

# EliteULTRA

Highly Efficient **Condensing Boiler & Combi Units**



## DURABLE HEATING - BOILER & COMBI UNITS

Boiler Firing Rates: 85,000, 120,000, 150,000, 199,000 Btuh

Combi Firing Rates: 120,000, 150,000, 199,000 Btuh

Condensing technology with a new and patented XtraTech Stainless Steel Heat Exchanger, ensuring many years of reliable performance

## ABSOLUTE EFFICIENCY

Up to 96% AFUE while using an outdoor sensor (included)

Up to 11:1 turndown ratio limits short cycling and provides more efficient energy consumption

Built-in automatic bypass eliminates expensive primary / secondary piping

Equipped with a built-in highly efficient ECM Pump

## WHISPER QUIET OPERATION

Thanks to a pump and combustion fan with insulating panels

## EASY TO USE INTERFACE

LCD display with digits, symbols, and an intuitive menu to set the desired temperature, activate functions, and even manage different heating zones

## COMBI BOILER: FULL COMFORT SETTING

Domestic hot water preheat function for instant hot water

## SMART CONNECTIVITY WITH HTP LINK

The Elite Ultra is always at your fingertips with WiFi on board, allowing the boiler and its many system parameters to be monitored remotely

Set up real-time service and maintenance notifications to ensure that the unit is regularly monitored, or if professional assistance is recommended

## EASY TO SERVICE WITH QUICK SNAP COMPONENT AND SENSOR CONNECTIONS

## FIFTEEN (15) YEAR LIMITED WARRANTY

## FLOOR AND WALL MOUNT MODELS AVAILABLE



ELU-85 - 120 Boiler and  
120 - 150 Combi Model Shown



ELU-150 - 199 Boiler and 199 Combi  
Floor Mount ("FLKT") Model Shown

**SUSTAINABLE COMFORT FOR EVERYONE**

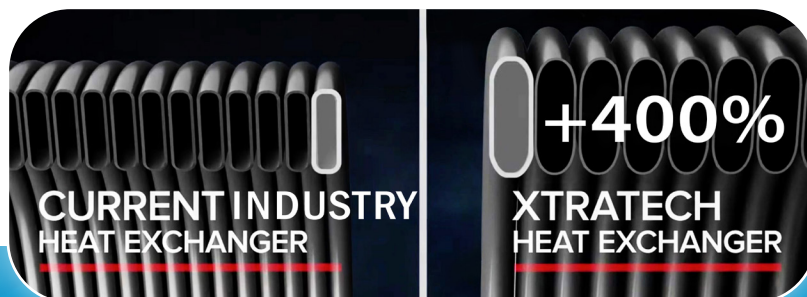
 **ARISTON**  
GROUP

# XtraTech Heat Exchanger

## The Heart of Our Design



**Up to 400%** Larger Pipe Surface Area Versus Conventional Designs Ensures Extremely Low Pressure Drop with High Performance



**XTRATECH™ HEAT EXCHANGER**

The Heart of Our Heating  
Condensing Technology

### XtraTech Stainless Steel Heat Exchanger

High Grade Stainless Steel

- Ensures maximum quality at the heart of the boiler
  - Resists corrosion to guarantee reliability for years to come
- Innovative Heat Exchanger Design

- Increases water flow, creating more internal turbulence
- This turbulence acts as a scrub on the internal walls, reducing heat exchanger deposits and ensuring a longer lifetime for your boiler

## HTP LINK

**You're in Control - Wherever You Are\***

With HTP Link, you and trusted service personnel can:

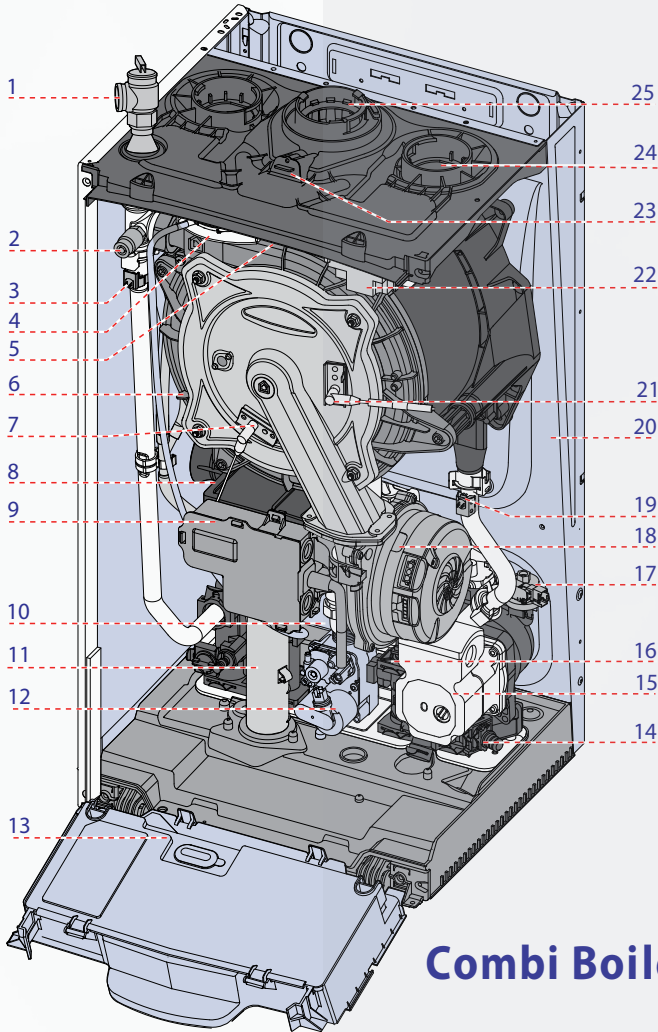
- Remotely view boiler parameters and status, ensuring proper operation and maximum efficiency.
- Receive boiler text and e-mail updates, alerting service personnel of possible issues.
- Access the boiler and troubleshoot issues without having to be onsite, reducing costly service calls.



