



# ODIN INTERNATIONAL

## HYBRID HEAT PUMP WATER HEATERS



RELY ON RUUD.™

## COMPANY INTRODUCTION

360° + 1 THE NEW

# DEGREE OF WARMTH

More than 100 years ago, Edwin Ruud, a Norwegian mechanical engineer, came to America and developed the first successful automatic water heater. That early success marked the beginning of a tradition of innovation and value that led to the introduction of RUUD® air conditioning and water heating equipment in the 1950s. Since then, the RUUD® has grown into one of North America's largest manufacturers of quality air conditioning and water heating products for residential and light commercial use. Today, RUUD® operates manufacturing facilities employing highly trained workers and state-of-the-art equipment. Over the years, the product lines have expanded, changed, and improved significantly as new design techniques and better manufacturing technologies have become available. What remains unchanged throughout our history, however, is our commitment to producing the most reliable, long-lasting, efficient equipment you can buy.

Our approach as a company is to keep the dialogue ongoing, listen, and then act. As a result, RUUD is able to constantly deliver innovations in the heating, cooling and water heating industries to provide our valued customers with new degrees of comfort.



● RHEEM Offices

● R&D Centers / Warehouses /  
Manufacturing Facilities

**11**  
R&D  
CENTERS

**13**  
RHEEM BUSINESS  
CENTER

**25**  
MANUFACTURING  
FACILITIES

# WHY RUUD?

## EXPERTISE

The Ruud® brand promise and central message remain: The Water Heater Experts.™ For decades, Richmond Water Heaters have showcased this expertise by delivering proven performance, quality and durability.

## VALUE

Ruud® Water Heaters are manufactured with exceptional workmanship and top-quality materials resulting in excellent performance, durability and efficiency.

## EXCEPTIONAL PRODUCTS

The Ruud® brand will continue to provide a comprehensive line of exceptional water heating products with features engineered to exceed expectations of consumers and the industry.

## SERVICE & SUPPORT

The Ruud® brand is a call away with expert service and support to help provide the best water heating solutions.

## OUR EXPERTISE & ADVANTAGES



### RELIABILITY

An American company with nearly 100 years of history in business, Ruud has been a pioneer in developing some of the most innovative advancements in water heating. With a long list of award-winning solutions, Ruud continues to deliver advanced comfort, savings, and experiences to our customers.



### WATER HEATING EXPERTS

With a wide range of products, we have something to fit almost every water heating need across MEA region. The proof is in having over 1,000,000 water heaters installed across MEA region. With Ruud commercial products installed in over 1,000 locations, we are also proud to be the preferred choice for commercial applications in the MEA region.



### SUSTAINABILITY

Ruud is making a difference with our ambitious 2025 goals. We continue to lead with our bold approach to improvements for our products and processes to dramatically cut our impact on the environment, while empowering both our customers and employees to work and live sustainably. It's all a part of our bold vision for the future.



### DEGREE OF INNOVATION

Reduce manufacturing greenhouse gas footprint by 50%.



### DEGREE OF EFFICIENCY

Reduce greenhouse gas emissions by 50% and achieve zero waste to landfill.



### DEGREE OF LEADERSHIP

Train plumbers and contractors on sustainable products of sustainable installation and recycling best practices.



# ODIN INTERNATIONAL

## HEAT PUMP WATER HEATERS

Experience enhanced comfort with maximum saving with Ruud's Heat Pump Water Heaters

Designed using the highest quality of materials, together with thoughtful innovation and technology, Ruud's Heat Pump Water Heaters are built intelligently to provide efficient and renewable energy solutions to meet your hot water needs.



EXCLUSIVE

# RHEEMGLAS®

TANKS

For enhanced durability, Rheem water heaters come with RHEEMGLAS® coating, a protective coating on the walls of the storage tank to enhance the lifespan of the water heater. Thanks to this proprietary solution, Rheem storage water heaters enjoy a great reputation for providing great quality and value across the world for many years.



**PLUS ONE®**  
**Multi-Layer Enamel Coating Protection**

Coating layer made using low-carbon, anti-scale and explosion-resistant special enamel steel sheet, which can be easily attached to our exclusive RHEEMGLAS® enamel coating. This multi-layer coating is achieved by adopting American spraying technology and production standards.



