### **AQ2000 Series - Hydronic Controls Product Selector**

#### Selection Procedure:

When using AQ2000 controls, selecting components could not be easier. All it takes are four easy steps.

- 1. Select whether the boiler supply water temperature is reset by the AQ control or not
- 2. Select zoning equipment (pumps, 2-wire valves or 4-wire valves with end switches)
- 3. Select number of space heating zones

4. For systems with more than 2 controlled water temperatures, each additonal mixed temperature will require an AQ2541E0 expansion

control panel plus sufficient zoning modules to manage the zones associated with the additional water temperature

	1	No Reset				Reset								
		Non-Programmable		Programmable		One system temperature			Two system temperatures					
		Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone	pumps	Zone valves (2 wire)	Zone valves with end switches
	1 zone								<u>AQ2511B0*</u>					
		AQ2504B2			<u>AQ25A4B2</u>			<u>AQ2514B2</u>			AQ2	524M2		
	2-4 zones		<u>AQ2504B2</u>			<u>AQ25A4B2</u>			<u>AQ2514B2</u>				<u>AQ2524M2</u>	
		10050400		<u>AQ2504B4</u>	AQ25A4B2 +		<u>AQ25A4B4</u>	10051100		<u>AQ2514B4</u>	1000			<u>AQ2524M4</u>
		<u>AQ2504B2 +</u> AQ2554P2X			AQ2554P2X			<u>AQ2514B2 +</u> AQ2554P2X				524 <u>M2</u> 554P2X		
		AQ2JJ4FZA	AQ2504B2 +		10200112/	AQ25A4B2 +		<u>AQ2JJ4F2A</u>	AQ2514B2 +		TAQZ	<u>JJ4FZA</u>	AQ2524M2	
Б	5-8 zones		AQ2554V2			AQ2554V2			AQ2554V2				+AQ2554V2	
Selection				<u>AQ2504B4 +</u>			<u>AQ25A4B4 +</u>			<u>AQ2514B4 +</u>				AQ2524M4
Sele				AQ2574V4			<u>AQ2574V4</u>			AQ2574V4				+AQ2574V4
<u>e</u>		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>			<u>AQ2514B2 +</u>				524M2		
npc	9-12	AQ2558P2X	10050400		<u>AQ2558P2X</u>	AQ25A4B2 +		AQ2558P2X	10051400		<u>+AQ2</u>	558P2X	10050 (110	
Zoning Module	9-12 zones		<u>AQ2504B2 +</u> AQ2554V2 (2)			AQ2554V2 (2)			<u>AQ2514B2 +</u> AQ2554V2 (2)				<u>AQ2524M2</u> +AQ2554V2 (2)	
ing	201103		<u> AQ2004V2 (2)</u>	AQ2504B4 +		<u></u>	<u>AQ25A4B4 +</u>			AQ2514B4 +			<u> </u>	AQ2524M4
Zor				AQ2574V4 (2)			AQ2574V4 (2)			AQ2574V4 (2)				+AQ2574V4 (2)
		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>			<u>AQ2514B2 +</u>				524M2		
		<u>AQ2558P2X +</u>			AQ2558P2X +			<u>AQ2558P2X +</u>				558P2X		
	13-16	<u>AQ2554P2X</u>	A00504D0 -		<u>AQ2554P2X</u>	AQ25A4B2 +		<u>AQ2554P2X</u>	10051400		<u>+AQ2</u>	554P2X	400504140	
	zones		<u>AQ2504B2 +</u> AQ2554V2 (3)			AQ2554V2 (3)			<u>AQ2514B2 +</u> AQ2554V2 (3)				<u>AQ2524M2</u> +AQ2554V2 (3)	
			<u>AQ2004V2 (0)</u>	AQ2504B4 +		<u></u>	AQ25A4B4 +		<u> AQZJJ4VZ (J)</u>	AQ2514B4 +			<u> AQZJJ+VZ (J)</u>	AQ2524M4
				AQ2574V4 (3)			AQ2574V4 (3)			AQ2574V4 (3)				+AQ2574V4 (3)
					B			·			<b>B</b>			

Product Selector for Additional Water Temperatures
Wiring diagram for multiple Add-A-Temperature Modules
Wiring Instructions for Special Applications

#### NOTE:

Below are links to wiring diagrams of the AQ2000 components in Visio, AutoCAD DWG and AutoCAD DXF Formats Click on the applicable file format to access the diagrams' Table of Contents

\*AQ2511BO panel requires either a conventional, non-communicating thermostat OR a switching relay input. It does NOT use AQ1000 communicating thermostats

Visio Version

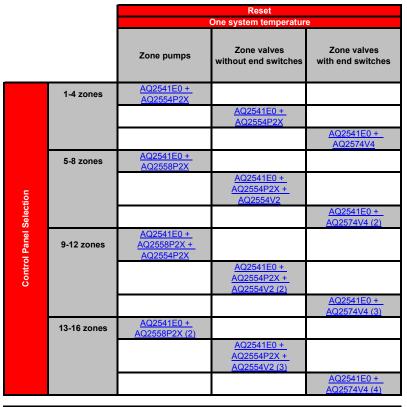
AutoCAD DWG Version

AutoCAD DXF Version

### AQ2000 Series - Hydronic Controls Product Selector

Selection Procedure:

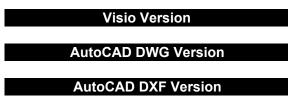
- When using AQ2000 controls for more than two water temperatures:
- 1. Select the AQ2000 panel (previous page)
- 2. Select the quantity of AQ254 Add-A-Temp Expansion Control Panels needed using the AQ254 selection tool (this page)
- 3. Save the result (drawing) for each selection in a separate file.
  - Print out the drawings, OR if using Visio or AutoCAD combine them all into one system drawing



Wiring diagram for multiple Add-A-Temperature Modules Wiring Instructions for Special Applications

#### NOTE:

Below are diagrams of the AQ2000 components in Visio, AutoCAD DWG and AutoCAD DXF Format. Click on the respective version to access the diagrams' Table of Contents



### **AQ2000 Wiring Instructions for Special Applications**

**PDF Version** 

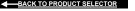
AQ2511BO Reset Panel with Connections to Non-Communicating Zoning Panel or Thermostat
Combining Pump and Valve Zoning on the Same Zoning Module
Combining Pump and Valve Zoning on Separate Zoning Modules
AQ2000 Control Panel for use with T775 Boiler Stager (multiple boilers)
Programmable AQ2000 Control Panel for One Zone of AC
Programmable AQ2000 Control Panel for One Zone of AC with Fan
AQ2000 Wiring to Oil Aquastat
Using a 24V Zone Valve for DHW & Bypass Valves (AQ2504B2 shown)
Two Stage Zone Control
Wiring for Single and Multiple (Averaging) Sensor Installations
Wiring of VisionPRO IAQ and NC Relay to Aux-In
AQ2511B0 with Tankless Coil
Group Pump Wiring and Sequence of Operation

<u>Wiring diagram for multiple Add-A-Temperature Modules</u> Additional Water Temperature Selector

### **Visio Version**

AutoCAD DWG Version

AutoCAD DXF Version

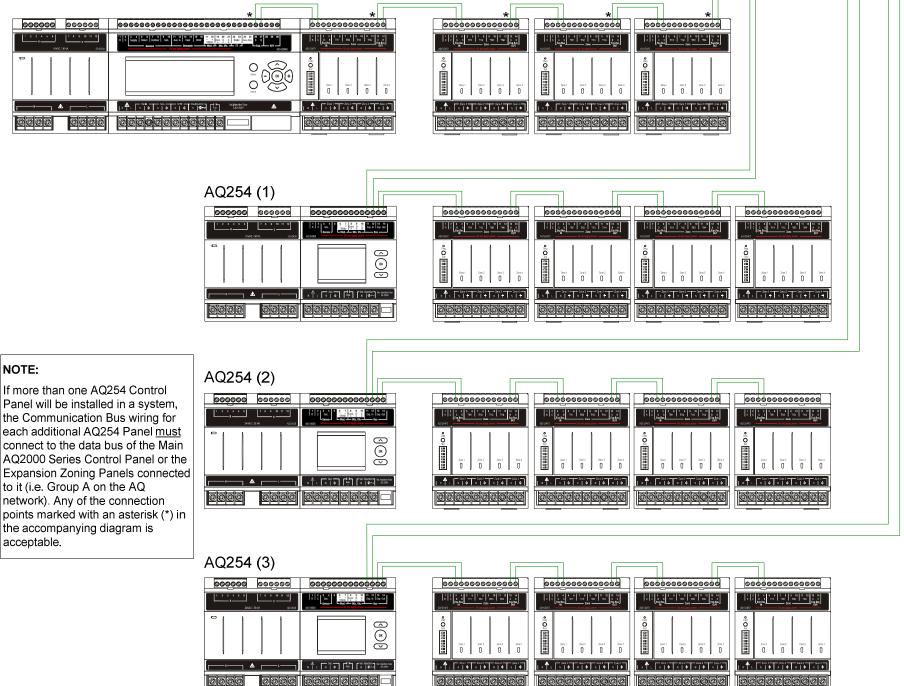


-BACK TO ADDITIONAL WATER TEMPERATURES



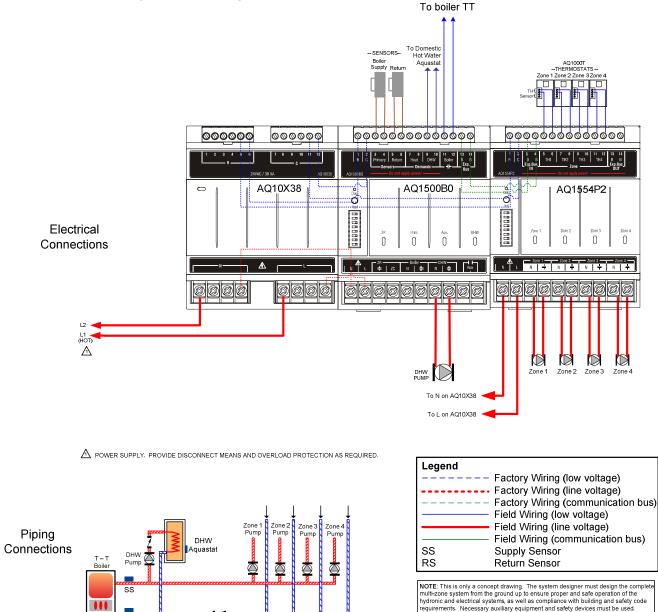
### Wiring Diagram for Multiple Add-A-Temperature Modules

Boiler Controller (may be AQ250, AQ25A, AQ251, or AQ252)



# AQ2504B2 (Pumps)

RS



#### PRINT THIS PAGE

Please select 'Current Page' to print single page. To print on legal size paper, select Properties → Advanced under Paper Size, select Legal.

BILL OF MATERIAL	
Parts	<b>Quantity</b>
AQ2504B2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE PUMPS	4
DHW PUMP	1

Suggested Accessories Available from Honeywell:

#### Hydronic Controls

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series Potable Controls

Thermostatic Mixing Valve

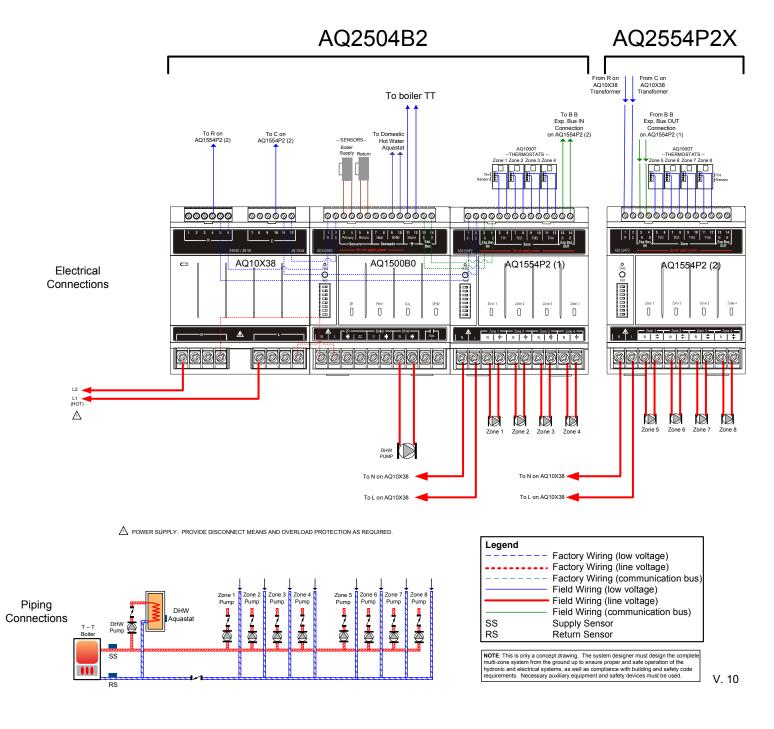
- AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06

V. 10

#### PRINT THIS PAGE

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### AQ2504B2 + AQ2554P2X



# BILL OF MATERIALPartsQuantityAQ2504B21AQ2554P2X1AQ1000TN2 non-programmable or4Q1000TP2 programmable thermostatAQ1000TP2 programmable thermostat8ZONE PUMPS8DHW PUMP1

#### Suggested Accessories Available from Honeywell:

#### **Hydronic Controls** Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve · AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series **Potable Controls**

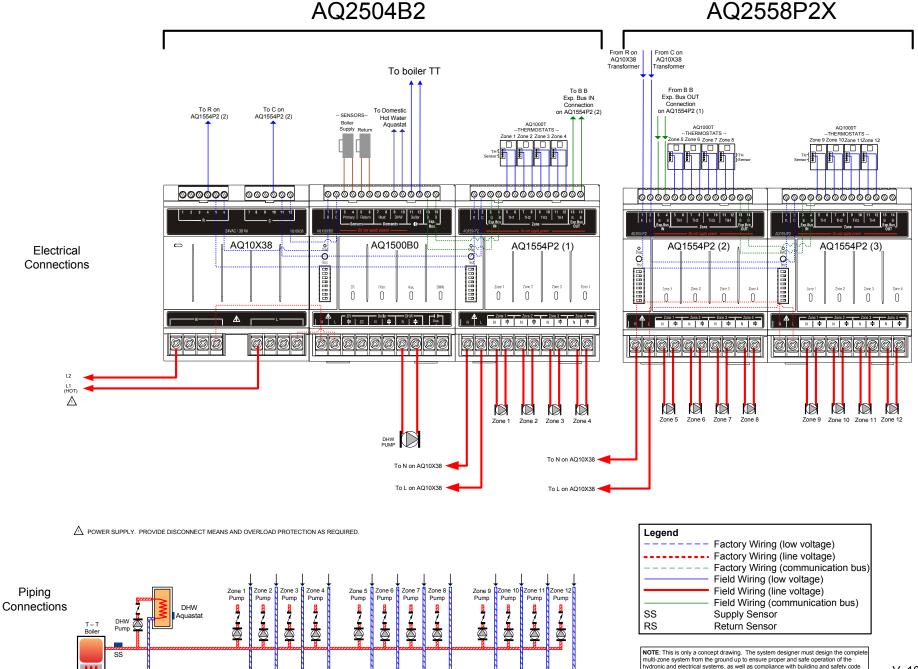
- Thermostatic Mixing Valve
- AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06

...

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### AQ2504B2 + AQ2558P2X



PartsQuantityAQ2504B21AQ2558P2X1AQ1000TN2 non-programmable or1AQ1000TP2 programmable thermostat12ZONE PUMPS12DHW PUMP1

#### Suggested Accessories Available from Honeywell:

**BILL OF MATERIAL** 

Hydronic Controls Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

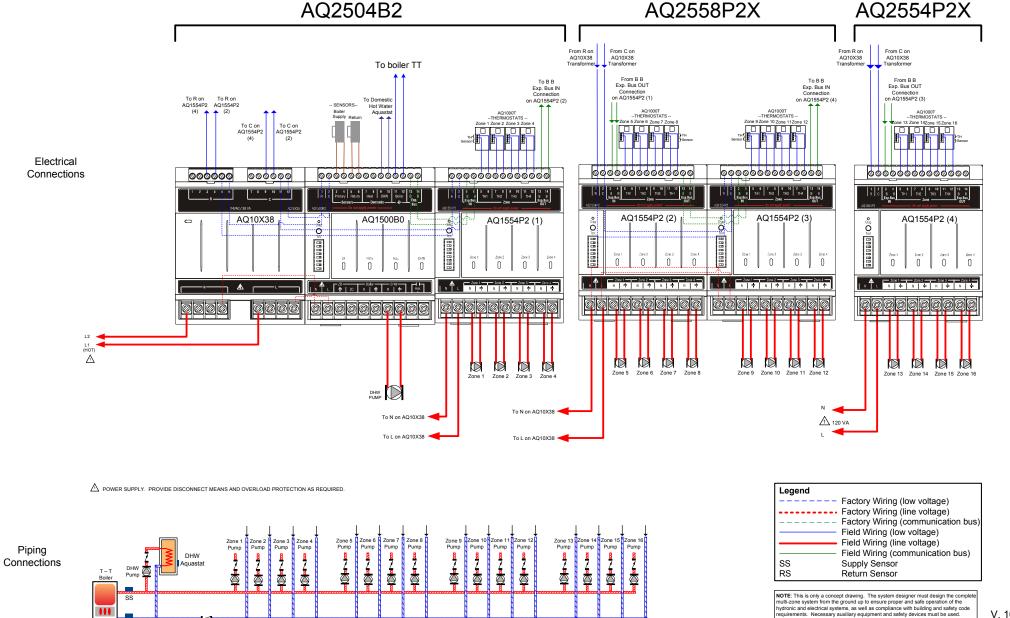
V. 10

equirements. Necessary auxiliary equipment and safety devices must be used.

111

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### AQ2504B2 + AQ2558P2X + AQ2554P2X



**BILL OF MATERIAL** Parts Quantity AQ2504B2 AQ2558P2X AQ2554P2X AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 16 ZONE PUMPS 16 DHW PUMP 1

#### Suggested Accessories Available from Honeywell:

**Hydronic Controls** Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

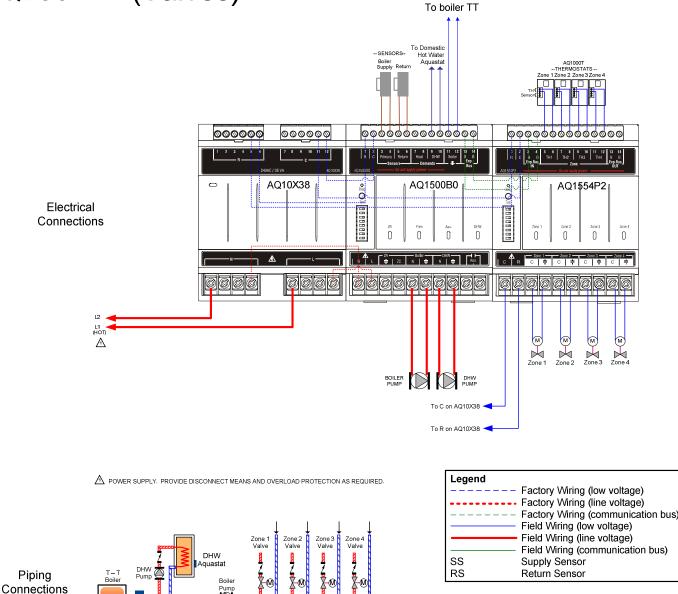
Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve DS05 • DS06

## AQ2504B2 (Valves)

SS

RS

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NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used PRINT THIS PAGE Please select 'Current Page' to

To print on legal size paper, select Properties → Advanced under Paper Size, select Legal.

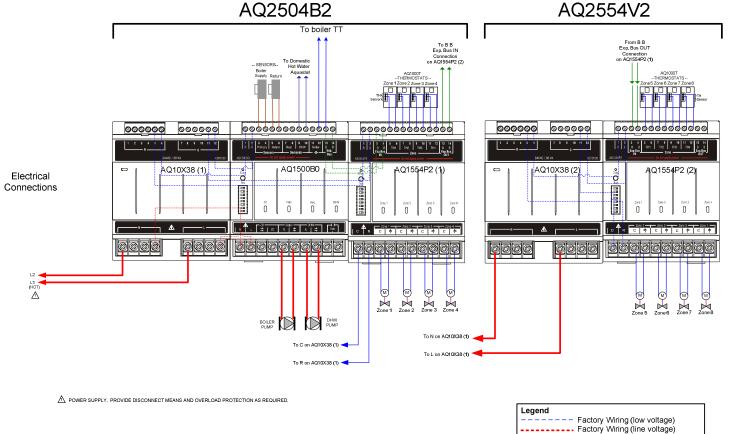
BILL OF MATERIAL	
Parts	Quantity
AQ2504B2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043A	4
DHW PUMP	1

Suggested Accessories Available from Honeywell:

#### **Hydronic Controls**

- Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series Potable Controls
- Thermostatic Mixing Valve
- AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06
- V. 10

# AQ2504B2 + AQ2554V2



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BILL OF MATERIAL	
Parts	Quantity
AQ2504B2	1
AQ2554V2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE - V8043A	8
DHW PUMP	1

Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

Zone 3 Zone 5 Zone 6 Zone 2 Zone Zone 7 Zone 8 Valv Valve Valve Valve Valve Valve Valve Valve Piping DHW 8 7 8 4 Connections DHW T-T 20 Pumr 7-00 **X**-M Boile 70 X-0 7-00 SS 111

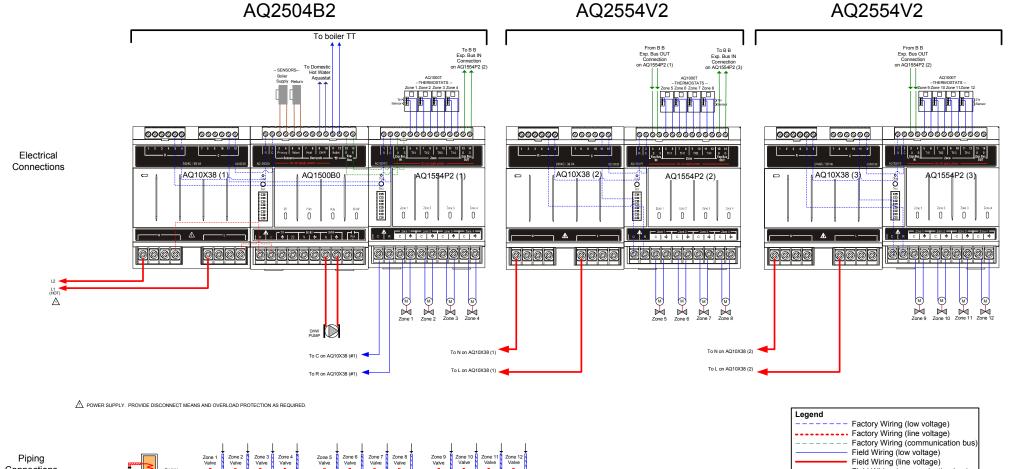
Legend SS RS	Factory Wiring (low voltage) Factory Wiring (lom voltage) Factory Wiring (communication bus Field Wiring (low voltage) Field Wiring (ine voltage) Field Wiring (communication bus) Supply Sensor Return Sensor
--------------------	---

NOTE: This is only a concept drawing. The system designer must design the complet multi-cone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

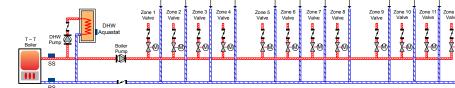
V. 10

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# AQ2504B2 + AQ2554V2 (2)



Connections



Legend	
	Factory Wiring (low voltage)
	Factory Wiring (line voltage)
	Factory Wiring (communication bus
	Field Wiring (low voltage)
	Field Wiring (line voltage)
	Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-sone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. V. 10 BILL OF MATERIAL Parts Quantity AQ2504B2 1 AQ2554V2 2 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 12 ZONE VALVES - V8043A 12 DHW PUMP

Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

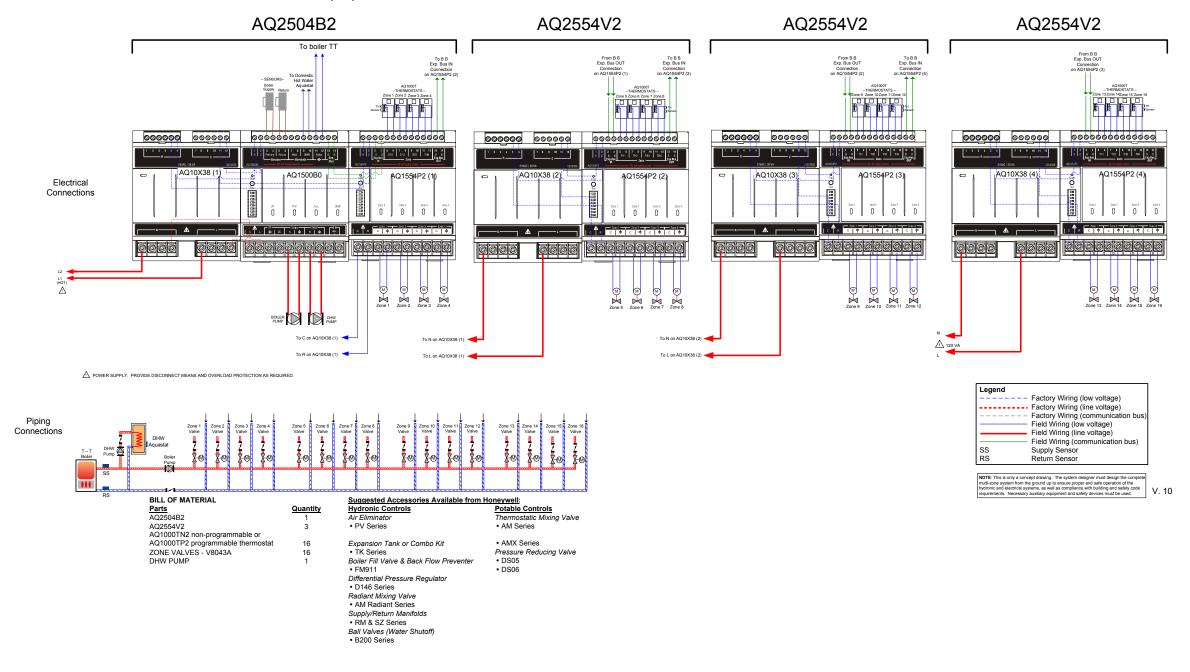
#### Potable Controls

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

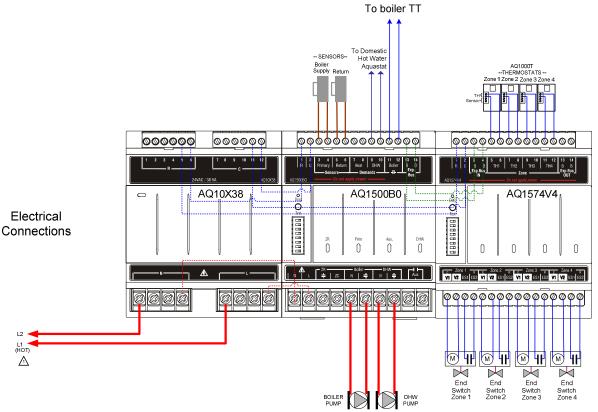
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under Paper Size, select Legal.

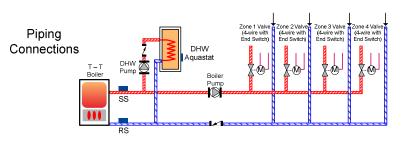
### AQ2504B2 + AQ2554V2 (3)

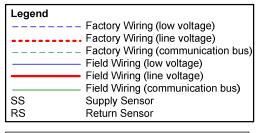


## AQ2504B4



A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.





NOTE: This is only a concept drawing. The system designer must design the complete multizone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

#### PRINT THIS PAGE

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BILL OF MATERIAL <u>Parts</u> AQ2504B4	Quantity 1
AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat ZONE VALVES - V8043E/F DHW PUMP	4 4 1

Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve

• DS05

• DS06

V. 10

#### BACK TO PRODUCT SELECTOR

# AQ2504B4 + AQ2574V4

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Quantity

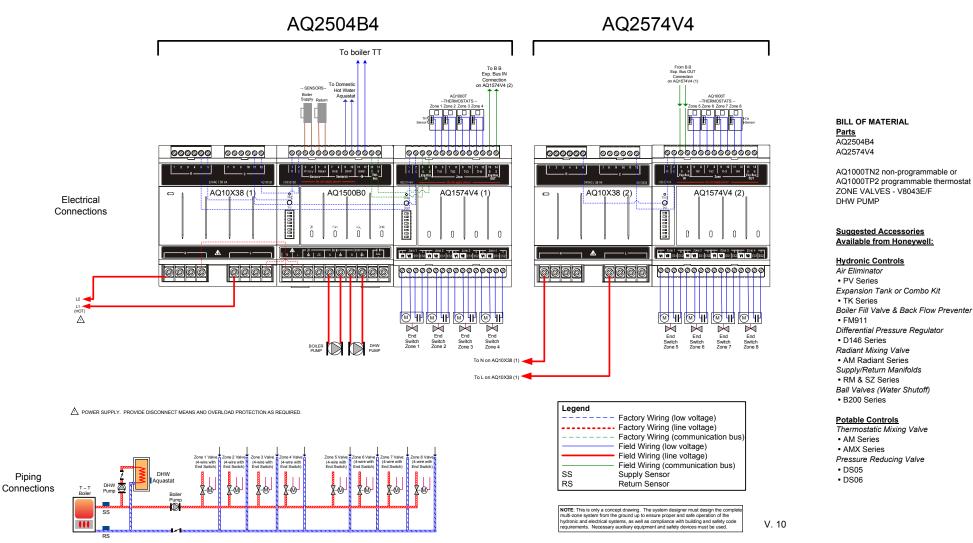
1

1

8

8

1



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AQ2504B4 + AQ2574V4 (2)

under Paper Size, select Legal

Quantity

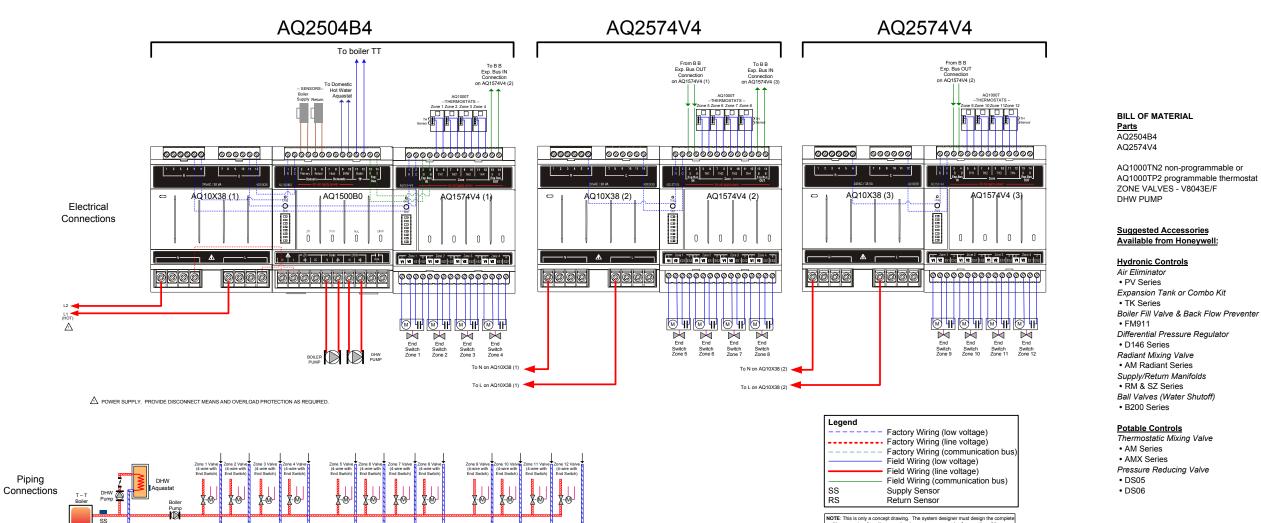
1

2

12

12

1

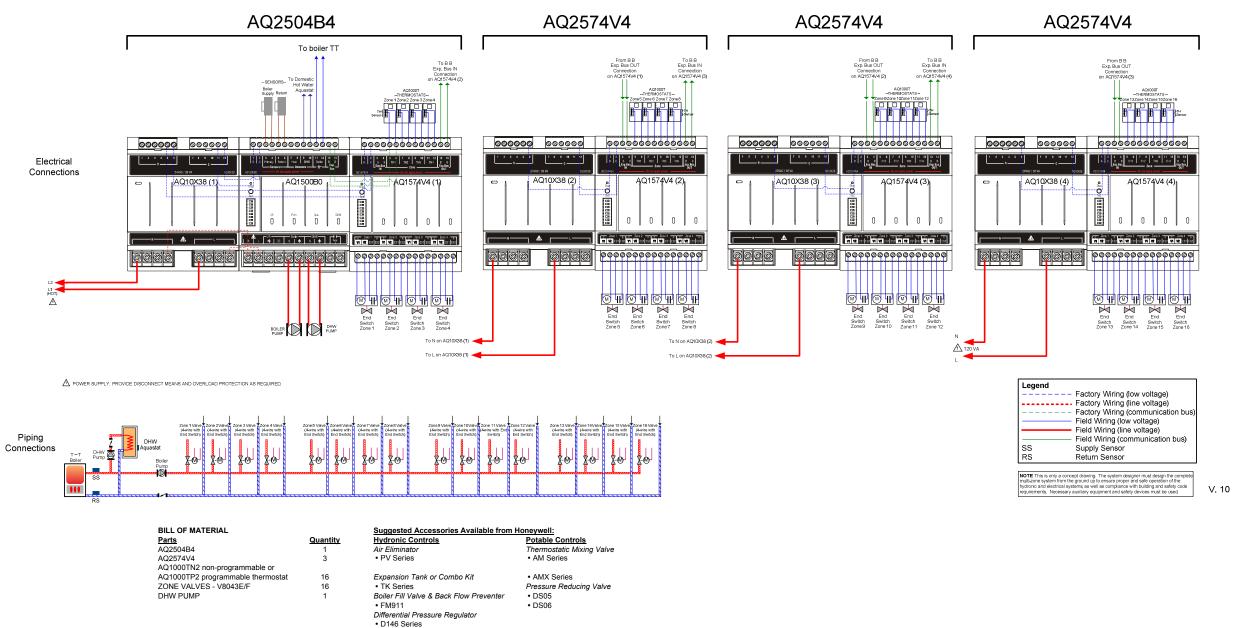


V. 10

multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code

equirements. Necessary auxiliary equipment and safety devices must be used.

### AQ2504B4 + AQ2574V4 (3)



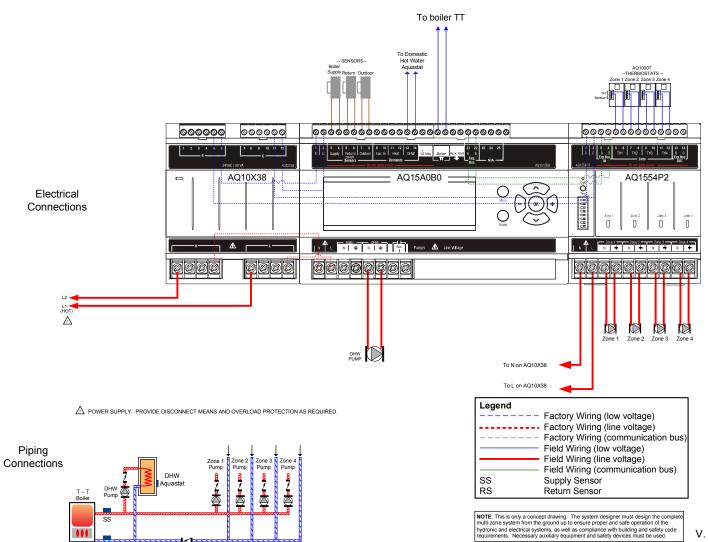
Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

# AQ25A4B2 (Pumps)

RS

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#### BILL OF MATERIAL

Parts	Quantity
AQ25A4B2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE PUMPS	4
DHW PUMP	1

### Suggested Accessories

Available from Honeywell:

#### Hydronic Controls

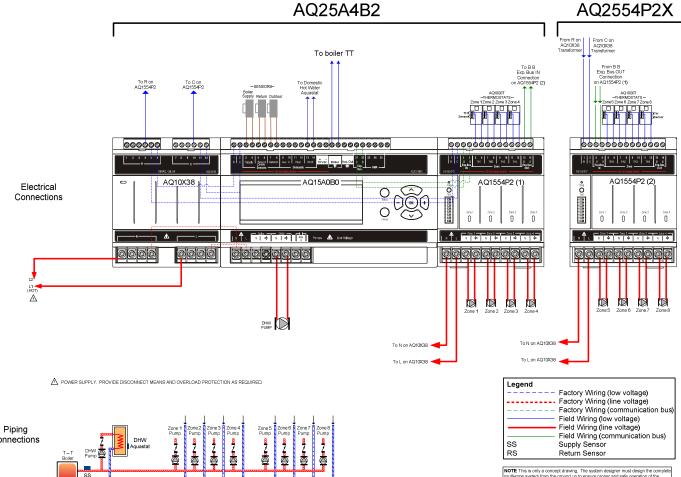
- Air Eliminator • PV Series
- Expansion Tank or Combo Kit
- TK Series
- Boiler Fill Valve & Back Flow Preventer
- FM911
- Differential Pressure Regulator
- D146 Series
- Radiant Mixing Valve
- AM Radiant Series
- Supply/Return Manifolds
- RM & SZ Series
- Ball Valves (Water Shutoff)
- B200 Series

#### Potable Controls

- Thermostatic Mixing Valve
- AM Series
- AMX Series
- Pressure Reducing Valve
- DS05 • DS06

#### BACK TO PRODUCT SELECTOR

# AQ25A4B2 + AQ2554P2X



NOTE: This is only a concept drawing. The system designer must design the complet multicone system from the ground up to ensure proper and safe operation of the hydronic and decircal systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. V. 10

PRINT THIS PAGE lease select 'Current Page print single page. To print on legal size paper, select Properties  $\rightarrow$  Advanced under Paper Size, select Legal.

BILL OF MATERIAL Quantity Parts AQ25A4B2 1 AQ2554P2X AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 8 ZONE PUMPS 8 DHW PUMP

#### Suggested Accessories Available from Honeywell:

#### Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

Connections 111

#### BACK TO PRODUCT SELECTOR

111

## AQ25A4B2 + AQ2558P2X



Quantity

1

1

12

12

1

BILL OF MATERIAL

AQ1000TN2 non-programmable or

AQ1000TP2 programmable thermostat

<u>Parts</u> AQ25A4B2

AQ2558P2X

ZONE PUMPS

Suggested Accessories

Hydronic Controls

Air Eliminator • PV Series

TK Series

• FM911

Available from Honeywell:

Expansion Tank or Combo Kit

Differential Pressure Regulator • D146 Series

Radiant Mixing Valve

AM Radiant Series

RM & SZ Series

Potable Controls Thermostatic Mixing Valve

· B200 Series

AM Series

• DS05 • DS06

AMX Series

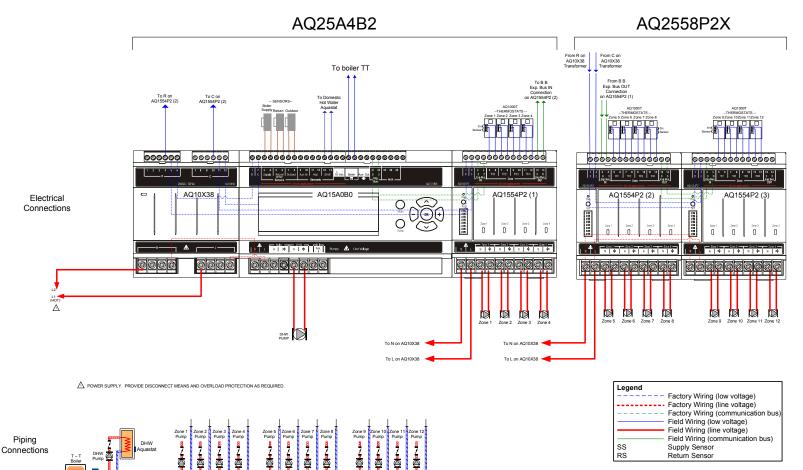
Supply/Return Manifolds

Ball Valves (Water Shutoff)

Pressure Reducing Valve

Boiler Fill Valve & Back Flow Preventer

DHW PUMP



NOTE: This is only a concept drawing. The system designer must design the complete multi-core system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as an ele a compliance with huding and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

111

### AQ25A4B2 + AQ2558P2X + AQ2554P2X

Quantity

1

16

16

1

BILL OF MATERIAL

AQ1000TN2 non-programmable or

AQ1000TP2 programmable thermostat

Parts AQ25A4B2 AQ2558P2X AQ2554P2X

ZONE PUMPS

Suggested Accessories

Hydronic Controls Air Eliminator • PV Series

Radiant Mixing Valve

AM Radiant Series

B200 Series

AMX Series

• DS05

• DS06

Potable Controls Thermostatic Mixing Valve • AM Series

Pressure Reducing Valve

Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff)

TK Series

• FM911

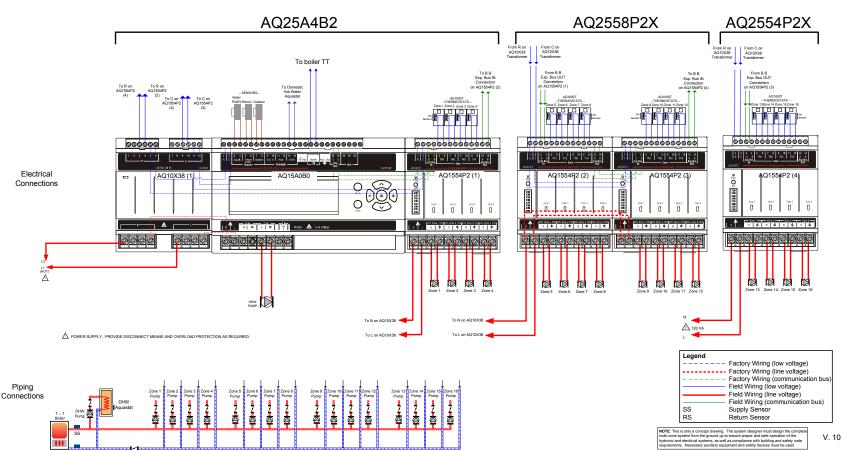
Available from Honeywell:

Expansion Tank or Combo Kit

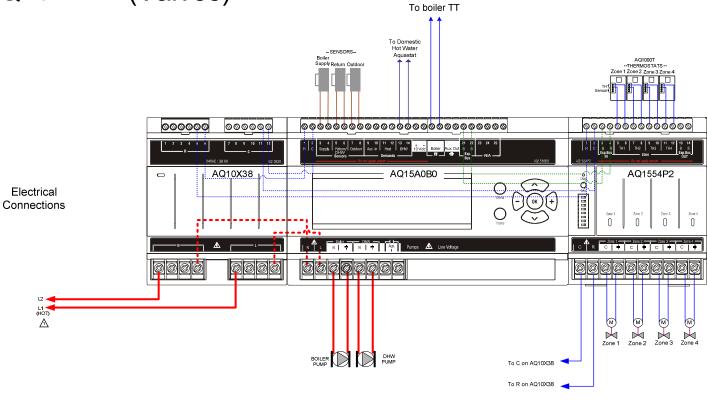
Differential Pressure Regulator D146 Series

Boiler Fill Valve & Back Flow Preventer

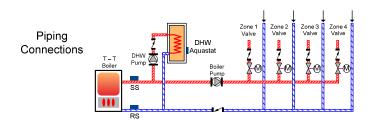
DHW PUMP



### AQ25A4B2 (Valves)



A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.



Legend	
	– – Factory Wiring (low voltage)
	Factory Wiring (line voltage)
	Factory Wiring (communication bus)
	—— Field Wiring (low voltage)
	Field Wiring (line voltage)
	—— Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

#### PRINT THIS PAGE

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BILL OF MATERIAL	
Parts	Quantity
AQ2514B2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043A	4
DHW PUMP	1

#### Suggested Accessories Available from Honeywell:

Hydronic Controls

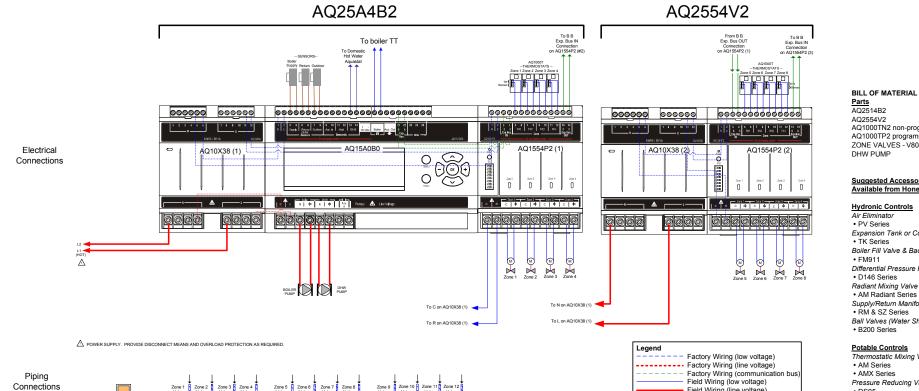
Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

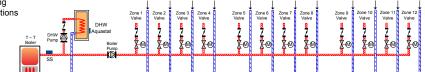
#### Potable Controls

- Thermostatic Mixing Valve
- AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06

#### BACK TO PRODUCT SELECTOR

### AQ25A4B2 + AQ2554V2





Legend	
	<ul> <li>Factory Wiring (low voltage)</li> </ul>
	<ul> <li>Factory Wiring (line voltage)</li> </ul>
	<ul> <li>– Factory Wiring (communication b)</li> </ul>
	<ul> <li>Field Wiring (low voltage)</li> </ul>
	<ul> <li>Field Wiring (line voltage)</li> </ul>
	<ul> <li>Field Wiring (communication bus</li> </ul>
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as completione with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. V. 10

#### AQ2554V2 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat ZONE VALVES - V8043A DHW PUMP Suggested Accessories Available from Honeywell: Hydronic Controls

Quantity

1

1

8

8

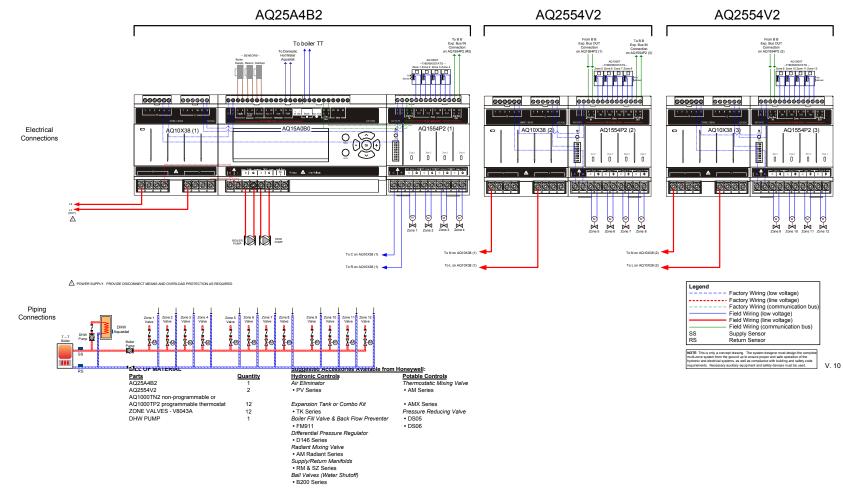
1

Air Eliminator · PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve DS05 • DS06

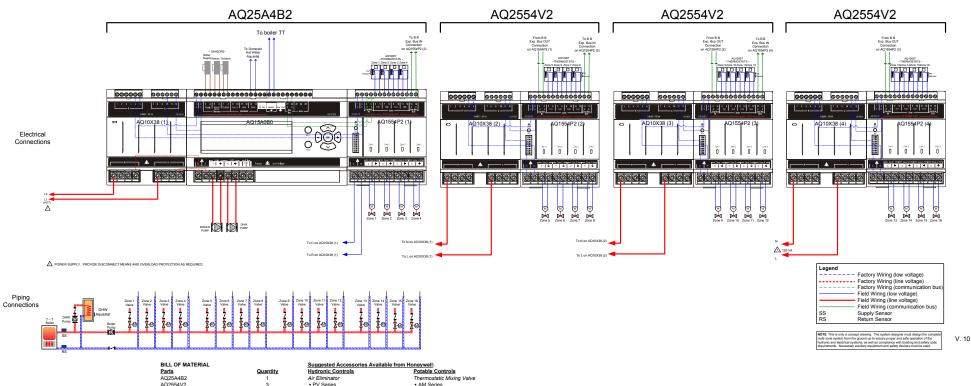
### AQ25A4B2 + AQ2554V2 (2)



# AQ25A4B2 + AQ2554V2 (3)

Į

BACK TO PRODUCT SELECTOR



3 PV Series 16 Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series

Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) · B200 Series

AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat

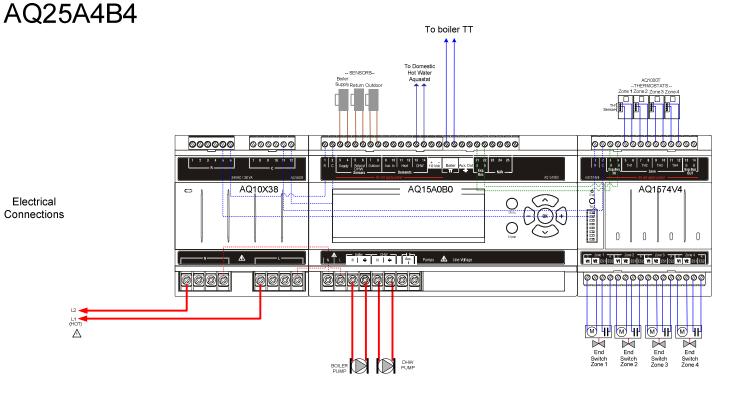
ZONE VALVES - V8043A

DHW PUMP

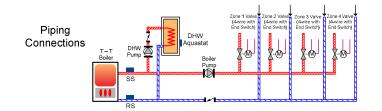
- AM Series AMX Series Pressure Reducing Valve
  - DS05 DS06

#### PRINT THIS PAGE

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A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.



Legend	
	<ul> <li>– – Factory Wiring (low voltage)</li> </ul>
	Factory Wiring (line voltage)
	Factory Wiring (communication bus)
	— Field Wiring (low voltage)
	Field Wiring (line voltage)
	— Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

BILL OF MATERIAL Parts AQ25A4B4 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat	Quantity 1
AQ1000TP2 programmable thermostat	
ZONE VALVES - V8043E/F DHW PUMP	4 1

#### Suggested Accessories Available from Honeywell:

#### Hydronic Controls

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

V. 10

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

# AQ25A4B4 + AQ2574V4

BACK TO PRODUCT SELECTOR

SS



Quantity

1

1

8

8

BILL OF MATERIAL Parts

AQ1000TN2 non-programmable or

ZONE VALVES - V8043E/F

Suggested Accessories Available from Honeywell:

Expansion Tank or Combo Kit

Differential Pressure Regulator • D146 Series

Boiler Fill Valve & Back Flow Preventer

Hydronic Controls

Radiant Mixing Valve • AM Radiant Series

Supply/Return Manifolds • RM & SZ Series

Ball Valves (Water Shutoff) • B200 Series

Potable Controls Thermostatic Mixing Valve

Pressure Reducing Valve

AM Series

AMX Series

• DS05

• DS06

Air Eliminator

PV Series

TK Series

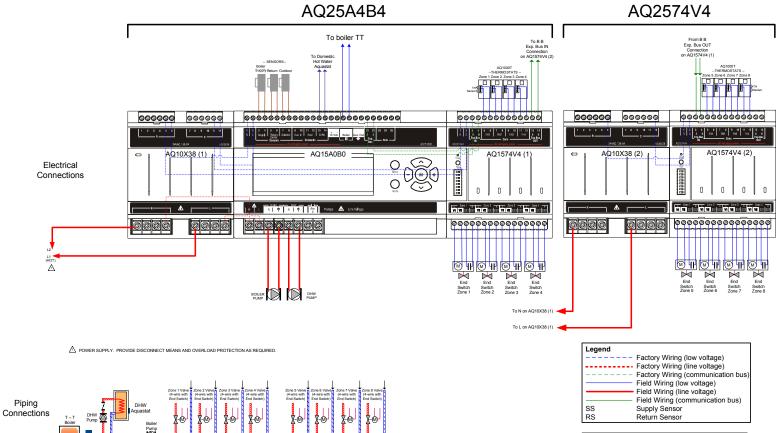
• FM911

AQ1000TP2 programmable thermostat

AQ25A4B4

AQ2574V4

DHW PUMP



NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and decircal systema, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. V. 10

### AQ25A4B4 + AQ2574V4 (2)

AQ1000TP2 programmable thermostat

ZONE VALVES - V8043E/F

DHW PUMP

12

12

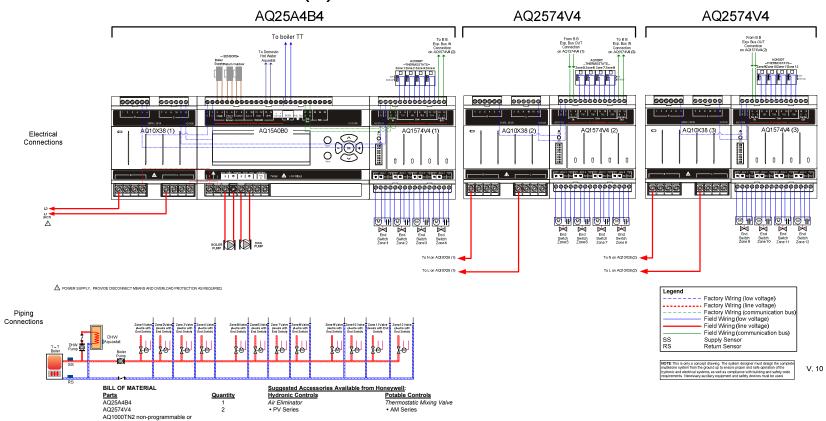
Expansion Tank or Combo Kit

Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

Boiler Fill Valve & Back Flow Preventer

TK Series

• FM911



AMX Series

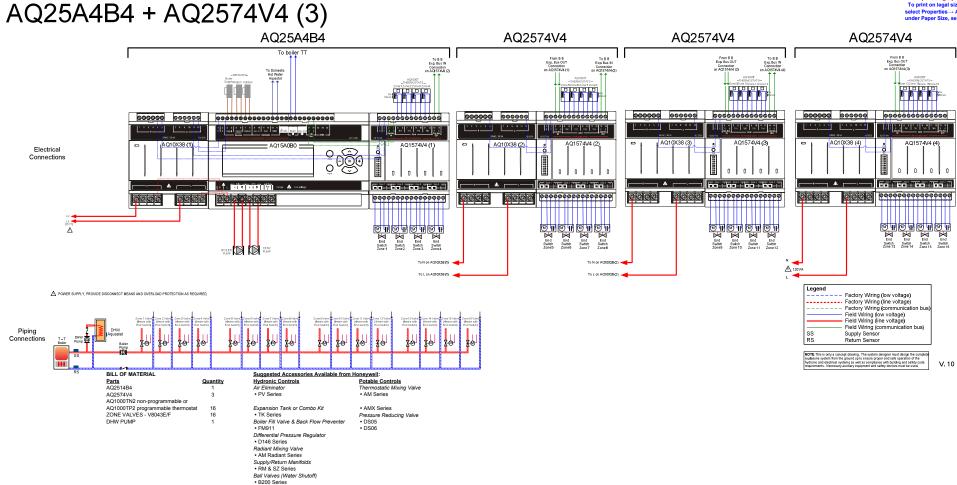
• DS05

DS06

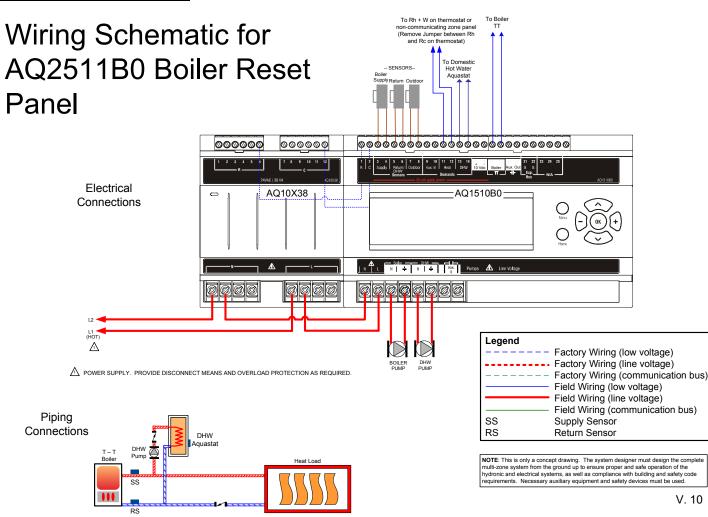
Pressure Reducing Valve

#### BACK TO PRODUCT SELECTOR









#### PRINT THIS PAGE

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BILL OF MATERIAL	
Parts	<u>Quantity</u>
AQ10X38	1
AQ1510B0	1
DHW PUMP	1

#### Suggested Accessories Available from Honeywell:

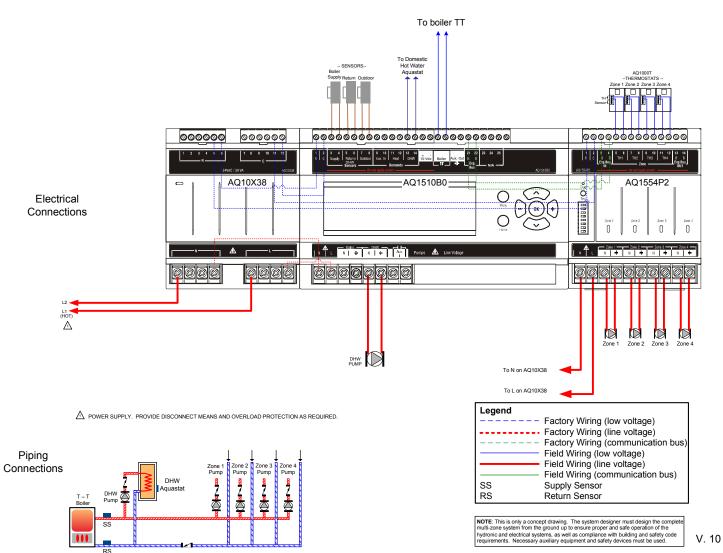
Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

- Thermostatic Mixing Valve
- AM Series
- AMX Series
- Pressure Reducing Valve • DS05
- DS06

### AQ2514B2 (Pumps)



#### PRINT THIS PAGE

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**BILL OF MATERIAL** Parts Quantity AQ2514B2 1 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 4 ZONE PUMPS 4 DHW PUMP 1

#### Suggested Accessories Available from Honeywell:

#### Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series

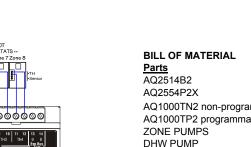
- Ball Valves (Water Shutoff)
- B200 Series

#### Potable Controls

- Thermostatic Mixing Valve
- AM Series AMX Series
- Pressure Reducing Valve
- DS05
- DS06

### AQ2514B2 + AQ2554P2X

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AQ2554P2X

Zone 3

 $\mathbb{D}$ 

Zone 4

0

Ø

Zone 8

	1
	1
mmable or	
able thermostat	8
	8
	1

Quantity

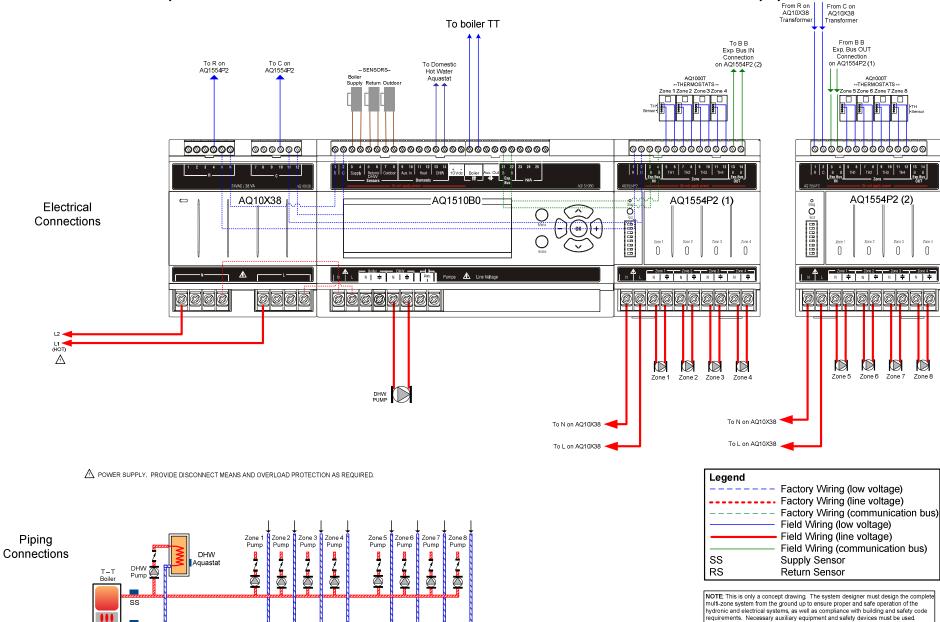
#### Suggested Accessories Available from Honeywell:



Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### **Potable Controls**

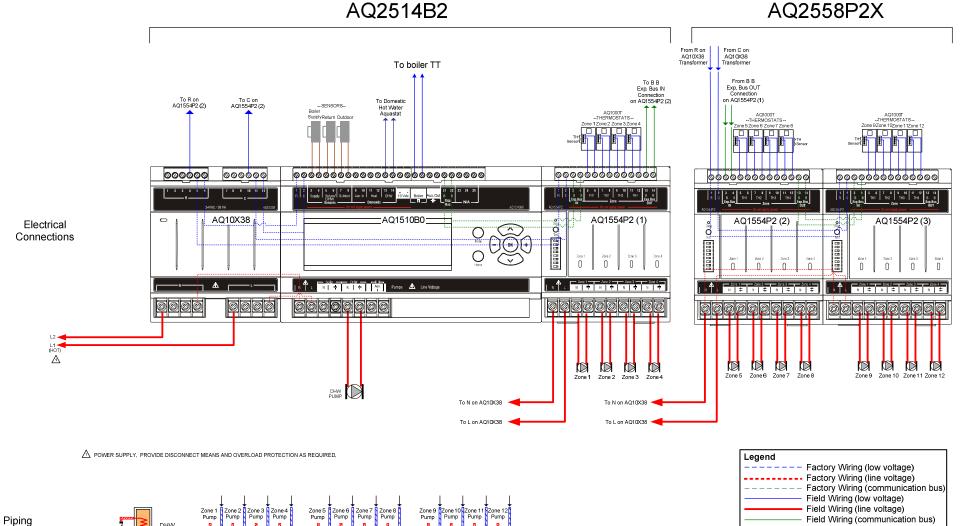
Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06



AQ2514B2

V. 10

### AQ2514B2 + AQ2558P2X



PRINT THIS PAGE Please select 'Current Page' to print single page. To print on legal size paper, select Properties  $\rightarrow$  Advanced under Paper Size, select Legal.

BILL OF MATERIAL	
Parts	Quantity
AQ2514B2	1
AQ2558P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	12
ZONE PUMPS	12
DHW PUMP	1

#### Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

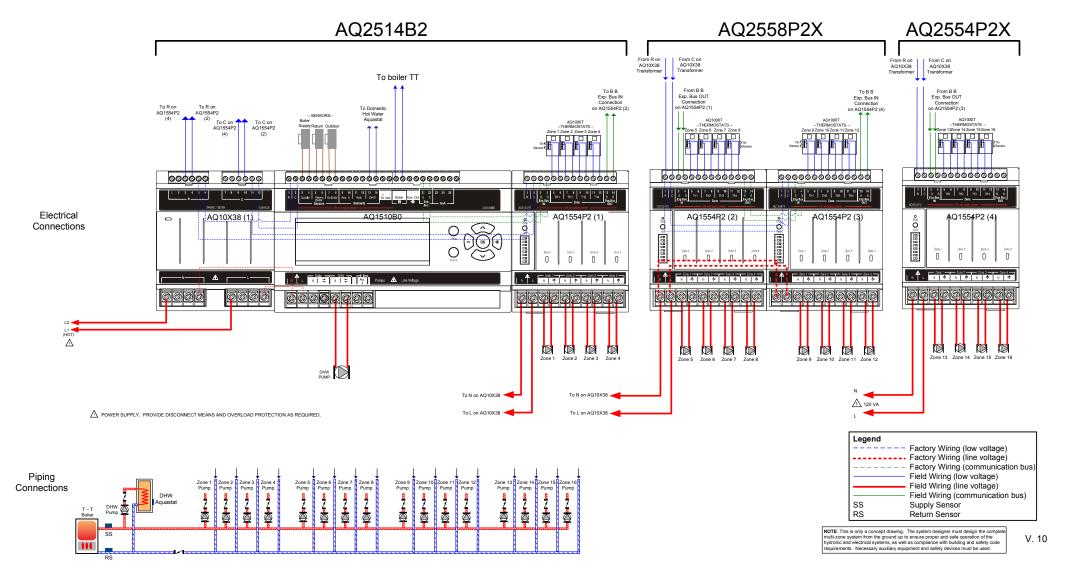
Piping Connections	T-T Boiler SS	Zone 1 Pump Pump 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Zone 8 Zone 9 Zone 10 Zon Pump Pump Pump P 2 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	
	RS		 	

Factory Wiring (low voltage)
<ul> <li>Factory Wiring (line voltage)</li> </ul>
Factory Wiring (communication bu
Field Wiring (low voltage)
<ul> <li>Field Wiring (line voltage)</li> </ul>
Field Wiring (communication bus)
Supply Sensor
Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code V. 10 requirements. Necessary auxiliary equipment and safety devices must be used.

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### AQ2514B2 + AQ2558P2X + AQ2554P2X



BILL OF MATERIAL	
Parts	Quantity
AQ2514B2	1
AQ2558P2X	1
AQ2554P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	16
ZONE PUMPS	16
DHW PUMP	1

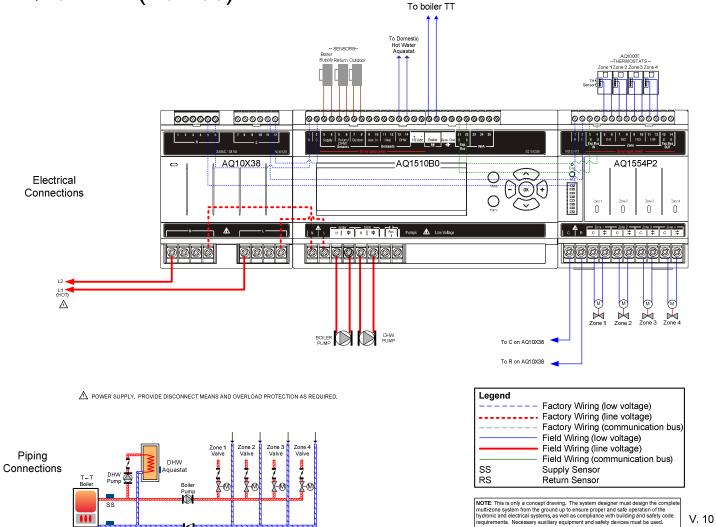
#### Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

### AQ2514B2 (Valves)



#### PRINT THIS PAGE

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BILL OF MATERIAL	
Parts	Quantity
AQ2514B2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043A	4
DHW PUMP	1

#### Suggested Accessories Available from Honeywell:

#### Hydronic Controls

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05

• DS06

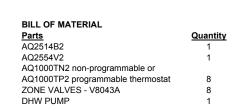
#### BACK TO PRODUCT SELECTOR

Piping

....

RS

### AQ2514B2 + AQ2554V2

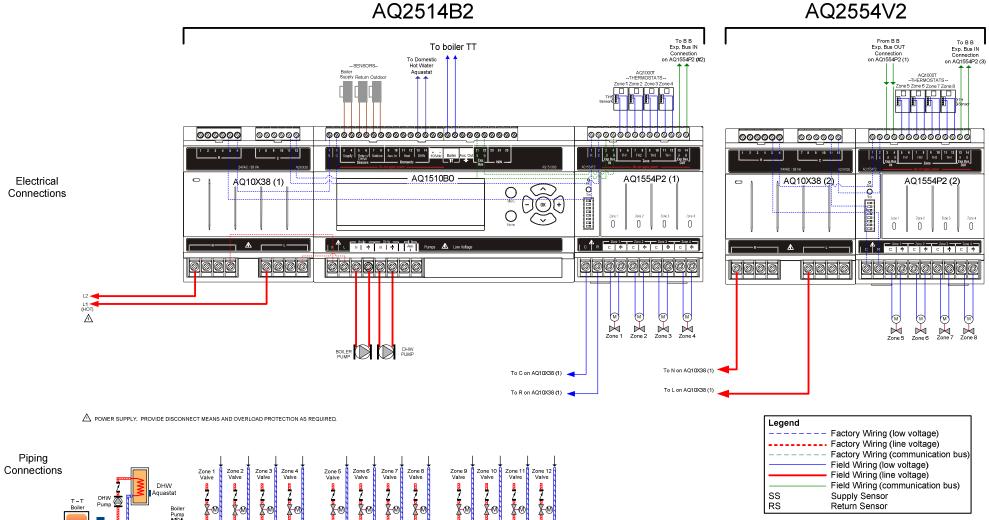


#### Suggested Accessories Available from Honeywell:

Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### **Potable Controls**

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

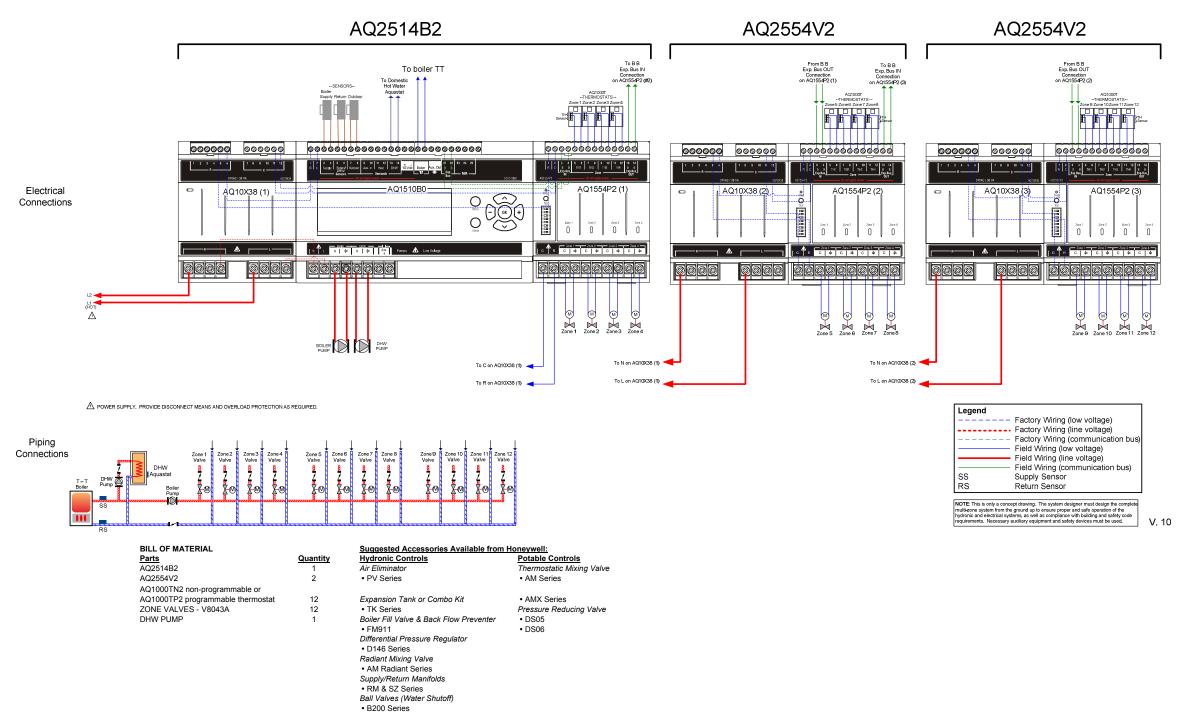


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V. 10

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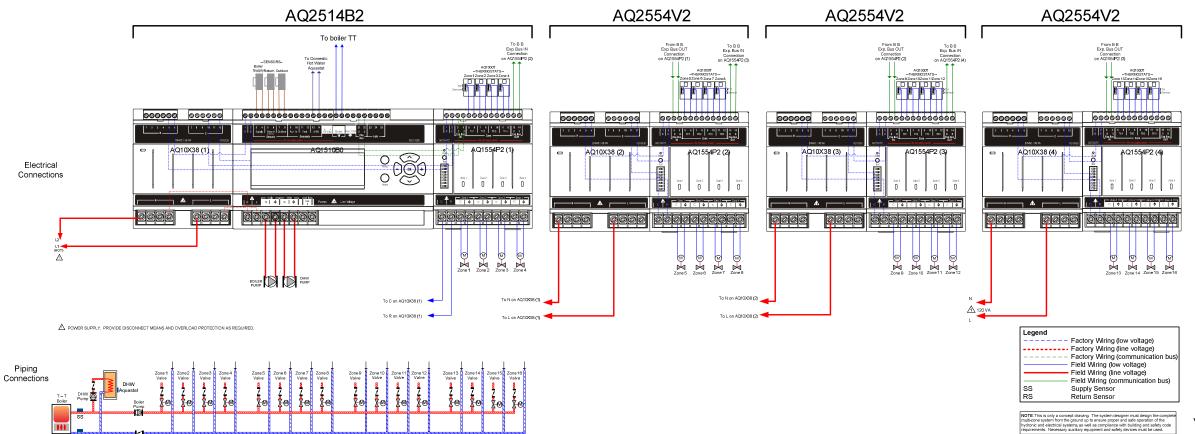
### AQ2514B2 + AQ2554V2 (2)



....

### AQ2514B2 + AQ2554V2 (3)





BILL OF MATERIAL <u>Parts</u> AQ2514B2 Quantity AQ2554V2 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat ZONE VALVES - V8043A DHW PUMP

3

16

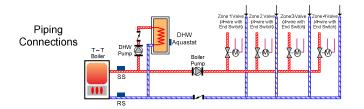
16

B200 Series

Suggested Accessories Available from Honeywell: Hydronic Controls Potable Controls Thermostatic Mixing Valve Air Eliminator PV Series AM Series Expansion Tank or Combo Kit AMX Series TK Series Pressure Reducing Valve Boiler Fill Valve & Back Flow Preventer • DS05 • FM911 • DS06 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff)

#### AQ2514B4 To boiler TT To Domestic Hot Water Aquastat -- SENSORS-Boiler SupplyReturn Outdoor AQ10001 HERMOSTATS Zone 2 Zone 3 000000 @@@@@@@ @@@@@@@@@@@@@@@ 10 11 12 13 14 .cc. In Heat DHW 10Vdc Boller Aux 3 2 3 3 5 6 7 8 9 10 11 12 13 14 8 6 8 8 TH1 TH2 TH3 TH4 8 8 AQ10X38 -AQ1510B0-AQ1574V4 0 Ö Electrical O 8888888 Connections 0 0 0 0 0 N L N + N + Aux Line Watage C Zone 1 R C Zone 2 R C Zone 3 R C Zone 4 R VI V2 ES1 ES2 VI V2 ES1 ES2 VI V2 ES1 ES2 ₫ ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ 0000 000000000 0000 L1 (HOT) <u>Man Man Man Man</u> A End Switch Zone 1 End Switch Zone 2 End Switch Zone 3 M End Switch Zone 4 DHW PUMP BOILER PUMP $\square$

A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.



Legend	
	<ul> <li>– Factory Wiring (low voltage)</li> </ul>
	Factory Wiring (line voltage)
	Factory Wiring (communication bus
	— Field Wiring (low voltage)
	Field Wiring (line voltage)
	— Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-cone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. PRINTTHIS PAGE Please select 'Current Page' to print single page. To print on legal size paper, select Properties → Advanced under Paper Size, select Legal.

BILL OF MATERIAL	
Parts	Quantity
AQ2514B4	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043E/F	4
DHW PUMP	1

#### Suggested Accessories Available from Honeywell:

### Hydronic Controls

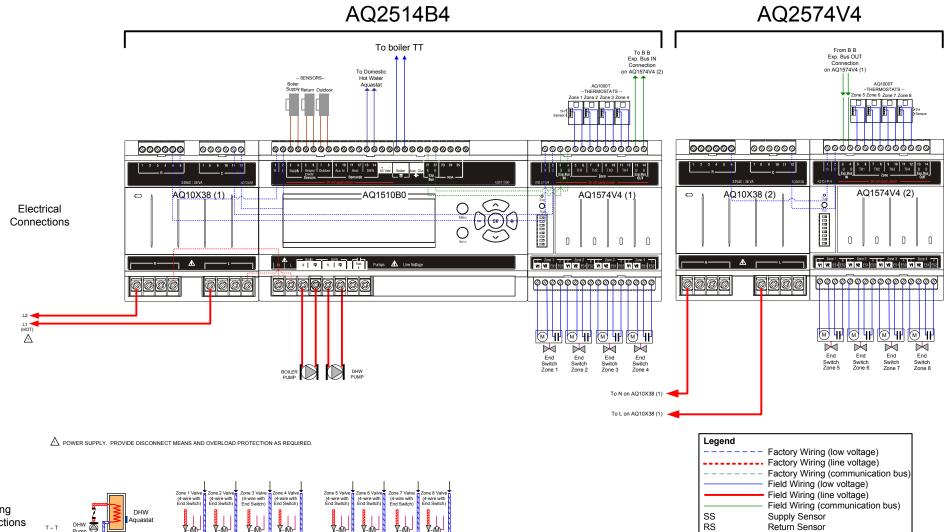
Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05

• DS06

### AQ2514B4 + AQ2574V4



NOTE: This is only a concept drawing. The system designer must design the comple multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used. V. 10

BILL OF MATERIAL	
Parts	Quantity
AQ2514B4	1
AQ2574V4	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE VALVES - V8043E/F	8
DHW PUMP	1

Suggested Accessories Available from Honeywell:

### Hydronic Controls

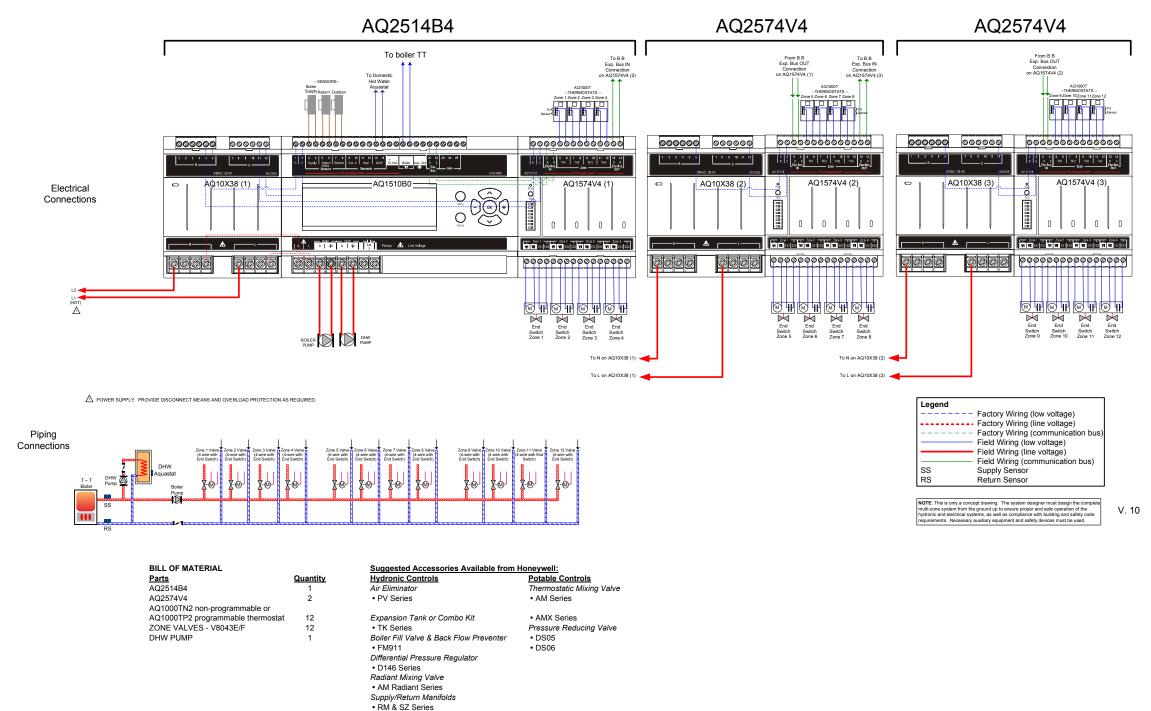
Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### **Potable Controls**

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

Piping Connections Pum Roile 

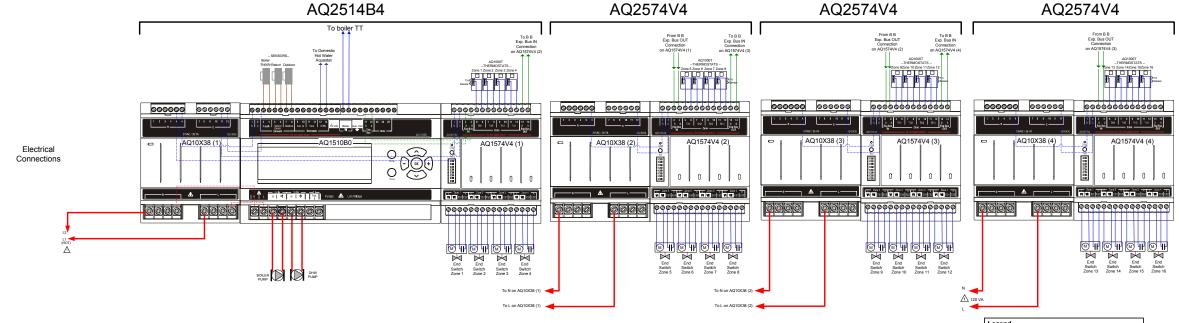
### AQ2514B4 + AQ2574V4 (2)



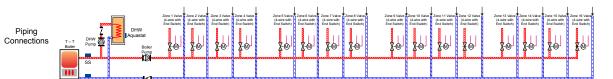
Ball Valves (Water Shutoff) • B200 Series

### AQ2514B4 + AQ2574V4 (3)





A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.



Parts	Quanti
AQ2514B4	1
AQ2574V4	3
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	16
ZONE VALVES - V8043E/F	16
DHW PUMP	1

Suggested Accessories Available from Honeywell:		
Hydronic Controls	Potable Controls	
Air Eliminator	Thermostatic Mixing Valve	
PV Series	AM Series	
Expansion Tank or Combo Kit	AMX Series	
TK Series	Pressure Reducing Valve	
Boiler Fill Valve & Back Flow Preventer	• DS05	
• FM911	• DS06	
Differential Pressure Regulator		
D146 Series		
Radiant Mixing Valve		
AM Radiant Series		
Supply/Return Manifolds		
RM & SZ Series		
Ball Valves (Water Shutoff)		
B200 Series		

 Legend
 Factory Wiring (low voltage)

 ----- Factory Wiring (line voltage)

 ----- Factory Wiring (communication bus)

 Field Wiring (low voltage)
 Field Wiring (low voltage)

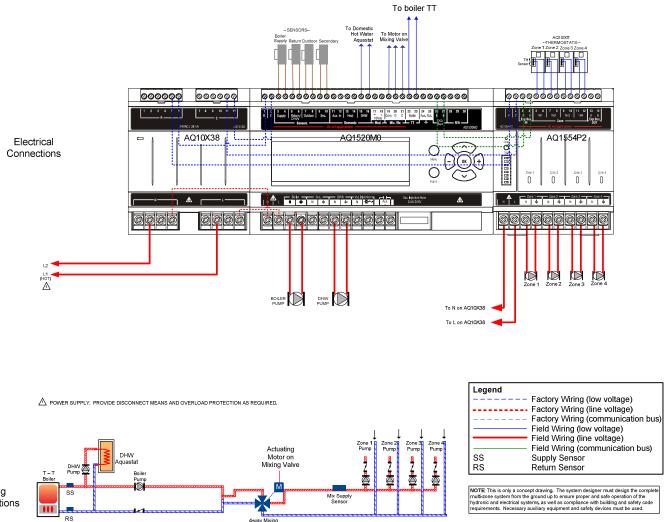
 ----- Field Wiring (low voltage)

 SS
 Supply Sensor

 RS
 Return Sensor

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### AQ2524M2 (Pumps)



4-way Mixing valve

### PRINT THIS PAGE

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BILL OF MATERIAL	
Parts	<b>Quantity</b>
AQ2524M2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE PUMPS	4
DHW PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

### Available from Honeywell:

Hydronic Controls

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

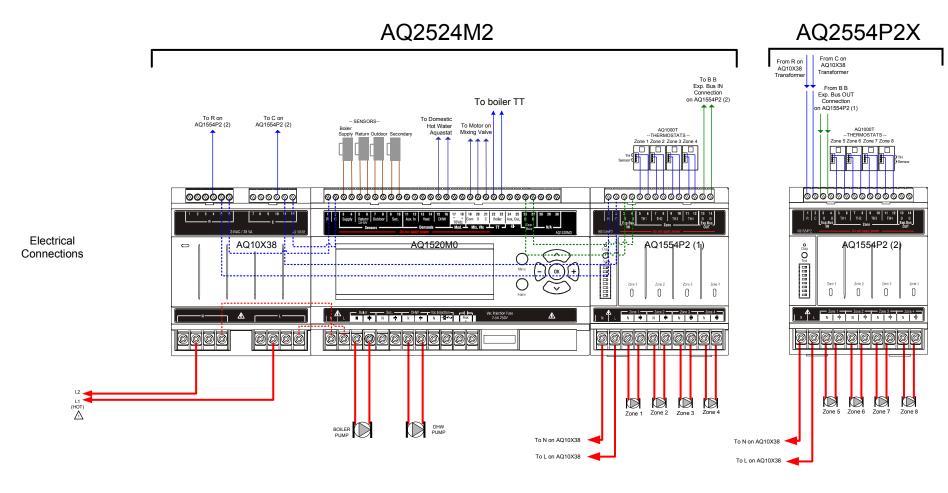
V. 10

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

Piping Connections

### AQ2524M2 + AQ2554P2X

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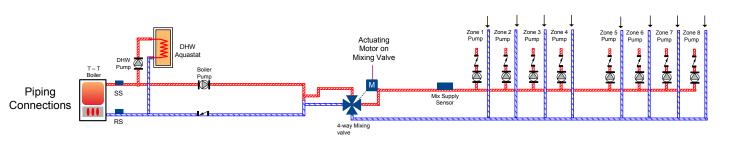
#### BILL OF MATERIAL Parts Quantity AQ2524M2 1 AQ2554P2X 1 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 8 ZONE PUMPS 8 DHW PUMP M6063A4007 ACTUATOR FOR V5442N V5442N SERIES 4-WAY MIXING VALVE 1

Hydronic Controls Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

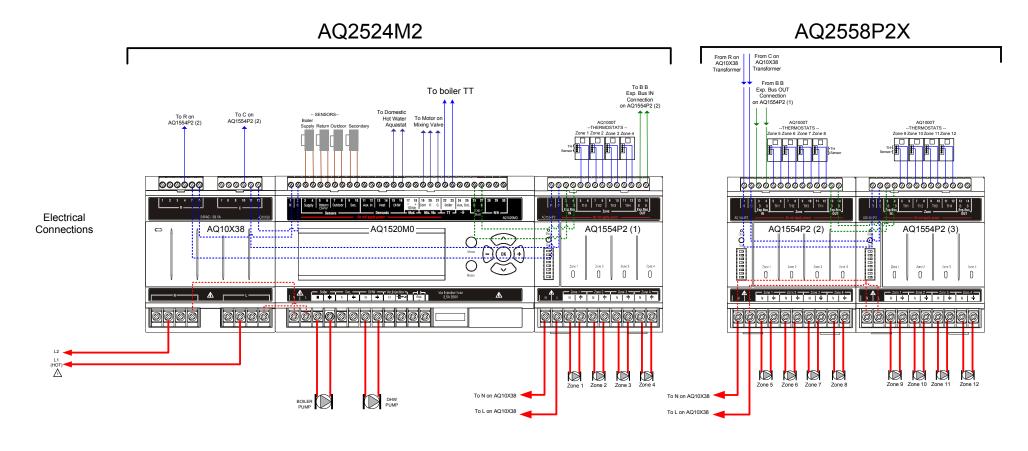
A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

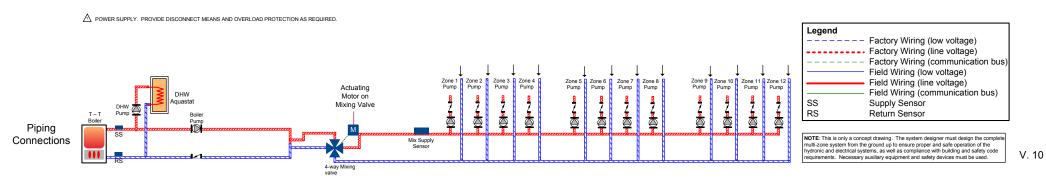


Legend	
	<ul> <li>– Factory Wiring (low voltage)</li> </ul>
	<ul> <li>Factory Wiring (line voltage)</li> </ul>
	Factory Wiring (communication bu
	<ul> <li>Field Wiring (low voltage)</li> </ul>
	Field Wiring (line voltage)
	— Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

### AQ2524M2 + AQ2558P2X





BILL OF MATERIAL	
Parts	Quantity
AQ2524M2	1
AQ2558P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	12
ZONE PUMPS	12
DHW PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

### Hydronic Controls

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

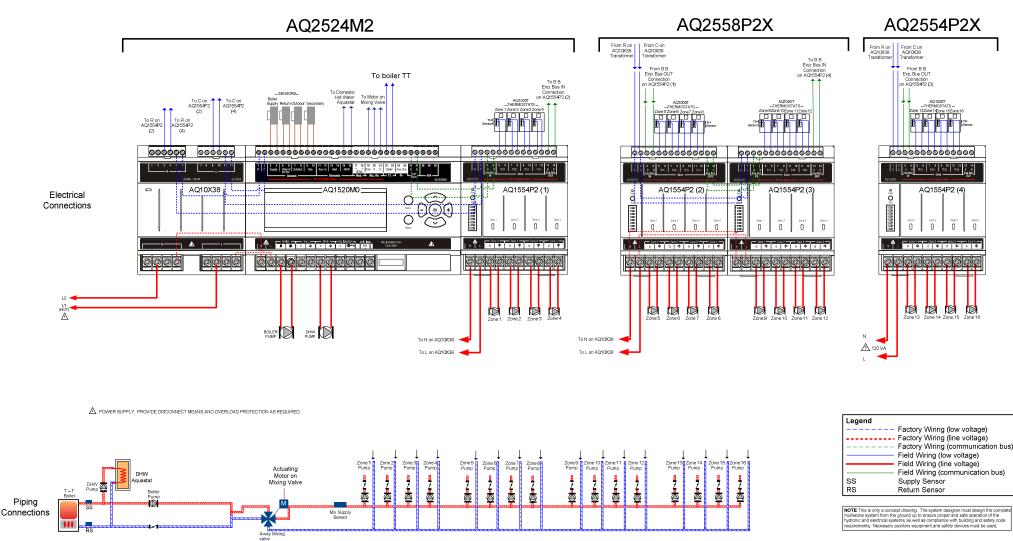
#### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

BACK TO PRODUCT SELECTOR

### AQ2524M2 + AQ2558P2X + AQ2554P2X





 BILL OF MATERIAL

 Parts
 Quantity

 AQ2524M2
 1

 AQ2558P2X
 1

 AQ2554P2X
 1

 AQ1000TN2 non-programmable or
 1

 AQ1000TP2 programmable thermostat
 16

 ZONE PUMPS
 16

 DHW PUMP
 1

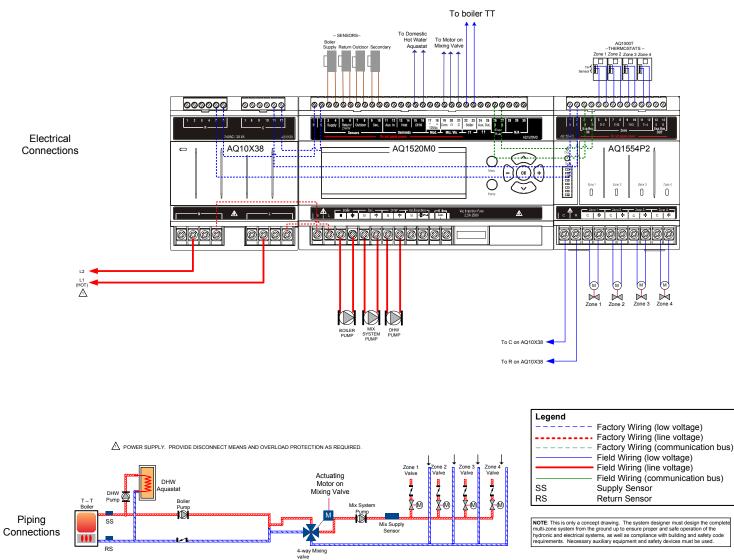
 M6063A4007 ACTUATOR FOR V5442N
 1

 V5442N SERIES 4-WAY MIXING VALVE
 1

Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

Potable Controls Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

### AQ2524M2 (Valves)



### PRINT THIS PAGE Please select 'Current Page' to

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BILL OF MATERIAL	
Parts	Quantity
AQ252M2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043A	4
DHW PUMP	1
MIXING PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

#### Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

- Thermostatic Mixing Valve AM Series AMX Series
- Pressure Reducing Valve
- DS05
- DS06

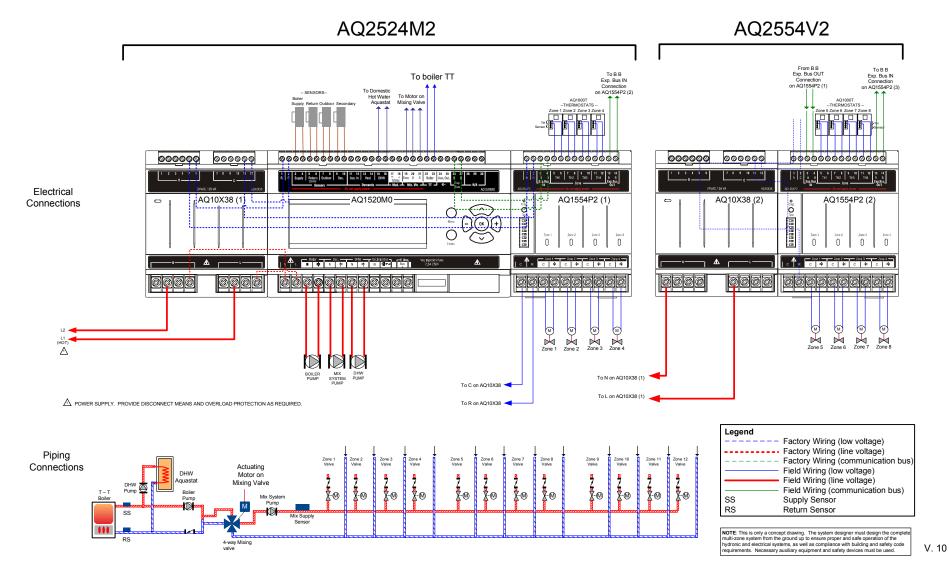
V. 10

Zone

M

Zone 4

### AQ2524M2 + AQ2554V2



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BILL OF MATERIAL	
Parts	Quantity
AQ252M2	1
AQ2554V2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE VALVES - V8043A	8
DHW PUMP	1
MIXING PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

#### Hydronic Controls

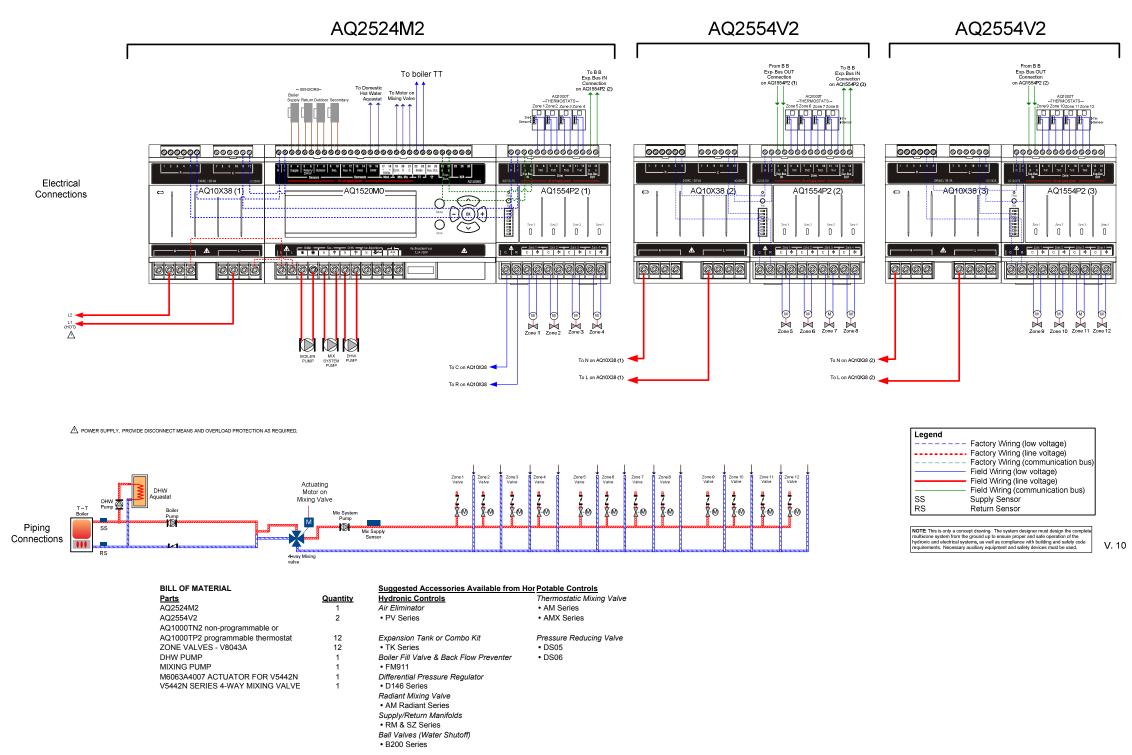
Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

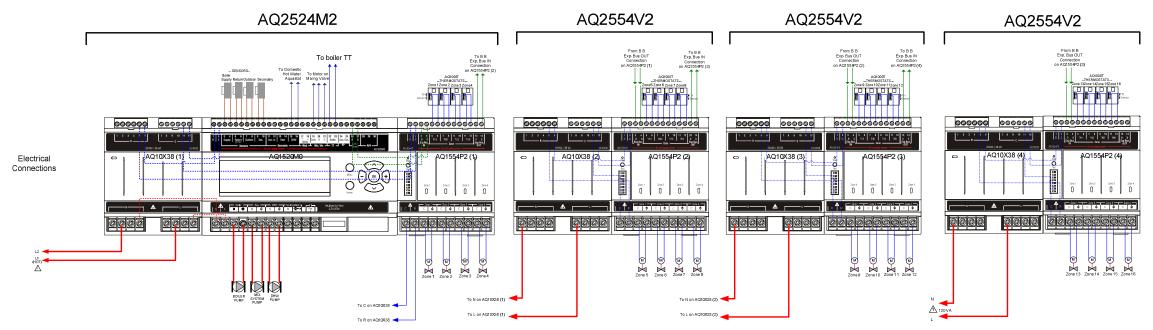
Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06

### AQ2524M2 + AQ2554V2 (2)

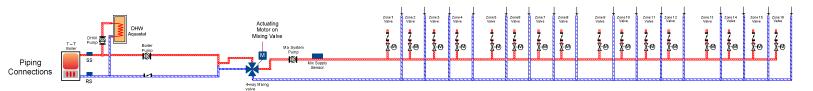
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### AQ2524M2 + AQ2554V2 (3)



△ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.



# Legend -----Factory Wiring (low voltage) ------Factory Wiring (ine voltage) ------Field Wiring (ow voltage) ------Field Wiring (low voltage) ------Field Wiring (low voltage) -------SS Supply Sensor RS Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multicone system from the ground up to ensure proper and sets operation of the hydronic and exercical systems, as were as compliance with building and safety code requirements. Necessary suxiliary equipment and safety devices must be used.

#### BILL OF MATERIAL

Parts
AQ2524M2
AQ2554V2
AQ1000TN2 non-programmable or
AQ1000TP2 programmable thermostat
ZONE VALVES - V8043A
DHW PUMP
MIXING PUMP
M6063A4007 ACTUATOR FOR V5442N
V5442N SERIES 4-WAY MIXING VALVE

Suggested Accessories Available from HorPotable Controls		
Hydronic Controls	Thermostatic Mixing Valve	
Air Eliminator	AM Series	
PV Series	AMX Series	
Expansion Tank or Combo Kit • TK Series	Pressure Reducing Valve • DS05	
Boiler Fill Valve & Back Flow Preventer	• DS05	
FM911	• D306	
Differential Pressure Regulator		
D146 Series		
Radiant Mixing Valve		
<ul> <li>AM Radiant Series</li> </ul>		
Supply/Return Manifolds		
DM & S7 Series		

- RM & SZ Series
- Ball Valves (Water Shutoff) • B200 Series

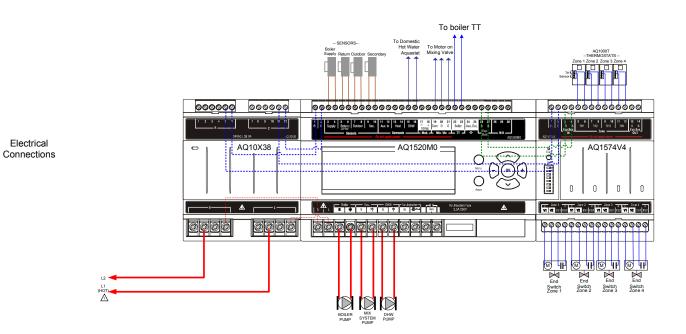
Quantity

3

16

16

### AQ2524M4





Legend	
	<ul> <li>– Factory Wiring (low voltage)</li> </ul>
	<ul> <li>Factory Wiring (line voltage)</li> </ul>
	Factory Wiring (communication bus
	<ul> <li>Field Wiring (low voltage)</li> </ul>
	<ul> <li>Field Wiring (line voltage)</li> </ul>
	— Field Wiring (communication bus)
SS	Supply Sensor
RS	Return Sensor

NOTE: This is only a concept drawing. The system designer must design the comple multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

BILL OF MATERIAL	
Parts	Quantity
AQ2524M4	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043E/F	4
DHW PUMP	1
MIXING PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

#### Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### Potable Controls

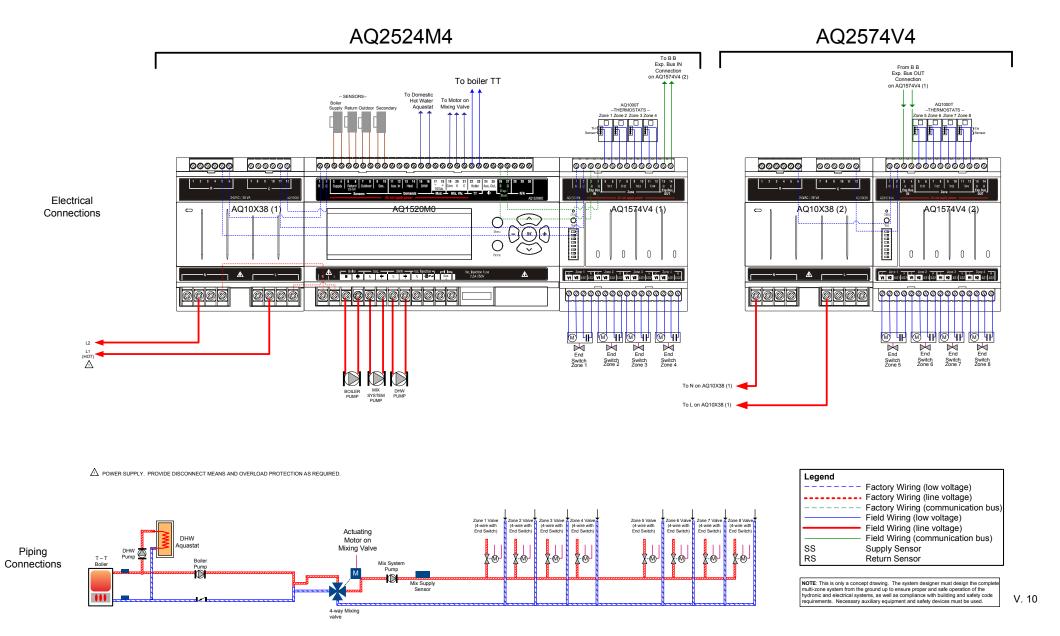
- Thermostatic Mixing Valve AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06

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### AQ2524M4 + AQ2574V4



BILL OF MATERIAL	
Parts_	Quantity
AQ2524M4	1
AQ2574V4	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE VALVES - V8043E/F	8
DHW PUMP	1
MIXING PUMP	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1



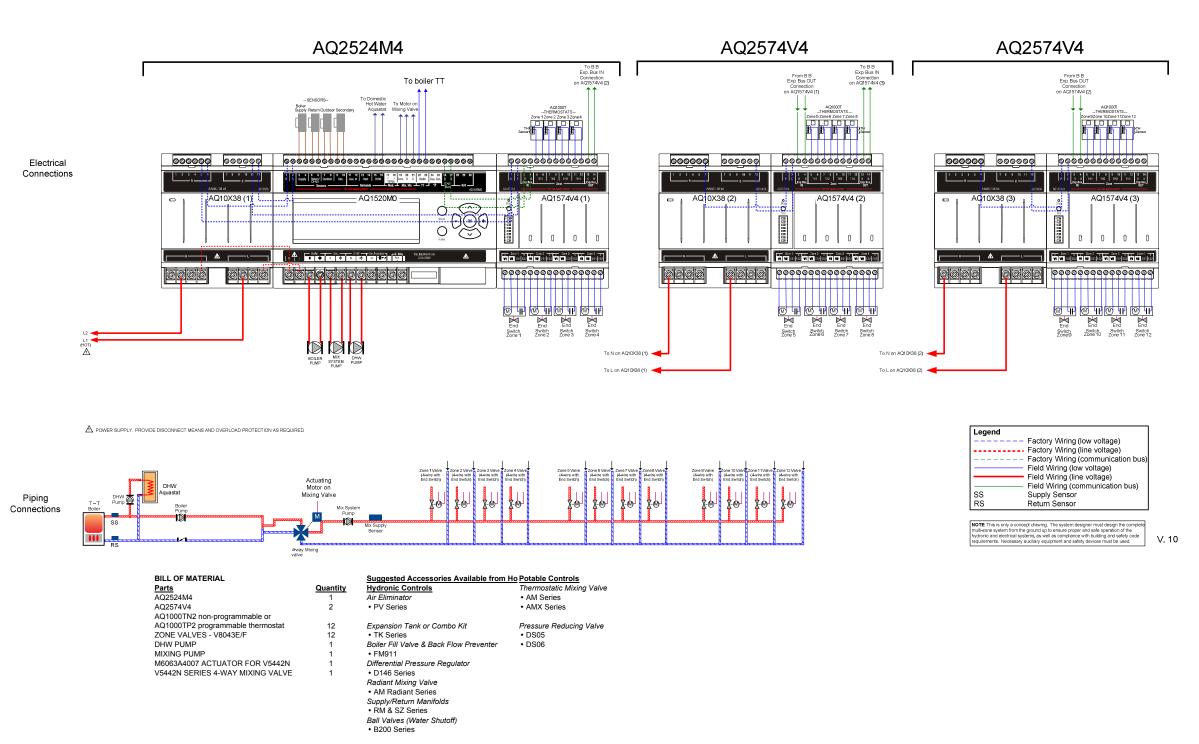
Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

### Potable Controls

Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05

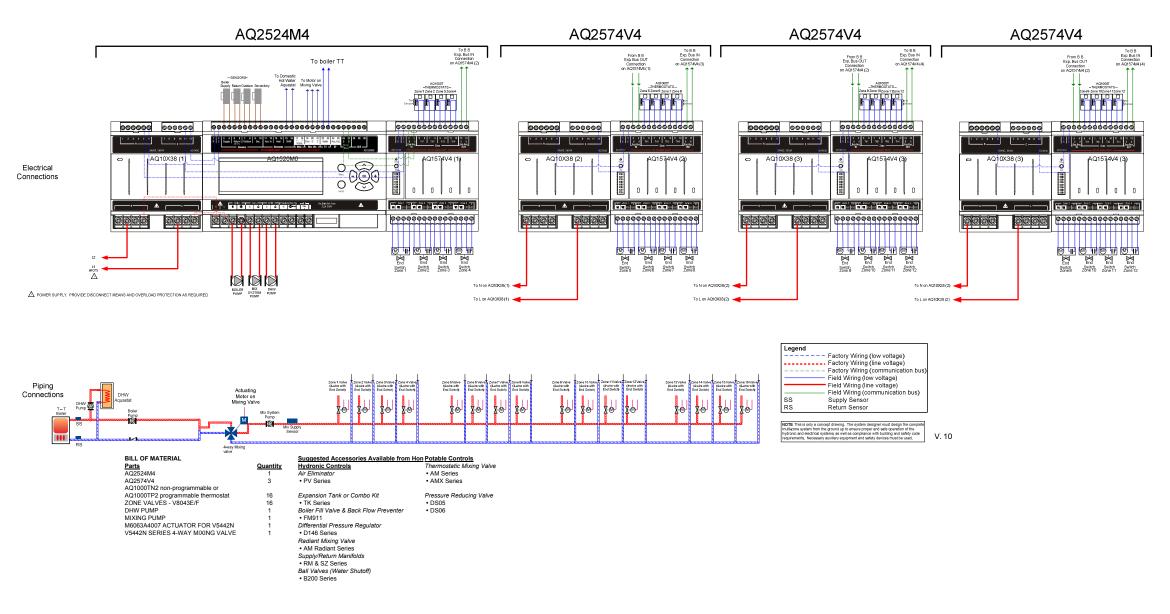
• DS06

### AQ2524M4 + AQ2574V4 (2)



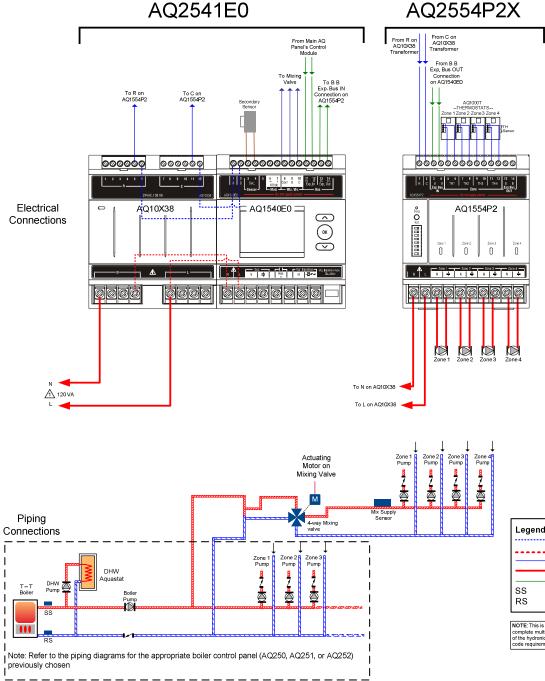
### AQ2524M4 + AQ2574V4 (3)





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### AQ2541E0 + AQ2554P2X (Pumps)



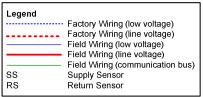
BILL OF MATERIAL	
Parts	Quantity
AQ2541E0	1
AQ2554P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE PUMPS	4
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

Air Eliminator • PV Series Expansion Tank or Combo Kit • TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator • D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series

#### Potable Controls

\_....

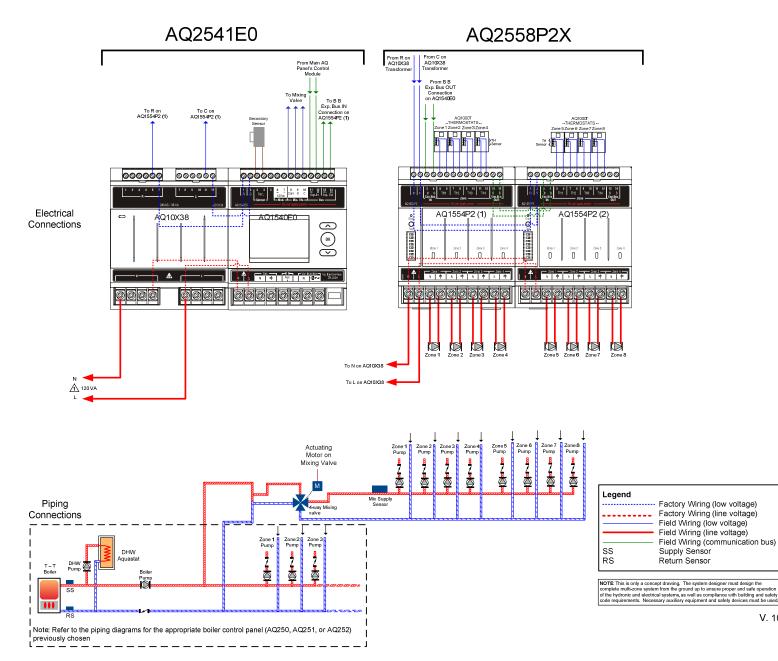
Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05 • DS06



NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydroin and lectrical systems, as well as compliance with building and safet code requirements. Necessary auxiliary equipment and safety devices must be used to be

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### AQ2541E0 + AQ2558P2X



BILL OF MATERIAL	
Parts	Quantity
AQ2541E0	1
AQ2558P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE PUMPS	8
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1
Air Eliminator	
PV Series	
Expansion Tank or Combo Kit • TK Series	

IK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds RM & SZ Series

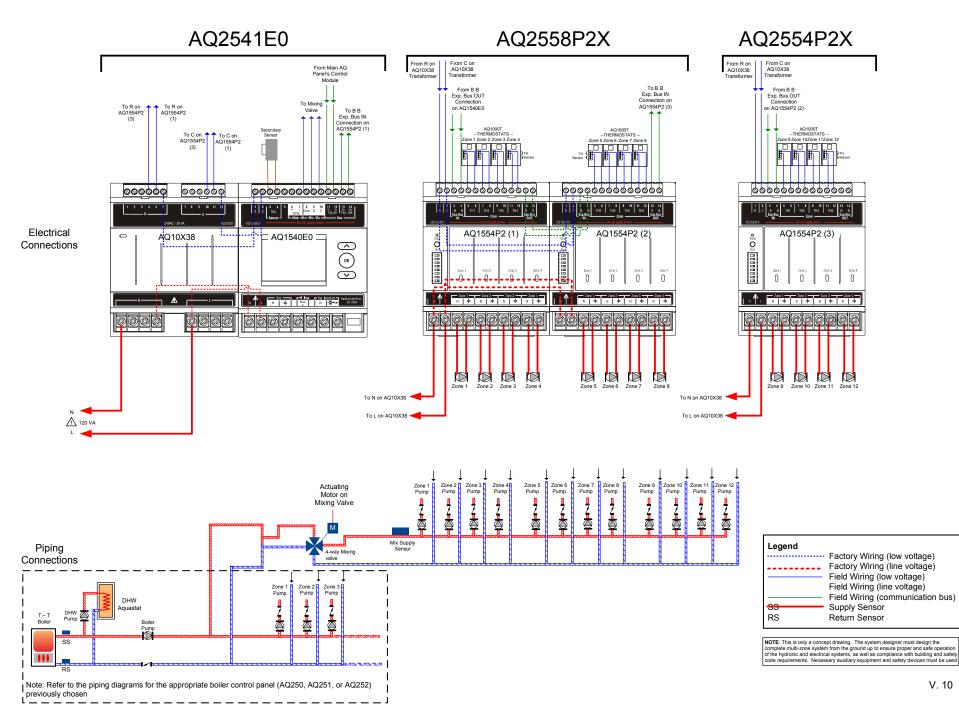
Ball Valves (Water Shutoff)

### B200 Series

### Potable Controls

- Thermostatic Mixing Valve AM Series
- AMX Series
- Pressure Reducing Valve
- DS05
- DS06

### AQ2541E0 + AQ2558P2X + AQ2554P2X



AQ2541E0	1
AQ2558P2X	1
AQ2554P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	12
ZONE PUMPS	12
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1
Air Eliminator	
PV Series	
Expansion Tank or Combo Kit	

Quantity

Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

BILL OF MATERIAL

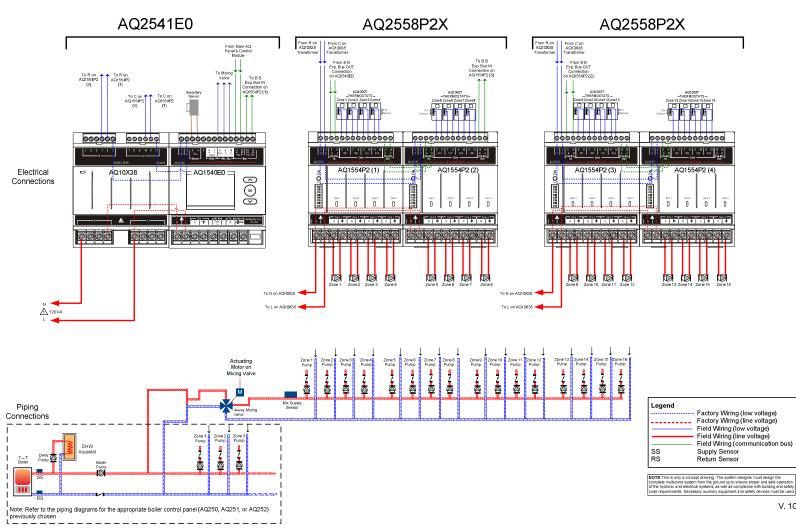
Parts

Potable Controls Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve DS05 • DS06

### BACK TO ADDITIONAL WATER TEMPERATURES

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### AQ2541E0 + AQ2558P2X (2)



#### BILL OF MATERIAL Parts AQ2541E0 Quantity AQ2558P2X AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat ZONE PUMPS MIXING PUMP MIXING VALVE M6063A4007 ACTUATOR FOR V5442N V5442N SERIES 4-WAY MIXING VALVE

1

2

16

16

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

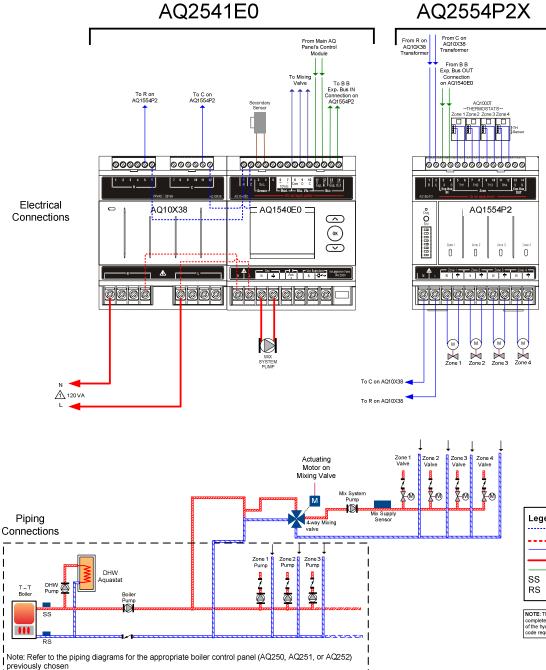
Potable Controls

V. 10

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve DS05 • DS06

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### AQ2541E0 + AQ2554P2X (Valves)



Parts	Quantity
AQ252M2	1
AQ2554P2X	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043A	4
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1
Air Eliminator • PV Series	
Expansion Tank or Combo Kit	
TK Series	
Boiler Fill Valve & Back Flow Preventer	
• FM911	
Differential Dressure Degulator	

Simplify the second secon

### Potable Controls

BILL OF MATERIAL

- Thermostatic Mixing Valve • AM Series • AMX Series Pressure Reducing Valve • DS05
- DS06

 Legend
 Factory Wiring (low voltage)

 Factory Wiring (line voltage)
 Field Wiring (low voltage)

 Field Wiring (low voltage)
 Field Wiring (low voltage)

 Field Wiring (communication bus)
 SS

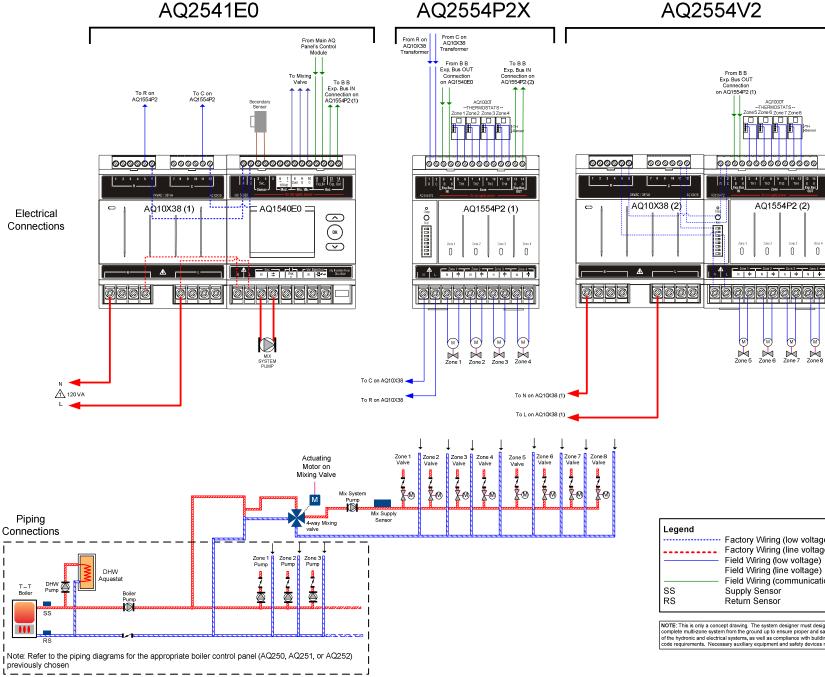
 SS
 Supply Sensor

 RS
 Return Sensor

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used.

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### AQ2541E0 + AQ2554P2X + AQ2554V2



BILL OF MATERIAL	
Parts	Quantity
AQ2541E0	1
AQ2554P2X	1
AQ2554V2	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	8
ZONE VALVES - V8043A	8
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

#### Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### **Potable Controls**

Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

### Factory Wiring (low voltage) Factory Wiring (line voltage) Field Wiring (low voltage) Field Wiring (line voltage) Field Wiring (communication bus)

NOTE: This is only a concept drawing. The system designer must design the complete multi-zone system from the ground up to ensure proper and safe operation of the hydronic and electrical systems, as well as compliance with building and safety code requirements. Necessary auxiliary equipment and safety devices must be used

### BACK TO ADDITIONAL WATER TEMPERATURES

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Quantity

2

12

12

1

BILL OF MATERIAL

AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat

M6063A4007 ACTUATOR FOR V5442N

V5442N SERIES 4-WAY MIXING VALVE

ZONE VALVES - V8043A

Parts

AQ2541E0

AQ2554V2

AQ2554P2X

MIXING PUMP

MIXING VALVE

Hydronic Controls

Expansion Tank or Combo Kit

Differential Pressure Regulator

Boiler Fill Valve & Back Flow Preventer

Air Eliminator

PV Series

TK Series

• D146 Series Radiant Mixing Valve

B200 Series

• DS05

• DS06

Potable Controls

AM Radiant Series

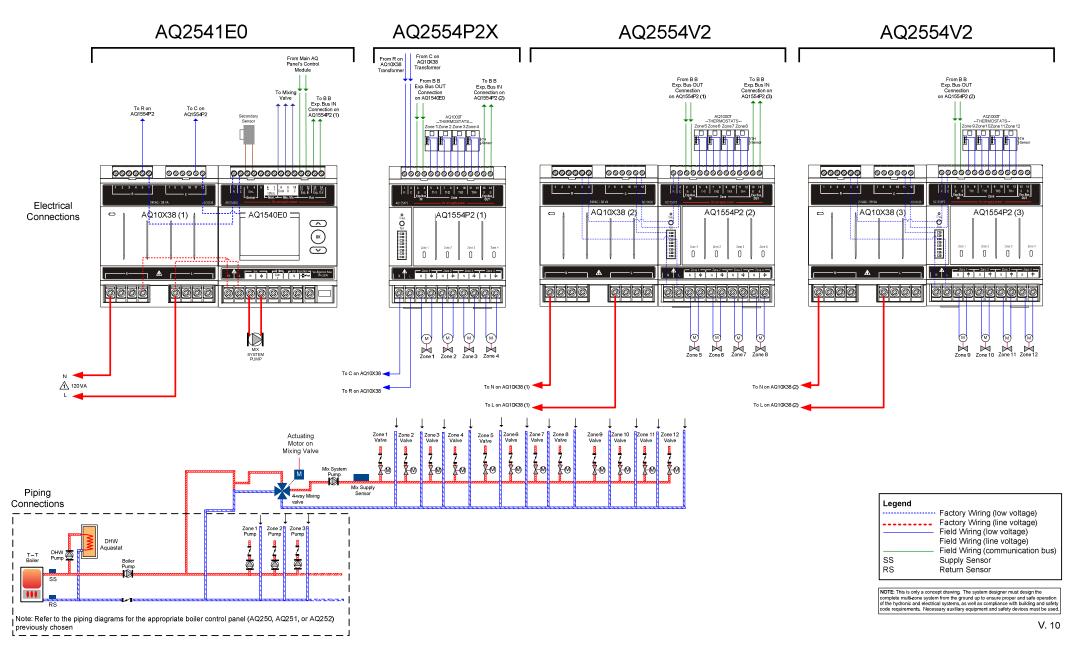
Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff)

Thermostatic Mixing Valve • AM Series • AMX Series

Pressure Reducing Valve

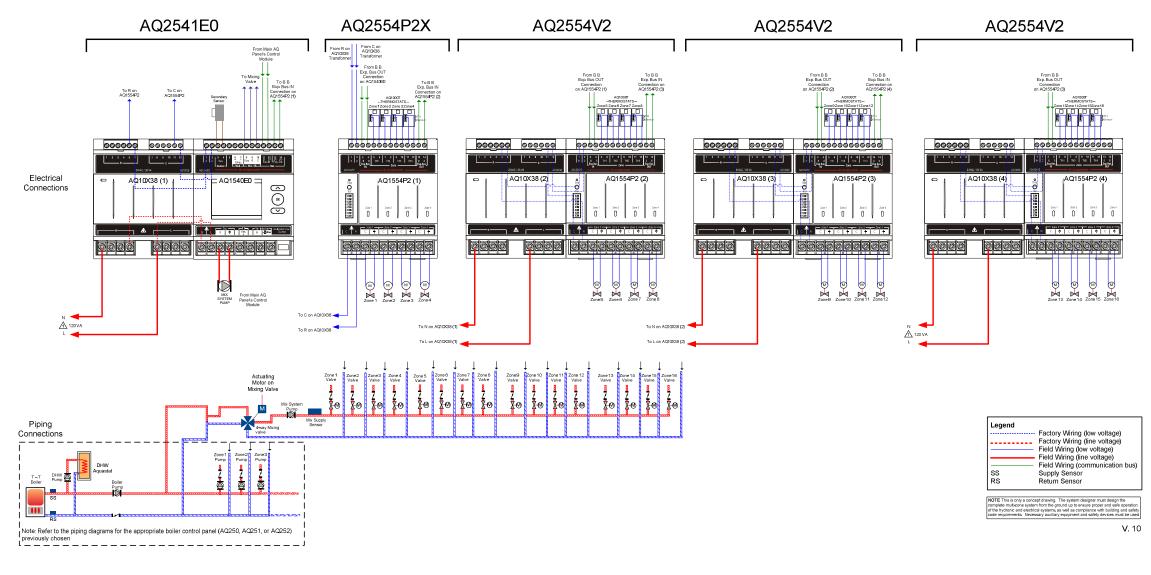
• FM911

### AQ2541E0 + AQ2554P2X + AQ2554V2 (2)





### AQ2541E0 + AQ2554P2X + AQ2554V2 (3)



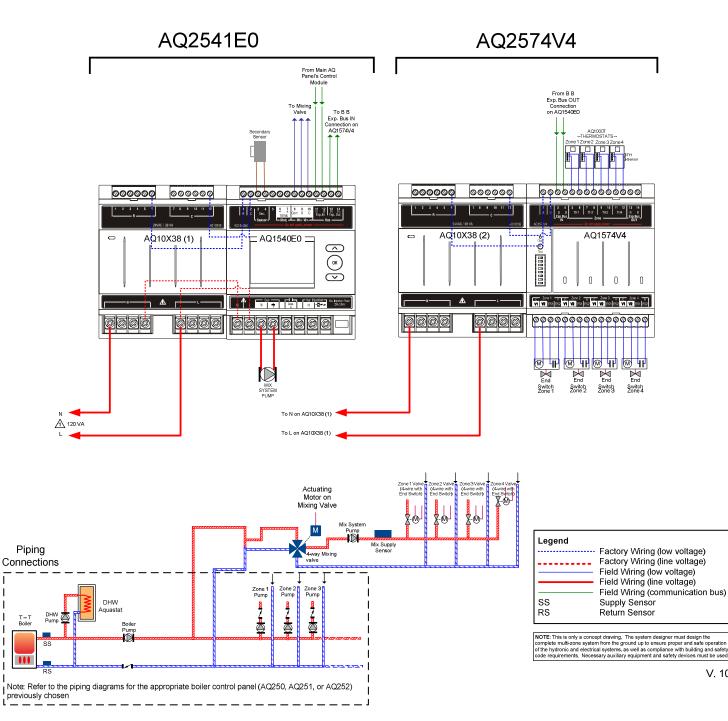
BILL	OF	MAT	ERIAL

Parts
AQ2541E0
AQ2554P2X
AQ2554V2
AQ1000TN2 non-programmable or
AQ1000TP2 programmable thermostat
ZONE VALVES • V8043A
MIXING PUMP
MIXING VALVE
M6063A4007 ACTUATOR FOR V5442N
V5442N SERIES 4-WAY MIXING VALVE

Suggested Accessories Available from Honeywell:			
Quantity	Hydronic Controls	Potable Controls	
1	Air Eliminator	Thermostatic Mixing Valve	
1	PV Series	AM Series	
3	Expansion Tank or Combo Kit	AMX Series	
16	TK Series	Pressure Reducing Valve	
16	Boiler Fill Valve & Back Flow Preventer	• DS05	
1	• FM911	• DS06	
1	Differential Pressure Regulator		
1	D146 Series		
1	Radiant Mixing Valve • AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) • B200 Series		

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### AQ2541E0 + AQ2574V4



BILL OF MATERIAL	
Parts	Quantity
AQ2541E0	1
AQ2574V4	1
AQ1000TN2 non-programmable or	
AQ1000TP2 programmable thermostat	4
ZONE VALVES - V8043E/F	4
MIXING PUMP	1
MIXING VALVE	1
M6063A4007 ACTUATOR FOR V5442N	1
V5442N SERIES 4-WAY MIXING VALVE	1

Hydronic Controls

Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve · AM Radiant Series Supply/Return Manifolds • RM & SZ Series Ball Valves (Water Shutoff) B200 Series

#### **Potable Controls**

Thermostatic Mixing Valve

AM Series

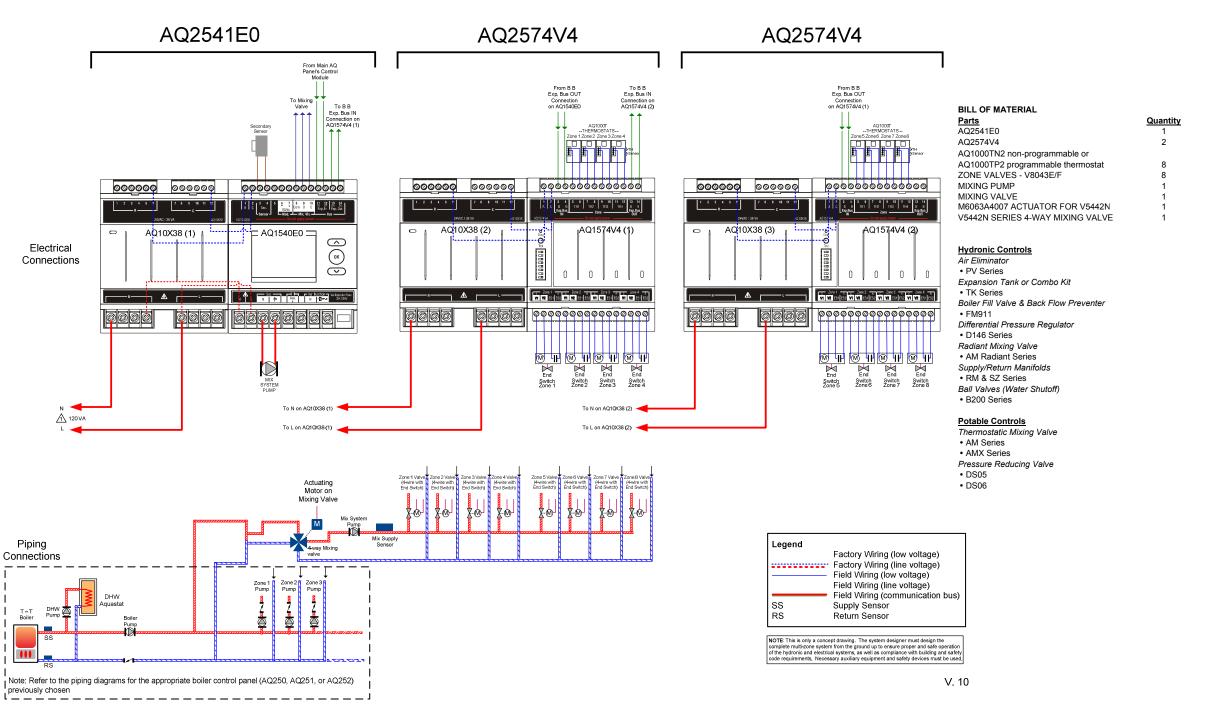
AMX Series

Pressure Reducing Valve

- DS05
- DS06

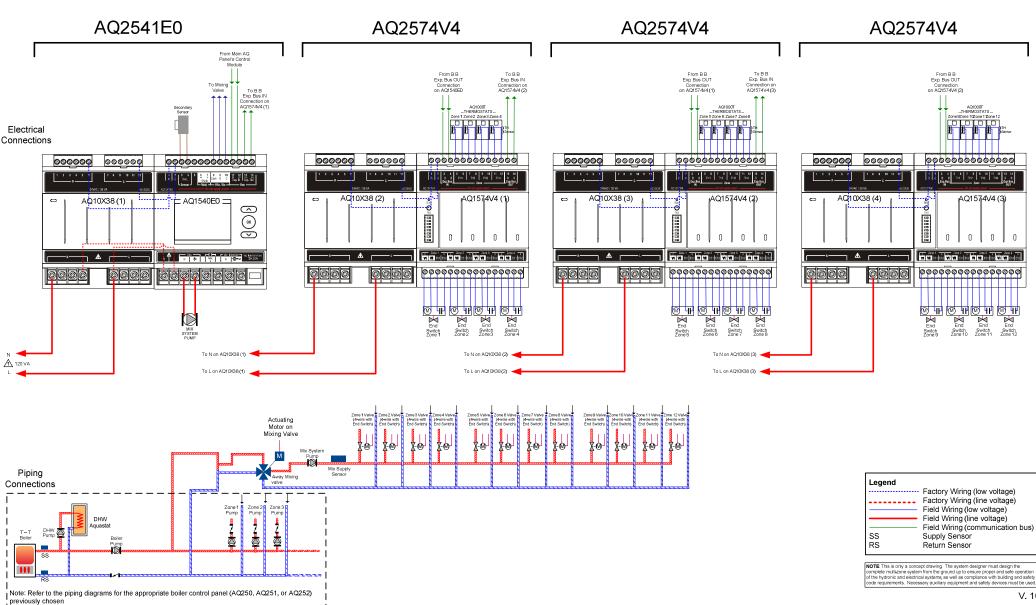
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### AQ2541E0 + AQ2574V4 (2)



### BACK TO ADDITIONAL WATER TEMPERATURES

## AQ2541E0 + AQ2574V4 (3)

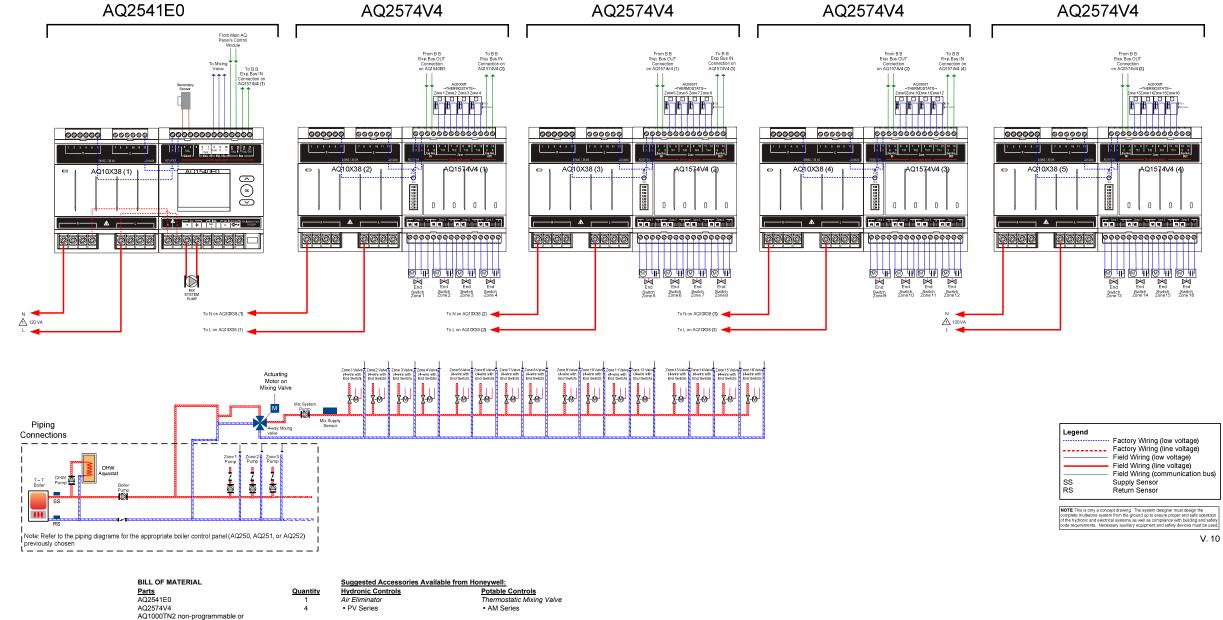


BILL OF MATERIAL Parts Quantity AQ2541E0 AQ2574V4 3 AQ1000TN2 non-programmable or AQ1000TP2 programmable thermostat 12 ZONE VALVES - V8043E/F 12 MIXING PUMP MIXING VALVE 1 M6063A4007 ACTUATOR FOR V5442N V5442N SERIES 4-WAY MIXING VALVE 1

Hydronic Controls Air Eliminator PV Series Expansion Tank or Combo Kit TK Series Boiler Fill Valve & Back Flow Preventer • FM911 Differential Pressure Regulator D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

Potable Controls Thermostatic Mixing Valve AM Series AMX Series Pressure Reducing Valve • DS05 • DS06

### AQ2541E0 + AQ2574V4 (4)



AQ1000TP2 programmable thermostat ZONE VALVES • V8043E/F MIXING PUMP MIXING VALVE M6063A4007 ACTUATOR FOR V5442N V5442N SERIES 4-WAY MIXING VALVE

16

16

TK Series

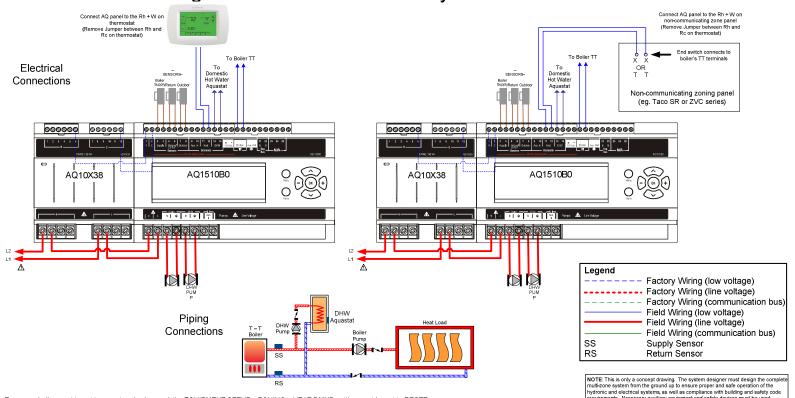
 D146 Series Radiant Mixing Valve AM Radiant Series Supply/Return Manifolds RM & SZ Series Ball Valves (Water Shutoff) B200 Series

• FM911

Expansion Tank or Combo Kit AMX Series Pressure Reducing Valve Boiler Fill Valve & Back Flow Preventer • DS05 • DS06 Differential Pressure Regulator

### BACK TO SPECIAL WIRING DIAGRAMS

Wiring Diagram for AQ2511B0 Boiler Reset Panel Connected to a Non-communicating Thermostat or Zone Relay Panel



Note: 1. To ensure boiler reset target temperature is observed, the EQUIPMENT SETUP > ZONING > HEAT DMND setting must be set to RESET. 2. Installation requires that a non-communicating (switch closure) thermostat or zone relay panel be connected to the HEAT input terminals (11 and 12) of the AQ2511BO.

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requirements. Necessary auxiliary equipment and safety devices must be used.

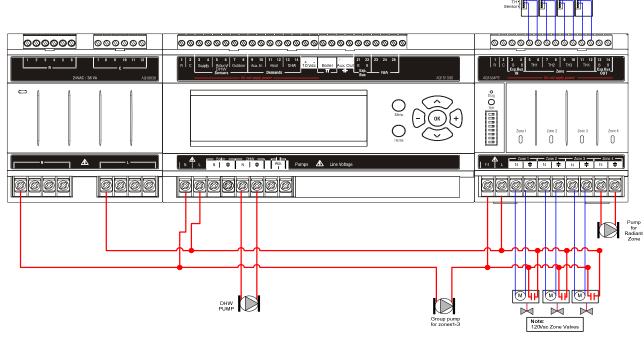
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one 1 Zone 2 Zone 3 Zone

### Combining Pump and Valve Zoning on the Same AQ2000 Zoning Module



1. This installation requires line voltage zone valves with end switches. Designer to choose a valve with suitable Cv

2. AQ1000 thermostat on a zone valve zone calls, which energizes the motor of its zone valve

3. When fully open, the zone valve end switch "makes", energizing the zone valve "group pump"

4. DO NOT use the AUX.PUMP contacts to energize the zone valve group pump for this configuration

5. Set Zoning Module DIP switch # 5 to "VALVE" position and set zone valve opening time ("EQUIPMENT SETUP>ZONING>ZONE VALVES TIME TO OPEN")

appropriate to the zone valves selected e.g. 10 seconds for electric valves; 3-4 minutes for heat motor valves

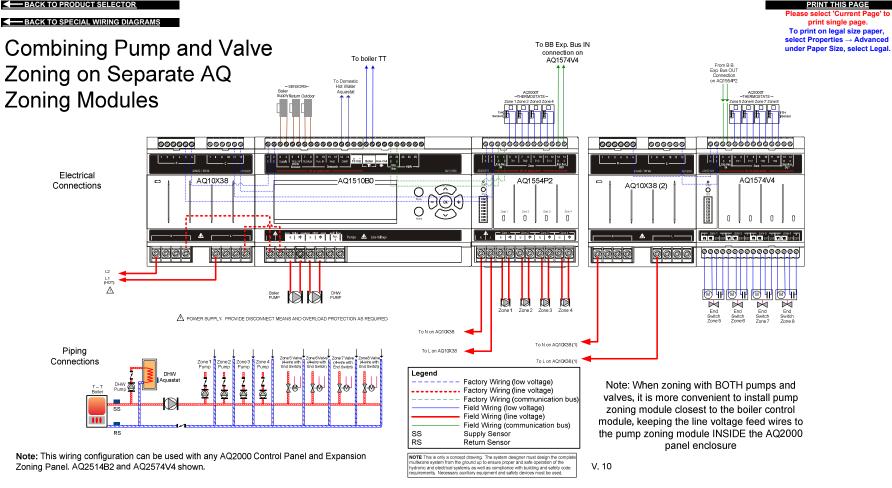
6. Do not need a BOILER pump connected

7. With this design, the group pump is energized ONLY when one or more of the zone valves is fully open. There is no interference between the pump on the

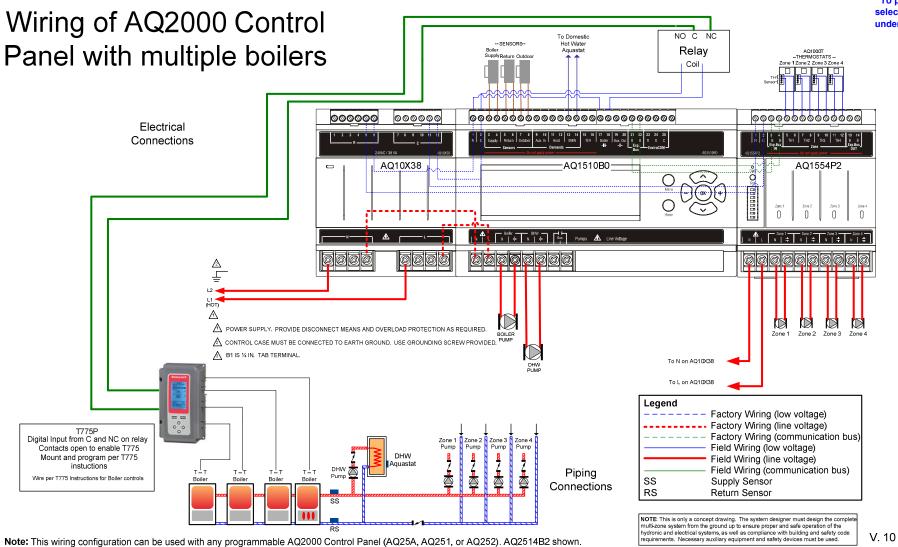
radiant zone and the group pump or its zone valves

8. Requires an AQ2514B2 (NOT an AQ2514B4)

Note: This wiring configuration can be used with any programmable AQ2000 Control Panel (AQ25A, AQ251, or AQ252). AQ2514B2 shown.



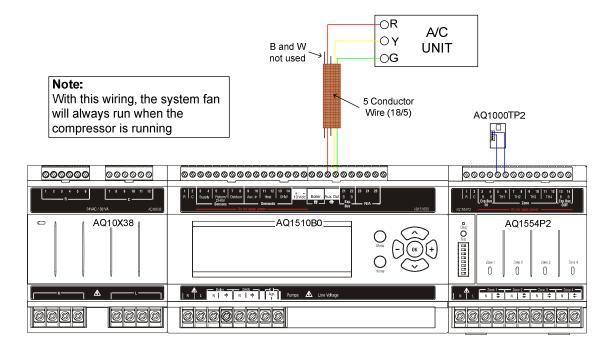
BACK TO SPECIAL WIRING DIAGRAMS



BACK TO SPECIAL WIRING DIAGRAMS

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### AQ2000 Control Panel Wiring for One Zone of AC



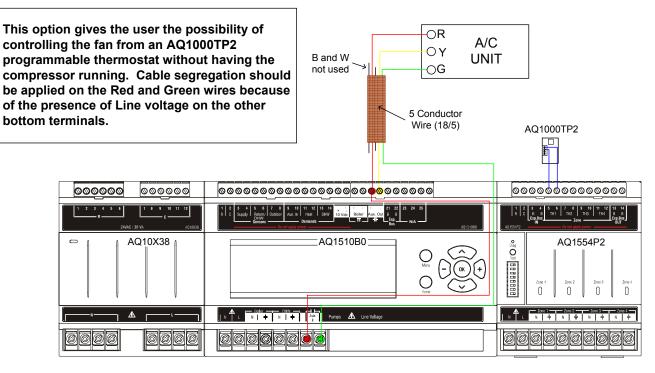
Note: This wiring configuration can be used with any programmable AQ2000 Control Panel (AQ25A, AQ251, or AQ252). AQ2514B2 shown.

BACK TO SPECIAL WIRING DIAGRAMS

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### AQ2000 Control Panel Wiring for One Zone of AC With Fan



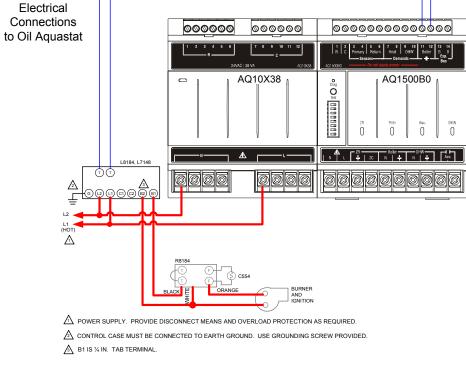
Note: This wiring configuration can be used with any programmable AQ2000 Control Panel (AQ25A, AQ251, or AQ252). AQ2514B2 shown.

BACK TO SPECIAL WIRING DIAGRAMS

### PRINT THIS PAGE

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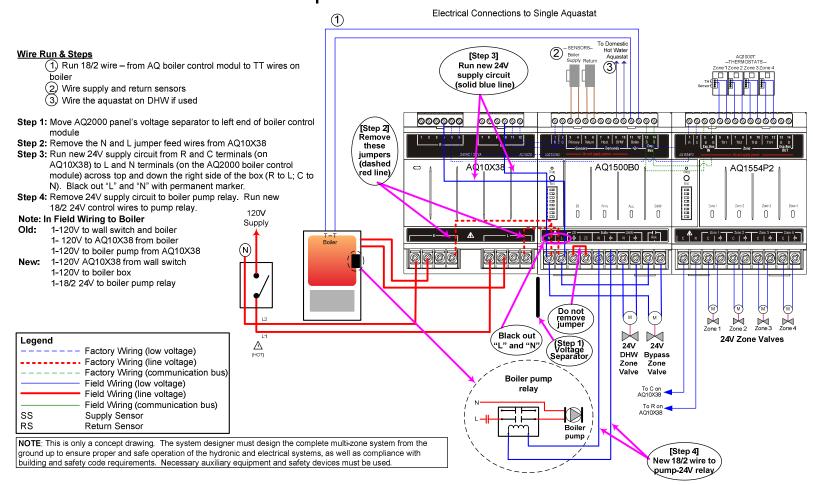
# AQ2000 Control Panel Wiring To Oil Aquastat



Note: This wiring configuration can be used with any AQ2000 Control Panel (AQ250, AQ25A, AQ251, AQ252). AQ250 shown.

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# Wiring Diagram for using a 24V zone valve on DHW loop



#### BACK TO PRODUCT SELECTOR

1.

2.

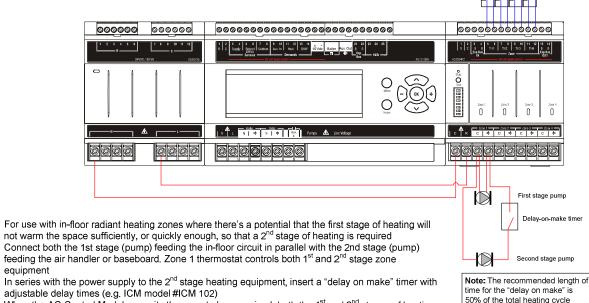
З.

equipment

### BACK TO SPECIAL WIRING DIAGRAMS

### AQ2000 Control Panel Wiring for Two Stage Zone Control

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When the AQ Control Module permits the zone to be energized, both the 1<sup>st</sup> and 2<sup>nd</sup> stages of heating 4. equipment are powered, but the 2<sup>rd</sup> stage equipment does not run until the "delay on make" expires

5. If the zone temperature reaches set point before the 2<sup>nd</sup> stage is brought on, the heating cycle ends, the zone outputs are de-energized, and the "delay on make" timer is reset for the next cycle

Note: This wiring configuration can be used with any AQ Control Panel (AQ250, AQ254, AQ251, or AQ252). AQ2514B2 shown.

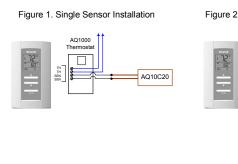
V. 10

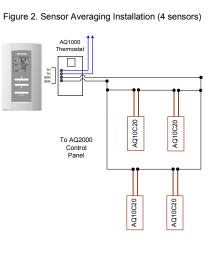
length e.g. for 2 cycles per hour

(30 minutes cycle length), the

"delay on make" time setting should be 15 minutes

### Wiring of Single and Multiple (Averaging) Sensor Installations





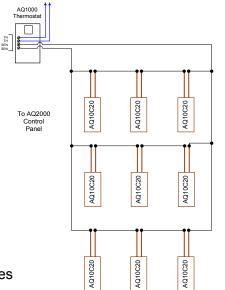


Figure 3. Sensor Averaging Installation (9 sensors)

### Note:

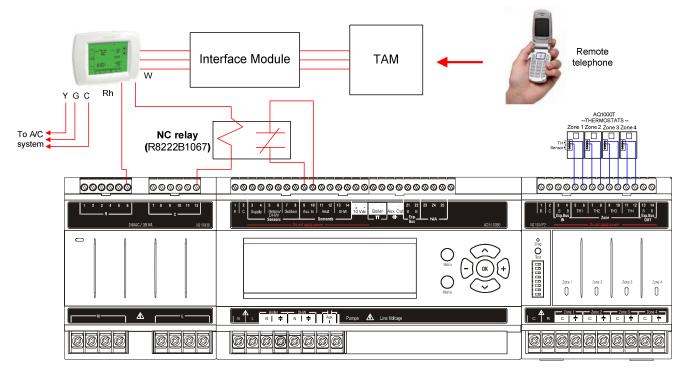
If multiple floor / slab sensors are required to obtain an average floor temperature for a large, single zone they must be arranged in a "series and parallel" wiring configuration for temperature averaging. This network consists of four or nine sensors, as shown in Figures 2 and 3

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## Wiring of VisionPRO IAQ and NC Relay to Aux-In

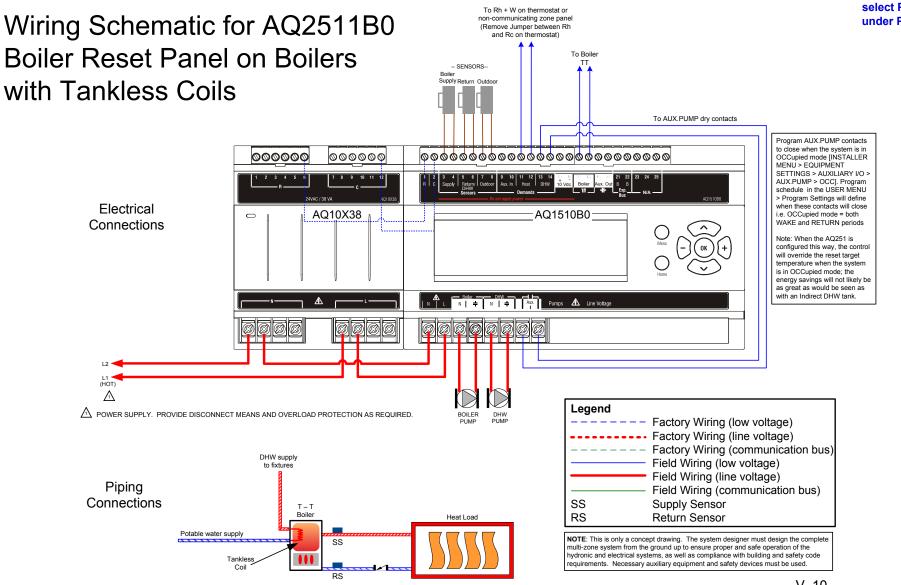
(for remote dial-in to bring system out of vacancy mode)



- 1. Set VisionPRO IAQ Occupied setpoint to 80 F; Vacancy setpoint to 40 F
- 2. Set AQ1000 zone thermostats Occupied setpoint to 68 F; Vacancy setpoint to 45 F
- 3. Locate the VisionPRO IAQ thermostat in an upper hallway and AQ1000 thermostats in the zones (rooms)
- 4. Configure the AQ251 to put system into "Vacancy setpoint" mode when its Aux. In terminals are shorted
- 5. Power the control circuit of the NC relay with 24VAC from the AQ10X38 transformer)
- 6. On a call for heat from the VisionPRO IAQ, the R<sub>h</sub> and W terminals close, powering the relay and opening the Aux.In terminals; the heating of the house is under the AQ251's control as long as the room temperature (where the VisionPRO IAQ is located) is less than 80 F
- 7. When the VisionPRO IAQ is put into Vacancy mode (remotely, by the TAM), the VisionPRO IAQ's setpoint is adjusted down to 40 F and it will call for heat (and its R<sub>h</sub> and W terminals will be closed) as long as the room temperature (where the VisionPRO IAQ is located) remains 40 F or less. In this range, the AQ251 is again controlling the temperature of the zones at the Occupied setting (68 F) and will do so until the temperature of the room increases to > 40 F or above.
- 8. In a shoulder season, where outdoor temperature could be >40 F, the VisionPRO IAQ (with Vacancy setpoint of 40 F) will have no call for heat so its R<sub>h</sub>

