



Mondale

& Associates

Mondale Hydronic Catalog



Maxifold



The **TurboMax®** is an indirect water heater that stores boiler water and heats potable water as needed. In commercial applications, the recovery rates and outputs are very impressive. More output in less space! In residential applications, extra connections on the tank make this a 3-in-1 product -- instantaneous indirect water heater, buffer tank and hydraulic separator.

turbomax

Performance and peace of mind!

Main Features

- Heat transfer efficiency of 99%
- Instantaneous domestic hot water
- More than 30-year life span
- Unmatched energy transfer capabilities
- Minimizes energy consumption
- Compatible with all sources of thermal energy

THE MOST HIGH-PERFORMANCE WATER HEATER IN ITS CATEGORY

TurboMax® produces 2 times more hot water per hour than its closest competitor with the same volume.

15 - YEAR RESIDENTIAL WARRANTY
ON THE RESERVOIR AND COPPER COILS

10 - YEAR COMMERCIAL WARRANTY
ON THE RESERVOIR AND COPPER COILS

2 - YEAR WARRANTY
ON MECHANICAL PARTS

ADDITIONAL CONNECTIONS INCLUDED.

With its additional connections, the TurboMax® indirect water heater optimizes the boiler's performance by serving as a buffer tank and hydraulic separator in addition to producing domestic water.

Standard Features

- 1 - Heating water supply
- 2 - Heating water return
- 3 - Domestic cold water
- 4 - Domestic hot water
- 5 - Pressure relief valve
- 6 - Temperature and pressure indicator
- 7 - Tank drain valve
- 8 - Immersion well
- 9 - Automatic air vent
- 10 - Adjustable feet support
- 11 - Additional connections
- 12 - 2" HFC-free polyurethane insulation
- 13 - Aquastat with adjustable temperature



Only for 80-5A 120-9A models



Provides a 3-in-1 indirect water, buffer tank and hydraulic separator.



Performances												
Domestic hot water production per hour in US gallons ¹												
Model	110 °F - DHW ²				140 °F - DHW ²				160 °F - DHW ²			
	Maximum Exchange Capacity		GPH		Maximum Exchange Capacity		GPH		Maximum Exchange Capacity		GPH	
	BTU/h	kW	1st hour	Continuous	BTU/h	kW	1st hour	Continuous	BTU/h	kW	1st Hour	Continuous
* TurboMax 30-3	380 000	111	683	653	270 000	79	338	326	180 000	53	186	181
TurboMax 50-3	380 000	111	703	653	270 000	79	346	326	180 000	53	190	181
* TurboMax 50-5	645 000	189	1159	1109	455 000	133	569	549	300 000	88	313	302
* TurboMax 80-5	645 000	189	1189	1109	455 000	133	581	549	300 000	88	316	302
TurboMax 80-5A	645 000	189	1189	1109	455 000	133	581	549	300 000	88	316	302
* TurboMax 120-9	1 165 000	341	2122	2002	820 000	240	1038	990	545 000	160	569	549
TurboMax 120-9A 125	1 165 000	341	2122	2002	820 000	240	1038	990	545 000	160	569	549
TurboMax 120-9A 200	1 165 000	341	2122	2002	820 000	240	1038	990	545 000	160	569	549

1 - 40 °F domestic cold water supply and 180 °F boiler water temperature.

2 - DHW: domestic hot water

* Stocked at Mondale Warehouse

Specifications										
Model	Max Pressure	Tank Volume	Exchange Surface	Max DHW Flow ¹	Domestic Water Connections	Heating Water Connections	Height	Diameter	Weight	
TurboMax 30-3	150 psi	30 US gal	19.6 sq. ft.	9 gpm	1 1/4" Sweat M	1 1/4" NPTM	59 3/4"	18"	170 lbs.	
TurboMax 50-3	150 psi	50 US gal	19.6 sq. ft.	9 gpm	1 1/2" Sweat M	1 1/4" NPTM	60 3/4"	22"	212 lbs.	
TurboMax 50-5	150 psi	50 US gal	32.7 sq. ft.	15 gpm	1 1/2" Sweat M	1 1/4" NPTM	60 3/4"	22"	230 lbs.	
TurboMax 80-5	150 psi	80 US gal	32.7 sq. ft.	15 gpm	1 1/2" Sweat M	1 1/2" NPTM	74 3/4"	24"	308 lbs.	
TurboMax 80-5A	150 psi	80 US gal	32.7 sq. ft.	15 gpm	2" Sweat M	1 1/2" NPTM	74 3/4"	24"	317 lbs.	
TurboMax 120-9	150 psi	119 US gal	58.9 sq. ft.	27 gpm	2" Sweat M	2" NPTM	76 3/4"	28"	430 lbs.	
TurboMax 120-9A 125	125 psi	120 US gal	58.9 sq. ft.	27 gpm	2 1/2" Sweat M	2" NPTM	76 3/4"	28"	450 lbs.	
TurboMax 120-9A 200	200 psi	120 US gal	58.9 sq. ft.	27 gpm	2 1/2" Sweat M	2" NPTM	76 3/4"	28"	540 lbs.	

1 - These values must be reduced for high temperature and continuous flow applications.

- Standby loss < 1/2 °F per hour
- Heat transfer efficiency: 99%
- Output temperature up to 200 °F

Extraordinary Advantages

turbomax



More Than 30 Years

When the TurboMax® instantaneous indirect water heater is properly installed, its life span is more than 30 years. Incredibly durable, the TurboMax® is also covered by a **15-year residential warranty** and a **10-year commercial warranty**, both of which are some of the best in the industry.

No Corrosion No Maintenance

Unlike traditional tanks and water heaters, **the TurboMax® uses copper coils to circulate the potable water** instead of having it accumulate in the tank. Copper is a proven material that naturally resists corrosion and thermal stress.

In addition, the closed-circuit heat transfer liquid principle helps to quickly purge the system of any corrosion-causing dissolved oxygen. There is no sacrificial anode. **No replacement** is required. **No inspection** of the inner lining is required. The system requires minimal maintenance.

Unparalleled Energy-Transfer Capacity

Using a large amount of copper helps maximize the exchange surface, thus resulting in maximum energy transfer capacity. This enables a large quantity of domestic hot water to be produced without requiring large storage tanks in commercial applications. Reducing the volume of stored water minimizes heat loss when the system is on standby and generates **substantial energy savings and space savings of up to 75%**.

Energy Costs Reduced By Up To 30%

Unlike traditional hot water heaters, the TurboMax® instantaneous indirect water heater maintains its effectiveness over time by **preventing scale to accumulate** in the exchanger. This reduction of scale from the exchanger's walls is made possible by the water turbulence and the expansion-contraction of the copper pipes—two phenomenon TurboMax® leverages.

Potable water circulates through the copper coils in a state of turbulence, which improves convection exchange while generating friction on the walls, thus preventing scale accumulation. In addition, fluctuating water temperatures make the copper coil expand and contract, reducing scale build-up on the copper. The combined effect of reducing the volume of stored water and maintaining optimal efficiency helps reduce energy costs by up to 30% in some cases.

Exceptional-Quality Instantaneous Domestic Hot Water

Unlike traditional hot-water heaters, the TurboMax® instantaneously produces domestic hot water. It provides superior-quality potable hot water while preventing the proliferation of bacteria, such as *Legionella*.

No Residue

Over time, a traditional hot water heater generates residues that accumulate in the bottom of the tank. The residues are in direct contact with the stagnant domestic hot water and affect its quality. They form an unwanted insulator that prevents the heat from destroying bacteria, such as *Legionella*.

Compatible With All Sources of Thermal Energy

The instantaneous indirect water heater meets your needs as it is compatible with all sources of thermal energy, such as gas, oil, electricity, wood and solar energy.



Buffer Tank

The **BuffMax**® optimizes runtimes and limits on/off cycling of the energy source. When the minimum system load is lower than the energy source's minimum capacity, the system will generate short cycles. This causes premature wear of the equipment and substantially decreases the system's energy efficiency.

