

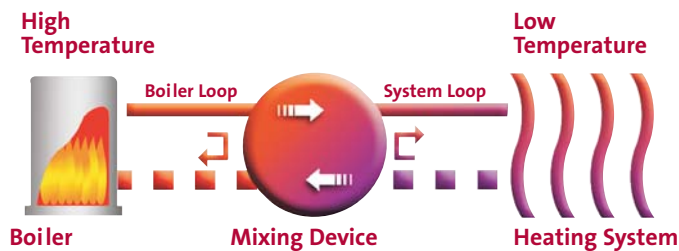
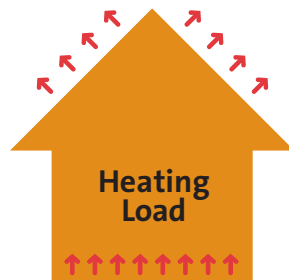
MixiMizer®

Packaged Injection Mixing Solution

Automatically Maintains Indoor Comfort as the Outdoor Temperature Changes.

How Outdoor Reset Works.

↑ Heat Loss Increases as Outdoor Temperature Decreases
↓ Heat Loss Decreases as Outdoor Temperature Increases



- Integrated pump and control for plug n' play simplicity
- Prewired water sensors and appliance line cord for easy installation
- Integral check valve to prevent thermal siphoning

Additional MixiMizer® Features:

WARM WEATHER SHUTDOWN- disables the system when the outdoor temperature reaches 70° F, for greater efficiency

PUMP EXERCISING- if pump has not run for 3 days, the control exercises the pump for 10 seconds to ensure longevity and performance

EXTERNAL "CALL FOR HEAT" INPUT- accepts external demand signal for heat, offering flexibility and simplicity of operation

POST PURGE- after a call for heat is removed, the pump will run for 20 seconds to purge the remaining heat from the system

BOILER RETURN PROTECTION- if boiler return water temperature is not maintained above 135° F, the pump slows the amount of water being injected into the system, allowing it to be returned to the boiler

SYSTEM TEMPERATURE PROTECTION- if system water temperature approaches the limit of 140° F, the pump slows the amount of water being injected into the system to protect the floor coverings

Calculation Selection Example

> System Design Supply Water Temperature = 120° F

> Outdoor Design Temperature = 10° F

> Warm Weather Shut Down = 70° F

Please note: The factory default for the Warm Weather Shut Down is always 70° F. A 5° F parallel shift is user selectable.

Heating Curve Setting=

$$\frac{\text{System Design Temperature} - \text{Warm Weather Shut Down}}{\text{Warm Weather Shut Down} - \text{Outdoor Design Temperature}} = \frac{120^{\circ}\text{F} - 70^{\circ}\text{F}}{70^{\circ}\text{F} - 10^{\circ}\text{F}} = .8$$

HEATING CURVE TABLE

	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	
60.0	1.0	2.0	3.0														
50.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5										
40.0	0.3	0.7	1.0	1.3	1.6	2.0	2.3	2.7	3.0	3.3	3.7						
30.0	0.2	0.5	0.8	1.0	1.2	1.5	1.8	2.0	2.3	2.5	2.8	3.0	3.3	3.5			
20.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	
10.0	0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.3	1.5	1.7	1.8	2.0	2.2	2.3	2.5	2.7
0.0	0.1	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2	1.4	1.6	1.7	1.9	2.0	2.1	2.3
-10.0	0.1	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	1.9	2.0
-20.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8

Pumping System Includes:



INTEGRATED PUMP & CONTROL- Grundfos UP15 or UP43 pumps offer full-range variable-performance with integrated check valves



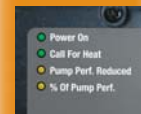
2 WATER TEMPERATURE SENSORS- one for system water temperatures, one for boiler return water temperature, both factory-installed



OUTDOOR TEMPERATURE SENSOR- for accurate outdoor readings



SELECTABLE HEATING CURVE DIAL- used to select the precise heating curve for the building's design parameters

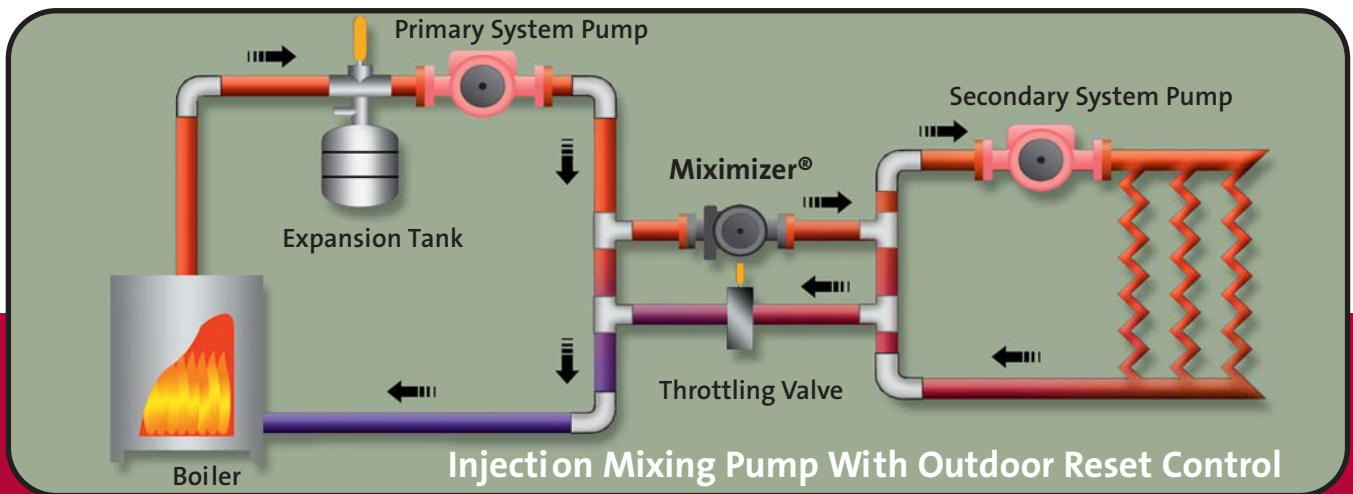


LED PERFORMANCE PANEL- color LED readouts display power, call for heat, pump performance reduced and percentage of pump performance

System is available in cast iron and bronze
UP15-42BUC7/MR = part# 59896286

UP15-42FC/MR = part# 59896277
UP43-64FC/MR = part# 52722398

UP15-42BUC5/MR = part# 59896285
UP43-64BFC/MR = part# 52722401



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