

# System schematics for aroTHERM plus



**Vaillant**



**Vaillant**

# Table of Contents

2.	30110-1011 - aroTHERM plus, Buffer, Cylinder, 1 RAD Zone
5.	30111-1011 - aroTHERM plus, Buffer, Cylinder, 1 UFH Circuit (3rd Party)
8.	30120-1012 - aroTHERM plus, Buffer, Cylinder, 2 RAD Zone
11.	30121-1012 - aroTHERM plus, Buffer, Cylinder, 1 RAD Zone, 1 UFH Circuit (3rd Party)
14.	30130-1011 - aroTHERM plus, HEX Module, Volumiser, Cylinder, 1 RAD Zone
17.	30131-1011 - aroTHERM plus, HEX Module, Cylinder, 1 UFH Circuit (3rd Party)
20.	30140-1012 - aroTHERM plus, HEX Module, Cylinder, 2 RAD Zone
23.	30141-1012 - aroTHERM plus, HEX Module, Cylinder, 1 RAD Zone, 1 UFH Circuit (3rd Party)
26.	30160-1011 - aroTHERM plus, Hydraulic Station, Buffer, Cylinder, 1x RAD Zone
29.	30161-1011 - aroTHERM plus, Hydraulic Station, Buffer, Cylinder, 1 UFH Circuit (3rd Party)
32.	30170-1012 - aroTHERM plus, Hydraulic Station, Buffer, Cylinder, 2 RAD Zone
35.	30171-1012 - aroTHERM plus, Hydraulic Station, Buffer, Cylinder, 1 RAD Zone, 1 UFH Circuit (3rd Party)
38.	30180-1011 - aroTHERM plus, Hydraulic Station, HEX Module, Cylinder, 1 RAD Zone
41.	30181-1011 - aroTHERM plus, Hydraulic Station, HEX Module, Cylinder, 1 UFH Circuit (3rd Party)
44.	30190-1012 - aroTHERM plus, Hydraulic Station, HEX Module, Cylinder, 2 RAD Zone
47.	30191-1012 - aroTHERM plus, Hydraulic Station, HEX Module, Cylinder, 1 RAD Zone, 1 UFH Circuit (3rd Party)
50.	30200-1011 - aroTHERM plus, Hydraulic Station, HEX Module, Buffer, Cylinder, 1 RAD Zone
53.	30201-1011 - aroTHERM plus, Hydraulic Station, HEX Module, Buffer, Cylinder, 1 UFH Circuit (3rd Party)
56.	30210-1012 - aroTHERM plus, Hydraulic Station, HEX Module, Buffer, Cylinder, 2 RAD Zone
59.	30211-1012 - aroTHERM plus, Hydraulic Station, HEX Module, Buffer, Cylinder, 1 RAD Zone, 1 UFH Circuit (3rd Party)
62.	30220-1011 - aroTHERM plus, uniTOWER, Buffer, 1 RAD Zone
65.	30211-1011 - aroTHERM plus, uniTOWER, Buffer, 1 UFH Circuit (3rd Party)
68.	30230-1012 - aroTHERM plus, uniTOWER, Buffer, 2 RAD Zone
71.	30231-1012 - aroTHERM plus, uniTOWER, Buffer, 1 RAD Zone, 1 UFH Circuit (3rd Party)
74.	30240-1011 - aroTHERM plus, HEX Module, Buffer, 1 RAD Zone
77.	30241-1011 - aroTHERM plus, HEX Module, Buffer, 1 UFH Circuit (3rd Party)
80.	30250-1012 - aroTHERM plus, HEX Module, Buffer, 2 RAD Zone
83.	30251-1012 - aroTHERM plus, HEX Module, Buffer, 1 RAD Zone, 1 UFH Circuit (3rd Party)
86.	30260-1011 - aroTHERM plus, Volumiser, 1 RAD Zone
89.	30261-1011 - aroTHERM plus, Volumiser, 1 UFH Circuit (3rd Party)
92.	30270-1012 - aroTHERM plus, Volumiser, 2 RAD Zone
95.	30271-1012 - aroTHERM plus, 1 RAD Zone, 1 UFH Circuit (3rd Party)

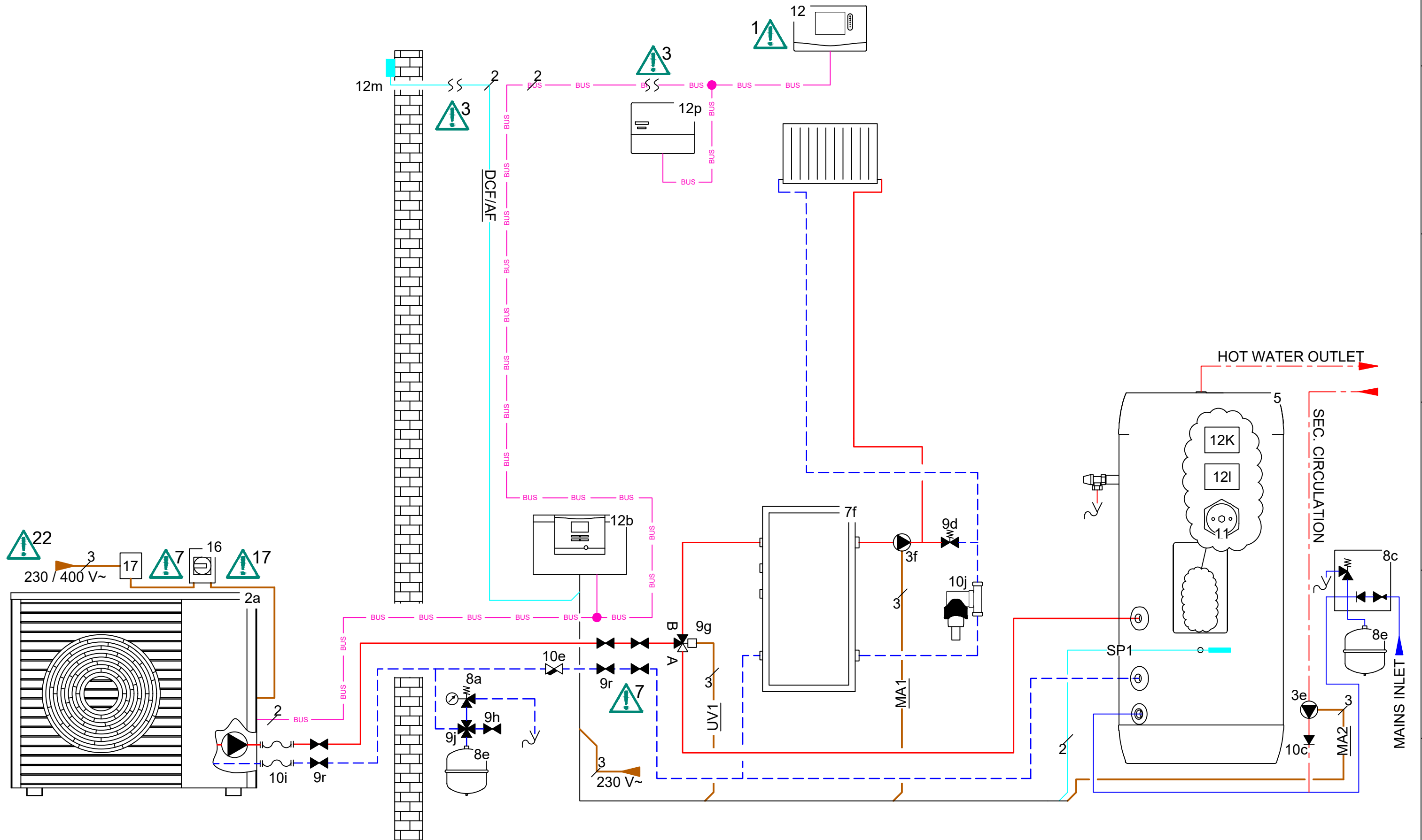
30110-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone.
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Buffer (45/100L)

HTG. Circuit(s): 1x Radiator - Direct ,

24/08/2023

REV: E

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

30110-1011

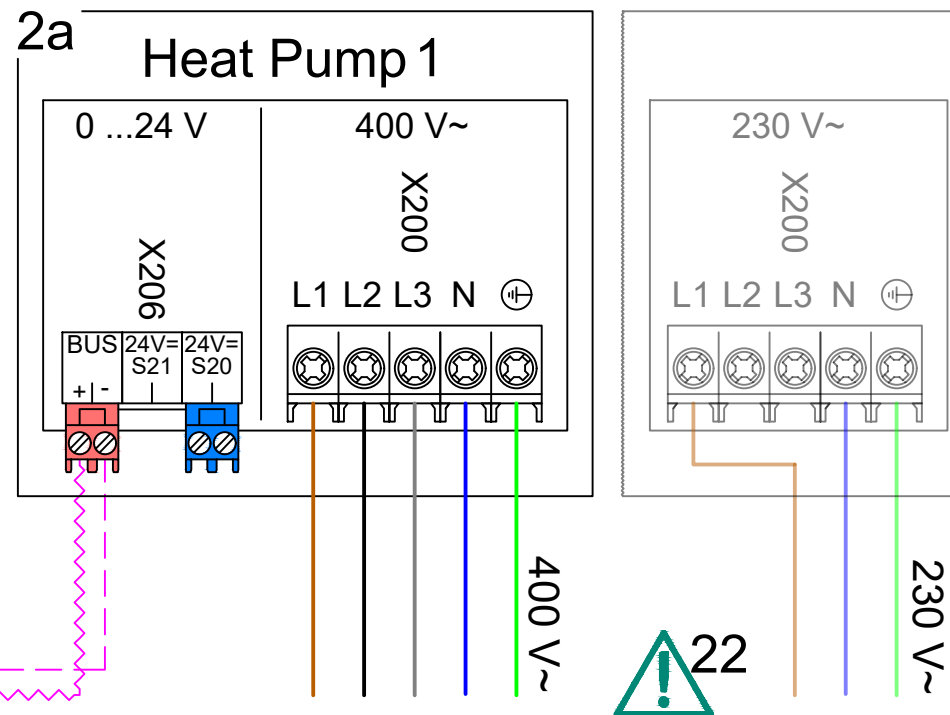
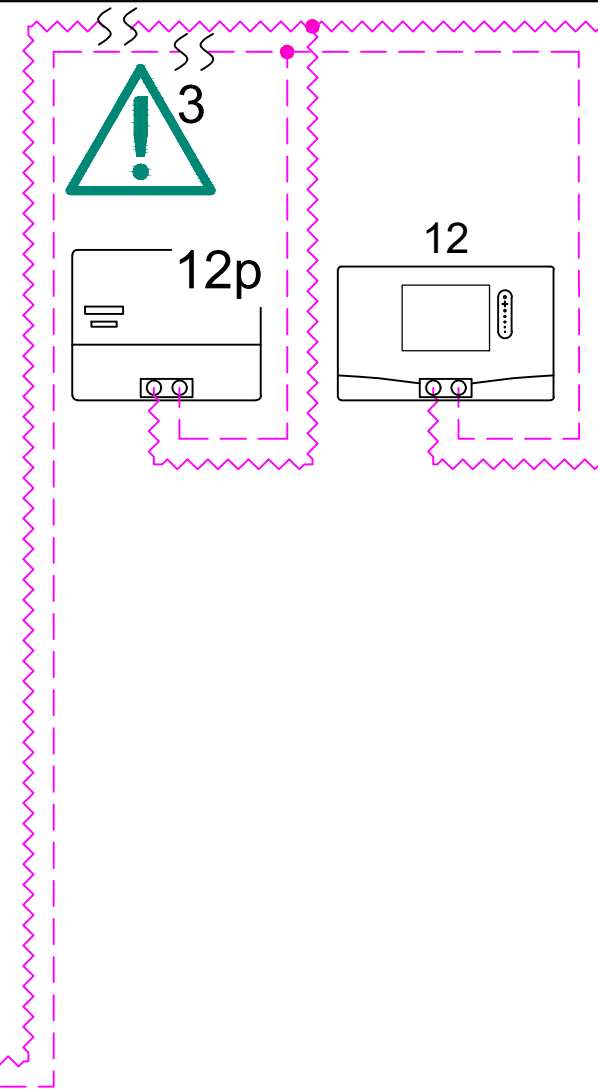
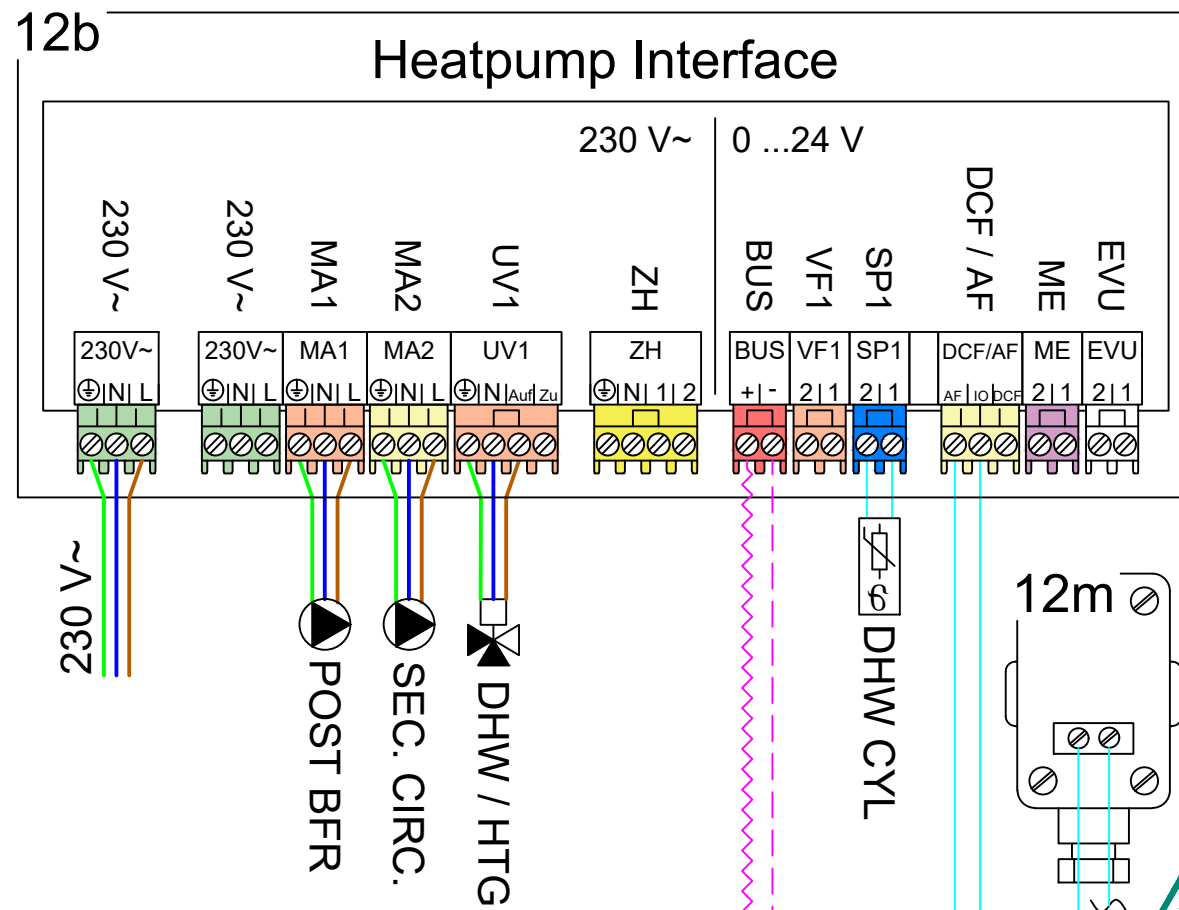


-See page 2 for detailed wiring.

1. See page 3 for relevant controller system configuration settings.
3. Controls and outdoor sensor can be wired or wireless.
7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone.

