Cooling Capacity 2.5kW - 8.0kW

Heating Capacity 3.2kW - 9.0kW

Hitachi Inverter Wall Split Air Conditioning

Giving you complete control









The fast way to enjoy warm or cool, clean air

Imagine being able to heat or cool a room quickly, economically and effectively.

Then imagine being able to ensure that the air is virtually 100% free of allergens and bacteria.

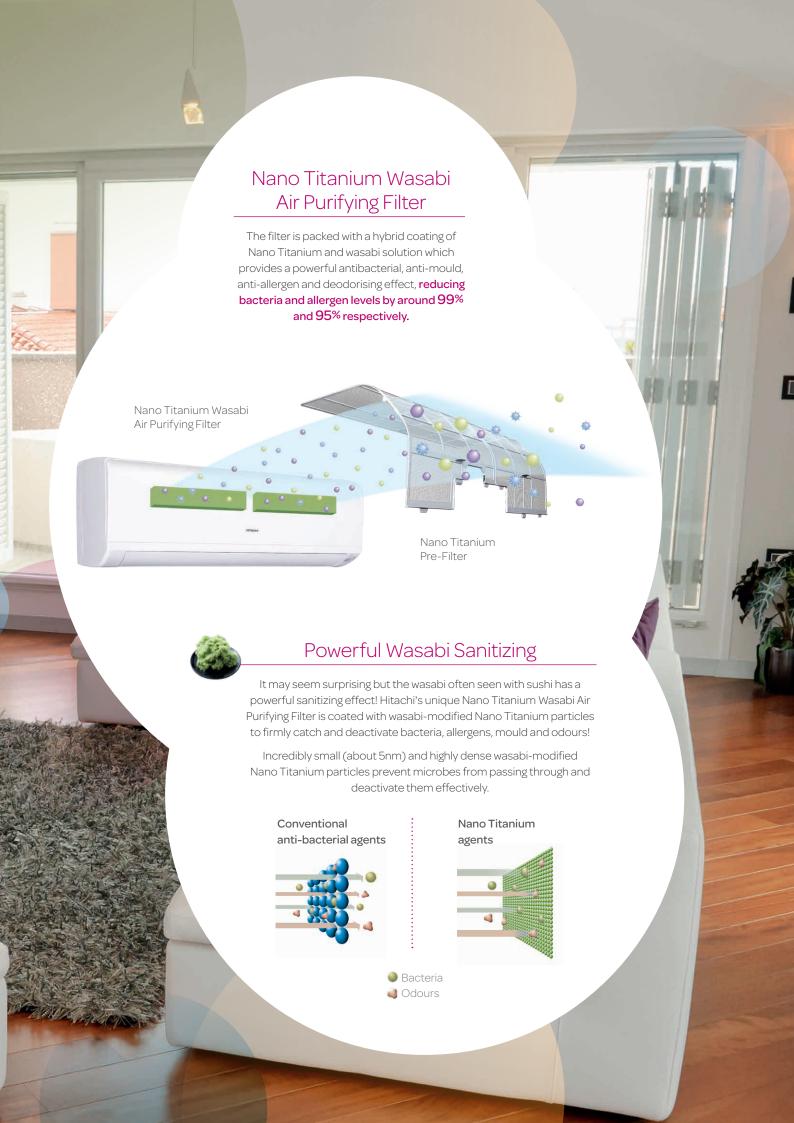
Hitachi's innovative wall split range makes it all possible.

Boasting the ability to heat or chill a space 26% faster than any non-inverter alternative, this advanced system also enables precise temperature control and energy efficiency levels 50% greater than any conventional unit.

For those demanding only the purest air quality, Hitachi's wall splits feature a nano titanium pre filter and a unique nano titanium wasabi air purifying filter which **reduces** bacteria and allergen levels by around 99% and 95% respectively.

Ranging in capacity from 2.5kW to 8kW, Hitachi's wall split range is the ideal choice for residential homes or commercial spaces.







Why a Hitachi wall split is the quiet achiever

Hitachi wall split units can exert an almost instant effect in even the most challenging of winter and summer conditions.

While their high-speed heating and cooling capacity generates warm or cool air faster, a **multi-directional auto-swing** capacity makes it possible to simultaneously direct that air to the left and the right. With all corners covered, it's easy to see why they're so much more effective than systems that can only address one side of a room at a time.

