

Introducing The New

Ultra
Series 3

Condensing high-efficiency gas boiler

Ratings - 5 sizes

80 MBH

105 MBH

155 MBH

230 MBH

310 MBH

All with 20-100% Modulation



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C-1110 (0608)





Since its unveiling in 2001, 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.

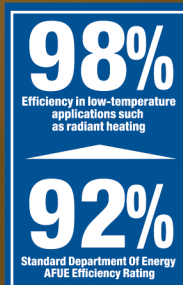
All Ultra boilers feature AFUE efficiencies in the range of 92.0 - 93.0%. These are some of the highest efficiencies in the industry, and when the Ultra is used in low-temperature applications such as radiant heating, it can achieve efficiencies up to 98%.

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.

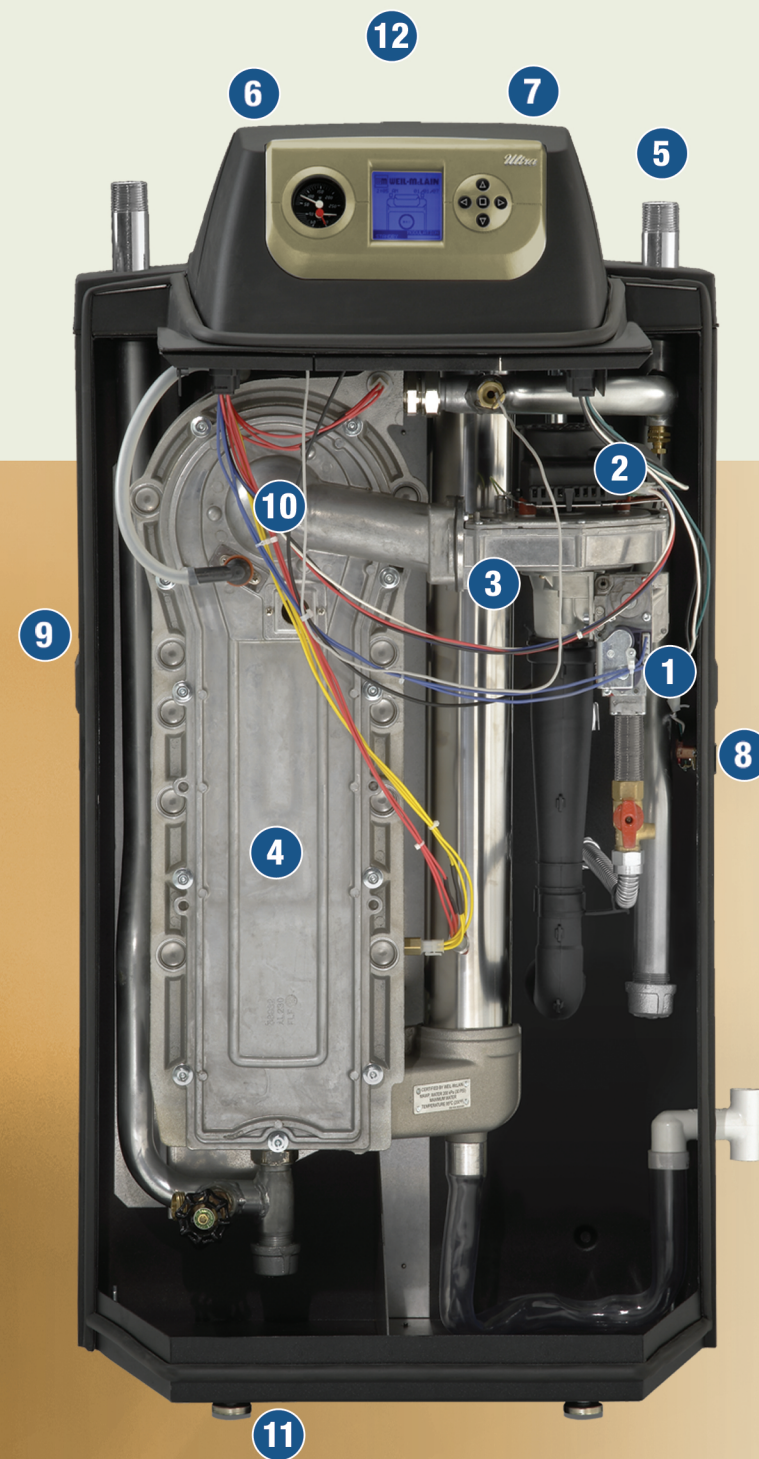
For well over a century, Weil-McLain has been single-minded in its pursuit of continual breakthrough innovation, backed by a solid commitment to provide the best customer service and support.

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.

Endless hot water.

Weil-McLain brings you the perfect match. Ultra Plus indirect-fired water heaters and Ultra boilers are the best value combination for all your comfort heating and hot water needs.

