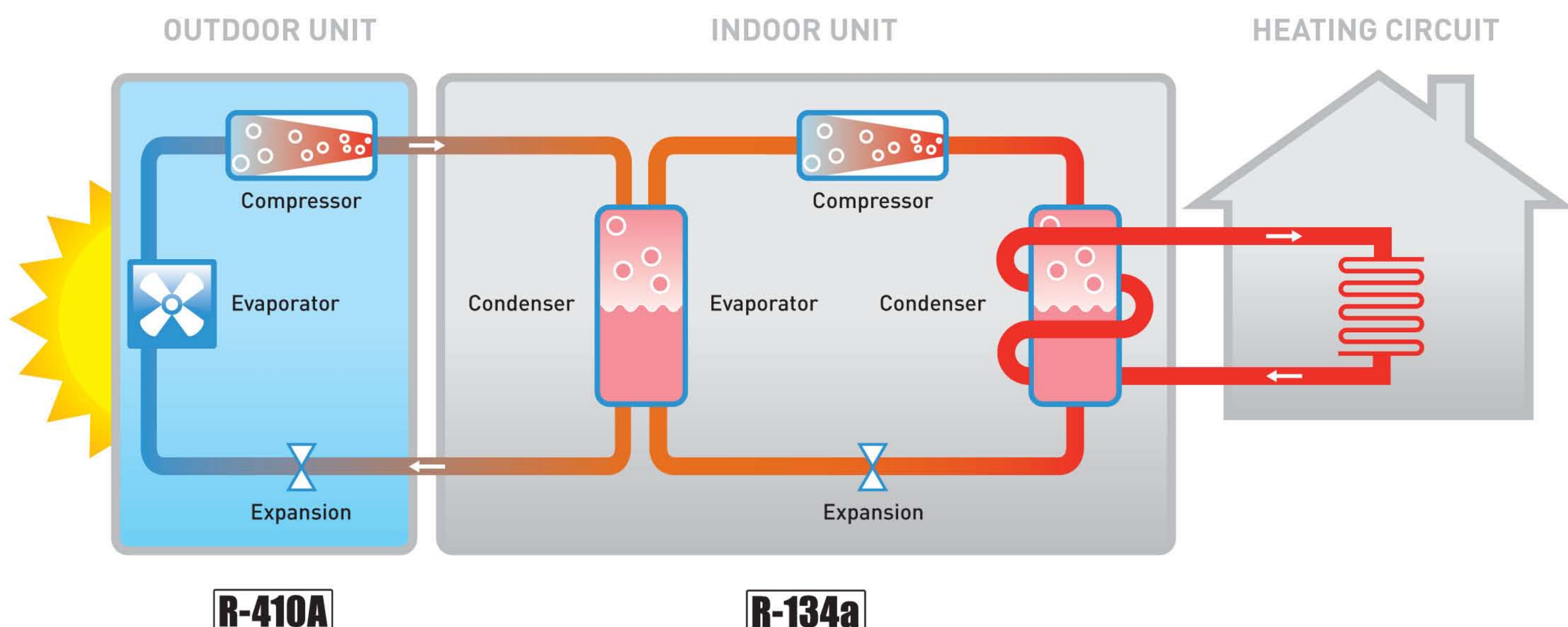
THE SOLUTION WITH AN EYE TO THE FUTURE

### THE MOST IMPORTANT ADVANTAGES AT A GLANCE:

- > Change boiler directly to heat pump – radiators can stay
- > Water temperatures up to 80 °C without electrical heater
- > Big operation range down to -25 °C outdoor temperature
- > Incomparable double Inverter cascade system plus all the known advantages of the altherma™ system!

### HOW THE SYSTEM WORKS

altherma™ HT is equipped with a double heat pump, extracting thermal energy from the ambient air and delivering the generated heat via radiators. The first heat pump – located in the outdoor unit – provides an intermediate temperature source for the second heat pump in the indoor unit, which heats the water to 80 °C. This 80 °C leaving water temperature is reached purely on the basis of thermodynamic principles – without an additional booster heater – making altherma™ HT extremely efficient. Both heat pumps are inverter based, adding to the system's efficiency.



## OUTDOOR UNIT



altherma™ HT  
outdoor unit  
ERRQ

		Single Phase			Three Phase		
		ERRQ 011AV1	ERRQ 014AV1	ERRQ 016AV1	ERRQ 011AY1	ERRQ 014AY1	ERRQ 016AY1
Nominal heating capacity <sup>(1)</sup>	kW	11	14	16	11	14	16
Nominal power input	kW	3,57	4,66	5,57	3,57	4,66	5,57
COP	-	3,08	3	2,88	3,08	3,00	2,88
Dimensions	Height	mm	1345			1345	
	Width	mm	900			900	
	Depth	mm	320			320	
Weight	kg	120			120		
Operation range	Heating	°C	-20 ~ +20 <sup>(2)</sup>			-20 ~ +20 <sup>(2)</sup>	
	Domestic hot water	°C	-20 ~ +35 <sup>(2)</sup>			-20 ~ +35 <sup>(2)</sup>	
Piping Length	Min	m	3			3	
	Max	m	50			50	
	Chargeless	m	10			10	
	Max. height difference	m	30			30	
Power supply	Phase	~	1			3	
	Frequency	Hz	50			50	
	Voltage	V	220-240			380-415	

