



engineered for life™



Engineered for next-level

comfort.



CENTURION

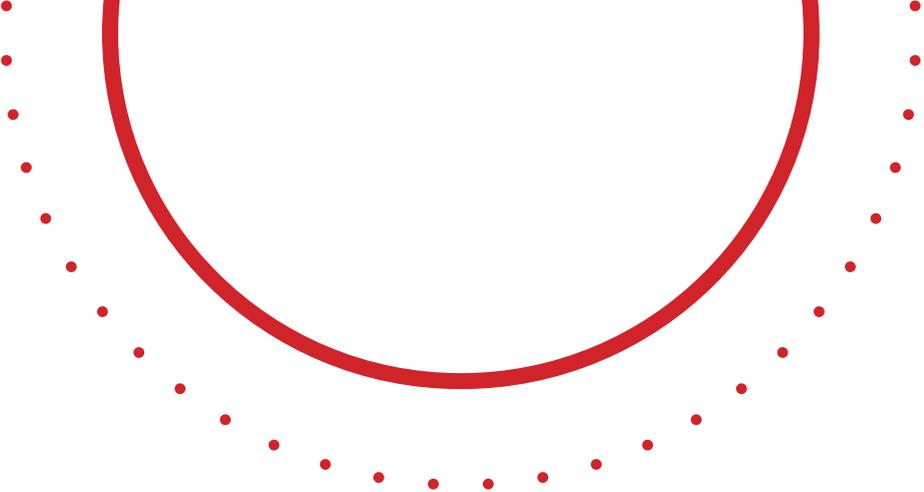


Table of Contents

About Rheem

- 04 Global Presence
- 06 Rheem's Middle East & Africa Presence
- 09 Family of Brands
- 10 Timeline
- 12 Sustainability
- 13 360+1 Philosophy

-
- 15 Features
 - 16 How Rheem Centurion Works
 - 16 Operation in Heating or Cooling Mode
 - 17 Modes of Operation
 - 17 Operation Mode Logic
 - 18 High Energy Saving
 - 18 Modes Comparison
 - 18 Hot Water Production
 - 19 Multiple Application Solution
 - 19 High Water Temperature Productions
 - 19 Low Noise Levels
 - 20 Multiple Application Solutions
 - 21 Tank Specifications
 - 22 VRF Specifications



Global Presence.

For 100 years, Rheem has pioneered innovative air conditioning and water heating solutions.

Our journey began in 1925, as a small family business based in Arkansas, USA. Since then, we have evolved into a global symbol of trust and quality within the industry, having our headquarters in Atlanta.

While the company has produced a number of products in its 100 years of operation, Rheem is currently the only manufacturer in the world that produces heating, cooling, water heating, pool and spa heating and commercial refrigeration products, and it is the largest manufacturer of water heating products in North America.

From industry-leading technologies to next-generation energy efficiencies, Rheem has been a pioneer in developing some of the most innovative advancements in heating, cooling and water heating. With a long list of award-winning solutions, Rheem continues to deliver advanced comfort, savings and experience to our customers just as we've done for nearly 100 years.

We are committed to making a difference with the products we create for the people we serve, and for the planet we call home.





11 R&D Centres

13 Rheem Business Offices

23 Manufacturing Facilities

14K+ Employees

50+ Global Air & Water Brands

88 Countries of Coverage

Middle East & Africa Regional Presence.

Rheem MEA established its Dubai office in 2012, marking a significant milestone in expanding the brand's regional presence. Since then, the Dubai office has served as the central hub for operations, sales, and customer support across the Middle East and Africa, reinforcing Rheem's commitment to delivering innovative and energy-efficient heating, cooling, and water solutions to the region.

In 2020, Rheem established its Innovation and Learning Centre (ILC) in Dubai, UAE. This cutting-edge facility serves as a dynamic platform for training, conferences, and workshops, leveraging advanced technology to provide an immersive learning experience.

HVAC and plumbing professionals, engineers, and other industry stakeholders gain first-hand insights into Rheem's extensive range of residential and commercial HVAC systems and water heating solutions.

Rheem MEA achieved a significant milestone in 2021 with the inauguration of its state-of-the-art manufacturing hub in Dubai, UAE, solidifying its presence in the GCC and enhancing its global footprint.

