Job or Customer :	
Location :	
Engineer :	
❑ Complies with Spec ❑ Alternate	Notes :
Contractor :	
HeatLink Rep :	
Submitted By :	Date :
Approved By :	Date :
P.O. Number :	Date :

Description
These panels provide a secondary pump with a 3-way rotary mixing valve and DDC Mixing Valve Motor.

Qty	Stk. #	Secondary Circulator
	3WMIX-BMS	Ferrous, Grundfos UPS26-99FC
	3WMIXHH-BMS	Ferrous, Grundfos UPS26-150FC

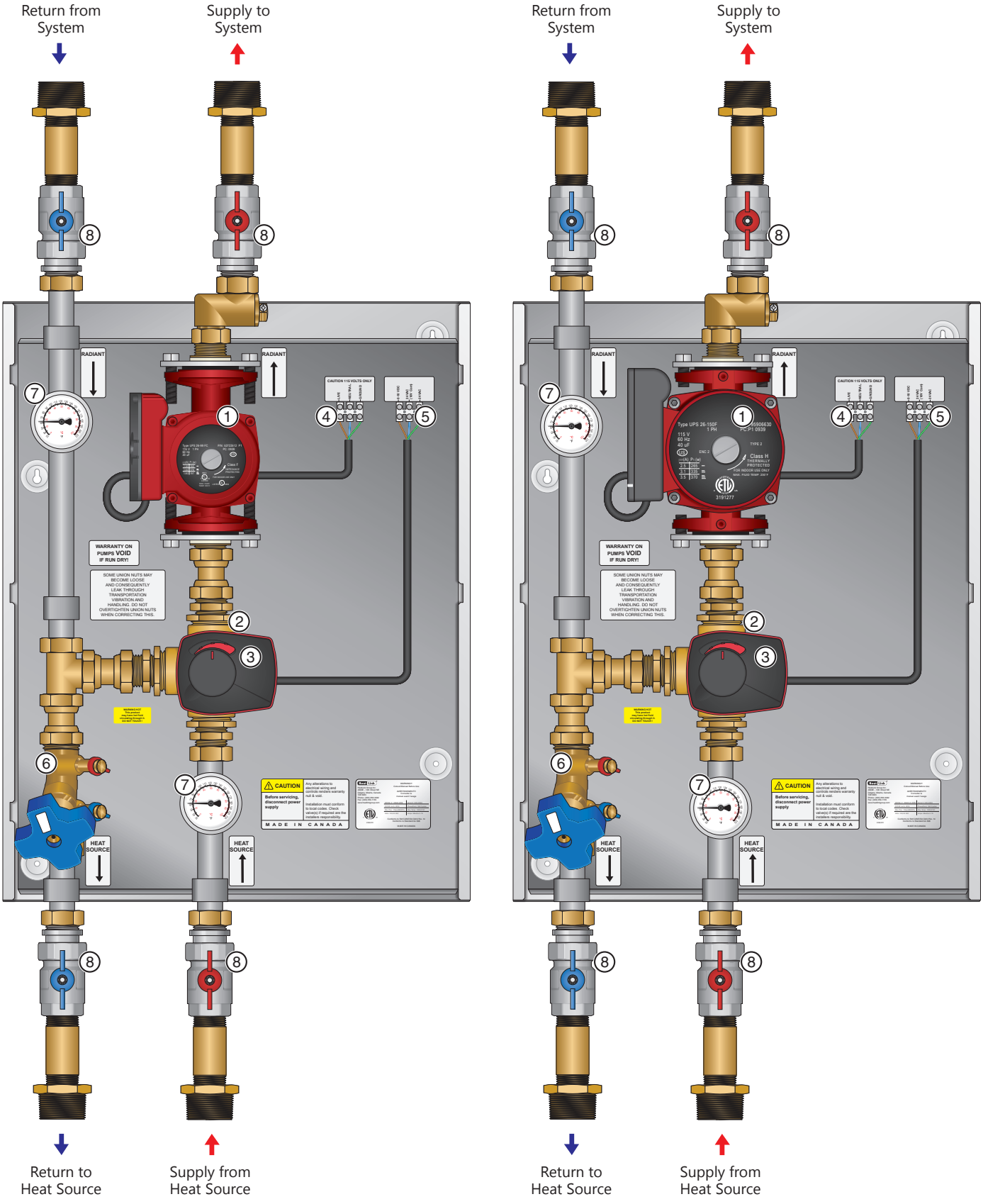
Technical Data

		Model Number	
	Specifications	3WMIX-BMS	3WMIXHH-BMS
Max ambient temperature	120ºF (49ºC)	•	•
Max operating temperature	200ºF (93ºC)	•	•
Max operating pressure	125 psi (862 kPa)	•	•