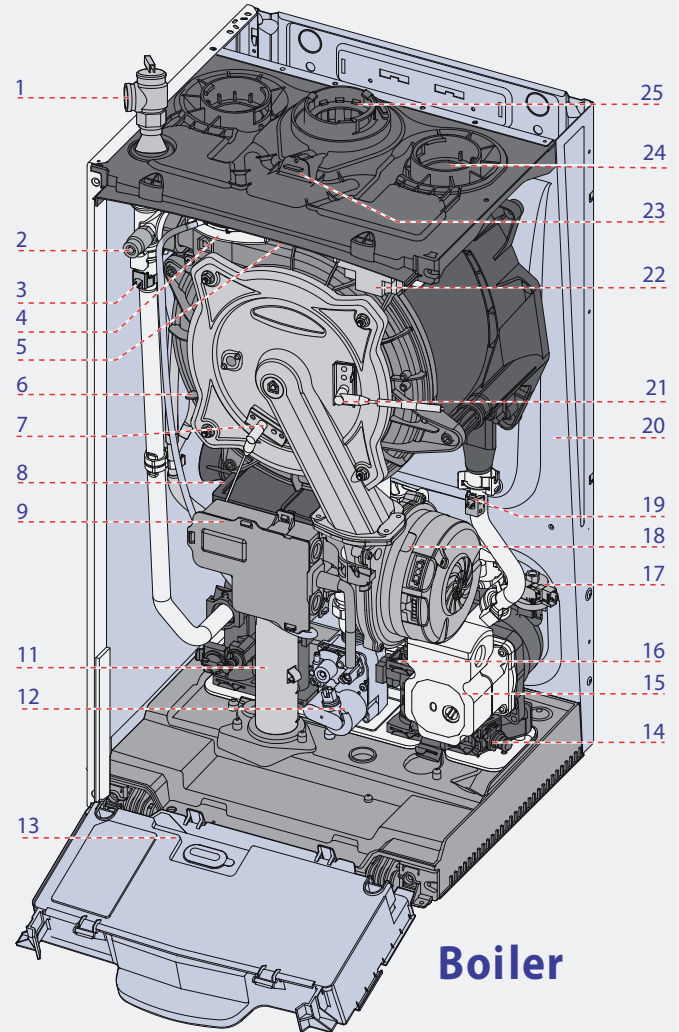
\*HTP Link Available on All Models



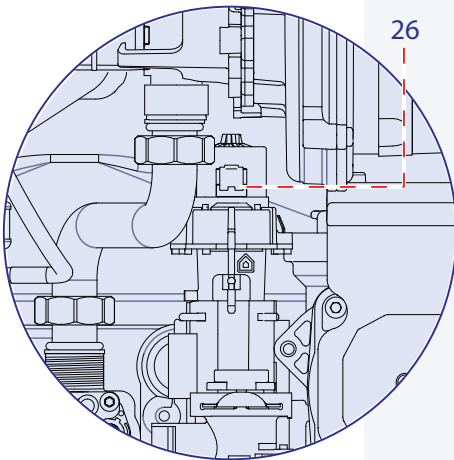
# A Look Inside the ELU-85 - 120 Boiler and 120 - 150 Combi



**Combi Boiler**

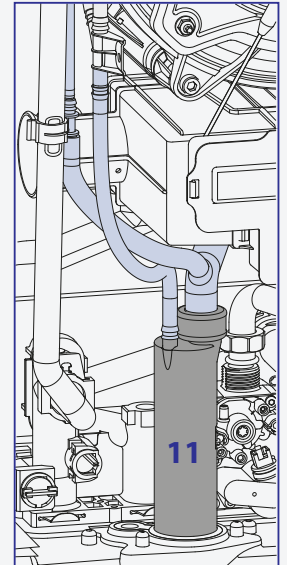


**Boiler**



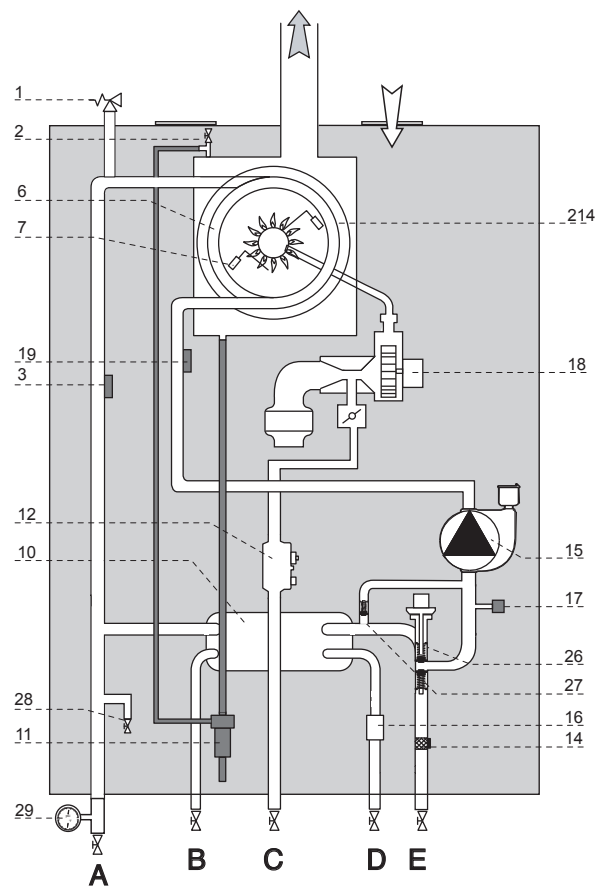
1. Pressure relief valve
2. Air purge valve
3. Boiler outlet temperature sensor
4. Air pressure switch
5. Flue gas temperature sensor
6. Main heat exchanger
7. Flame detection electrode
8. Silencer
9. Junction box
10. DWH heat exchanger\*
11. Condensate trap
12. Gas valve
13. Control panel
14. C.H. circuit filter
15. Circulation pump with auto air vent
16. DHW flow switch\*
17. Water pressure switch
18. Modulating fan
19. Boiler inlet temperature sensor
20. Frame
21. Ignition electrode
22. Spark generator
23. Combustion analysis test point
24. Air intake connection
25. Exhaust vent connection
26. Diverter valve

\*Applicable on combi units only.