22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

24/08/2023

REV:

E

Appliance(s): aroTHERM Plus, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, ,

Domestic Hot Water: 1x Cylinder

30110-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value
<b>Installation</b>	
Adapt. heat curve:	Deactivated
Hybrid manager:	Bivalence pt
Heating bivalence point:	-20°
DHW bivalence point:	-20°
Alternative point:	Off
ESCO:	HP + BUH Off
Back-up boiler:	Off
<b>Basic system diagram config.</b>	
Basic system diagram code:	10
<b>HP control module configuration</b>	
MO 2:	Circulation pump
<b>Circuit 1</b>	
Circuit type:	Heating
OT switch-off threshold:	30°
Heat curve:	**Site specific
Min. target flow temperature:	15°
Max. target flow temperature:	45°
Set-back mode:	Normal
Room temp. mod.:	Expanded
<b>Zone 1</b>	
Zone activated:	Yes
Zone assignment:	Control
<b>Domestic hot water</b>	
Cylinder:	Active
Anti-legio. day:	**User preference
Anti-legio. time:	**User preference
Cylinder charging offset:	15 K
Cyl. charg. anti-cycl. time:	5 min

REV	DATE	DESCRIPTION
E	24/08/2023	Added aroTHEM Plus 400v option
		Updated ESCO settings
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Buffer (45/100L)

HTG. Circuit(s): 1x Radiator - Direct ,

24/08/2023

REV: E

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

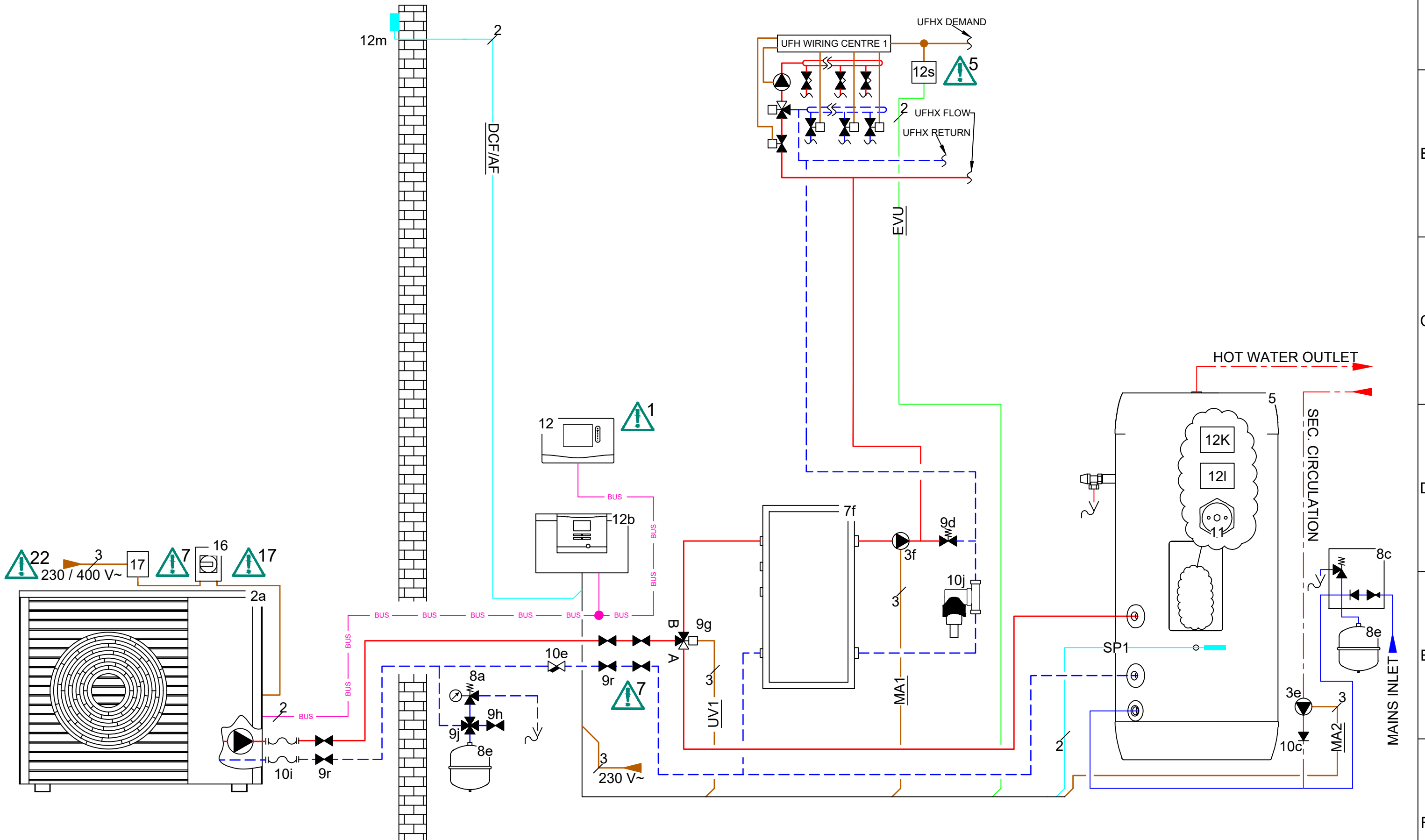
30111-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
25/08/2023 REV: D

Appliance(s): aroTHERM Plus, Buffer (45/100L Buffer)  
Control(s): sencoCOMFORT (VRC720)

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .  
Domestic Hot Water: 1x Cylinder

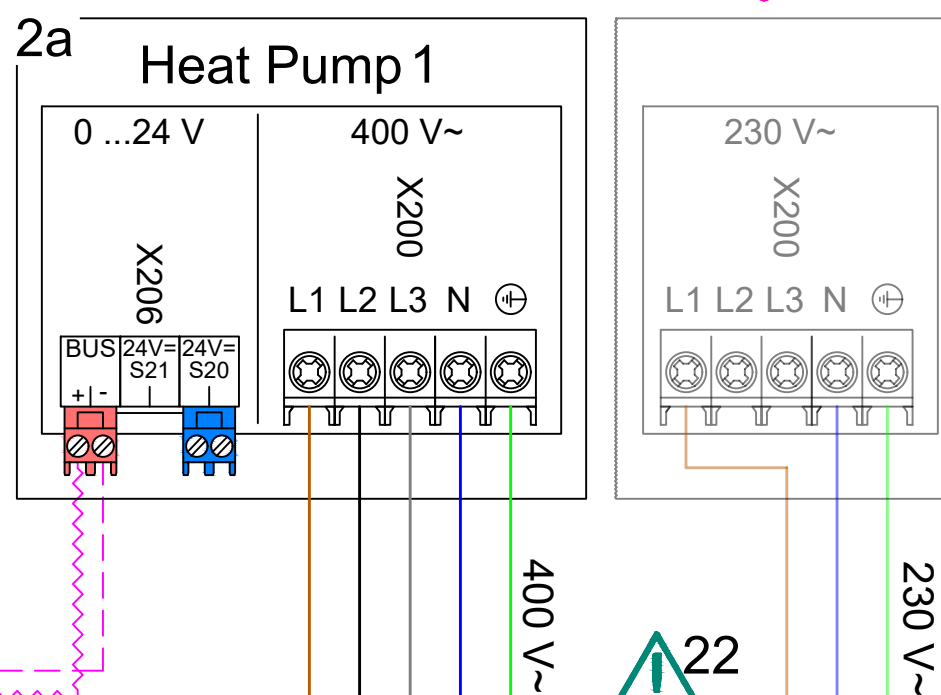
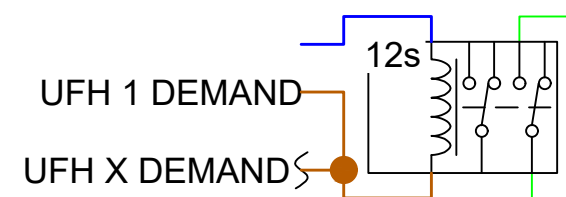
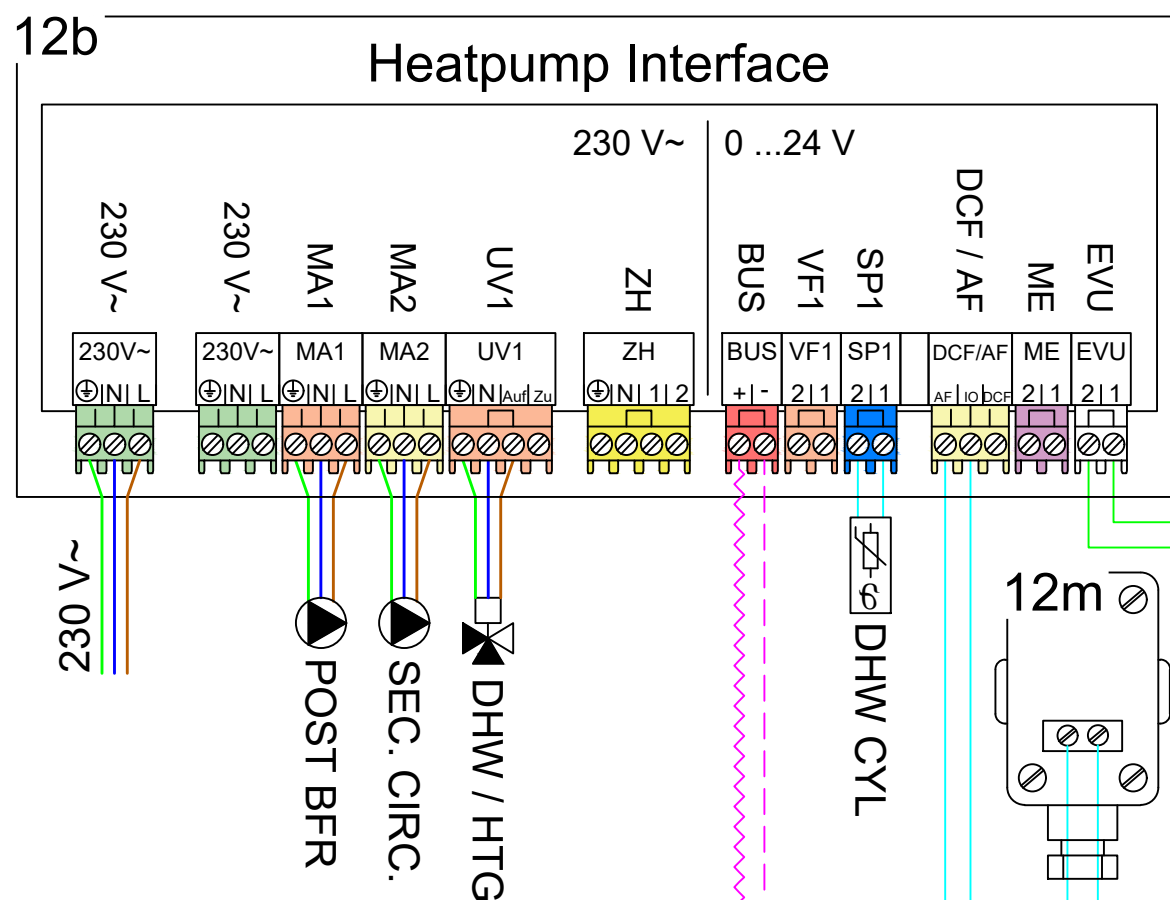
30111-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30111-1011

### Terms and Conditions for Vaillant Schematic Diagrams

PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.



- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

### sensoCOMFORT VRC720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

D	25/08/2023	Added aroTHERM Plus 400V option
REV	DATE	DESCRIPTION
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

25/08/2023

REV: D

Appliance(s): aroTHERM Plus, Buffer (45/100L Buffer)

Control(s): sensoCOMFORT (VRC720)

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

Domestic Hot Water: 1x Cylinder



30120-1012

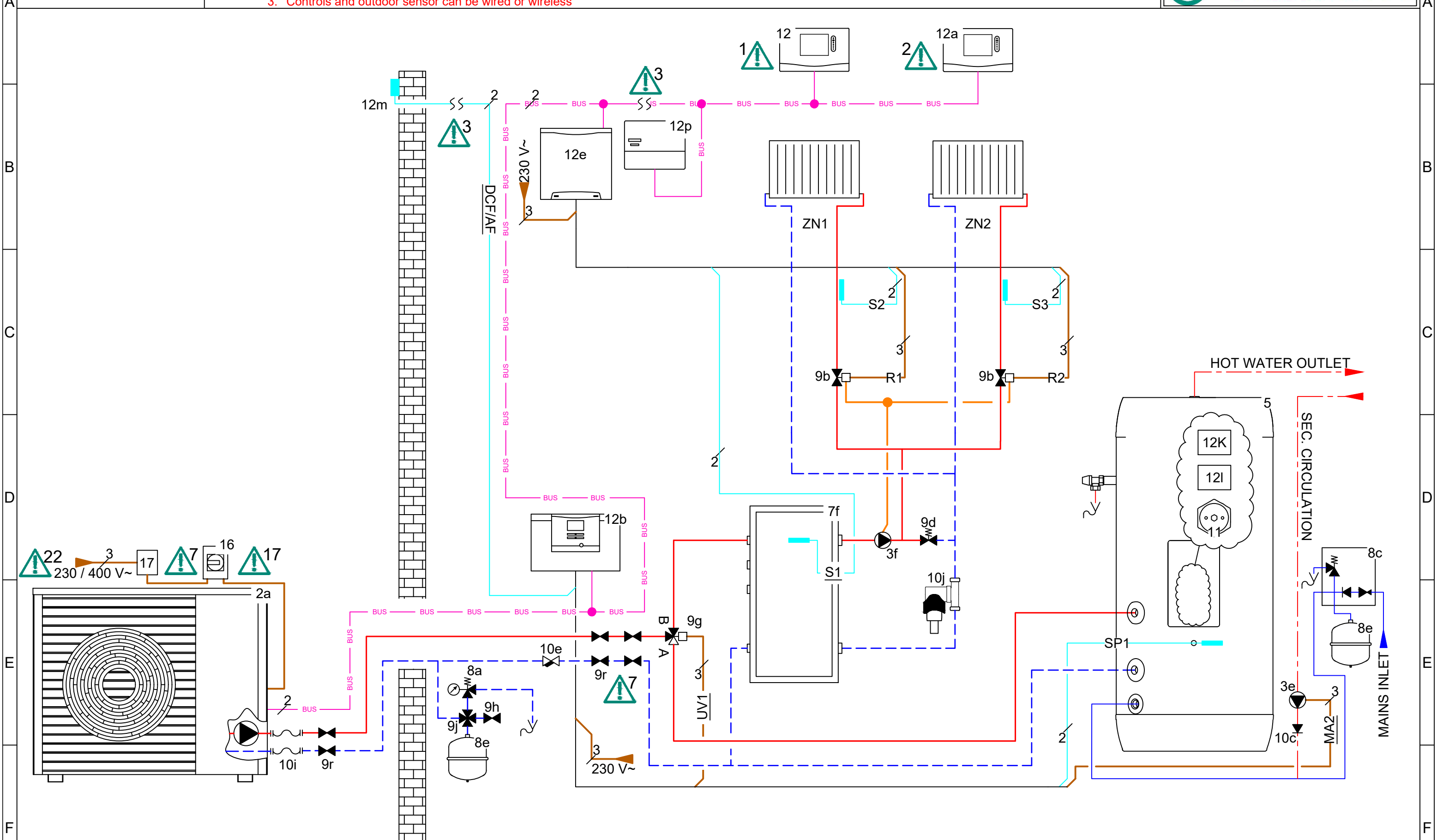


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.
- 3. Controls and outdoor sensor can be wired or wireless

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance:  
230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A. Rice  
16/02/2024 REV: E

