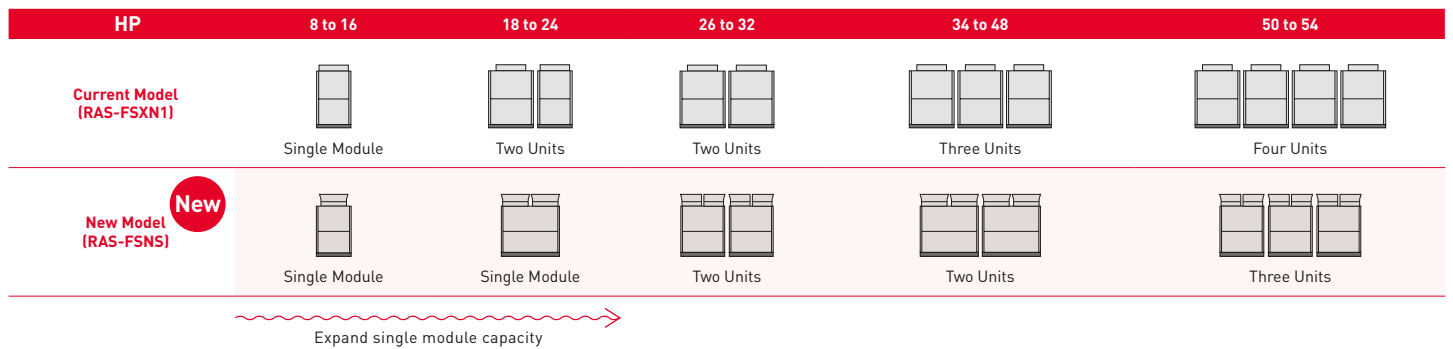


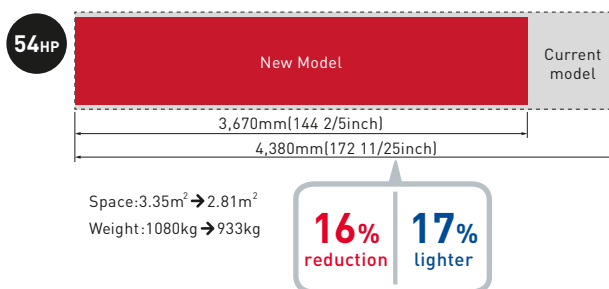
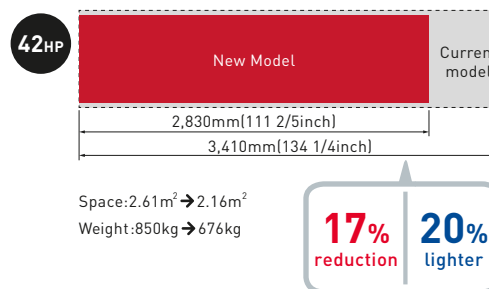
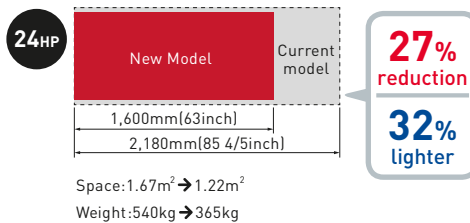
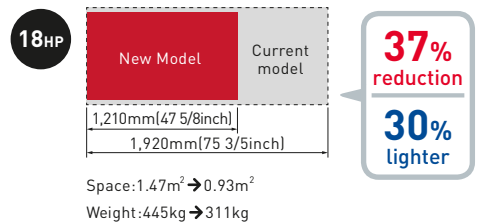
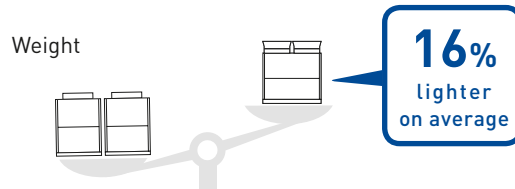
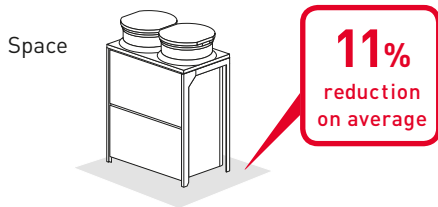
Design Flexibility