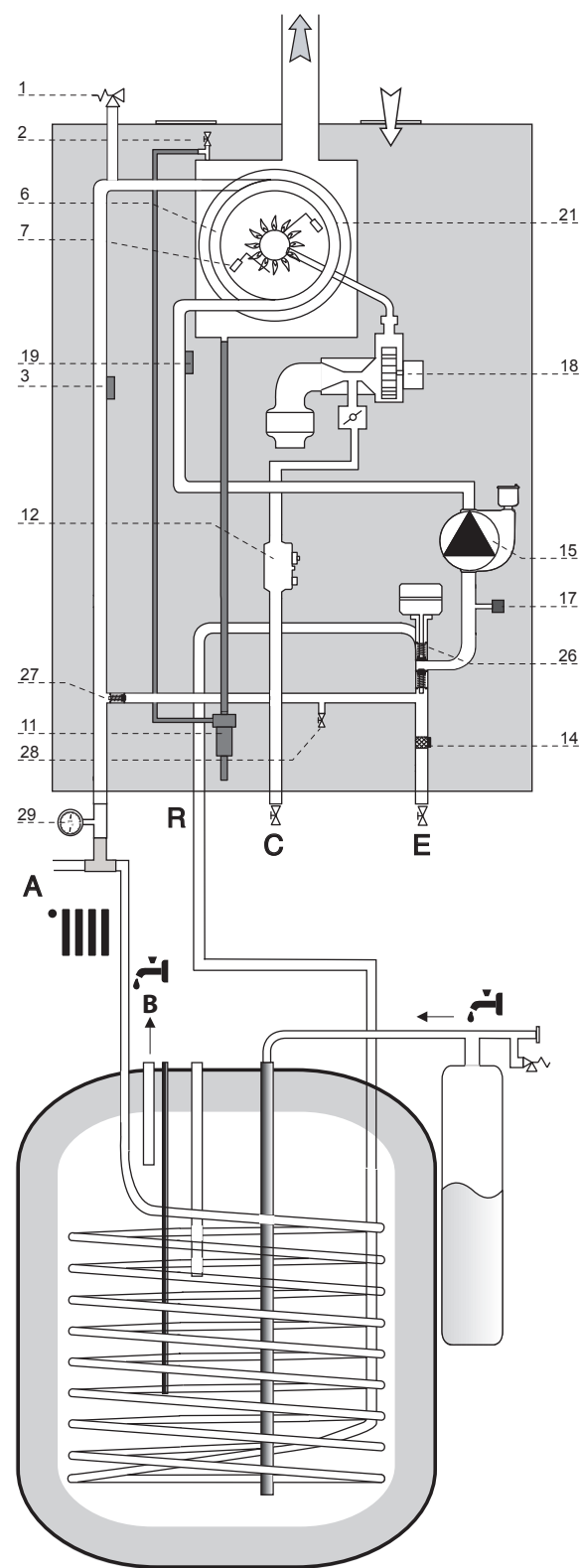


# Water Circuit Diagram - ELU-85 - 120 Boiler and 120 - 150 Combi

ELU-120WCN - ELU-150WCN



ELU-85WBN - ELU-120WBN



1. Pressure relief valve
2. Air purge valve
3. Boiler outlet temperature sensor
4. Air pressure switch
5. Flue gas temperature sensor
6. Main heat exchanger
7. Flame detection electrode
8. Silencer
9. Junction box
10. DHW heat exchanger
11. Condensate trap
12. Gas valve
13. Control panel
14. CH circuit filter
15. Circulation Pump with auto air vent
16. DHW Flow switch
17. Water pressure switch
18. Modulating Fan
19. Boiler inlet temperature sensor
20. Frame
21. Ignition electrode
22. Spark generator
23. Combustion Analysis Test Point
24. Air intake connection
25. Exhaust vent connection
26. Diverter valve
27. By-pass
28. Drain valve
29. Pressure gauge

## CAPTION

A	Central Heating and Indirect Water Heater Supply	D	DHW Cold Inlet
B	DHW Hot outlet	E	Central Heating Return
C	Gas inlet	R	Indirect Water Heater Return (Heating Only Boilers)

