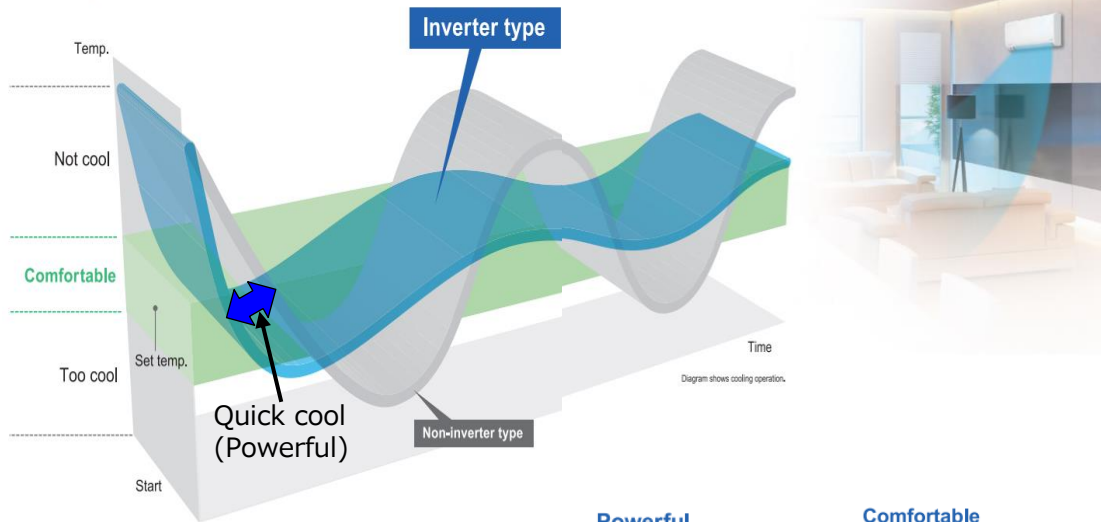


# Benefit of inverter

Q. Inverters are more expensive for about 30-40% in terms of cost than non inverter ACs. With this expensive cost, residential users are mostly not capable of buying the high cost of inverters ACs. What is the chance for manufacturers to lowering this Gap in cost from Non inverter to Inverter ACs?

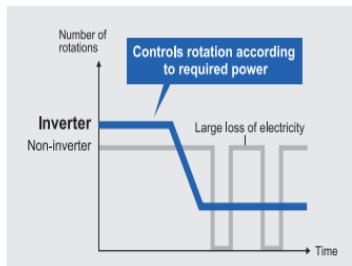
## Benefit of inverter over Non-Inverter AC

### Less Temperature Fluctuation



### More Energy-Saving than Non-Inverter

Inverters are devices which are able to vary their capacity by adjusting operating frequency. Inverter air conditioners do this by altering the power supply frequency of their compressors. In contrast, non-inverter air conditioners have a fixed capacity and can only control the indoor temperature by starting or stopping their compressors.



Inverter systems can cut energy consumption compared to non-inverter models. This helps to reduce household power bills and also lowers CO2 emissions caused by electricity generation.

### Powerful

Inverter air conditioners operate at maximum capacity as soon as they start up. This burst of increased power allows them to reach the set temperature more quickly.

### Energy-Saving

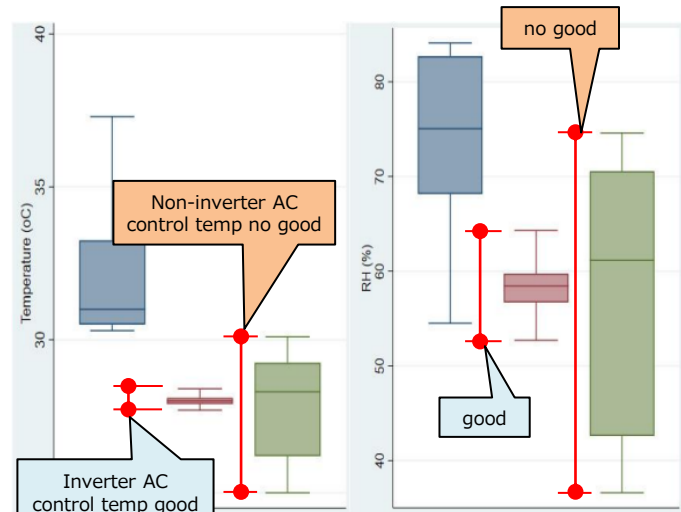
As the set temperature is reached, inverter operation adjusts to low capacity to maintain the room temperature. This precise control makes inverter models more energy-efficient than non-inverters, which must repeatedly start or stop their compressors.

### Comfortable

Inverter systems finely adjust their capacity according to the air conditioning load, minimising the difference between the set temperature and room temperature. This ensures higher comfort levels than with non-inverter systems.

## Test data Inverter vs Non inverter AC

-Inverter AC give us better temp and humidity resulting in comfort.



Test was done in Hanoi in 2022

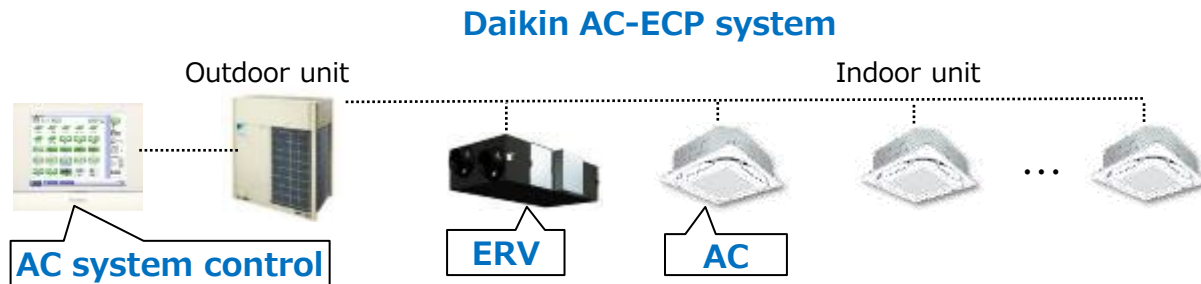
- Inverter AC
- Non-Inverter AC
- Outside condition

# Condition to control ERV with air conditioner

Q. Can I know about condition to control ERV with air condition?

## 1. Hardware wise condition

As is presented in our webinar, Daikin ERV work with Daikin AC and control system just like below. Each equipment need to work together with optimized control.



AC-ECP: Air conditioning system with excessive cooling protect

## 2.function wise condition

AC and ERV is controlled by the following parameter.

- 1) Outdoor air : Temperature, humidity
- 2) Indoor air : Temperature, humidity, CO2 concentration
- 3) AC system control: Operational rule that is set by user/maker such as below
  - lunch time off,
  - delayed ventilation start in the morning to save energy, etc