Temperature Control Method	3-Way Mixing Valve w/DDC Motor	•	•
Temperature Control Range	50-180ºF (10-82ºC)	•	•
Power supply	120/24 V(ac)	•	•
Primary Pump	Grundfos UPS 26-99	•	
Primary Pump	Grundfos UPS 26-150		•
Piping	1" 304SS Tubing	•	•
Piping connections	1½" MNPT	•	•
Material - backplate	16 Gauge galvanized steel	•	•
Material - enclosure	Powder coated steel	•	•

Standards / Listings
CAN/CSA-C22 No.14, UL508
cETLus

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Panel Configurations



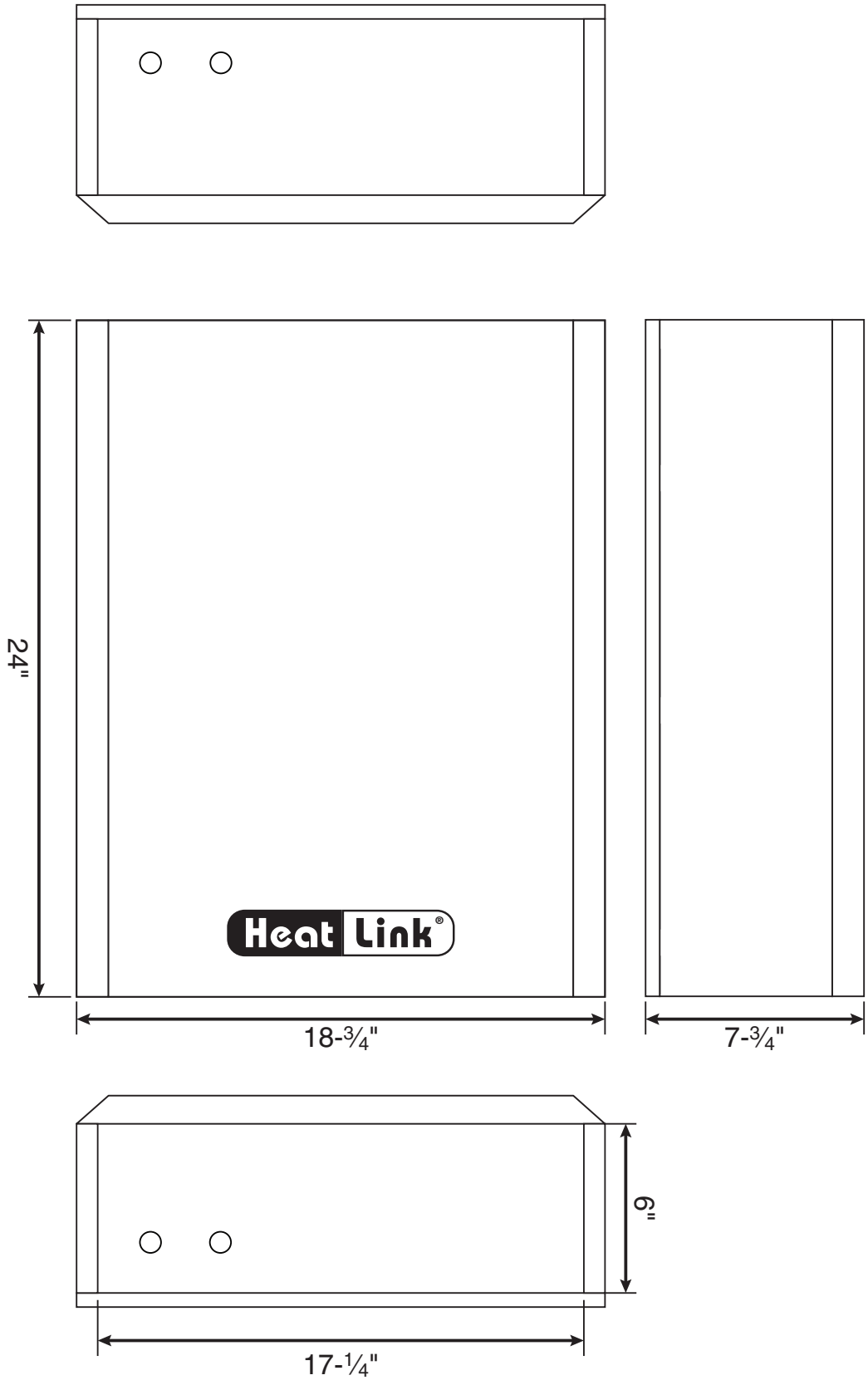
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Panel Components

