



HTP



### Heat Exchanger



### **15 YEAR LIMITED WARRANTY**





# Features

### **DURABLE HEATING - BOILER & COMBI UNITS**

Firing rate: 85,000 & 150,000 Btuh - Boiler units

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

### **ABSOLUTE EFFICIENCY**

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

A 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 modulating pump and insulating panels

### **EASY to USE INTERFACE**

Full text and intuitive menu from which you can easily set the temperature you desire, activate functions, and even manage different heating zones

### SMART CONNECTIVITY with HTP LINK

Wherever you are the Elite Ultra boiler is always at your finger tips, with a Wi-Fi gateway on board allowing you to monitor the boiler and its many system parameters remotely

Set up real-time service notifications to stay informed -Maintenance alerts can provide assurance that the unit has been regularly monitored, is overdue for maintenance or if professional assistance is recommended

### **COMBI BOILER: FULL COMFORT SETTING**

Firing rate up to 150,000 Btuh - Combi Boiler units Domestic hot water preheat function for instant hot water





## XtraTech Heat Exchanger the heart of our design

**150%** Larger Pipe Surface Area Versus Conventional Designs Ensures Extremely Low Water Pressure Drop with High Performance

ISTRY

ANGER



Heat Exchanger



36°₀=....65°

The Elite Ultra comes equipped with XtraTech Durable Stainless Steel Heating Technology. The high grade stainless steel ensures maximum quality at the heart of the boiler and resists corrosion to guarantee reliability for years to come. The innovative heat exchanger design provides an increase in water flow which creates more internal turbulence. The turbulence acts as a scrub to the internal walls and reduces heat exchanger deposits ensuring a longer lifetime in your boiler.

# Easy to Use Interface

Full text and intuitive menu from which you can easily set the temperature you desire, activate functions, and even manage different heating zones

### how the interface works



Water Heating Adjustment +/-2 Auto 3 Comfort





6 Reset (7



Space Heating

Adjustment +/-

# HTPL:NK& you're in control wherever you are

A new generation of connectivity that is easily set up to establish alerts and address service issues. With HTP Link, you can view the parameters of the boiler while monitoring its operation to assure it is running at maximum efficiency. HTP Link ensures confidence that the boiler is operating correctly and effectively without having to be on site with the unit. Assign a trusted member of personnel to receive text and e-mail updates remotely regarding the boiler. They will receive access to the boilers display right to their fingertips to monitor any irregular operation and initiate service immediately.

## **Excellence Begins Here**

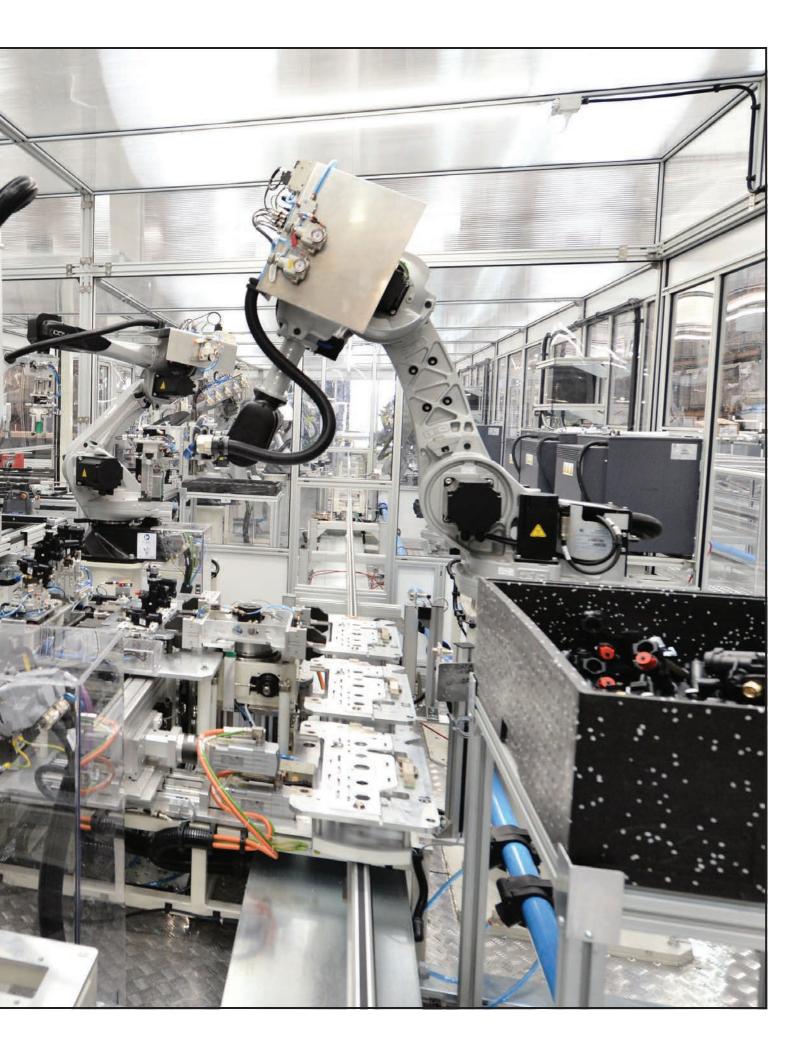
Over 250 million people globally trust Ariston in their homes and businesses

Quality You Can Depend On: Tested for 100% quality and safety, ensuring your boiler performs at its best, longer

Advance Performance: The ultimate technologies and smart connectivity for thermal home comfort and energy efficiency

Modern Design: Products developed by Ariston design engineers with special attention to crucial details while boasting pleasing aesthetics





# boiler & combi units available



Access to internal components has never been easier with snap connections, which allow for service in a snap! Eliminating the need to braze or solder inside the unit, components can be easily accessed and serviced.

