Product BrochureCommercial Water Heaters | SPIDER *fire*® Series



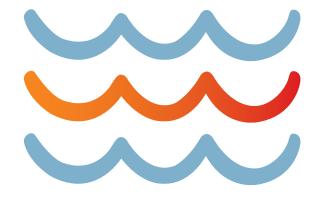
The new degree of comfort.™

PERF^ORMANCE



SPIDER *fire*: Delivers high efficiency and real savings for today's businesses

- Up to 97% thermal efficiency
- 80 and 100-gallon capacity models
- Patented heat exchanger system eliminates hot spots
- LCD diagnostics
- Quiet operation



SPIDERfire takes a bite out of fuel costs

The SPIDER *fire* family of 80 and 100-gallon condensing commercial water heaters offers a wide range of Btu/h inputs and ultra-high thermal efficiencies. The result is fuel savings and a higher hot water recovery rate – especially during periods of peak demand.

How SPIDERfire Works

The heart of the SPIDERfire is its patented multi-leg, heat-exchange system. Our proprietary design provides a remarkably efficient heat transfer system.



- Top burner blows combustion gases down the main flue.
- 2. Hot gases traverse nearly the full length of the elongated tubes two more times, extracting the heat.
- 3. 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.

Exclusive SPIDER*fire* Features

Durable, 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 porcelain coated flue network in water. Hot spots are eliminated and the design boosts efficiency.

Advanced Burner Operation

Latest 80 and 100-gallon models have increased burner surface area for ultra smooth ignition and quiet operation.

LCD Diagnostic System

Positioned at eye level, it monitors key functions and includes a scrollable, operational history that details usage.

Slim Profile

SPIDERfire's narrow diameters and modest height will fit in tight spaces.

Brass Drain Valve

Factory installed, full-port, full-flow brass drain valve for faster draining and servicing.

Third-party Tested

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

Made in America

Manufactured in Montgomery, AL.

SPIDERfire Fits Many Commercial Applications

With its sleek modern design, SPIDER fire models are engineered to quickly deliver substantial amounts of low-cost hot water that meets the needs of larger commercial applications.





Laundromats

Additional SPIDERfire Features

PVC or CPVC Venting

SPIDERfire's cooler flue gases permit venting through low-cost 2, 3, and 4 inch tubing, which means it can be installed virtually anywhere.

Power Vent and Power Direct Vent Installation

All models can be installed as a PV or PDV. The PDV is a good choice where negative air pressure or indoor air quality is a concern.

Multiple Water Connections

Hot and cold connections on front and rear for more installation options.

Natural and LP Gas

All SPIDERfire models are available in either natural or LP gas.

Reduced Emissions

Ultra low NOx burner design reduces greenhouse emissions. SCAQMD Rule 1146.2 compliant: 14ng/J NOx emissions.

Direct Spark Ignition System

Energy saving ignition that ignites pilot only when there is a call for heat.

ASME Certification

All inputs are available with ASME certification.

Warranty

Standard three-year limited warranty can be upgraded to five years.

Please refer to Commercial Warranty Certificate.



Customer Benefits

Specifying Engineers

SPIDER*fire* offers ultra-high efficiency and energy savings. With maximum delivery of up to 516 gallons of hot water for one hour at a 100 degree rise, its performance meets 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 small footprint reduces space requirements and long vent runs can be achieved through the use of low-cost PVC venting.

Contractors

SPIDER*fire*'s narrow diameter fits more easily down stairs and in tight places. Hot and cold water connections on both sides of the jacket provide installation flexibility, especially during retrofits. The eye level status and diagnostic display is scrollable and reduces guess work. Low-cost plastic venting can be used for power or power direct vent applications.

Facilities Managers

SPIDER fire's energy savings is an attractive solution to escalating costs. Because businesses often have heavy periods of hot water demand daily, the ability to deliver up to 516 gallons for one hour helps keep you in business. Easy-to-read status and diagnostic display provides key information for faster installation and service. Standard three-year warranty can be increased to five years.



Steeped deep in tradition and natural beauty, Hazeltine National Golf Club has hosted more United States Golf Association (USGA) events than any other golf club in the country.

"Without a reliable supply of hot water, our club simply cannot function," explained Matt Murphy, who has managed club operations since 2007. "From our kitchen and culinary staff, to guest services and locker rooms, down to our onsite laundry facility – dependable hot water is critical." He added that the club hosts more than 150 events and draws upwards of 60,000 members and guests each year.



"We are very pleased with the outcome of this extensive course and facilities renovation and especially our new clubhouse," said Murphy. "We're experiencing a 20-30 percent reduction in energy costs for the new clubhouse, despite increasing our square footage by 25 percent. Based on the enormous amount of hot water used by our kitchen, laundry and guest services, I would attribute a sizable portion of these energy savings to our high-efficiency water heating system."

Lower installation costs To get an installation done fast, start small.