Storage Tank

Any hydronic heating system with the **BuffMax**® stores energy like a battery. When a demand is made for limited heating (for example, when there is little difference between indoor and outdoor temperatures) or when it is used with a low-capacity energy source, the energy required will first come from the tank's thermal storage.

Hydraulic Separator

Adding a **BuffMax**® tank to a hydronic heating system helps to evacuate air, eliminate impurities and ensure the optimal functioning of the pumps—not only for the energy source but also for the distribution system.

buffmax



The tank that makes all the difference!



Standard Equipment

- 2" HFC-free polyurethane insulation
- 150 psi maximum operating pressure (125 psi for ASME units)
- 4 openings for hydraulic separation
- Immersion well with multiple positions
- Tanks available in 7 sizes
- ASME models available
- Adjustable legs
- 10-year warranty

Optional Equipment

- Extra tappings
- Custom tapping diameters
- Flange connections
- Aquastat control
- Insulation for chilled water

10 - YEAR WARRANTY
ON THE TANK

2 - YEAR WARRANTY
ON MECHANICAL PARTS

Standard Features

- 1** - Automatic Air Vent
- 2** - Boiler Water Connection
- 3** - Temperature and Pressure Indicator
- 4** - 3/4" NPT Drain Valve
- 5** - Immersion Well
- 6** - 3/4" Drain



Only for 120A, 175A and 200A models.



Models and Specifications								
Model	Volume US Gal.	A	B	C	D	E	Standard Connections	Weight Lb.
* BuffMax 30	30	56"	18"	21-1/2"	46-1/2"	13-1/2"	1-1/2" NPT	125
* BuffMax 50	50	57"	22"	25-1/2"	47-1/16"	14-1/16"	2" NPT	160
* BuffMax 80	80	71"	24"	28-1/2"	60-13/16"	13-13/16"	2-1/2" NPT	245
* BuffMax 120	120	72-1/2"	28"	32-1/2"	61-1/2"	14-9/16"	3" NPT	330
BuffMax 120A	119	73-5/16"	28"	32-1/4"	60"	17"	3" NPT	405
BuffMax 175A	175	82-1/16"	32"	36-3/16"	67-1/16"	20-7/16"	3" NPT	550
BuffMax 200A	200	89-15/16"	32"	36-3/16"	74-15/16"	20-7/16"	3" NPT	590

* Stocked at Mondale Warehouse

By reducing ON/OFF cycling, it improves and maximizes the heating system's efficiency— all while reducing maintenance repair costs.

Get the best of both worlds with the **ComboMax® ULTRA**. An electric boiler for hydronic heating combined with an instantaneous water heater, the **ComboMax® ULTRA** is the ideal solution for all water heating needs. Almost maintenance-free, it can help to substantially save both in terms of space and installation-related costs.

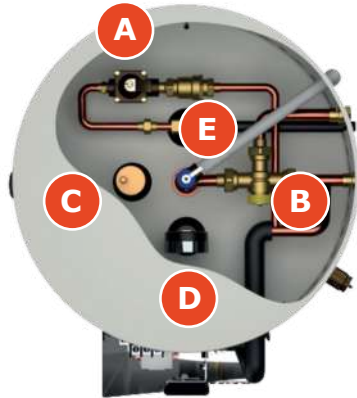
4.5 KW TO 29 KW **combomax** **ULTRA**

The ultimate combination!

Simplified Installation

Easier install with factory pre-assembled accessories

- A-** Pressure regulator with back flow preventer for boiler water
- B-** Domestic hot water mixing valve
- C-** Automatic air vent
- D-** Temperature and pressure indicator
- E-** Domestic hot water pressure relief valve



T2 UltraSMART® Controller

The **T2 UltraSMART®** controller is precise and easy to configure with its back light display. It enables optimal management of the hot water temperature and saves on energy costs.

This controller also manages operation of the heating system pump when there is a demand from the thermostat. It offers the possibility to be installed in a dual-energy mode and ensures a priority on domestic hot water production.

15 - YEAR WARRANTY
ON THE TANK AND THE COILS

2 - YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL

ComboMax Ultra		
Model	(Available In 2 Sizes) ComboMax ULTRA 50	ComboMax ULTRA 70
Volume	48 US gallons	71 US gallons
Maximum Operating Pressure	30 psi	30 psi
Maximum Operating Pressure (Domestic Hot Water)	125 psi	125 psi
Boiler Connections	1" male NPT	1-1/4" male NPT
Potable Water Connections	3/4" female NPT	3/4" female NPT
Diameter	22"	24"
Height	60"	70-1/2"
Weight	325 lb	430 lb



Standard Features

- 1** - T2 UltraSMART® controller
- 2** - Cold water supply
- 3** - Domestic hot water outlet
- 4** - Boiler pressure relief valve
- 5** - Copper coils
- 6** - Drain valve
- 7** - Water heating inlet
- 8** - Water heating outlet
- 9** - Electric elements



combomax ULTRA



Multi-position Installation

Domestic hot water production at 110° F* (US gal)				
Power kW	ComboMax ULTRA 50		ComboMax ULTRA 70	
	10 min	1 hr	10 min	1 hr
4.5	50	50	73	95
7.5	53	53	76	113
9	55	55	78	122
12	58	58	81	139
15	61	61	84	157
18	64	64	87	175
* 20	66	66	89	186
24	69	69	92	210
27	-	-	95	228
29	-	-	97	239

* 40 °F domestic cold water supply and 180°F boiler water temperature

* Stocked at Mondale Warehouse - ComboU50-20US and ComboU70-18US



DoubleMax - Instantaneous Indirect "Double-Wall" Water Heater

The **DoubleMax's**® ingenious double-wall design drastically reduces the risk of potable water being contaminated by the heating water.

doublemax

Performance has never been so safe!



Main Features

- Double-wall copper heat exchanger
- Instantaneous domestic hot water
- More than 30-year life span
- Unmatched energy transfer capabilities
- Minimizes energy consumption
- Compatible with all sources of thermal energy
- No maintenance – 10-year commercial warranty

Standard Features

- 1 - Heating supply
- 2 - Heating return
- 3 - Domestic cold water
- 4 - Domestic hot water
- 5 - Pressure relief valve
- 6 - Temperature and pressure indicator
- 7 - Drain valve
- 8 - Immersion well
- 9 - Automatic air vent
- 10 - Adjustable legs
- 11 - Additional connections
- 12 - 2" HFC-free polyurethane insulation

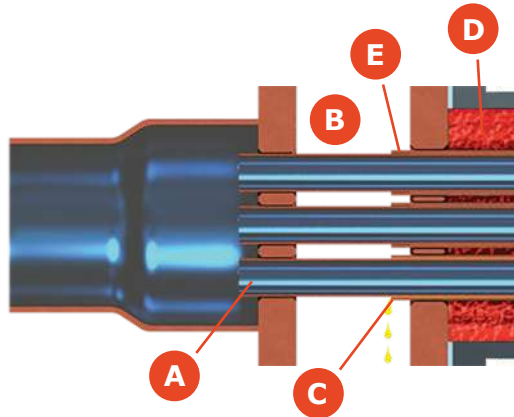
10 - YEAR COMMERCIAL WARRANTY
ON THE RESERVOIR AND COPPER COILS

15 - YEAR RESIDENTIAL WARRANTY
ON THE RESERVOIR AND COPPER COILS

2 - YEAR WARRANTY
ON MECHANICAL PARTS

Reduces the risk of cross-contamination

- A - Domestic water
- B - 360° visual detection
- C - Vented leak ports
- D - Heat transfer fluid
- E - Double-wall tube



Specifications

Model	Tank Volume	Exchange Surface	Max DHW Flow*	Domestic Water Connections	Heating water connections	Height	Diameter	Weight
DoubleMax 50-4	50 US gal.	24.7 sq. ft.	12 gpm	1-1/2" Sweat F	1-1/4" NPTM	59-1/4"	22"	260 lbs.
DoubleMax 80-5	80 US gal.	30.9 sq. ft.	15 gpm	1-1/2" Sweat F	1-1/2" NPTM	73-3/4"	24"	355 lbs.
DoubleMax 120-9	119 US gal.	55.6 sq. ft.	27 gpm	2" Sweat F	2" NPTM	76-1/4"	28"	530 lbs.

