

SPIDERfire[®]



Maximum delivery
460 gallons for one
hour at 100° F rise

95% Thermal Efficiency

*Maximizes
Energy Efficiency and
Performance*

- Dramatically reduces fuel costs
 - Patented heat exchange system
 - Eye level display for diagnostics
- ... and more!*

Commercial water heaters
from Rheem-Ruud



SPIDERfire takes the bite out of fuel costs

Rheem-Ruud INNOVATION

SPIDERfire's unique multi-leg heat transfer system is where this new product gets its colorful name. The Rheem-Ruud line of condensing commercial water heaters offers a wide range of BTU inputs, all with ultra-high thermal efficiencies. The result is fuel savings and a higher recovery rate – especially during periods of heavy use.

The heart of the SPIDERfire is its patented heat-exchange system: a series of connected, elongated tubes immersed in the water tank and through which heat is transferred to the water. Generated by the burner at the top of the unit, combustion gases are blown down the large main flue in the center of the unit. The gases then traverse nearly the full length of the unit two more times, extracting as much heat energy as possible. By the end of the cycle, the temperature of the flue gases drops to between 110°F and 140°F and is cool enough for condensation to begin.

Made in America

Manufactured in Montgomery, Alabama, all SPIDERfire models come equipped with a 100-gallon storage tank and available in either natural gas or LP.

Third-Party Tested

The Rheem-Ruud SPIDERfire has been extensively tested by a third-party agency for water conditions and temperature, corrosive environments, dust and lint, increased cycling and venting configurations.



Restaurants



Hotels



Laundromats

Applications

With its sleek modern design, the new SPIDERfire is engineered to deliver substantial amounts of hot water to meet the needs of larger commercial applications, such as restaurants, office buildings, schools, retail stores, and the like.

SPIDERfire BENEFITS

TO SPECIFYING ENGINEERS

SPIDERfire offers ultra-high efficiency and energy savings. With up to a maximum delivery of 460 gallons, its performance will meet the needs of most businesses. Indoor air quality issues can be addressed by drawing combustion air from outside the building with a power direct vent installation. The SPIDERfire's small footprint reduces space requirements and long vent runs can be achieved through the use of low-cost PVC venting materials.

TO CONTRACTORS

SPIDERfire's narrow 26.25 inch diameter fits more easily down stairs and in tight places. Hot and cold water connections on both sides of the jacket provide flexibility during installation, especially during retro fits. The eye level status and diagnostic display is scrollable and reduces guess work, which helps speed up installation and service. Low-cost plastic venting materials can be used for power or power direct vent applications.

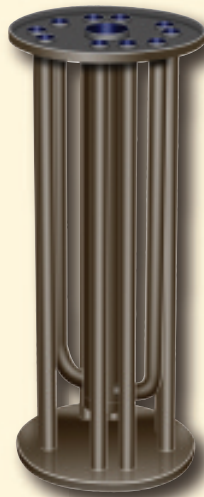
TO FACILITIES MANAGERS

Hot water is the second biggest energy user in most buildings, placing it right behind the HVAC system for energy costs. SPIDERfire's energy savings is an attractive solution to escalating costs. Because businesses often have heavy periods of hot water demand daily, SPIDERfire's ability to deliver up to 460 gallons for one hour helps keep you in business. In addition, the easy-to-read status and diagnostic display will help provide key information for fast installation and service. SPIDERfire's standard three year warranty can be increased to five years for additional piece of mind.

SPIDERfire's superb design is built to last



**SPIDERfire
LCD diagnostic
system**
provides
scrollable
diagnostics



SPIDERfire!
Multi-leg heat
exchanger system
is porcelain
coated inside
and out

Energy-efficient “wet-base” design

Rheem engineered a “wet base” for the lower portion of its flue system, suspending the first two legs of the flue network in water, rather than connecting them to the bottom of the tank. Hot spots are eliminated and the design also boosts efficiency – heat is not lost through the bottom of the tank, as it is with a dry base design.

Easier, less costly venting

The cool temperatures of the flue gases permit venting through standard PVC or CPVC tubing. The low cost plastic venting means the contractor can install the product virtually anywhere, using almost any piping configuration. Depending on the model, an installer can use two-, three- or four-inch venting – further lowering his costs and simplifying his installation.

Power or power direct vent operation

All models can be installed as a single-pipe, power-vented product; or as a two-pipe, power direct-vented product – the latter for environments where negative air pressure or if indoor air quality is a concern. All inputs for SPIDERfire are available with ASME certification.

Corrosion-protection

Rheem coats the tubes inside and out with a specially formulated porcelain enamel designed to protect against the effects of condensation.

Highly durable flue design

The unique flue network of the SPIDERfire eliminates “hot spots” – which can cause premature failure. It is built to last, even in heavy-commercial applications.

OUR EXCLUSIVE FEATURES

- **SPIDERfire LCD diagnostic system:** This system is standard on all SPIDERfire units, enabling installers and service technicians to monitor key functions and components. LCD display is positioned at eye level offering easy-to-read status. The LCD's memory includes a scrollable, operational history to detail usage patterns and facilitate troubleshooting.
- **Multiple water inlets and outlets:** Two pairs of hot and cold water connections on either side of the water heater jacket provide installation flexibility, especially important in retrofit installations.
- **Slim profile:** Just 26.25 inches in diameter – 1.5 to 2 inches smaller than competitive models – the SPIDERfire fits more easily into tight commercial spaces.
- **Full-port, full-flow brass drain valve – factory installed:** Allows for faster draining and servicing.
- **Direct spark-to-flame ignition system**
- **Warranty:** Standard three-year limited warranty can be upgraded to five years.



