30RHM-V

INVERTER MODULAR AIR-COOLED CHILLER

Turn To The Experts

Carrier is a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies.

Supported by the iconic Carrier name, the company's portfolio includes industry-leading brands such as Carrier, Kidde, Edwards, LenelS2 and Automated Logic.

Carrier's businesses enable modern life, delivering efficiency, safety, security, comfort, productivity and sustainability across a wide range of residential, commercial and industrial applications.

In 1998, Time magazine named Dr. Carrier one of its 20 most influential builders and titans ofthe 20th century.

Operate under all conditions

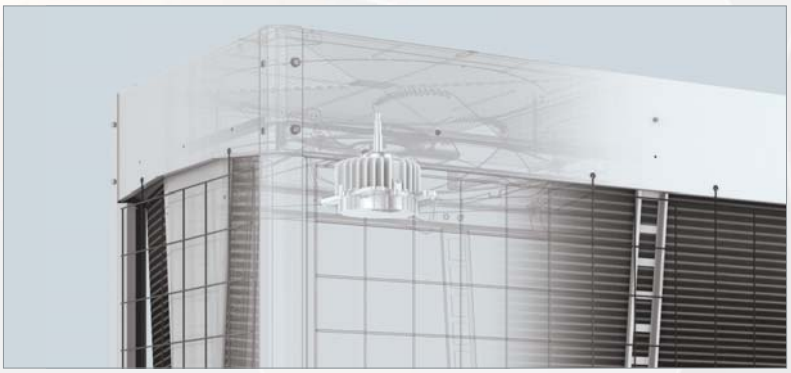
With years of experience in developing and designing process air conditioners, has successfully integrated EVI and full inverter technologies and made a breakthrough in the operation of modular units.

Operating temperature in cooling mode: -20 to +55ºC
Operating temperature in heating mode: -26 to +55ºC
Performance improved by 20% at extreme conditions

1

Dynamic control of condensation pressure

Efficient inverter fan and 15%-100% stepless capacity control to match changes in the system pressure in real time.



2

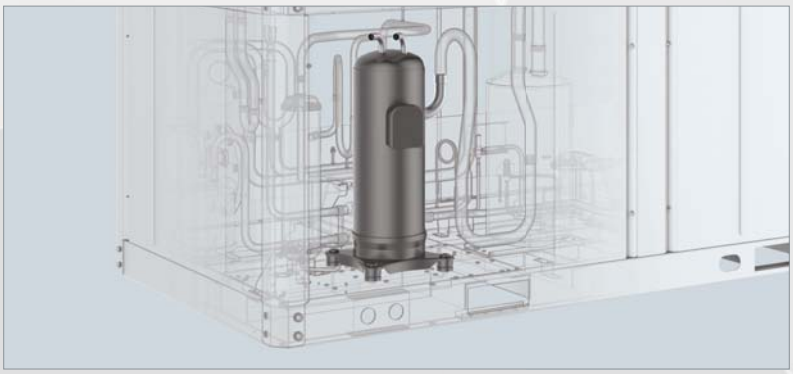
Inverter EVI technology

Inverter adjustment under partial load ensures efficient operation;
EVI technology ensures strong cold and strong heat at extreme conditions.

3

Self-developed drive control program

German stepless sine-wave permanent magnet motor driving technology provides computing at 8000 times per second and double filtering to ensure that power disruption is removed at all frequencies.



Full inverter energy saving

30RHM-V series modular units use full inverter design so that the partial load efficiency is greatly enhanced.
With patented control technology, multiple units are able to operate at the same time in a stable, efficient and balanced manner.