This advanced facility specialises in producing high-quality HVAC solutions, including packaged air conditioning systems designed to cater to diverse requirements and budgets.





Innovation & Learning
Centre in Dubai, UAE

As a testament to Rheem's commitment to excellence and sustainability, the Dubai manufacturing hub plays a pivotal role in delivering reliable, energy-efficient solutions to customers across the Middle East and Africa.

Further expanding its regional presence, Rheem inaugurated its largest ILC in Riyadh, KSA, in 2024. Serving as the company's regional headquarters, this flagship facility underscores Rheem's commitment to fostering innovation, knowledge-sharing, and excellence in the HVAC industry.

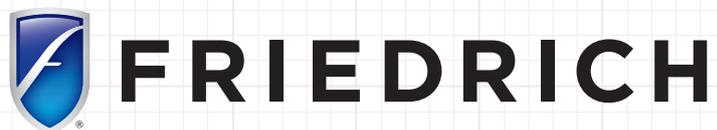
Rheem operates in more than 80 countries worldwide and has a strong presence across the Middle East and Africa, including the UAE, Saudi Arabia, Kuwait, Qatar, Bahrain, Oman, Egypt, Iraq, and Nigeria. We are also continuing to expand further into Africa, with growing operations in Morocco, South Africa, and beyond.

Our Regional Presence





Family of Brands



Timeline

1889

Edwin RUUD invents the first gas storage water heater.



1925

Brothers Richard and Donald Rheem establish Rheem Manufacturing Company.



1930-1950

Automatic gas storage water heaters are produced under the Ruud business. Rheem enters the HVAC business, advertising central heating & air conditioning systems.



2009-2010

- Rheem introduces tankless water heaters.
- Research & development (R&D) lab opens in Mexico.



2012

Established Rheem Manufacturing MEA FZE (UAE office).



2020

Opens Innovation and Learning Centre in UAE.

1970

Air conditioning headquarters open in Fort Smith, Arkansas. Water heating headquarters are established in Montgomery, Alabama.



1980-1990

- Paloma Co. Ltd of Nagoya, Japan, acquires Rheem.
- Creates the Richmond brand for Water Heating.
- Opens Nuevo Laredo (WHD).



2000-2008

- Rheem® pioneers the first gas storage water heater, originally patented by Edwin RUUD in 1890.
- Nuevo Laredo (ACD) opens.
- Rheem’s headquarters open in Atlanta.



2021

Opens new air conditioning factory in UAE.



2024

Opens the largest Rheem Innovation Learning Centre in Saudi Arabia.



2025

Celebrates 100 years of innovation.



Our Commitment to Sustainability

At Rheem, we are committed to developing products which consume fewer resources, generate less waste and ensure simpler, safer processes. These solutions are designed to dramatically cut our impact on the environment, whilst empowering both our customers and employees to work and live sustainably.



Degrees of innovation

We are focused on innovating with intent, engineering solutions with lifetime sustainability in mind — from material selection, to smart features, to responsible recycling.



Degrees of efficiency

We strive for operational excellence, working smarter and more sustainably to consume fewer resources, generate less waste and ensure simpler, safer processes.



Degrees of leadership

We hire and inspire our teams to be next-generation thinkers and responsible stewards of our industry, the greater community, and the environment.

Our 360+1 Philosophy

At Rheem, our 360+1 philosophy is at the centre of everything we do. Over the past century, we have pioneered smart solutions that meet the heating, cooling and water heating needs of contractors and homeowners alike.

We believe in delivering excellence at every angle – from design, to performance, to partnership and beyond. We delve into every detail, from top to bottom and inside out.

We continuously interrogate and evaluate the work that goes into installing and servicing our products, to ensure that we are delivering the best experience possible – and then we push it even further.

We are committed to total sustainability, reliability, comfort and control in each of our products, and we always go that extra degree to exceed the expected. This is why we're more than a provider; we're your trusted partner.



360° Performance™

Performance is not just about numbers. It's also about reliability – for today, tomorrow and for years to come. With every product we design and develop, we set out to lower energy consumption and operating costs. Our work continuously drives us towards optimal efficiency, to deliver better results for people and our planet.