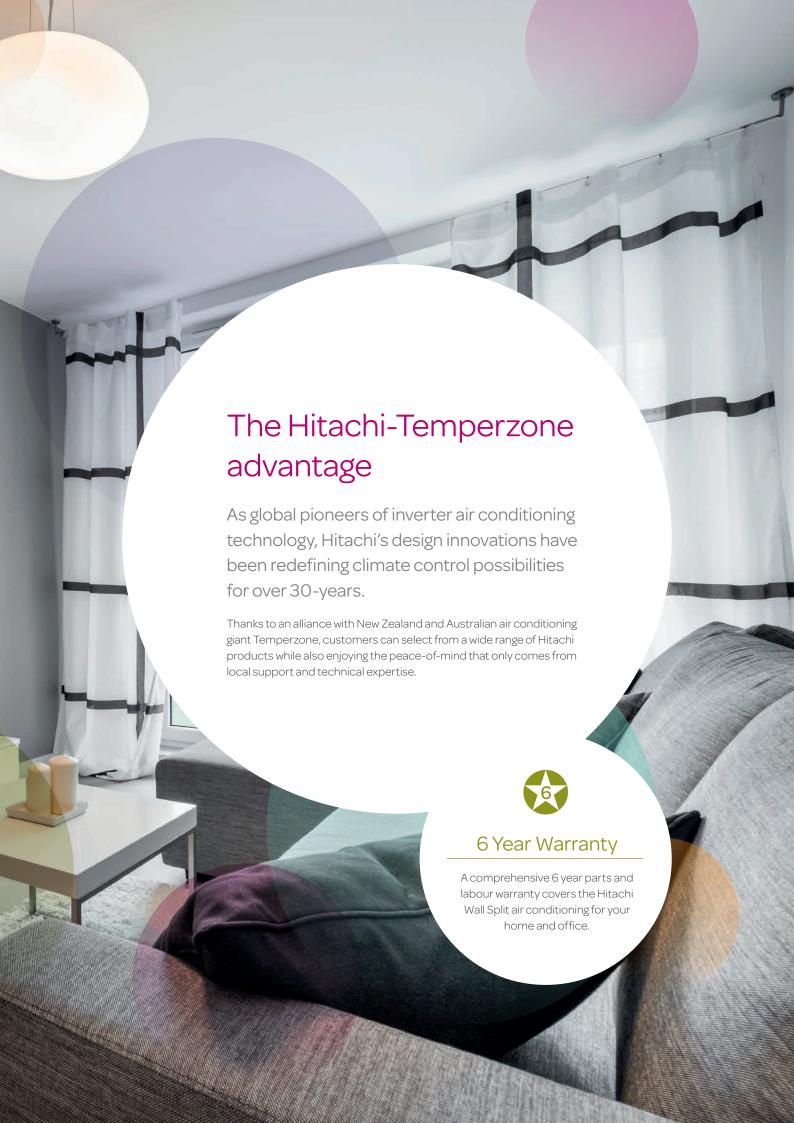
But heating and cooling speed and efficiency is only part of the story.

Thanks to the incorporation of DC fan technology within Hitachi wall split indoor units, modifications to airflow intensity are able to occur without any noticeable change in sound levels. The outdoor units are also **extremely quiet**, making them ideal for use in highly built-up areas or where neighbours are in close proximity.

Other benefits:

- Industry leading 6 year parts and labour warranty on Hitachi Wall Splits for the home and office.
- All Hitachi Heat Pumps are highly efficient Energy Star qualifiers.
- A full array of super-efficient DC technology, including motor, compressor, and outer and inner fans.
- An ECO Mode setting that enables the user to achieve significant energy savings.
- Heat pump control from anywhere with a Wi-Fi smartphone control option.

- Convenient and complete control via a user-friendly wireless controller.
- High durability, made possible by anti-corrosion and anti-dust coatings on the outer heat exchanger.
- · Ease of installation.
- Optional Remote alarm capacity, ensuring any problems can be monitored and diagnosed by an external controller.
- An optional card key 'on' and 'off' function that enables automatic deactivation once a room becomes unoccupied.







Inverter Wall Split

DC Inverter Technology

A DC compressor offers improved performance during periods of extended operation. It also features a split rotor with displaced electrical poles, enabling the suppression of electromagnetic noise. Low-speed performance characteristics have also been improved, leading to significant reductions in annual running costs.

