



# Home sweet home



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SPLIT PRODUCT RANGE  
RESIDENTIAL CATALOGUE



Daikin Europe N.V.

# About Daikin

Daikin has a worldwide reputation based on 90 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use and 56 years as a leader in heat pump technology.

## Daikin quality

Daikin's much envied quality quite simply stems from the close attention paid to design, production and testing as well as aftersales support. To this end, every component is carefully selected and rigorously tested to verify its contribution to product quality and reliability.

## Year-round comfort at home

The whole purpose of total climate control is to provide the optimal year-round living environment and Daikin are experts at tailoring solutions to do this. No matter whether it is for a single room or a complete home, our Multi system, with its market-leading inverter and heat pump technologies, can be tailored to produce the right result. Our indoor units are designed to blend beautifully with your interior décor and for simple installation. We even offer a solution that combines air conditioning with ventilation and humidification for perfect comfort.

# Environmental Awareness

Air conditioning enhances the indoor climate, providing pleasant working and living conditions in even the harshest climates. In recent years however, aware of the need to safeguard the environment, Daikin has taken great strides to limit negative effects associated with its production and operation. As a result, new energy saving equipment combined with innovative manufacturing techniques, minimise any impact on the environment.

## Commitment to the environment

Concern for the environment is inherent throughout Daikin's global operations, from design and production to the everyday actions of its workforce. Daikin heat pumps in combination with in-house inverter technology offer unparalleled indoor heating comfort and process efficiency.

## Heat Pump Efficiency

Heat pumps can extract heat energy from the outside air, even on the coldest days of winter. Daikin systems are capable of providing comfortable and efficient indoor heating as well as meeting exact heating and cooling requirements.

## Energy efficient equipment

Many product innovations stem from Daikin environmental awareness. Inverter control reduces unit start up time and varies compressor output to match precise system load requirements. Also, when linked with Daikin DC compressor motors, it allows Daikin equipment to achieve the highest energy efficiency ratings in the market. Similarly, advanced computerised control packages ensure optimum system efficiency at all times and allow remote monitoring via the internet.

## Reducing waste

Daikin was the first European air conditioning manufacturer to gain ISO14001 environmental certification and all Daikin plants and subsidiaries are now similarly certified. The company's zero waste policy ensures that many of its products can be recycled, reused or recovered.

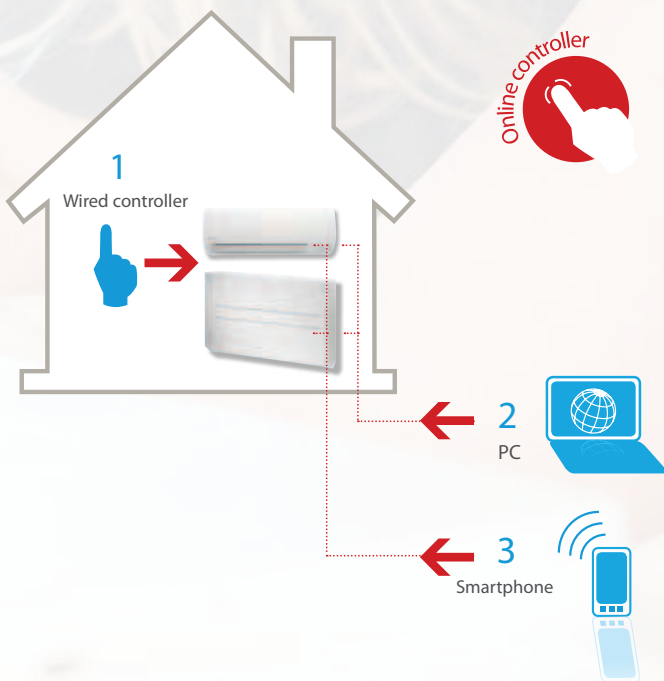
## Recycling materials

Daikin recycles materials as a matter of course. For instance, the sludge recovered from pre treated waste water is used in cement manufacture. The recycling of other types of waste is also supported by investment in returnable packaging.

## Choosing the best refrigerant

Daikin aims to develop systems that improve comfort levels while having low environmental impact. Refrigerant choice is a key factor in the drive to maximise energy efficiency and to minimise the global warming impact of systems. The use of refrigerants is assessed on the following key factors: Global Warming Potential (GWP), energy efficiency and natural resource efficiency. R-32 has a GWP of 650 compared with R-410A's GWP of 2,088, a reduction of 68%. R-32 products can also achieve higher efficiency levels both in part load and full load conditions and R-32 is a single component refrigerant, which makes it easy to recycle.

