

# Shirokuma

When power goes hand in hand with comfort



## Motion sensor

Technology that saves you money – with a motion sensor to continuously analyze the presence of people in the room.

If there is no detection after 20 min, the setpoint is shifted by one degree; after 40 min it shifts one degree again. (Fig. 1)

## 4-Way Swing

Because the blades move both vertically and horizontally, the air is distributed more uniformly, improving the level of comfort in the room. (Fig. 2)

## Low noise level

Our Shirokuma indoor units were designed to work at low noise levels from 20dB(A), to keep them completely discreet.

## Constant Power technology

The CONSTANT POWER solution has been specially developed by HITACHI.

It improves the performance of your heat pump and maintains its heating power down to an outside temperature of  $-15^{\circ}\text{C}$  and ensures heating down to  $-20^{\circ}\text{C}$ . (Fig. 3)

## Double fan blade

For a pleasant and improved air flow in the living room, the Shirokuma unit is equipped with a double fan blade. This double blade discreetly ensures a comfortable flow of air, avoiding the unpleasantness of a 'swinging fan'.

## FrostWash technology

The Shirokuma is designed to offer you effective air purification throughout the year with its exclusive and innovative functionality: FrostWash. Automatically and regularly cleans the heat exchanger to emit pure, clean air.

## Ultra performance filtration

STAINLESS prefilters and Active Carbon filters as standard. The Active Carbon filter with silver ions (known for their antibacterial properties) acts by adsorption. This retains certain gas molecules or suspended particles on the surface of the filter. The air that comes out of the filter is then free of odors and pollutants.

Fig. 1

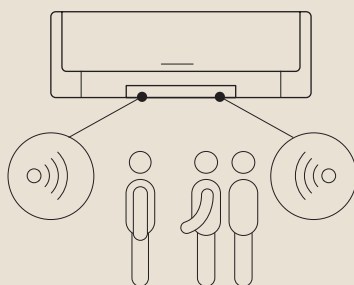


Fig. 2

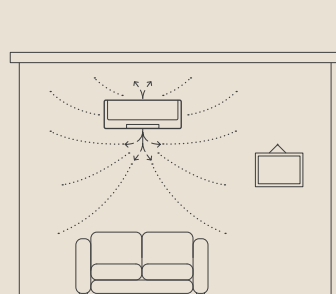
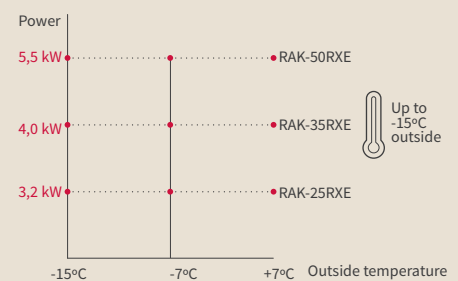
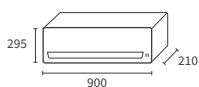