COMPACT

Combination Comparison of Outdoor Unit

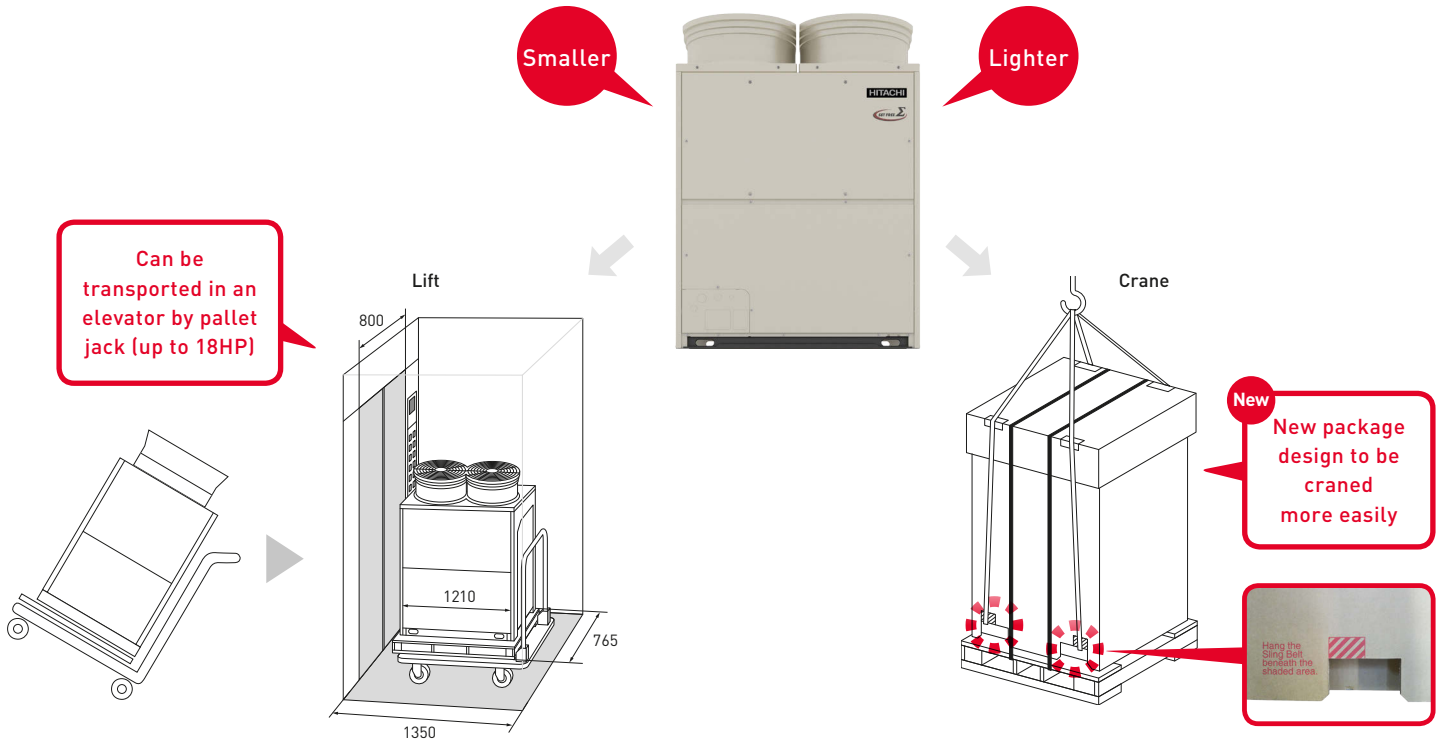


More Compact Case (Compare to Current Model)