When you install an 80 or 100 gallon SPIDERfire you'll have your choice of 24 SPIDERfire models and 12 of these models use the low-cost, easy-to-handle 2 inch vent pipe. SPIDERfire has a narrow footprint and a built-in exhaust riser that fits tightly to the chassis. The new 80 gallon's shorter height, plus SPIDERfire's convenient top venting, means it can be installed faster in tight spaces.



Installation Features

Choose from 24 Models!

80 & 100 Gallon capacities that range from 130,000 to 399,900 Btu/h

Choice of 2, 3, 4 Inch Plastic Venting

Two inch vent for faster, low cost installations

Built-in Exhaust Riser

No need to build riser yourself; SPIDERfire's factory installed exhaust riser fits tightly to the chassis and is covered by an attractive black fascia.

Power Vent or Power Direct Vent

Install as PV or PDV for installation flexibility. PDV is a good choice when either negative air pressure or air quality is an issue.

Narrow Footprint

SPIDERfire will fit in tight spaces, having just a 26 ¼ inch diameter for both the 80 and 100 gallon models.

LCD Display

Provides multiple setting options, status, and other information that will speed installation.

Water Connections on Front and Rear

The industry's best 2 inch NPT high-flow connections to ensure a maximum flow rate.

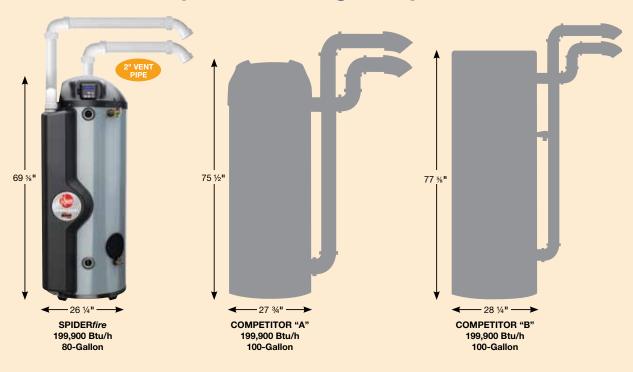
ASME Construction

ASME construction is available on all models.

No Conversion Kits Necessary

When ordering SPIDERfire, ask for natural gas or liquid propane models and they will be shipped ready to install.

Competitor Venting Comparison





SPIDER fire Specifications

RECOVERY CAPACITIES Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises									
MODEL NUMBER	INPUT (BTU/H) NAT. & LP	THERMAL EFFICIENCY	UNITS	100°F (56°C)	140°F (78°C)				
GHE80-130(A)	130.000	130.000 9/%							
	,		LPH	580	413				
GHE80-150(A)	150.000	171	122						
	100,000	## THERMAL EFFICIENCY UNITS (56) 97% GPH 15 94% GPH 25 100 94% GPH 26 100 92% GPH 27 100 92% GPH 19 95% GPH 19 100 95% GPH 26 100 100 100 100 100 100 100 1	648	462					
GHE80-200(A)	199,900	GPH	228	163					
	133,300	3470	LPH	864	618				
GHE80-250(A)	250 000	250,000 92% GPH 279							
	230,000	3270	1057	754					
GHE80-300(A)	300,000	020/	GPH	335	239				
GHE60-300(A)	300,000	92/6	LPH	1270	906				
GHE100-130(A)	130,000	150	107						
	100,000	3370	LPH	567	405				
GHE100-160(A)	160,000	184	132						
	100,000	3376	698	499					
GHE100-200(A)	199,000	229	164						
	133,000	3376	868	620					
GHE100-250(A)	250,000	282	201						
	230,000	97%		763					
GHE100-300(A)	300,000	GPH 338							
	300,000	3378	LPH	1282	916				
GHE100-350(A)	350,000	92%	GPH	390	279				
	333,000	3270	IERMAL UNITS 100°F 140° 161ENCY UNITS (56°C) (78°N) 178°N 178°N 179°N 179°	1057					
GHE100-400(A)	399,900	92%	GPH	446	319				
GITE 100-400(A)	333,300	3270	LPH	1688	1209				

MAXIMUM DELIVERY In U.S. Gallons and Liters (Includes useable storage and recovery for indicated times)									
MODEL NUMBER	GAL.	LITERS	INPUT (BTU/H) NAT. & LP	TEMP. RISE	UNITS	5 MIN.	1 HR.	MIN. TO RECOVER CONTENTS	
GHE80-130(A)	80	303	130,000	100 F	GAL.	69	209	31	
. ,			,	56°C	LTR.	262	792		
GHE80-150(A)	80	303	150,000	100°F	GAL.	70	227	28	
. ,			,	56°C	LTR.	265	860		
GHE80-200(A)	80	303	199,900	100°F	GAL.	75	284	21	
. ,			,	56°C	LTR.	284	1076		
GHE80-250(A)	80	303	250.000	100°F	GAL.	79	335	17	
				56 C	LTR.	299	1270		
GHE80-300(A)	80	303	300,000	100°F	GAL.	84	391	14	
			000,000	56 C	LTR.	318	1482		
GHE100-130(A)	100	379	130.000	100°F	GAL.	83	220	39	
			100,000	56°C	LTR.	313	833	05	
GHE100-160(A)	100	379	160,000	100°F	GAL.	85	254	33	
			100,000	56°C	LTR.	323	964	33	
GHE100-200(A)	100	379	199.000	100°F	GAL.	89	299	26	
GITE 100-200(A)	100	379	199,000	56°C	LTR.	338	1134	20	
GHE100-250(A)	100	379	250.000	100°F	GAL.	94	352	21	
			230,000	56°C	LTR.	354	1333	21	
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	
			330,000	56°C	LTR.	389	1745	13	
GHE100-400(A)	100	379	399,900	100°F	GAL.	107	516	14	
			333,900	56°C	LTR.	406	1956] '4	

