

Introducing The New

*Ultra*

Series 3

## Ultra Efficient Condensing Gas Boiler

Ratings - 6 sizes

80 MBH

105 MBH

155 MBH

230 MBH

299 MBH

399 MBH



UP TO  
**96.4%**  
EFFICIENT



**WEIL-McLAIN**



Since its unveiling in 2002, the Ultra condensing boiler has set the industry standard for innovation, design, ease of installation, reliability and efficiency. Now, Weil-McLain is taking the industry standard to a new level with the introduction of the Ultra Series 3. The Ultra Series 3 delivers peace of mind, unmatched comfort, and immediate payback in energy savings for homeowners.



## High Efficiency and Environmentally Friendly

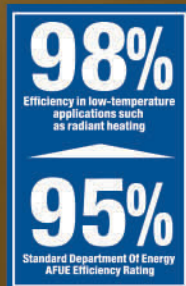


As fuel costs soar, home heating efficiency is on the mind of virtually every homeowner.

All Ultra boilers feature AFUE efficiencies in the range of 95.2 - 96.4%. These are some of the highest efficiencies in the industry, and when the Ultra is used in low-temperature applications such as radiant heating, it can achieve efficiencies up to 98%.

The Ultra boiler is designed to be environmentally friendly and exceeds the highest North American environmental air-quality standards. In fact, it provides cleaner combustion for low NOx applications allowing for a reduction in green house gases.

While fuel efficiency and the environment are highly important factors, here's another-the Ultra system comes from Weil-McLain, America's acknowledged leader in boiler quality and reliability.



For well over a century, Weil-McLain has been single-minded in its pursuit of continual breakthrough innovation, backed by a solid commitment to provide the best customer service and support.

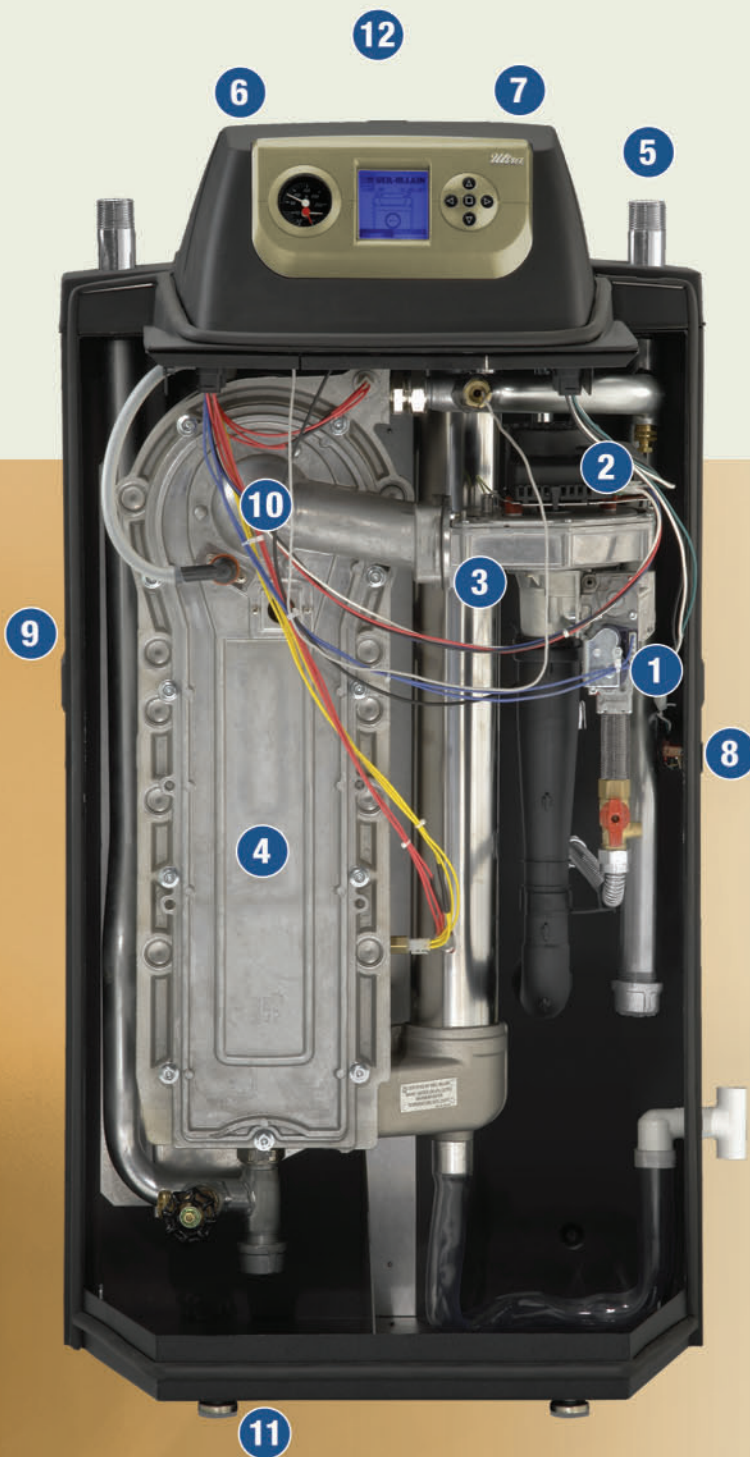
The new Weil-McLain Ultra, coupled with the industry's greatest reputation for quality, provides today's most comforting combination. By far.