See figure 1

Precise Inverter Control

The operating speed of the compressor's DC motor can be adjusted continuously in 1Hz increments and in free relation to the variability of system capacity.

See figure 2

Auto Restart

For even greater convenience, the Auto Restart feature prompts the air conditioner to restart at it's previous setting right after a power failure.

Low Temperature Operation

Hitachi Heat Pumps can operate in outside temperatures **down to as low as -15°C**. This should ensure you keep cosy and warm all winter.

Seamless Fan Speed Control

With the newly improved seamless fan control system, Hitachi's air conditioners assure extremely quiet and smooth fan speed changes for even more comfort. No more annoying sound and surprises from sudden fan speed changes.

Energy Star Qualifiers



All Hitachi Heat Pumps are very energy efficient and qualify for Energy Star.
Energy Star qualification is given to only the most energy efficient products.



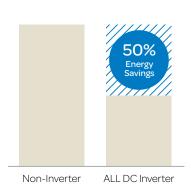
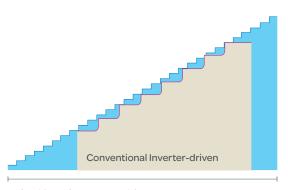


Fig 2



Hitachi precise Inverter-driven

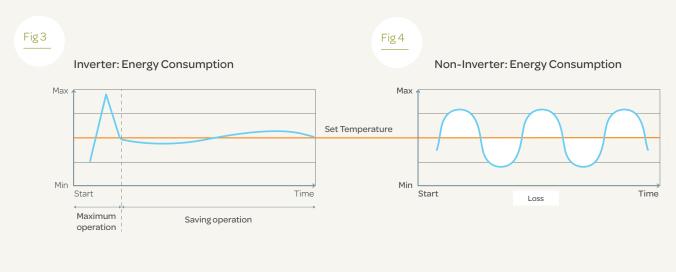
Technological advancements

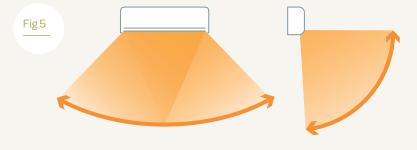
Energy savings

With intelligent inverter technology, an air conditioner will heat or cool with maximum capacity at start up, then automatically slows down to a minimum suitable capacity to maintain room temperature at a comfortable level.

Non-inverter can only operate a simple on-off control. It tries to maintain temperature by repeatedly switching power on and off, which consumes much more electricity with bigger temperature fluctuation.

See figures 3-4

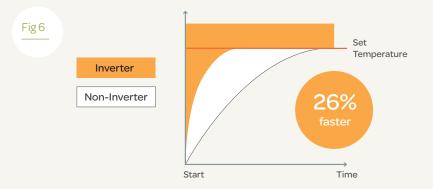




Multi-Directional Auto Swing

The louvres not only move up and down automatically, but also left and right. This action disperses air over a much wider range to warm or cool the room efficiently and evenly.

See figure 5



High Heating & Cooling Speed

Get your room heated instantly on a cold morning! With its high powered start up, Inverter heat pumps realise up to 26% faster heating compared to non-inverter types.

See figure 6



Inverter Wall Split

Quiet, Efficient, Safe

Hitachi's inverter models feature DC motors in the indoor and outdoor unit fans, as well as the compressor.

DC motors are 10% more efficient than conventional AC motors, and are also very quiet. What's more, operating at low Voltage (35V), the indoor unit offers much safer maintenance.

See figure 7

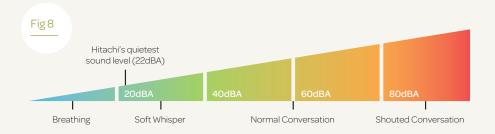
Fig 7

Comparison of motor efficiency (compared by Hitachi)



Hitachi Heat Pumps are very quiet. The quietest in our range* has a sound level of only 22dBA in it's lowest mode (that's quieter than a soft whisper). Your heat pump will operate between low and medium fan speed most of the time. This is where it's very important to be quiet and where Hitachi Heat Pumps excel.

See figure 8



*RAS-25YHA5 and RAS-35YHA6

Convenient wireless control

Complete Control

Hitachi wall-mounted units come with a choice of two wireless remote controllers, ensuring complete control from the comfort of your armchair

As well as offering the standard mode, louvre and fan speed control, Hitachi systems also incorporate an additional array of innovative features designed to make your life easier.