Europe's first commercialised air-to-air heat pump system to use R-32 refrigerant was introduced by Daikin in Autumn 2013: the new Ururu Sarara range.



## Always in control, no matter where you are

Daikin heatpumps can be controlled from a distance by an online controller which allows you to set and even schedule the temperature from anywhere, using your smartphone, laptop, PC, tablet or touch screen. So you can manage the unit when away from home, offering optimal climate control while saving energy. Connectable to FVXG25-50K, FVXS25-50F, FTXS35-50K, FTXZ25-50N, FTXS60-71G, FTX50-71GV and FLXS25-60B.

# Daikin leads the way... Seasonal Smart use of energy

## Challenging 20-20-20 environmental targets

The European Commission has set challenging targets for improving energy efficiency in the EU. These so-called 20-20-20 targets aim at a 20% reduction in CO<sub>2</sub> emissions, 20% share of renewable energy and a 20% reduction in the use of primary energy, all by the year 2020. To realise these objectives, Europe issued the Eco-Design Directive [2009/125/EC]. This sets minimum efficiency requirements for energy related products. Since 2013, all air conditioners and air to air heat pumps under 12 kW are in scope of this Eco-Design Directive. Since 2013, products unable to comply with the minimum efficiency requirement (such as non-inverter air conditioners) lost their CE marking and thus may no longer be sold in Europe. In 2014 the energy-performance bar was raised significantly.

## Major change: seasonal efficiency in line with real-life performance

Not only does the Eco-Design Directive systematically raise the minimum requirements with respect to environmental performance, the method used to measure this performance has also been changed to better reflect real-life conditions. Previous measurements reflected so-called nominal efficiency, a measurement of performance at one fixed outdoor temperature and with equipment running at full power. Since a cooling or heating season involves a range of outdoor temperatures (not just the one nominal temperature in the rating) and equipment is often only running at partial load, this old rating did not properly reflect actual performance.

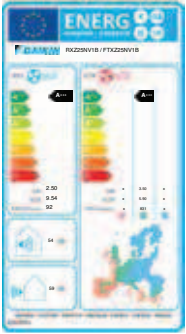
The new method, seasonal efficiency, measures heating and cooling performance across a range of outdoor temperatures that give a better representation of actual efficiency over an entire heating or cooling season. Moreover, auxiliary modes such as stand-by mode are also taken into account in the new seasonal efficiency ratings. Thus seasonal efficiency gives a much better representation of the real performance of an air conditioner, in real-life conditions, across an entire season.

Temperature		Capacity		Auxiliary modes	
<b>NOMINAL</b>	<b>SEASONAL</b>	<b>NOMINAL</b>	<b>SEASONAL</b>	<b>NOMINAL</b>	<b>SEASONAL</b>
1 Temperature condition:	Several rating temperatures	Does not reflect partial capacity	Integrates operation at <b>partial instead of full capacity</b>	Does not take auxiliary power modes into account	Includes consumption auxiliary modes:
35°C for cooling 7°C for heating	for cooling and heating, reflecting actual performance over an entire season	Benefits of inverter technology not visible	<b>Benefits of inverter technology</b> are shown		<ul style="list-style-type: none"> <li>• Thermostat off</li> <li>• Standby mode</li> <li>• OFF mode</li> <li>• Crankcase heater</li> </ul>
Does not often occur in reality					

**Nominal efficiency** gives an indication on how efficient an air conditioner is when operating in a nominal condition.

**Seasonal efficiency** gives an indication on how efficient an air conditioner is when operating over an entire cooling or heating season.

# efficiency,



## Europe's energy label: raising the bar on energy efficiency

To inform consumers concerning these new energy performance standards, Europe also introduced a new energy label. The present European energy label, introduced in 1992, has had its effect. Consumers are able to compare and make purchasing decisions based on uniform labelling criteria. The new label that came into force on 1 January 2013 allows end-users to make even better informed choices, since seasonal efficiency reflects air conditioner or heat pump efficiency over an entire season.

The energy label includes multiple classifications from A+++ to D reflected in colour shadings ranging from dark green (most energy efficient) to red (least efficient). Information on the label includes not only the seasonal efficiency ratings for heating (SCOP) and cooling (SEER), but also annual energy consumption and sound levels.

