## :: welcome to the rebirth of cool

The all-new Rheem® Commercial Renaissance™ Line



**7.5–12.5 Ton Package Air Conditioners** (RACDZT, RACDZS, RACDZR)

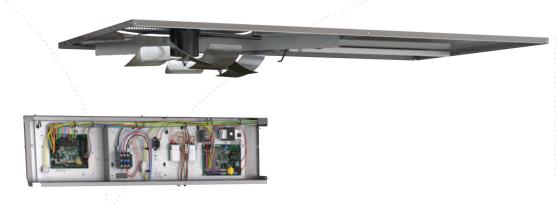
**3–12.5 Ton Package Gas Electric Units** (RGEDZT, RGEDZS, RGEDZR, RGECZR)

**7.5, 8.5 & 10 Ton Package Heat Pumps** (RHPDZT, RHPDZS)

TRADE GUIDE

# renaissance COMMERCIAL HVAC LINE

A revival of innovation and performance in commercial HVAC.





#### INTRODUCING THE RHEEM® COMMERCIAL RENAISSANCE LINE—

the culmination of years of research and development, creative engineering and innovation. Crafted with smart new features and exclusive PlusOne® advantages—all delivered with our world-renowned performance and dependability—the

Trade Line is a signature piece in our growing portfolio of industry-leading commercial HVAC solutions.

#### **TIER COMPARISON**

Models	Single-Stage Cooling	Two-Stage Cooling	2018 DOE Efficiency Standards Compliant	2023 DOE Efficiency Standards Compliant	VFD Technology	HumidiDry™
Commercial Prestige® Series (RACDZT, RGEDZT, RHPDZT)		1	1	/	<b>√</b>	Option
Commercial Classic Plus® Series (RACDZS, RGEDZS, RHPDZS)		1	/		Option	Option
Commercial Classic® Series (RACDZR, RGEDZR, RGECZR)	1		/			

# Based on inspired thinking and innovative problem solving—a refined solution to enhance productivity.



7.5-12.5 Ton Cabinet is Show

Redesigned for today's demanding commercial applications, the Renaissance™ Line is packed with smart thinking—like high-quality critical components, lean manufacturing processes and robust design features—including the strengthened, solid, single-piece top, durable panels, plus Scroll™ compressor technology. It's innovative Rheem® engineering that delivers easy installability, smart serviceability and industry-leading efficiencies for uptime dependability in a wide range of rooftop environments.

- Simple drop-in replacement—cutting installation time in half for substantial cost savings
- Build-to-order systems for all efficiency levels
- Prestige® Series models are 2023 DOE Efficiency Standards Compliant right now
- First system in the dehumidification market with built-in Variable Frequency Drive (VFD)<sup>1</sup>
- PlusOne® SmartShield™ Coil System Full MicroChannel Coil—an industry first for full indoor and outdoor MicroChannel Coils in commercial package heat pumps—decreases the amount of required refrigerant, connection brazing and overall weight
- PlusOne® SmartShield™ Coil System Heat Pump Defrost System virtually eliminates ice build-up²

## :: proven faster & easier serviceability!

When performing industry-standard service & preventative maintenance, the Renaissance Commercial Line reduces the service time by up to 100 minutes over other commercial HVAC brands.<sup>3</sup>

¹VFD Technology and HumidiDry™ are available on ZS/ZT models, and will be available on 3–6 Ton ZR/ZS models in 2020. ²Available on 3–5 Ton Heat Pumps Only – coming Q4 2019. ³Per a MIAT Commercial HVAC Competitive Time Study, conducted June 4–6, 2019.



## The all-new Renaissance<sup>™</sup> Line. Genius.

Our engineers were given a challenge: Create an innovative package rooftop product line to meet the new demands of a wide range of commercial applications. They delivered an inspired solution that improves every aspect from replacement to dependability and from installability to serviceability.



1 PLUSONE® DIAGNOSTICS

#### Renaissance **CoreCommand™ Control**

Dual 7-Segment LED Display delivers enhanced diagnostics with 43 easy-tounderstand fault codes, complete fault history and input / output options to meet building compliance needs.



6 PLUSONE® HUMIDIDRY™

The first in the dehumidification market to incorporate a VFD that operates at a lower speed on first-stage cooling, saving energy, enhancing performance and increasing comfort.3



SmartShield™

PLUSONE® SMARTSHIELD™ **COIL SYSTEM** 

#### ElectroFin® E-Coat **Process Technology**

A factory-applied condenser coating that delivers superior corrosion resistance for indoor and outdoor coils to operate in the harshest of environments.

#### 3 Full MicroChannel Coil

Full indoor and outdoor MicroChannel Coils maximize reliability while decreasing the amount of required refrigerant, connection brazing and overall weight. Rheem® is proud to offer the industry's first full indoor and outdoor MicroChannel Coil for commercial package heat pumps.