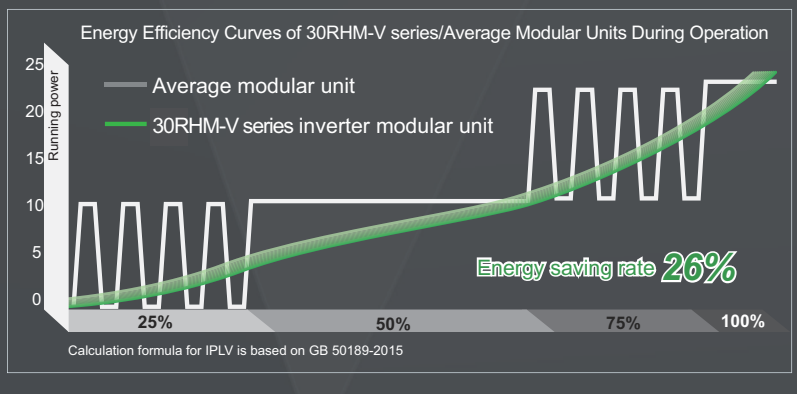
Reaching the national EEI level 1 in cooling and heating mode

IPLV is above 4.55 in cooling mode
exceeding the national EEI level 1 (4.0)

IPLV is above 3.10 in heating mode
meeting the national EEI level 1 for heating of the new national standard

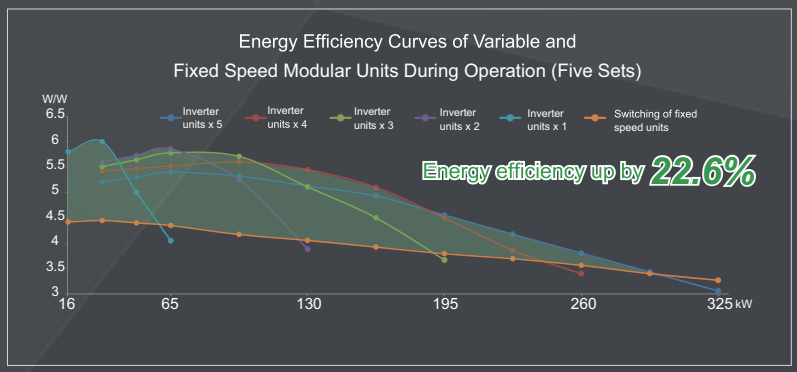
*The cooling performance complies with GB 19577-2015

*The heating performance complies with GB 37480-2019



Inverter operation and accurate output

The unit is equipped with a large-capacity inverter compressor that supports 15%-100% stepless regulation. The unit has a smooth performance curve. In addition, it performs well under partial load and the compressor does not start or stop frequently.



Balanced control to ensure energy efficiency

Partial load operation prioritized
When multiple modules are combined, the frequency of each compressor is intelligently controlled, so that the system operates in an energy-efficient area in a balanced manner.

Various application scenarios

Comfort

Silent and environmentally friendly
Extremely comfortable

The noise can be lowered by 6-10 dB(A) in silent mode
The noise can be as low as 50 dB(A) in partial load

Process

Perennial cooling
Stable operation

Operate stably in cooling mode at the ambient temperature of -20 to +55ºC
Precise control of water outlet temperature

Strong heat

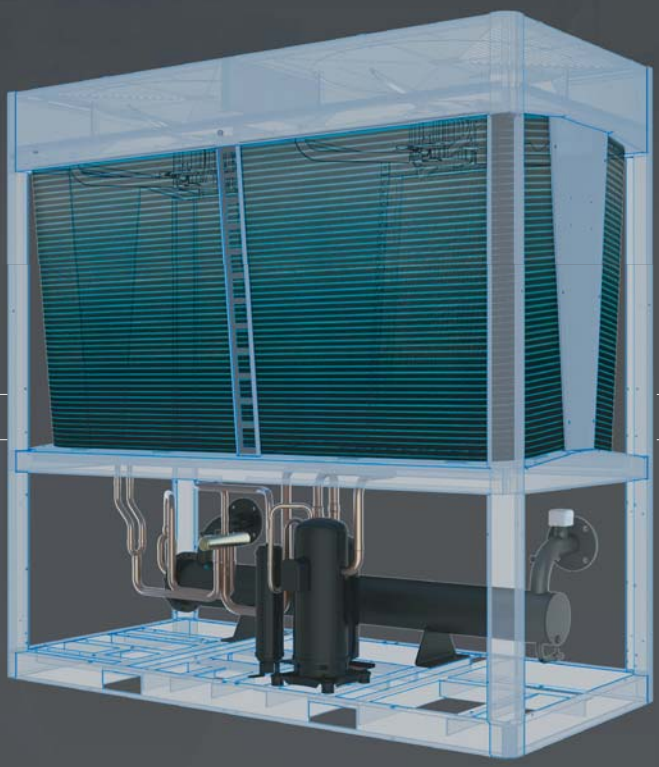
Low temperature and strong heat
EVI and enhanced efficiency