Fig. 3

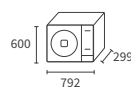


### Indoor units

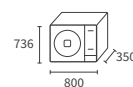


RAK-25RXE  
RAK-35RXE  
RAK-50RXE

### Outdoor units



RAC-25WXE  
RAC-35WXE



RAC-50WXE

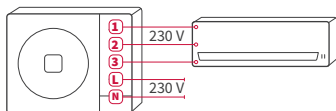
Performance, cooling	Unit	2.5 kW	3.5 kW	5.0 kW
Nominal cooling capacity (min-max)	kW	2.50 (0.90 - 3.10)	3.50 (0.90 - 4.00)	5.00 (1.90 - 5.20)
UK cooling capacity (UK sensible)	kW	2.38 (2.09)	3.33(2.70)	4.76 (3.50)
Rated power input Cooling (min-max)	kW	0.481 (0.25 - 1.00)	0.814 (0.25 - 1.40)	1.397 (0.50 - 2.10)
EER	-	5.20	4.30	3.58
Energy class Cooling	-	A+++		A++
SEER (average climate)	-	8.50	8.70	7.50
Working range in Cooling	°C	-10°C /+ 43°C		
Performance, heating				
Nominal heating capacity (min-max)	kW	3.20 (0.90 - 4.20)	4.00 (0.90 - 4.80)	5.80 (2.2 - 7.00)
Heating capacity at -7°C <sup>(1)</sup>	kW	3.20	4.00	5.50
Rated power input Heating (min-max)	kW	0.593 (0.25 - 1.20)	0.800 (0.25 - 1.60)	1.415 (0.50 - 2.70)
COP	-	5.40	5.00	4.10
Energy class Heating	-	A+++		A++
SCOP (average climate)	-	5.20		4.70
Working range in Heating	°C	-20°C /+ 21°C		
Indoor units	Unit	RAK-25RXE	RAK-35RXE	RAK-50RXE
Sound pressure in Cooling mode (EL / L / M / H) <sup>(2)</sup>	dB(A)	20 / 27 / 35 / 43	22 / 29 / 37 / 45	25 / 31 / 39 / 47
Sound pressure in Heating mode (EL / L / M / H) <sup>(2)</sup>	dB(A)	20 / 28 / 36 / 43	22 / 30 / 37 / 45	25 / 31 / 39 / 48
Sound power in Cooling mode	dB(A)	58	60	
Airflow in Cooling mode (EL / L / M / H)	m <sup>3</sup> /h	300 / 330 / 510 / 600	320 / 340 / 520 / 660	350 / 400 / 580 / 720
Dehumidification	l/h	1.4	1.6	2
Dimensions (H x L x D)	mm	295 x 900 x 210		
Net weight	kg	11		
Remote control	-	Weekly infrared (included)		
Outdoor units	Unit	RAC-25WXE	RAC-35WXE	RAC-50WXE
Sound pressure in Cooling mode <sup>(2)</sup>	dB(A)	47	48	51
Sound power in Cooling mode	dB(A)	61	62	65
Airflow (Cooling / Heating)	m <sup>3</sup> /h	1860 / 1620	1920 / 1620	2160 / 2160
Dimensions (H x L x D)	mm	600 x 792 x 299		
Net weight	kg	37.5		
Compressor	-	Rotary		
				2-cylinder rotary
Refrigeration characteristics				
Diameter of pipes (Liq / Gas)	inches	1/4" / 3/8"		1/4" / 1/2"
Initial refrigerant charge	kg	0.98		1.3
Pre-charged for	m	20		30
Min. length	m	3		
Max. length / Additional charge	m/g/m	20 /-		30 /-
Max. level difference (outdoor unit above / outdoor unit below)	m	10 / 10		
Refrigerant	-	R32		
Electrical features				
Power supply	V/Ph/Hz	230V / 1Ph / 50Hz		
Operating current (Cooling / Heating)	A	1.09 - 4.35 / 1.09 - 5.22	1.09 - 6.09 / 1.09 - 6.96	2.17 - 9.13 / 2.17 - 11.74
Recommended fuse size	A	25	25	25
Cable width (EN 60 335-1) <sup>(3)</sup>	mm <sup>2</sup>	1.50 x 2 + E		2.50 x 2 + E
Indoor/outdoor connection (shielded)	mm <sup>2</sup>	1.50 x 3 + E		2.50 x 3 + E

<sup>(1)</sup> Data includes defrosting. To find out the data for your project, refer to our technical catalogues.

<sup>(2)</sup> Sound pressure measurements were made 1 meter from the unit without obstructions (see the technical catalogue).

<sup>(3)</sup> Data shown is for indication purpose only. It is the installer's responsibility to ensure that these cable widths meet the needs of the facility and current standards.

Indoor units are powered at 220-230 V from the outdoor unit.



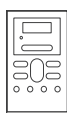
## Controls and compatible accessories (see page 161)



Infrared remote control

RAR-6NE1

Included



Wired standard remote control

SPX-RCDB1



Wired programmable remote control

SPX-WKT4



H-link box

PSC-6RAD

Other (price excluding taxes):

- Control box for multi-indoor units  
SPX-DST1 + SPX-WDST8M

- interface airCloud Home SPX-WFG02

- Hi-Box AHP-SMB-01

- Hi Kumo interface for Hi-Box SPX-TAG01

- Single dry contact kit SPX-WDC3

- Single error report kit SPX-WDC7 + HA-S100TSA