

Ultra Efficient Condensing Gas Boiler 80 | 105 | 155 | 230 | 299 | 399 MBH

Submittal Sheet

JOB NAME	
LOCATION	
ARCH./ENGR	
WHOLESALER	
MECH. CONTRACTOR	
MODEL NO	_GAS TYPE
BTU/HR INPUT	_BTU/HR OUTPUT
NOTES	

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 Temperature & Pressure Gauge
- Outlet Water Temperature Sensor
- Inlet Water Temperature Sensor
- Flue Gas Temperature Sensor
- Outdoor Temperature Sensor
- System Water Temperature 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)

Optional Equipment/Venting Options

- □ Wall Mounting Kit
- ☐ LWC0 (w/ Harness and Test Button)
- ☐ Concentric Vent Kit (3")

Example 1 Control Mean Flexibility

7 Control[™] Module

- 3.5" Liquid Crystal Display Screen
- Three boiler priorities with multiple preset system configurations
- Color-coded removable terminal blocks
- Multiple boiler functionality
- · Alarm control functionality
- Ignition Control
- High Limit & Modulating Temperature Control
- Low Water Protection
- Outdoor Reset
- Ability to control any combination of 3 circulators
- 0-10 VDC Input
- 0-10 VDC Output





















Dimensions

Models	Ultra 80 CT	Ultra 105 CT	Ultra 155 CT	Ultra 230 CT	Ultra 299 CT	Ultra 399 CT
Packaged Boiler	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
Natural Gas	383-500-720	383-500-722	383-500-723	383-500-724	383-500-725	383-500-726
Propane Gas	383-500-721	383-500-722*	383-500-723*	383-500-724*	383-500-725*	383-500-726*
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

DOE AFUE	93.5%	94.0%	94.0%	94.1%	92.5%	91.7%*
Net I=B=R	62 MBH	81 MBH	123 MBH	183 MBH	234 MBH	317 MBH
DOE Heating Cap.	71 MBH	94 MBH	139 MBH	207 MBH	270 MBH	*365 MBH
CSA Input (Minimum)	16 MBH	21 MBH	31 MBH	46 MBH	62 MBH	80 MBH
CSA Input (Maximum)	80 MBH	105 MBH	155 MBH	230 MBH	299 MBH	399 MBH

^{*}Combustion Efficiency

Data

Vent Size	2" or 3"	2" or 3"	3"	3" or 4"	4"	4"
Vent Material	PVC/CPVC/SS	PVC/CPVC/SS	PVC/CPVC/SS	PVC/CPVC/SS	PVC/CPVC/SS	PVC/CPVC/SS
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"

Gas Pressures (w.c.): Natural Gas: All Sizes (Except Model 299) - 4.0" min. - 13.0" Max/ Model 299 - 5.0" - 13.0" L/P Gas: All Sizes - 4.0" Min. - 13.0" Max



In the interest of continual improvements in product and performance, Weil-McLain reserves the right to change specifications without notice. For reference use only. See product manual for detailed information.