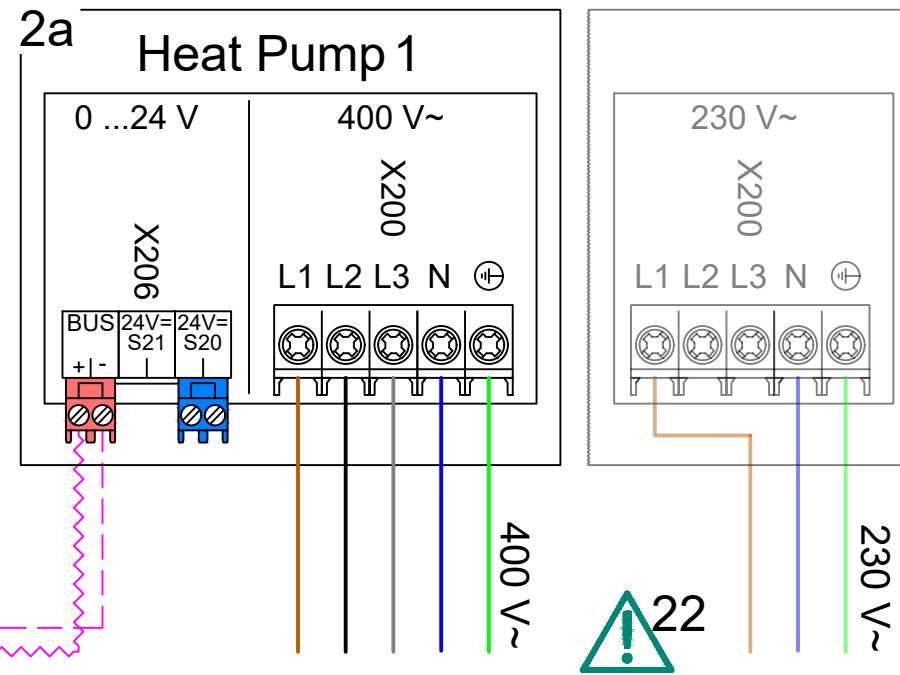
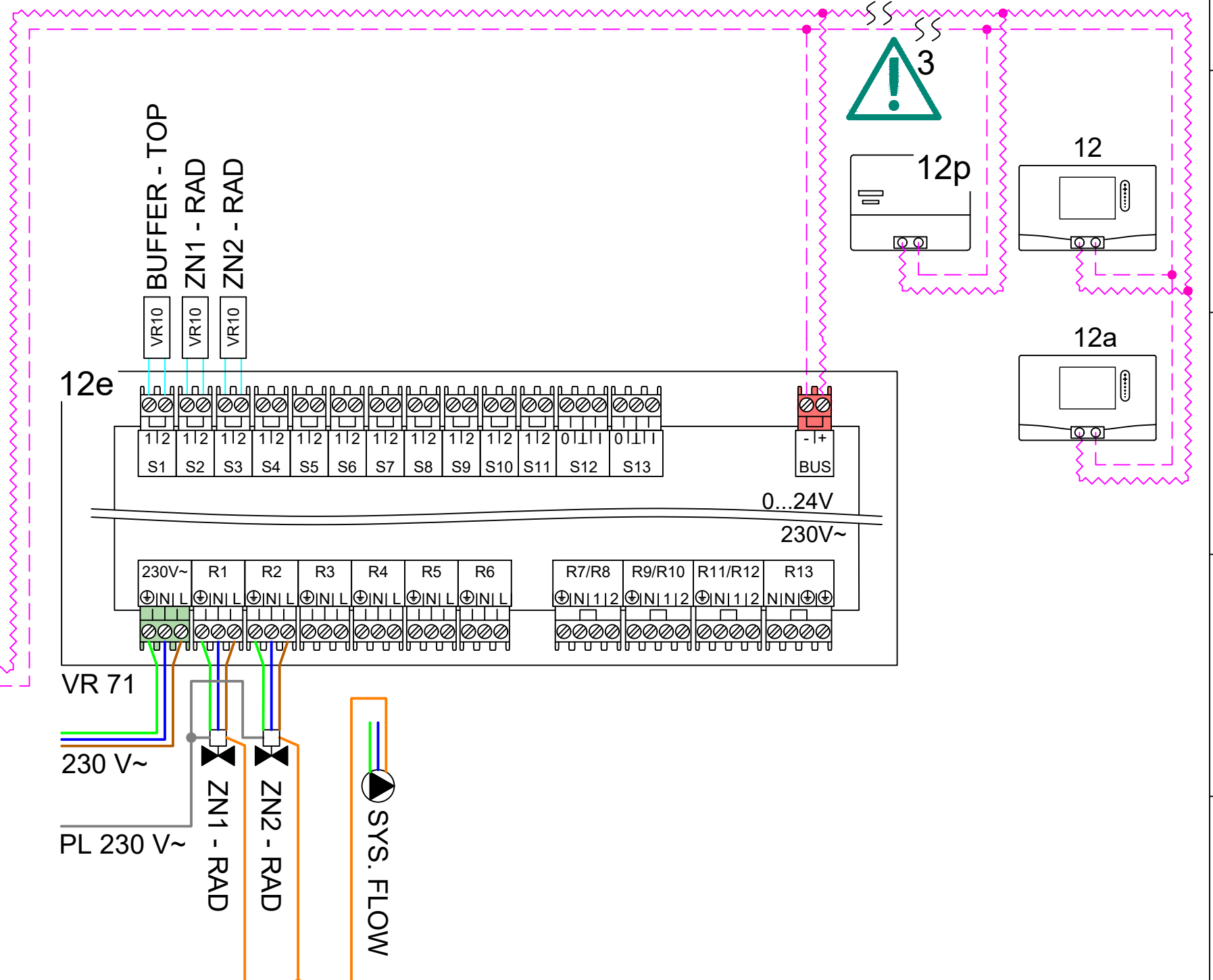
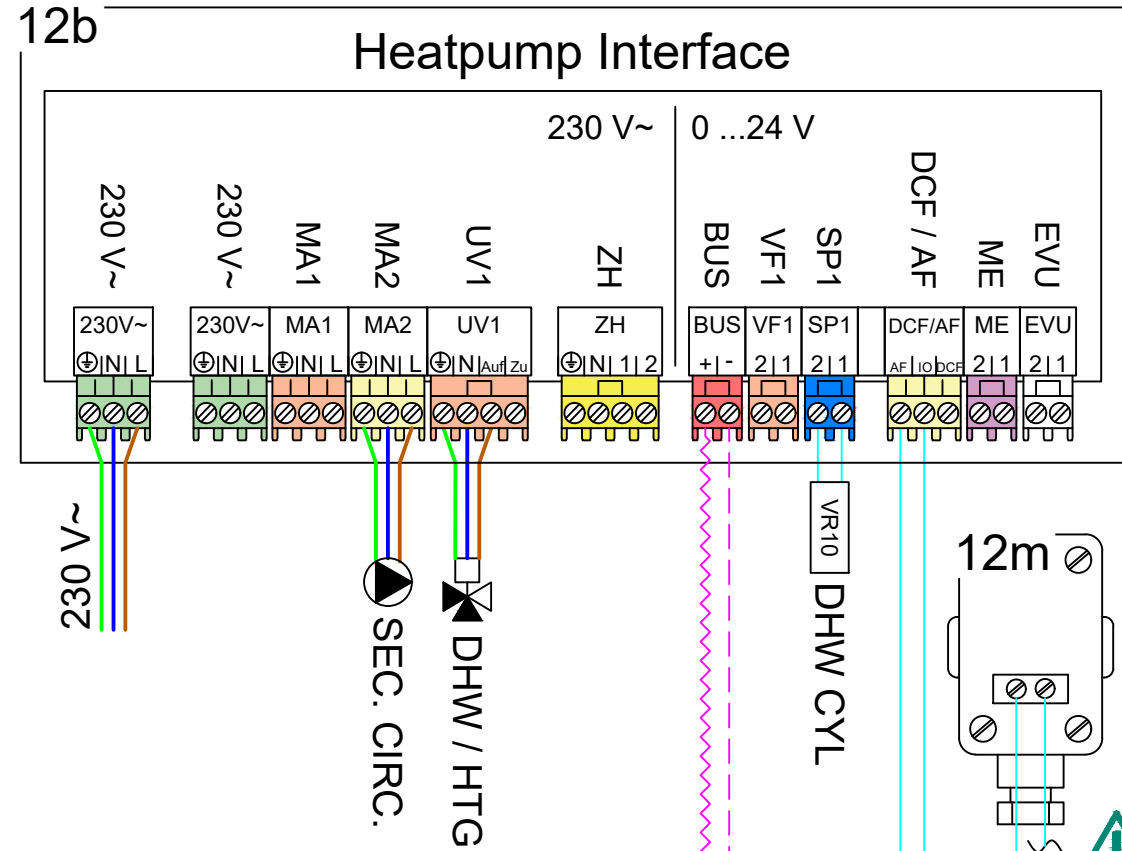
Appliance(s): aroTHERM Plus, Buffer (45/100L)  
Control(s): sensoCOMFORT, VR 92

B.  
HTG. Circuit(s): 2x Radiator - Direct ,  
Domestic Hot Water: 1x Cylinder

30120-1012

- ⚠** -See page 2 for detailed wiring.
1. See page 3 for relevant controller system configuration settings.
  2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.
  3. Controls and outdoor sensor can be wired or wireless

7. Optional for metering purposes.
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance:  
230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A. Rice  
16/02/2024 REV: E

Appliance(s): aroTHERM Plus, Buffer (45/100L)  
Control(s): sensoCOMFORT, VR 92

B.

HTG. Circuit(s): 2x Radiator - Direct ,  
Domestic Hot Water: 1x Cylinder

30120-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12a VR92
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45° (Assumed)
ESCO:	HP + BUH Off	Set-back mode:	Normal
Back-up boiler:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	Rem. contr. 1
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
F	16/02/2024	Added aroTHERM Plus 400V option	2,E
		Added S1 sensor on buffer	-
		Domestic Cold Water	
		Domestic Hot Water	
		Heating Flow	
		Heating Return	
		Glycol Flow	
		Glycol Return	
		230/400V Wire	
		Low Voltage Sensor Wire	
		Low Voltage eBUS	BUS
		Low Voltage Demand Signal	
		eBUS +	
		eBUS -	
		Indicates Cable Junction	BUS
		Indicates No. of cable cores	3

Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A. Rice  
16/02/2024 REV: E

Appliance(s): aroTHERM Plus, Buffer (45/100L)  
Control(s): sensoCOMFORT, VR 92

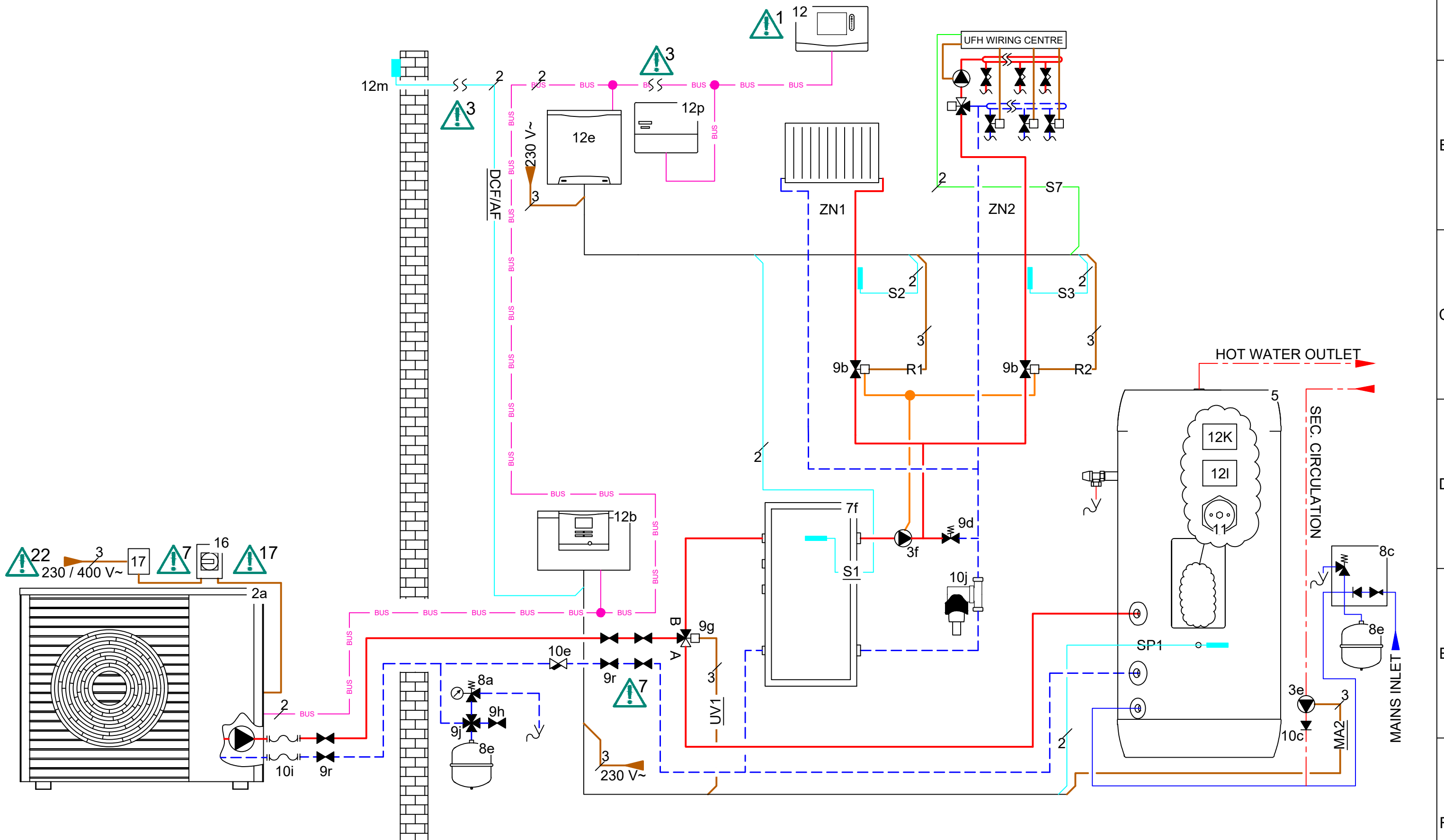
HTG. Circuit(s): 2x Radiator - Direct ,  
Domestic Hot Water: 1x Cylinder

30121-1012-



-See page 2 for detailed wiring.  
1. See page 3 for relevant controller system configuration settings.  
3. Controls and outdoor sensor can be wired or wireless  
4. Link required (not factory fitted).

7. Optional for metering purposes.  
17. Rotary Isolator must be situated outside of the Protective Zone  
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

25/08/2023

REV:

G

Appliance(s): aroTHERM Plus, Buffer (45/100L),

Control(s): sensoCOMFORT,

HTG. Circuit(s): 1x Radiator - Direct, 1x UHF - 3rd Party, ----

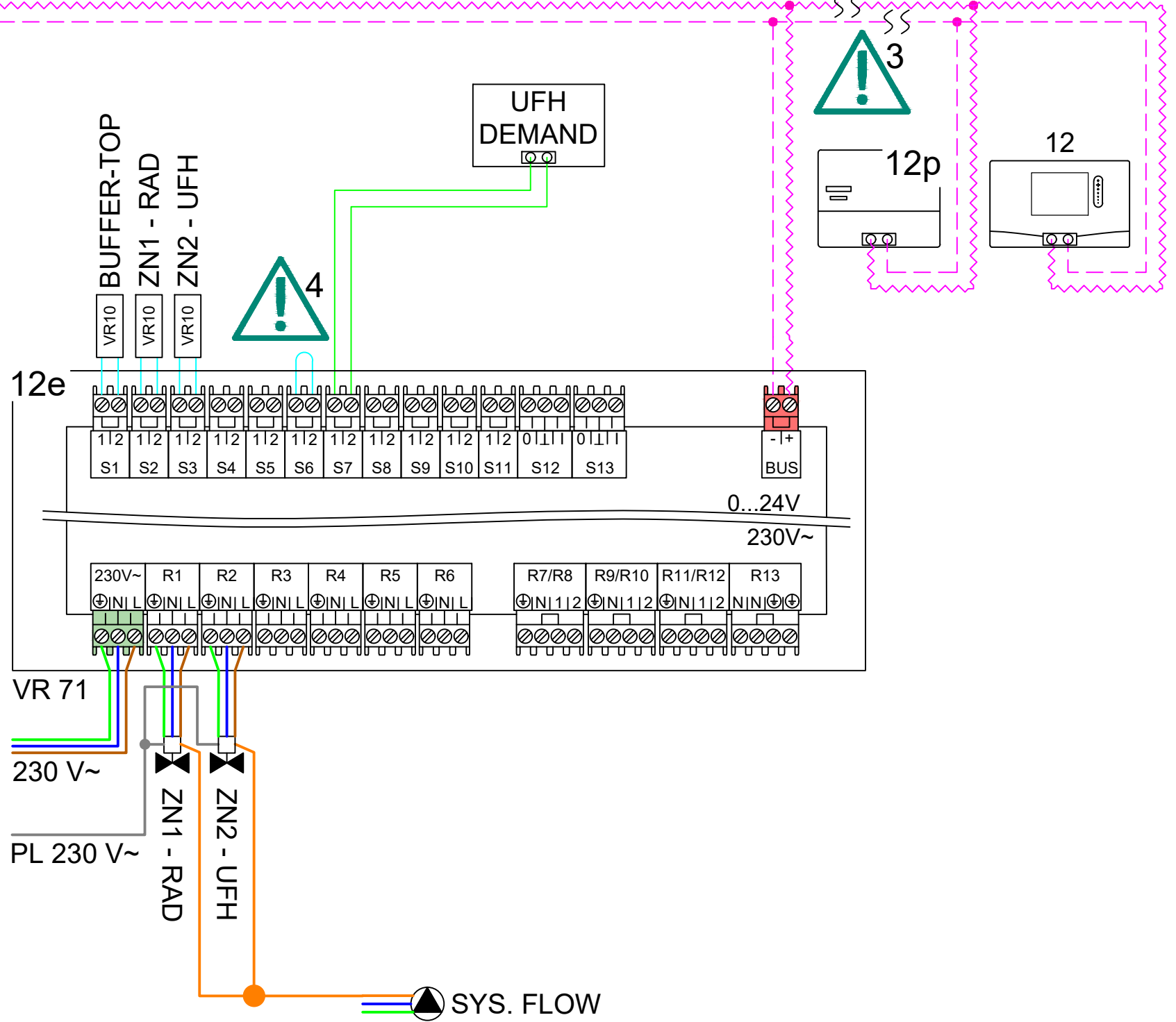
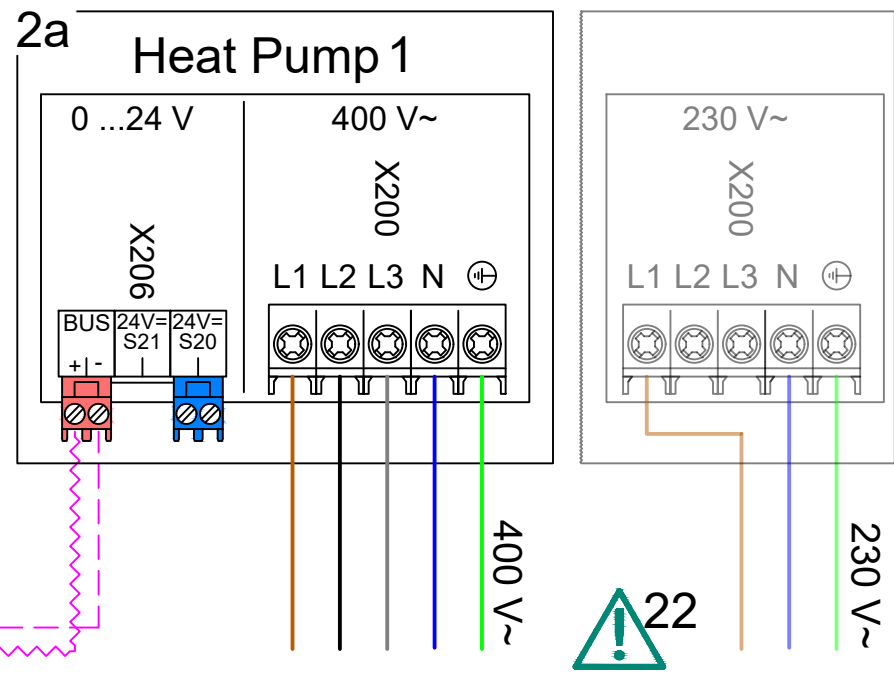
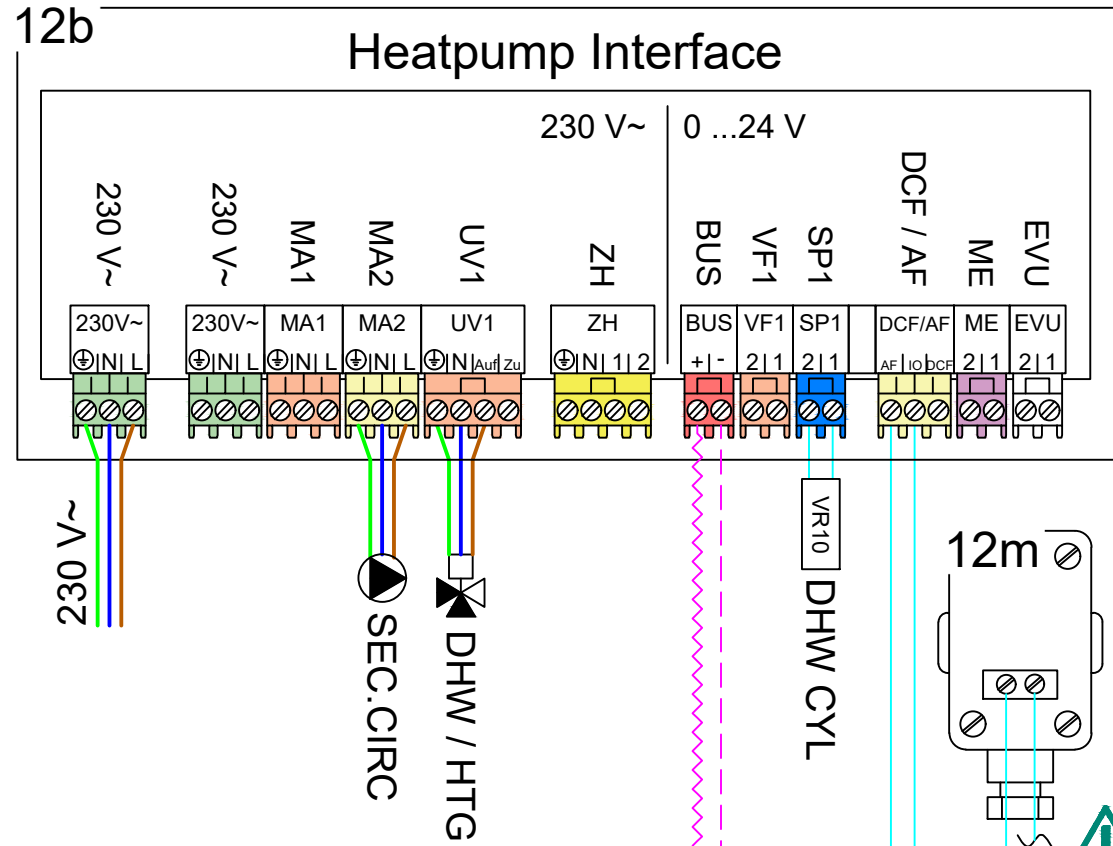
Domestic Hot Water: 1x Cylinder

30121-1012-



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 4. Link required (not factory fitted).

7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30121-1012-

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH Off	Set-back mode:	Eco
Back-up boiler:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	No assignmt
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
G	25/08/2023	Added aroTHERM Plus 400V option	2,E
Domestic Cold Water			
Domestic Hot Water			
Heating Flow			
Heating Return			
Cooling Flow			
Cooling Return			
Glycol Flow			
Glycol Return			
230/400V Wire			
Low Voltage Sensor Wire			
Low Voltage eBUS		BUS	
Low Voltage Demand Signal			
eBUS +			
eBUS -			
Indicates Cable Junction		BUS	
Indicates No. of cable cores		3	

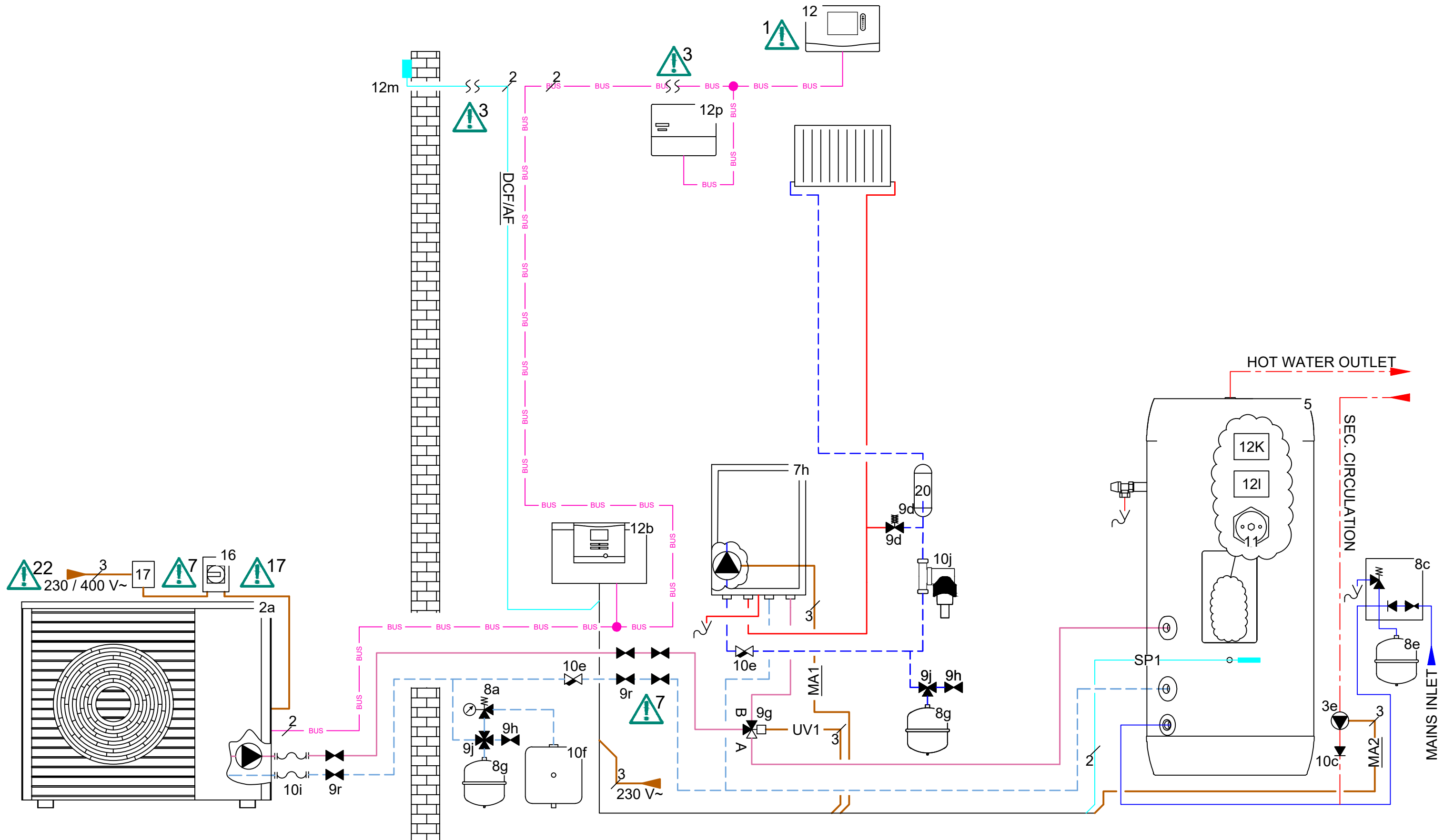
30130-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV: E

Appliance(s): aroTHERM Plus, Heat Ex. Module, Volumiser

Control(s): sensoCOMFORT

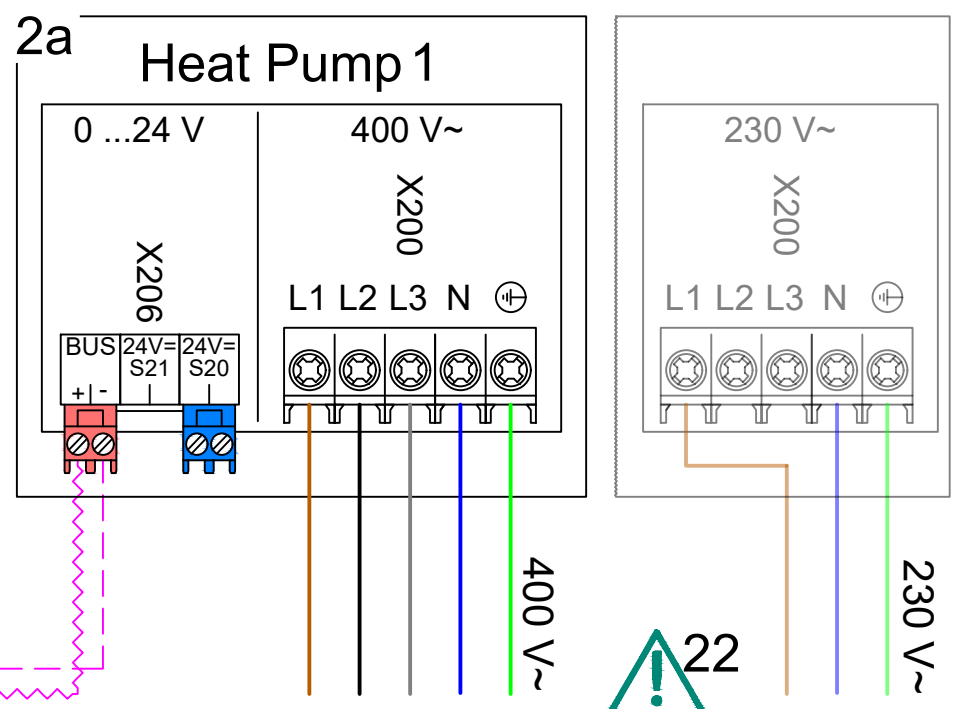
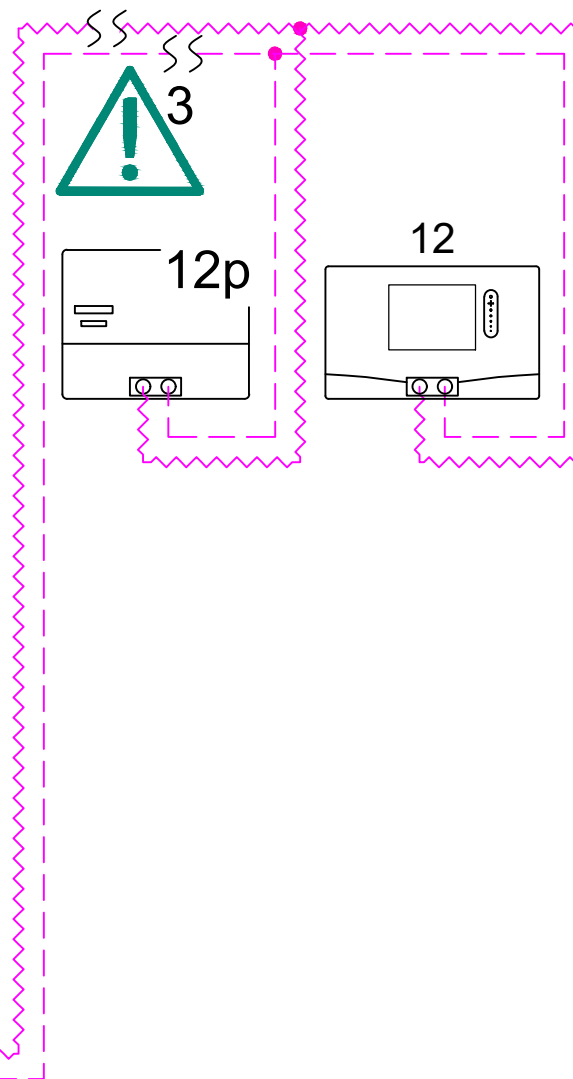
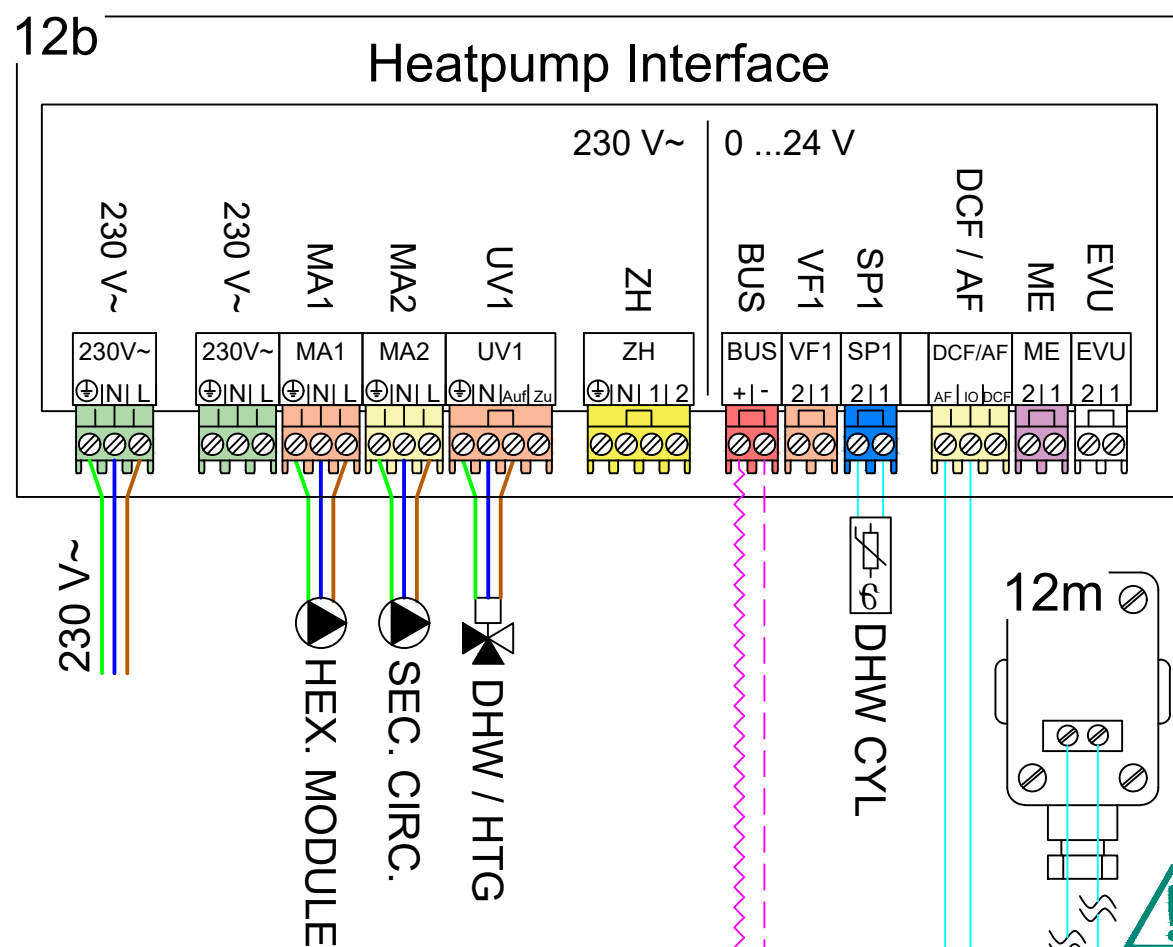
HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V





30130-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter
- 20 System Volumiser

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value
<b>Installation</b>	
Adapt. heat curve:	Deactivated
Hybrid manager:	Bivalence pt
Heating bivalence point:	-20°
DHW bivalence point:	-20°
Alternative point:	Off
ESCO:	HP + BUH Off
Back-up boiler:	Off
<b>Basic system diagram config.</b>	
Basic system diagram code:	10
<b>HP control module configuration</b>	
MO 2:	Circulation pump
<b>Circuit 1</b>	
Circuit type:	Heating
OT switch-off threshold:	30°
Heat curve:	**Site specific
Min. target flow temperature:	15°
Max. target flow temperature:	45°
Set-back mode:	Normal
Room temp. mod.:	Expanded
<b>Zone 1</b>	
Zone activated:	Yes
Zone assignment:	Control
<b>Domestic hot water</b>	
Cylinder:	Active
Anti-legio. day:	**User preference
Anti-legio. time:	**User preference
Cylinder charging offset:	15 K
Cyl. charg. anti-cycl. time:	5 min

REV	DATE	DESCRIPTION
E	29/08/2023	Added aroTHERM Plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module, Volumiser

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

29/08/2023

REV: E

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

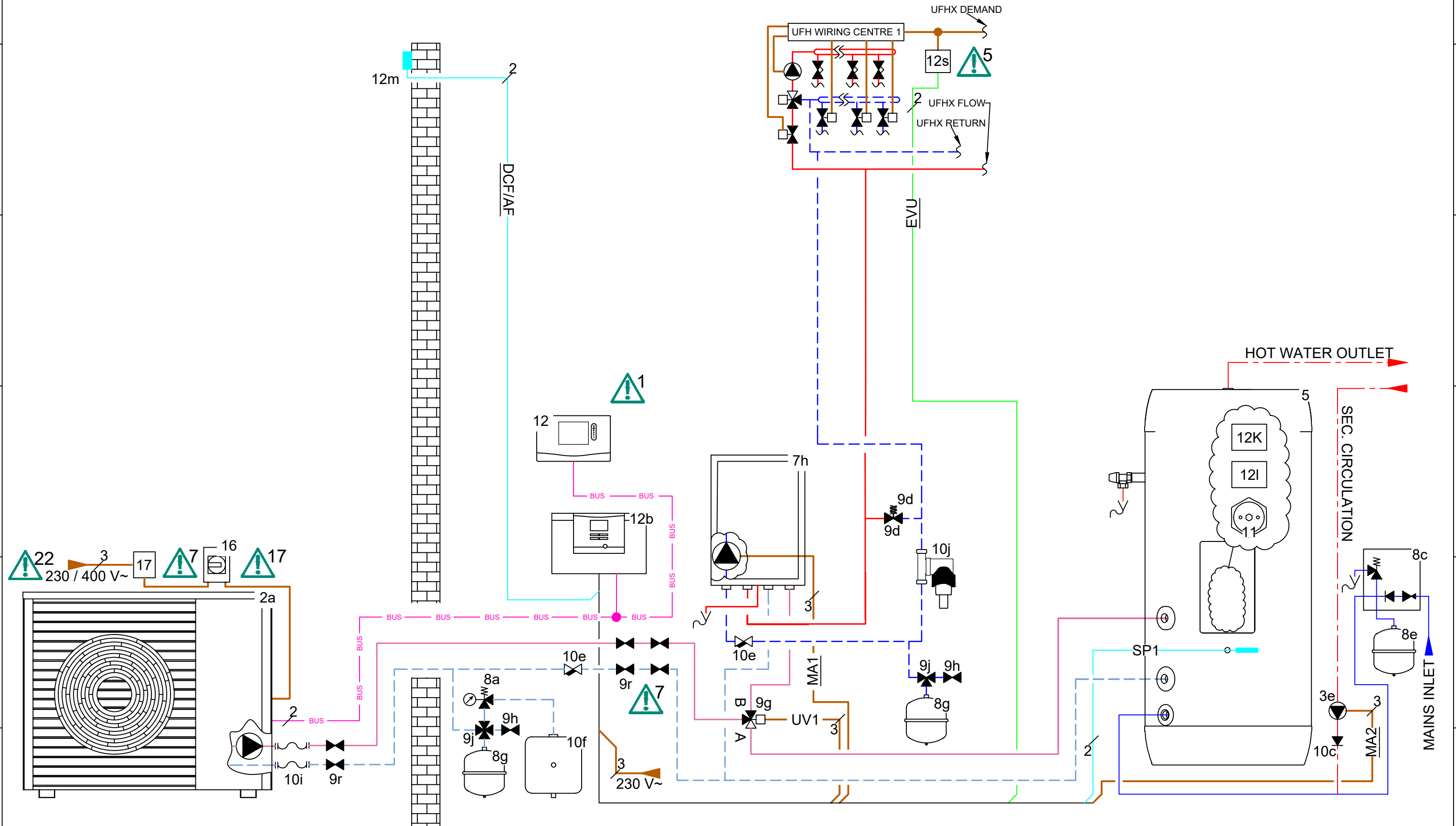
30131-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
29/08/2023 REV: D

Appliance(s): aroTHERM Plus, Heat Ex. Module  
Control(s): VRC 720

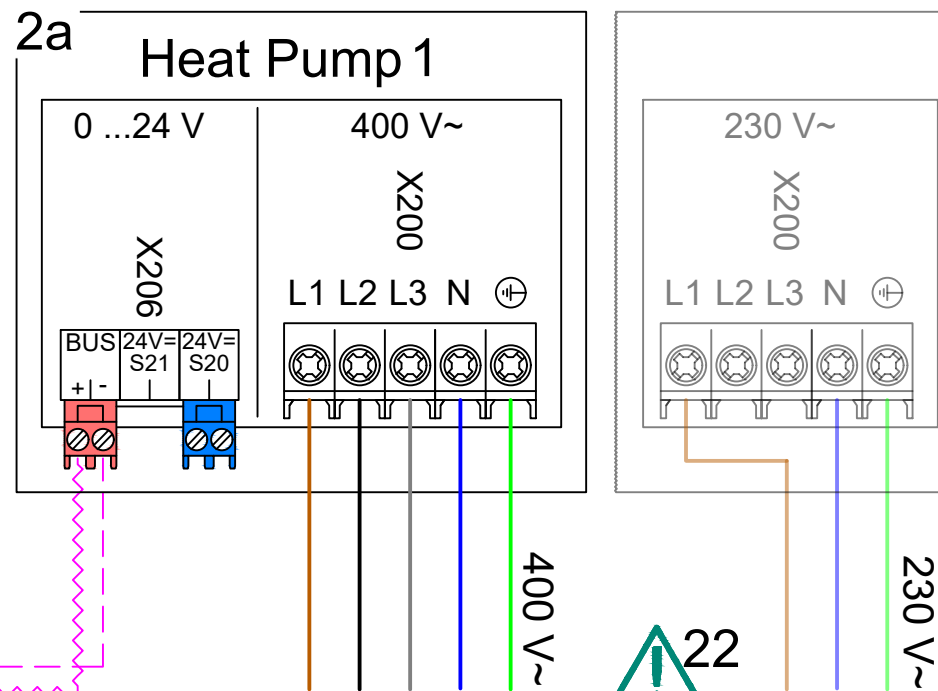
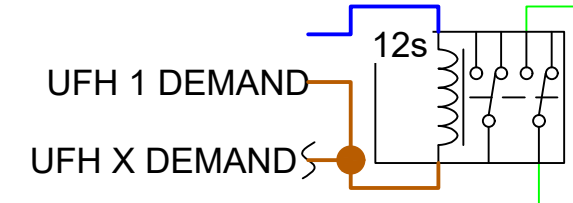
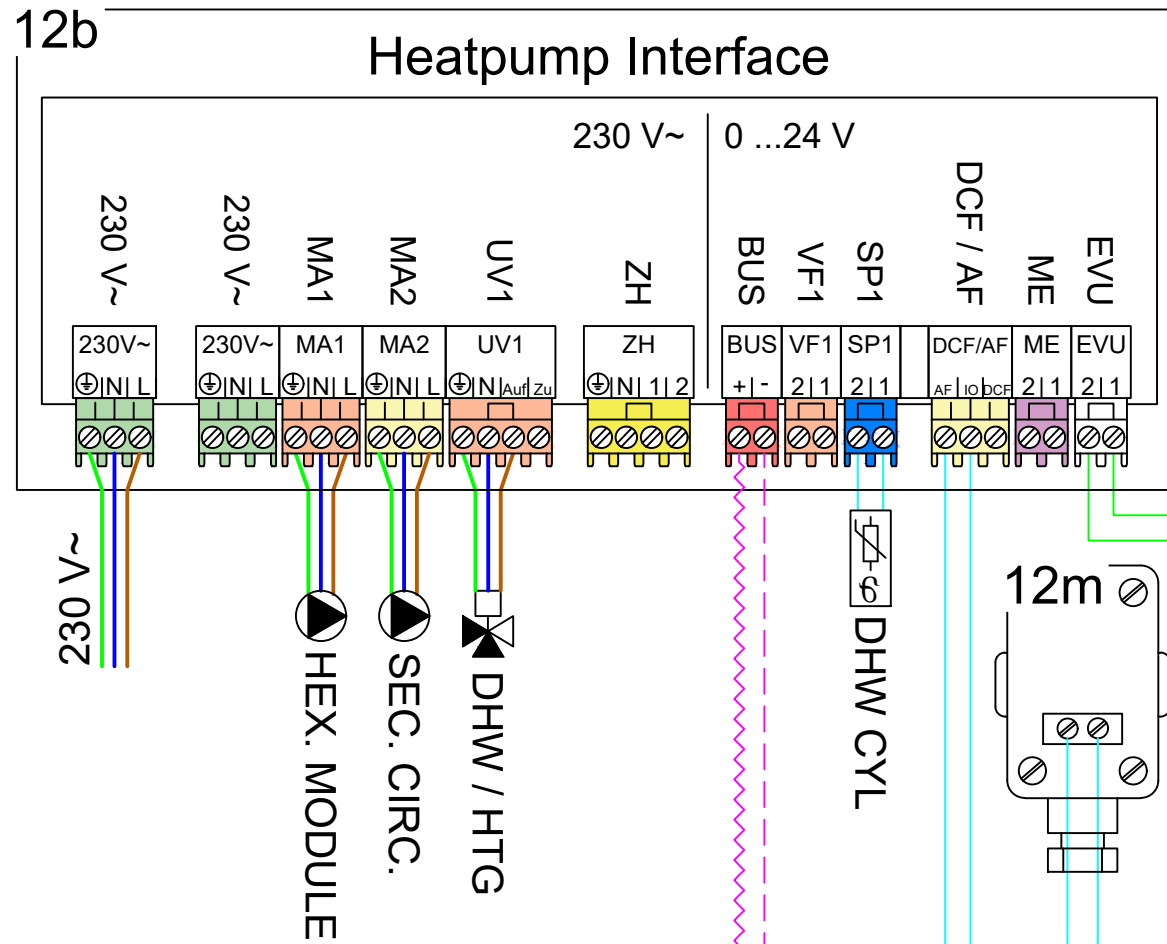
HTG. Circuit(s): 1x UFH(X) - 3rd Party, .  
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30131-1011

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

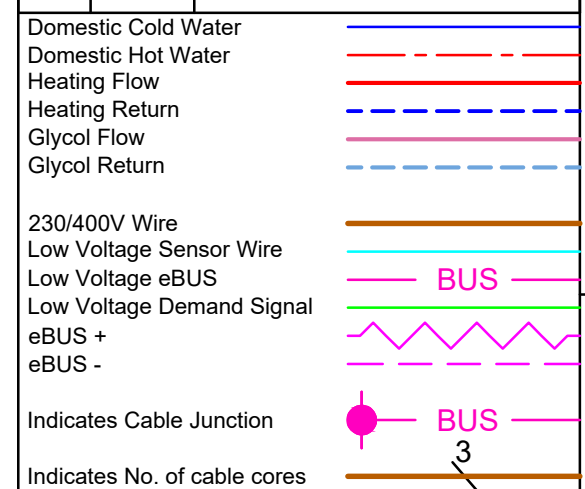
sensoCOMFORT VRC 720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

D 29/08/2023 Added aroTHERM 400V option

REV	DATE	DESCRIPTION
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module

HTG. Circuit(s): 1x UFH(X) - 3rd Party, ,

29/08/2023

REV: D

Control(s): VRC 720

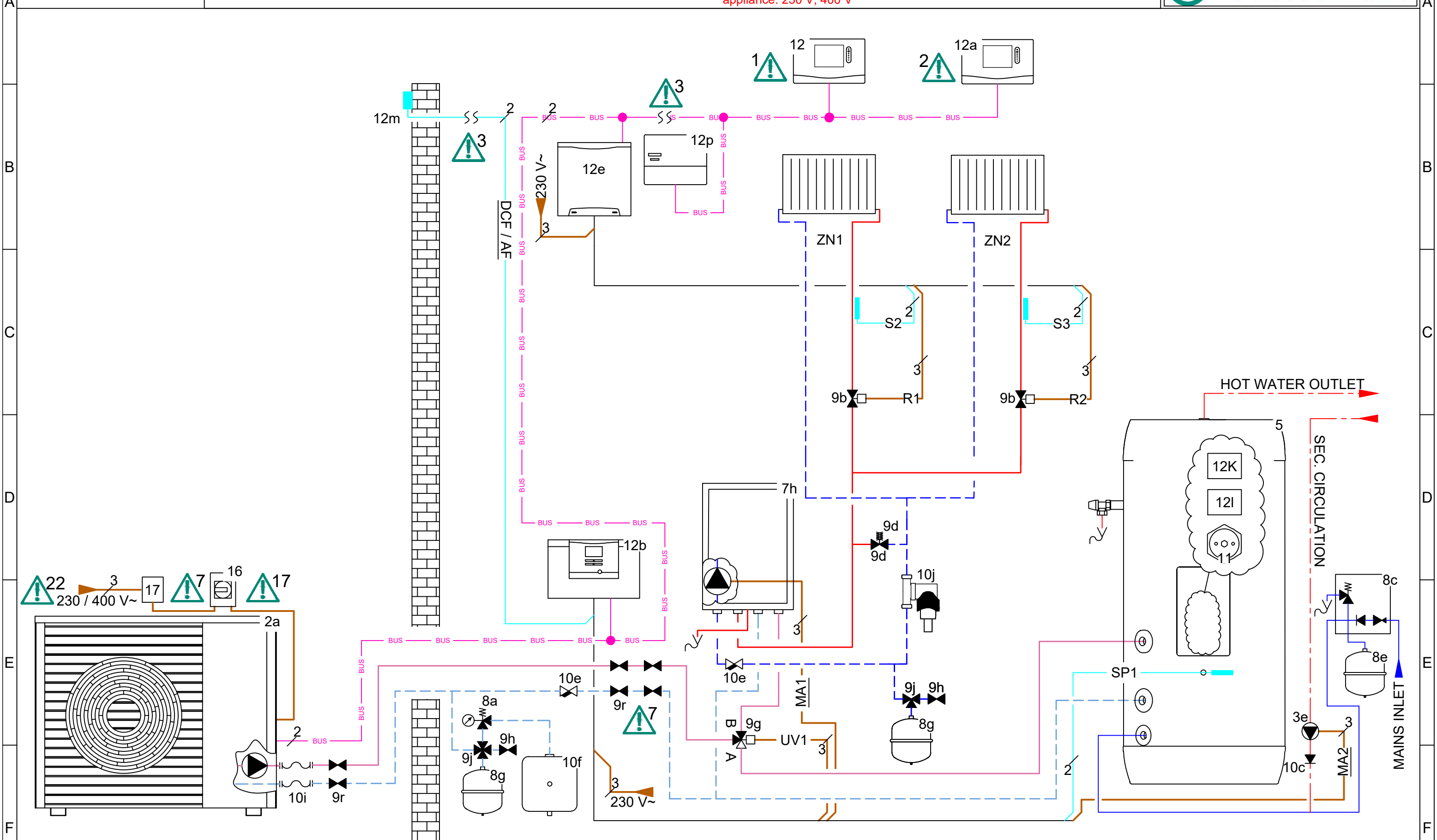
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

