

# R32 Light commercial ducted unit



The discrete and high-performance high-end solution



## Condensate pump included

So you don't have to worry about adding more expense to the installation, the ducted unit incorporates its own pumps to automatically remove condensation. (Fig. 1)

## Static high pressure

The ducted has a pressure of 150 Pa so you can install it just where you want it and the user does not have to worry about enough air getting to the furthest room.

## Flexible installation

With a 30 m long pipe run between the indoor unit and the outdoor unit, this indoor unit can be installed in any part of the building. What's more, the level difference between the two can be up to 20 m.

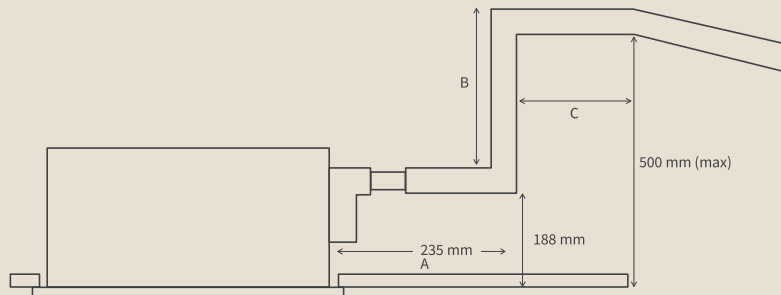
## Compatible with the airCloud for Home remote controller

In the app, you can turn the system on and off, turn the temperature up or down and program the system from anywhere in the world. All you need is a mobile phone, an Internet connection and Wi-Fi equipment (optional) to connect to the equipment.

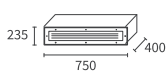
## Compatible with Airzone

With a single ducted unit, the user can control up to 6 rooms separately thanks to Airzone motorized plenums that fit directly onto the Hitachi units. This level of compatibility means you are free to use the full range of Airzone air regulation of Airzone products.

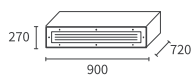
Fig. 1



### Indoor units



RAD-25RPE  
RAD-35RPE

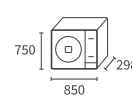
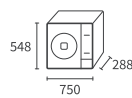