360° Installability™

We continuously add innovative new features to our product line-up to make installation faster, easier and more cost-effective. This seamless approach is integral to what we do. In fact, we think this aspect of our products is so important, that we coined a new term for it: Installability™.



360° Serviceability™

We work smarter, so you don't have to work harder. Serviceability is a cornerstone of our work. We ensure that our products are developed with easy access to unit components in mind, and our diagnostic systems are intelligently designed to make problem-solving quicker and easier.

Rheem Centurion

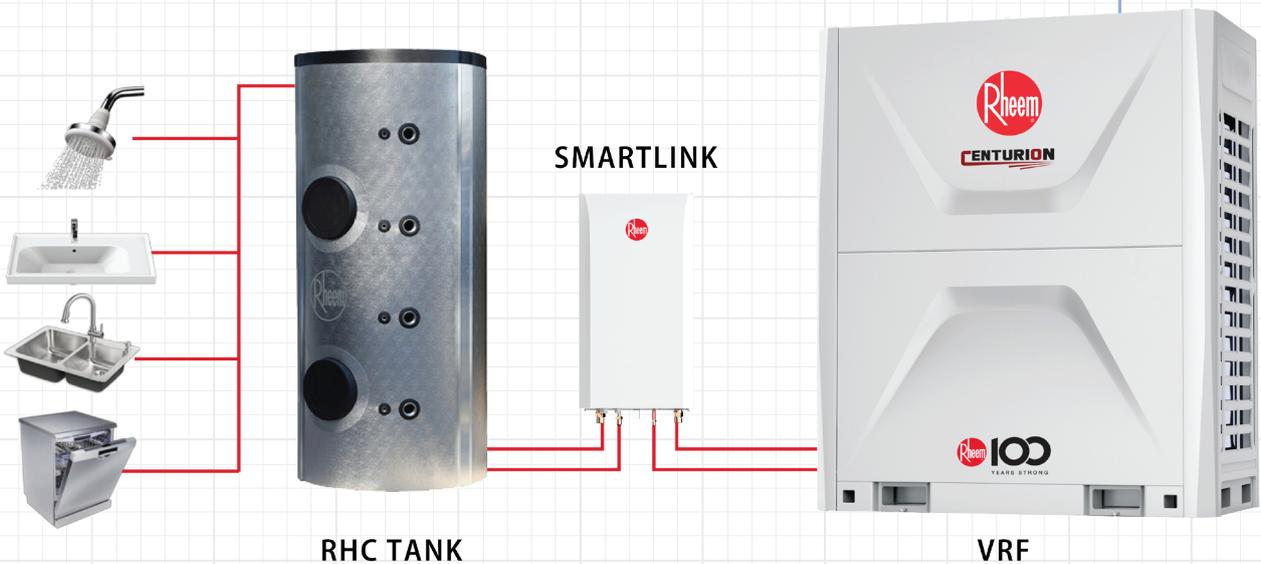


Features

COOLING COMFORT



HOT WATER COMFORT



CONTINUOUS HOT WATER PRODUCTION WHILE COOLING THE SPACE



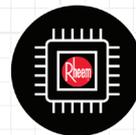
ENERGY SAVINGS UP TO 84%



HIGH EFFICIENCY



CONTINUOUS HOT WATER UPTO 70 °C



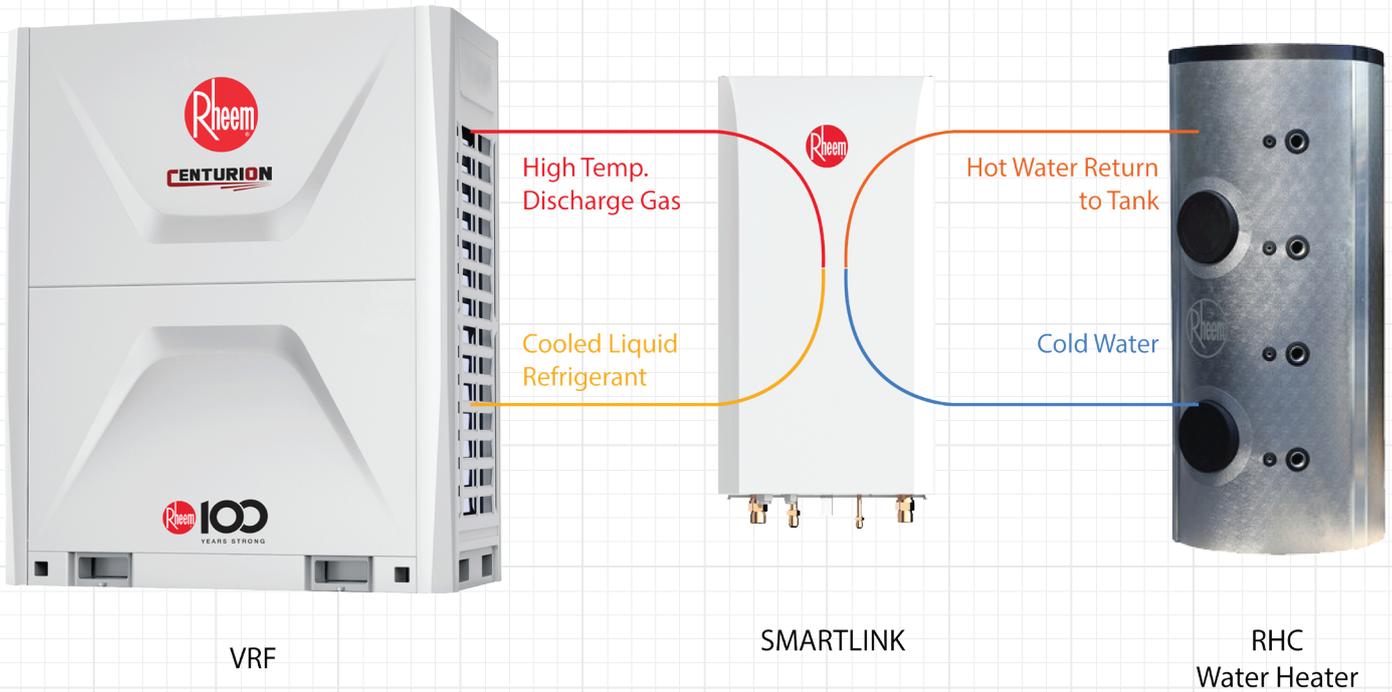
ADVANCED RHEEMSMART CONTROLS WITH MULTIPLE MODES



