

### Air Conditioners

# **Heating & Cooling**

- » URURU humidifies without separate water supply
- SARARA
   dehumidification
   without temperature
   difference
- Powerful ventilation refreshes room in2 hours
- » Daikin Flash Streamer technology: powerful air purification







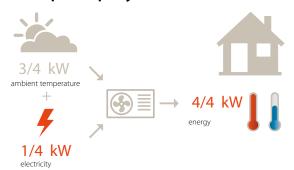


Daikin's Ururu Sarara split heat pump unit, with its unique system, can heat and cool, humidify and dehumidify, ventilate and purify the indoor air all at the same time.

Daikin's heat pumps are all-in-one heating and cooling solutions, meaning comfortably warm in winter and cool in summer. The indoor unit can be used for a pair application - one indoor unit connected to one outdoor unit.

The ideal solution for living comfort in all seasons. Perfect, just the way you like it.

# Combining highest efficiency and year-round comfort with a heat pump system



#### Did you know that ...

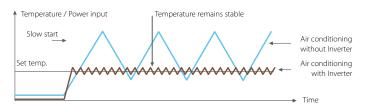
Air-to-air heat pumps obtain 75% of their output energy from a renewable source: the ambient air, which is both renewable and inexhaustible. Of course, heat pumps also require electricity to run the system, but increasingly this electricity can also be generated from renewable energy sources (solar energy, 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.

### Inverter technology

Daikin's inverter technology is a true innovation in the field of climate control. The principle is simple: inverters adjust the power used to suit the actual requirement - no more, no less! This technology provides you with two concrete benefits:

- by improving comfort. An air conditioning system with an inverter continuously adjusts its cooling and heating output to suit the temperature in the room thus improving comfort levels. The inverter reduces system start-up time enabling the required room temperature to be reached more quickly. As soon as the correct temperature is reached, the inverter ensures that it is constantly maintained.
- **Energy efficient:** Because an inverter monitors and adjusts ambient temperature whenever needed, energy consumption drops by 30% compared to a traditional on/off system! (non-inverter).

#### Heating operation:



# Seasonal efficiency: raising the bar on energy efficiency

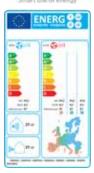
To realise its challenging 20-20-20 environmental goals, Europe is imposing minimum efficiency requirements for energy related projects. These minimum requirements come into effect on 1 January 2013, and will be revised upward in subsequent years.

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. The new seasonal performance rating provides a much more accurate picture of actual expected energy efficiency over an entire heating or cooling season.

Completing the picture is a new energy label for EU. The present label, introduced in 1992 and modified in the meantime, allows consumers to compare and make purchasing decisions based on uniform labelling criteria. The new label includes multiple classifications from A+++ to G 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 annual energy consumption and sound levels. It will allow end-users to make even better informed choices, since seasonal efficiency reflects air conditioner or heat pump efficiency over an entire season.



SEASONAL EFFICIENCY



# 5 air treatment techniques in 1 system

#### 1. Humidification, even during heating

For humidification, called 'Ururu' in Japanese, no water reservoir is needed. Moisture is absorbed from the outdoor unit and streams into the indoor unit where it is evenly distributed throughout the room. The advantages of humidity are preventing sore throats, dry skin and making the human body feel warmer, even at lower temperatures, thus reducing heating demand and energy consumption.



#### 2. Dehumidification,

#### without a drop in temperature

Dehumidification, or 'Sarara' in Japanese, reduces indoor humidity, without affecting the room temperature, by mixing cool, dry air with warm air. So no hot and stuffy rooms any more!



# 3. Improved indoor air quality thanks to Daikin's flash streamer technology



Exhaust gases and unpleasant odours are removed via the outdoor unit. Afterwards

the indoor unit purifies the air from dust, pollen, cigarette smoke and cooking odours. It also breaks down viruses and moulds.

#### 4. Ventilation,

#### fresh air even with closed windows

Fresh, conditioned air is brought into the room, without cold or heat loss. The temperature of the incoming air is brought at the desired level.

#### 5. Heating & cooling

The Ururu Sarara not only offers the possibility of cooling in summer, it can also provide warmth in cold winters.

## Design & technological quality

The Ururu Sarara received the distinguished 'Good Design Award', the unique evaluation criterion for industrial design in Japan.





