Adaptability

LOW NOISE OPERATION

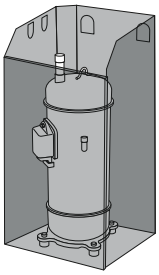
Thanks to below 2 Design Changes

Sound Power Level dB(A)

HP	8	10	12	14	16	20	22	24
Current Model	81.5	82.5	84	85.4	85.5	86	87	87
New Model	80	82	82	85	85	86	84	86

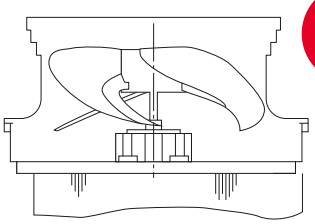
-1.5 on Average !
The performance capability has increased, but the running Sound Power Lebel (dB(A)) has decreased.

Compressor:
The model is louder than conventional models due to the utilization of a compact high-speed compressor, but it can reduce the level of the sound pressure by up to 2dB(A) due to the utilization of new pressure covers.



New Cover

Air blower:
The air blower has a new structure where it is placed above the heat exchanger, meaning that the noise on the reverse side can be suppressed.

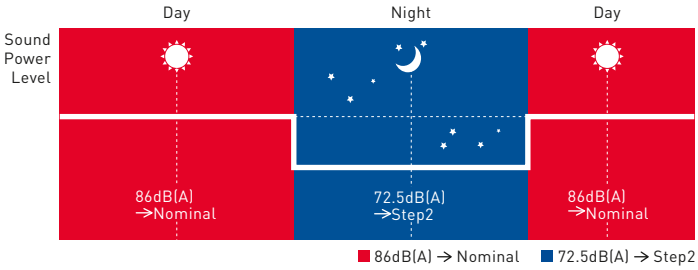


New Model

SILENT MODE

The user can set a (three-step) nighttime low-noise schedule using the control unit remote controller. The user can set a schedule for operation that takes the ambient environment into account.

Setting example



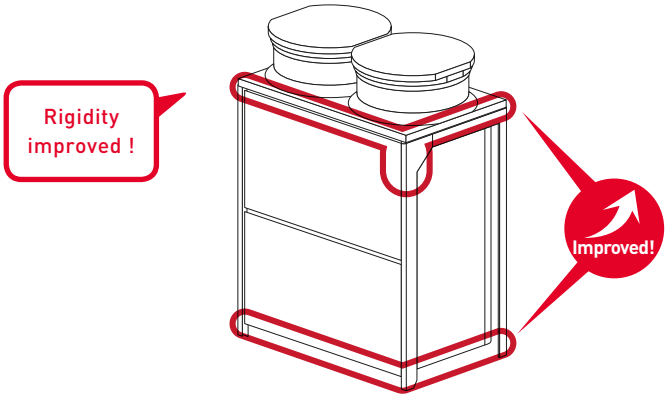
dB(A)

	18HP	42HP
Noise Reduction mode	Sound Power Level	Sound Power Level
Nominal	86	89
Step1	82.5	86
Step2	77.5	81
Step3	72.5	76

*The range of performance and operation is limited, since the rotation frequency of the compressor and ODU fan are forcibly decreased.

IMPROVED STRENGTH

Rigidity ratio (measured value) in the front and back direction : increased by 36.7%