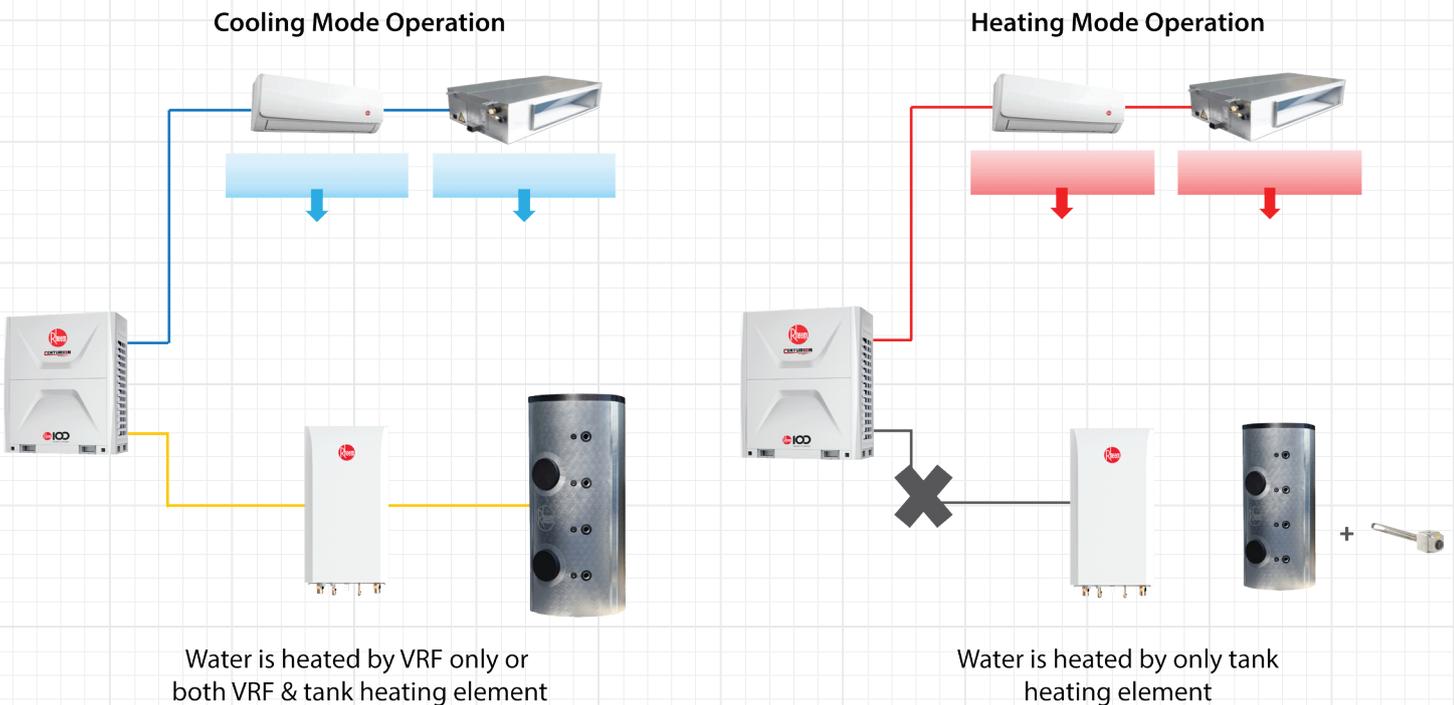
LOWER NOISE LEVEL

How Rheem Centurion Works

The heat absorbed by VRF indoor units is used to heat the water. The heated refrigerant exchanges heat with cold water in the Smart Link heat exchanger.



Operation in Cooling or Heating Mode



Mode of Operation

✓ Standard Efficiency

- The VRF operates up to a water temperature of 45°C.
- Both the VRF and the electrical heater operate between 45°C and 55°C.
- Above 55°C, only the electrical heater operates.