## INDOOR UNIT



altherma™ HT  
indoor unit  
EKHBRD  
with hot water  
tank EKHTS

		Single Phase			Three Phase		
		EKHBRD 011AV1	EKHBRD 014AV1	EKHBRD 016AV1	EKHBRD 011AY1	EKHBRD 014AY1	EKHBRD 016AY1
Casing	Colour	Metallic grey			Metallic grey		
	Material	Precoated sheet metal			Precoated sheet metal		
Dimensions	Height	mm	705			705	
	Width	mm	600			600	
	Depth	mm	695			695	
Pump	Type	DC motor			DC motor		
	Nr. of speeds	inverter controlled			inverter controlled		
Expansion vessel	Volume	l	12			12	
	Max. water pressure	bar	3			3	
	Pre-pressure	bar	1,5			1,5	
Safety valve	opening pressure	bar	3			3	
Water circuit	Manometer	yes			yes		
	Drain valve / fill valve	yes			yes		
	Shut off valve	yes			yes		
	Air purge valve	yes			yes		
Operation range - water side	Min. heating temp.	°C	25			25	
	Max. heating temp.	°C	80			80	
	Min. hot water temp.	°C	45			45	
	Max. hot water temp.	°C	75			75	
Power supply	Phase	~	1			3	
	Frequency	Hz	50			50	
	Voltage	V	220-240			380-415	

<sup>(1)</sup> Measuring conditions: EW: 55 °C; LW: 65 °C; dT: 10 °C; ambient conditions: 7 °CDB/6 °CWB

<sup>(2)</sup> Operation range: operation possible down to -25 °C, but no guarantee of capacity  
upper limit possible to be set to +24 °C in field settings

Combination Table	ERRQ011AV1	ERRQ014AV1	ERRQ016AV1	ERRQ011AY1	ERRQ014AY1	ERRQ016AY1
EKHBRD011AV1	●	-	-	-	-	-
EKHBRD014AV1	-	●	-	-	-	-
EKHBRD016AV1	-	-	●	-	-	-
EKHBRD011AY1	-	-	-	●	-	-
EKHBRD014AY1	-	-	-	-	●	-
EKHBRD016AY1	-	-	-	-	-	●

## HOT WATER TANKS



altherma™ HT  
indoor unit  
EKHBRD  
with hot water  
tank EKHTS

			Standard Tank		Passivated Tank	
			EKHTS200A	EKHTS260A	EKHTSP200A	EKHTSP260A
Casing			Metallic grey		Metallic grey	
			Galvanised steel		Galvanised steel	
Dimensions	Height (standalone)	mm	1335	1610	1335	1610
	Height (integrated on indoor unit)	mm	2010	2285	2010	2285
	Width	mm	600	600	600	600
	Depth	mm	695	695	695	695
Weight - empty		kg	70	78	75	83
Water volume		l	200	260	200	260
Material			Stainless steel (DIN 1.4521)		Stainless steel (DIN 1.4521)	
Max. temperature		°C	75		75	
Max. water pressure		bar	10		10	
Insulation	Material		EPS		EPS	
	Heat loss	kWh /24h	1,2	1,5	1,2	1,5
Heat exchanger	Material		Duplex steel LDX 2101		Duplex steel LDX 2101	
	Internal coil volume	l	7,5		7,5	
	Surface	m²	1,56		1,56	
3-way-valve	Coefficient of flow (kV) - space heating		13		13	
	Coefficient of flow (kV) - hot water		8		8	
	Inlet	mm	Male Quick coupling 35		Male Quick coupling 35	
	Outlet - space heating	mm	Female Quick coupling 35		Female Quick coupling 35	
Temperature sensor	Outlet - hot water tank		Female Quick coupling 25		Female Quick coupling 25	
	Cable length		11,5		11,5	
	Water inlet heat exchanger		Female Quick coupling 25		Female Quick coupling 25	
Piping connections	Water outlet heat exchanger		Female Quick coupling 25		Female Quick coupling 25	
	Water inlet heat exchanger		G 3/4 (female)		G 3/4 (female)	
	Water outlet heat exchanger		G 3/4 (female)		G 3/4 (female)	
	Cold water in		G 3/4 (female)		G 3/4 (female)	
	Hot water out		G 3/4 (female)		G 3/4 (female)	
	Recirculation connection		G 1/2 (male)		G 1/2 (male)	
Service hole	Size		-		125	

Option kit	Description
EKFMAHT	Option kit for standalone tank
EKRP1AHT	Demand PCB for connection of room thermostat or backup heater
EKRUAHT	Remote user interface
EKBUHA6V3	In-line backup heater 1~, 230V, 6kW
EKBUHA6W1	In-line backup heater 3~, 400V, 6kW
EKRP1HBA	Remote alarm PCB
EKRTW	Wired room thermostat
EKRTR	Wireless room thermostat
EKRTETS	Optional external temperature sensor for EKRTTR

\* Prices and technical details not available at date of printing.

This pricelist is valid from 1.7.2009

All prices are list prices / all prices excl. VAT

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In all of us,  
a green heart



**DAIKIN AIRCONDITIONING CENTRAL EUROPE HANDELSGMBH**

DAIKIN products are available at:

