APPLICATIONS ENGINEERING

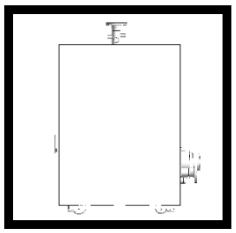
Vitocrossal 200, CI2
APPLICATION GUIDE

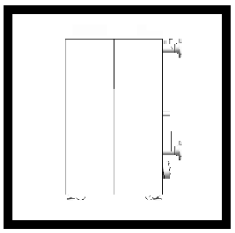
CI2 Series
Floor standing gas-fired condensing boiler
399 to 2000 MBH

08/2022

Component Index

Hydronic Components


CI2 399-1000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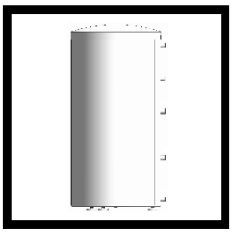
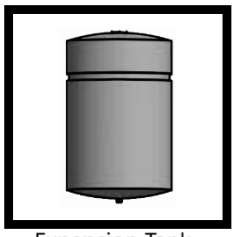
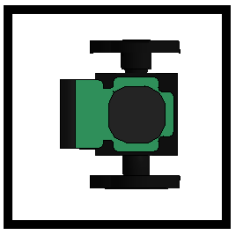
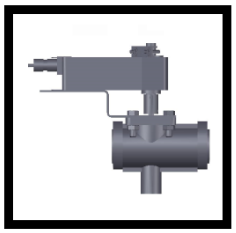

DHW Indirect Tank

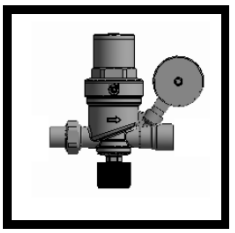

Expansion Tank


Circulator

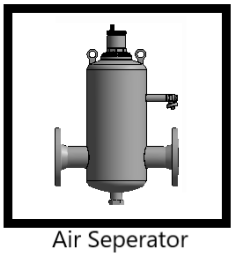

Mixing Valve

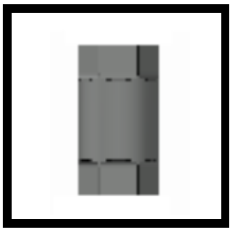

Boiler Isolation Valve


Ball Valve

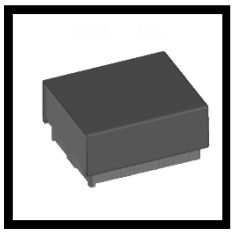

Fill Valve

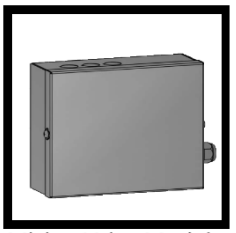

Backflow Preventer

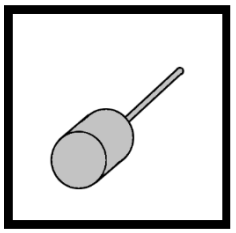

Air Seperator


Check Valve

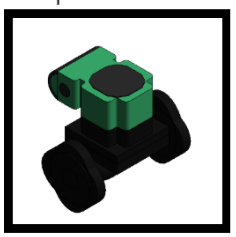
Electrical Components


Outdoor Air Sensor

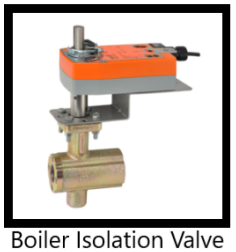

Mixing Valve Module


Temperature Sensor


Mixing Valve Motor


Circulator

Thermostat


Boiler Isolation Valve

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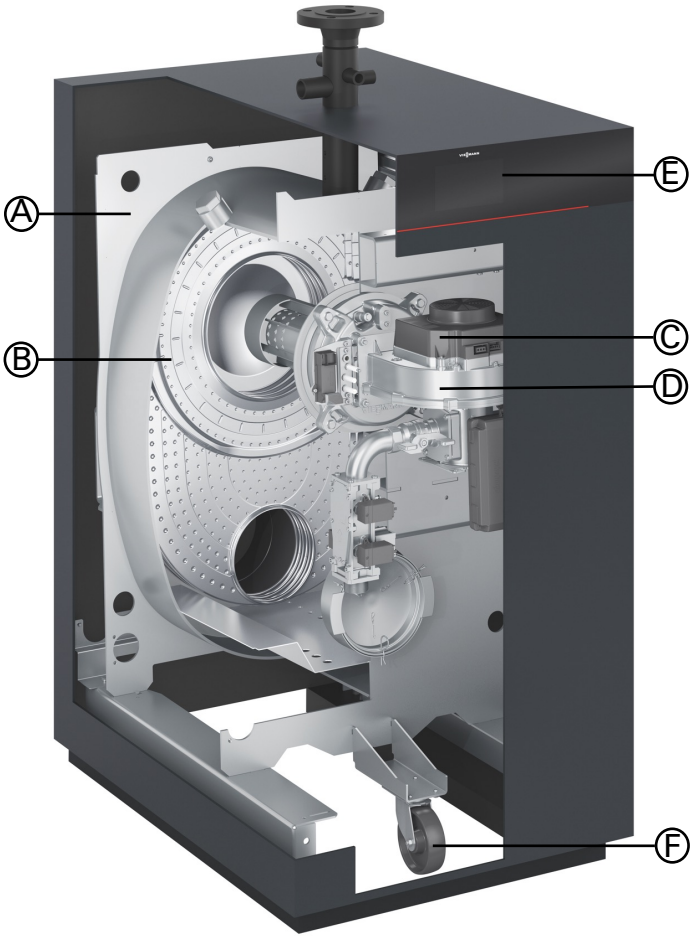

Boiler Description

The Vitocrossal 200, CI2 boiler is floor mounted high efficiency, gas-fired condensing boiler with pre-mix modulating cylinder burners for natural gas (NG) or liquid propane (LP), with Inox Crossal heat exchanger made of high-grade SA 240 stainless steel.

The Vitocrossal 200, CI2 boiler is designed for closed loop hot water heating systems with maximum supply water temperatures of 185°F with a maximum operating pressure of 80 psig.

The pre-mix cylinder burners have an environmentally - friendly operation with a modulation range of up to 30:1. Burner includes O2 trim to maintain optimum combustion throughout the modulation range.

The Vitocrossal 200, CI2 boiler control platform is designed for system operation. The control has the ability to operate three circulator zones, up to three mixing valves for a variety of water temperatures, and the ability to integrate into a building management system (BMS).

The onboard control can control up to 16 boilers.

Ⓐ Pre-wired and pre-assembled
Ⓑ High operational reliability and long service life through corrosion-resistant Inox-Crossal heat exchanger surfaces made of high grade stainless steel
Ⓒ Fully modulating Matrix cylinder burner with a long service life
Ⓓ Constantly high efficiency with Lambda PrO_2 control combustion manager
Ⓔ Easy-to-use integrated control unit with 7 inch color touch screen and graphic display
Ⓕ Space-saving and compact, ideal for difficult handling conditions thanks to integrated casters

General Information

Boiler Overview (Continued)

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Boiler Model	CI2	399	500	750	1000	1500	2000
Input	MBH	399	500	750	1000	1500	2000
	kW	117	147	220	293	440	586
Minimum Input NG	MBH	50	50	75	100	50	100
	kW	14.7	14.7	22.0	29.3	14.7	29.3
Minimum Input LPG	MBH	50	50	90	100	50	100
	kW	14.7	14.7	26.2	29.3	14.7	29.3
Output (thermal efficiency)	MBH	391	490	734	977	1460	1940
	kW	114	143	215	286	428	568
Net AHRI Rating	MBH	340	426	638	850	1270	1687
	kW	99	124	187	249	372	494
Combustion Efficiency *1	%	97	97	96.9	96.8	96.6	96.5
Thermal Efficiency *1	%	98	97.9	97.8	97.7	97.3	97.0
NG Supply Pressure	"w.c. (min.)	4	4	4	4	4	4
	"w.c. (max.)	14	14	14	14	14	14
LPG Supply Pressure	"w.c. (min.)	10	10	10	10	10	10
	"w.c. (max.)	14	14	14	14	14	14
Power Supply	Voltage	120	120	120	120	120	120
	Phase	1	1	1	1	1	1
	Hz	60	60	60	60	60	60
	Amp.	20	20	20	20	20	20
Overall Boiler Length (including insulation and jacketing)	in.	39	39	47¼	47¼	56¼	56¼
	mm	992	992	1200	1200	1428	1428
Overall Boiler Width (including insulation and jacketing)	in.	29½	29½	29½	29½	29½	29½
	mm	750	750	750	750	750	750
Overall Boiler Height (including insulation and jacketing)	in.	64½	64½	64½	64½	78¾	78¾
	mm	1640	1640	1640	1640	1998	1998
Concrete Boiler Base							
Length	in.	32	32	41	41	47¼	47¼
	mm	812	812	1040	1040	1200	1200
Width	in.	29½	29½	29½	29½	29½	29½
	mm	750	750	750	750	750	750
Thickness	in.	0	0	0	0	0	0
	mm	0	0	0	0	0	0
Weight							
Complete with the burners, control, thermal insulation and jacketing	lb.	789	789	963	963	1812	1969
	Kg	358	358	437	437	822	893
Boiler Water Content	USG	29	29	50	50	113	99
	L	108	108	189	189	426	376
Heat Exchanger Surface	ft.²	65.2	65.2	129.4	129.4	196.2	258.8
	m2	6.1	6.1	12.0	12.0	18.2	24.0
Maximum Operating Temperature	°F	210	210	210	210	210	210
	°C	99	99	99	99	99	99
Maximum Adjustable High Limit	°F	185	185	185	185	185	185
	°C	85	85	85	85	85	85
Maximum Operating Pressure	psig	80	80	80	80	80	80
	bar	5.5	5.5	5.5	5.5	5.5	5.5
Minimum Pressure	lb/hr	375	463	683	904	1345	1786
Relief Valve Capacity	Kg/hr	170	210	310	410	610	810

*1 Tested to ANSI/AHRI standard 1500 Performance Rating of Commercial Space Heating Boilers / DOE Test Procedure 81 FR 89276 / U.S. Standards ANSI Z21.13/CSA 4.9.

General Information

Boiler Overview (Continued)

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Boiler Model	CI2	399	500	750	1000	1500	2000
Boiler Electric Power Consumption without pumps or accessories (Watts)							
Maximum Input		352	475	492	666	1064	1267
Minimum Input		54	54	74	79	103	134
Standby		17	17	20	20	70	70
Boiler Connections							
Boiler supply and return (BS), (BR) (NPT male thread)	in.	2	2				
	mm	50	50				
Boiler supply and return (BS), (BR) (ANSI flanges)	in.			2½	2½	4	4
	mm			65	65	100	100
Safety supply	in.	1¼	1¼	1¼	1¼	1¼	1¼
Boiler drain	in.	1½	1½	1½	1½	1½	1½
Condensate drain (barbed fitting)	in.	¾	¾	¾	¾	¾	¾
Gas connection	in.	1½	1½	1½	1½	2	2
Boiler Flue Collar							
Internal diameter	in.	4	4	6	6	6	8
	mm	104.2	104.2	155	155	155	205.2
Combustion Air Internal diameter (with combustion air intake kit	in.	4	4	6	6	6	8
	mm	104.2	104.2	155	155	155	205.2
Flue Gas Values							
Temperature (at a return temperature of 86°F (30°C)							
at rated input	°F	97	104	97	100	108	108
	°C	36	40	36	48	42	42
at partial load	°F	88	88	91	93	93	93
	°C	31	31	33	34	34	34
Temperature (at a return temperature of 140°F (60°C)							
at rated input	°F	145	149	145	149	154	154
	°C	63	65	63	65	68	68
Mass flow rate (of flue gas)							
at rated input	lbs/h	359	452	675	899	1351	1799
	kg/h	163	205	306	408	613	816
at partial load	lbs/h	108	136	202	270	405	540
	kg/h	49	62	92	122	184	245
Max. Condensate Flow Rate for NG and LPG	USG/h	4	5	7	10	15	19
	L/h	14.6	18.4	27.5	36.6	55.0	73.3
Pressure at boiler flue outlet (at rated input)	pa (max.)	600	600	600	600	600	600
	"w.c. (max.)	2.4	2.4	2.4	2.4	2.4	2.4
Standby Loss							
At boiler water temperature 122°F (50°C) [room temperature 68°F (20°C)]	BTU/h	2870	2870	2930	2930	4590	4590
	W	841	841	858	858	1345	1345
	%	0.8	0.7	0.4	0.3	0.3	0.3
NOx @3% O_2 (NG) *2		< 20 ppm					

*2 The Vitocrossal 200 CI2 boilers are certified to the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1146.2, Bay Area Air Quality Management District (BAAQMD) Regulation 9 Rule 6.

Boiler Dimensions – Models CI2 399, 500, 750, 1000

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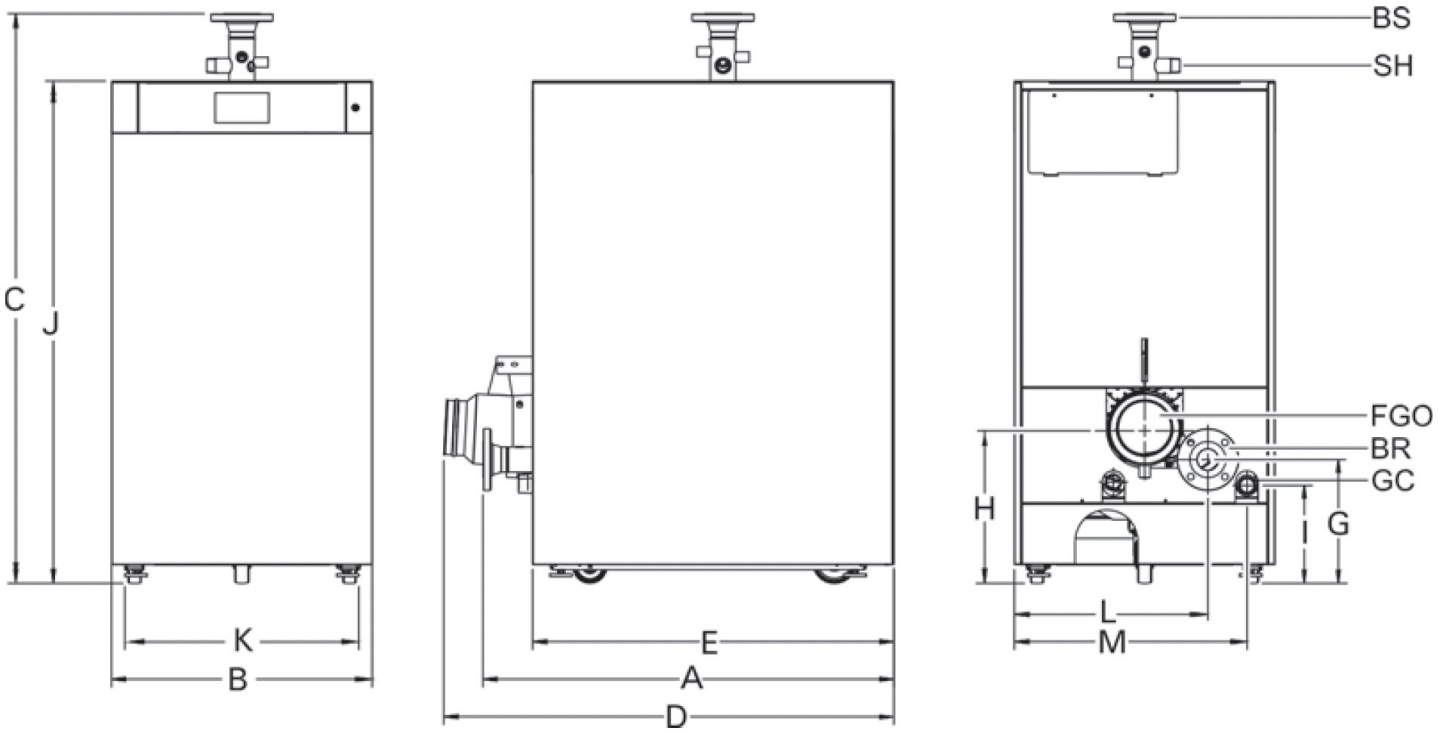

Note: dimensional tolerance of ± ¼ in. (± 5mm)

Legend

SH Safety Header
BS Boiler Supply
GC Gas Connection
BR Boiler Return
FGO Flue Gas Outlet (vent pipe connection)

* Height to the bottom of the casters.

Dimensions

Boiler Model		399/500	750/1000
A	in. (mm)	35¾ (909)	46½ (1183)
B	in. (mm)	29½ (750)	29½ (750)
C*	in. (mm)	64½ (1640)	64½ (1640)
D	in. (mm)	39 (992)	47½ (1200)
E	in. (mm)	32 (812)	41 (1040)
F	in. (mm)	--	--
G	in. (mm)	14½ (366)	14 (358)
H	in. (mm)	18 (457)	17¼ (444)
I	in. (mm)	11 (283)	11 (283)
J	in. (mm)	57 (1452)	57 (1452)
K	in. (mm)	26½ (674)	26½ (674)
L	in. (mm)	22 (557)	22 (557)
M	in. (mm)	26½ (670)	26½ (670)

Boiler Dimensions – Models CI2 1500, 2000

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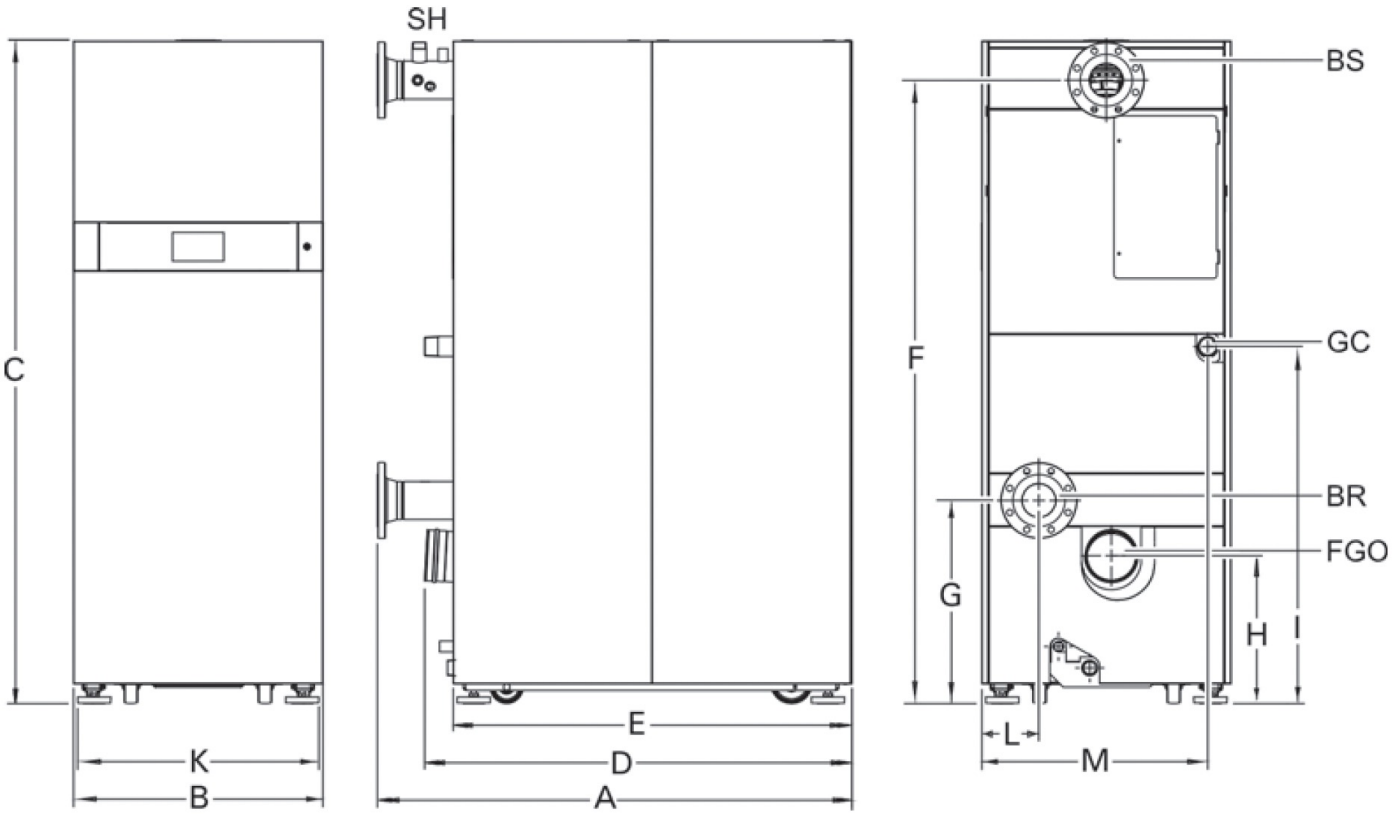

Note: dimensional tolerance of ± ¼ in. (± 5mm)

Legend

SH Safety Header
BS Boiler Supply
GC Gas Connection
BR Boiler Return
FGO Flue Gas Outlet (vent pipe connection)

* Height to the bottom of the casters.

Dimensions

Boiler Model		1500/2000
A	in. (mm)	56¼ (1428)
B	in. (mm)	29½ (750)
C*	in. (mm)	78¾ (1998)
D	in. (mm)	51 (1297) 1500 51 (1295) 2000
E	in. (mm)	47¼ (1200)
F	in. (mm)	74 (1875)
G	in. (mm)	24 (612)
H	in. (mm)	15 ¾ (398) 1500 15 (383) 2000
I	in. (mm)	42¼ (1073)
J	in. (mm)	--
K	in. (mm)	28½ (726)
L	in. (mm)	6¾ (172)
M	in. (mm)	26¾ (680)

Boiler Minimum Clearances

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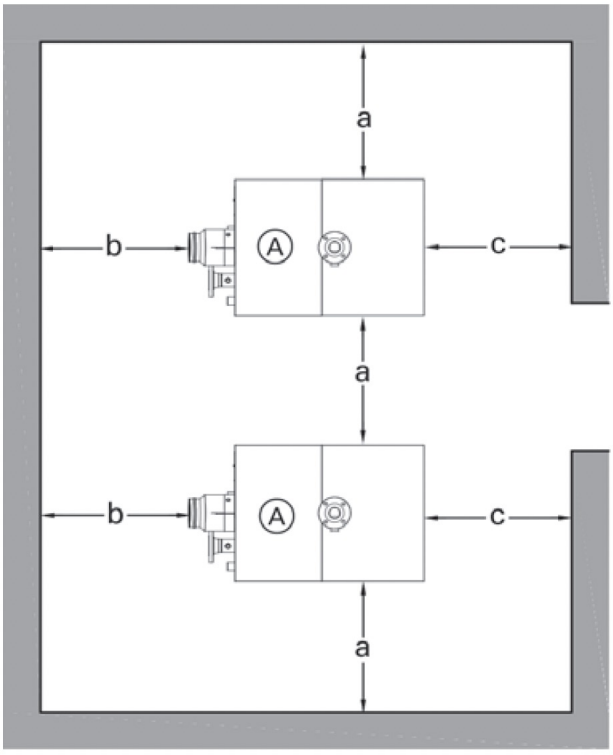
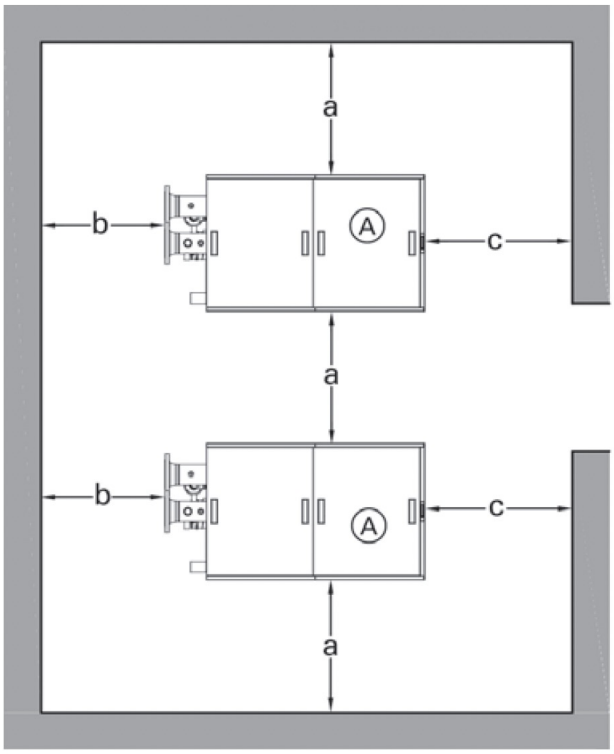
CI2 399, 500, 750 and 1000



CI2 1500 and 2000



Legend

Ⓐ Boiler

To enable convenient installation and maintenance, observe the stated clearance dimensions. Maintain minimum clearances where space is tight.

CI2 Model		All Models
a*2	in. mm	27½ 700
b*1	in. mm	31½ 800
c	in. mm	39½ 1000
Top clearance	in. mm	20 510

*1 Clearance for pipe vent installation

***2 Clearance between boilers can be reduced to 0 in. (0 mm) in multi-boiler installation.**

Mechanical room

- Avoid air contamination by halogenated hydrocarbons (e.g. as in sprays, paints, solvents and cleaning agents).
- Avoid very dusty conditions.
- Avoid high levels of humidity.
- Protect against frost and ensure good ventilation, otherwise the system may suffer faults and damage. In rooms where air contamination from halogenated hydrocarbons is to be expected, operate the boiler using only direct vent (sealed combustion) operation only.

Minimum clearances to combustibles

CI2 Model	All Models
Top	0
Sides	0
Flue	per vent manufacturer's specifications
Front	0
Floor	combustible

Vitocrossal 200, CI2 Application 1

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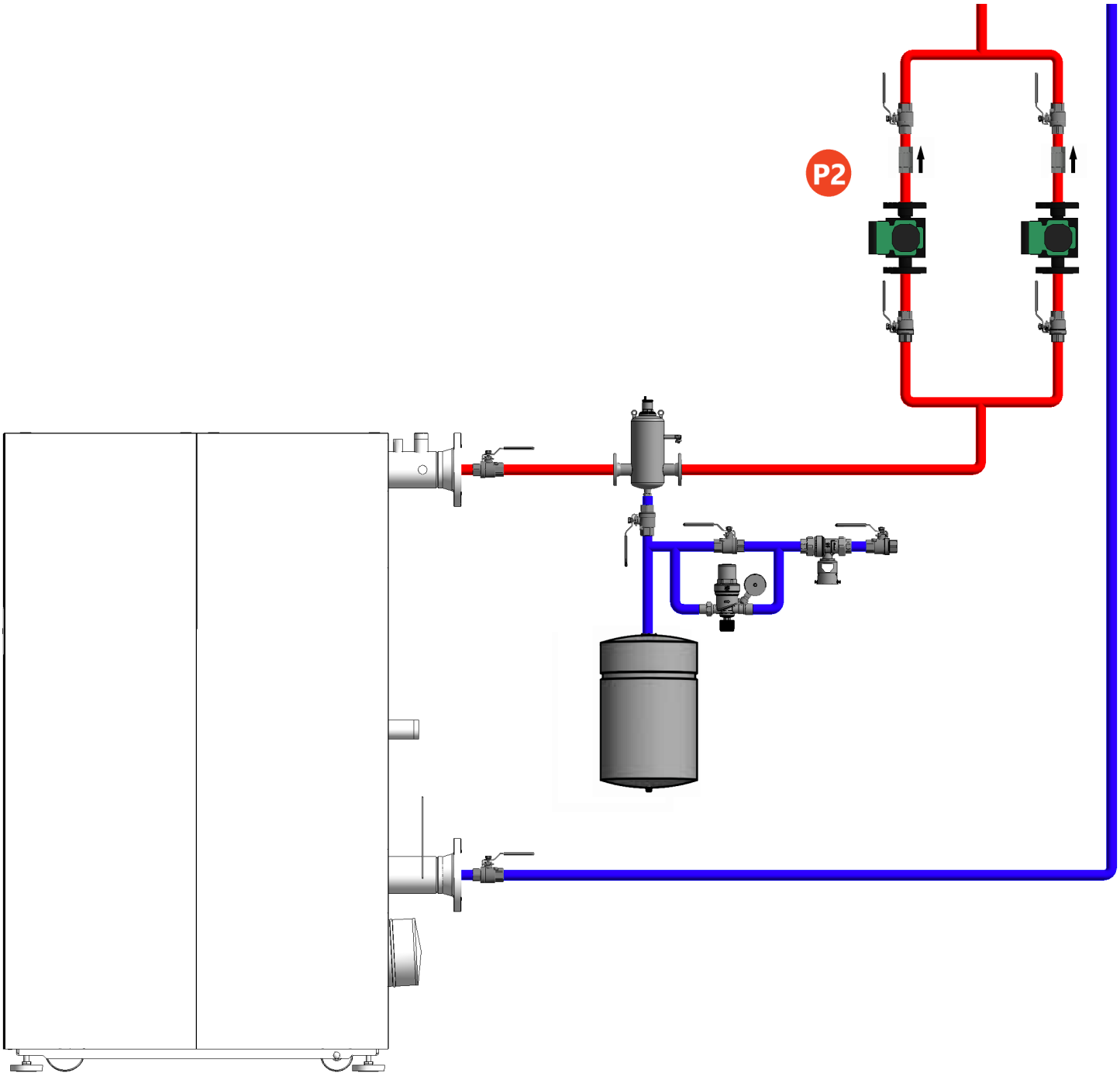
Variable primary
One Boiler, Single Temperature without Mixing Valve



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

Vitocrossal 200, CI2 Application 1

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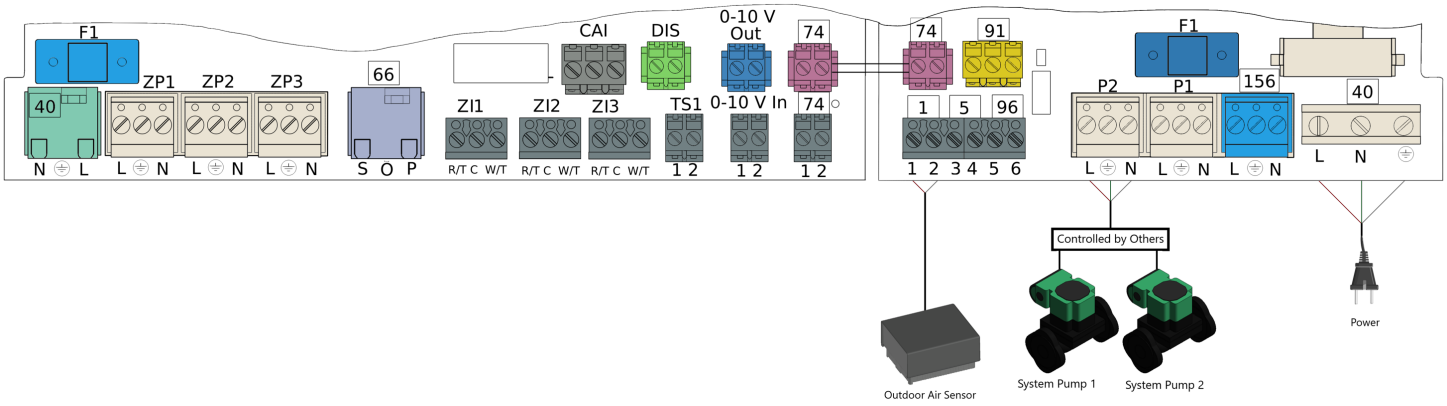
Variable Primary

One Boiler, Single Temperature without Mixing Valve



Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Vitocrossal 200, CI2 Application 2

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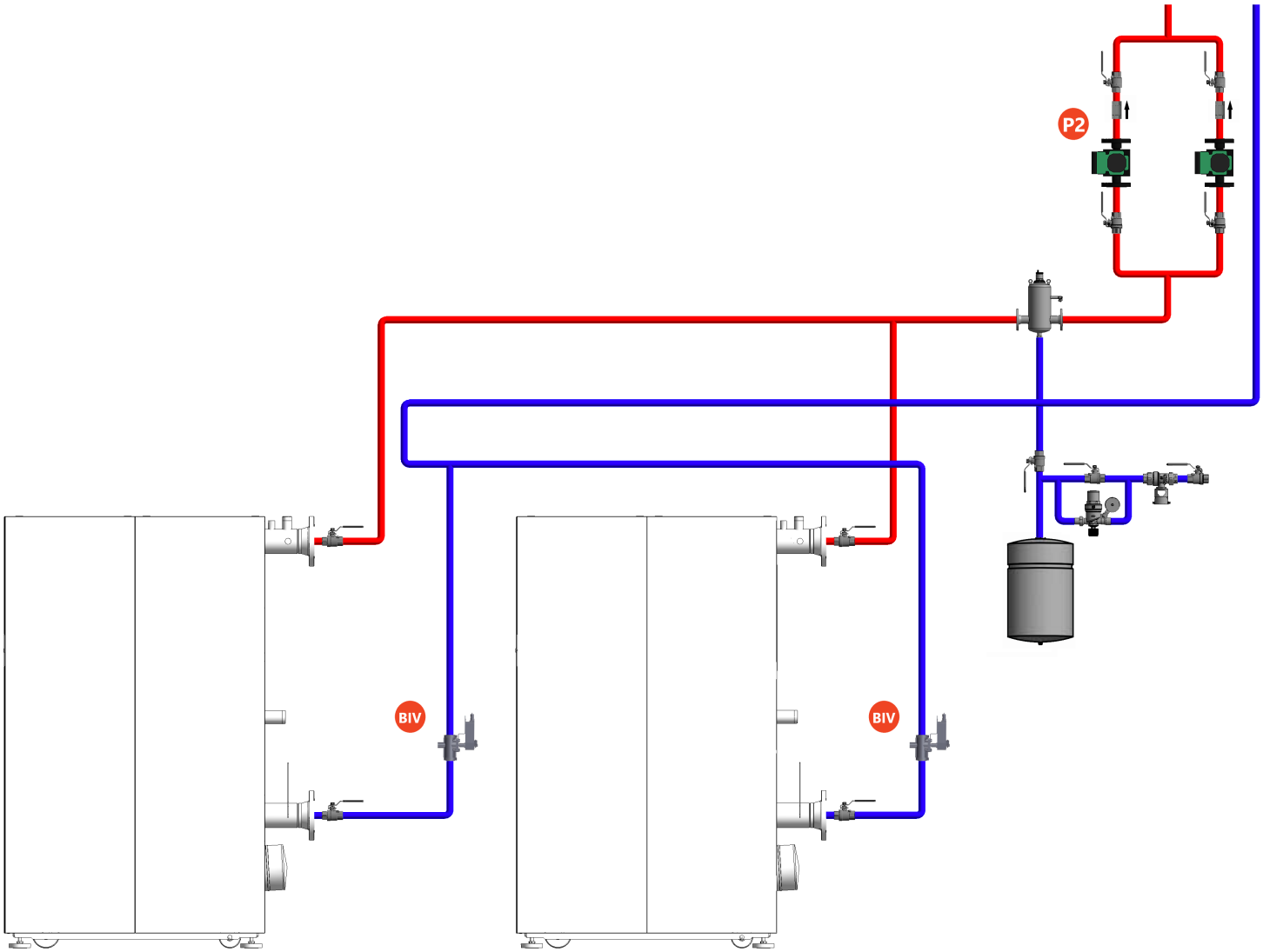
Variable Primary

Two Boilers, Single Temperature without Mixing Valve



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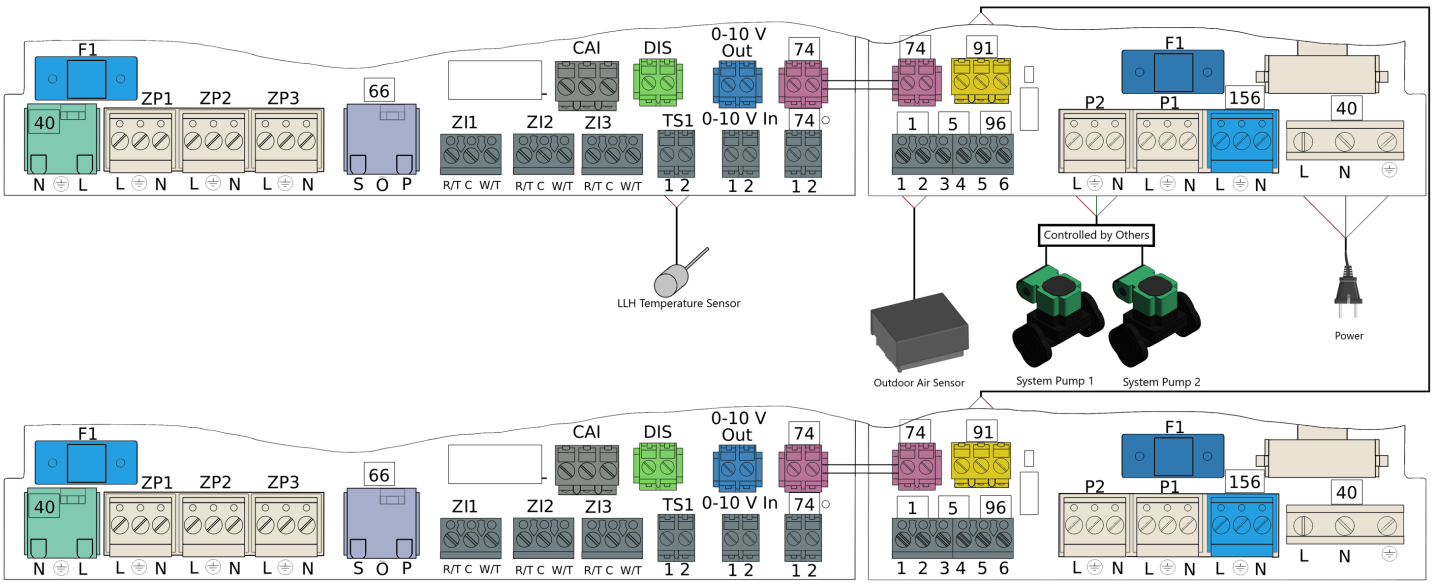
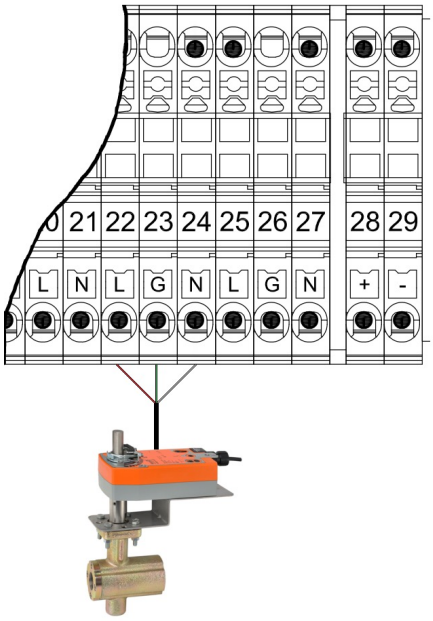
Variable Primary

Two Boilers, Single Temperature without Mixing Valve



Boiler Isolation Valve Connections on DIN Rail for each Boiler, 2 amps max



Boiler Isolation Valve

Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Vitocrossal 200, CI2 Application 3

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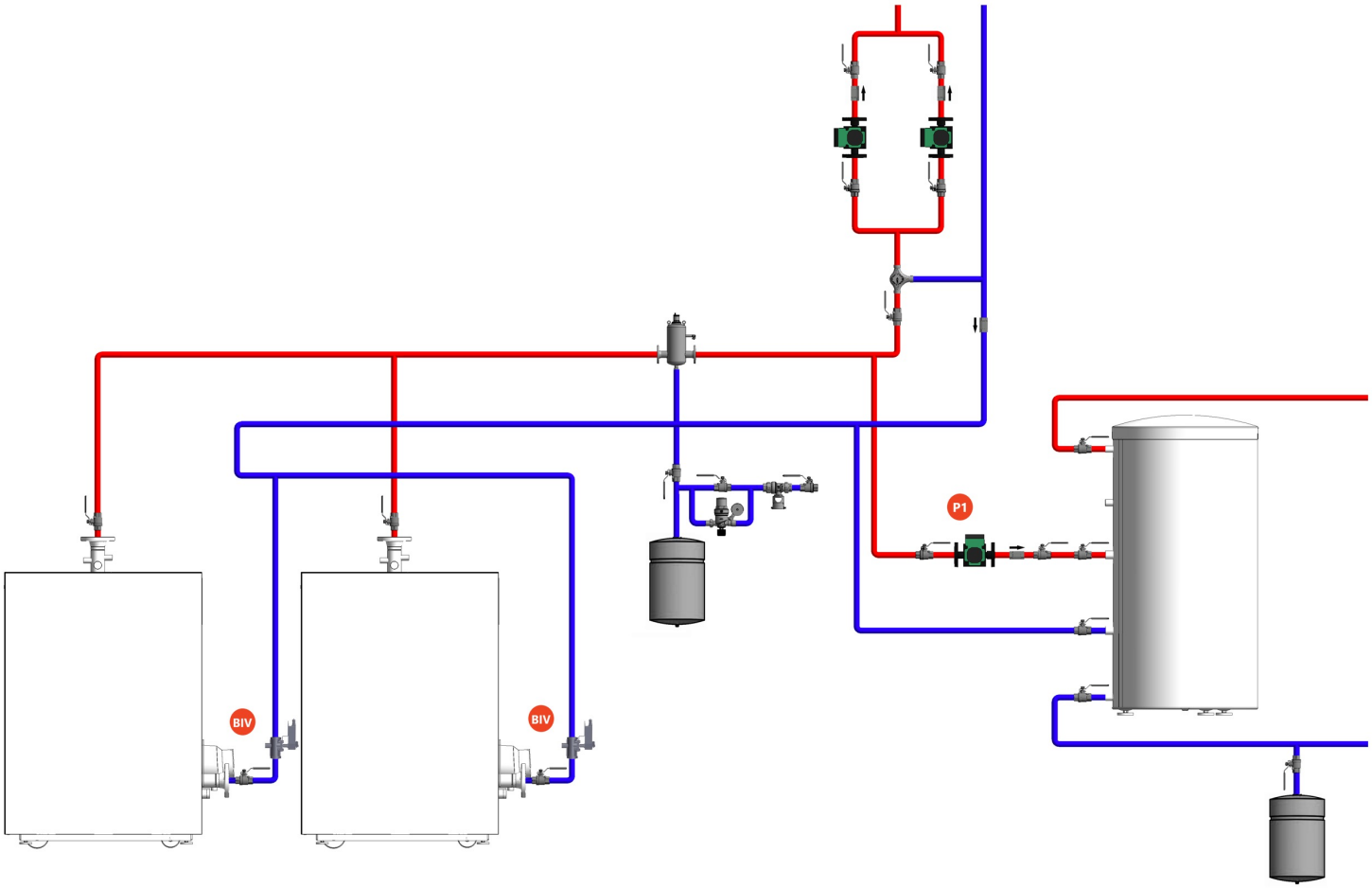
Variable Primary

Two Boilers, Single Temperature with Mixing Valve and DHW



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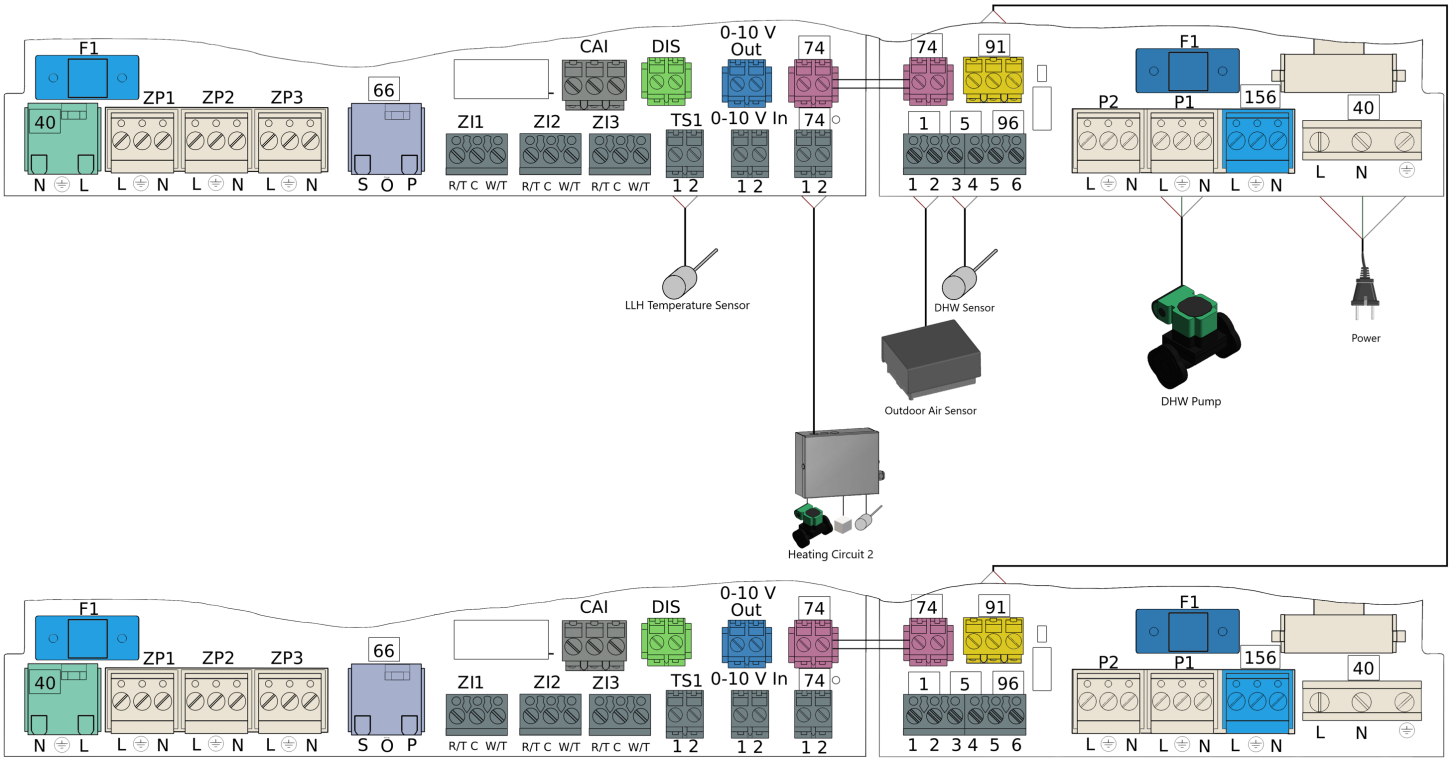
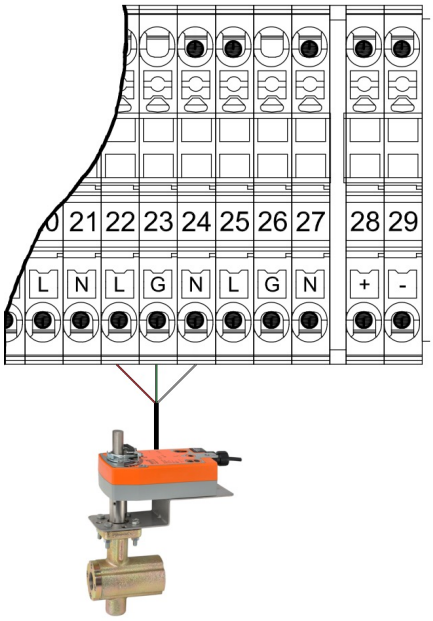
Variable Primary

Two Boilers, Single Temperature with Mixing Valve and DHW



Boiler Isolation Valve Connections on DIN Rail for each Boiler, 2 amps max



Boiler Isolation Valve

Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Vitocrossal 200, CI2 Application 4

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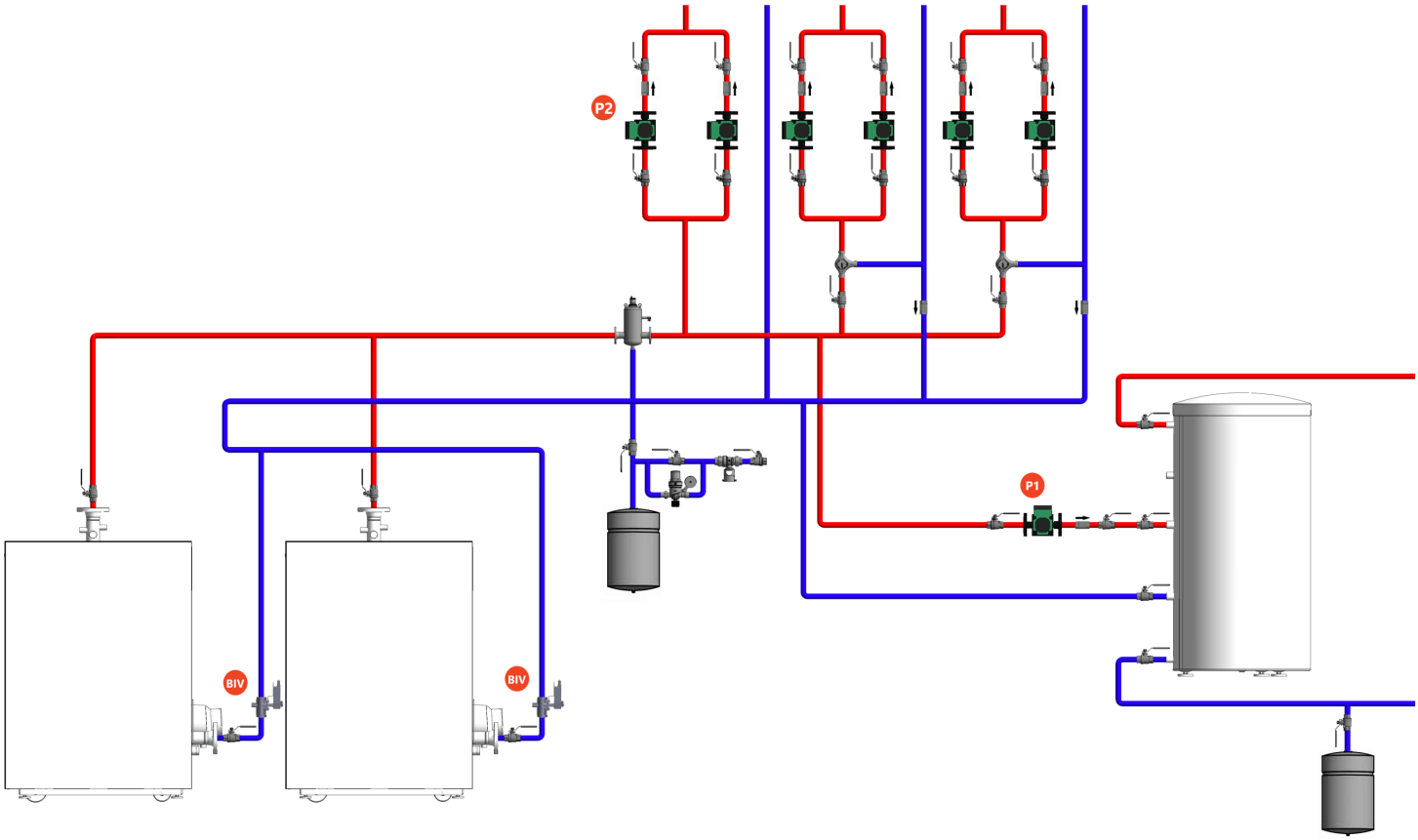
Variable Primary

Two Boilers, Multiple Temperatures with Mixing Valves and DHW



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

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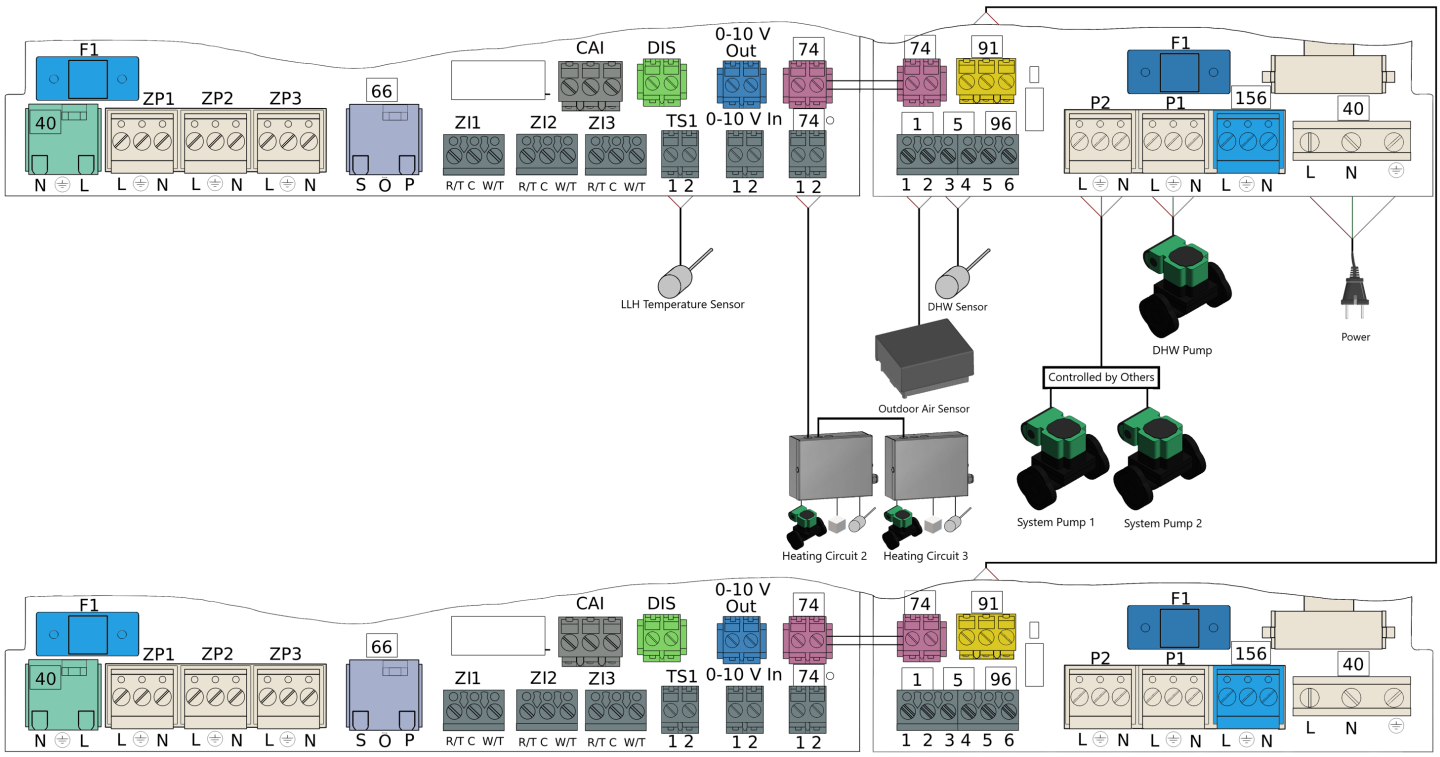
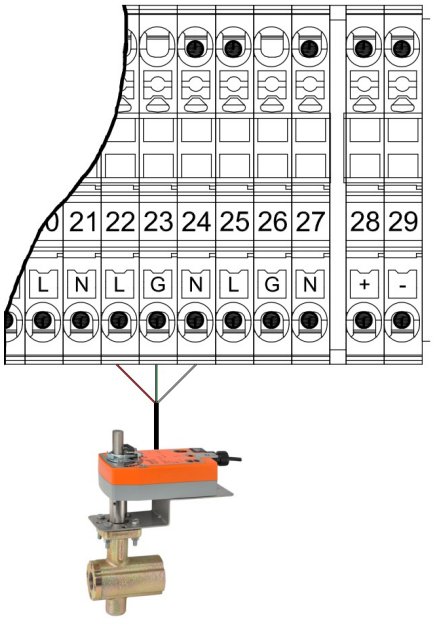
Variable Primary

Two Boilers, Multiple Temperatures with Mixing Valves and DHW



Boiler Isolation Valve Connections on DIN Rail for each Boiler, 2 amps max



Boiler Isolation Valve

Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Vitocrossal 200, CI2 Application 5

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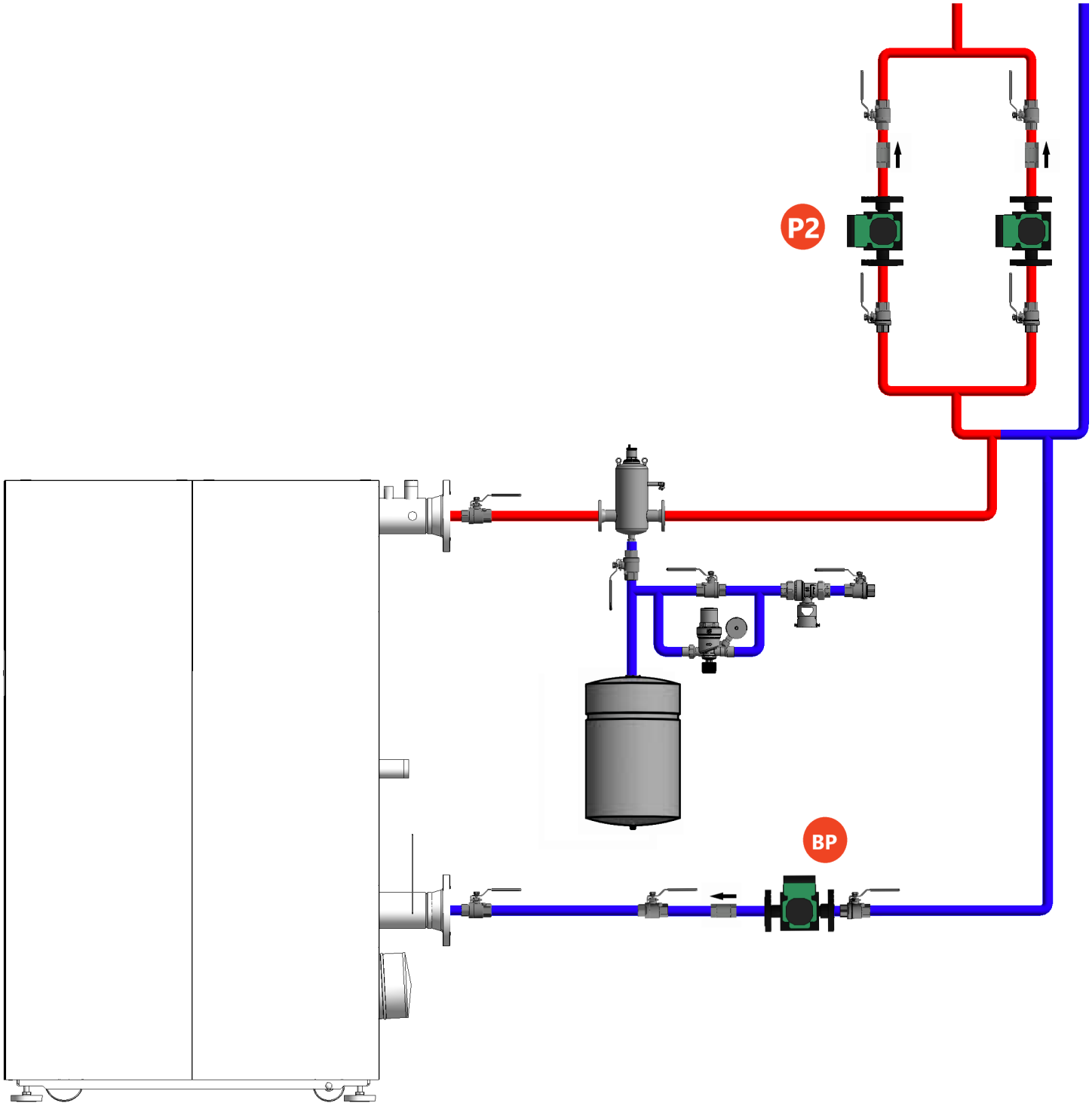
Primary/ Secondary

One Boiler, Single Temperature without Mixing Valve



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

Vitocrossal 200, CI2 Application 5

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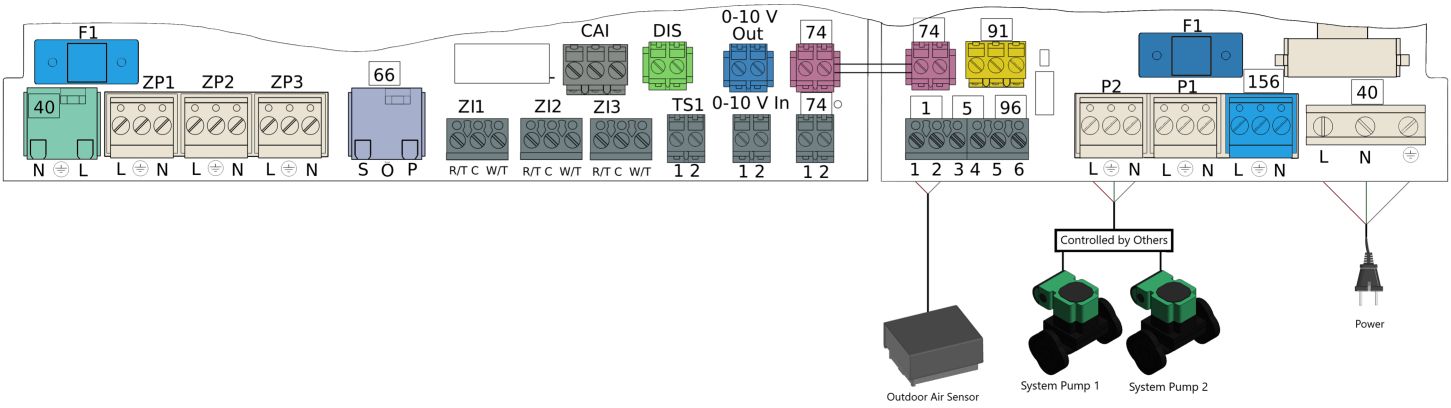
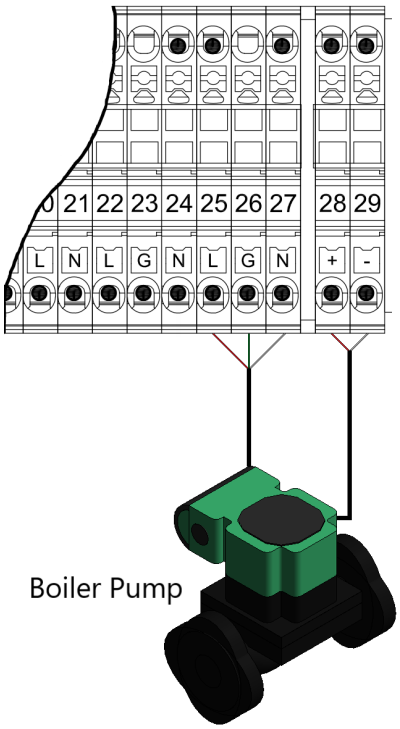
Primary/ Secondary

One Boiler, Single Temperature without Mixing Valve



Boiler Pipe Connections on DIN Rail, 2 amps max



Disclaimer: All 120V Outputs have a 2 amp draw maximum.

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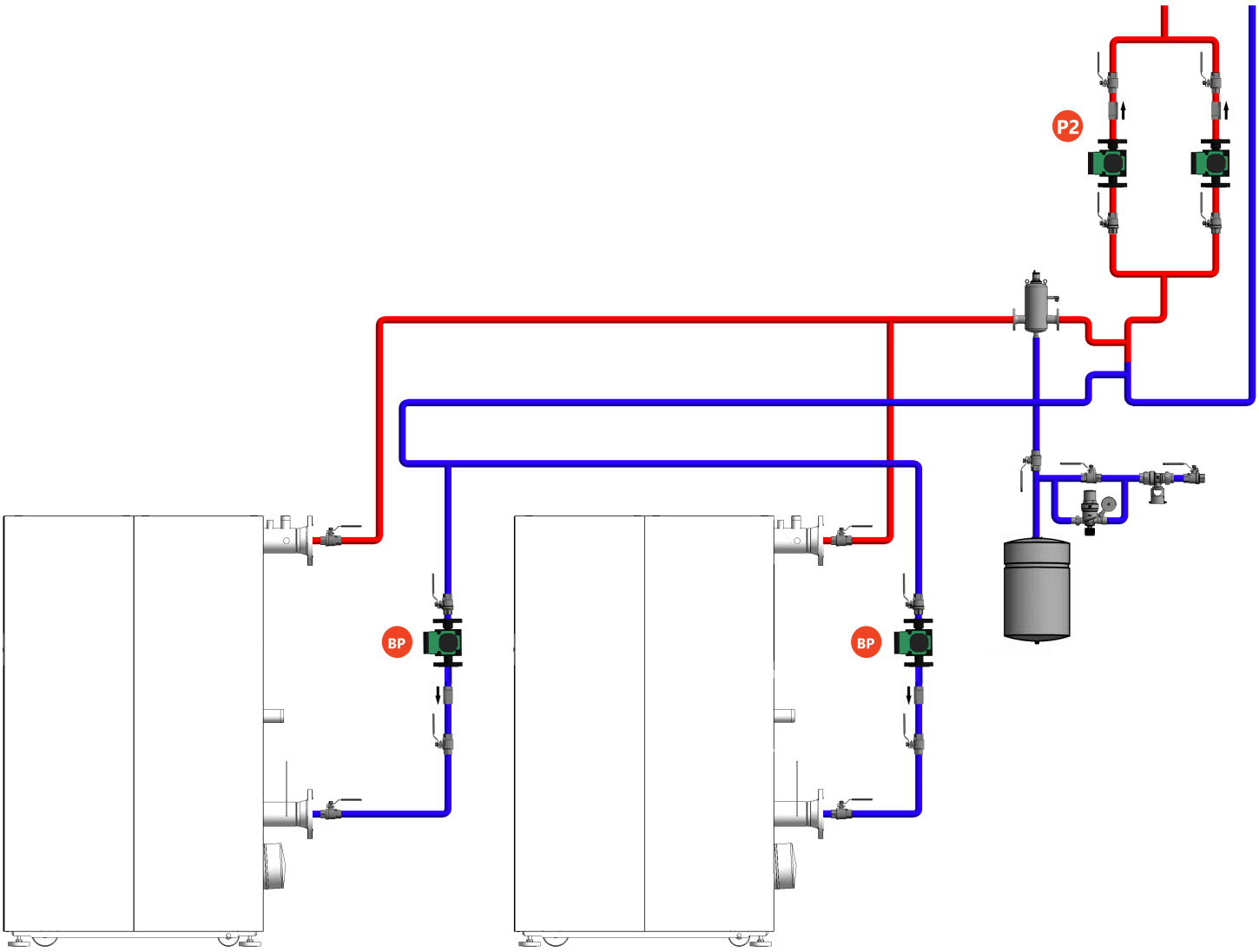
Primary / Secondary
Two Boilers, Single Temperature without Mixing Valve



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

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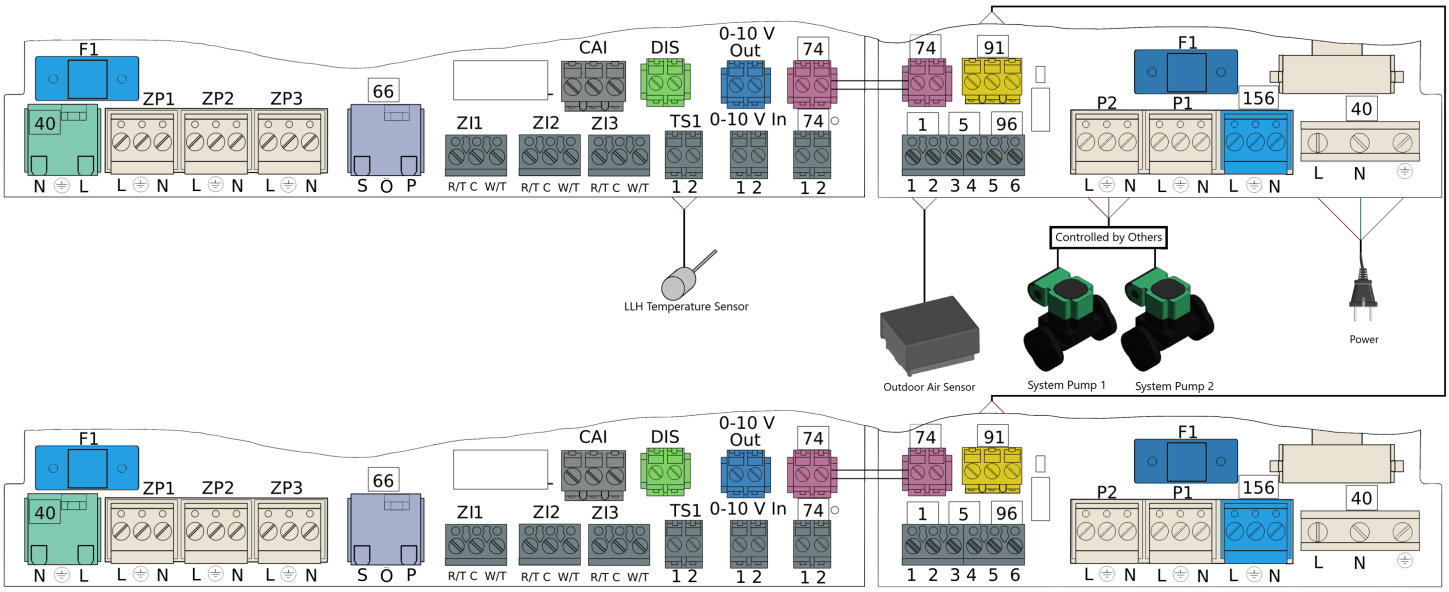
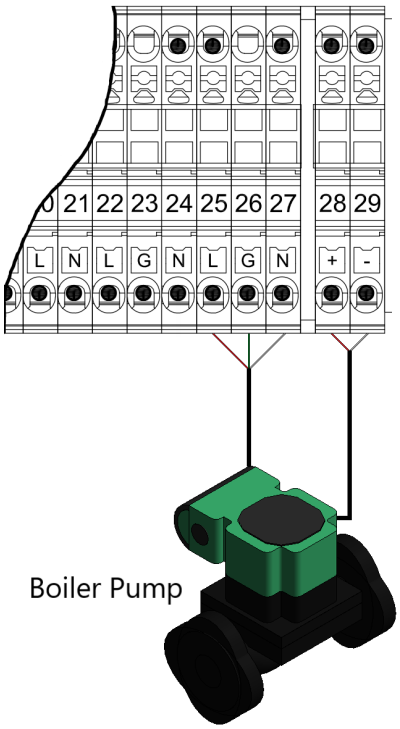
Primary / Secondary

Two Boilers, Single Temperature without Mixing Valve



Boiler Pump Connections on DIN Rail for each Boiler, 2 amps max



Disclaimer: All 120V Outputs have a 2 amp draw maximum.

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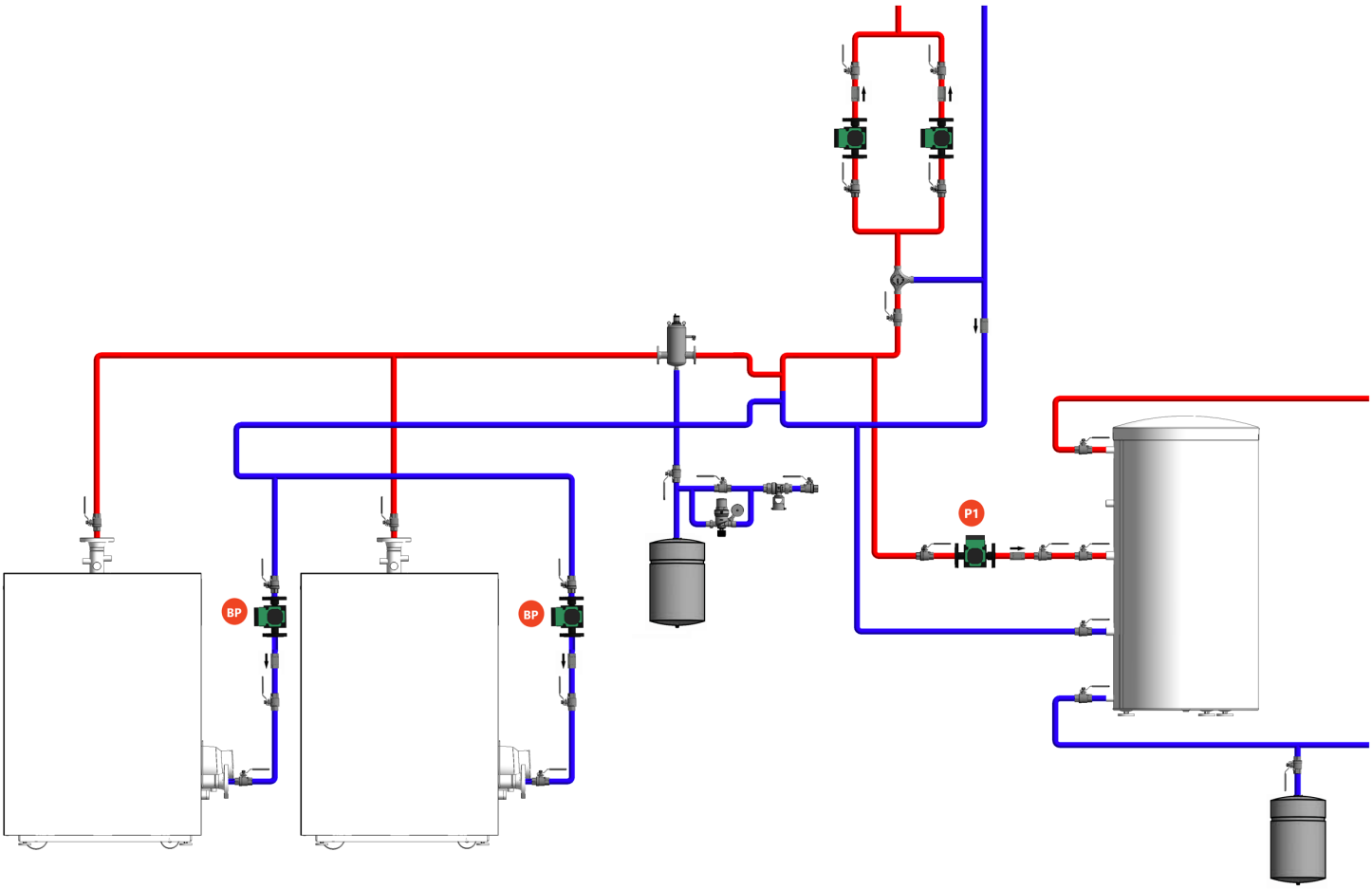
Primary / Secondary

Two Boilers, Single Temperature with Mixing Valve and DHW



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

Vitocrossal 200, CI2 Application 7

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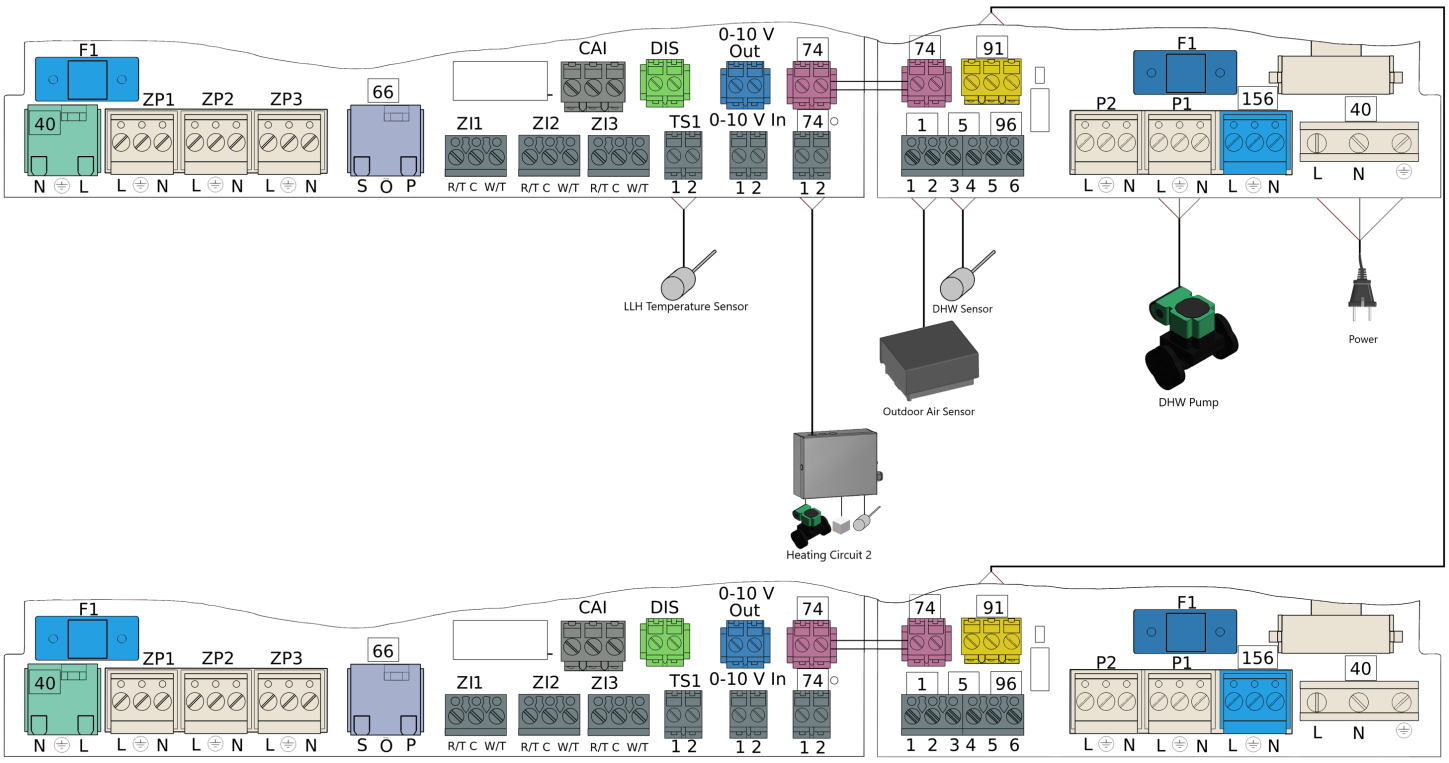
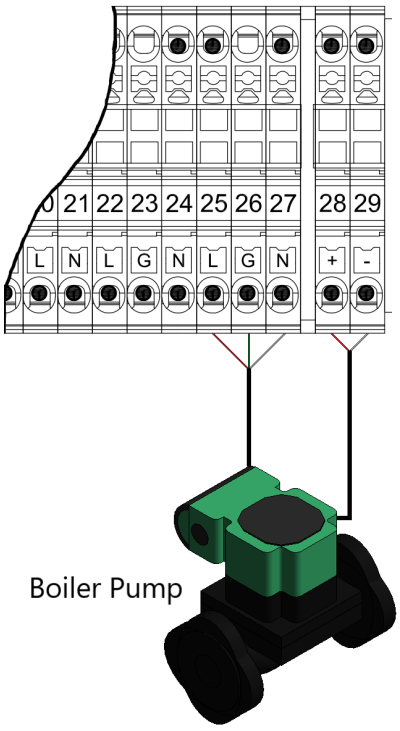
Primary / Secondary

Two Boilers, Single Temperature with Mixing Valve and DHW



Boiler Pump Connections on DIN Rail for each Boiler, 2 amps max



Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Vitocrossal 200, CI2 Application 8