A surface mount sensor eliminates the potential for long term failure in comparison to traditional sensors.

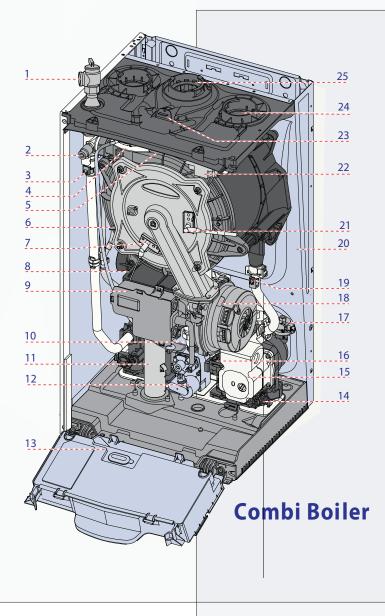
**Combi:** The Elite Ultra Combi Boiler provides both space AND water heating (ELU-120WC, ELU-150WC) providing you with abundant hot water to take care of both domestic hot water and space heating. This compact appliance allows you to achieve all of your heating needs in one small unit.

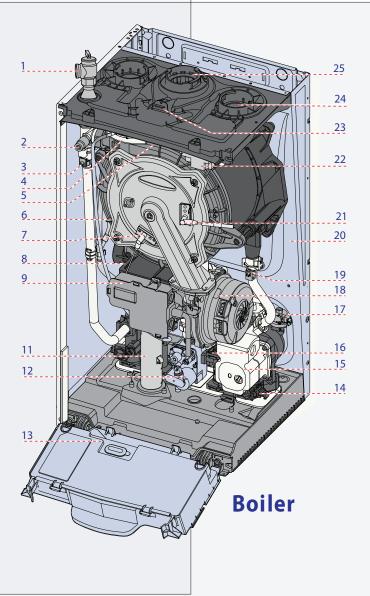
**Boiler:** The Elite Ultra Highly Efficient Condensing Boiler (ELU-85WB, ELU-120WB) provides greater energy savings. High efficiency boilers have higher thermal efficiency ratings than standard boilers. Specifically, condensing boilers extract heat from flue gas moisture, making them highly efficient. Along with higher thermal efficiency ratings, high efficiency commercial boilers provide a maximum payback on fuel savings.

A unique feature of the boiler design is the internal three way valve, which eliminates the need of any secondary pump when connecting to indirect fired water. This eliminates time and extra cost versus traditional methods of piping indirect fired water that can be found in competitor units.



# a look inside

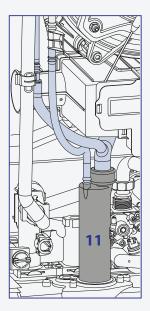




- 26
- Pressure relief valve 1.
- 2. Air purge valve Boiler outlet 3.
- temperature sensor 4. Air pressure switch
- Flue gas 5.
- temperature sensor
- 6. Main heat exchanger
- 7. Flame detection electrode 21. Ignition electrode
- Silencer 8
- 9. Junction box
- 10. DWH heat exchanger\*
- 11. Condensate trap
- 12. Gas valve
- 13. Control panel
- 14. C.H. circuit filter

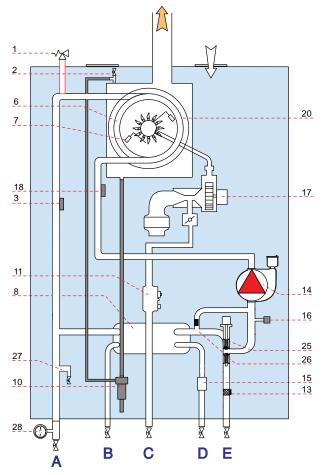
\*Applicable on combi units only.