Figure 1 - Water Circuit Diagrams

# Specifications - ELU-85 - 120 Boiler and 120 - 150 Combi

Model		ELU-85WBN	ELU-120WBN	ELU-120WCN	ELU-150WCN
Type		Boiler		Combi	
Installation		Indoor, Wall Hung, Fully Condensing			
Space Heating Minimum / Maximum Input (Btu/Hr) <sup>1</sup>		9,400 / 85,000	13,200 / 120,000	11,200 / 106,000	13,200 / 120,000
Domestic Hot Water Minimum / Maximum Input (Btu/Hr) <sup>1</sup>		N/A	N/A	11,200 / 114,000	13,200 / 150,000
DOE AFUE <sup>2</sup> (%)		96	95	95.5	95
Heating Capacity <sup>1, 2</sup> (MBH)		79	111	98	111
Net AHRI Rating, Water (MBH) <sup>12</sup>		69	97	85	97
Hot Water Capacity	35°F Rise	N/A	N/A	6.0	7.9
	45°F Rise	N/A	N/A	4.7	6.1
	77°F Rise	N/A	N/A	2.7	3.6
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent			
Minimum - Maximum Exhaust Vent Run <sup>3</sup>		2" (6 - 100 feet), 3" (6 - 150 feet)			
Minimum - Maximum Intake Air Pipe Run <sup>3</sup>		2" (0 - 100 feet), 3" (0 - 150 feet)			
Approved Exhaust Vent Materials <sup>3</sup>		PVC, CPVC, PP, Stainless Steel			
Shipping Weight (lbs)		78	84	83	84
Gas Supply Pressure	NG	3.5" to 10.5" WC			
	LP	8" to 13" WC			
Power Supply		120V, 60 Hz, less than 12A			
General Operating Conditions		Ambient Temperature Range: 33 – 104°F (0.6 – 40°C) Product Approvals and Requirements: ANSI Z21.13 / CSA 4.9			
Ignition System		Direct Electronic Spark Ignition / Flame Rectification			
Burner System		Premixed Fuel Modulation / Stainless Steel Burner			
Gas Valve System		Air Ratio Valve			
Dimensions (in Inches)	W	16" 3/64			
	H	43" 5/8			
	D	15" 1/8			
Approx. Full Boiler Weight (lbs)		88.2	88.6	91	92.8
Boiler Water Content (Gallons)		1.1	1.2	1.1	1.2
Boiler Setpoint Temperature Range		68 – 122°F Low Temperature / 86 - 179°F High Temperature			
DHW Indirect Setpoint Temperature Range		104 – 149°F			
DHW Setpoint Range (Combi Models)		97 – 140°F			
Water Pressure (PSI)	Heat Exchanger MAWP	50			
	Pressure Relief Valve	30			
	DHW Max Pressure	N/A	N/A	125	125
Control Panel / Main Controller		AristonThermo LCD Display / AristonThermo GALEVO2 Control			
Connection Sizes	CH Supply / Return	1" Male Sweat with Adapter			
	DHW Inlet / Outlet	3/4" Male Sweat with Adapter			
	Gas Inlet	3/4" Male NPT			
Materials	Cabinet	Painted Steel and Plastic			
	Heat Exchanger	Type 441 Stainless Steel Water Tube			
Safety Devices		Flame Rectifier Probe, Temperature Limit Control (190°F), Water Pressure Switch (Min. 8 PSI), Freeze Protection, Blocked Condensate Pressure Switch, Condensate Trap, Flue Temperature High Limit Sensor (210°F), Blocked Vent Pressure Switch			

Table 1 - Technical Specifications

## NOTES:

<sup>1</sup> Listed Input and Output Ratings are at minimum vent lengths at an altitude of 0 - 2000 ft. Numbers will be lower with longer venting and/or altitudes greater than 2000 ft.

<sup>2</sup> Ratings based on standard test procedures prescribed by the US Department of Energy.

