

#### URURU SARARA



#### The new and unique

# Ururu Saraa

- ✓ 5 air treatment techniques in 1 system
- ✓ Lowest environmental impact
- ✓ Perfect comfort

Heating a room in winter tends to dry the air, which can lead to sore throats, colds and other ailments. During summer a high degree of humidity, even with moderate temperatures, can be very uncomfortable. To enjoy year-round comfort, you need more than just temperature control, you need control over the humidity level, combined with the supply of fresh clean air, to give you perfect comfort. 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.

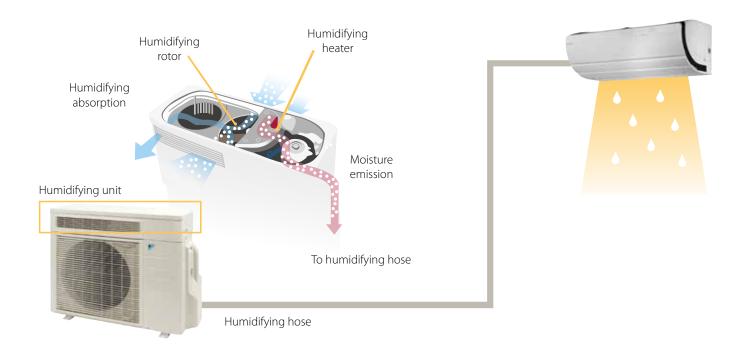


# 5 air treatment techniques in 1 system

#### 1. Ururu - humidification without a separate water supply

#### Quick and effective humidification

A unique built-in humidification element in the outdoor unit absorbs the moisture present in the outside air and sends it to the indoor unit. Since moisture is not absorbed from the room's air, quick and effective humidification is possible, even with the drier air of winter.



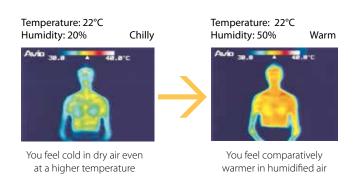
#### Ururu: heating and humidification for optimum comfort

The unit incorporates both an air conditioner and a humidifier, making ideal heating possible. The Ururu humidification subsystem supplies the 450ml/h of water required to fully humidify an entire large living room. Unlike a standard humidifier, this indoor unit has no water tank but uses moisture from the outside air. Thus there is no need for a water supply and no time-consuming cleaning. This feature also eliminates the worrisome growth of bacteria and other micro-organisms.

#### Humidified air feels warmer

Dry air actually makes your body feel cooler. Ururu humidification will leave you feeling warmer compared to increasing the heating set point. This also prevents dry skin and sore throats, and maintains a humidity level in which viruses cannot survive. In addition, optimal comfort with lower indoor temperature implies energy savings.

The thermograph shows the temperature distribution of the skin 30 min. after entry into the room



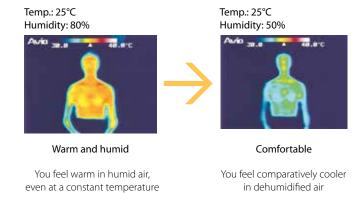
unique in the

### 2. Sarara - dehumidification without unnecessary cooling

Just as humidification has beneficial effects on comfort levels in the winter, so does dehumidification in the summer months.

#### Lower humidity creates a comfortable dryness, even at a constant temperature.

During summer, a high degree of ambient air humidity, even at moderate temperatures, can make a room feel hot and oppressive. Our unique Ururu Sarara unit reduces indoor humidity while maintaining an even room temperature. This feature prevents overcooling, which is appreciated by people who are sensitive to cold. In addition, optimal comfort, even with a lower indoor temperature, implies energy savings.



The thermograph shows the temperature distribution of the skin 30 min. after entry into the room

#### **NEW** Dehumidification technology Ekodorai

This clever technology reduces indoor humidity without affecting the room temperature by only using a part of the indoor heat exchanger.

#### 3. Ventilation – fresh air, even with closed windows

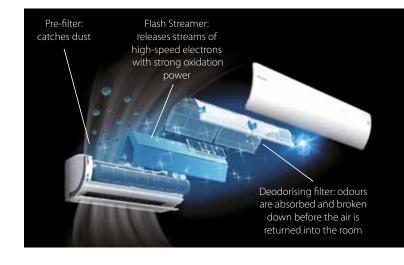
Unlike a conventional air conditioner, the Ururu Sarara brings fresh, conditioned air into the room. The Ururu Sarara is the very first residential heat pump system that – because of its powerful ventilation capacity of 32 m<sup>3</sup>/h – can fill a room of more than 26 m<sup>2</sup> with fresh air in less than two hours. Furthermore, the incoming air is brought in at the desired temperature without thermal loss.

#### 4. Air purification – non-stop purified and allergy-free air



#### Increased indoor air quality with Daikin Flash Streamer technology

The Ururu Sarara purifies the incoming air. The air is purified by passing through dust and pollen filtration before the photocatalytic air purification filter breaks down any odours such as cigarette smoke and cooking smells. In the final stage, the Flash Streamer gives the air a further treatment: it breaks down any possible remnants of formaldehyde, viruses and moulds.



#### 5. Heating and cooling

And last but not least, the Ururu Sarara not only offers the possibility of cooling in summer, it also provides very efficient heating in cold winters.



## Lowest environmental impact

#### Did you know that ...

Air-to-air heat pumps obtain 80% of their output energy from a renewable source: the ambient air, which is both free and inexhaustible. Of course, heat pumps need electricity too to run the system, but this electricity can also be generated from renewable energy sources (solar energy, wind energy, hydropower, biomass). A heat pump's efficiency is measured in SCOP (seasonal coefficient of performance) for heating and SEER (seasonal energy efficiency ratio) for cooling.



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.



#### Seasonal efficiency: raising the bar on energy efficiency

To realise its challenging 20-20-20 environmental goals, Europe has imposed minimum efficiency requirements for energy-related products. These minimum requirements came into effect on 1 January 2013, and will be revised upward in 2014.

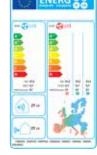
SEASONAL EFFICIENCY

Not only does the Eco-Design Directive systematically raise the minimum requirements with respect to environmental performance, but the method used to measure this performance has also been changed to reflect real-life conditions more accurately.

The new seasonal performance rating provides a much more accurate picture of the actual expected energy

Completing the picture is a new energy label for the EU. The present label, introduced in 1992 and modified since then, allows consumers to compare and make purchasing decisions based on uniform labelling criteria. The new label includes multiple classifications from A+++ to D, which are reflected in colour shadings ranging from dark green (most energy efficient) to red (least efficient). Information on the new label includes not only the new seasonal

efficiency ratings for heating (SCOP) and cooling (SEER), but also the annual energy consumption and sound levels. It allows end-users to make even better informed choices, since seasonal efficiency reflects air conditioner or heat pump efficiency over an entire season.

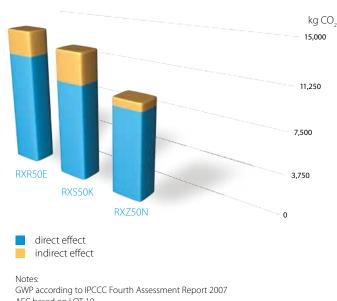


#### **NEW**

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

efficiency over an entire heating or cooling season.

In the pursuit of greater energy efficiency and reduced environmental impact, we are using a new refrigerant, Difluoromethane or R32. Compared to the standard R-410A refrigerant, R32 is easily recycled, 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. All in all, it delivers a lower environmental impact which leads directly to lower electricity consumption.



AFC based on LOT 10

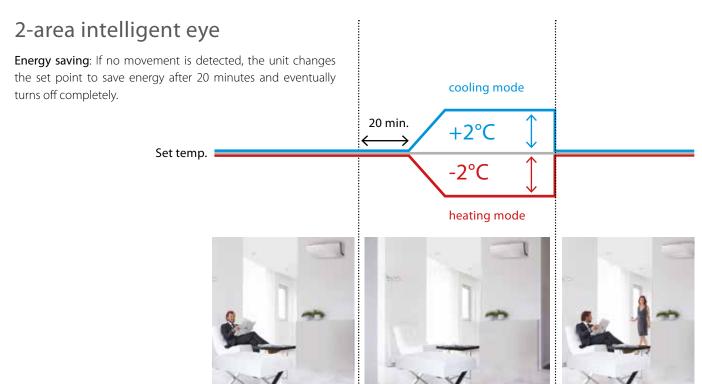
## Other energysaving features

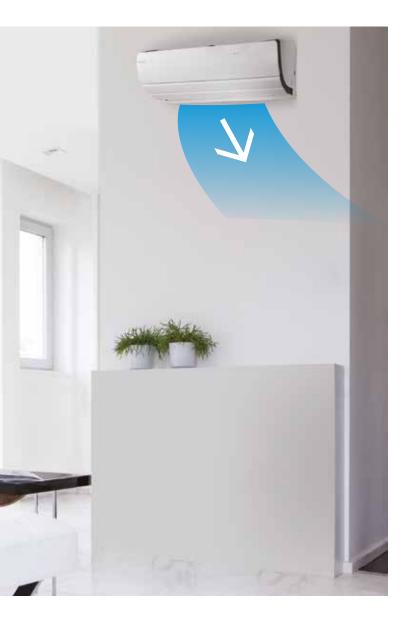
#### Automatic filter cleaning

- > No need to clean filters manually
  - A brush removes dust from the air filter
  - The dust is stored in a dust box
- Continuously cleaned filters keep the airflow rate stable and reduces power consumption by approximately 25%









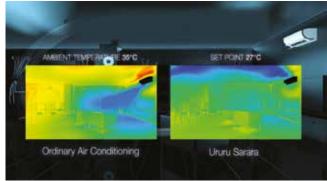
## Comfort

## 2-area intelligent eyeno draught

No cold draughts. If the 2-area intelligent eye detects people in the room, the air flow is directed away from them to a zone that is empty.

#### 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.



#### Double air intake

#### Quickly creates a comfortable and uniform temperature

Drawing in warm air at the top and cooler air from below, the unit is able to rapidly produce an outflow with an even temperature.







## Control

#### User-friendly remote controller

- > Functions most often used are located at the front of the remote controller
- > Displays indoor and outdoor temperatures and humidity
- Backlight buttons for easy operation in the dark NEW
- > Every-day timer for easy programming of your schedule
  - Start your A/C every day at the same time NEW
  - Stop your A/C every day at the same time
- > Information on your actual energy consumption



#### Always in control no matter where you are

The Ururu Sarara can be connected to an online controller (option KKRP01A) that allows you to monitor and control the system from anywhere at anytime via an app or the internet.



## 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!



red<mark>dot</mark> design award winner 2013

## Specifications

#### 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	Energy label		A+++			
	(average climate)	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	m³/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	m³/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	High	dBA	54	57	60	
	Heating	High	dBA	56	57	59	
Sound - pressure	Cooling	High/Nom./Low/Silent operation	dBA	38/33/26/19	42/35/27/19	47/38/30/23	
level	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		mm	9.5			
Power supply	Phase / Frequency / Voltage		Hz/V		1~/50/220-240		

OUTDOOR UNIT					RXZ25N	RXZ35N	RXZ50N	
Dimensions	Unit	HeightxWidthxDepth r		mm	693x795x300			
Weight	Unit	kg			50			
Fan - air-flow rate	Cooling	High/Low		m³/min	31.0/22.5	34.4/22.5	40.4/22.5	
	Heating	High/Low		m³/min	28.3/16.2	31.5/16.2	33.1/16.2	
Sound - power level	Cooling	High		dBA	59	61	63	
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 / Frequence	y / Voltag	e	Hz/V				
Current - 50Hz	Maximum fuse amps (MFA) A			Α		-		

(1) EER/COP according to Eurovent 2012

#### **Options**

INDOOR UNITS - CONTROL SYSTEMS		FTXZ25N	FTXZ35N	FTXZ50N
Wiring adapter: normal open contact / normal	mal open pulse contact	KRP413A1S (1)		
Centralised control board	Up to 5 rooms	KRC72 (2)		
Anti-theft protection for remote control		KKF936A4		
Central remote control		DCS302C51		
Unified on/off control		DCS301B51		
Schedule timer		DST301B51		
Interface adapter for DIII-net		KRP928A2S		
Online controller		KKRP01A		
External mounting kit for online controller		KKRPM01A		
Wifi power cable for online controller		KKRPW01A		
Touch LCD wall controller (3)		KBRC01A		
Simple wall controller (3)		KBRCS01A		
KNX gateway		KLIC-DD		

Notes
(1) Wiring adapter supplied by Daikin. Time clock and other devices to be purchased locally. / (2) Wiring adapter is also required for each indoor unit.
(3) Can only be used in combination with online controller KKRP01A.

OUTDOOR UNITS	RXZ25N	RXZ35N	RXZ50N
Humidifying hose L joint (10 pcs.)		KPMJ983A4L	
L-shape cuffs for humidification (10pcs)		KPMH950A4L	
Humidifying hose extension set (2m)		KPMH974A402	
Hose for humidification (10m)		KPMH942A42	



The new Ururu Sarara system combines a more efficient refrigerant with five air treatment techniques to produce a total comfort solution with extremely low environmental impact and very low energy consumption. Saving the environment and saving you money!

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