# Ultra Gas Series 3 components

Designed to optimize operation resulting in significant fuel savings.



- 1 A negative regulated gas valve that precisely delivers gas to the boiler for optimal performance.
- 2 A variable speed motor that constantly matches combustion output to your heating needs.
- 3 A venturi mixing body that precisely mixes air and gas providing higher efficiency.
- 4 A cast aluminum mono block heats faster – aluminum provides **10 times better** heat transfer than stainless steel.
- 5 Water and gas piping placement are designed for quick and easy connection at the top or bottom of the boiler.
- 6 Conveniently located for simple installation and servicing, the electrical components have been pre-wired and are connected to the U-Control Module with color-coded terminal block plugs.
- 7 Simplified venting with PVC or CPVC for both exhaust and combustion air. Slide the pipe into the top outlet flue pipe adaptors and tighten the restraining ring, without messy sealants. Achieve vent runs up to 100 feet.
- 8 Side mounted service receptacle on a separate circuit for use with a condensate pump, service equipment or service light.
- 9 Side jacket handles for easy handling.
- 10 High grade stainless steel burner with woven steel fiber mesh that uses pre-mixed air and gas providing for a 20% to 100% modulating firing rate. The burner is designed for long life and whisper quiet operation.
- 11 Four adjustable boiler feet for easy placement and leveling.
- 12 The Ultra is lightweight compared to conventional boiler, requires minimal clearance and floor space, and can be used in floor standing or wall hung applications.



Featuring  
**Ucontrol**  
Flexibility



## How high heating costs fall to Ultra technology.

For gas-fired applications, Ultra boilers employ an advanced mono-block aluminum heat exchanger that transfers heat faster than conventional materials.

Ultra's unique electronic sensor and control system allows key functions like the modulation of firing rates up or down, as conditions both inside and outside the home fluctuate.

Unlike most other systems that merely turn off or on at a single preset indoor temperature, Ultra senses precisely how much heat needs to be produced at any given instant and adjusts itself accordingly.

The result? Far greater fuel efficiency and far less wear and tear on critical internal parts.

## User friendly display screens.



The back-lit LCD display and simple programming buttons make entering and receiving information easy. It allows homeowners the ability to view current boiler status, check water and outdoor temperatures, review boiler maintenance schedule and view installing contractor contact information.





#### **AQUA Plus**

Models Available: 35, 45, 55, 85, 105

## **Endless hot water.**

When matched with a Weil-McLain indirect-fired water heater, you will experience virtually limitless hot water for bathing, laundry, dishwashing and cooking at a lower operating cost compared to most other alternatives. Our indirect-fired water heaters provide twice the peak flow of a tankless coil, 50% more than a comparable sized direct-fired gas water heater, and three times as much as an electric unit.

## **Heating perfection – and long-term protection.**

Weil-McLain offers all its Ultra residential boiler customers an exclusive Homeowner Protection Plan.

The warranty covers parts and labor charges for 5 years from the date of installation as outlined in the Plan.

And the cost of this plan to you is...nothing. Just register your new Ultra boiler with us on line at [www.weil-mclain.com](http://www.weil-mclain.com) within 30 days of installation, and you are covered. That's it. When you pause to consider all of that, is it really any wonder we call it Ultra?



**The All New Ultra Gas Series 3**





Featuring  
**U-control**  
Flexibility

## The Exclusive U-Control Module Makes Boiler Set Up and Operation Easy

- **SET UP OPTIONS**  
-Simple or as elaborate as you want
- **TEMPERATURE MANAGEMENT**  
-From 1 to 3 different setpoints for single or multiple zone type management
- **ZONE TYPES**  
-Choose predetermined settings or customize
- **MULTIPLE BOILERS**  
-Capable of controlling additional boilers or heating appliances
- **SYSTEM SENSING**  
-Sense boiler, system and outdoor temperatures
- **SERVICE ALERTS**  
-Use the standard screen message or customize with contractor information

## Standard Equipment

### Boiler

- Cast Aluminum Block
- 30 PSI ASME Relief Valve
- Drain Valve
- Stainless Steel Burner (80, 105)  
with woven steel fiber mesh (155, 230, 299 & 399)
- Direct Spark Ignition
- Variable Speed Blower Assembly
- Venturi mixing system with Air Silencer
- Negative Pressure Regulated Gas Valve
- 50 VA Transformer
- Dual Scale Temp. & Pressure Gauge
- Outlet Water Temp. Sensor
- Inlet Water Temp. Sensor
- Flue Gas Temp. Sensor
- Outdoor Temp. Sensor
- System Water Temp. Sensors