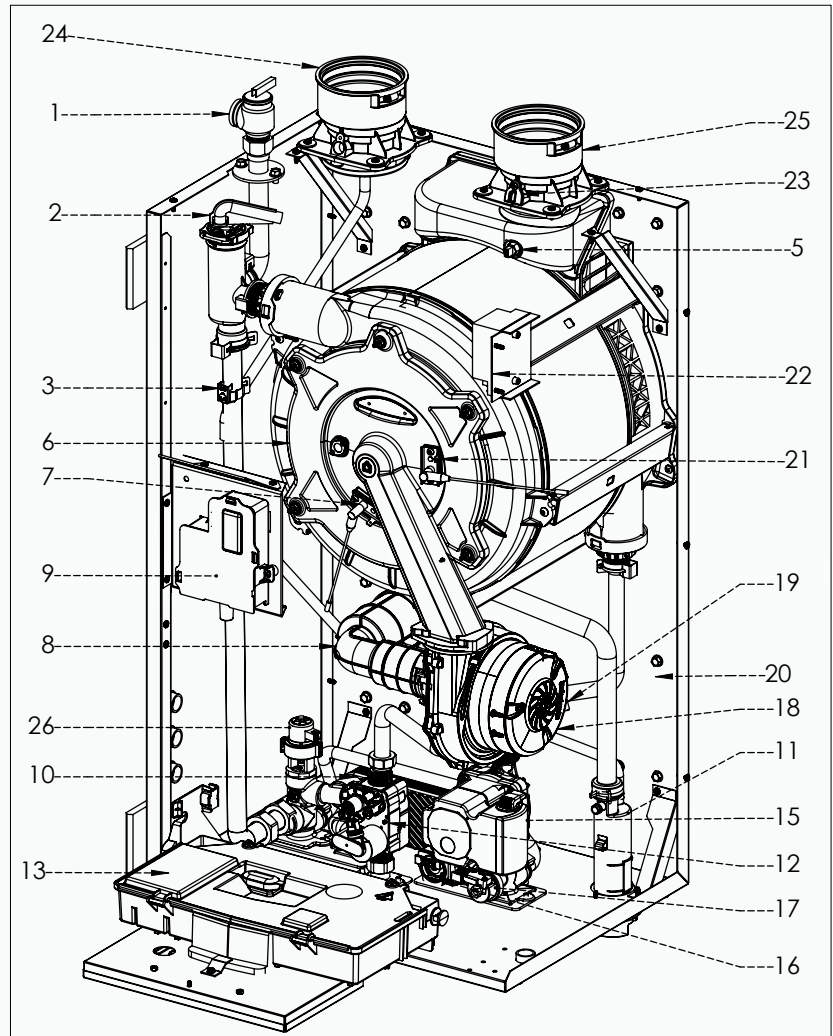
<sup>3</sup> The ELU requires a special venting system. Use only the vent materials and methods detailed in these installation instructions.



15 Year Limited Warranty

# A Look Inside the ELU-150 - 199K BTU Combi/Boiler

1. Pressure relief valve
2. Air purge valve
3. Boiler outlet temperature sensor
4. Air pressure switch
5. Flue gas temperature sensor
6. Main heat exchanger
7. Flame detection electrode
8. Silencer
9. Junction box
10. DHW Heat Exchanger (Combi Models Only)
11. Condensate trap
12. Gas valve
13. Control panel
15. Circulation Pump
16. DHW Flow Sensor (Combi Models Only)
17. Water pressure switch
18. Modulating Fan
19. Boiler inlet temperature sensor
20. Frame
21. Ignition electrode
22. Spark generator
23. Combustion Analysis Test Point
24. Air intake connection
25. Exhaust vent connection
26. Diverter valve



## Floor and Wall Mount Models Available

For increased installation flexibility, ELU-150WBN, ELU-199WBN, and ELU-199WCN models are available with a factory installed floor mount kit. Just add FLKT to the model number when ordering. The floor mount kit includes a wall hung boiler mounted on a pre-piped and pressure tested floor stand to ensure leak proof operation. The upgraded floor mount cabinet features piping adapters that can be moved from the left to the right side to further meet installation conditions.