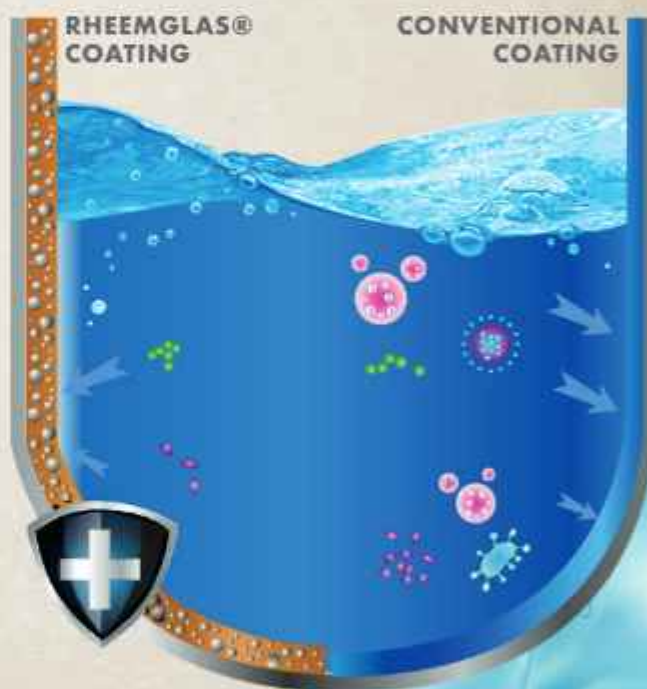
**PLUS ONE®**  
**Special Enamel Steel Sheet**

The yield strength of a typical enamel steel sheet is as high as 412MPa. RHEEMGLAS® enamel coating has the same expansion coefficient as an enamel steel sheet. This means that with RHEEMGLAS® enamel coating, inner tank will not corrode or crack easily due to thermal expansion or contraction.



**PLUS ONE®**  
**Anti-Bacterial Protection**

Thanks to its antiscaling properties, RHEEMGLAS® enamel coating effectively prohibits the growth of harmful and aggressive bacteria, making the water in the storage tank cleaner, and prolonging the lifespan of the storage water heater.



RHEEMGLAS®  
ANTI-BACTERIAL TANK

## PRODUCT INFORMATION

### HYBRID HEAT PUMP SERIES

# ODIN INTERNATIONAL 400L

## INTEGRATED AIR SOURCE WATER HEATER



### CAPACITY

Wider capacity of 400L ensures sufficient hot-water supply by heat pump only, continuously produces 1000L hot water at constant temperature.



### WIDE AMBIENT OPERATING RANGE (-7-43°C)

Odin 400l is equipped with zero-cold-water technology with a COP\* upto 4.2, ensuring that water is warm as soon as the facet is turned on with a built-in circulation system.



### HIGH TEMPERATURE HEAT PUMP SYSTEM

Heating up to 70°C by heat pump only. 5.2kW heating capacity, ensuring sufficient hot-water supply.



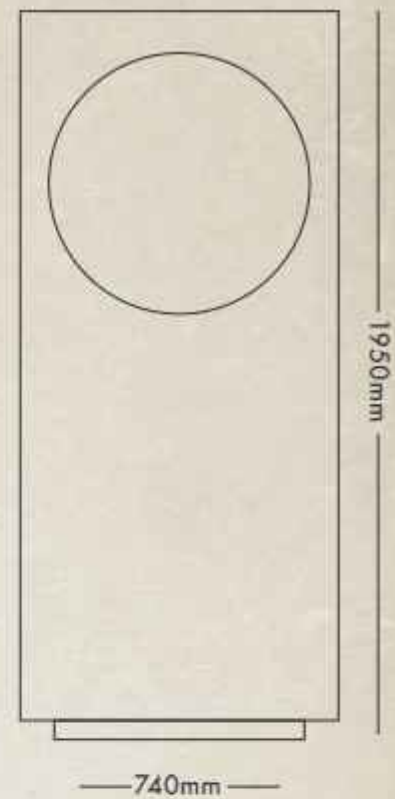
### RUUD READY CONNECT MOBILE APP

Smart control experience with Ruud Readyconnect App.