AltSource™ is the only electric high-volume boiler on the market, and it is the perfect complement to all sources of renewable energy heat. This combination boiler-storage tank is designed for residential use and is practically maintenance-free. It serves as a back-up energy source to the primary system in order to maximize output and generate significant energy savings.

altsource

4.5 KW TO 29 KW



The Perfect Complement To Renewable Energy!

Main Features

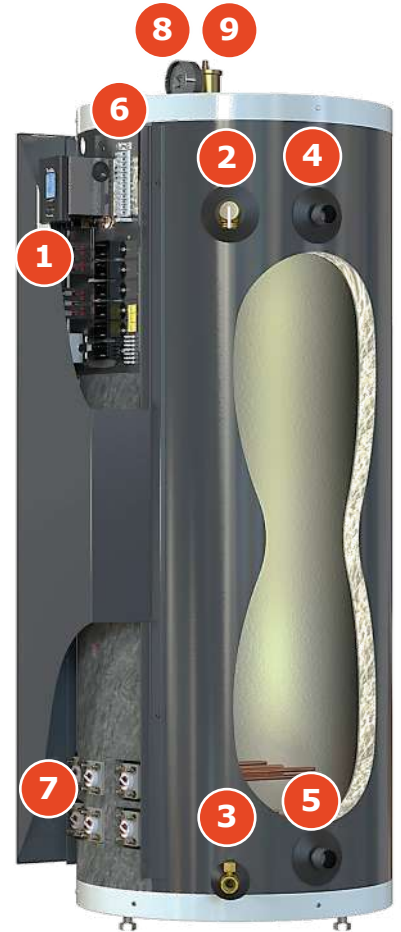
- Heating stops when outside temperature gets warmer
- “Boost” mode that automatically increases the temperature when needed
- Works only when triggered by the thermostat
- Ability to purge the pump when system is not running
- Adjustable between 50 °F and 190 °F
- Safety control to limit excessively high temperatures
- Electrical supply and heat pump contact
- 24 V electrical supply for thermostat and other accessories

Standard Features

- 1 - T2 UltraSmart® controller
- 2 - Boiler pressure relief valve
- 3 - Drain valve
- 4 - Heating water supply
- 5 - Heating water return
- 6 - Electrical panel
- 7 - Electric elements
- 8 - Temperature and pressure indicator
- 9 - Automatic air vent

15 - YEAR WARRANTY
ON THE TANK AND THE COILS

2 - YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL COMPONENTS



T2 UltraSMART® Controller

The intelligent **T2 UltraSMART®** controller modulates the power level based on the system requirements and adjusts the water temperature based on outdoor temperature.

- Accurate and easily configurable **T2 UltraSMART®** controller with back light display
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- The **T2 UltraSMART®** controller enables users to view the boiler’s operation status at a glance



Multi-position Installation

altsource



AltSource (Available In 2 Sizes)		
Model	AltSource 50	AltSource 70
Volume	48 US gallons	71 US gallons
Weight	280 lbs.	380 lbs.
Maximum Operating Pressure	30 PSI	30 PSI
Connections	1" male NPT	1-1/4" male NPT
Diameter	22"	24"
Height	56-7/16"	66-5/16"

* Stocked at Mondale Warehouse - AltSource50-20US



The AltSource™ thermal mass electric water heater is perfect for optimizing the performance of many types of heating systems:

- Biomass heating
- Wood boilers
- Geothermal applications
- Air-water heat pumps
- Solar energy systems

Mini Ultra - Electric Boiler

Our **mini ULTRA** electric boilers are ideal for heating single family homes and condominiums. These compact heaters can effortlessly fit into very small spaces. What's more: the boilers come in a variety of configurations, making them easy to install.

mini **3 KW TO 12 KW** ULTRA



100% compact efficient comfort!

mini ULTRA 3 KW TO 12 KW

- The UltraSmart™ controller enables users to view the boiler's operation status at a glance
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- Heating stops when outside temperature gets warmer
- "Boost" mode that automatically increases the temperature when needed
- Ability to purge the pump when system is not running

Standard Features

- Safety control to limit excessively high temperatures
- 120 V pump power supply
- 24 V electrical supply for thermostat and other accessories
- 30 PSI safety relief valve
- Drain/purge valve
- 208/240 VAC electrical supply

15 - YEAR WARRANTY
ON THE RESERVOIR

2 - YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL PARTS

21-1/2"

8-3/4"

8-7/8"



Multi-position Installation

Mini Ultra (240 VAC / 60 Hz / 1 Phase¹)

Model	Power ²		Amps ³	Electrical Elements	Stages	Recommended Electrical Supply ⁴		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
* Mini ULTRA 3	3	10,236	12.5	1 x 3 kW	1	12	10	20
* Mini ULTRA 4.5	4.5	15,354	18.8	1 x 4.5 kW	1	10	10	30
* Mini ULTRA 6	6	20,472	25	2 x 3 kW	2	8	6	40
* Mini ULTRA 7.5	7.5	25,590	31.3	1 x 3 kW + 1 x 4.5 kW	2	8	6	40
* Mini ULTRA 9	9	30,708	37.5	2 x 4.5 kW	2	8	6	50
* Mini ULTRA 12	12	40,944	50	2 x 6 kW	2	6	4	70

* Stocked at Mondale Warehouse

¹ Electrical supply 120/240 V or 120/208 V 1 phase (L1-N-L2) with three 90 °C conductors and a ground or two conductors and a ground if the boiler does not require a 120 VAC pump or accessories.

² Multiply by .75 for 208 VAC supply.

³ Multiply by .867 for 208 VAC supply.

⁴ The wire gauges and breaker capacity must be in conformity with the standards of the National Electrical Code (NEC), Canadian Electrical Code (CEC) and local codes (if applicable).



bth ULTRA™ electrical boilers are compact and highly performant. Available in a wide array of performance levels and voltages, these highly versatile systems are very energy-efficient and can be used for residential, commercial and institutional applications. Lightweight and robust, the **bth ULTRA™** is easily installed and can supply all types of hot water heating systems.

bthultra **7 KW TO 36 KW**

**Maximum Efficiency.
Optimal Performance.**



bth ULTRA™ 7 KW TO 36 KW

- Heating stops when outside temperature gets warmer
- “Boost” mode that automatically increases the temperature when needed
- Works only when triggered by the thermostat
- Ability to purge the pump when system is not running
- Adjustable between 50 °F and 190 °F
- Safety control to limit excessively high temperatures
- Electrical supply and heat pump contact (contact only with commercial boilers)
- Breakers with 33 & 36 kW residential models
- 24 V electrical supply for thermostat and other Accessories
- 30 PSI safety relief valve Drain/purge valve

15 - YEAR WARRANTY
ON THE RESERVOIR

2 - YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL PARTS



T2 UltraSMART® Controller

The intelligent **T2 UltraSMART®** controller modulates the power level based on the system requirements and adjusts the water temperature based on outdoor temperature.