ELU-150 - 199 Boiler and 199 Combi  
Wall Mount Model Shown



ELU-150 - 199 Boiler and 199 Combi  
Floor Mount ("FLKT") Model Shown



# Water Circuit Diagram - ELU-150 - 199K BTU Combi/Boiler

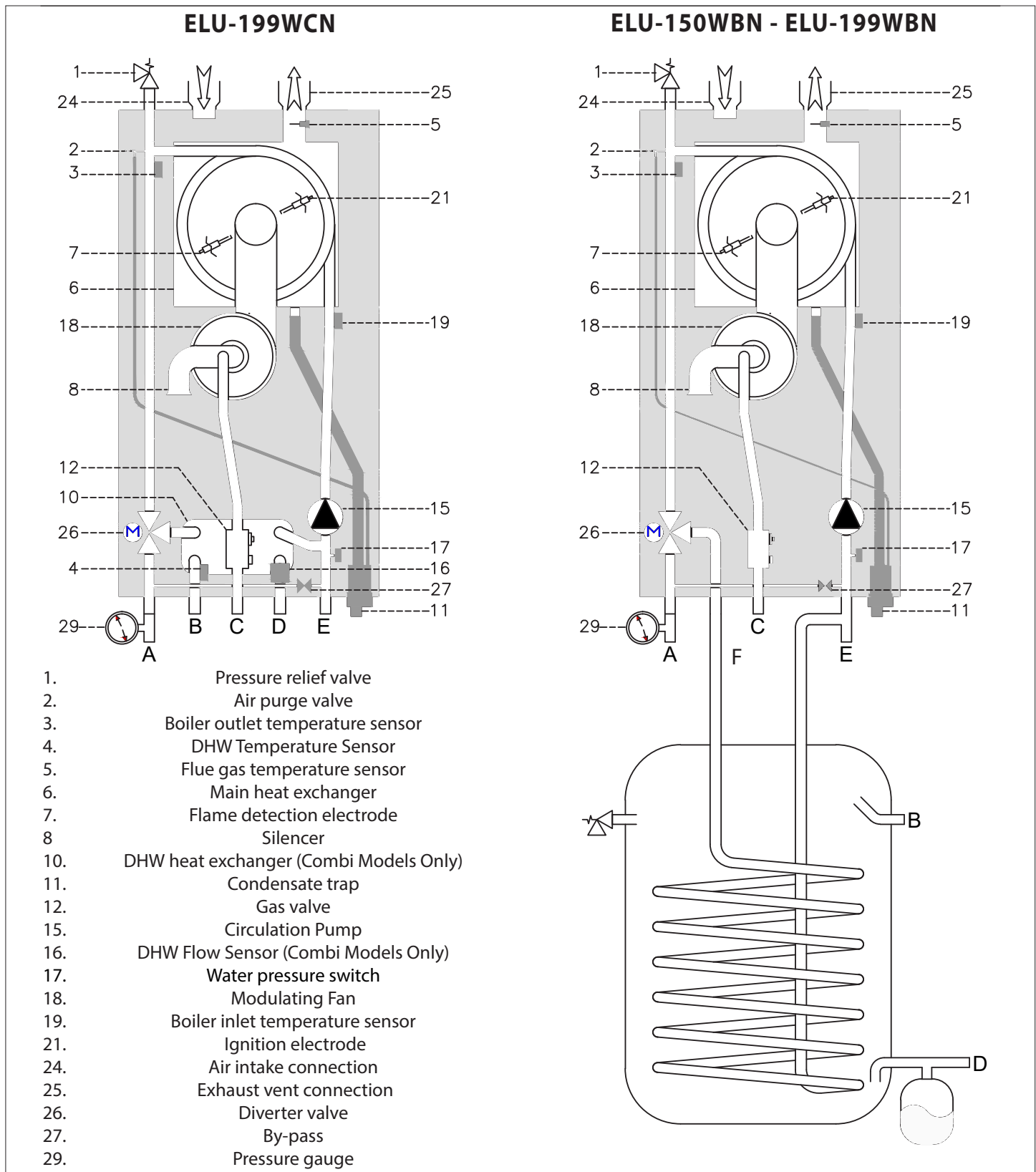


Figure 2 - Water Circuit Diagrams

# Specifications - ELU-150 - 199K BTU Combi/Boiler

Model		ELU-150WBN	ELU-150WBN-FLKT	ELU-199WBN	ELU-199WBN-FLKT	ELU-199WCN	ELU-199WCN-FLKT
Type		Boiler				Combi	
Installation		Indoor, Wall Hung, Fully Condensing					
Minimum / Maximum Input (Btu/Hr) <sup>1</sup>		15,000 / 150,000	NG	19,700 / 197,000		NG	19,700 / 197,000
			LP	19,200 / 192,000		LP	19,200 / 192,000
DOE AFUE <sup>2</sup> (%)		95		95		95	
Heating Capacity <sup>1, 2</sup> (MBH)		139		184		184	
Net AHRI Rating, Water (MBH) <sup>2</sup>		121		160		160	
Hot Water Capacity	35°F Rise	N/A		N/A		10.5	
	45°F Rise	N/A		N/A		8.2	
	77°F Rise	N/A		N/A		4.8	
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent					
Minimum - Maximum Exhaust Vent Run <sup>3</sup>		2" (6 - 100 feet) / 3" (6 - 150 feet)			3" (6 - 150 feet)		
Minimum - Maximum Intake Air Pipe Run <sup>3</sup>		2" (0 - 100 feet) / 3" (0 - 150 feet)			3" (0 - 150 feet)		
Approved Exhaust Vent Materials <sup>3</sup>		PVC, CPVC, PP, Stainless Steel					
Shipping Weight (lbs)		115	150	125	160	130	165
Gas Supply Pressure	NG	3.5" to 10.5" WC					
	LP	8" to 13" WC					
Power Supply		120V, 60 Hz, less than 12A					
General Operating Conditions		Ambient Temperature Range: 33 – 104°F (0.6 – 40°C) Product Approvals and Requirements: ANSI Z21.13 / CSA 4.9					
Ignition System		Direct Electronic Spark Ignition / Flame Rectification					
Burner System		Premixed Fuel Modulation / Stainless Steel Burner					