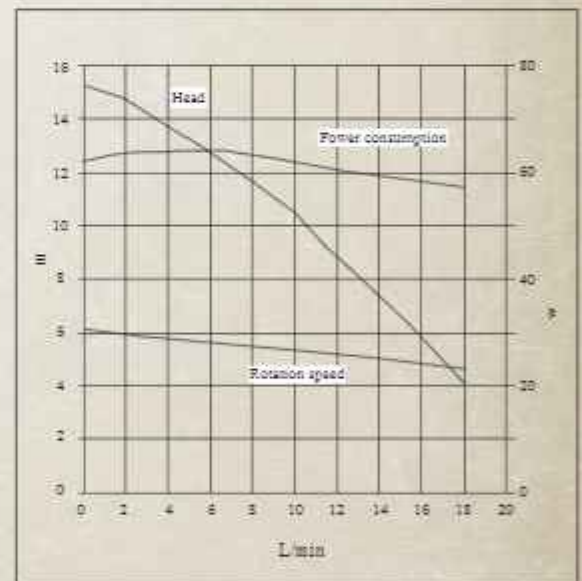


HEAT PUMP MODEL		RUHP-400-5207-M
RATED TANK CAPACITY (LITERS)		400
POWER SUPPLY		220-240V-50Hz
RATED HEAT PUMP HEATING CAPACITY (KW)*		5.25
HEAT PUMP RATED INPUT*	POWER (KW)	1.25
HEATING ELEMENT RATED INPUT	POWER (KW)	3.6
MAXIMUM INPUT	POWER (KW)	5.5
COP*		4.2
WATER TEMPERATURE SETTING (°C)		35 - 70°C
AMBIENT TEMPERATURE RANGE (°C)		-7 ~ 43°C
IP RATING		IPX4
NOISE LEVEL (DB [A])		53
REFRIGERANT TYPE		R134a
TANK SIDE	HEAT EXCHANGER TYPE	Microchannel Outside the Tank
	INLET/OUTLET / TPR VALVE/	RP 3/4" (DN20)
	RATED PRESSURE (MPA)	0.85
	MAXIMUM WATER INLET PRESSURE (MPA)	0.68
AIR SIDE	HEAT EXCHANGER TYPE	Internal Thread Tube with Hydrophilic Aluminium Foil
	AIR INLET/OUTLET	Side/Back
INBUILT CIRCULATION PUMP	INLET AND OUTLET SIZE	1/2"
	WATER TEMPERATURE RANGE	0-80 DEG C
	RATED FLOW RATE & HEAD	Flow rate 10L/min.or more at pump head 7m,
OVERALL DIMENSION	DIAMETER (MM)	740
	HEIGHT (MM)	1950
NET WEIGHT (KG)		180

## RUUD HYBRID HEAT PUMP WATER HEATERS



### PUMP CURVE



### NOTES

To ensure the efficiency and normal operation of the unit, pay attention to the following items:

- Do not install the water heater in operating environment below -7°C, so as not to affect the normal operation or damage the machine.
- The space around the water heater should facilitate the removal of the unit for maintenance or replacement if necessary.

\*Rating Condition: Dry bulb temperature: 20°C, Wet bulb temperature: 15°C, Water heated from 15°C to 55°C.

## PRODUCT INFORMATION

### HYBRID HEAT PUMP SERIES

# ODIN INTERNATIONAL

## INTEGRATED AIR SOURCE WATER HEATER



### CLASS 1 ENERGY RATING, COP $\geq$ 4.2

Generates about 2.68kWh of energy to heat water with only 0.667kWh of electrical power. This helps to provide 4.2 times of savings as compared to conventional electrical water heaters.



### WIDE AMBIENT OPERATING RANGE (-7°C TO 45°C)

Excellent adaptability, capable of operating in a wide range of ambient settings, from -7°C to 45°C, to provide hot water regardless of temperature of external environment.



### MICROCHANNEL HIGH EFFICIENCY HEAT EXCHANGER

High pressure rating, large heat exchanger area and high heat transfer rate to improve the heat exchange efficiency of the heat pump system.