#	Components	Component Description	Part Number	
			3WMIX-SMCP	3WMIXHH-SMCP
1	Secondary pump	Moves the heated fluid through the system when there is a call for heat from the system controller.	UPS26-99	UPS26-150
2	1¼" Mixing valve (hidden)	3-way brass mixing valve regulates the temperature in the hydronic system with the help of the electric motor actuator and system controller.	63539	
3	DDC Mixing Valve Motor	Mounted to the control valve and moves the valve appropriately to allow the heated fluid to enter. Works in conjunction with the system controller.	58132	
4	Terminal block (pump)	Easy wiring access for pump.		
5	Terminal block (mixing valve)	Easy wiring access for mixing valve.		
6	Balancing valve	Adjusts flow.	n/a	
7	Thermometer	Shows system temperature.	n/a	
8	Isolation valve assemblies*	Zone valve used to isolate the panel from the system during fill & purge, and maintenance.	n/a	

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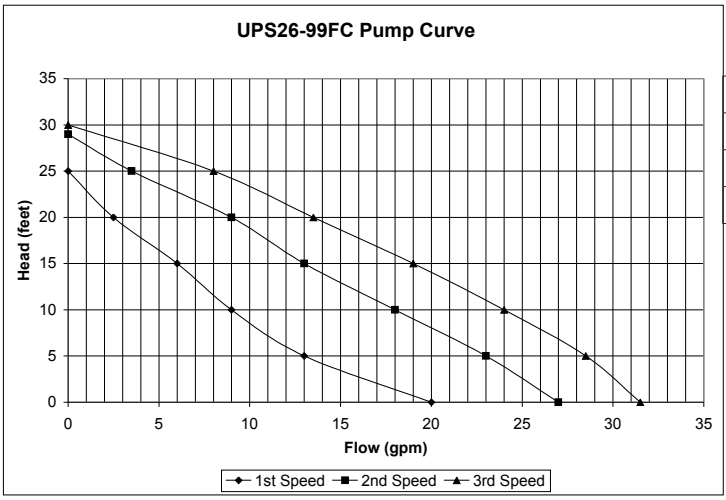
Enclosure and Panel Dimensions



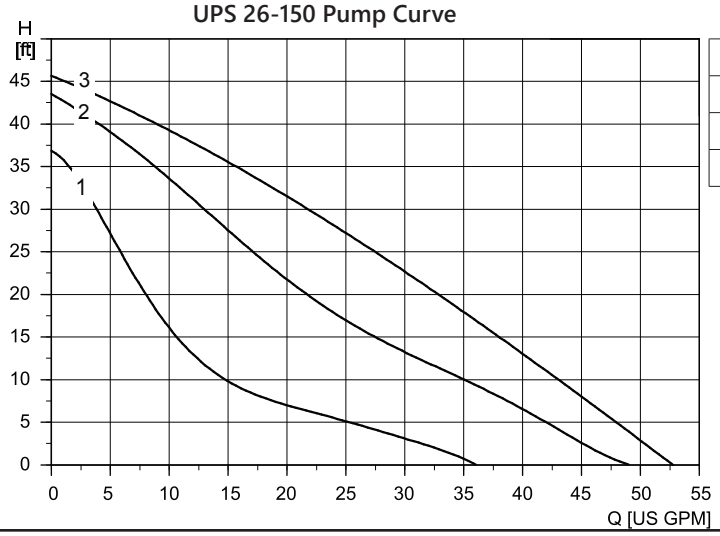
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Pump Technical Data