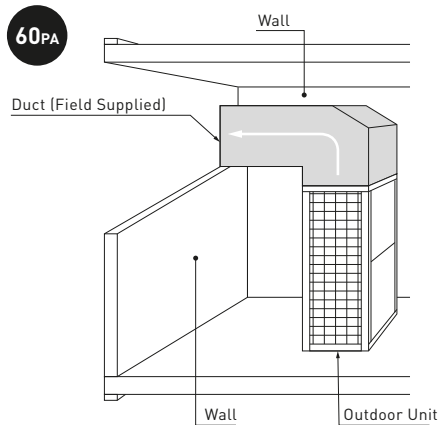
EASY TRANSPORTATION



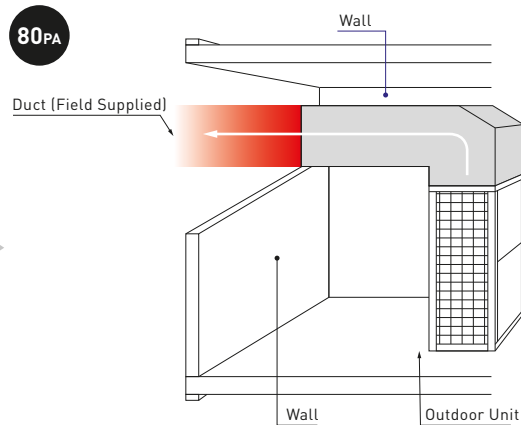
IMPROVED EXTERNAL STATIC PRESSURE

High static pressure for outdoor units: can handle up to 80Pa

Current Model



New Model



offers more options for the indoor installation of the outdoor unit

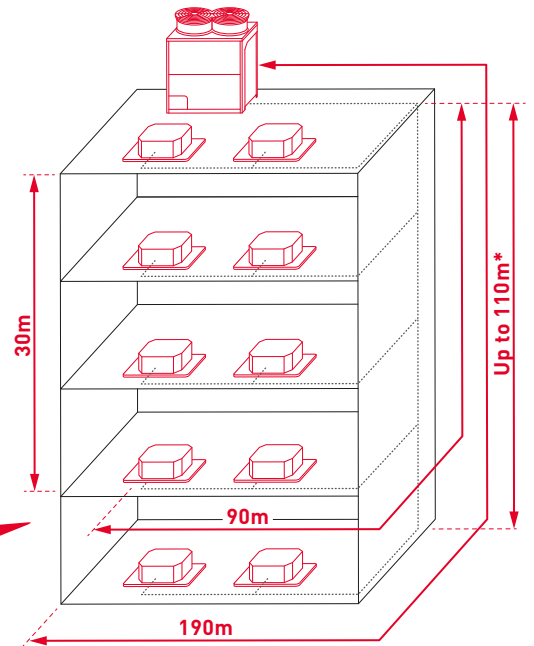
- Less piping length
- Lower installation cost
- Visual aesthetics

PIPING CONNECTION WORKABILITY

Improvement of restrictions on piping construction

Total piping length	1000m	
Longest length actual (Equivalent)	165m (190m)	
Longest length after first branch	90m	
Level difference between ODU and IDU	Higher ODU	Standard 50m Optional 110m(*)
	Lower ODU	40m
Level difference between IDUs	30m	

* Please consult your distributor or dealer if the height difference is over 50m.



- Suitable for a high-rise building or complex facilities.
- Leads to cost/time saving for designers, with more efficient design.

Piping Direction

The pipes can be installed in three directions (front, rear or bottom side) from the bottom base.

For Piping from Front cover

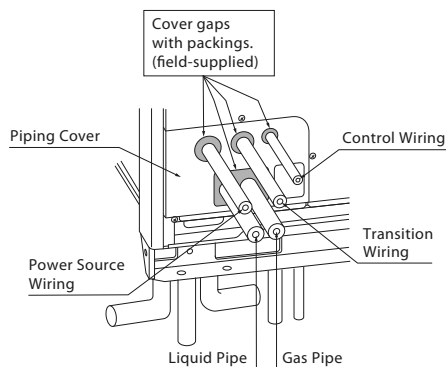


image: front

For Piping from Bottom base to Left, Right and Rear side

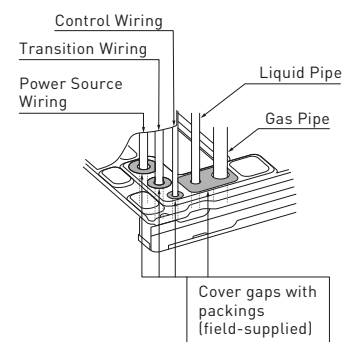


image: bottom

- For more service space in front.