Gas Valve System		Air Ratio Valve					
Dimensions (in Inches)	W	19.75"	21.65"	19.75"	21.65"	19.75"	21.65"
	H	38.25"	50.97"	38.25"	50.97"	38.25"	50.97"
	D	18.5"	20.09"	18.5"	20.09"	18.5"	20.09"
Approx. Full Boiler Weight (lbs)		115	150	130	165	135	170
Boiler Water Content (Gallons)		2			2.7		
Boiler Setpoint Temperature Range		68 – 122°F Low Temperature / 86 - 179°F High Temperature					
DHW Indirect Setpoint Temperature Range		104 – 149°F					
DHW Setpoint Range (Combi Models)		97 – 140°F					
Water Pressure (PSI)	Heat Exchanger MAWP	50					
	Pressure Relief Valve	30					
	DHW Max Pressure	N/A			N/A		150
Control Panel / Main Controller		AristonThermo LCD Display / AristonThermo GALEVO2 Control					
Connection Sizes	CH Supply / Return	1 1/4" Male NPT					
	DHW Inlet / Outlet	3/4" Male NPT					
	Gas Inlet	3/4" Male NPT					
Materials	Cabinet	Painted and Galvanized Steel					
	Heat Exchanger	Type 441 Stainless Steel Water Tube					
Safety Devices		Flame Rectifier Probe, Temperature Limit Control (190°F), Water Pressure Switch (Min. 8 PSI), Freeze Protection, Condensate Trap, Flue Temperature High Limit Sensor (210°F)					

**Table 2 - Technical Specifications**

**NOTES:**

<sup>1</sup> Listed Input and Output Ratings are at minimum vent lengths at an altitude of 0 - 2000 ft. Numbers will be lower with longer venting and/or altitudes greater than 2000 ft.

<sup>2</sup> Ratings based on standard test procedures prescribed by the US Department of Energy.

<sup>3</sup> The ELU requires a special venting system. Use only the vent materials and methods detailed in these installation instructions.



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