	Model Number	
	UPS 26-99FC	UPS 26-150 FC
Material		
Inlet cone, bearing plate, bearing retainers, rotor can, rotor cladding, shaft retainer	Stainless steel	
Stator housing	Aluminum	
Shaft, upper and lower radial bearings	Aluminum oxide ceramic	
Thrust bearing	Carbon bearing and EPDM retainer	
Check valve	ACETA with 302 SS spring and nitrile rubber seats	
Pump housing (volute)	Cast iron	
O-ring and gaskets	EPDM	
Impeller	PES composite (30% glass filled)	
Terminal box	Noryl® with EPDM gasket	
Flow range	0-33 US gpm (0-7.5 m^3/h)	0-53 US gpm (0-12 m^3/h)
Head range	0-29 ft(0-8.8 m)	0-46 ft (0-14 m)
Motors	2-pole, single phase	
Max. liquid temperature	230ºF (110ºC)	
Min. liquid temperature	36ºF (2ºC)	
Max. system temperature	145 psi (10 bar)	



Speed	Volts	Amps	Watts	Hp	Capacitor
3	115	1.8	197	1/6	20 µF/180V
2		1.5	179	1/6	
1		1.3	150	1/6	



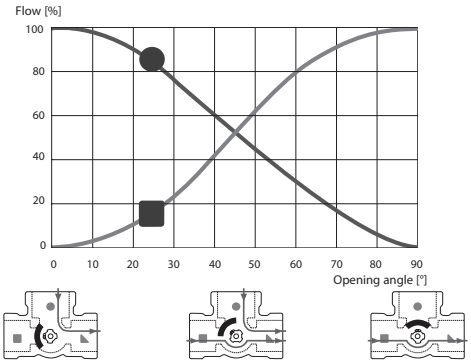
Speed	Volts	Amps	Watts	Hp	Capacitor
3	115	3.5	370	1/6	40 µF/180V
2		3.1	335	1/6	
1		2.5	265	1/6	

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Technical Data - 3-way Mixing Valve

Mixing Valve Nominal Size:	1-¼"
Mixing Valve Cv:	18.7
Material - Valve Body & Slide:	Brass DZR
Material - Shaft & Bushing:	PPS composite
Material - O-ring:	EPDM
Max. Operating Temperature:	230°F (110°C)
Min. Operating Temperature:	-15°F (-10°C)
Max. Operating Pressure:	145 psi (10 bar)
Max. Differential Pressure:	Mixing - 14.5 psi (1 bar) Diverting - 20 psi (2 bar)
Leaking in % of flow*:	Mixing - <0.05% Diverting - <0.02%
Max. Torque:	<44lbf*in (<5Nm)

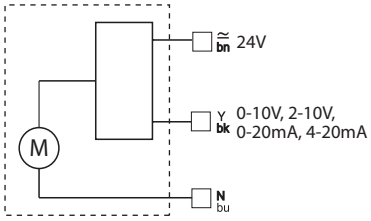
*based on diff. pressure of 14.5 psi (1 bar)



Technical Data - DDC Mixing Valve Motor

Ambient Temperature:	max. 131°F (55°C) min. 23°F (-5°C)
Power Supply:	24±10% Vac/dc, 50/60 Hz
Enclosure Rating:	IP41
Protection Class:	II
Torque:	6 Nm
Power Consumption - Operation:	AC: 5W DC: 2.5W
Power Consumption - Dimensioning:	AC: 8 VA DC: 4 VA
Rating Auxiliary Switch:	6(3)A 250Vac
Running Time 90°:	45/120 sec
Control Signal	0-10V, 2-10V, 0-20mA, 4-20mA

The motor should be preceded by a multi-pole contact breaker in the fixed installation.



CE LVD 2006/95/EC
EMC 2004/108/EC
RoHS 2002/95/EC

Installation
Installation must follow all of HeatLink's instructions and guidelines.

Maintenance
Maintenance must follow all of HeatLink's instructions and guidelines.

Related Documents
Operation, Installation, and Maintenance Manual L6 3WMIX-BMS
HeatLink Limited Heating Warranty

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