#### 4 Heat Pump Defrost System¹

Rheem-exclusive, patent-pending Microchannel Defrost System that virtually eliminates ice build-up, preventing operation failure.



**5** PLUSONE® VELOCIFIN™2

#### **Heat Exchanger**

A patent-pending, complete redesign of the heat exchanger tubing that meets customer and agency (AFUE, FER, ANSI Z21.47) requirements, and increases heat transfer through an innovative velocity conceptimproving overall product efficiency.



PlusOne

ServiceSmart

## **PLUSONE® SERVICESMART**

**Qwik-Change Flex-Fit Rack** 

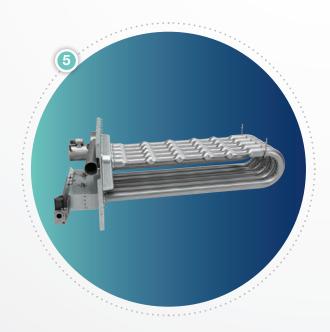
Allows easy changeover between 2" and 4" filters.

#### 8 Qwik-Slide Blower Assembly

Extremely easy access and removal of blower assembly to service internal components.

#### Qwik-Clean Drain Pan

Composite material pan that slides out completely for easy cleaning and features a standard overflow sensor.





#### 7.5-12.5 Ton Cabinet is Shown

#### **NEW FEATURES**

#### External Lockable **Gauge Ports**

Enables measuring pressures without opening the cabinet door and affecting unit performance.

#### 11 Improved Footprint

Drop-in replacement cuts installation time in half for substantial cost savings.



-Antoine de Saint-Exupéry

## :: the next level of efficiency a new era in savings.

We know energy efficiency, savings, compliance and guarantees are important to you. That's why we've re-engineered the Renaissance™ Line from the ground up—all to meet the exacting standards of the industry as well as our customers. The Renaissance Line delivers a smart mixture of enhanced energy cost savings, available rebates, regulation compliance and an industry-leading warranty.

## High-Efficiency Savings

The Renaissance Line delivers improved energy savings of over 30% when compared to current baseline technology available in most commercial units operating in the marketplace—translating into savings of thousands of dollars over the life of the equipment.

#### **Customized Solutions**

The Renaissance Line offers a breadth of heating and cooling solutions and build-to-order systems to suit the customer's business needs, design and application requirements—so there's no need to overpay for unnecessary "packages." The efficiency level and factory-installed options needed are chosen, with most factory-installed options and field-installed accessories available across all product tiers\*—ensuring customers get a customized solution to suit their business needs.

## **Rebate Opportunity**

With industry-leading efficiencies of up to 14.8 IEER, the Renaissance Line may qualify for a variety of utility rebates—helping business customers realize substantial savings for a greater return on their investment, at purchase and year after year.



#### COMMERCIAL PRODUCT SPECIFICATIONS

#### PACKAGE GAS ELECTRIC UNITS

## :: visionary form meets flexible function.

From new construction to replacement projects and more, the new Rheem® Commercial Renaissance™ Line offers a breadth of commercial heating and cooling products that meet all design and application requirements. Whether your customers are retail, hotels, restaurants, offices, schools, senior care or gyms, you'll have the ability to connect a new, customized Renaissance unit quickly and efficiently, providing comfort and peace-of-mind.

## DOE Efficiency Standards Compliant

Loaded with innovative and improved technologies for compliance with the Department of Energy's (DOE) new IEER standards effective as of January 2018—plus, we're ready RIGHT NOW for 2023 regulations.

## California Title 24 / ASHRAE 90.1 Compliant

Achieves superior energy efficiency and performance with our exclusive PlusOne® features to meet ASHRAE 90.1-2007\*, ASHRAE 90.1-2013, ASHRAE 62.1 and California Title 24 regulations.

## **Guaranteed Performance**

Our industry-leading commercial limited warranty includes:

- Stainless Steel Heat Exchanger 20 Years
- Aluminized Heat Exchanger 10 Years
- Scroll<sup>™</sup> Compressor 5 Years
- All Other Parts 1 Year

\*Applies to RGEDZR, RACDZR, RHPDZR models only.