1. See page 3 for relevant controller system configuration settings.
2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless
7. Optional for metering purposes.
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV: D

Appliance(s): aroTHERM Plus, Heat Ex. Module

Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

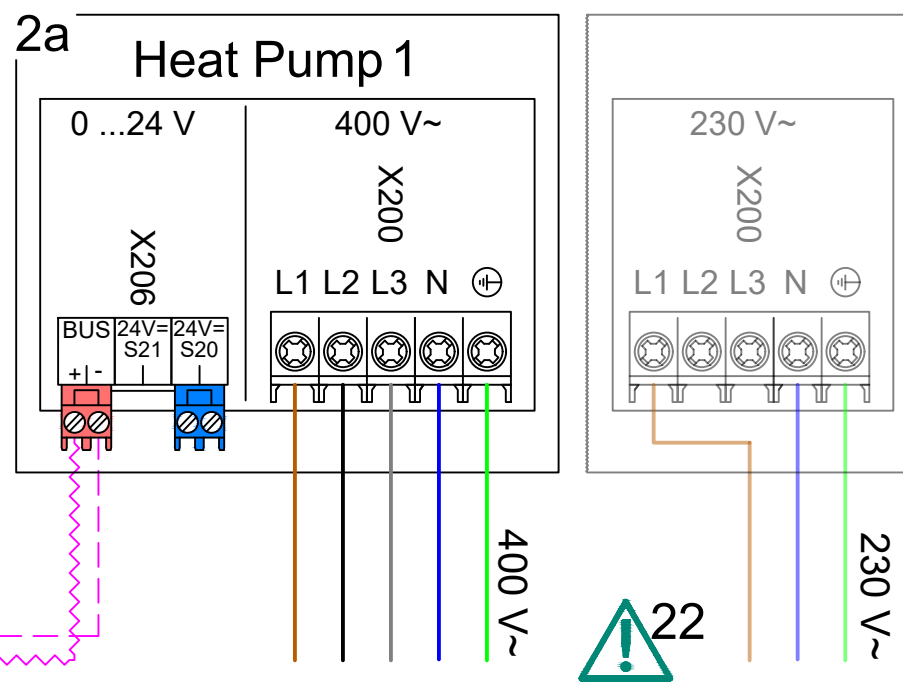
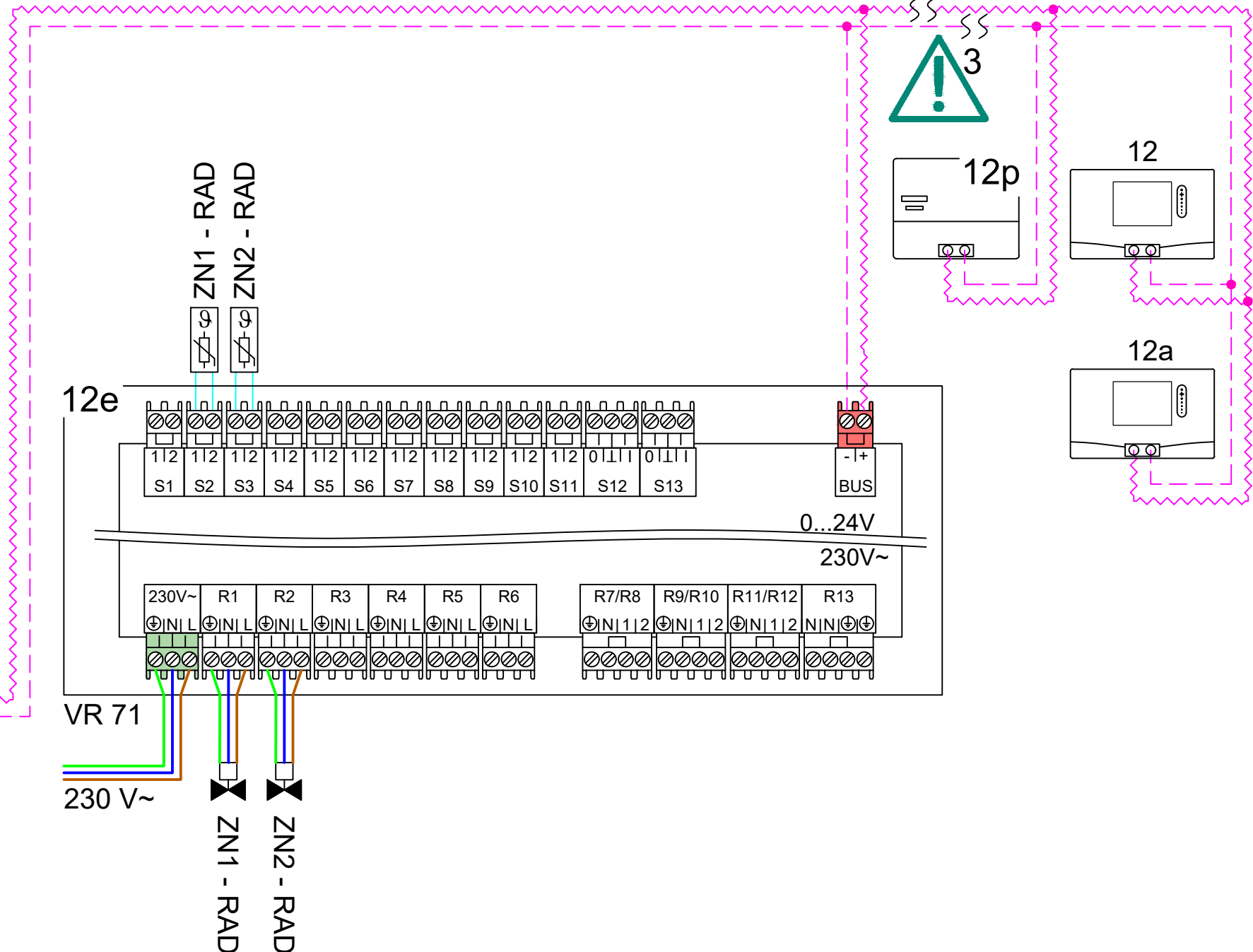
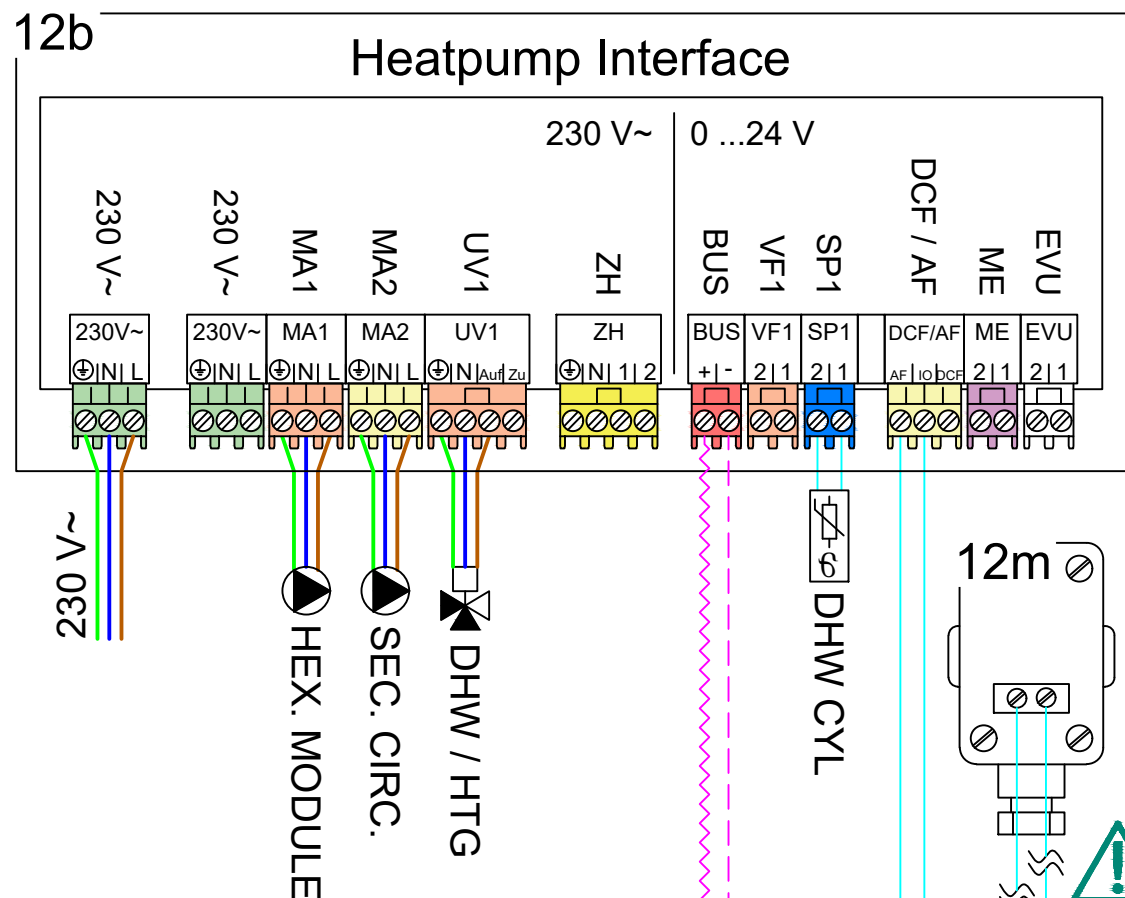
30140-1012



-See page 2 for detailed wiring.

1. See page 3 for relevant controller system configuration settings.
2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless
7. Optional for metering purposes.
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV: D

Appliance(s): aroTHERM Plus, Heat Ex. Module

Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

30140-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

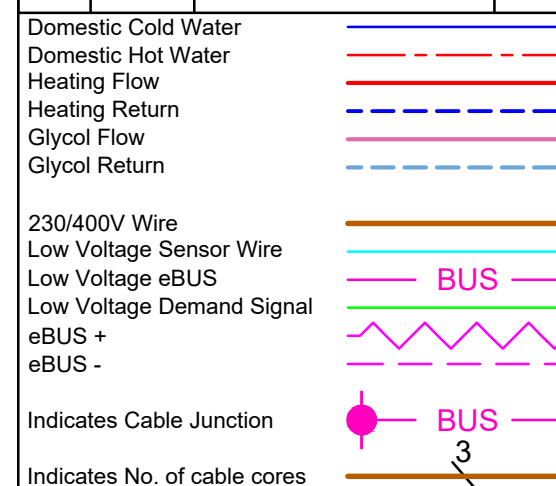
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12a VR92
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC 720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45° (Assumed)
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
FM3 configuration:	3	<b>Zone 2</b>	
FM3 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	Rem. contr. 1
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

D	29/08/2023	Added aroTHERM 400V option	2,E
		Updated ESCO Setting	2,C
REV	DATE	DESCRIPTION	ZONE



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV: D

Appliance(s): aroTHERM Plus, Heat Ex. Module

Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

30141-1012

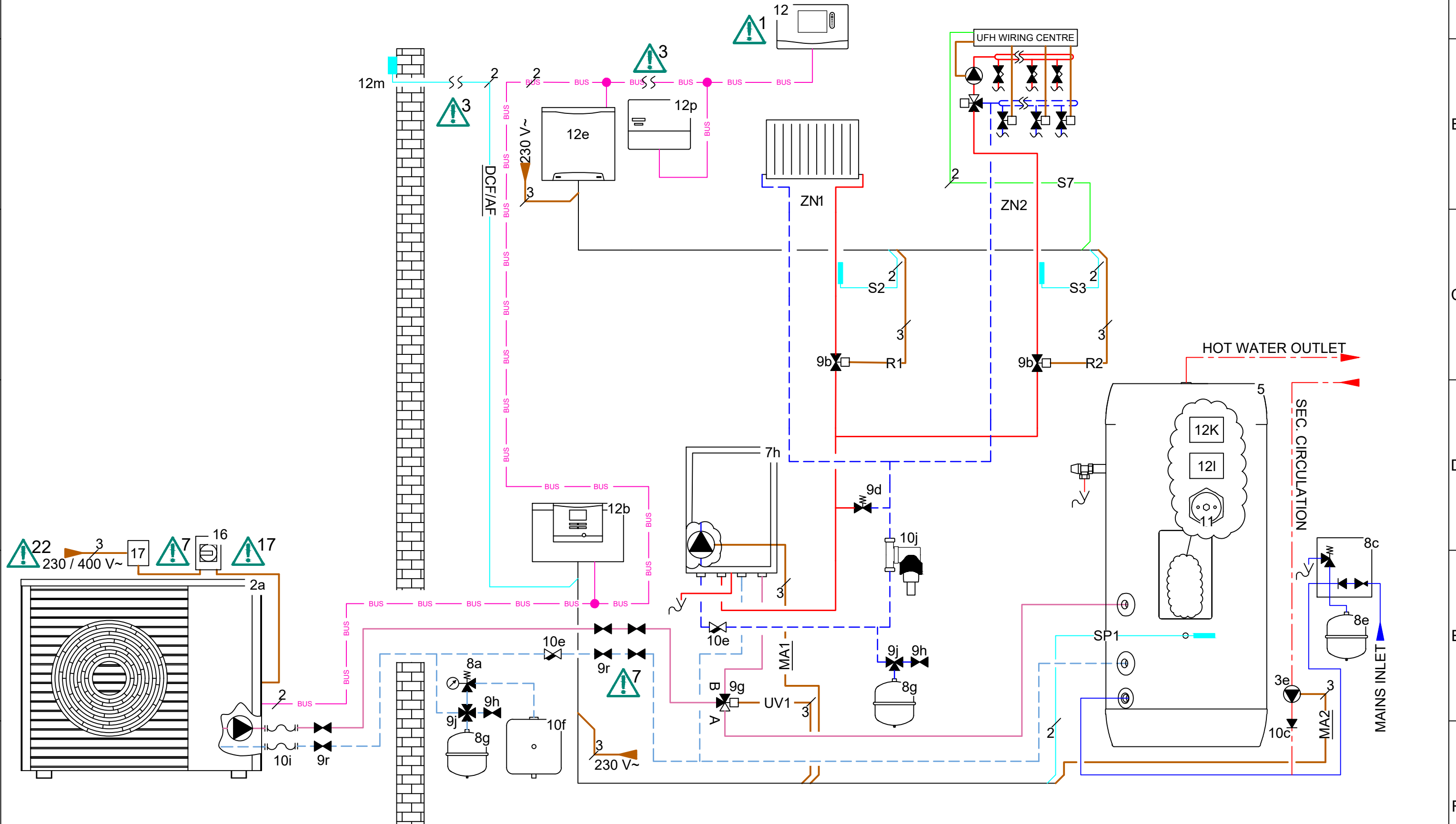


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless.
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFG - 3rd Party,