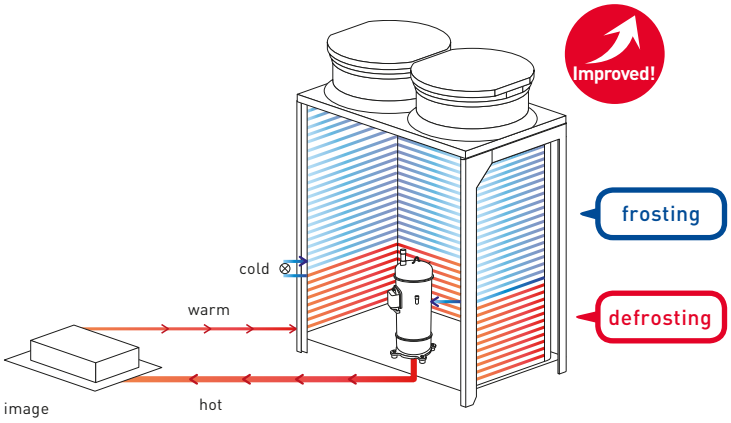


image

DEFROSTING

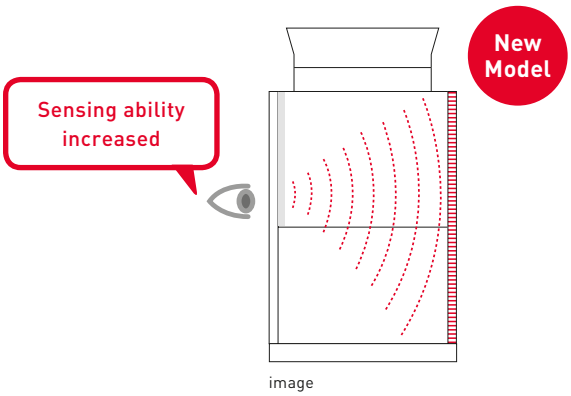
Prevention

for defrosting prevention, the model controls frost and ice formation during heating operation by running mid-temperature coolant (5°C-20°C) before decreasing the pressure through a heat exchanger to control frost and ice formation on the lower part of the outdoor heat exchanger.



Better Sensing

Even while defrosting, Hitachi's original sensing function has improved the system for detecting the frost amount.

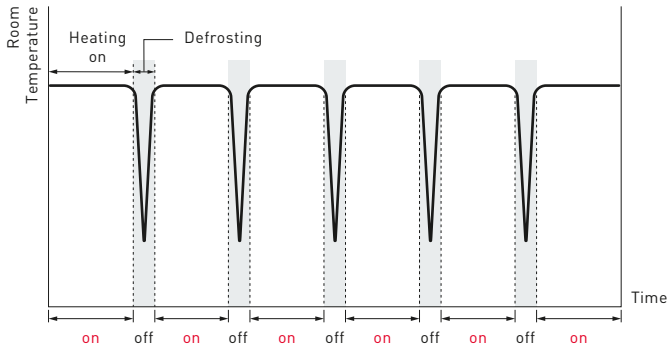


More efficient defrosting

In addition, the defrosting interval has been increased by more than 200%, from 120 minutes to 250 minutes. Undertakes defrosting more efficiently, rather than unnecessary defrosting every two hours.

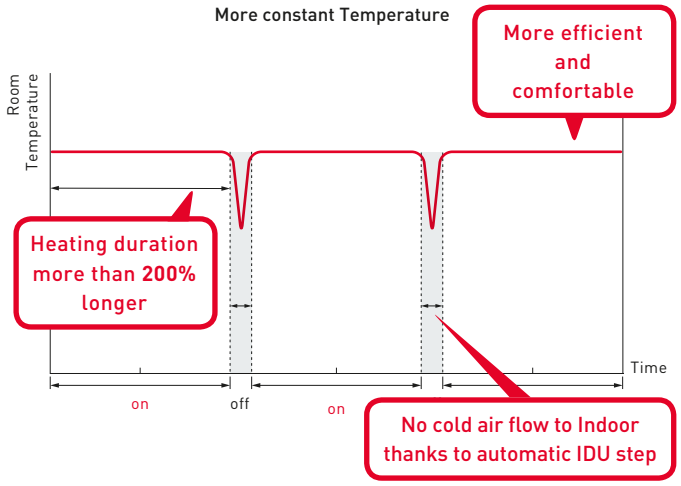
Current Model (image)

Unstable Temperature



New Model (image)