### FAST HEATING

2800W heating capacity, ideal for residential and light commercial applications.



### LOW NOISE OPERATION

40dB, special sound-proof insulation to ensure quiet and silent operation, especially during night hours.



### RUUD READY CONNECT MOBILE APP

Smart control experience with Ruud Readyconnect App.



### HIGH TEMPERATURE HEAT PUMP SYSTEM

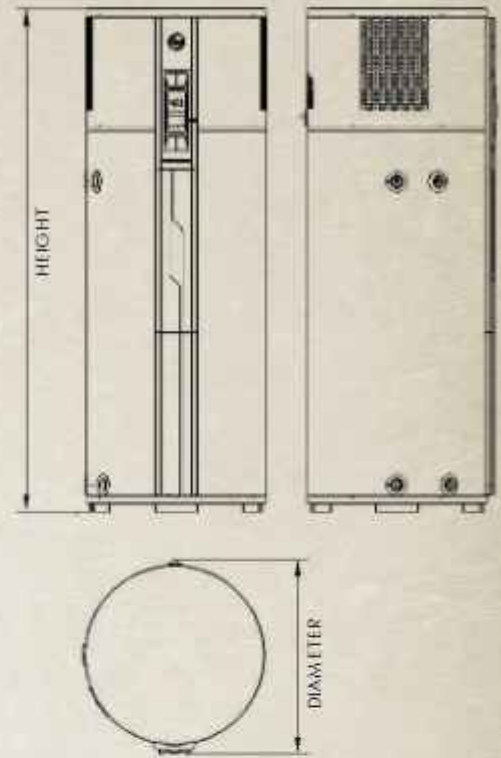
Heats up to 70°C with only heat pump system without cutting in of heating element.





## RUUD HYBRID HEAT PUMP WATER HEATERS

HEAT PUMP MODEL		RUHP-180-2805-M	RUHP-280-2805-M
POWER SUPPLY		220-240V~50Hz	
RATED HEAT PUMP HEATING CAPACITY (KW)*		2.8	
HEAT PUMP RATED INPUT*	POWER (KW)	0.666	
	CURRENT (AMPS)	3.0	
HEATING ELEMENT RATED INPUT	POWER (KW)	2.5/3.0@220V/240V	
	CURRENT (AMPS)	11.4/12.5@220V/240V	
MAXIMUM INPUT	POWER (KW)	4.0@240V	
	CURRENT (AMPS)	16.7@240V	
COP*		4.2	
WATER TEMPERATURE SETTING (°C)		35 - 70°C	
AMBIENT TEMPERATURE RANGE (°C)		-7 ~ 55°C	
IP RATING		IP24	
NOISE LEVEL (DB (A))		≤ 40	
REFRIGERANT TYPE		R134a	
TANK SIDE	HEAT EXCHANGER TYPE	Microchannel Outside the Tank	
	TANK CAPACITY (L)	180	280
	INLET/OUTLET/TPR VALVE/ DRAIN VALVE CONNECTION	RP ¾" (DN20)	
	RATED PRESSURE (MPA)	0.85	
	MAXIMUM WATER INLET PRESSURE (MPA)	0.68	
AIR SIDE	HEAT EXCHANGER TYPE	Internal Thread Tube with Hydrophilic Aluminium Foil	
	AIR INLET/OUTLET	Side Intake/Exhaust	
OVERALL DIMENSION	DIAMETER (MM)	Ø525	Ø648
	HEIGHT (MM)	1810	1815
NET WEIGHT (KG)		96	120



### NOTES


To ensure the efficient and normal operation of the device, pay attention to the following precautions:


- Do not install the water heater in operating environment below -7°C, so as not to affect the normal operation or damage the machine.
- The space around the water heater should facilitate the removal of the entire water heater for repair or replacement if necessary.
- Exposure to the rain or water spraying direct to the water heater should be minimized.

\*Rating Condition: Dry bulb temperature: 20°C, Wet bulb



Learn more at: [www.ruud-mea.com](http://www.ruud-mea.com)

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 in Ruud Middle East and Africa

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