Std. Wireless Controller

Eco Mode

Programmed to run your system at a slightly reduced rate, Eco Mode helps keep your power consumption to a minimum.

Sleep Mode

A function that adjusts fan speed and temperature to provide comfort conditioning while you're sleeping, Sleep Mode also prevents drafts that might disrupt a good night's sleep.

See figure 9



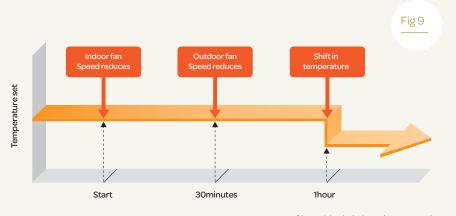
Running your system at maximum output for 20-minutes, Powerful Mode projects airflow further and faster to cool or heat a room rapidly.

Track Power Consumption*

Unwelcome power bill surprises are now a thing of the past thanks to the ability to monitor your air conditioner's power usage directly from your wireless controller.



Optional Wireless Controller



 ${\sf Sleep\,Mode\,in\,heating\,operation}$

^{*}Function only available through optional wireless remote



Inverter Wall Split

Leave Home Function*

Allowing you to preset your air conditioner to start automatically if the internal temperature drops to 10°C while you're not at home, Leave Home Function is ideal for use in locations that experience very cold conditions. It can even be instrumental in preventing formation of dampness and mould.

Weekly Timer Function*

Completely eliminating the need to manually control your air conditioner, the Weekly Timer function enables you to preset your unit to automatically turn on and off or change temperature to suit your weekly schedule. The seven-day timer function allows you to set up to six on/off time and temperature settings for each day of the week. You can even preset two seven-day schedules (mode A and B) and choose the desired schedule as required.

See figure 10

Fig 10

		Mon	Tue	Wed	Thur	Fri		Sat		Sun
6:00	0	ON/25°C	ON/25°C	ON/25°C	ON/25°C	ON/25°C	0	ON/27°C		
8:00	9	OFF	OFF	OFF	OFF	OFF				
10:00							2	ON/25°C		
12:00	3	ON/27°C	ON/27°C	ON/27°C	ON/27°C	ON/27°C				
14:00	4	OFF	OFF	OFF	OFF	OFF			0	OFF
16:00							3	ON/26°C		
18:00	6	ON/27°C	ON/27°C	ON/27°C	ON/27°C	ON/27°C	4	ON/27°C		
20:00										
22:00	6	OFF	OFF	OFF	OFF	OFF	6	OFF	2	OFF

Example of a programmed seven day schedule over Winter.

 $[\]hbox{``Function only available through optional wireless remote'}\\$

Advanced commercial control

Advanced Control Options

The perfect solution for any commercial application, Hitachi Inverter wall splits can incorporate an array of optional features for advanced control capability.

Demand Response Module (DRED)

Hitachi offer an optional DRM module for instances where local requirements specify DRED compatibility.

Wired Controllers

Wired controllers are available as an option. A Premium 7 day LCD wired controller is ideal for use in commercial or large-scale applications where a wireless controller may not be applicable. It incorporates all standard as well as advanced features including:

- ECO Mode
- One Touch Clean
- Powerful Mode
- Weekly Timer
- ECO Sleep Function
- Leave Home
- Tracking power consumption

Remote On/Off

Available as an option, remote On / Off switches the unit on or off via a remote device such as a hotel room card key.

Run Status & Alarm Signal

Available as an option, Run Status and Alarm Signal indicates when a unit is running, or if the unit has stopped due to an internal fault. This is beneficial for projects where multiple units have been installed.



Basic LCD wired controller (SPX-RCDB)

Compatible with

- · RAS/RAC 25YHA5
- · RAS/RAC35YHA6
- · RAS/RAC50-80YHA4



Premium 7 day LCD wired controller (SPX-WKT2)

Compatible with

- · RAS/RAC 25YHA5
- · RAS/RAC35YHA6
- · RAS/RAC 50-80YHA4

WiFi smartphone control

Cloud based WiFi control option

Control your Hitachi Heat Pump from anywhere with your smartphone or tablet device.

With the WiFi controller, you can remotely control your Hitachi heat pump from your smartphone or tablet.

You can turn it on or off, change mode, change temperature, adjust the fan speed and set a 7 day weekly scheduler. It's right at your finger tips – from anywhere any time.