- Accurate and easily configurable **T2 UltraSMART®** controller with back light display
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- The **T2 UltraSMART®** controller enables users to view the boiler’s operation status at a glance

Commercial (480 VAC / 60 Hz / 3 Phases¹)

Model	Power		Recommended Electrical Supply*			Recommended Electrical Supply*		
	kW	BTU/h	Amps	277 V Elements	Stages	Cu Wire	Al Wire	Breaker
* BTH ULTRA 15	15	51,180	18	3 x 5 kW	1	10	10	30
* BTH ULTRA 18	18	61,416	21.6	3 x 6 kW	1	10	10	30
BTH ULTRA 30	30	102,360	36.1	6 x 5 kW	2	8	6	50
* BTH ULTRA 36	36	122,832	43.3	6 x 6 kW	2	6	4	60

* **Stocked at Mondale Warehouse**

¹ Electric supply 480 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

BTH Ultra - Electric Boiler (Pgs 2 of 2)

Commercial (208 VAC / 60 Hz / 3 Phases ¹)								
Model	Power ²		Amps ³	240 V Elements	Stages	Recommended Electrical Supply*		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
* BTH ULTRA 7	7	22,860	18.8	3 x 3 kW	1	10	10	30
* BTH ULTRA 10	10	34,461	28.2	3 x 4.5 kW	1	8	6	40
BTH ULTRA 11	11	38,214	31.4	3 x 5 kW	1	8	6	40
* BTH ULTRA 13	13	46,062	37.6	6 x 3 kW	2	8	6	50
BTH ULTRA 17	17	58,004	47.1	3 x 3 kW + 3 x 4.5 kW	2	6	6	60
BTH ULTRA 20	20	68,922	56.5	6 x 4.5 kW	2	6	4	80
BTH ULTRA 22	22	76,770	62.7	6 x 5 kW	2	6	4	80
BTH ULTRA 25	25	84,276	69	3 x 5 kW + 3 x 6 kW	2	4	3	90
* BTH ULTRA 27	27	92,124	75.3	6 x 6 kW	2	4	2	100

*** Stocked at Mondale Warehouse**

¹ Electrical supply 208 V or 240 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

² Multiply by 1.34 for 240 VAC supply. ³ Multiply by 1.15 for 240 VAC supply.

Commercial (600 VAC / 60 Hz / 3 Phases ¹)								
Model	Power		Amps	347 V Elements	Stages	Recommended Electrical Supply*		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
BTH ULTRA 9	9	30,708	8.7	3 x 3 kW	1	14	12	15
BTH ULTRA 13	13	44,356	12.5	3 x 4.5 kW	1	12	10	20
BTH ULTRA 18	18	61,416	17.3	6 x 3 kW	2	10	10	30
BTH ULTRA 22	22	75,064	21.2	3 x 3 kW + 3 x 4.5 kW	2	10	10	30
BTH ULTRA 27	27	92,124	26	6 x 4.5 kW	2	8	6	40
BTH ULTRA 30	30	102,360	28.9	6 x 5 kW	2	8	6	40
BTH ULTRA 36	36	122,832	34.6	6 x 6 kW	2	8	6	50

¹ Electric supply 600 V 3 phases (L1-L2-L3) with three 90 °C conductors and a ground.

* The wire gauges and breaker capacity must be in conformity with the standards of the National Electrical Code (NEC), Canadian Electrical Code (CEC) and local codes (if applicable).

Residential (240 VAC / 60 Hz / 1 Phase ¹)								
Model	Power ²		Amps ³	240 V Elements	Stages	Recommended Electrical Supply*		
	kW	BTU/h				Cu Wire	Al Wire	Breaker
* BTH ULTRA 12	12	40,944	50	4 x 3 kW	4	6	4	70
* BTH ULTRA 15	15	51,180	62.5	2 x 3 kW + 2 x 4.5 kW	4	6	4	80
* BTH ULTRA 18	18	61,416	75	4 x 4.5 kW	4	4	2	100
* BTH ULTRA 20	20	68,240	83.3	4 x 5 kW	4	3	2	110
* BTH ULTRA 24	24	81,888	100	4 x 6 kW	4	2	0	125
* BTH ULTRA 27	27	92,124	112.5	6 x 4.5 kW	6	1 x 1 or 2 x 6 ⁴	1 x 00 or 2 x 4 ⁴	2 x 80 or 150
* BTH ULTRA 29	29	98,948	120.8	4 x 5 kW + 2 x 4.5 kW	6	1 x 1 or 2 x 6 ⁴	1 x 00 or 2 x 4 ⁴	2 x 80 or 175
* BTH ULTRA 33	33	112,596	137.5	3 x 5 kW + 3 x 6 kW	6	2 x 4 ⁴	2 x 2 ⁴	2 x 100
* BTH ULTRA 36	36	122,832	150	6 x 6 kW	6	2 x 4 ⁴	2 x 2 ⁴	2 x 100

*** Stocked at Mondale Warehouse**

¹ Electric supply 120/240 V or 120/208 V 1 phase (L1-N-L2) with three 90 °C conductors and a ground or two conductors with a ground if the boiler does not require a 120 VAC pump or accessories.

² Multiply by .75 for 208 VAC supply. ³ Multiply by .867 for 208 VAC supply. ⁴ See Installation Manual.

Zilmet Expansion Tanks



Hydronic Expansion Tanks—Flat Rectangular

Part #	Volume (GAL)	NPT	Stand	Details
ZFT08R-15	2.1	1/2"	Mounting Bracket	w/Union & Double-Check Valve
ZFT18R-30	4.8	1/2"	Mounting Bracket	w/Union & Double-Check Valve
ZFT24R-60	6.3	1/2"	Mounting Bracket	w/Union & Double-Check Valve

Features

- Perfect accessory to pair with a wall hung condensing boiler
- Welded mounting bracket and unique design allows for a quicker and less expensive installation
- Great for tight installations
- All tanks come with a welded mounting bracket and union connections with a two way check valve

Materials Of Construction

Shell: Carbon steel
Connections: 1/2" NPT
Membrane: SBR synthetic rubber
Color: Grey



Inox-Pro Tanks



Inox Stainless Steel Expansion Tanks

Part #	Volume (GAL)	NPT	NSF 61	Stand	Details
ZS05	0.13	1/2"	No	None	----
ZS1	0.26	1/2"	No	None	----
ZS2	0.53	1/2"	No	None	----
ZS8	2.1	3/4"	Yes	None	----
ZS12	3.2	3/4"	Yes	None	----
ZS18	4.8	3/4"	Yes	None	----
2524V	6.3	1"	Yes	None	----

Operating Conditions

Max. Operating Pressure
ZS05-ZS18: 150 psi
Operating Temperatures: 14-210 F

Materials Of Construction

Shell: 304 stainless steel
Flange: Stainless steel
Membrane: Butyl diaphragm

Features

- Butyl diaphragms are suitable for both hot and cold water Applications
 - ZS8, ZS12, ZS18 are NSF 61 certified
 - Available in additional sizes
- Uses:**
- High corrosive areas, rain water collection, water hammer arrestors, variable speed pump applications, marine applications, breweries, hospitals, food manufacturing plants, etc.

Zilmet IntaKLEAN Multifunction Magnetic Dirt Separator Filter - "NEW"

Zilmet IntaKlean is the best solution in solving heating system problems due to the presence of particles caused by corrosion and scale during normal system operation. The magnetic filter effectively collects all the impurities present in the circuit and prevents them from circulating within it. All the magnetic contaminants (ferrous residues) and non-magnetic (algae, sludge, sand etc.) are then easily removed by simply opening the drain plug. The device protects the boiler continuously, avoiding wear and damage of all system components.

intaklean²

MULTIFUNCTION MAGNETIC DIRT SEPARATOR FILTER FOR HYDRAULIC CIRCUITS



Features

- It can be mounted on vertical, horizontal and diagonal piping
- Includes Ball Valve Set
- Built-in wire mesh filter
- Fully removable 11,000 gauss magnet
- All impurities are removed helping to increase the working life of the boiler
- Maintains optimum system efficiency by fighting corrosion
- Easy to clean
- Easy 32 ounce dosing of the treatment fluids

Product Chart

Part #	NPT
IK203	3/4"
IK210	1"
IK211	1-1/4"
IK210P	1" Press
IK211P	1-1/4" Press



Zilmet ZEP-1 Stainless Steel Expansion Tank - "NEW"

ZEP-1 was designed to provide maximum protection to the heat exchanger and the piping system on tankless water heaters, relieving problems associated with excess pressure by absorbing any potential increase in pressure within the unit or piping system; this helps prevent potentially costly leaks and repairs.