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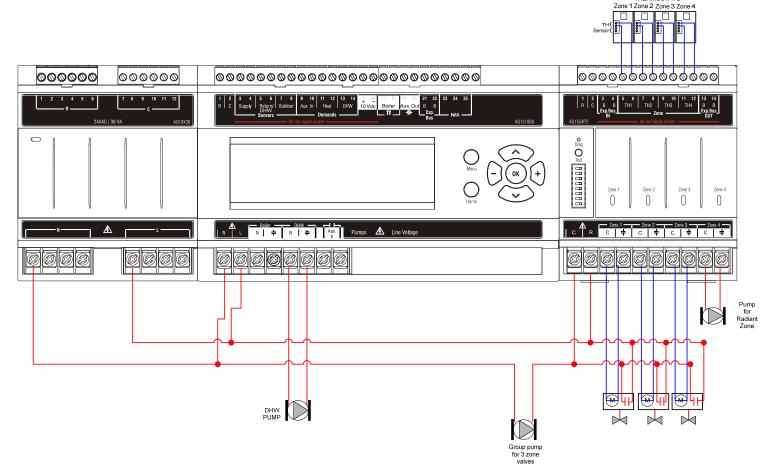


BACK TO SPECIAL WIRING DIAGRAMS

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AQ1000T --THERMOSTATS --



- 1. AQ1000 thermostat on a zone valve zone calls, which energizes the motor of its zone valve
- 2. When fully open, the zone valve end switch "makes", energizing the zone valve "group pump"
- 3. DO NOT use the AUX.PUMP contacts to energize the zone valve group pump

Group Pump Wiring and Sequence of Operation

- 4. Set Zoning Module DIP switch # 5 to "PUMP" position
- 5. Do not need a BOILER pump connected
- 6. This in installation requires line voltage zone valves with end switches. Designer to choose a valve with suitable Cv
- 7. With this design, the group pump is energized ONLY when one or more of the zone valves is fully open and there is not interference between the pump on the radiant zone and the group pump or its zone valves
- 8. Requires an AQ2514B2 (NOT an AQ2514B4)

#### Selection Procedure:

- When using AQ2000 controls, selecting components could not be easier. All it takes are four easy steps.
- **1**. Select whether the boiler supply water temperature is reset by the AQ control or not
- 2. Select zoning equipment (pumps, 2-wire valves or 4-wire valves with end switches)
- 3. Select number of space heating zones

4. For systems with more than 2 controlled water temperatures, each additonal mixed temperature will require an AQ2541E0 expansion

control panel plus sufficient zoning modules to manage the zones associated with the additional water temperature

	1			No	Reset		Reset							
		Non-Programmable				Programmable		One	e system tempera	iture	Two	system temperat	ures	
		Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	
	1 zone								<u>AQ2511B0</u>					
		AQ2504B2			<u>AQ25A4B2</u>			AQ2514B2			<u>AQ2524M2</u>			
	2-4 zones		AQ2504B2			AQ25A4B2			AQ2514B2			<u>AQ2524M2</u>		
				<u>AQ2504B4</u>			<u>AQ25A4B4</u>			<u>AQ2514B4</u>			<u>AQ2524M4</u>	
		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>			<u>AQ2514B2 +</u>						
		<u>AQ2554P2X</u>			<u>AQ2554P2X</u>	AQ25A4B2 +		<u>AQ2554P2X</u>			Two system temperatures           alves end hes         Zone pumps         Zone valves wire)         Zone valves with end switches           AQ2524M2         AQ2524M2         AQ2524M2           AQ2524M2         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2558P2X         AQ2524M2         AQ2524M2           +AQ2558P2X         AQ2524M2         AQ2524M4           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M2           +AQ2554P2X         AQ2524M2         AQ2524M4 <td></td>			
ç	5-8 zones		<u>AQ2504B2 +</u>			AQ2554V2			<u>AQ2514B2 +</u>					
tio			<u>AQ2554V2</u>	AQ2504B4 +		<u>AQ2004V2</u>	AQ25A4B4 +		<u>AQ2554V2</u>	AQ2514B4 +		002524144		
Selection				AQ250464 + AQ2574V4			AQ2574V4			AQ2574V4				
		AQ2504B2 +		AQZOTTVT	AQ25A4B2 +			AQ2514B2 +		AQZOTIVI	AQ2524M2		<u>-//Q20/+/+</u>	
an a		AQ2558P2X			AQ2558P2X			AQ2558P2X						
ğ	9-12		AQ2504B2 +			<u>AQ25A4B2 +</u>			AQ2514B2 +			AQ2524M2		
D D	zones		<u>AQ2554V2 (2)</u>			<u>AQ2554V2 (2)</u>			<u>AQ2554V2 (2)</u>			+AQ2554V2 (2)		
Zoning Module				<u>AQ2504B4 +</u>			<u>AQ25A4B4 +</u>			<u>AQ2514B4 +</u>			<u>AQ2524M4</u>	
Zc				AQ2574V4 (2)			<u>AQ2574V4 (2)</u>			<u>AQ2574V4 (2)</u>			+AQ2574V4 (2)	
		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u> AQ2558P2X +			<u>AQ2514B2 +</u>						
		<u>AQ2558P2X +</u> AQ2554P2X			AQ2554P2X			<u>AQ2558P2X +</u> AQ2554P2X						
	13-16		AQ2504B2 +		110200112/1	AQ25A4B2 +		<u>AQ200412A</u>	AQ2514B2 +			AO2524M2		
	zones		AQ2554V2 (3)			AQ2554V2 (3)			AQ2554V2 (3)					
				AQ2504B4 +			AQ25A4B4 +			AQ2514B4 +			AQ2524M4	
				AQ2574V4 (3)			AQ2574V4 (3)			AQ2574V4 (3)			+AQ2574V4 (3)	
				<u>AQ2014V4 (0)</u>	L	1		l		<u>AQ2014V4 (0)</u>			<u> AQ237474 (</u>	

Product Selector for Additional Water Temperatures
Wiring diagram for multiple Add-A-Temperature Modules
Wiring Instructions for Special Applications

### NOTE:

Below are links to wiring diagrams of the AQ2000 components in Visio, AutoCAD DWG and AutoCAD DXF Formats Click on the applicable file format to access the diagrams' Table of Contents

\*AQ2511BO panel requires either a conventional, non-communicating thermostat OR a switching relay input. It does NOT use AQ1000 communicating thermostats

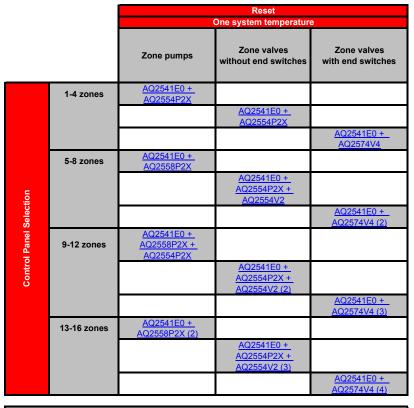
PDF version

AutoCAD DWG Version

Selection Procedure:

- When using AQ2000 controls for more than two water temperatures:
- 1. Select the AQ2000 panel
- 2. Select the quantity of expansion control panels needed using the AQ254 selection tool
- 3. Save the result (drawing) for each selection in a separate file.

Print out the drawings, OR - if using Visio or AutoCAD - combine them all into one system drawing



Wiring diagram for multiple Add-A-Temperature Modules Wiring Instructions for Special Applications

### NOTE:

Below are diagrams of the AQ2000 components in Visio 2002, Visio 2003, AutoCAD DWG and AutoCAD DXF Format. Click on the respective version to access the diagrams' Table of Contents

### **PDF Version**

AutoCAD DWG Version

### **AQ2000 Wiring Instructions for Special Applications**

AQ2511BO Reset Panel with Connections to Non-Communicating Zoning Panel or Thermostat
Combining Pump and Valve Zoning on a Single Zoning Module
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AQ2000 Wiring to Oil Aquastat
Using a 24V Zone Valve for DHW & Bypass Valves (AQ2504B2 shown)
Two Stage Zone Control
Wiring for Single and Multiple (Averaging) Sensor Installations
Wiring of VisionPRO IAQ and NC Relay to Aux-In
AQ2511B0 with Tankless Coil
Group Pump Wiring and Sequence of Operation

Wiring diagram for multiple Add-A-Temperature Modules Additional Water Temperature Selector

### **PDF Version**

AutoCAD DWG Version

#### Selection Procedure:

When using AQ2000 controls, selecting components could not be easier. All it takes are four easy steps.

- **1.** Select whether the boiler supply water temperature is reset by the AQ control or not
- 2. Select zoning equipment (pumps, 2-wire valves or 4-wire valves with end switches)
- 3. Select number of space heating zones

4. For systems with more than 2 controlled water temperatures, each additonal mixed temperature will require an AQ2541E0 expansion

control panel plus sufficient zoning modules to manage the zones associated with the additional water temperature

				No I	Reset			Reset							
		Non-Programmable				Programmable		On	e system tempera	ture	Two	o system temperat	tures		
		Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches		
	1 zone								<u>AQ2511B0</u>						
		AQ2504B2			<u>AQ25A4B2</u>			AQ2514B2			AQ2524M2				
	2-4 zones		<u>AQ2504B2</u>			AQ25A4B2			<u>AQ2514B2</u>			<u>AQ2524M2</u>			
				AQ2504B4	AQ25A4B2 +		<u>AQ25A4B4</u>	10054450		<u>AQ2514B4</u>	100504140		<u>AQ2524M4</u>		
		<u>AQ2504B2 +</u> <u>AQ2554P2X</u>			AQ2554P2X			<u>AQ2514B2 +</u> AQ2554P2X			<u>AQ2524M2</u> +AQ2554P2X				
		<u>AQ2334F2A</u>	AQ2504B2 +		10200112/	AQ25A4B2 +		<u>AQ2004F2A</u>	AQ2514B2 +		<u>+AQ2004F2A</u>	AQ2524M2			
u	5-8 zones		AQ2554V2			AQ2554V2			AQ2554V2			+AQ2554V2			
Selection				<u>AQ2504B4 +</u>			<u>AQ25A4B4 +</u>			<u>AQ2514B4 +</u>			AQ2524M4		
Sele				<u>AQ2574V4</u>			<u>AQ2574V4</u>			<u>AQ2574V4</u>			<u>+AQ2574V4</u>		
le		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>			<u>AQ2514B2 +</u>			AQ2524M2				
Module	9-12	<u>AQ2558P2X</u>	A 0.050 (D0 )		<u>AQ2558P2X</u>	AQ25A4B2 +		<u>AQ2558P2X</u>	40054450		+AQ2558P2X	100504140			
ž,	zones		<u>AQ2504B2 +</u> AQ2554V2 (2)			AQ2554V2 (2)			AQ2514B2 + AQ2554V2 (2)			<u>AQ2524M2</u> +AQ2554V2 (2)			
Zoning	_000		<u> </u>	AQ2504B4 +			AQ25A4B4 +		<u>/(0200+V2 (2)</u>	AQ2514B4 +		- TRQ200+V2 (2)	AQ2524M4		
Zor				AQ2574V4 (2)			AQ2574V4 (2)			AQ2574V4 (2)			+AQ2574V4 (2)		
		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>			<u>AQ2514B2 +</u>			AQ2524M2				
		<u>AQ2558P2X +</u>			<u>AQ2558P2X +</u>			<u>AQ2558P2X +</u>			+AQ2558P2X				
	13-16	<u>AQ2554P2X</u>	A 0.050 (D0 )		<u>AQ2554P2X</u>	AQ25A4B2 +		<u>AQ2554P2X</u>	A0054450 x	(2 wire) with end switches 22511B0 22514B2 AQ2514B4 2514B2 + 22554V2 AQ2514B4 + AQ2574V4 22514B2 + 2514B2 + 2514B4 +	+AQ2554P2X	100504140			
	zones		<u>AQ2504B2 +</u> AQ2554V2 (3)			AQ2554V2 (3)						<u>AQ2524M2</u> +AQ2554V2 (3)			
			<u> AQ2004V2 (0)</u>	AQ2504B4 +			AQ25A4B4 +		<u>AQ2004V2 (0)</u>	AQ2514B4 +		<u>- AQ2004V2 (0)</u>	AQ2524M4		
				AQ2574V4 (3)			AQ2574V4 (3)						+AQ2574V4 (3)		

Product Selector for Additional Water Temperatures
Wiring diagram for multiple Add-A-Temperature Modules
Wiring Instructions for Special Applications

### NOTE:

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\*AQ2511BO panel requires either a conventional, non-communicating thermostat OR a switching relay input. It does NOT use AQ1000 communicating thermostats

Visio Version PDF Version

#### BACK TO PRODUCT SELECTOR

### AQ2000 Series - Hydronic Controls Product Selector

AutoCAD DWG Version

#### Selection Procedure:

When using AQ2000 controls for more than two water temperatures:

- 1. Select the AQ2000 panel
- 2. Select the quantity of expansion control panels needed using the AQ254 selection tool
- 3. Save the result (drawing) for each selection in a separate file.
- Print out the drawings, OR if using Visio or AutoCAD combine them all into one system drawing

			Reset	
			One system temperature	9
		Zone pumps	Zone valves without end switches	Zone valves with end switches
	1-4 zones	<u>AQ2541E0 +</u> <u>AQ2554P2X</u>		
			<u>AQ2541E0 +</u> <u>AQ2554P2X</u>	
				<u>AQ2541E0 +</u> <u>AQ2574V4</u>
	5-8 zones	<u>AQ2541E0 +</u> <u>AQ2558P2X</u>	40054450	
tion			<u>AQ2541E0 +</u> <u>AQ2554P2X +</u> <u>AQ2554V2</u>	
Selec				<u>AQ2541E0 +</u> <u>AQ2574V4 (2)</u>
Control Panel Selection	9-12 zones	<u>AQ2541E0 +</u> <u>AQ2558P2X +</u> AQ2554P2X		
Contro			<u>AQ2541E0 +</u> <u>AQ2554P2X +</u> AQ2554V2 (2)	
				<u>AQ2541E0 +</u> <u>AQ2574V4 (3)</u>
	13-16 zones	<u>AQ2541E0 +</u> <u>AQ2558P2X (2)</u>		
			<u>AQ2541E0 +</u> <u>AQ2554P2X +</u> <u>AQ2554V2 (3)</u>	
				<u>AQ2541E0 +</u> <u>AQ2574V4 (4)</u>
W	<u>'iring diagram</u>	m for multiple A	dd-A-Temperatur	e Modules

Wiring Instructions for Special Applications

<u>NOTE:</u>

Below are diagrams of the AQ2000 components in Visio 2002, Visio 2003, AutoCAD DWG and AutoCAD DXF Format. Click on the respective version to access the diagrams' Table of Contents

### Visio Version

PDF Version

### **AQ2000 Wiring Instructions for Special Applications**

AQ2511BO Reset Panel with Connections to Non-Communicating Zoning Panel or Thermostat
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Wiring of VisionPRO IAQ and NC Relay to Aux-In
AQ2511B0 with Tankless Coil
Group Pump Wiring and Sequence of Operation

Wiring diagram for multiple Add-A-Temperature Modules Additional Water Temperature Selector

**Visio Version** 

**PDF Version** 

Selection Procedure:

- When using AQ2000 controls, selecting components could not be easier. All it takes are four easy steps.
- 1. Select whether the boiler supply water temperature is reset by the AQ control or not
- 2. Select zoning equipment (pumps, 2-wire valves or 4-wire valves with end switches)
- 3. Select number of space heating zones

4. For systems with more than 2 controlled water temperatures, each additonal mixed temperature will require an AQ2541E0 expansion

control panel plus sufficient zoning modules to manage the zones associated with the additional water temperature

				No F	Reset				Reset							
		Non-Programmable				Programmable			One	system tempera	ture	Two	system temperat	ures		
		Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	z	Zone pumps	Zone valves (2 wire)	Zone valves with end switches	Zone pumps	Zone valves (2 wire)	Zone valves with end switches		
	1 zone									<u>AQ2511B0</u>						
		AQ2504B2			<u>AQ25A4B2</u>				AQ2514B2			<u>AQ2524M2</u>				
	2-4 zones		AQ2504B2			AQ25A4B2				AQ2514B2			AQ2524M2			
				<u>AQ2504B4</u>			<u>AQ25A4B4</u>				<u>AQ2514B4</u>			<u>AQ2524M4</u>		
		<u>AQ2504B2 +</u> AQ2554P2X			<u>AQ25A4B2 +</u> AQ2554P2X				AQ2514B2 + AQ2554P2X			<u>AQ2524M2</u> +AQ2554P2X				
		<u>AQ2004P2X</u>	AQ2504B2 +		<u>AQ200412A</u>	AQ25A4B2 +		-	<u>AQ2004P2X</u>	A02514D2 L		<u>+AQ2554P2X</u>	AQ2524M2			
R	5-8 zones		AQ2504B2 + AQ2554V2			AQ2554V2		AQ2514B2 + AQ2554V2		+AQ2554V2						
ctic			10200112	AQ2504B4 +			AQ25A4B4 +			102001112	AQ2514B4 +		1102001112	AQ2524M4		
ele				AQ2574V4			AQ2574V4				AQ2574V4			+AQ2574V4		
0 9		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>				AQ2514B2 +			AQ2524M2				
qu		<u>AQ2558P2X</u>			<u>AQ2558P2X</u>			4	AQ2558P2X			+AQ2558P2X				
Zoning Module Selection	9-12		<u>AQ2504B2 +</u>			$\frac{AQ25A4B2 +}{AQ2554}$				<u>AQ2514B2 +</u>			<u>AQ2524M2</u>			
bu	zones		<u>AQ2554V2 (2)</u>			<u>AQ2554V2 (2)</u>	AQ25A4B4 +			<u>AQ2554V2 (2)</u>			+AQ2554V2 (2)			
oni				<u>AQ2504B4 +</u> AQ2574V4 (2)			AQ2574V4 (2)				<u>AQ2514B4 +</u> AQ2574V4 (2)			<u>AQ2524M4</u> +AQ2574V4 (2)		
N		AQ2504B2 +		<u>AQ2574V4 (2)</u>	AQ25A4B2 +		<u>//(d20/11/1(2)</u>		AQ2514B2 +		<u>AQ2314V4 (2)</u>	AQ2524M2		<u>+AQ2374V4 (2)</u>		
		AQ2558P2X +			AQ2558P2X +				Q2558P2X +			+AQ2558P2X				
	13-16	AQ2554P2X			AQ2554P2X				AQ2554P2X			+AQ2554P2X				
	zones		<u>AQ2504B2 +</u>			<u>AQ25A4B2 +</u>				<u>AQ2514B2 +</u>			AQ2524M2			
	201165		<u>AQ2554V2 (3)</u>			<u>AQ2554V2 (3)</u>				<u>AQ2554V2 (3)</u>			+AQ2554V2 (3)			
				<u>AQ2504B4 +</u>			<u>AQ25A4B4 +</u>				<u>AQ2514B4 +</u>			<u>AQ2524M4</u>		
				<u>AQ2574V4 (3)</u>			<u>AQ2574V4 (3)</u>				<u>AQ2574V4 (3)</u>			<u>+AQ2574V4 (3)</u>		

Product Selector for Additional Water Temperatures
Wiring diagram for multiple Add-A-Temperature Modules
Wiring Instructions for Special Applications

### NOTE:

Below are links to wiring diagrams of the AQ2000 components in Visio, AutoCAD DWG and AutoCAD DXF Formats Click on the applicable file format to access the diagrams' Table of Contents

\*AQ2511BO panel requires either a conventional, non-communicating thermostat OR a switching relay input. It does NOT use AQ1000 communicating thermostats

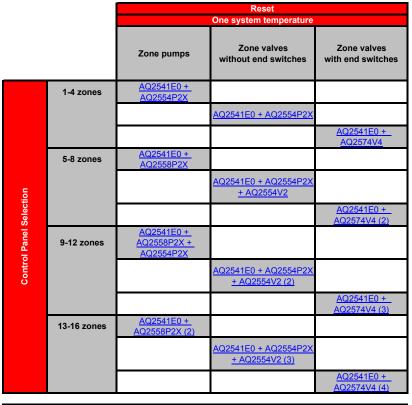
Visio Version

AutoCAD DWG Version

PDF Version

Selection Procedure:

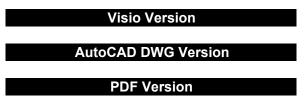
- When using AQ2000 controls for more than two water temperatures:
- 1. Select the AQ2000 panel
- 2. Select the quantity of expansion control panels needed using the AQ254 selection tool
- 3. Save the result (drawing) for each selection in a separate file.
- Print out the drawings, OR if using Visio or AutoCAD combine them all into one system drawing



Wiring diagram for multiple Add-A-Temperature Modules Wiring Instructions for Special Applications

### NOTE:

Below are diagrams of the AQ2000 components in Visio 2002, Visio 2003, AutoCAD DWG and AutoCAD DXF Format. Click on the respective version to access the diagrams' Table of Contents



### **AQ2000 Wiring Instructions for Special Applications**

AQ2511BO Reset Panel with Connections to Non-Communicating Zoning Panel or Thermostat
Combining Pump and Valve Zoning on a Single Zoning Module
Combining Pump and Valve Zoning on Different Zoning Modules
AQ2000 Control Panel for use with T775 Boiler Stager (multiple boilers)
Programmable AQ2000 Control Panel for One Zone of AC
Programmable AQ2000 Control Panel for One Zone of AC with Fan
AQ2000 Wiring to Oil Aquastat
Using a 24V Zone Valve for DHW & Bypass Valves (AQ2504B2 shown)
Two Stage Zone Control
Wiring for Single and Multiple (Averaging) Sensor Installations
Wiring of VisionPRO IAQ and NC Relay to Aux-In
AQ2511B0 with Tankless Coil
Group Pump Wiring and Sequence of Operation

Wiring diagram for multiple Add-A-Temperature Modules Additional Water Temperature Selector

**Visio Version** 

AutoCAD DWG Version

**PDF Version**