The application allows for an unlimited number of users, and unlimited number of WiFi control devices to be connected. All connected users have real-time control and readings.

The WiFi control system is simply plug and play. Download the app, plug the WiFi control device into a power point then pair it with your home WiFi and it's all set up. The app is compatible with all Android smartphones/tablets and iPhone/iPad devices.



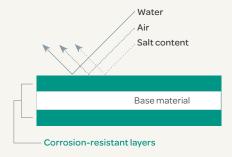


Long life durable system

Anti-Corrosion, Anti Rust

An anti-corrosion coating means the condenser lasts up to three-times longer than standard variants. Facilitating better performance and higher durability - even in the toughest of conditions.

Hitachi outdoor units are rustproof with a full coating of anti-rust paint.





Inverter Wall Split

Comparison tables

Model						
Indoor Outdoor	RAS-25YHA5 RAC-25YHA5	RAS-35YHA6 RAC-35YHA6	RAS-50YHA4 RAC-50YHA4	RAS-60YHA4 RAC-60YHA4	RAS-70YHA4 RAC-70YHA4	RAS-80YHA4 RAC-80YHA4
Capacity kW						
Nominal Cooling	2.5	3.5	5.0	6.0	7.0	8.0
Nominal Heating	3.2	4.0	6.0	7.0	8.0	9.0
Capacity (Range) kW						
Cooling	1.0 - 3.2	1.1 - 4.2	1.2 - 5.8	1.2 - 6.8	1.5 - 8.3	1.5 - 8.5
Heating	1.0 - 4.4	1.1 - 5.5	1.2 - 6.8	1.2 - 7.5	1.5 - 9.0	1.5 - 9.7
Air Flow I/sec						
Hi/Med/Lo/Sleep	153/112/83/55	158/147/92/55	227/173/117/97	270/200/145/120	280/230/170/140	350/240/225/200
Energy Efficiency						
EER / AEER Cooling	4.51/4.48	3.74/3.73	3.44/3.43	3.33/3.31	3.38/3.37	3.24/3.23
COP/ACOP Heating	4.68 / 4.65	4.11 / 4.10	4.04 / 4.02	3.85/3.83	4.18 / 4.16	3.89/3.87
Star Rating Cooling	4.00	2.50	2.00	2.00	2.00	1.50
Star Rating Heating	4.50	3.50	3.50	3.00	3.50	3.00
Noise Levels (dB(A))						
Indoor Unit						
Hi/Med/Lo/Sleep	39/32/28/22	41/35/28/22	47/39/28/24	49/41/32/29	47/42/33/30	49/45/40/36
Outdoor Unit						
Cooling/Heating	47/48	47/48	50/52	50/52	51/53	55/55
Dimensions (mm)						
Indoor (WxHxD)	780 x 280 x 218	780 x 280 x 218	900 x 300 x 230		1100 x 300 x 250	
Outdoor (WxHxD)	750 x 548 x 288	750 x 548 x 288	850 x 650 x 298	850×750×298	850 x 800 x 298	650 X 600 X 296
Weights (kg)	75.422	75 /20	10 / 45	11 / 50	15 /50	15 /50
Indoor/Outdoor	7.5 / 33	7.5 / 38	10 / 45	11/50	15/52	15/52
Operating Range	40.400	10. 1000	10: 1000	40.0		
Outdoor Op. Temp. (Cooling) Outdoor Op. Temp. (Heating)	-10 to 46 °C -15 to 21 °C					
Refrigerant Type	10 10 21 0	10 10 21 0		410A	101021	101021
Pipe Sizes (mm)	Ø9.5/Ø6.35	Ø9.5/Ø6.35	Ø12.7/Ø6.35	Ø12.7 / Ø6.35	Ø15.88/Ø6.35	Ø15.88/Ø6.35
Refrig Pipe charge (m)	20	20	30	20	30	30
Min / Max Pipe Lgth / Lift (m)	2/20/10	2/20/10	3/30/10	3/30/20	3/30/20	3/30/20
Power Supply		25	30 Volt / 50 Hz / 1 Pl	hasa		
Power Supply			30 VOIL / 50 HZ / TPI	nase		
Run Amps / Phase (A/ph.)	2.86/3.33	4.21 / 4.31	6.2 / 6.56	7.6 / 7.7	8.6/9.9	10.3 / 10.5
Cooling / Heating Power Supply To	2.00 3.33	7.21/4.31		oor Unit	0.0/ 9.9	10.5 / 10.5
Rec. Circuit Breaker (A)	15	15	16	20	20	20
Interconnecting Wire				1.5mm 3 Core + E		
<u> </u>						