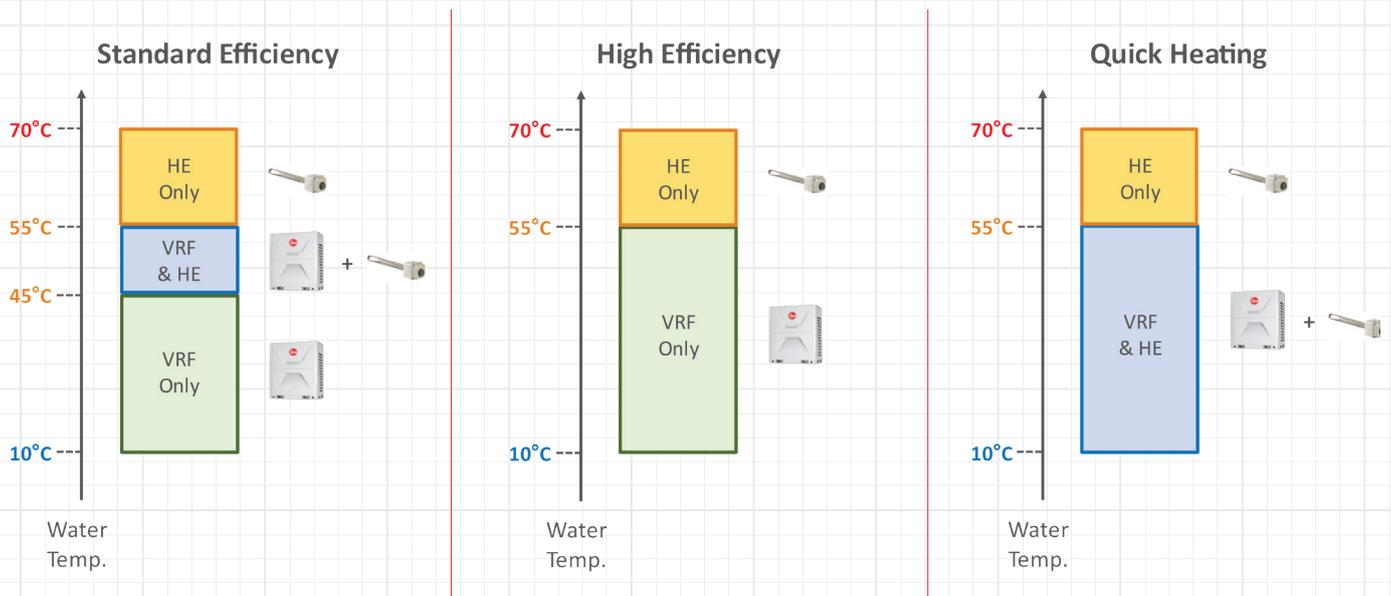
✓ High Efficiency

- The VRF is prioritized and used to heat the water most of the time.
- Hot water temperatures of up to 55°C are achieved by the VRF alone.

✓ Quick Heating

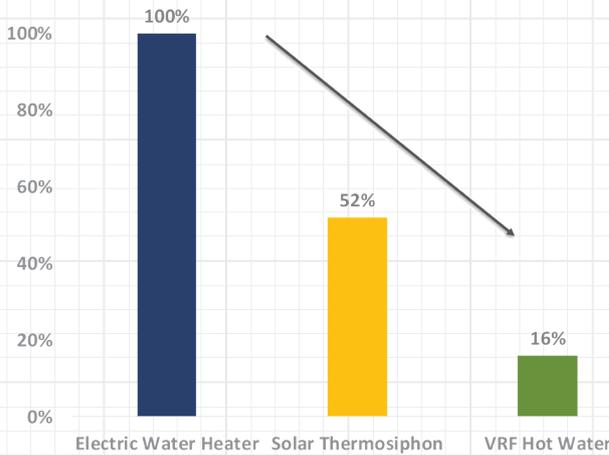
- The VRF and the electrical heater will both operate from the start.

Operation Mode Logic



High Energy Savings

- ✓ Real-time tests and simulations show the VRF heat-recovery water heater can save up to 84% energy versus a conventional electric water heater.



Up to
84%
KWH ENERGY SAVED/YEAR

Modes Comparison

- ✓ A comparison of Standard Efficiency and High Efficiency modes at 40 °C ambient temperature shows the performance of a 10 HP VRF unit operating at 100% load.

STANDARD EFFICIENCY
69%
ENERGY SAVING

80 Min Heating Time

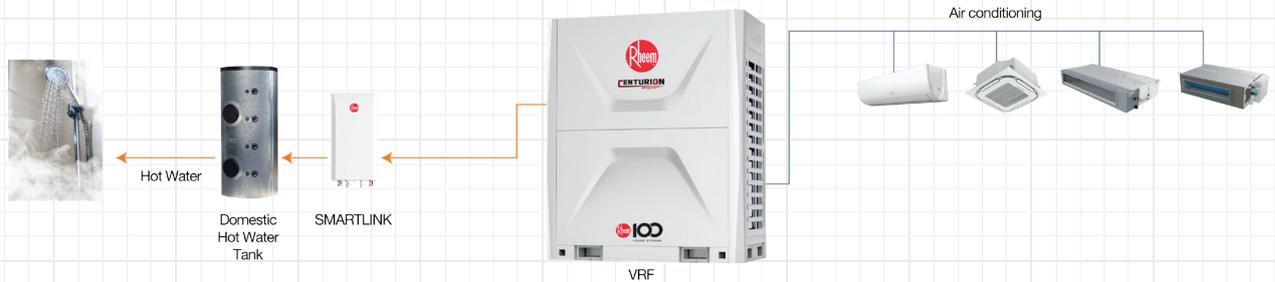
HIGH EFFICIENCY
83%
ENERGY SAVING

105 Min Heating Time

Continuous Hot Water Production While Cooling The Space



The following shows a comparison between Standard Efficiency and High Efficiency modes under the same condition of 40 °C ambient for a 10 HP VRF unit operating at full load.



High Water Temperature Production



The system is capable to heat the water up to 70 °C which minimizes the growth of bacteria inside the tank.



