Power Inverter

The Mr Slim Power Inverter range is now stronger than ever. The technological developments applied to this new range of equipment offer the end user some of the highest energy efficiency ratings available, alongside greater application flexibility.

This range is available in single and 3-phase options, the latter having running currents that are more than half that of the single phase option, offering a clear benefit to business premises that already have 3-phase supply installed. All models have low starting currents of 5 amps.

Improved COP / EER Ratings - COP and EER ratings have increased across the board with the introduction of the new VHA4 and VKA/YKA models, many systems within our range now having energy labels of 'A' in both heating and cooling.

The issue of using existing R22/R407c pipe work has been resolved using Mitsubishi Electric's unique 'Replace Technology', offering the opportunity to upgrade older, less efficient systems with the minimum of cost and installation disruption.

Reducing Power Consumption by 70% - The new Mr Slim Power Inverter can reduce power consumption by up to 70% compared to a previously installed non-inverter model*1, making the energy cost savings associated with this range truly remarkable. A high power function also delivers increased capacity at times of high demand, allowing the room target temperature to be reached as rapidly as possible from start up.

Silent Operation

Operation has been made near-silent (67% quieter than corresponding R22 outdoor unit*2) as a result of improvement in the design of the fan blades and the new grille shape. The Power Inverter is even quieter at night when outside temperatures drop, as it can be set to low-noise mode (cooling only) reducing operating noise by 3dBA (50% quieter than normal day mode).

A low-noise priority function is also available by connecting a separate commercially available timer or selector switch. When a signal is received from the timer or switch, the unit automatically runs in low-noise mode.

*1 Based on the following operating conditions - Place-Office in Tokyo, Japan / Operating time-8am to 8pm, 6 days/week / Operating period-Cooling: April 16 - November 8. Heating: December 14 - March 23 / [illegible] PLH-3GKHB / PUH-3YKA. Power Inverter model is a PLA-RP71BA2 / PUHZ-RP71VHA4.

*2 When comparing the Power Inverter (PUHZ-RP71VHA4) with R22 (PUH3-VKA) in cooling.

POWER INVERTER

Highly Efficient Fan and Grille

The shapes of the fan and grille of the outdoor unit have been redesigned, realising an increase in discharge volume and a more efficient heat exchange, while maintaining the same operating noise level.

Outdoor unit fan opening increased <RP100-250>

The diameter of the fan opening in the outdoor unit has been increased from 490 to 550mm. Discharge volume has been increased, while maintaining the same fan rotation speed.

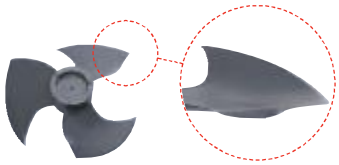
Opening increased from **490** to **550mm** in diameter

Grille shape changed <RP60-250>

The shape of the air outlet grille has been changed to reduce pressure loss. This has helped improve heat exchange performance.

Inflexed fan <RP100-250>

The adoption of a fan with improved ventilation characteristics and a newly designed rear edge that suppresses wind turbulence raises fan operation efficiency.



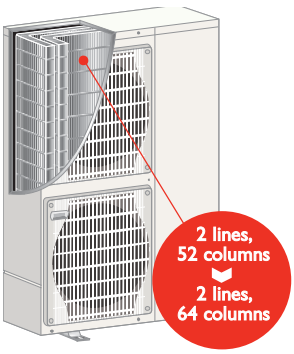
Advanced energy-saving technologies

Highly Efficient Heat Exchanger

A reduction in pipe diameter and an increase in surface area have improved the overall efficiency of the heat exchanger.

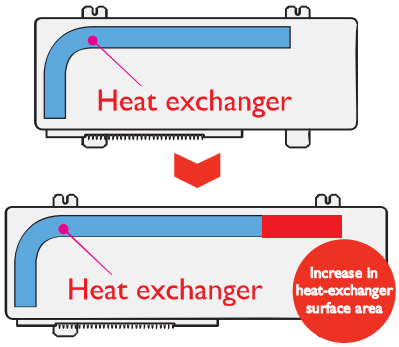
High-density heat exchanger <RP100-250>

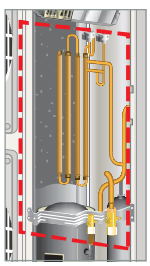
The pipe diameter for the RP100–140 has been changed from 9.52 to 7.94mm, the same diameter as that used for RP200–250 units, resulting in a high-density heat exchanger.



Heat-Exchange Surface Area Increased <RP100-250>

The heat exchanger size has been extended horizontally, increasing the surface area.





Heat Interchanger Circuit (HIC) Added <RP140>

An HIC has been added to improve energy efficiency during cooling operation. Liquid refrigerant is rerouted, transformed into a gas state and injected back into the system to increase overall pressure of the refrigerant being sent to the compressor, thereby reducing the load on the compressor and raising efficiency.