^{**} Rated capacity measured in accordance with AS/NZS 3823 conditions: Cooling: Indoor 27°C db / 19°C wb: Ambient 35°C db Mains power source - AC 230V and 50Hz Heating: Indoor 20°C db: Ambient 7°C db / 6°C db



Inverter Wall Split

2.5 - 3.5kW

RAS/RAC-25YHA5 RAS/RAC-35YHA6



5.0 - 6.0kW

RAS/RAC-50YHA4 RAS/RAC-60YHA4







7.0 - 8.0kW

RAS/RAC-70YHA4 RAS/RAC-80YHA4







Standard Wireless Controller (RAR-5FA1)





Outdoor unit (RAC-50YH4)

Optional 7 Day Wireless Controller (SPX-RCKA2)





6 Year Warranty

A comprehensive 6 year parts and labour warranty covers the Hitachi Wall Split air conditioning for your home and office.*

^{*}Refer to Hitachi Warranty for full conditions.

Comparison tables

Model				
Indoor	RAF-35NXA1	RAF-50NXA1		
Outdoor	RAC-35NXA1	RAC-50NXA1		
Capacity kW				
Nominal Cooling	3.5	5.0		
Nominal Heating	4.2	6.0		
Capacity (Range) kW				
Cooling	1.1 - 4.2	1.1 - 5.2		
Heating	1.1 - 5.2	2.2-7.3		
Air Flow I/sec				
Hi/Med/Lo/Sleep	167/138/111/92	180/147/120/103		
Energy Efficiency				
EER / AEER Cooling	3.80/3.74	3.33/3.29		
COP / ACOP Heating	3.95/3.89	3.87/3.83		
Star Rating Cooling	2.50	2.00		
Star Rating Heating	3.00	3.00		
Noise Levels (dB(A))				
Indoor Unit				
Hi/Med/Lo/Sleep	42/35/29/25	46/37/30/25		
Outdoor Unit				
Cooling/Heating	47/49	52/52		
Dimensions (mm)				
Indoor (WxHxD)	760 X 600 X 235	760 X 600 X 235		
Outdoor(WxHxD)	841 X 548 X 335	887 X 600 X 345		
Weights (kg)				
Indoor/Outdoor	14/36	14 / 40		
Operating Range				
Outdoor Operating Temp. (Cooling) °C	-10 to 43 °C	-10 to 43 °C		
Outdoor Operating Temp. (Heating) °C	-15 to 21 °C	-15 to 21 °C		
Refrigerant Type	R410A	R410A		
Pipe Sizes (mm)	Ø9.5/Ø6.35	Ø12.7 / Ø6.35		
Refrig Pipe charge (m)	20	20		
Min / Max Pipe Lgth / Lift (m)	3/20/10	3/20/10		
Power				
Power Supply	230 Volt / 50 Hz / 1 Phase	230 Volt / 50 Hz / 1 Phase		
Run Amps / Phase (A/ph.)				
Cooling / Heating	4.8 / 4.9	6.2/7.0		
Power Supply To	Outdoo			
Rec. Circuit Breaker (A)	16	16		
Interconnecting Wire	1.5mm 2 Core + E	1.5mm 2 Core + E		
	Engy ?	angt ?		
Energy Star®	ENERGY STAR	ENERGY STAR		

^{**} Rated capacity measured in accordance with AS/NZS 3823 conditions: Cooling: Indoor 27°C db / 19°C wb: Ambient 35°C db Mains power source - AC 230V and 50Hz Heating: Indoor 20°C db: Ambient 7°C db / 6°C db





Inverter Floor Split

3.5 - 5.0kW

RAF/RAC-35NXA1 RAF/RAC-50NXA1



Standard Wireless Controller*

(RAR-3U1)



Outdoor unit (RAC-35NXA1)

HITACHI







6 Year Warranty

A comprehensive 6 year parts and labour warranty covers the Hitachi Wall Split air conditioning for your home and office.**

 $^{^{\}star}\, \text{Controllers and some control features differ from those featured in this brochure}.$

 $^{{\}tt **Refer to \, Hitachi \, Warranty \, for \, full \, conditions.}$



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