- 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
- 22. Spark generator
- 23. Combustion analysis test point
- 24. Air intake connection
- 25. Exhaust vent connection
- 26. Diverter valve



## water circuit diagram

**Combi Boiler** 



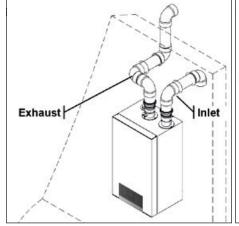
- 1. Safety valve
- 2. Manual air purge
- 3. Supply NTC 1 sensor
- 6. Main heat exchanger
- 7. Flame detection electrode
- 8 DWH heat exchanger
- 10. Syphon
- 11. Gas valve
- 13. Heating filter, included
- 14. Circulation Pump with auto air vent
- 15. DHW flow switch
- 16. Heating pressure switch
- 17. Blower
- 18. Return NTC 2 sensor
- 20. Ignition electrode
- 25. 3 way valve
- 26. By-pass
- 27. Drain tap
- 28. Tridicator Gauge
- A Delivery Heating for Either Central Heating Circuit or Indirect Water Heater Supply Circuit
- 1 6 \_20 7 18 \_\_17 3 I 11 \_14 16 25 26 10 13 27 R С Ε Α <sup>↑</sup>R ř. Domestic Hot Water B ≜ Expansion Tank  $\mathbb{R}^{1}$

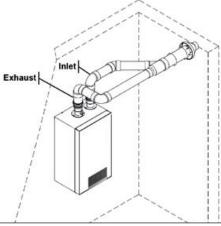
**Boiler** 

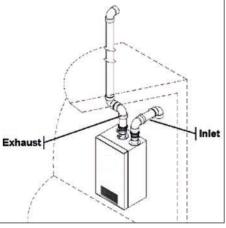
- C Gas Inlet 3/4" NPT Male
  - D Cold Water Inlet 3/4" NPT Male
  - E Heating Return
- R Indirect Return Line (Heating Only Boilers)

B - Hot Water Outlet (Combi Only)

## multiple venting options







2 Pipe Side Wall Direct Vent

**Concentric Side Wall Direct Vent** 

2 Pipe Vertical Exhaust w/Side Wall Air Inlet

## specifications

MODEL		ELU-85WBN Boiler	ELU-120WBN Boiler	ELU-120WCN Combi	ELU-150WCN Combi
Installation		Indoor, Wall mount, Fully Condensing			
Minimum / Maximum Heating Input (Btu/Hr)	Central Heating (CH)	9,400/85,000	13,200/120,000	11,200/106,000	13,200/120,000
	Domestic Hot Water(DHW)	NA	NA	11,200/114,000	13,200/150,000
AFUE		96	95	95.5	95
Heating Capacity (MBH)		79	111	98	111
Hot Water Capacity	35°F Rise	NA	NA	6.8	8.5
	45°F Rise	NA	NA	5.3	6.6
	77°F Rise	NA	NA	3.1	3.8
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent			
Intake Air Vent Run		2" (0 - 100 feet), 3" (0 - 150 feet) Sched 40 PVC, CPVC, PP, SS			
Exhaust Vent Run		2" (6 - 100 feet), 3" (6 - 150 feet) Sched 40 PVC, CPVC, PP, SS			
Shipping Weight (Ibs)		78	84	83	84
Gas Supply Pressure	NG	3.5" to 10.5" WC			
	LP	8" to 13" WC			
Power Supply		120V, 60Hz, less than 12A			
General Operating Conditions		Ambient Temperature Range: 33 - 104°F (0.6 - 40°C) Product Approvals and Requirements: ANSI Z21.13 and CSA 4.9			
Ignition System		Direct electronic Spark Ignition/Flame Rectification			
Burner System		Premixed Fuel Modulation/Stainless Steel Metal Burner			
Gas Valve System		Air Ratio Valve			
Dimensions	W	16" 3/64"			
	н	43" 5/8			
	D	15″ 1/8			
Approx. Full Bo	iler Weight (Ibs)	88.2	88.6	91	92.8
Boiler Water Content (Gallons)		1.1	1.2	1.1	1.2
Water Pressure (PSI)	Heat Exchanger MAWP	50			
	Pressure Relief Valve	30			
	DHW Max Pressure	NA	NA	125	125
Connection Sizes	CH Supply/Return	1" Male Sweat with Adapter			
	DWH	3/4" Male Sweat with Adapter			
	Gas Inlet	3/4" Male NPT			

\*HTP boilers are factory set to operate with Natural Gas. BEFORE OPERATING WITH PROPANE the boiler must be converted to Propane using this kit. Use the procedures outlined in the ELU Natural to Propane Conversion instructions to fully complete the Natural Gas to LP conversion for models.













**HTP Comfort Solutions LLC** was established in 1974 by Mr. Raymond D. Davis as a designer and fabricator of heat exchangers for the boiler and solar industries. Today, HTP is enjoying its second generation of family leadership under CEO Dave Davis and is a full-fledged manufacturer on the cutting edge of energy-efficient space and water heating technology.

Although HTP makes a wide assortment of heating products and system components, we are known for our best-selling SuperStor stainless steel indirect fired water heaters, first introduced in 1980. HTP was the first U.S. based manufacturer to bring a condensing gas fired water heater to the domestic market in 1987. In 1999, HTP delivered yet another breakthrough when we introduced the first residential high efficiency modulating boilers in North America.

In 2017 HTP partnered with Ariston Thermo, a global manufacturer of thermal comfort solutions, to bring together two highly innovative companies with a unique focus on energy savings and a lifetime value to consumers. Like HTP, the Ariston Thermo Group is a family owned and operated business which is in its third generation of family leadership. Together, Ariston Thermo and HTP is an industry leading powerhouse in innovative space and water heating technology.