ZEP-1 Stainless Steel Expansion Tank

and Shock Arrester for Tankless and POU Water Heaters with 2 gallons or less of total water volume



Features

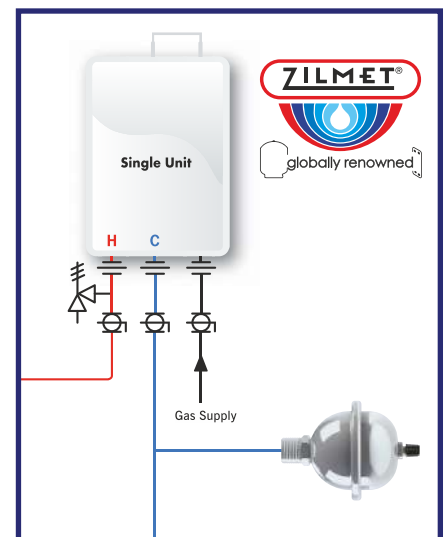
- Tank has a 50 psi factory pre-charge
- Air charge can be adjusted, and is serviceable
- Entire tank is constructed of 304 stainless steel
- Butyl membrane diaphragm

Operating Conditions

Max. Working Pressure: 220 psi
Max. Operating Temperature: 210°F

Product Chart

Part #	NPT	NSF61
ZEP-1	1/2"	Yes



ZEP-1 can be installed below the isolation kit or anywhere on the cold water supply line between the heater and the check valve.

Zilmet Expansion Tanks - Hydronic Heating

Zilmet has over 50 years experience in manufacturing high quality expansion tanks. The company produces over 5 million tanks annually. All products are designed and manufactured exclusively by Zilmet. The tanks are fully vertically integrated with a seamless diaphragm that never stretches or creases. There are no bubbles or corners to trap sediment, inhibiting bacterial growth. **There is a 5-year warranty on all models.**



Side Connection allows for quicker, less expensive installation



Cal-Pro Hydronic Expansion Tanks				
Part #	Volume (GAL)	NPT	Stand	Details
ZHT-R15	2.1	1/2"	None	Radiant / Lined Tank
ZHT-R30	4.8	1/2"	None	Radiant / Lined Tank
ZHT-008-15	2.1	1/2"	None	Equiv to #15
ZHT-018-30	4.8	1/2"	None	Equiv to #30
ZHT-024-60	6.3	1/2"	None	Equiv to #60
ZHT-035	9.2	3/4"	None	---
ZHT-035F	9.2	3/4"	Yes	Side Connection
ZHT-050-90	13.2	3/4"	None	---
ZHT-050F	13.2	3/4"	Yes	Side Connection
ZHT-080	21.0	3/4"	Yes	Side Connection
ZHT-105	27.7	3/4"	Yes	Side Connection
ZHT-150	39.6	3/4"	Yes	Side Connection
ZHT-200	52.8	3/4"	Yes	Side Connection
ZHT-250	66.0	3/4"	Yes	Side Connection
ZHT-300	79.3	3/4"	Yes	Side Connection
ZHT-400	105.7	3/4"	Yes	Side Connection
ZHT-500	132.1	1"	Yes	Side Connection
ZHT-600	158.5	1"	Yes	Side Connection
ZHT-700	184.9	1"	Yes	Side Connection

Features

- Certified synthetic SBR rubber diaphragm
- MIG welding on large sizes eliminates interior rough spots and sharp edges
- Protected pre charge valve eliminates potential leak path
- Factory leak tested to ensure tank integrity
- Designed to maximize drawdown
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, providing increased life cycle

Operating Conditions

Max. Working Pressure 2-13.2 Gal: 60 psi
Max. Working Pressure 21-184 Gal: 90 psi
Max. Operating Temperature: 210 F
Factory Pre-charge: 12 psi

Materials Of Construction

Shell: Carbon steel
Connections: Stainless steel
Membrane: SBR synthetic rubber
Color: Grey

Hydro-Plus Bottom Connection Well Tank

Hydro-Plus Models Chart

Part #	Volume (GAL)	NPT	NSF61	Stand	Details
ZHP202BC	21.1	1"	Yes	Yes	Bottom Connection
ZHP202BV-BC	21.1	1"	Yes	Yes	Bottom Connection
ZHP203BC	27.7	1-1/4"	Yes	Yes	Bottom Connection
ZHP204BC	39.6	1-1/4"	Yes	Yes	Bottom Connection
ZHP34BC	34.1	1-1/4"	Yes	Yes	Bottom Connection
ZHP250BC	54.7	1-1/4"	Yes	Yes	Bottom Connection
ZHP302BC	79.3	1-1/4"	Yes	Yes	Bottom Connection
ZHP351BC	119.0	1-1/4"	Yes	Yes	Bottom Connection



(HydroPlus BC)

Features

- 150 psi rated
- All weather epoxy-polyester powder coated paint
- SS connector
- Polypropylene base for all weather applications

Material Description

Shell: Carbon Steel
Connection: Stainless Steel
Fixed Membrane: Butyl
Material of Base: Polypropylene
Tank Color: Blue
Base Color: Grey

Operating Conditions

Max. Operating Pressure: 150 psi
Operating Temperature: 210°F
Factory Pre-Charge: 38 psi



- System Connection height consistent with Industry
- Same ZHP Tank with "NEW" Bottom Connection

Zilmert Expansion Tanks - Thermal and Well Tanks



globally renowned



Easy-Pro In-Line Thermal Expansion Tanks For DHW

Part #	Volume (GAL)	NPT	NSF 61	Stand	Details
ZEP001	0.04	1/2"	Yes	No	For Tankless Water Heaters / Stainless Steel
ZEP005	2.1	3/4"	Yes	No	Good For Well Tank / Thermal
ZEP012	4.8	3/4"	Yes	No	Good For Well Tank / Thermal
ZEP018	6.3	1"	Yes	No	Good For Well Tank / Thermal

Hydro-Plus Well Tanks (Vertical Stand With Base)

Part #	Volume (GAL)	NPT	NSF 61	Stand	Details
ZHP005	2.1	3/4"	Yes	No	---
ZHP012	4.8	3/4"	Yes	No	---
ZHP018	6.3	1"	Yes	No	---
ZHP104IL	9.2	1"	Yes	No	---
ZHP200IL	13.2	1"	Yes	No	---
ZHP200F	13.2	1"	Yes	Yes	Side Connection
ZHP202	21.1	1"	Yes	Yes	Side Connection
ZHP203	27.7	1-1/4"	Yes	Yes	Side Connection
ZHP204	39.6	1-1/4"	Yes	Yes	Side Connection
ZHP250	52.8	1-1/4"	Yes	Yes	Side Connection
ZHP251	66.0	1-1/4"	Yes	Yes	Side Connection
ZHP302	79.3	1-1/4"	Yes	Yes	Side Connection
ZHP350	106.0	1-1/4"	Yes	Yes	Side Connection
ZHP351	119.0	1-1/4"	Yes	Yes	Side Connection
ZHP400	132.1	1-1/4"	Yes	Yes	Side Connection
ZHP451	158.5	1-1/4"	Yes	Yes	Side Connection

Features

- Seamless NSF 61 certified low permeability butyl diaphragm never creases and channels water directly to outlets, thus eliminating bacterial growth pockets
- MIG welding eliminates interior rough spots and sharp edges
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, increasing life cycle
- Powder coated finish for a longer lasting, more durable finish

Operating Conditions

Max. Operating Pressure: 150 psi
Operating Temperatures: 210 F
Factory Pre-charge Hydro-Plus: 38 psi
Factory Pre-charge Easy-Pro In-Line: 40 psi

Materials Of Construction

Shell: Carbon steel (internally coated with epoxy powder for potable water applications)
Connections: Stainless steel (internally coated with powder for potable water applications)
Fixed Membrane: Butyl (for potable water applications)
Color: Almond