Heat at even -26ºC (water outlet temperature at 40ºC)
The water outlet temperature can reach 55ºC
(when the ambient temperature is above 0ºC)

Simple but Stunning

Concise structure

- Vulnerable parts fully concealed to facilitate installation
- Four-way air return and 45% more windward area to ensure more efficient heat exchange and reliable structure
- Carrier classical "ivory white" coated metal sheet framework



Simplified system

- Creative single compressor design featuring inverter and EVI technologies
- Optimized refrigerant pipeline to reduce welding costs

User-friendly experience

- Installation – full series compatibility of modular unit
- Usage – easy-to-use control panel (optional), one-key operation
- After-sales service – standard memory module and ten-year data management

Technical Specifications

Performance Data

Model			30RHM-V035	30RHM-V065	30RHM-V130
Nominal cooling	Cooling capacity	kW	33.5	65.0	130.0
	Power consumption	kW	12.0	21.2	41.8
	COP	W/W	2.79	3.06	3.11
Nominal heating 1	Heating capacity	kW	24.0	48.0	96.0
	Power consumption	kW	10.2	20.5	41.5
	COP	W/W	2.35	2.34	2.31
Nominal heating 2	Heating capacity	kW	34.0	75.0	150.0
	Power consumption	kW	10.5	23.4	45.0
	COP	W/W	3.24	3.20	3.33
Power supply		–	380~415V 3N-50Hz		
Water flow		m^3/h	5.76	11.2	22.4
Water resistance		kPa	30	45	45
Water inlet and outlet pipe connection type		–	DN40 external thread connection	DN65 flange connection	DN65 flange connection
Operating mode		–	Automatic operation controlled by microcomputers		
Compressor	Type	–	Scroll type DC inverter EVI		
	Qty	Set	1	1	2
Fan	Type	–	DC inverter low-noise axial flow fan		
	Air flow	m^3/h	13000	26000	47000
	Qty	Set	1	2	2
Refrigerant	Type	–	R410A		
External Dimensions (Length * Width * Height)		mm	1170x846x1694	2000×950×2020	2250×1150×2260
Weight	Net weight	kg	285	600	960
	Operating weight		300	660	1060
Noise		dB(A)	50-61	50-67	50-67
Maximum total power		kW	20	31.5	63
Maximum operating current		A	30.5	50	100

★ Notes: 1. The nominal cooling capacity and nominal cooling consumption power are tested at the rated water flow, water outlet temperature of 7°C, and outdoor dry-bulb temperature of 35°C. The nominal heating capacity 1 is tested at the rated water flow, water outlet temperature of 41°C, and outdoor dry-bulb temperature of -12°C and wet-bulb temperature of -14°C. The nominal heating capacity 2 is tested at the rated water flow, water outlet temperature of 45°C, and outdoor dry-bulb temperature of 7°C and wet-bulb temperature of 6°C.

2. About 6% loss caused by system pipelines, water pumps, valves, and dirt after unit installation shall be considered for the cooling (heating) capacity in actual applications.

3. The specifications are subject to change due to product improvement without prior notice.

4. Parameters listed in the above tables are for a single module. Up to 16 modules can be used together.

5. The control accessory box needs to be purchased separately, which contains the wired controller, wired controller communication cable, user manual, temperature sensor, etc. The box content may change. Please refer to the actual factory configurations.

Operating Range

Ambient temperature range in cooling mode	°C	-20 - 55
Ambient temperature range in heating mode	°C	-26 - 55
Cooling return water temperature	°C	10 - 25
Cooling water outlet temperature	°C	5 - 20
Heating return water temperature	°C	25 - 50
Heating water outlet temperature	°C	30 - 55