### For your personal comfort

Following features have been incorporated



**1. Night set mode:** saves energy, by preventing overcooling or -heating during night time



**2. Comfort mode:** prevents cold or warm air blowing directly on the body



**3. 3D air distribution:** combination of vertical and horizontal auto-swing to circulate the air evenly in large rooms or corners



**4. Whisper quiet operation:** the sound of the indoor units is that low that it can be compared to rustling leaves (down to 23 dBA for FTXR28E)



Online controller: to monitor or control your heat pump system from anywhere via app or internet.

# **Heating & Cooling**

_

INDOOR UNIT				FTXR28E	FTXR42E	FTXR50E			
Cooling capacity	Min./Nom./Max.		kW	1.55/2.8/3.6	1.55/4.2/4.60	1.55/5.0/5.50			
Heating capacity	Min./Nom./Max.		kW	1.30/3.6/5.00	1.30/5.1/5.6	1.30/6.0/6.20			
Seasonal efficiency (according to EN14825)	Cooling Energy label			В	A				
	Po	design	kW	2.80	4.20	5.00			
	SI	SEER		4.91	5.46	5.22			
	An	nual energy consumption	kWh	200	269	335			
	Heating E	Energy label		A++	A+				
		design	kW	4.00	4.90	5.60			
	climate) So	SCOP		5.08	4.50	4.27			
	An	nual energy consumption	kWh	1,101	1,523	1,834			
(cooling at 35°/27° nominal load, heating	EER			5.00	4.00	3.42			
	COP			5.14	4.32	3.97			
	Annual energy con:	sumption	kWh	280	525	730			
	Energy label Cooling/Heating			A/A					
Casing	Colour			White					
Dimensions	Unit HeightxWidthxDepth r		mm	305x890x209					
Weight	Unit kg		kg	14					
Fan - Air flow rate	Cooling High	gh/Nom./Low/Silent operation	m³/min	11.1/8.8/6.5/5.7	12.4/9.6/6.8/6.0	13.3/10.3/7.3/6.5			
	Heating High	gh/Nom./Low/Silent operation	m³/min	12.4/9.8/7.3/6.5	12.9/10.2/7.7/6.8	14.0/11.1/8.3/7.3			
Sound power level	Cooling N	om.	dBA	55	58	60			
	Heating N	om.	dBA	57	58	60			
Sound pressure level	Cooling High	gh/Nom./Low/Silent operation	dBA	39/33/26/23	42/35/27/24	44/37/29/26			
	Heating High	gh/Nom./Low/Silent operation	dBA	41/35/28/25	42/36/29/26	44/38/31/28			
connections	Liquid OD mm		mm	6.35					
	Gas OD r		mm	9.52					
	Drain OD		mm	18					
Power supply	Phase / Frequency	/ Voltage	Hz/V	1~/50/220-240					

OUTDOOR UNIT					RXR28E	RXR42E	RXR50E
Dimensions	Unit	HeightxWidthxDepth		mm	693x795x285	693x795x285	693x795x285
Weight	Unit			kg	48	48	48
Fan - Air flow rate	Cooling	Nom.		m³/min	33.8	36.2	36.2
	Heating	Nom.		m³/min	31.4	31.9	34.3
Sound power level	Cooling	Nom.		dBA	59	61	62
Sound pressure level	Cooling	Nom.		dBA	46	48	48
	Heating	Nom.		dBA	46	48	50
Operation range	Cooling	Ambient	Min.~Max.	°CDB	-10~43	-10~43	-10~43
	Heating	Ambient	Min.~Max.	°CWB	-20~18	-20~18	-20~18
Refrigerant	Type/GWP				R-410A/1,975	R-410A/1,975	R-410A/1,975
Piping connections	Piping length	OU - IU	Max.	m	10	10	10
	Level difference	IU - OU	Max.	m	8	8	8
Power supply	Phase / Frequency / Voltage			Hz/V	1~/50/220-240	1~/50/220-240	1~/50/220-240
Current - 50Hz	Maximum fuse amps (MFA)			Α	16	16	16

<sup>(1)</sup> EER/COP according to Eurovent 2012







Infrared remote control



Outdoor unit RXR28,42,50E



Dalkin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Dalkin has been the environment in this challenge demands the eco design and development of a wide range of products and an envery management system, resulting in energy conservation and a reduction of waste.

FSC

Dalkin products are distributed by:

Dalkin products are dist