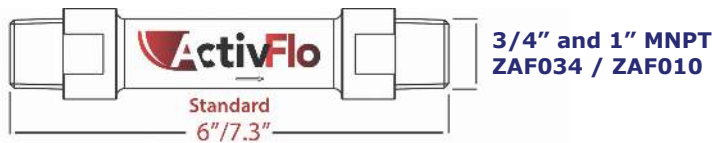
Stainless steel side connection allows for quicker, less expensive installation

ActivFlo Pro Water Conditioner

The ActivFlo from ZilmetsUSA is a No-Salt Hard Water Conditioner. Hard water is a common water condition that is a result of calcium and magnesium in the water supply. Effects of hard water include limescale buildup, reduced water flow, reduced heating efficiency, and waste of detergents to clean. The ActivFlo imposes a catalytic action as water flows through, that causes calcium to form into an insoluble aragonite crystal. These crystals do not have the same bonding properties as calcium which means they won't stick to pipework, heating elements, faucets, etc.



 globally renowned



Features

- Improves and maintains efficiency of heating equipment
- Up to 50% less soap and washing detergent needed
- No spotting or marks on stainless steel sinks and counters
- Improvement in some dry skin conditions
- Better tasting water from the tap
- No power required
- Quality stainless steel housing
- Life expectancy in excess of 20 years
- Suitable for whole house protection

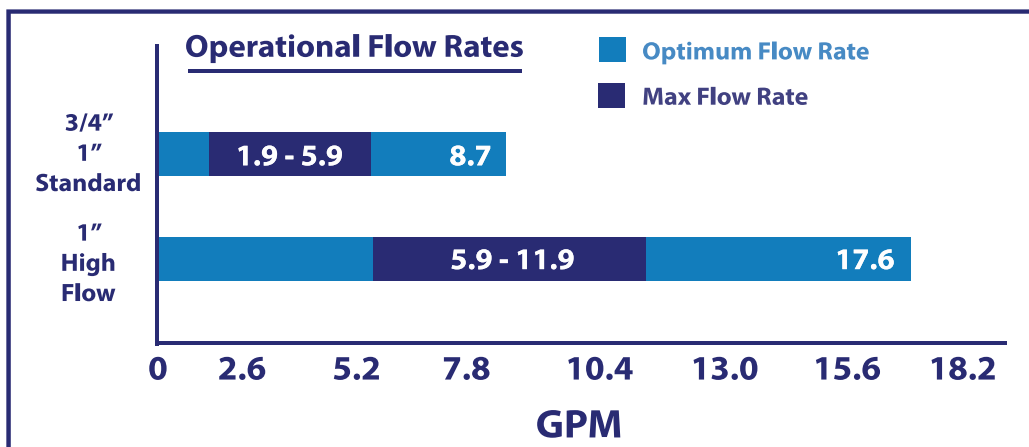
Installation Applications

- Water marks on sinks, fixtures, and counters
- Using a lot of soap
- Dry skin
- Bad taste from tap water
- Less hot water from water heater
- Flowrate decreasing

Technical Specifications

Maximum Operating Temperature: 185F°
Operating Temperature: 232 psi
Connections: NPT Thread

Model Number	Description	Flowrate (GPM)	Connection Size
ZAF012MF	SOLO Point-of-Use 1/2"	0.7 - 3.6	1/2" M/F NPT
ZAF034	Residential Standard 3/4"	1.9 - 5.9	3/4" MNPT
ZAF010	Residential Standard 1"	1.9 - 5.9	1" MNPT
ZAF010H	Residential High Flow 1"	5.9 - 15.9	1" MNPT



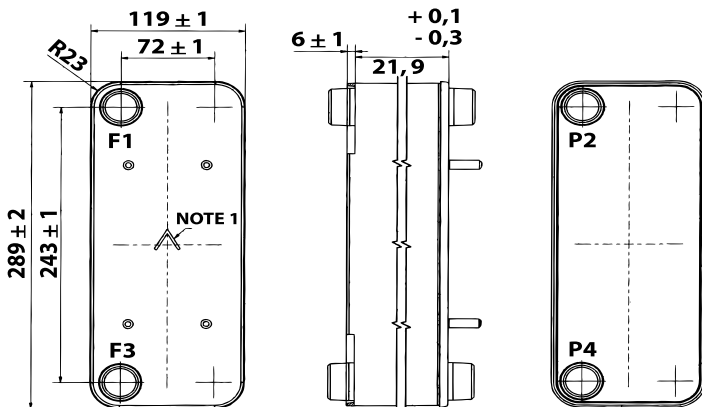
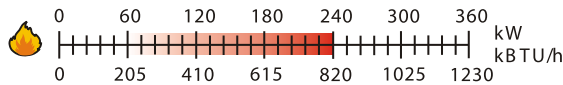
Compact Brazed Plate Heat Exchangers

Experience more efficient heat transfer solutions in your heating application! The list of applications that operate more efficiently with Compact Brazed Plate Heat Exchangers, is a long one: boilers, steam, solar panels, floor heating, snow melting and so on...



***Mondale stocks several sizes of B10T (roughly 5" x 12") single-wall models with the "Front and Back" connections, B120T (10" x 20") and several sizes of B16 double-wall models. SWEP also manufactures many other types of brazed plate heat exchangers up to 3+ million BTUs. Please call us for sizing, pricing and availability. Dimensions for our B10T models are provided below.**

Port diameter		Max flow rate		Max heat transfer area	
mm	inch	m ³ /h	usg/min	m ²	ft ²
24	1"	12	53	4.3	41



NOTE 1 Alternate Marking: Sticker or Stamp

Features

- Made from stainless steel and manufactured with the highest of quality
- Delivered with full traceability and verified functionality
- Approved by leading independent international bodies such as PED, UL, KHK, CSA
- Manufactured in the USA and Sweden

Brazed Plate Heat Exchangers (Single Wall)

#Part	Description	BTU _h
B10TH-BKT	Wall Mount Bracket for Front and Back Connections	---
B10THX-8FB	B10TH x 8/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	65,000
B10THX-10FB	B10TH x 10/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	90,000
B10THX-12FB	B10TH x 12/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	110,000
B10THX-16FB	B10TH x 16/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	150,000
B10THX-20FB	B10TH x 20/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	185,000
B10THX-24FB	B10TH x 24/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	220,000
B10THX-30FB	B10TH x 30/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	270,000
B10THX-36FB	B10TH x 36/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	320,000
B10THX-40FB	B10TH x 40/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	345,000
B10THX-50FB	B10TH x 50/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	405,000
B10THX-60FB	B10TH x 60/1P-SC-S 2 x 1" NPT / 2 x 1" NPT	455,000
B120TH x 30	B120T Model (9.6" x 20.7") 1-1/2" NPT	385,000
B120TH x 40	B120T Model (9.6" x 20.7") 1-1/2" NPT	505,000
B120TH x 50	B120T Model (9.6" x 20.7") 1-1/2" NPT	620,000
B120TH x 80	B120T Model (9.6" x 20.7") 1-1/2" NPT	920,000

(Double Wall)

Part #	Description	BTU _h
B16DW x 10	B16DW x 10 / 1P-SC-S4* 1" NPT	60,000
B16DW x 30	B16DW x 30 / 1P-SC-S4* 1" NPT	205,000
B16DW x 50	B16DW x 50 / 1P-SC-S4* 1" NPT	350,000
B16DW x 70	B16DW x 70 / 1P-SC-S4* 1" NPT	480,000
B16DW x 100	B16DW x 100 / 1P-SC-S4* 1" NPT	575,000

*** Delivered Outputs At Design Conditions Are: Side A (Water) - 180 Supply / 150 Return**

FERNOX Products

Fernox has developed a reliable and trusted product portfolio covering everything from water treatment cleaners to inhibitors. These products have been used successfully in Europe for many years and are approved for use by most boiler manufacturers.