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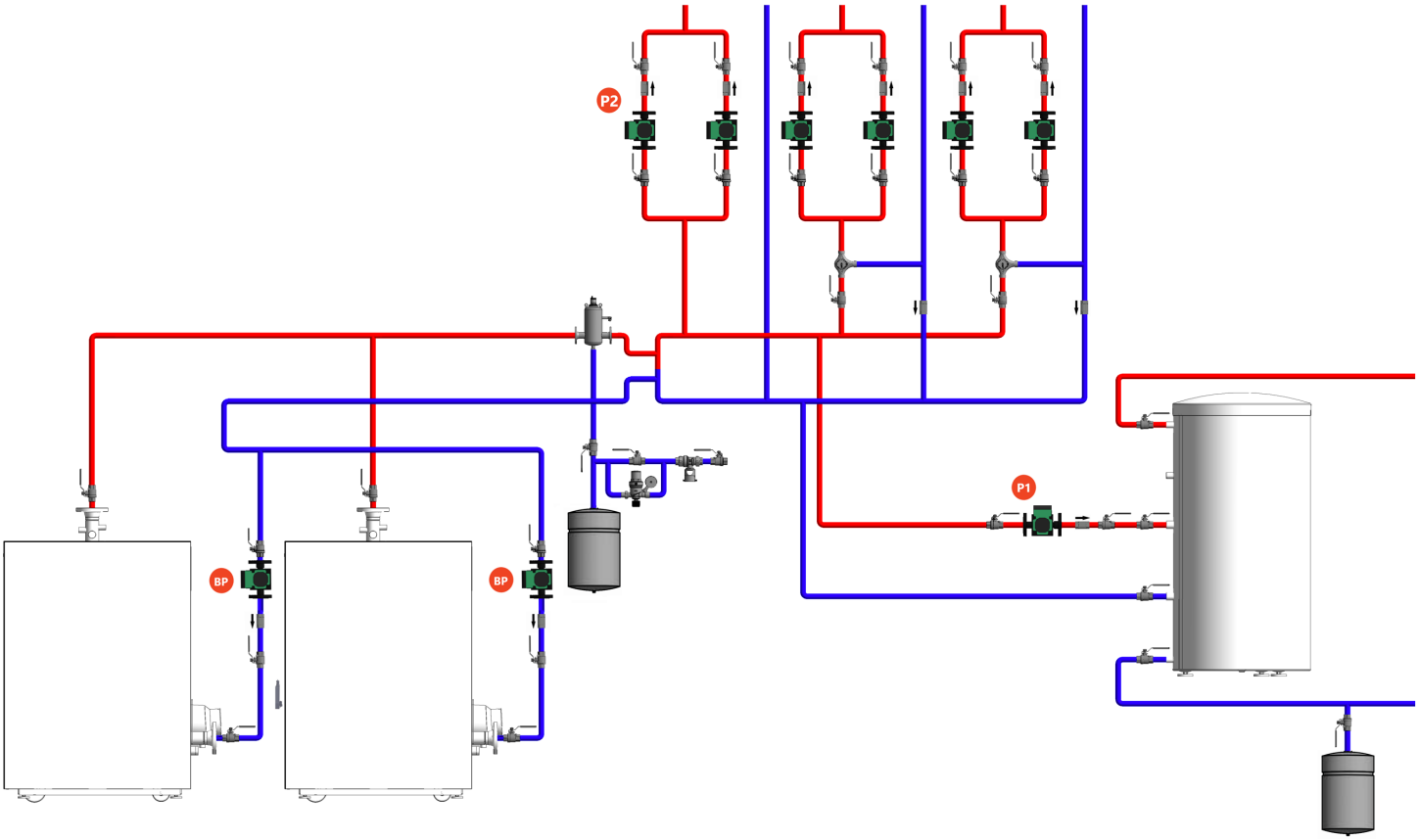
Primary / Secondary

Two Boilers, Multiple Temperatures with Mixing Valves and DHW



Disclaimer: Tempering Valves are field supplied where required by local jurisdiction.

Vitocrossal 200, CI2 Application 8

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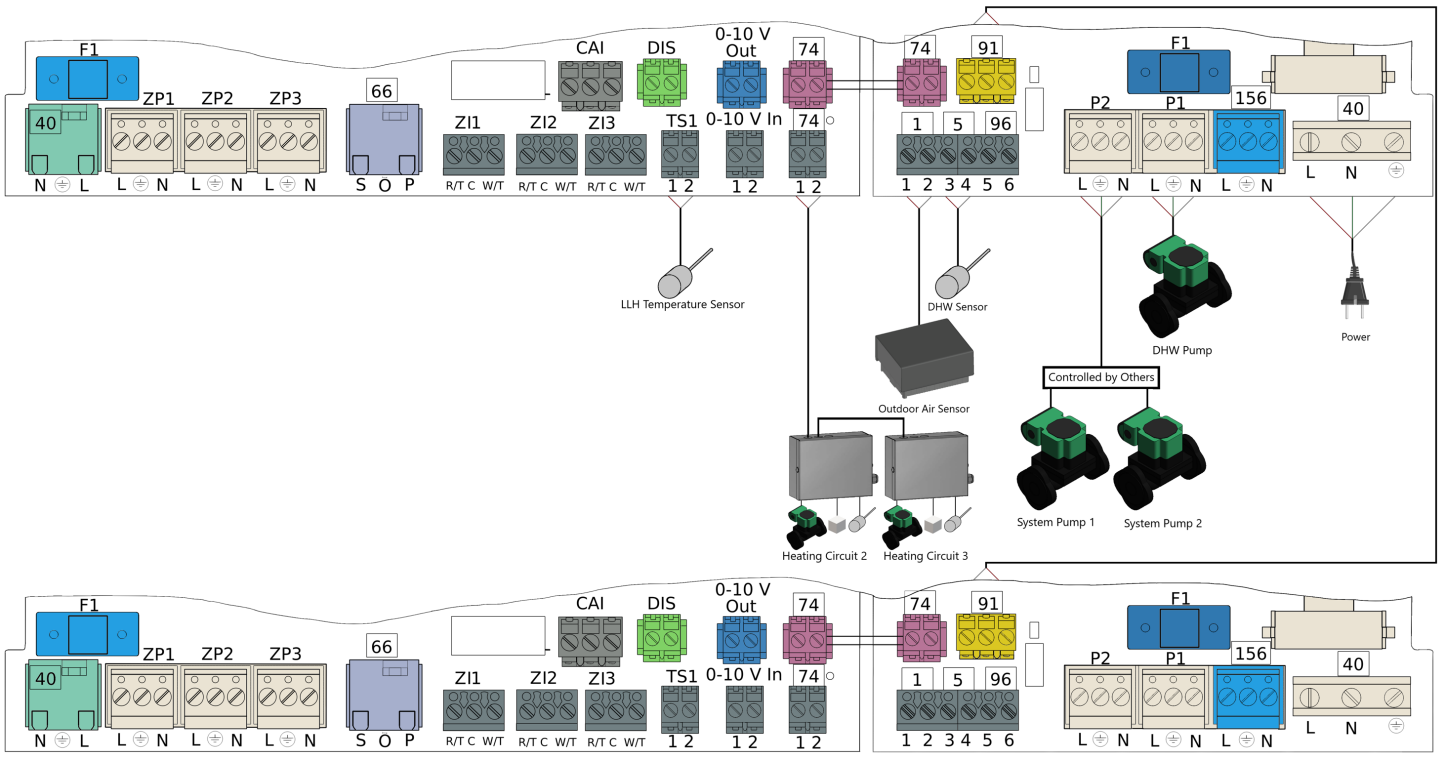
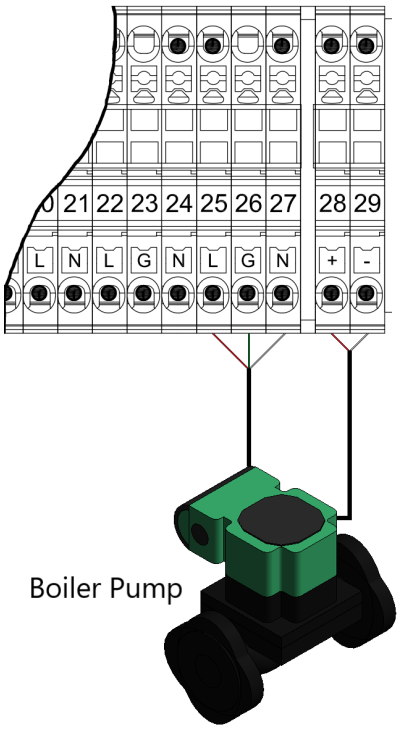
Primary / Secondary

Two Boilers, Multiple Temperatures with Mixing Valves and DHW



Boiler Pump Connections on DIN Rail for each Boiler, 2 amps max



Disclaimer: All 120V Outputs have a 2 amp draw maximum.

Low Loss Header Sizing

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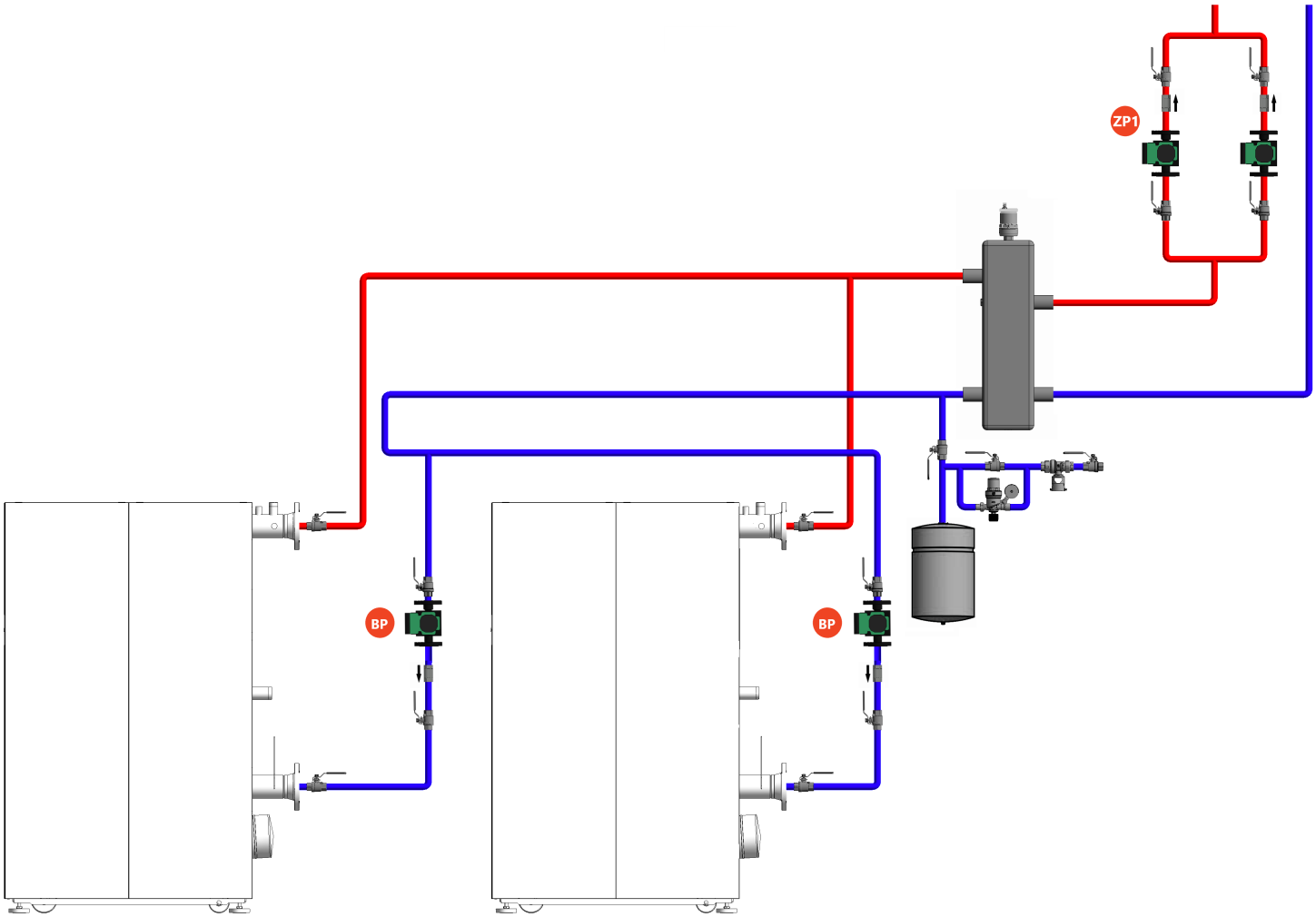
Note: A Low Loss Header can be used instead of closely spaced tees and an air separator, as shown in the drawing below.



LLH Model No.	Maximum system flow rate GPM (L/min)
160/80	44 (167)
200/120	80 (303)
250/150	119 (450)
300/200	189 (715)
400/200	251 (950)
450/250	374 (1416)
500/300	484 (1832)
600/400	748 (2831)
650/450	1034 (3914)
700/500	1320 (4997)