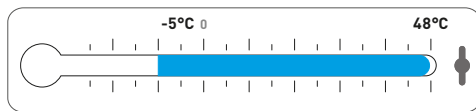


OPERATION TEMPERATURE RANGE

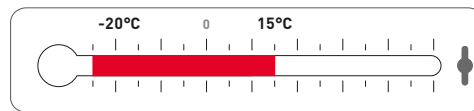
Expansion of scope of outdoor operating temperature



Cooling Capacity Range	°C DB [°F]	-5 to 48 (23 to 118)
Heating Capacity Range	°C WB [°F]	-20 to 15 (-4 to 59)



Cooling mode



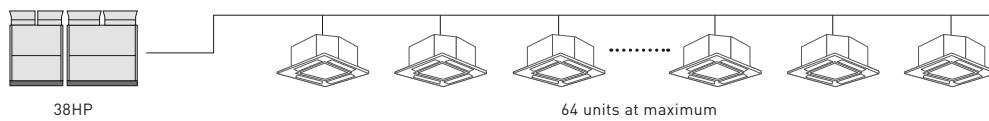
Heating mode

NOTES:

- Cooling operation at maximum 48°C DB (for standard type) and 52°C DB (for high efficiency type) should be available only if the outdoor air inlet temperature increase temporarily according to the installation condition.
- If install the units to the place where exceed ambient temperature 48°C continuously, the combination ratio must be lower 130% and not to operate all of the indoor unit simultaneously.
- The cooling capacity is deteriorated at high ambient temperature. Select the larger capacity outdoor unit than compatible building heat load.
- The appropriate amount (100%) of refrigerant must be charged. Excessive charging of refrigerant is forbidden.
- It must be avoided to install the units where affected by direct sunlight reflection and short circuit. There may be the possibility to activate protection control and alarm system if install the units to inappropriate place. Also the life time of the products and parts must be considerably shortened.
- Periodic maintenance (1/certain month) must be applied to the heat exchanger fin to avoid adhesion of dirt and clogging of sand to the outdoor unit heat exchanger.
- Refer to the technical catalog for the detail.

IDU COMBINATIONS RANGE

Expansion of number of connectable indoor units



Outdoor Unit Capacity (HP)	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38-54
Range of combination capacity	Standard Type (FSNS) : 50 to 130% (In case the combination ratio exceed 130%)															
Maximum Connectable IDU Quantity	13	16	19	23	26	26	33	36	40	43	47	50	53	56	59	64
Recommended Connectable IDU Quantity	8	10	10	16	16	16	18	20	26	26	32	32	32	32	32	38

NOTES:

- The connectable indoor unit capacity ratio can be calculated as follows.
Connectable Indoor Unit Capacity Ratio = Total Indoor Unit Capacity / Total Outdoor Unit Capacity
- For the system under which all the indoor units are supposed to operate simultaneously, the total indoor unit capacity should be less than outdoor unit capacity. Otherwise, it may cause a decrease of operating performance and operating limit in overload operation.
- For the system under which all the indoor units are not supposed to operate simultaneously, the total indoor unit capacity is available up to 130% against the outdoor unit capacity.
- When operating the outdoor unit in cold areas with temperatures of -10°C, or under the high heating load conditions, the total indoor unit capacity should be less than 100% against the outdoor unit capacity and the total piping length should be less than 300m.
- The air flow volume for indoor units of 0.8 and 1.0HP is set higher than that for indoor units of 1.5HP or more. Make sure to select appropriate indoor units when installing indoor units where cold draft may occur during heating operation. If installing indoor units in such places, refer to the recommended number of connectable indoor units.
- If combination capacity of indoor units exceed 100% of outdoor unit capacity, there might be the possibility of insufficient capacity of 130% (standard) and 150% (high efficiency) combination ratio. Refer to the technical.