Save \$! Express cans and pints available in carton quantities of 10

Express Cans (Pressurized) / For Systems Up To 34 Gallons (400 ML Sizes)

Protector F1 Express
Part #: F-62436

- Long term protection against corrosion and limescale
- Multi-metal safe



Boiler Noise F2 Express
Part #: F-58231

- Reduces boiler noise
- Systems up to 26 gal



Cleaner F3 Express
Part #: F-62437

- Removes sludge flux and debris
- Restores heating efficiency



Leak Sealer F4 Express
Part #: F-62438

- Stops small leaks
- Ideal for reducing pressure loss from sealed system



Protector + Filter Fluid
Part #: F-62310

- Lifts corrosion deposits and contaminants within central heating system to deliver to in-line filter
- Systems up to 26 gal



Liquid Products / For Systems up to 34 Gallons (1-Pint Sizes)

F1 Filter Fluid + Protector
Part #: F-62234

- Protects and cleans when used with TF-1 Filter
- Systems up to 26 gal



Protector F1
Part #: F-57880

- Long term protection against corrosion and limescale
- Multi-metal safe



Boiler Noise Silencer F2
Part #: F-57881

- Reduces boiler noise
- Improves heat transfer efficiency



Cleaner F3
Part #: F-57882

- Removes sludge, scale and debris
- Restores heating efficiency



Leak Sealer F4
Part #: F-57883

- Stops small leaks
- Ideal for reducing pressure loss from sealed systems



Alphi-11 Propylene Glycol



Fernox Alphi-11 Protector is a combined antifreeze and inhibitor, which gives long term protection against internal corrosion and limescale in commercial heating and chilled water systems. Fernox Alphi-11 Protector is compatible with all

metals and materials commonly used in central heating systems, including aluminum.

Part #	Description	Size	Packaging
F-155738-005	97% Propylene Glycol with 3% F1 Protector Built In!	5 Gal Jug	Singles or Pallet
F-155738-055		55 Gal Drum	Singles or Pallet
F-174819-005	Propylene Glycol F1 Protector: Pre-mixed 30% Concentration	5 Gal Jug	Pallet Only
F-174819-055		55 Gal Drum	Pallet Only
F-174821-005	Propylene Glycol F1 Protector: Pre-mixed 40% Concentration	5 Gal Jug	Pallet Only
F-174821-055		55 Gal Drum	Pallet Only

*** Premix is also available in 25%, 35%, 45% and 50% concentrations.**

Application and Dosage

The minimum recommended "in-use" concentration of the product is 25% in order to ensure adequate corrosion protection.

Alphi-11%	25%	30%	35%	40%	45%	50%
Freezing Point Deg. F	12.2	5	0.4	-7.6	-16.6	-29.2
Burst Point Deg. F	0	-20	-40	-60	-70	-80

We recommend that untreated systems are thoroughly cleansed and flushed using Fernox Cleaner F3 before treating with Fernox Antifreeze Protector Alphi-11 or F1-Protector as existing debris can damage the installation.

FERNOX ALPHI-11 and other GLYCOLS are NOT the same!



It is critical to understand the instructions and properties of different glycol products in addition to the requirements of the boiler systems in which the glycol is being used. Many boiler manufacturers require that pH levels in their boiler systems be maintained between pH of 6.5 to 8.5. This level is accomplished and maintained by using Alphi-11 glycol.

Many other glycol products on the market have pH levels exceeding 9.0. Further, some manufacturers recommend adding an inhibitor product when pH levels fall below 8.5 to get it above 9.0. This puts the pH level of the boiler system outside the allowable range of many boiler manufacturers. Additionally, the level of maximum allowable grains of hardness for additional fill water is not always listed in the installation or maintenance instructions.

Also, many manufacturers utilize nitrates and phosphates in the glycol's inhibitor package. You may recognize these as ingredients in fertilizer. FernoX **does not** use nitrates or phosphates.

Alphi-11 Key Features

- **F1 Protector is the Inhibitor used in the FernoX Alphi-11 glycol.**
- **F1 Protector and Alphi-11 glycol do NOT have Nitrates or Phosphates as many competitive products do.**
- **Hard water recommended, up to 70 grains (or 1197 PPM) allowable hardness.**
- **Alphi-11 Glycol is available in full concentrate or Pre-Mix of 25%, 30%, 35%, 40%, 45% or 50% (or custom for large jobs).**
- **pH level (soln 25%) is 7.0 – 7.5.**

FERNOX Products

Commercial / For HVAC Commercial Systems



Protector F1
2.6 Gallons
Part #: F-59700

- Central heating protector for commercial and cooling systems
- Maintains efficiency of system
- Systems up to 500 gal.



Cleaner F3
2.6 Gallons
Part #: F-59701

- Central heating cleaner for commercial and cooling systems
- Remove sludge and scale
- Systems up to 500 gal.



FC1 Inhibitor + Filter Fluid
5.28 Gallons
Part #: F-62225

- Inhibitor package with active dispersant to aid in safe collection of corrosion debris and scale to a filter

Cleaners And Limescale Remover / For Sludged And Blocked Systems



DS-10 Dry-Side Cleaner
Part #: F-61029

- For cleaning the combustion side of heat exchangers



DS-40 System Cleaner
Part #: F-62478 (4.2 lbs)
Part #: F-58511 (55 lbs)

- Powerful acid descaler and sludge remover
- Eliminates boiler noise



System Neutralizer
4.4 lbs
Part #: F-62078

- Neutralizes DS40 System cleaner to avoid acid discharge
- Conditions system for application of corrosion inhibitor

Filters, Commissioning And Test Kits



Express Boiler Commissioning Kit
Part #: F-62089

- Maintain the design specification and energy efficiency
- Comprised of Cleaners, Protectors and Check Strips



TDS Meter
Part #: F-57875

- For easy on-site measurement of total dissolved solids
- Ideal for use when powerflushing

Express Inhibitor Test
Part #: F-62540

- Gives rapid on-site analysis of the concentration of all FernoX protectors
- Kit includes 50 test strips



Universal Test Kit
Part #: F-63600

- On-site analysis of central heating system water
- Simple color charts for measuring concentrations



Boiler Commissioning Kit
Part #: F-59480

- Maintain design specification and energy efficiency
- Comprised of Cleaner, Protector and Check Strips



TF1 Omega Filter
Part #: F-62294 (1")
Part #: F-62373 (1-1/4")
Part #: F-62374 (1-1/2")

- Inline magnetic filter with powerful neodymium magnetic assembly
- Easy install with vertical or horizontal piping



TF1 Total Filter
Part #: F-60003

- Removes and contains magnetic and non-magnetic contaminants
- Fast to fit and easy to clean
- Includes ball valves

Panel Radiators

More comfort, less wall space! Built in Germany to the highest design and quality standards, DiaNorm's panel radiation products combine comfortable radiant heat with individual room temperature control. DiaNorm radiators take up to **75% less wall space** and generate comfortable heat at lower water temperatures than baseboard heating products.

*** When ordering, please select appropriate adaptors, valves and thermostat.**



Features

- Made of high quality 1.25mm FePO1 steel
- Epoxy powder coating, white finish to RAL 9010
- Water connections are not exposed but located at bottom
- Can utilize thermostatic radiator valve for non-wire zoning
- Can be piped with plastic "PEX" Tubing, making it much easier to install than copper

Specifications (Type 22, 3-3/4" Deep)

Part #	Height x Length	BTU Outputs @ 180°F
DN20836	8" x 36"	2815
DN20848	8" x 48"	3757
DN20864	8" x 64"	5005
DN20872	8" x 72"	5633
DN21216	12" x 16"	1546
DN21224	12" x 24"	2317
DN21236	12" x 36"	3477
DN21248	12" x 48"	4637
DN21264	12" x 64"	6183
DN21272	12" x 72"	6954
DN21616	16" x 16"	1931
DN21624	16" x 24"	2900
DN21636	16" x 36"	4347
DN21648	16" x 48"	5797
DN21664	16" x 64"	7728
DN21672	16" x 72"	8697
DN22016	20" x 16"	2368
DN22024	20" x 24"	3555
DN22036	20" x 36"	5330
DN22048	20" x 48"	7107
DN22064	20" x 64"	9475
DN22072	20" x 72"	10663
DN22416	24" x 16"	2757
DN22424	24" x 24"	4135
DN22436	24" x 36"	6203
DN22448	24" x 48"	8271
DN22464	24" x 64"	11031
DN22472	24" x 72"	12409
DN23616	36" x 16"	3862
DN23636	36" x 36"	8690
DN23672	36" x 72"	17381



The table to the right lists the most popular sizes that are typically stocked at Mondale. Several other sizes are also available upon request.