All models have a maximum setpoint of 185°F.

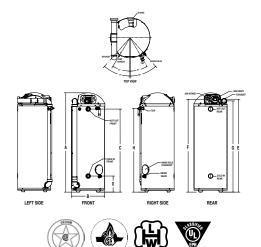
DIMENSIONAL INFORMATION All dimensions shown in English and Metric													
MODEL		_					_				WATER CONN.		APPROX.
NUMBER	UNITS	Α	В	C	D	E	F	G	Н	VENT	INLET	OUTLET	SHIP. WT. (LB)*
GHE80-130(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2", 3", 4"	2" NPT	2" NPT	725
	mm	1768	667	1680	324	1641	1646	1595	1692				
GHE80-150(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2". 3". 4"	2" NPT	2" NPT	725
GUEO0-100(A)	mm	1768	667	1680	324	1641	1646	1621	1692	2", 3", 4"			
GHE80-200(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	2", 3", 4"	2" NPT	2" NPT	745
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE80-250(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	3", 4"	2" NPT	2" NPT	745
GI IE00-230(A)	mm	1768	667	1680	324	1641	1646	1621	1692		ZINFI		
GHE80-300(A)	inches	69-5/8	26-1/4	66-1/8	12-3/4	64-5/8	64-13/16	62-13/16	66-5/8	3", 4"	2" NPT	2" NPT	745
	mm	1768	667	1680	324	1641	1646	1621	1692				
GHE100-130(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
GHE 100-130(A)	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-160(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-200(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	2", 3", 4"	2" NPT	2" NPT	765
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-250(A)	inches	78-3/4	26-1/4†	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	795
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-300(A)	inches	78-3/4	26-1/4 [†]	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	795
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-350(A)	inches	78-3/4	26-1/4 [†]	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	800
	mm	2001	667	1674	324	1873	1869	1829	1687				
GHE100-400(A)	inches	78-3/4	26-1/4 [†]	66	12-3/4	73-3/4	73-5/8	72	66-7/16	3", 4"	2" NPT	2" NPT	800
	mm	2001	667	1674	324	1873	1869	1829	1687		Z INFI		

*Weights listed are for non-ASME. Add 35 lbs. for ASME models. 130,000 - 199,000 Btu/h models are certified to be installed with 2" venting. All models require a 120V power source. Input rates 130-199: 1/2" gas inlet. Input rates 250-400: 3/4" gas inlet. See use and care manual for venting details. †Overall width is 27-5/16" due to exhaust cover.

Zero inch clearance to all combustible surfaces on sides; 6" top clearance for 130 to 300 models; 8" for 350 to 400 models.

Models with inputs of 130,000 Btu/h thru 199,000 Btu/h are certified to vent with 2" schedule 40 PVC, CPVC or ABS pipe.

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









With Optional Kit

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

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Anatomy of SPIDER*fire*

Schedule 40 PVC Venting

Choice of 2"- 3"- 4" vent pipe for fast, low cost installations

LCD Display

Provides multiple setting options, status and information

Built-in Exhaust Riser

Reduces installation time

Water Connections

Second set on rear, industry's best 2" NPT high-flow connections

Brass Drain Valve

Full-port, full flow for faster draining



Small Footprint 26 1/4" Diameter

Ultra Low NOx Burner

Reduces emissions

Advanced Burner System

Large burner surface for ultra smooth ignition and quiet operation

Direct Spark Ignition System

Energy saving ignition that ignites pilot only when there is a call for heat

Multi-leg Heat Exchanger

Ultra-efficient heat transfer with 92-97% thermal efficiency

ASME Construction

Available on all models

Wet-base Flue Design

Eliminates hot spots and premature tank failure

More Choices!

80 & 100 Gallon Models

24 Models to choose from!

Btu Inputs

Five inputs for 80 gallon Seven inputs for 100 gallon

Installs as Power Vent or Power Direct Vent

For installation flexibility

Natural Gas or Liquid Propane

For application flexibility

Warranty

3-Year limited warranty, upgradeable to five years

Built in Montgomery, Alabama and third-party tested















ASME

Low Lead