#### PACKAGE HEAT PUMPS

COOLING DATA							HEAT INPUT				PHYSICAL DATA	
Model						47 Capacity	Cop 47 Efficiency	17 Capacity	Cop 17 Efficiency	Dimensions H x W x L (inches)	Shipping Weight (lbs)	
RHPDZS090A	7.5	89,000	86,000	3,000/3,030	12.2	86,000	3.3	48,000	2.3	50 x 58 x 89	814–825	
RHPDZS102A	8.5	101,000	98,000	3,400/3,345	12.2	98,000	3.3	60,000	2.3	50 x 58 x 89	850–861	
RHPDZS120A	10.0	119,000	114,000	4,000/4,060	12.2	114,000	3.3	72,000	2.3	50 x 58 x 89	902–913	
RHPDZT090A	7.5	89,000	86,000	3,000/3,030	14.1	86,000	3.4	48,000	2.3	50 x 58 x 89	814–825	
RHPDZT102A	8.5	101,000	98,000	3,400/3,345	14.1	98,000	3.4	60,000	2.3	50 x 58 x 89	850–861	
RHPDZT120A	10.0	119,000	114,000	4,000/4,060	14.1	114,000	3.4	72,000	2.3	50 x 58 x 89	902–913	

COOLING DATA							INPUT	PHYSICAL DATA	
Model						1st Stage	2nd Stage	Dimensions H x W x L (inches)	Shipping Weight (lbs)
RGECZR036	3.0	36,000	35,400	1,200/1,300	N/A	75,000	52,500	41 x 45 x 78	645
RGECZR048	4.0	48,000	47,500	1,600/1,730	N/A	75,000	52,500	41 x 45 x 78	668
RGECZR060	5.0	60,000	57,500	2,000/1,950	N/A	75,000	52,500	41 x 45 x 78	671
RGEDZR090A**15	7.5	88,000	85,000	3,000/3,175	12.7	105,000	150,000	50 x 58 x 89	878
RGEDZR090A**20	7.5	88,000	85,000	3,000/3,175	12.7	143,000	205,000	50 x 58 x 89	878
RGEDZR102A**15	8.5	99,000	96,000	3,400/3,200	12.7	105,000	150,000	50 x 58 x 89	907
RGEDZR102A**22	8.5	99,000	96,000	3,400/3,200	12.7	157,500	225,000	50 x 58 x 89	907
RGEDZR120A**15	10.0	118,000	114,000	4,000/3,480	12.7	105,000	150,000	50 x58 x 89	935
RGEDZR120A**22	10.0	118,000	114,000	4,000/3,480	12.7	157,500	225,000	50 x 58 x 89	935
RGEDZS090**15	7.5	88,000	85,000	3,000/3,175	12.7	105,000	150,000	50 x 58 x 89	878
RGEDZS090**20	7.5	88,000	85,000	3,000/3,175	12.7	143,000	205,000	50 x 58 x 89	878
RGEDZS102**15	8.5	99,000	96,000	3,400/3,225	12.7	105,000	150,000	50 x 58 x 89	907
RGEDZS102**22	8.5	99,000	96,000	3,400/3,225	12.7	157,500	225,000	50 x 58 x 89	907
RGEDZS120**15	10.0	118,000	114,000	4,000/3,480	12.7	105,000	150,000	50 x 58 x 89	935
RGEDZS120**22	10.0	118,000	114,000	4,000/3,480	12.7	157,000	225,000	50 x 58 x 89	935
RGEDZS150**15	12.5	148,000	142,000	5,000/3,750	12.2	105,000	150,000	60 x 58 x 89	1,133
RGEDZS150**22	12.5	148,000	142,000	5,000/3,750	12.2	157,500	225,000	60 x 58 x 89	1,133
RGEDZT090**15	7.5	88,000	85,000	3,000/3,175	14.6	105,000	150,000	50 x 58 x 89	878
RGEDZT090**20	7.5	88,000	85,000	3,000/3,175	14.6	143,000	205,000	50 x 58 x 89	878
RGEDZT102**15	8.5	99,000	96,000	3,400/3,225	14.6	105,000	150,000	50 x 58 x 89	907
RGEDZT102**22	8.5	99,000	96,000	3,400/3,225	14.6	157,500	225,000	50 x 58 x 89	907
RGEDZT120**15	10.0	118,000	114,000	4,000/3,480	14.6	105,000	150,000	50 x 58 x 89	935
RGEDZT120**22	10.0	118,000	114,000	4,000/3,480	14.6	157,500	225,000	50 x 58 x 89	935
RGEDZT150**15	12.5	148,000	142,000	5,000/3,750	14	105,000	150,000	60 x 58 x 89	1,133
RGEDZT150**22	12.5	148,000	142,000	5,000/3,750	14	157,500	225,000	60 x 58 x 89	1,133