Technical Specifications

Cooling

30RHM-V035

Leaving Water Temperature °C	Ambient Temperature°C																											
	55		52		48		44		40		35		30		25		15		5		0		-5		-10		-15		-20	
	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input
5	0.21	0.48	0.36	0.77	0.48	0.89	0.77	1.04	0.92	1.12	0.96	0.99	0.98	0.92	1.03	0.88	1.02	0.75	1.08	0.72	1.08	0.72	1.09	0.70	1.02	0.66	1.09	0.66	1.15	0.67
7	0.21	0.50	0.38	0.78	0.55	0.91	0.80	1.05	0.96	1.13	1.00	1.00	1.04	0.93	1.08	0.88	1.08	0.76	1.11	0.72	1.11	0.73	1.11	0.72	1.06	0.67	1.13	0.68	1.20	0.69
9	0.23	0.52	0.41	0.78	0.61	0.94	0.83	1.05	1.00	1.13	1.06	1.01	1.09	0.94	1.14	0.89	1.13	0.76	1.14	0.72	1.14	0.73	1.14	0.73	1.11	0.68	1.18	0.70	1.24	0.72
12	0.25	0.54	0.46	0.80	0.68	0.96	0.87	1.07	1.05	1.13	1.15	1.04	1.18	0.95	1.22	0.89	1.20	0.77	1.19	0.73	1.19	0.73	1.19	0.74	1.17	0.70	1.24	0.73	1.31	0.76
15	0.28	0.57	0.54	0.82	0.75	0.99	0.92	1.08	1.11	1.14	1.23	1.07	1.26	0.96	1.30	0.90	1.28	0.78	1.23	0.73	1.23	0.74	1.23	0.75	1.24	0.72	1.31	0.76	1.38	0.80
20	0.33	0.59	0.68	0.85	0.89	1.00	1.05	1.09	1.28	1.16	1.33	1.10	1.40	0.99	1.46	0.91	1.44	0.79	1.32	0.74	1.32	0.75	1.32	0.76	1.37	0.76	1.44	0.82	1.51	0.88

30RHM-V065/130

Leaving Water Temperature °C	Ambient Temperature°C																											
	55		52		48		44		40		35		30		25		15		5		0		-5		-10		-15		-20	
	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input	Cooling	Power input
5	0.19	0.51	0.36	0.77	0.48	0.89	0.77	1.04	0.89	1.09	0.96	0.99	0.98	0.92	1.03	0.88	1.02	0.75	1.08	0.72	1.08	0.70	1.09	0.68	1.02	0.66	1.09	0.66	1.15	0.67
7	0.20	0.51	0.38	0.78	0.55	0.91	0.80	1.05	0.93	1.09	1.00	1.00	1.04	0.93	1.08	0.88	1.08	0.76	1.11	0.72	1.11	0.70	1.11	0.68	1.06	0.67	1.13	0.68	1.20	0.69
9	0.21	0.52	0.41	0.78	0.61	0.94	0.83	1.05	0.97	1.10	1.06	1.01	1.09	0.94	1.14	0.89	1.13	0.76	1.14	0.72	1.14	0.71	1.14	0.69	1.11	0.68	1.18	0.70	1.24	0.72
12	0.24	0.53	0.46	0.80	0.68	0.96	0.87	1.07	1.02	1.10	1.15	1.04	1.18	0.95	1.22	0.89	1.20	0.77	1.19	0.73	1.19	0.71	1.19	0.69	1.17	0.70	1.24	0.73	1.31	0.76
15	0.28	0.54	0.54	0.82	0.75	0.99	0.92	1.08	1.08	1.11	1.23	1.07	1.26	0.96	1.30	0.90	1.28	0.78	1.23	0.73	1.23	0.72	1.23	0.70	1.24	0.72	1.31	0.76	1.38	0.80
20	0.35	0.57	0.68	0.85	0.89	1.00	1.05	1.09	1.25	1.13	1.33	1.10	1.40	0.99	1.46	0.91	1.44	0.79	1.32	0.74	1.32	0.73	1.32	0.72	1.37	0.75	1.44	0.82	1.51	0.88