Low Noise Levels



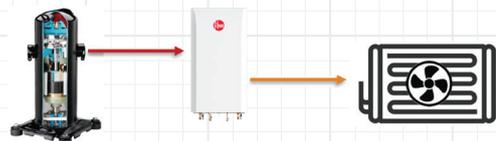
Since some of the refrigerant heat is exchanged with the water, the condenser fan will operate at lower speed to cool down the refrigerant which in return results in lower noise levels.



Conventional VRF



VRF HW System



Multiple Application Solutions



Villa



Residential Complex



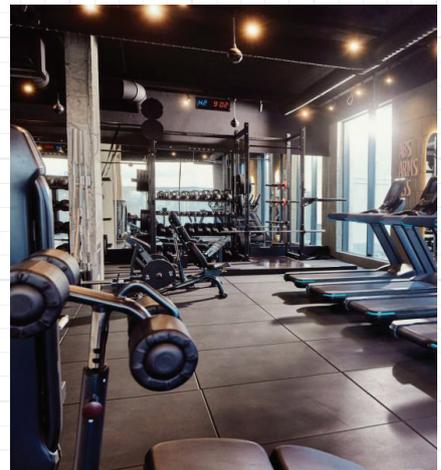
Office



Resturant



Sochool/University



Gym



Clinic/Hospital



Hotel



Staff Accomodation

Tank Specifications

TANK SPECIFICATIONS		
Model	Unit	RHC 300 - 500
Capacity	L	300 - 500
Capacity of the back-up heater	KW	3 - 3,5
Calorifier material		Glasslined Steel / SS316 L
Max pressure	BAR	8/10 bar
Outer cover		Aluminum
Temp range	C	25-70
Dimension (W*H*D)	mm	332,5*121*87.4
Heat exchange area	m ²	2.794
Rated water temp Range	°C	-20~110
Piping connections	inch	R1"
Safety valve set pressure	Mpa	0.3
Flow switch	m ³ /h	0.6
Drainage pipe connection	mm	Ø 25
Expansion tank	L	8
Protection class	/	IP44
Rated prower	Hz	230-50/60
Type	/	canned pump
Power input	W	4-95
current	A	0.04~0.75
Max Rotating speed	r/min	4500
Insulation class	/	class F
Pump head	m	9
Pump Flow	m ³ /h	4.5
Liquid Side	mm	15.88
Gas Side	mm	9.52
Drainage	mm	DN25

VRF Specifications

Outdoor Model	Model	SAVR-H250/5R1MC-HW	SAVR-H280/5R1MC-HW	SAVR-H330/5R1MC-HW
Power Supply	V~,Hz,Ph	380~415V,3N,50/60Hz	380~415V,3N,50/60Hz	380~415V,3N,50/60Hz
Cooling T1 (kW)	kW	25.2	28.2	33.3
Cooling T1 (TR)	TR	7.2	8.06	9.51
Cooling T1 (Btu/h)	Btu/h	86000	96000	114000
Cooling T1 (kW)	kW	22.2	24.9	30.6
Cooling (T3)	TR	6.34	7.11	8.74
Cooling (T3)	Btu/h	76000	85000	104000
Heating (H1)	kW	25.2	28.2	33.3
Heating (H1)	TR	7.2	8.06	9.51
Heating (H1)	Btu/h	86000	96000	114000
Rated Cooling Power Input (T1)	kW	5.73	6.78	8.14
Rated Cooling Current (T1)	A	9.04	10.94	13.11
Rated Cooling Power Input (T3)	kW	6.2	7.87	9.29
Rated Cooling Current (T3)	A	10	12.69	14.98
Rated Heating Power Input (T1)	kW	5.55	6.29	7.67
Rated Heating Current (T1)	A	8.75	10.13	12.37
EER(T1)	W/W	4.4	4.15	4.1
EER(T1)	Btu/h/W	15	14.15	14
Performance EER (T3)	W/W	3.59	3.17	3.28
Performance EER (T3)	Btu/(h*W)	12.25	10.8	11.2
Performance COP(H1)	W/W	4.54	4.48	4.34
CSPF	Btu/h/W	16.5	15.5	15
MCA/Max.Current	A	20.2	21.1	24.4
Outdoor Fan Type		Axial	Axial	Axial
Outdoor Fan Quantity		1	1	2
Airflow Volume	CFM	7059	7059	8235
Airflow Volume	m3/h	12000	12000	14000
Noise	dB(A)	45-58	45-58	45-61
Dimension(WxDxH) Net	mm	990x765x1635	990x765x1635	1340x765 1635
Dimension(WxDxH) Packing	mm	1030 825x1865	1030 825x1865	1395x815x1865
Weight Net	kg	225	225	257
Weight Gross	kg	235	235	272
Refrigerant Type		R410A	R410A	R410A
Refrigerant Charged Volume	g	14000	14000	14000
Refrigerant AC Liquid Side	mm	12.7	12.7	15.9
Refrigerant AC Gas Side	mm	22.2	22.2	28.6
Refrigerant Pipe Water Liquid Side	mm	9.52	9.52	9.52
Refrigerant Pipe Water Gas Side	mm	15.88	15.88	15.88
Refrigerant Pipe Max. Length	m	1000	1000	1000
Refrigerant Pipe Max. Height	m	110/130	110/130	110/130
Ambient Temp (Cooling/Heating)	°C	-10~55/-20~24	-10~55/-20~24	-10~55/-20~24