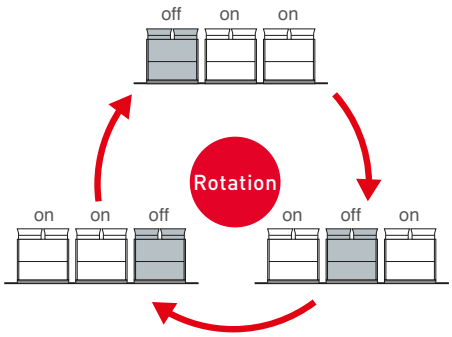
More constant Temperature



TO PREVENT FAILURE AND EMERGENCY OPERATION IN CASE OF FAILURE

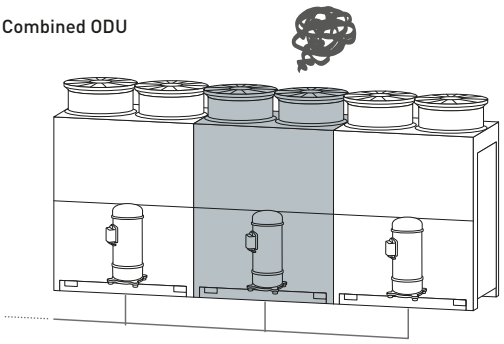
To prevent failure

Standardize the running time of the individual outdoor units and distribute the load by rotating the order of operation of the compressors of the outdoor units.



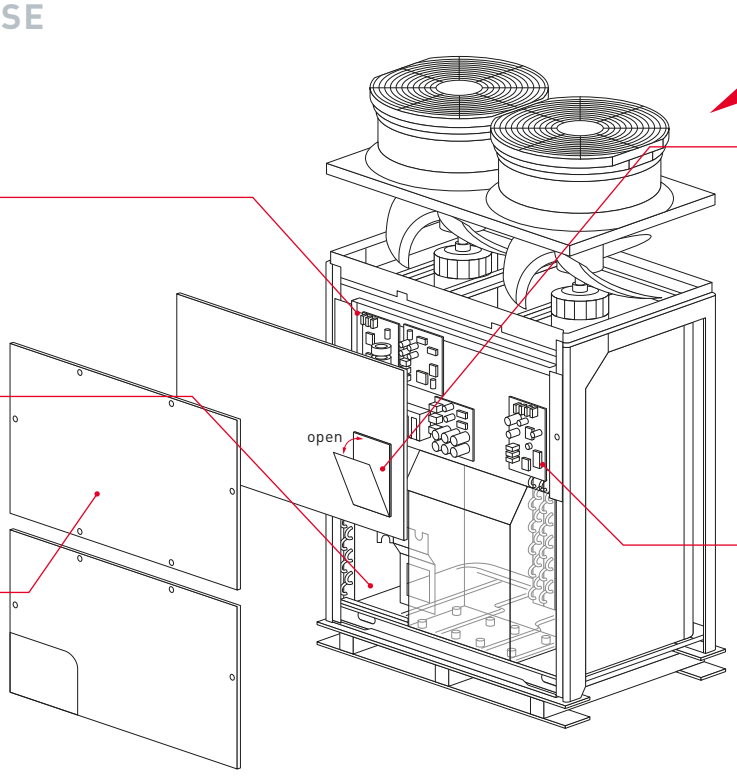
Back up function

Full introduction of backup operation function. If one outdoor unit should fail, the model can continue to operate using the remaining outdoor units, thereby preventing total system failure.



MAINTENANCE EASE

Total Structure Change



New Structure:
In upper section, all PCB visible and easily accessible

New Structure:
More Space in lower section, easy access to compressors or valves

New Panel:
The upper panel (on the side of an electric box) can be independently detached from the lower panel (on the compressor chamber side)

Newly adopted window for 7-segment display:
Adopting access door to the electrical box in the upper panel, which leads to easy access to 7-segment display, PSW & DSW and so on.

New DSW setting for Refrigerant pump-down:
Refrigerant evacuation: Enforced operation to open ODU EVO/EVB, IDU EVI, and Hi/Low pressure Bi-pass SVB