### Boiler Circulators

- 1" Flanges (80 & 105) Taco 007
- 1" & 1-1/4" Flanges (155 & 230) Taco 0014
- 1-1/4" & 1-1/2" Flanges (299) Taco 0014
- 1-1/4" & 1-1/2" Flanges (399) Taco 0013

### Complete Jacket Assembly with

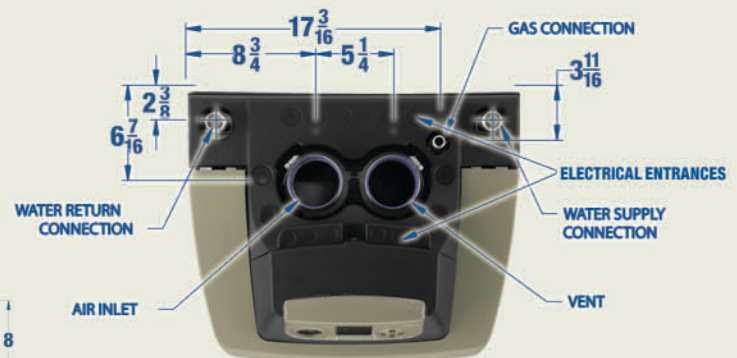
- Fully Removable Jacket Front
- Adjustable Boiler Legs
- Sidewall Vent/Air Termination Kit
- On/Off Power Switch
- Line Voltage Service Receptacle
- Condensate Trap with Drain Tee Assembly
- Propane Conversion Orifice  
(All except Model 80)

### U-control Module

- 3.5" LCD Display
- Three boiler priorities with multiple preset system configurations
- Color-coded removable terminal blocks
- Multiple boiler functionality
- Alarm control functionality
- Ignition Control
- High Limit & Modulating Temp. Control
- Low Water Protection
- Outdoor Reset
- Ability to control any combination of 3 circulators



Ultra boilers are low NOx Certified by the South Coast Air Quality Management District (Rule 1146.2).





# Ultra Efficient Condensing Gas Boiler

Models	Ultra 80	Ultra 105	Ultra 155	Ultra 230	Ultra 299	Ultra 399
Packaged Boiler	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Natural Gas	383-500-700	383-500-702	383-500-703	383-500-704	383-500-705	383-500-706
Propane Gas	383-500-701	383-500-702*	383-500-703*	383-500-704*	383-500-705*	383-500-706*
Taco Pump	007	007	0014	0014	0014	0013

\*Natural Gas field convertible to LP as standard equipment except for the Ultra 80

## Optional Equipment

Wall Mounting Kit	389-900-180	389-900-180	389-900-180	389-900-180	389-900-180	389-900-180
LWCO (w/harness & test button)	511-100-005	511-100-005	511-100-005	511-100-005	511-100-005	511-100-005
Concentric Vent Kit (3")	383-500-350	383-500-350	383-500-350	383-500-350	383-500-350	-
Indirect-Fired Water Heaters	Matching Aqua Plus 35, 45, 55, 85 and 105 Water Heaters are available					

## Ratings

CSA Input (Maximum)	80 MBH	105 MBH	155 MBH	230 MBH	299 MBH	399 MBH
CSA Input (Minimum)	16 MBH	21 MBH	31 MBH	46 MBH	62 MBH	80 MBH
DOE Heating Cap.	71 MBH	94 MBH	139 MBH	207 MBH	270 MBH	*365 MBH
Net I=B=R	62 MBH	81 MBH	123 MBH	183 MBH	234 MBH	317 MBH
<b>DOE AFUE</b>	<b>95.2%</b>	<b>95.3%</b>	<b>95.6%</b>	<b>95.4%</b>	<b>96.4%</b>	<b>*91.7%</b>

\*Combustion Efficiency

## Data

Vent Size	2" or 3"	2" or 3"	3"	3" or 4"	4"	4"
Vent Material	PVC/CPVC	PVC/CPVC	PVC/CPVC	PVC/CPVC	PVC/CPVC	PVC/CPVC
Combustion Air Size	2" or 3"	2" or 3"	3"	3" or 4"	4"	4"
Water Volume	.69 Gal.	.82 Gal.	1.17 Gal.	1.57 Gal.	2.1 Gal.	2.1 Gal.
Approx. Ship. Weight	199 lbs.	207 lbs.	234 lbs.	246 lbs.	297 lbs.	297 lbs.

## Dimensions

Min. Recommended Pipe Size	1"	1"	1-1/4"	1-1/4"	1-1/2"	1-1/2"
Supply Tappings	1"	1"	1"	1"	1-1/4"	1-1/4"
Return Tappings	1"	1"	1"	1"	1-1/4"	1-1/4"
Gas Connection Size	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"





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