Outdoor Model	Model	SAVR-H400/5R1MC-HW	SAVR-H450/5R1MC-HW
Power Supply	V~,Hz,Ph	380~415V,3N,50/60Hz	380~415V,3N,50/60Hz
Cooling T1 (kW)	kW	40.0	45
Cooling T1 (TR)	TR	11.43	12.86
Cooling T1 (Btu/h)	Btu/h	136000	154000
Cooling T1 (kW)	kW	35.7	39
Cooling (T3)	TR	10.2	11.14
Cooling (T3)	Btu/h	122000	133000
Heating (H1)	kW	40	45
Heating (H1)	TR	11.43	12.86
Heating (H1)	Btu/h	136000	154000
Rated Cooling Power Input (T1)	kW	9.41	11
Rated Cooling Current (T1)	A	15.17	17.73
Rated Cooling Power Input (T3)	kW	11.96	13.93
Rated Cooling Current (T3)	A	19.28	22.45
Rated Heating Power Input (T1)	kW	8.86	10.48
Rated Heating Current (T1)	A	14.28	16.89
EER(T1)	W/W	4.24	4.1
EER(T1)	Btu/h/W	14.45	14
Performance EER (T3)	W/W	2.99	2.8
Performance EER (T3)	Btu/(h*W)	10.2	9.55
Performance COP(H1)	W/W	4.5	4.31
CSPF	Btu/h/W	14.2	14
MCA/Max.Current	A	39.3	40.6
Outdoor Fan Type		Axial	Axial
Outdoor Fan Quantity		2	2
Airflow Volume	CFM	9412	9412
Airflow Volume	m3/h	16000	16000
Noise	dB(A)	45-61	45-61
Dimension(WxDxH) Net	mm	1340x765x1635	1340x765x1635
Dimension(WxDxH) Packing	mm	1395x815x1865	1395x815x1865
Weight Net	kg	314	314
Weight Gross	kg	329	329
Refrigerant Type		R410A	R410A
Refrigerant Charged Volume	g	16000	16000
Refrigerant AC Liquid Side	mm	15.9	15.9
Refrigerant AC Gas Side	mm	28.6	28.6
Refrigerant Pipe Water Liquid Side	mm	9.52	9.52
Refrigerant Pipe Water Gas Side	mm	15.88	15.88
Refrigerant Pipe Max. Length	m	1000	1000
Refrigerant Pipe Max. Height	m	110/130	110/130
Ambient Temp (Cooling/Heating)	°C	-10~55/-20~24	-10~55/-20~24



engineered for life™



@rheemmea



www.rheem-mea.com



Rheem Middle East & Africa

UAE: RMEA Manufacturing LLC | Onyx 2, Level P3, Offices 301-304, The Greens Dubai, UAEA | Tel: +971 4 230 5100

KSA: Rheem Innovation and Learning Centre | Riyadh Building 14, Business District, Airport Road, Riyadh, KSA | Tel: +966 11 494 5222