Heating

30RHM-V035

Leaving Water Temperature °C	Ambient Temperature°C																											
	-26		-20		-15		-10		-5		0		7		10		15		20		25		30		35		48		55	
	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input
30	0.47	0.77	0.59	0.83	0.71	0.87	0.79	0.86	0.90	0.86	1.00	0.81	1.05	0.81	1.18	0.83	1.19	0.86	1.18	0.75	1.17	0.63	1.26	0.61	1.36	0.62	1.44	0.56	1.50	0.58
35	0.47	0.86	0.58	0.86	0.70	0.92	0.79	0.94	0.88	0.96	0.97	0.89	1.01	0.86	1.15	0.86	1.19	0.87	1.18	0.75	1.17	0.64	1.26	0.61	1.35	0.62	1.44	0.53	1.50	0.55
40	0.46	0.97	0.58	0.92	0.69	1.03	0.79	1.05	0.89	1.07	0.96	0.97	0.99	0.91	1.14	0.95	1.19	0.99	1.15	0.87	1.10	0.75	1.19	0.72	1.27	0.73	1.28	0.64	1.34	0.65
45			0.57	1.10	0.67	1.13	0.77	1.15	0.88	1.17	0.95	1.06	1.00	1.00	1.13	1.06	1.19	1.11	1.16	0.90	1.14	0.69	1.22	0.67	1.31	0.68	1.32	0.59	1.38	0.61
50			0.56	1.27	0.64	1.29	0.76	1.28	0.87	1.28	0.93	1.16	0.95	1.10	1.12	1.16	1.19	1.23	1.13	1.02	1.07	0.80	1.16	0.78	1.24	0.79	1.24	0.77	1.30	0.79
55											0.92	1.15	0.94	1.05	1.12	1.20	1.19	1.34	1.11	1.13	1.04	0.92	1.12	0.89	1.04	0.90	1.06	0.69	1.09	0.70

30RHM-V065/130

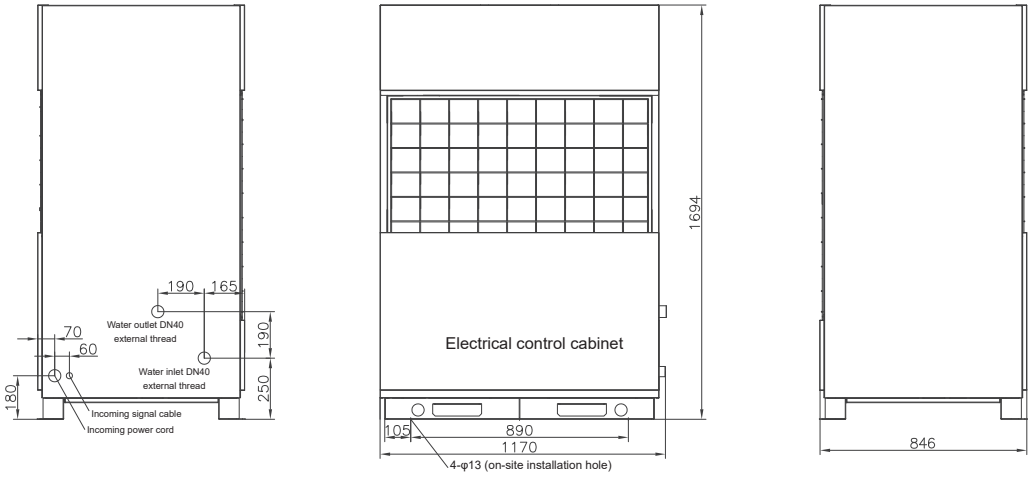
Leaving Water Temperature °C	Ambient Temperature°C																											
	-26		-20		-15		-10		-5		0		7		10		15		20		25		30		35		48		55	
	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input	Heating	Power input
30	0.42	0.68	0.52	0.71	0.60	0.72	0.67	0.74	0.79	0.76	0.90	0.78	1.01	0.79	1.08	0.79	1.09	0.78	1.09	0.71	0.87	0.49	0.94	0.47	1.01	0.48	1.07	0.44	1.09	0.44
35	0.41	0.76	0.51	0.79	0.60	0.78	0.66	0.80	0.79	0.84	0.90	0.86	1.01	0.85	1.08	0.88	1.09	0.85	1.10	0.75	0.88	0.54	0.95	0.52	1.02	0.53	1.08	0.45	1.11	0.46
40	0.41	0.83① / 0.86②	0.50① / 0.51②	0.86① / 0.86②	0.6	0.85	0.66	0.89	0.79	0.91	0.88	0.94	1.01	0.92	1.07	0.94	1.09	0.93	1.08	0.81	0.91	0.59	0.97	0.57	1.04	0.58	1.05	0.5	1.07	0.51
45			0.49	0.94① / 0.98②	0.60	0.92① / 1.05②	0.65	0.98① / 1.21②	0.78	1.02① / 1.16②	0.87	1.01	1.00	1.00	1.07	1.01	1.09	1.01	1.09	0.86	0.91	0.65	0.98	0.62	1.05	0.63	1.05	0.55	1.08	0.56
50					0.60	1.01	0.66	1.08	0.78	1.12	0.87	1.09	0.98	1.07	1.07	1.10	1.09	1.08	1.08	0.91	0.90	0.70	0.97	0.68	1.04	0.69	1.04	0.59	1.07	0.60
55											0.87	1.18① / 1.22②	0.98	1.14	1.07	1.17	1.09	1.17	1.04	0.97	0.89	0.76	0.96	0.74	0.89	0.74	1.04	0.63	1.07	0.64