30/08/2023

REV: B

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

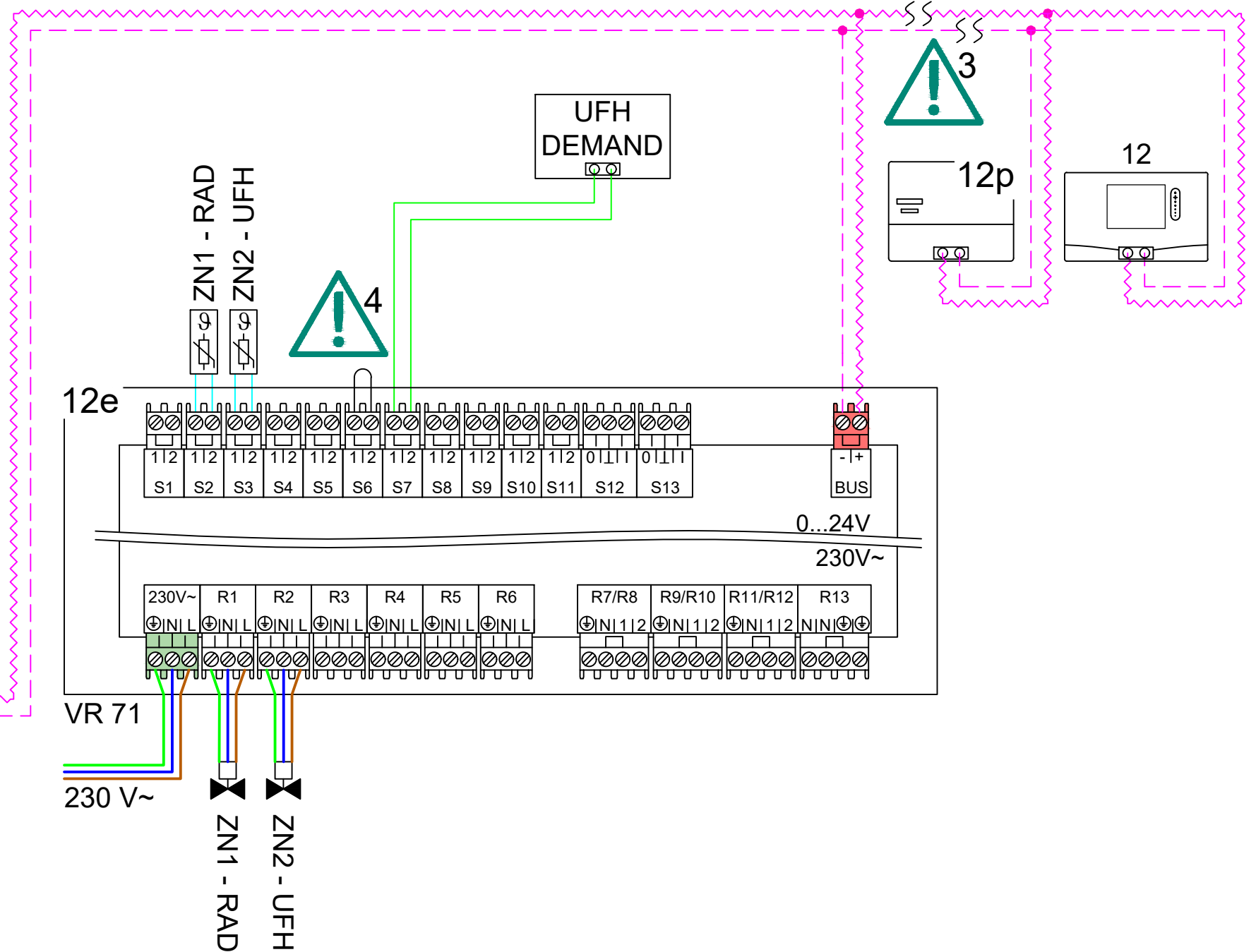
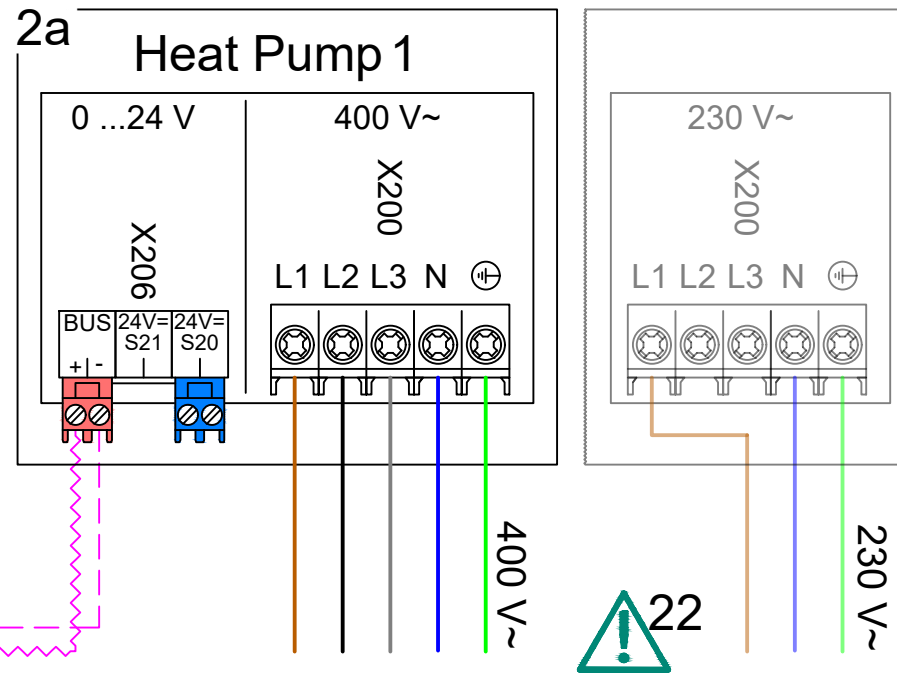
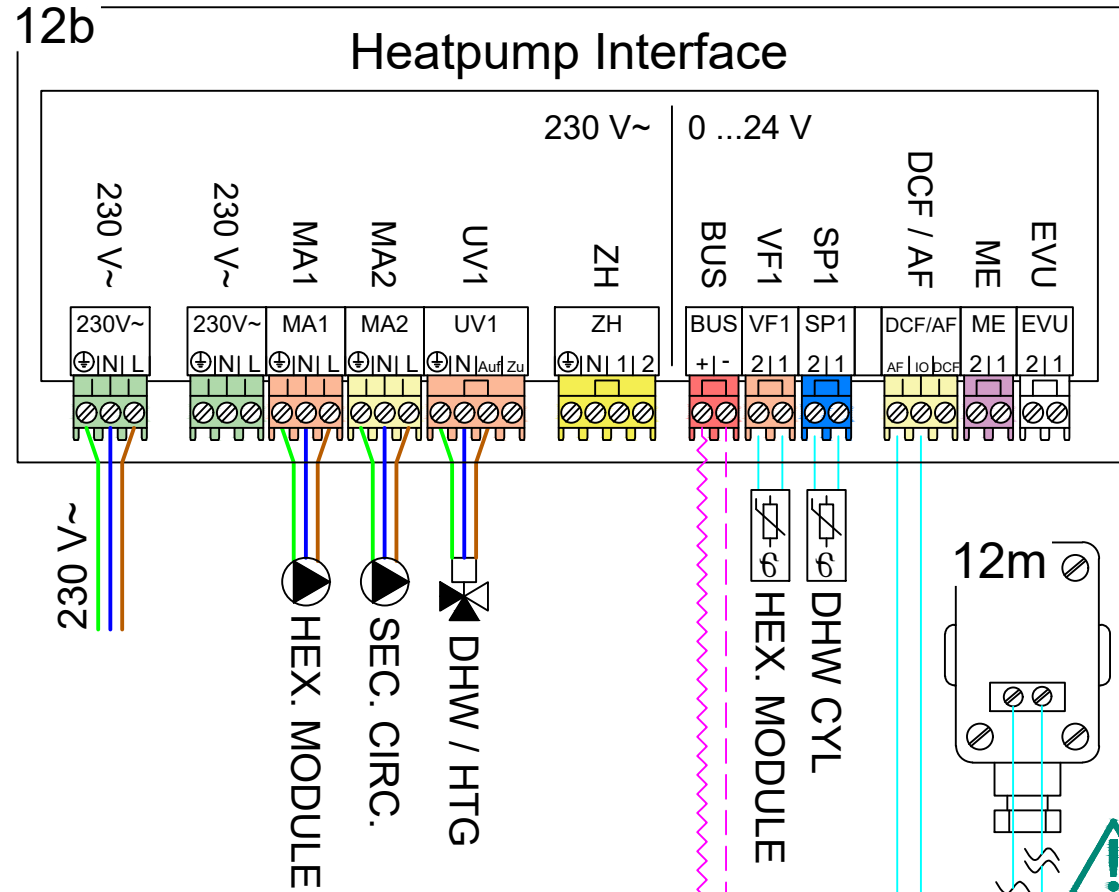


30141-1012



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless.  
 4. Link required (not factory fitted).

7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH - 3rd Party,

30/08/2023

REV: B

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

30141-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank (If applicable)
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC 720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45° (Assumed)
ESCO:	HP + BUH Off	Set-back mode:	Eco
Back-up boiler:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	No assignmt
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

B	30/08/2023	Added aroTHERM 400V option	2,E
---	------------	----------------------------	-----

REV	DATE	DESCRIPTION	ZONE
-----	------	-------------	------

Domestic Cold Water	
Domestic Hot Water	
Heating Flow	
Heating Return	
Glycol Flow	
Glycol Return	

230/400V Wire	
Low Voltage Sensor Wire	
Low Voltage eBUS	
Low Voltage Demand Signal	
eBUS +	
eBUS -	

Indicates Cable Junction	
Indicates No. of cable cores	

Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

30/08/2023

REV: B

Appliance(s): aroTHERM Plus, Heat Ex. Module

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH - 3rd Party,

Domestic Hot Water: 1x Cylinder

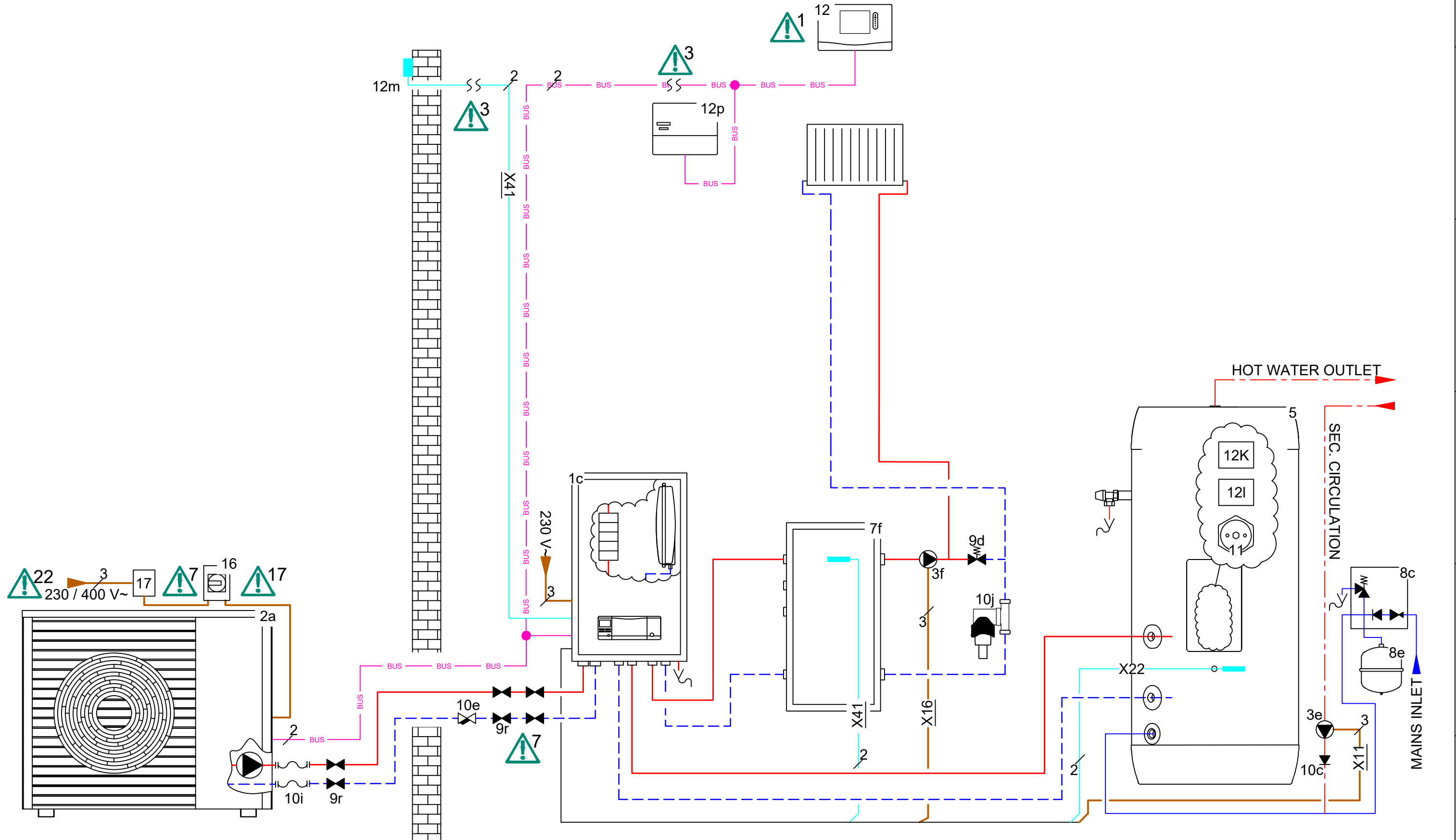
30160-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

22/07/2022

REV: D

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

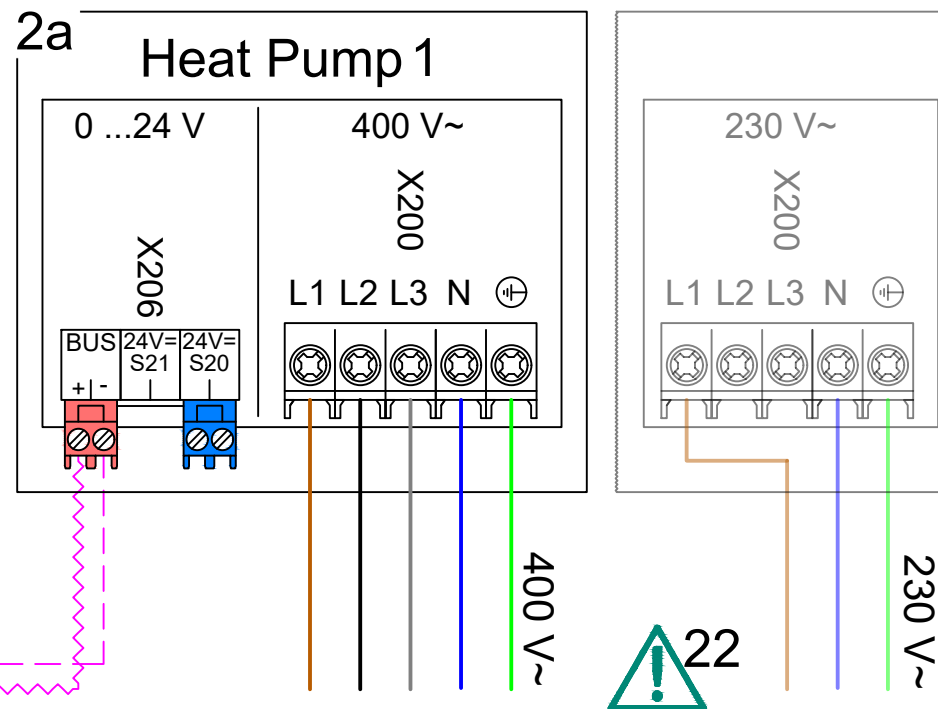
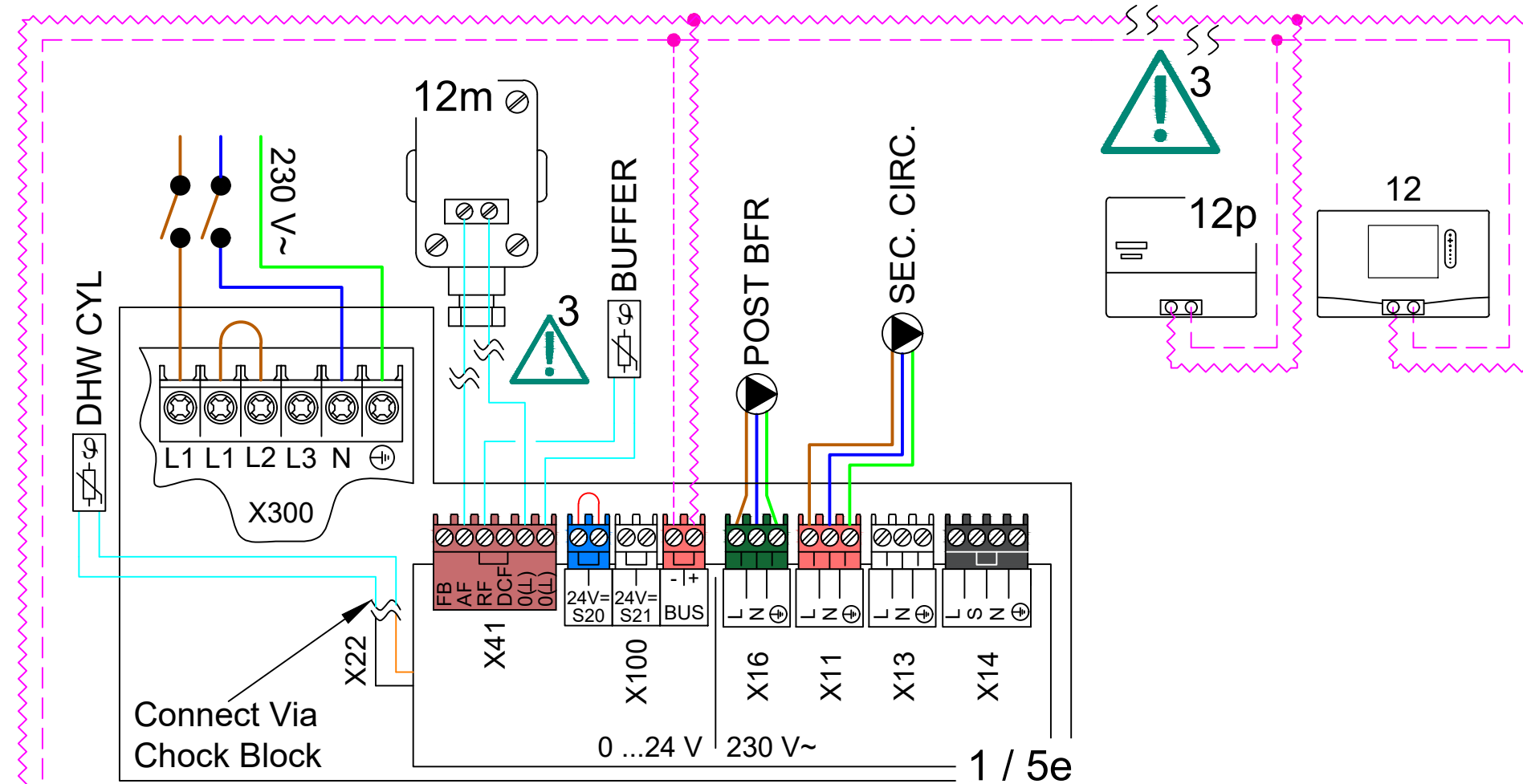
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering puposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30160-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	HP + BUH off		
Back-up boiler *1:	Off		
Conf. ext. input:	Bridge, deactiv.		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	Control		