High seasonal energy efficiency: Up to **A+++**

Daikin heat pumps have excellent seasonal efficiency ratings. SCOP & SEER up to **A+++**



## Products in the spotlight

# Ururu Sarara (FTXZ-N / RXZ-N) Total comfort solution



Daikin's new **Ururu Sarara**, with its unique combination of humidification, dehumidification, ventilation and purification provides the exact room comfort you want, any time of the year, comfortable warmth in winter and refreshing coolness in summer.



reddot design award  
winner 2013

### Award winning design

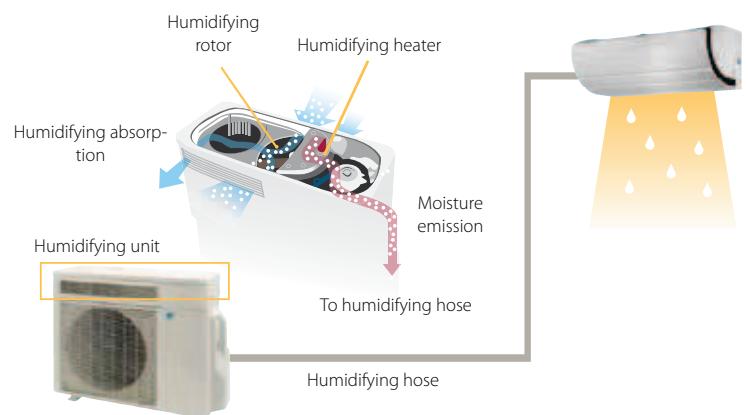
Since 1955, the internationally recognised 'RedDot Design Award' from the Design Zentrum in Essen, Germany has been awarded for outstanding product design and the Ururu Sarara was the winner in 2013!

**R-32**

## Top features

### 5 air treatment techniques in 1 system

1. Humidification, without a separate water supply
2. Dehumidification without unnecessary cooling
3. Ventilation, even with closed windows
4. Air purification, non-stop purified and allergy-free air
5. Heating and Cooling



## Lowest environmental impact

With an SEER & SCOP of A+++ on the entire range and by using a low GWP refrigerant, R32 GWP is approximately one third of R-410A GWP, Daikin Ururu Sarara delivers a lower environmental impact.

SEER + SCOP =

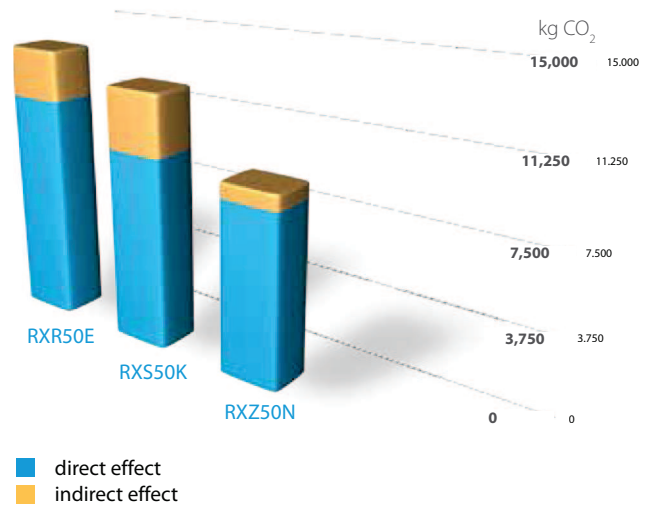


on the entire range

## Low environmental impact and high energy efficiency: the R32 story

In the pursuit of greater energy efficiency and reduced environmental impact, we are using a new refrigerant, **Difluoromethane or R-32**. Compared to the standard R-410A refrigerant, R-32 delivers a 68% reduction in environmental impact as measured by global warming potential (GWP), and when combined with the advanced technologies that we are developing, it delivers greater efficiency as well. Moreover, it is easily recycled. All in all, it delivers a lower environmental impact which leads directly to lower electricity consumption.

The highest energy efficiency, thanks to advanced energy-saving technologies like a new swing compressor, a new fan in the indoor unit, a new heat exchanger with a smaller diameter for a more energy-efficient heat exchange and a double air intake.



Notes:  
GWP according to IPCC Fourth Assessment Report 2007  
AEC based on LOT 10

## Energy saving features

- Automatic filter cleaning**  
 A brush removes dust from the air filter  
 The dust is stored in a dust box  
 Continuously cleaned filters keep the air flow rate stable and reduces power consumption by approximately 25%
- 3-area intelligent eye**  
**Energy saving:** If no movement is detected, the unit changes the set point to save energy after 20 minutes and eventually turns off completely.