SPIDER^{fire} Gas Specifications

RECOVERY CAPACITIES

In U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temp. Rises

MODEL NUMBER	INPUT (BTU/HR) NAT. & LP	THERMAL EFFICIENCY	UNITS	100°F (56°C)	140°F (78°C)
GHE100-130(A)	130,000	95%	GPH	150	107
			LPH	567	405
GHE100-160(A)	160,000	95%	GPH	184	132
			LPH	698	499
GHE100-200(A)	199,000	95%	GPH	229	164
			LPH	868	620
GHE100-250(A)	250,000	93%	GPH	282	201
			LPH	1068	763
GHE100-300(A)	300,000	93%	GPH	338	242
			LPH	1282	916
GHE100-350(A)	350,000	92%	GPH	390	279
			LPH	1479	1057

MAXIMUM DELIVERY

In U.S. Gallons and Liters (Includes useable storage and recovery for indicated times)

MODEL NUMBER	GAL.	LITERS	INPUT (BTU/HR) NAT. & LP	TEMP. RISE	UNITS	5 MIN.	1 HR.	MIN. TO RECOVER CONTENTS
GHE100-130(A)	100	379	130,000	100°F	GAL	83	220	39
				56°C	LTR	313	833	
GHE100-160(A)	100	379	160,000	100°F	GAL	85	254	33
				56°C	LTR	323	964	
GHE100-200(A)	100	379	199,000	100°F	GAL	89	299	26
				56°C	LTR	338	1134	
GHE100-250(A)	100	379	250,000	100°F	GAL	94	352	21
				56°C	LTR	354	1333	
GHE100-300(A)	100	379	300,000	100°F	GAL	98	408	18
				56°C	LTR	372	1547	
GHE100-350(A)	100	379	350,000	100°F	GAL	103	460	15
				56°C	LTR	389	1745	

All models have a maximum setpoint of 185°F.

DIMENSIONAL INFORMATION

All dimensions shown in English and Metric

MODEL NUMBER	UNITS	A	B	C	D	E	F	G	H	VENT	WATER CONNECTIONS		APPROX SHIP. WT. (LB) *
											INLET	OUTLET	
GHE100-130(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	2", 3", 4"	2" NPT	2" NPT	785
	mm	2001	667	1674	325	1873	1869	1839	1687				
GHE100-160(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	2", 3", 4"	2" NPT	2" NPT	785
	mm	2001	667	1674	325	1873	1869	1839	1687				
GHE100-200(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	2", 3", 4"	2" NPT	2" NPT	785
	mm	2001	667	1674	325	1873	1869	1839	1687				
GHE100-250(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	3", 4"	2" NPT	2" NPT	825
	mm	2001	667	1674	325	1873	1869	1839	1687				
GHE100-300(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	3", 4"	2" NPT	2" NPT	825
	mm	2001	667	1674	325	1873	1869	1839	1687				
GHE100-350(A)	inches	78-3/4"	26-1/4"†	66"	12-3/4"	73-3/4"	73-5/8"	72-7/16"	66-7/16"	3", 4"	2" NPT	2" NPT	825
	mm	2001	667	1674	325	1873	1869	1839	1687				

ZERO CLEARANCE TO COMBUSTIBLES

Models with inputs of 130,000 through 199,000 BTU are certified to vent with 2" schedule 40 pvc, cpvc or abs pipe

(For Canadian installations, please use ULC-S636 PVC and CPVC pipe.)

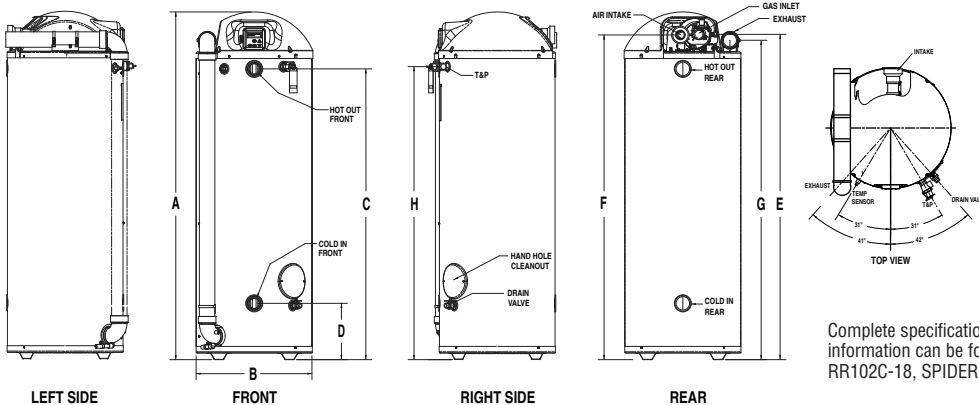
* Weights listed are for non-ASME. Add 35 lbs. for ASME models.

130,000 - 199,000 BTU models are certified to be installed with 2" venting.

All models require a 120V power source.

See use and care manual for venting details.

† Overall width is 27-5/16" due to exhaust cover



Complete specifications and venting information can be found on RR102C-18, SPIDER^{fire} spec sheet.



In keeping with its policy of continuous progress and product improvement, Rheem-Ruud reserves the right to make changes without notice.

Commercial water heaters
from Rheem-Ruud



Rheem Heating, Cooling & Water Heating • 101 Bell Road, Montgomery, AL 36117-4305
800-621-5622 • sales@rheem.com • www.rheem.com

Rheem Canada Ltd./Ltée • Water Heater Division • 125 Edgeware Road, Unit 1 • Brampton, Ontario L6Y 0P5
Not all models are available in Canada.

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