

Burnham

Gas Fired, **Chimney Vented, Cast Iron Water Boiler**

- 85% AFUE
- · Electronic ignition
- Easy, intelligent IQ Control System™
- Outdoor reset available increases efficiency by 15-20%
- 70 280 MBH (7 sizes)
- Industry standard tapping locations fit thousands of existing boiler installations
- Reliable, American-made cast iron heat exchanger accepts return water as low as 110°F
- · Lifetime limited warranty





Consists of the Intelligent Hydronic Control and **IQ** Option Panel





Intelligent Hydronic Control

- Provides fast and easy "out of the box" installation.
- · Simple codes convey boiler status and eliminate guesswork
- · Combines aquastat, relay, and ignition functions into a single module
- Two customizable integrated switching relays for easy addition of additional heating zone or indirect water heater



IQ Option Panel

Enables the easy plug & play installation of optional features such as outdoor reset, LWCO, and high limit





Optional Touchscreen

LCD displays all boiler settings, diagnostics, and troubleshooting in sentences, not codes











ES2: Technical Information







Standard Equipment

- · Insulated sleek, modern jacket
- · Integrated draft diverter, damper and connector included
- Heavy gauge 1" and 1-1/2" base insulation
- Intelligent Hydronic Control Simple self-diagnostic control system with 3-digit readout for status settings and errors
- IQ Option Panel, accepts plug & play IQ Option Cards for
 - Outdoor reset with DHW priority
 - Auto or manual reset low water cutoff
 - Auto or manual auxilliary high limit
- · Step-opening redundant gas valve
- · Stainless steel flue baffles
- 110°F minimum return temperature rating
- · Spark ignition with retry
- User-friendly wiring with 120V J-box
- Circulator
- · Cast iron section assembly
- · Resettable blocked vent switch
- · Boiler drain valve
- · Cast iron supply manifold with safety relief valve tapping

ES2 Ratings & Specifications												
Model	AFUE%	Input (MBH)	DOE Heating Capacity (MBH)	Net AHRI (MBH)	Vent Size (Inches)	Approx. Shipping Weight. (lbs.)						
ES23	85	70	59	51	4	254						
ES24	85	105	89	77	5	301						
ES25	85	140	119	103	6	353						
ES26	85	175	149	130	6	405						
ES27	85	210	178	155	7	464						
ES28	85	245	208	181	7	514						
ES29	85	280	238	207	8	564						

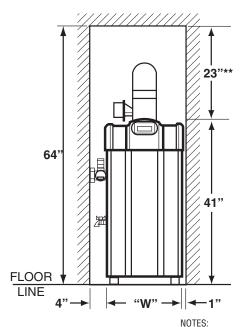
Available for natural or LP das

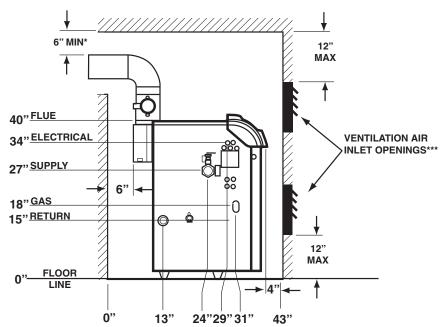
Ratings shown are based on certification to 2,000 ft. For elevations above 2,000 ft, use industry standard derating (4% per 1,000 ft.) All ES2s are shipped with 30 psi relief valves, MAWP is 50 psi.

Net AHRI Water Ratings shown based on a piping and pickup allowance of 1.15. Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

Burnham ES2 with Control inside
U.S. Boiler Company

ES2 Dimensions & Connections												
	Dimen	sions (in	ches)	Connections (inches)				Water				
						Gas	Relief	Content				
Model	Width	Height	Depth	Supply	Return	Valve	Valve	(gal.)				
ES23	12-3/4	41	33	1-1/4	1-1/4	1/2	3/4	2				
ES24	15-1/2	41	33	1-1/4	1-1/4	1/2	3/4	3				
ES25	18-1/2	41	33	1-1/4	1-1/4	1/2	3/4	4				
ES26	21-1/2	41	33	1-1/4	1-1/4	1/2	3/4	5				
ES27	24-3/4	41	33	1-1/4	1-1/4	3/4	3/4	6				
ES28	27-3/4	41	33	1-1/4	1-1/4	3/4	3/4	7				
ES29	30-3/4	41	33	1-1/4	1-1/4	3/4	3/4	8				





Caution: chimney, liner, and vent connector must meet requirements specified by manufacturer's installation instructions

- * Minimal radial distance around vent pipe and breeching
- * Add height required to maintain 6" clearance from all breeching components
- ** Area of each opening 1 sq. inch for each 1,000 BTUH input with minimum of 100 sq. inches. Height of opening should be half the width.