Remarks:

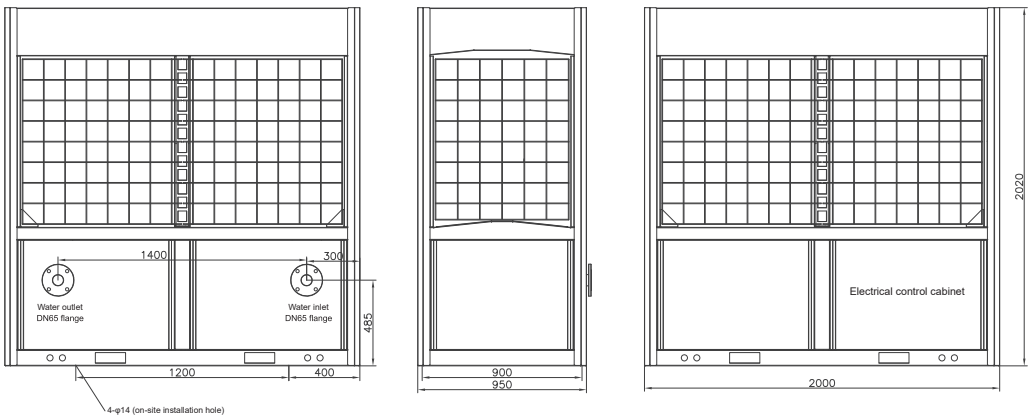
1. Heating correction factors based on Nominal Heating 2 condition
2. ① Applies for 30RHM-V065, ② Applies for 30RHM-V130

Unit Dimensions

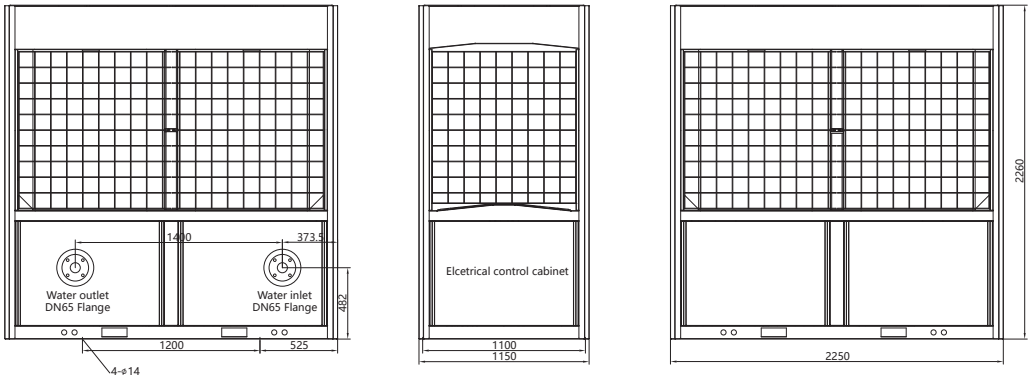
30RHM-V035



30RHM-V065



30RHM-V130



improve buildings™

Carrier improves the world around us; Carrier improves people's lives; our products and services improve building performance; our culture of improvement will not allow us to rest when it comes to the environment.

Carrier

www.carrier.co.id

Version:	Cat-30RHM-V_E20220819
Supersede:	--
Effective date:	Aug.2022
Printed date:	November, 2025