RAD-50RPE  
RAD-60RPE  
RAD-70PPD

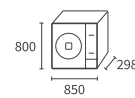
### Outdoor units



RAC-25NPE  
RAC-35NPE



RAC-50NPE  
RAC-60NPE



RAC-70NPD

Performance, cooling	Unit	2.5 kW	3.5 kW	5.0 kW	6.0 kW	7.0 kW
Nominal cooling capacity (min-max)	kW	2.50 (0.90 - 3.00)	3.50 (0.90 - 4.00)	5.00 (1.20 - 5.80)	6.00 (1.20 - 6.50)	7.00 (1.50 - 8.00)
UK total cooling capacity (UK sensible)	kW	1.60 (1.37)	3.50 (2.44)	4.77 (3.83)	5.24 (3.69)	6.64 (5.09)
Rated power input Cooling (min-max)	kW	0.595 (0.25 - 1.29)	0.945 (0.25 - 1.46)	1.42 (0.30 - 2.50)	1.71 (0.30 - 2.60)	2.11 (0.50 - 2.70)
EER	-	4.20	3.70	3.52	3.51	3.32
Energy class Cooling	-	A++				
SEER (average climate)	-	6.20	6.50	6.20		6.10
Working range in Cooling	°C	-10°C / +46°C			-15°C / +46°C	
Performance, heating	Unit	2.5 kW	3.5 kW	5.0 kW	6.0 kW	7.0 kW
Nominal heating capacity (min-max)	kW	3.50 (0.90 - 5.50)	4.80 (0.90 - 6.60)	6.00 (1.20 - 6.80)	7.00 (1.20 - 8.00)	8.00 (1.50 - 8.50)
Heating capacity at -7°C <sup>(1)</sup>	kW	2.50	3.20	4.20	5.00	5.50
Rated power input Heating (min-max)	kW	0.875 (0.25 - 1.50)	1.260 (0.25 - 1.92)	1.57 (0.30 - 2.65)	1.84 (0.30 - 2.65)	2.20 (0.50 - 2.80)
COP	-	4.00	3.81	3.82	3.80	3.64
Energy class Heating	-	A+				
SCOP (average climate)	-	4.30			4.00	
Working range in Heating	°C	-15°C / +24°C				
Indoor units	Unit	RAD-25RPE	RAD-35RPE	RAD-50RPE	RAD-60RPE	RAD-70PPD
Sound pressure in Cooling mode (EL / L / M / H) <sup>(2)</sup>	dB(A)	30 / 33 / 37 / 41			29 / 32 / 35 / 39	
Sound pressure in Heating mode (EL / L / M / H) <sup>(2)</sup>	dB(A)	30 / 34 / 38 / 42			29 / 32 / 35 / 40	
Sound power in Cooling mode	dB(A)	57			53	
Static pressure (L / M / H)	Pa	- / - / 70			50 / 100 / 150	
Airflow in Cooling mode (EL / L / M / H)	m³/h	330 / 390 / 450 / 510			350 / 540 / 800 / 1140	
Dehumidification	l/h	1.4	1.6	2.8	4.8	
Dimensions (H x L x D)	mm	235 x 750 x 400			270 x 900 x 720	
Net weight	kg	16			35	
Condensate pump	-	Included				
Remote control	-	Not included (SPX-RCKA1 / SPX-RCDA1 / SPX-WKT4)				
Outdoor units	Unit	RAC-25NPE	RAC-35NPE	RAC-50NPE	RAC-60NPE	RAC-70NPD
Sound pressure in Cooling mode <sup>(2)</sup>	dB(A)	48			50	
Sound power in Cooling mode	dB(A)	61			65	
Airflow (Cooling / Heating)	m³/h	1920 / 1620		2160 / 2160		2700 / 2700
Dimensions (H x L x D)	mm	548 x 750 x 288			750 x 850 x 298	
Net weight	kg	32.5			50	
Compressor	-	Rotary				
Refrigeration characteristics	Unit	RAC-25NPE	RAC-35NPE	RAC-50NPE	RAC-60NPE	RAC-70NPD
Diameter of pipes (Liq / Gas)	inches	1/4" / 3/8"			1/4" / 1/2"	
Initial refrigerant charge	kg	0.86			1.50	
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			20 / 20	
Refrigerant	-	R32				
Electrical features	Unit	RAC-25NPE	RAC-35NPE	RAC-50NPE	RAC-60NPE	RAC-70NPD
Power supply	V/Ph/Hz	230V / 1Ph / 50Hz				
Max. current	A	15			20	
Recommended fuse size	A	15			20	
Cable width (EN 60 335-1) <sup>(3)</sup>	mm²	2 x 1.50 + E			2 x 2.50 + E	
Indoor/outdoor connection (shielded)	mm²	3 x 1.50 + 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 1.5 meters 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.

Part number	Description	Length	Height	Depth	Compatibility	Number of ductwork connections
PIM1SOURADNH	STANDALONE SUPPLY PLENUM M1 2XD200	720	200	300 + 50	RAD-18QPE* / RAD 25-35RPE	2 x 200
PIM1REPRADNH	STANDALONE RETURN PLENUM M1 2XD200	655	205	200 + 50	RAD-18QPE / RAD 25-35RPE	2 x 200
PIM1REPRADNHF	STANDALONE RETURN PLENUM M1 filter door 2XD200	655	205	200 + 50	RAD-18QPE / RAD 25-35RPE	2 x 200
PIM1SOURADDH	STANDALONE SUPPLY PLENUM M1 3XD200	810	225	250 + 50	RAD-50-60RPE / RAD-70PPD	3 x 200
PIM1REPRADDH	STANDALONE RETURN PLENUM M1 2XD200	820	225	200 + 50	RAD-50-60RPE / RAD-70PPD	2 x 200

\* Only available as a multi option

## Controls and compatible accessories (see page 161)



Wired programmable remote control  
SPX-WKT4



Infrared remote control  
SPX-RCKA1



Wired standard remote control  
SPX-RCDA1

Other (price excluding taxes):

- Hi-Link box – PSC-6RAD
- Control box Multi-indoor units SPX-DST1 + SPX-WDST8M
- airCloud for Home interface WIFI SPX-WFG02
- Hi-Box AHP-SMB-01
- Hi Kumo interface for Hi-Box
- SPX-TAG01
- Single dry contact kit SPX-WDC2
- SPX-RTH1 remote sensor