#### PACKAGE AIR CONDITIONERS

	(	COOLING	HEAT INPUT		PHYSICAL DATA				
Model	Nominal Tonnage	Gross Capacity (BTUH)	AHRI Rated Net Capacity (BTUH)	Nominal CFM/ AHRI (CFM)		Low	High	Dimensions H x W x L (inches)	Shipping Weight (lbs)
RACDZR090	7.5	88,000	85,000	3,000/3,175	12.9	N/A	N/A	50 x 58 x 89	775
RACDZR102	8.5	99,000	96,000	3,400/3,200	12.9	N/A	N/A	50 x 58 x 89	801
RACDZR120	10.0	118,000	114,000	4,000/3,480	12.9	N/A	N/A	50 x 58 x 89	830
RACDZS090	7.5	88,000	85,000	3,000/3,200	12.9	N/A	N/A	50 x 58 x 89	775
RACDZS102	8.5	99,000	96,000	3,400/3,225	12.9	N/A	N/A	50 x 58 x 89	801
RACDZS120	10.0	118,000	114,000	4,000/3,480	12.9	N/A	N/A	50 x 58 x 89	830
RACDZS150	12.5	148,000	142,000	5,000/4,150	12.4	N/A	N/A	60 x 58 x 89	1,032
RACDZT090	7.5	88,000	85,000	3,000/3,200	14.8	N/A	N/A	50 x 58 x 89	775
RACDZT102	8.5	99,000	96,000	3,400/3,225	14.8	N/A	N/A	50 x 58 x 89	801
RACDZT120	10.0	118,000	114,000	4,000/3,480	14.8	N/A	N/A	50 x 58 x 89	830
RACDZT150	12.5	148,000	142,000	5,000/4,150	14.2	N/A	N/A	60 x 58 x 89	1,032

## :: customized solutions to help grow your business.



## Flexible Product Options

The Rheem® Renaissance™ Line is full of smart options and must-have accessories, which can be factory- or field-installed—ensuring your customers get a customized solution to suit their business needs.

## **Faster Lead Time**

With Rheem's redesigned, technologically advanced commercial production facility, we make it easy to take advantage of improved factory lead times on build-to-order systems with custom options to help avoid business downtime.

## Rheem Commercial KwikComfort® Financing

Rheem has partnered with Fernwood Capital to offer customized financing plans that meet the specific needs of the customer, allowing them to obtain commercial equipment, with total project costs of \$5,000–\$3 million, that will facilitate their continued business growth.

## Rheem Protection Plus® Plans

Rheem has partnered with AIG® to offer parts and labor extended service agreements, for commercial applications that allow you to provide customers with a full-service, world-class solution for their long-term HVAC needs.



## :: why Rheem® Commercial?



Building on nearly a century of industry-leading innovations, Rheem was the first manufacturer to include Scroll compressor technology and one of the first to offer R-410A package heat pump solutions above five tons. Rheem led the way with micro-channel heat exchangers in 3–5 ton package units—and with the  $H_2AC^{\circ}$  Rooftop Unit featuring eSync Integration Technology—the first-of-its-kind commercial integrated air and water system. The next step in this evolution is the Renaissance Line—commercial HVAC solutions designed to provide perfect comfort, flexibility and support for any business application.



Rheem History. Brothers Richard and Donald Rheem established Rheem Manufacturing Company in the mid-1920s and began manufacturing water heaters in the 1930s. In 1959, the company became an innovator in the water heating industry. Rheem entered the rapidly growing heating and air conditioning market, expanding again in the late 1960s and 1970s. In 1985, the company acquired Raypak®, a leading producer of copper tube boilers used for swimming pool heating, commercial hot water supply and hydronic heating. Rheem was the first to adapt Scroll compressor technology to its air conditioners in 1994 and launched the first and only commercial integrated air and water heating system, H<sub>2</sub>AC, in 2012.

Recognizing the need is the primary condition for design.

-Charles Eames



## Rheem-Owned Selection Tool Software

Rheem provides a free software portfolio developed with easy-to-use, smart selection tools you need to specify, select and document all Rheem equipment, including factory-installed options and field-installed accessories, for all commercial applications.



## BAS/EMS Compatible (Building Automation System / Energy Management System)

Every product in the Renaissance Line offers the latest in comfort management technology. Factory-installed ClearControl,™ Direct Digital Control (DDC) and sensors can connect to LonWorks,™ BACnet® and Modbus® BAS/EMS systems for remote monitoring and precise control—allowing faster problem solving if service is ever required. They also help the unit operate more efficiently and reduce energy costs.



## **BIM Support**

At Rheem, we're building a comprehensive engineering documentation and imagery content database, so you can more accurately design and estimate job costs in less time. This includes spec data, 2- and 3-D CAD® files and Revit® files that are BIM software compatible.



## **Dedicated Technical Support**

Uptime is critical to your business customers. That's why Rheem offers a dedicated Support Team standing by to answer your questions—plus with resources such as MyRheem.com, our Innovative Learning Centers, live product assistance and more, Rheem is here to support you at every step.

## :: ready to help your customers create their next commercial masterpiece?

No matter what project you need to spec, the Renaissance™ Line offers you the perfect fit for commercial rooftop applications—delivering masterful performance, easy installability and smart serviceability—plus, industry-leading efficiencies and the world-renowned Rheem® dependability you trust.

Visit Rheem.com/Renaissance today.