Our stainless steel tank-within-a-tank designed water heaters provide twice the peak flow of a tankless coil, at least 50 percent more than a comparable-sized direct-fired gas water heater and three times as much as an electric unit- so you get more hot water when you need it, all at a lower operating cost.

And even more, Weil-McLain's indirect-fired water heaters come with the industry's best residential limited lifetime warranty.



ULTRA Plus

Models Available: 40, 60, 80, 100, 110, 119

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.

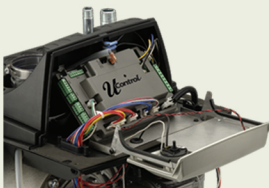
Heating perfection – and long-term protection.

At Weil-McLain, we're always thinking well – and well ahead. A prime example is the Ultra Warranty Program.

Weil-McLain offers all its Ultra boiler customers an exclusive Home Protection Plan. The Plan covers 100% of the parts and labor on all Weil-McLain supplied components of your Ultra system for 5 full years from the date of installation.

And the cost of this plan to you is...nothing. Just fill out and return your Ultra Registration Card to us 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 Exclusive U-Control Module Makes Boiler Set Up and Operation Easy

- SET UP OPTIONS
-Simple or as elaborate as you want
 - ZONE TYPES
-Choose predetermined settings or customize
 - SYSTEM SENSING
-Sense boiler, system and outdoor temperatures
- TEMPERATURE MANAGEMENT
-From 1 to 3 different setpoints for single or multiple zone type management
 - MULTIPLE BOILERS
-Capable of controlling additional boilers or heating appliances
 - 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 & 310)
- Direct Spark Ignition
- Variable Speed Blower Assembly
- Venture mixing system with Air Silencer
- Negative Pressure Regulated Gas Valve
- 50 VA Transformer
- Dual Scale T&P 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 (310) Taco 0014

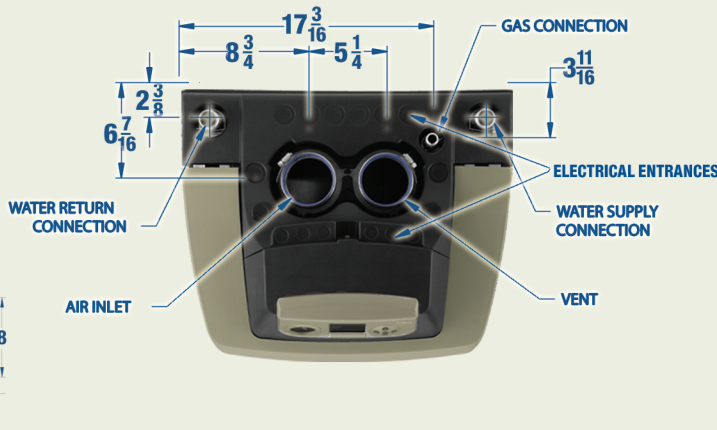
Complete Jacket Assembly with

- 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).



Condensing high-efficiency gas boiler 20-100% Modulation

Models	Ultra 80	Ultra 105	Ultra 155	Ultra 230	Ultra 310
	Part No.	Part No.	Part No.	Part No.	Part No.
Packaged Boiler					
Natural Gas	383-500-500	383-500-502	383-500-503	383-500-504	383-500-505
Propane Gas	383-500-501	383-500-502*	383-500-503*	383-500-504*	383-500-505*
Taco Pump	007	007	0014	0014	0014

*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
LWCO (w/harness & test button)	511-100-005	511-100-005	511-100-005	511-100-005	511-100-005
Concentric Vent Kit	383-500-350	383-500-350	383-500-350	383-500-350	383-500-350
Indirect-Fired Water Heaters	Matching Ultra Plus 40, 60, 80, 100, 110, and 119 Water Heaters are available				

Ratings

CSA Input (Maximum)	80 MBH	105 MBH	155 MBH	230 MBH	310 MBH
CSA Input (Minimum)	16 MBH	21 MBH	31 MBH	46 MBH	62 MBH
DOE Heating Cap.	71 MBH	94 MBH	139 MBH	207 MBH	*289 MBH
Net I=B+R	62 MBH	81 MBH	123 MBH	183 MBH	252 MBH
DOE AFUE	93.0%	92.0%	93.0%	92.8%	*93.3%

*Combustion Efficiency

Data

Vent Size	2" or 3"	2" or 3"	3"	3" or 4"	4"
Vent Material	PVC/CPVC	PVC/CPVC	PVC/CPVC	PVC/CPVC	PVC/CPVC
Combustion Air Size	2" or 3"	2" or 3"	3"	3" or 4"	4"
Water Volume	.95 Gal.	1.07 Gal.	1.17 Gal.	1.57 Gal.	2.1 Gal.
Approx. Ship. Weight	199 lbs.	207 lbs.	234 lbs.	246 lbs.	297 lbs.

Dimensions

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