Primary/Secondary Pump Sizing Recommendation

CI2 Pump Selection- Boiler Pumps for Primary / Secondary only

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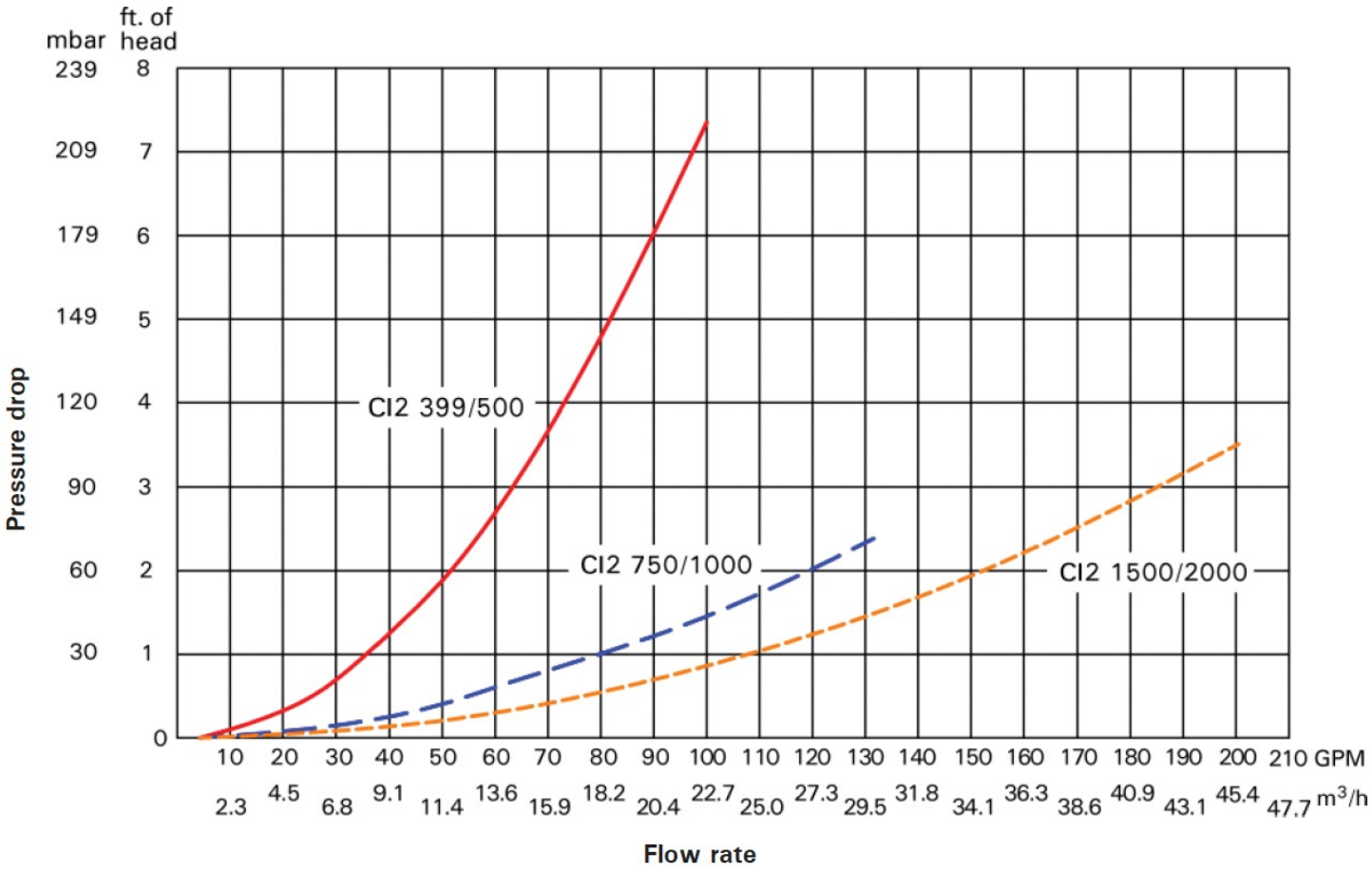

Boiler Model	Conditions	Taco Pump	Grundfos Pump (Magna 3)
CI2-399	39 gpm @ 12 ft	VR 15 L or 0034e*	Magna3 32-100 F
CI2-500	48 gpm @ 13 ft	VR15L	Magna3 40-80F
CI2 750	73 GPM @ 13.5 ft	VR20 M	Magna3 40-120
CI2-1000	97 GPM @ 11 ft	VR25L	Magna3 50-120
CI2 1500	146 GPM @ 10 ft	VR25H	Magna3 65-120
CI2-2000	194 GPM @ 13 ft	VR25H	Magna3 65-150

***Note:** 33 gpm @12 ft for a 0034e Taco Pump

Pump Selection Criteria

- ECM pumps are listed due to the ability to accept a 0-10 Vdc signal
- Flow rate based on a 20 °F ΔT
- Selection based on Steel Pipe
  - 70 linear ft.
  - Max Velocity of 8 ft/s
  - Max Head loss of 4 ft/ 100ft
- Pipe fitting factor of 1.5
- Pipe size auto selected

Gas Regulator Recommendation

Pieto Fiorentini Regulators

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Vent Limited Regulators:

Boiler Model	Gas Pressure	Model	Outlet	Description
CI2-399	2 psig	31154-B-EVL	1 ½"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
	10 psig	31154-OPD-BY-EVL	1 ½"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG
CI2-500	2 psig	31154-B-EVL	1 ½"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
	10 psig	31154-OPD-BY-EVL	1 ½"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG
CI2 750	2 psig	31154-B-EVL	1 ½"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
	10 psig	31154-OPD-BY-EVL	1 ½"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG
CI2-1000	2 psig	31154-B-EVL	1 ½"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
	10 psig	31154-OPD-BY-EVL	1 ½"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG
CI2- 1500	2 psig	31155-B-EVL	2"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
	10 psig	31155-OPD-BY-EVL	2"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG
CI2-2000	2 psig	31155-B-EVL	2"	1/2" Vent, Black Spring (6-14"w.c), w/ Filter CSA Z21.80 Vent limited Cert. To 2 PSIG
		31155-OPD-BY-EVL	2"	OPD Version - Op/Monitor, w/Filter, Full lock-up, 1/2" Vent, Black Spring (6-14"w.c) / Yellow Spring (10-27" w.c.), Z21.80 Vent limited Cert. To 10 PSIG

Note: Regulators are to be installed with 10 linear ft of gas piping between the regulator and boiler. Additionally, the gas pipe size between the regulator and the boiler is to be the size of the boiler gas connection.

Gas Regulator Recommendation

Pieto Fiorentini Regulators

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Vented Regulators:

Boiler Model	Gas Pressure	Model	Outlet	Orifice	Spring
CI2-399	2 psig	B42R	1-1/4	1/2x9/16"	Dk Gr (31)
	5 psig	B42R	1-1/4	1/2x9/16"	Dk Gr (31)
CI2-500	2 psig	B31R	1-1/4	1/2"	Lt Grn
	5 psig	B42R	1-1/4	1/2x9/16"	Dk Gr (31)
CI2 750	2 psig	B34SR	1-1/2	7/8" x 1"	Blk
	5 psig	B31R	1-1/4	1/2"	Lt Grn
CI2-1000	2 psig	B34SR	1-1/2	7/8" x 1"	Blk
	5 psig	B31R	1-1/4	1/2"	Lt Grn
CI2- 1500	2 psig	B34SR	2	7/8" x 1"	Blk
	5 psig	B34SR	2	7/8" x 1"	Blk
CI2-2000	2 psig	B34R	2	7/8" x 1"	Blk
	5 psig	B34SR	2	7/8" x 1"	Blk

Note: Regulators are to be installed with 10 linear ft of gas piping between the regulator and boiler. Additionally, the gas pipe size between the regulator and the boiler is to be the size of the boiler gas connection.

Building Management Systems Hard Wiring

Cascade Boiler connection to a Building Management System

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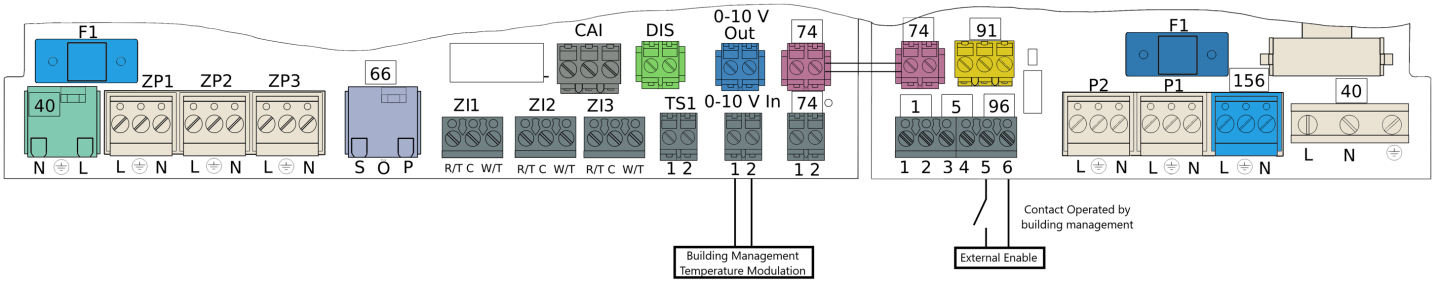

Non-BMS Boiler Enable with EM-EA1 Module

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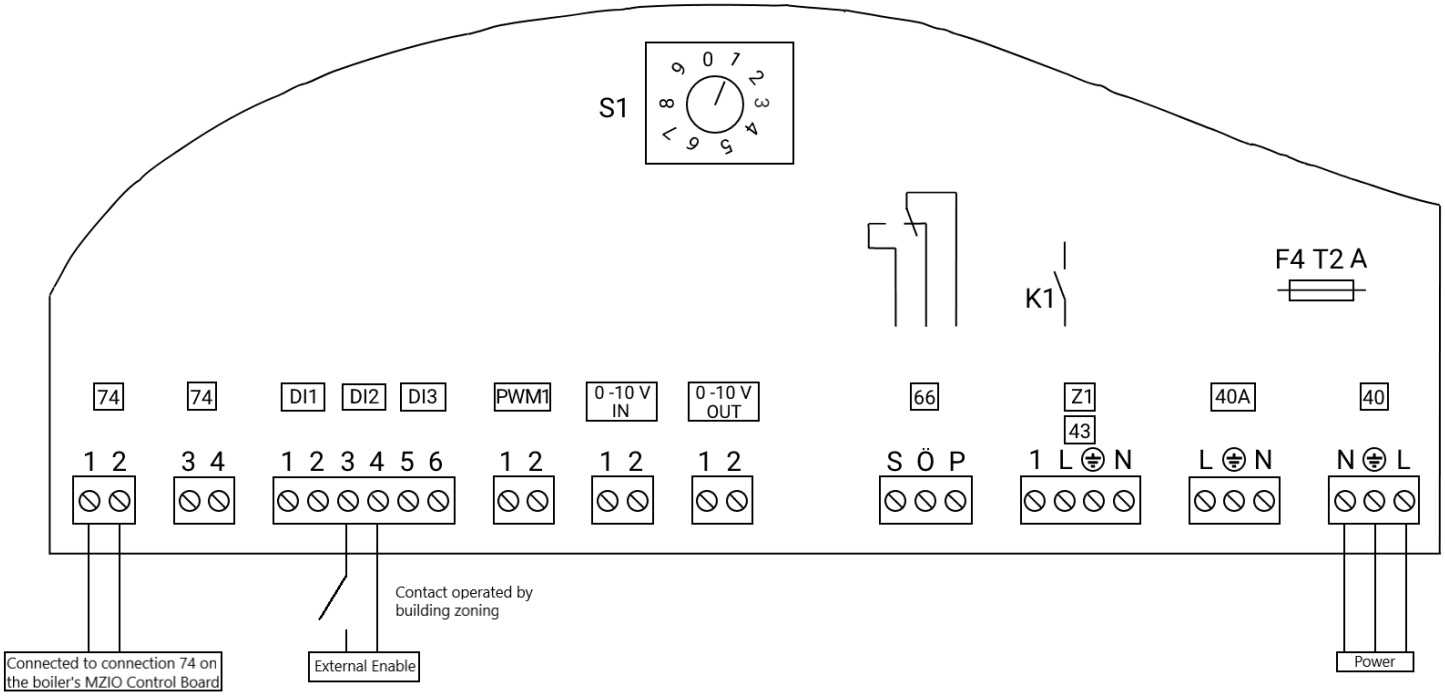
Boiler Enable by Zoning
Temperature controlled through Heating Circuit 1 (HC1)



Venting Lengths

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Individual Boiler Venting

Boiler Model		399	500	750	1000	1500	2000
Boiler flue collar (internal diameter)	in. (mm)	4 (104.2)	4 (104.2)	6 (155)	6 (155)	6 (155)	8 (205.2)
Combustion air intake diameter	in. (mm)	4 (104.2)	4 (104.2)	6 (155)	6 (155)	6 (155)	8 (205.2)
Max. total equivalent length (a+b)	in. (mm)	198 (60)	198 (60)	198 (60)	198 (60)	198 (60)	198 (60)

Common Boiler Venting

Common Header and Chimney Diameters

# of similar boilers	CI2 – 399 in. (mm)	CI2 – 500 in. (mm)	CI2 – 750 in. (mm)	CI2 – 1000 in. (mm)	CI2 – 1500 in. (mm)	CI2 – 2000 in. (mm)
2	8 (200)	8 (200)	10 (250)	10 (250)	12 (300)	14 (350)
3	10 (250)	10 (250)	12 (300)	12 (300)	16 (400)	16 (400)
4	10 (250)	12 (300)	14 (350)	14 (350)	18 (450)	18 (450)

Common Combustion Air Intake Header Diameters

# of similar boilers	CI2 – 399 in. (mm)	CI2 – 500 in. (mm)	CI2 – 750 in. (mm)	CI2 – 1000 in. (mm)	CI2 – 1500 in. (mm)	CI2 – 2000 in. (mm)
2	10 (250)	10 (250)	10 (250)	10 (250)	10 (250)	12 (300)
3	12 (300)	12 (300)	12 (300)	12 (300)	12 (300)	14 (350)
4	12 (300)	12 (300)	12 (300)	12 (300)	12 (300)	18 (450)

General

- The common vent (header) diameter and the chimney diameter must be same size.
- The maximum equivalent length of the venting system must not exceed:
  for CI2 399 to 1000 198ft (60m)
  for CI2 1500 131ft (40m)
  for CI2 2000 164ft (50m)
- Operation of the Vitocrossal 200 CI2 common vent system is dependent on the proper installation and operation of the flue vent damper.
- Available pressure at the flue outlet is 600 pa. (2.4 “w.c.). Pressure available at the outlet of the boiler flue collar can be used to calculate a revised vent system by the vent manufacturer (if needed).
- Only a maximum of 4 boilers can be connected to a common vent system.
- Only a maximum of 4 boilers can be connected to a common combustion air intake header.
- Sidewall venting is NOT allowed, only vertical vent (room air dependent or independent), positive pressure cat. IV or vertical/chimney can be used when common venting.

Miscellaneous Links

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- Quick Start Guide
- Technical Data Manual
- Installation Manual
- Common Venting with Flue Vent Damper
- Service Instructions
- Vitospec

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viessmann-us.com