## Perfect comfort



- Auto-cleaning filter**  
 No need to clean filters manually.
- Improved air flow pattern**  
 The new discharge air pattern - using the 'Coanda effect' - provides a greater airflow length, ensuring perfect comfort in every corner of your room.
- 3-area intelligent eye**  
 No cold draughts. If the 3-area intelligent eye detects people in the room, the air flow is directed away from them to a zone that is empty.

- User friendly remote control**  
 Even allows you to check actual power consumption.
- Online controller**



Always in control no matter where you are

Monitor and control the system from anywhere at anytime via an app or the internet





FTXZ-N



ARC477A1



reddot design award  
winner 2013

- › SEER + SCOP = A+++ on the entire range
- › Unique combination of humidification, dehumidification, ventilation, air purification and heating & cooling in 1 system
- › Enhanced comfort thanks to 3- area intelligent eye, improved airflow pattern and user friendly control
- › Reddot design award winner 2013
- › Online controller (optional): control your indoor unit from any location via smartphone, laptop, pc, tablet or touch screen
- › First R32 air-to-air heat pump in the European market



RXZ-N



## Heating & Cooling

Indoor unit				FTXZ25N	FTXZ35N	FTXZ50N	
Cooling capacity	Min./Nom./Max.		kW	0.6/2.5/3.9	0.6/3.5/5.3	0.6/5.0/5.8	
Heating capacity	Min./Nom./Max.		kW	0.6/3.6/7.5	0.6/5.0/9.0	0.6/6.3/9.4	
Power input	Cooling	Min./Nom./Max.	kW	0.11/0.41/0.88	0.11/0.66/1.33	0.11/1.10/1.60	
	Heating	Min./Nom./Max.	kW	0.10/0.62/2.01	0.10/1.00/2.53	0.10/1.41/2.64	
Seasonal efficiency (according to EN14825)	Cooling	Energy label		A+++			
		Pdesign		kW	2.50	3.50	5.00
		SEER			9.54	9.00	8.60
		Annual energy consumption		kWh	92	136	203
	Heating (Average climate)	Energy label		A+++			
		Pdesign		kW	3.50	4.50	5.60
		SCOP			5.90	5.73	5.50
		Annual energy consumption		kWh	831	1,100	1,427
Nominal efficiency (cooling at 35°/27° nominal load, heating at 7°/20° nominal load)	EER			6.10	5.30	4.55	
	COP			5.80	5.00	4.47	
	Annual energy consumption		kWh	205	330	550	
	Energy label		Cooling/Heating	A/A			
Casing	Colour		White				
Dimensions	Unit	HeightxWidthxDepth	mm	295x798x372			
Weight	Unit		kg	15			
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m <sup>3</sup> /min	10.7/7.5/5.3/4.0	12.1/8.4/5.6/4.0	15.0/9.2/6.6/4.6	
	Heating	High/Nom./Low/Silent operation	m <sup>3</sup> /min	11.7/8.6/6.7/4.8	13.3/9.2/6.9/4.8	14.4/10.7/7.7/5.9	
Sound power level	Cooling		dBA	54	57	60	
	Heating		dBA	56	57	59	
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	38/33/26/19	42/35/27/19	47/38/30/23	
	Heating	High/Nom./Low/Silent operation	dBA	39/35/28/19	42/36/29/19	44/38/31/24	
Piping connections	Liquid	OD	mm	6.35			
	Gas	OD	mm	9.5			
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 220-240			

Outdoor unit				RXZ25N	RXZ35N	RXZ50N
Dimensions	Unit	HeightxWidthxDepth	mm	693x795x300		
Weight	Unit		kg	50		
Fan - Air flow rate	Cooling	High/Low	m <sup>3</sup> /min	31.0/22.5	34.4/22.5	40.4/22.5
	Heating	High/Low	m <sup>3</sup> /min	28.3/16.2	31.5/16.2	33.1/16.2
Sound power level	Cooling		dBA	59	61	63
	Heating		dBA	59	61	64
Sound pressure level	Cooling	High	dBA	46	48	49
	Heating	High	dBA	46	48	50
Operation range	Cooling	Ambient	Min.~Max. °CDB	-10~43		
	Heating	Ambient	Min.~Max. °CWB	-20~18		
Refrigerant	Type/GWP			R32/650		
Piping connections	Piping length	OU - IU	Max. m	10		
	Level difference	IU - OU	Max. m	8		
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 220-240		
Current - 50Hz	Maximum fuse amps (MFA)		A	16		

(1) EER/COP according to Eurovent 2012, for use outside EU only.