Please contact us for more information.

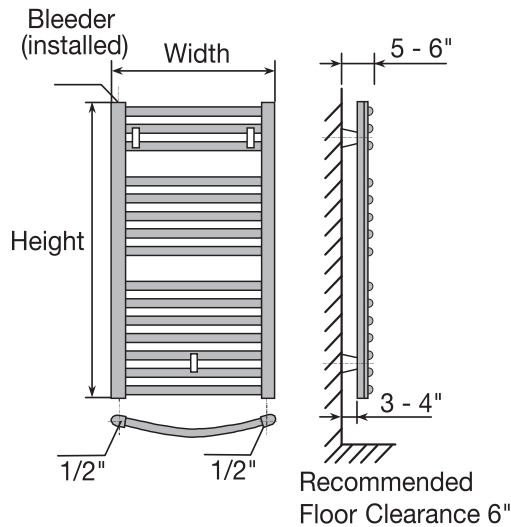
"Noblesse NB" Towel Warmers

Built in Germany to the highest design and quality standards, DiaNorm's "Noblesse NB" Towel Warmers provide affordable comfort and elegance, plus individual room temperature control. "Noblesse NB" Towel Warmers are made of precision round 1"x 1mm steel tubes. The horizontal bars are slightly bent forward, the vertical tubes are "D"- shaped and straight (1-1/2" x 1.5 mm)

*** When ordering, please select appropriate adaptors, valves and thermostat.**

Features

- **5-Year Limited Warranty**
- Designed for hot water (no steam) and operating pressures of up to 120 psi and temperatures of up to 220° F
- Supply and return water tapplings (1/2" fem) located at bottom of vertical tubes and reversible
- Standard 1/8" air bleeder installed at top of right hand vertical tube
- Mounting brackets included
- Standard finish is white epoxy powder coating to RAL 9016 which can be easily painted any color



Specifications

Part #	Height x Length	BTU Outputs @ 180° F
DN43224	32" x 24"	1,760
DN44824	48" x 24"	2,640
DN47224	72" x 24"	3,960

Panel Radiator and Towel Warmer (Valves & Accessories)

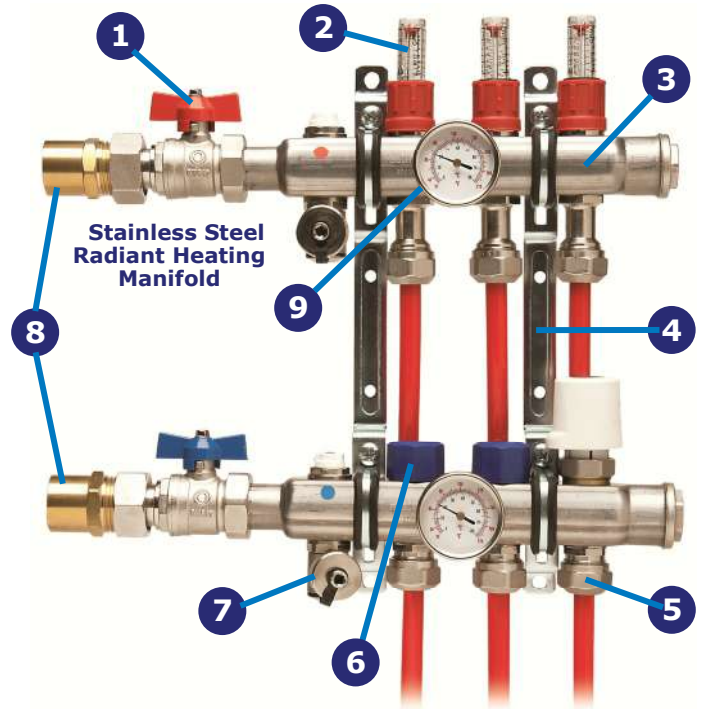
Part #	Product Description
H-1082	Return Angle Valve 1/2" (For towel warmers)
H-1365	Thermostat (WHITE)
H-5813	1/2" 2-Pipe Isolation Valve (STRAIGHT)
H-5814	1/2" 2-Pipe Isolation Valve (ANGLED)
H-5933	1/2" 2-Pipe Diverter Valve (STRAIGHT)
H-5934	1/2" 2-Pipe Diverter Valve (ANGLED)
H-6062	1/2" Double Angle Valve LH (For towel warmers)
H-6063	1/2" Double Angle Valve RH (For towel warmers)
H-6864	1/2" Copper Compression Fittings (Pair)
H-F6674	Dual Floor Escutcheon
H-WKL	Tubing Cover
DN40041	Floor Pedestal (Requires 2 per radiator) Radiator Rough-in Template, Includes 4-Tube/U-Tube only, For use with DN40441.
DN40441	Radiator Rough-in Template. Includes U-Tube.
DN40442	U-Tube only. For use with DN40441.

Maxifold Radiant Heating Manifold

The stainless steel Maxifold manifold provides quality craftsmanship and maximum comfort in radiant heating for your home. It's a wise choice as part of your overall hydronic heating system.

Features

- 1** Full-Port Ball Valves (optional)
- 2** Adjustable flowmeters allow flow to be set at up to 2 gallons per minute per loop
- 3** High-quality 1-1/2" stainless steel manifold. The slim profile fits conveniently in joist space
- 4** Mounting brackets included
- 5** Compression fittings available for 3/8", 1/2", 5/8" and 3/4" Pex tubing. These fittings can be used with most brands of Pex tubing.
- 6** Actuator Zone Valves (optional)
- 7** Fill valve swivels to allow piping from either direction. The fill valve cap also serves as the tool to open the fill and bleeder valves
- 8** 1" Sweat Manifold Transitions (Included)
- 9** Well for optional thermometers



Extension Valves



Extension Flow Meter

Electrothermal Actuators (LH)

Product #	Description
H - 2496	Normally Closed w/End Switch 4-Wire

Compression Fittings (EK-20 Size)

Product #	Description
H - 6849	3/8" PEX
H - 6850	1/2" PEX
H - 6851	5/8" PEX
H - 6852	3/4" PEX
H - 3831S	1/2" Copper Compression Fittings
H - 6950	1/2" Pex-Al-Pex

Stainless Steel Radiant Manifold

Product #	Description
H - 4172	For 2 Branches
H - 4173	For 3 Branches
H - 4174	For 4 Branches
H - 4175	For 5 Branches
H - 4176	For 6 Branches
H - 4177	For 7 Branches
H - 4178	For 8 Branches

Extension Kit

Product #	Description
H - 4172 EXT	For 2 Additional Branches
H - 4173 EXT	For 3 Additional Branches
H - 4174 EXT	For 4 Additional Branches
H - 4175 EXT	For 5 Additional Branches
H - 4176 EXT	For 6 Additional Branches

Accessories

Product #	Description
H - 4004	Caps For Unused Loops (Pair)
H - 4008	Sweat Tails (Pair)
H - 4700	Full-Port Ball Valves (Pair), Union Connections
H - 4700 - NPT	Ball Valve Set w/Gaskets, 1" NPT Connections
H - 6815	Gasket for 1" Manifold Tail Piece (Pair)
H - 4900	Thermometers

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