D 30/08/2023 Added aroTHERM 400V option

REV	DATE	DESCRIPTION
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

22/07/2022

REV: D

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

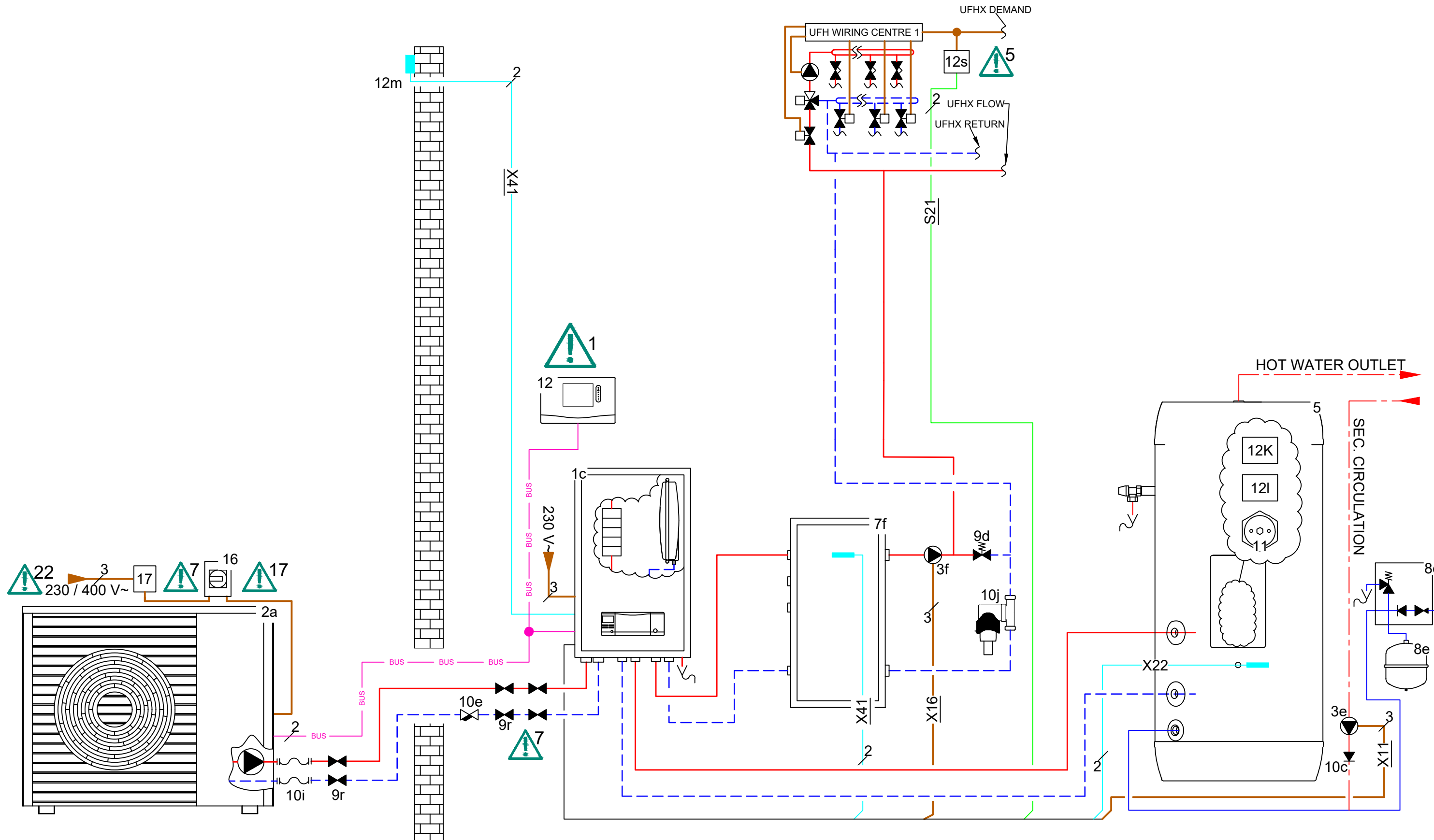
30161-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

30/08/2023

REV: D

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

Control(s): sensoCOMFORT VRC720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, ,

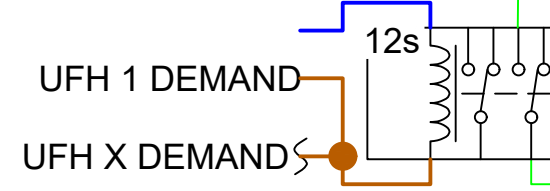
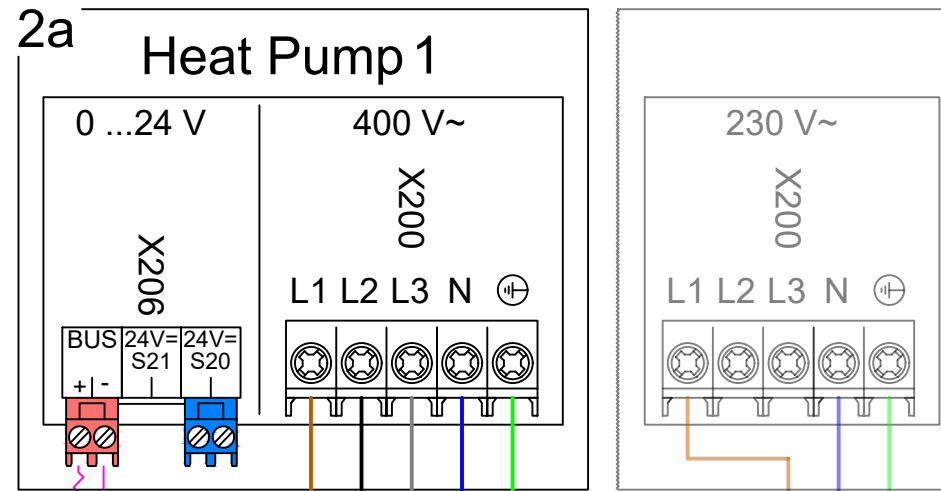
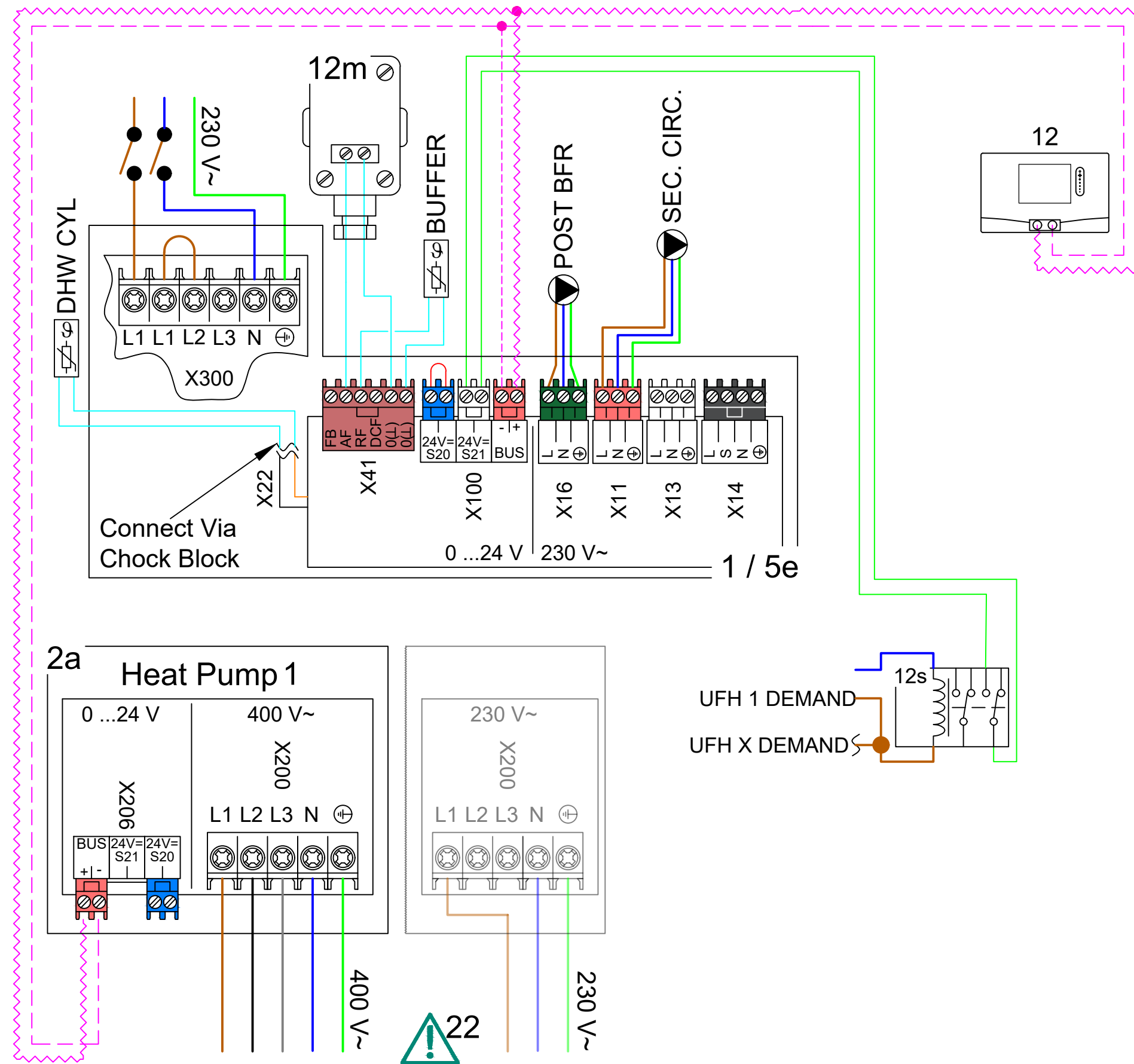
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30161-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

1. All applicable laws and regulations must be followed.
2. The Diagram may be subject to alteration at any time.
3. Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
4. Any reproduction of the design must have the prior permission of Vaillant.
5. During the planning, design, installation and later use of the system, all operating instructions must be followed.
6. In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
7. Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
8. These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

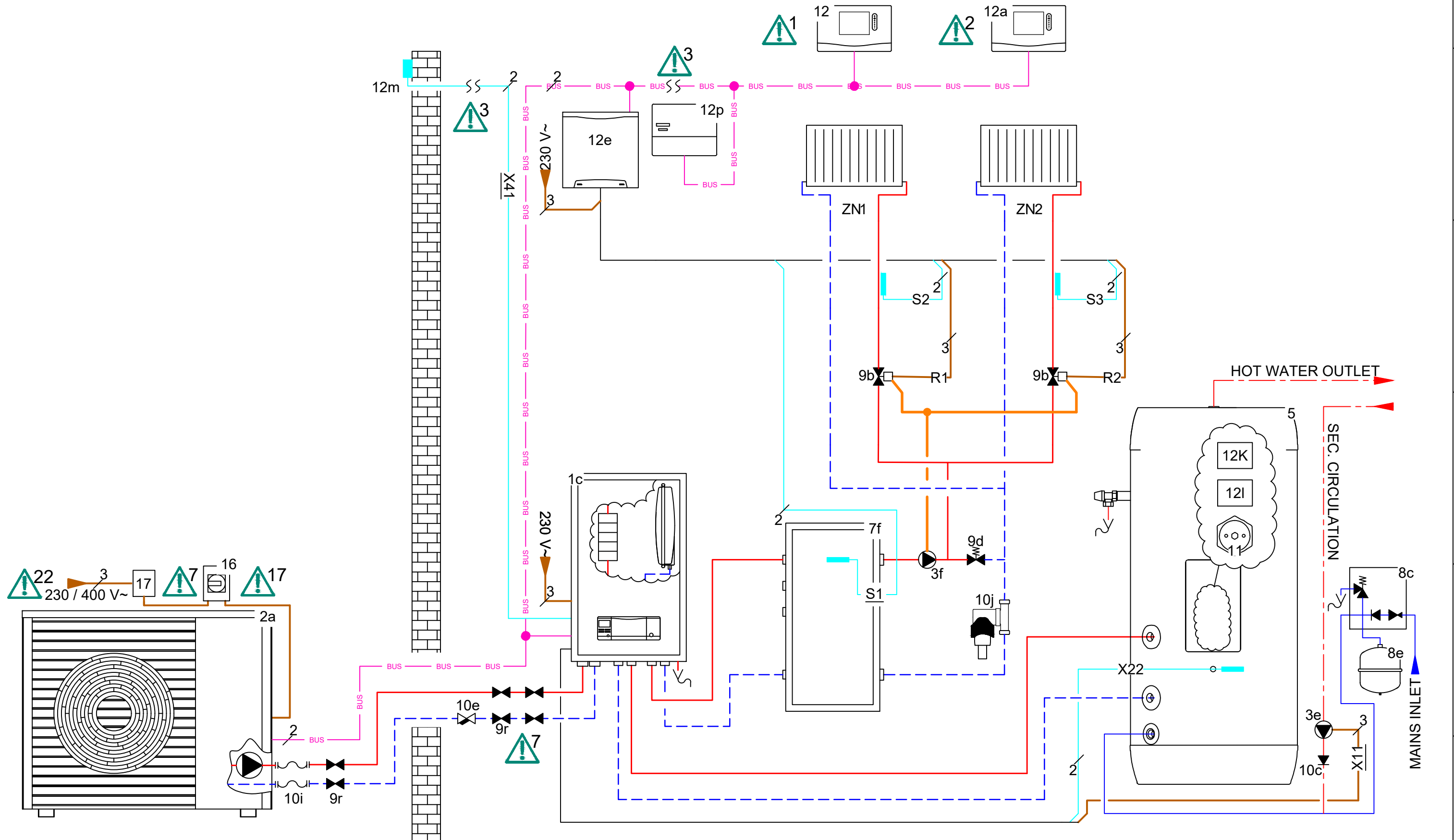
Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler*1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

REV	DATE	DESCRIPTION
D	30/08/2023	Added aroTHERM Plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores



- See page 2 for detailed wiring.
- 1. See page 3 for relevant controller system configuration settings.
- 2. Set VR92 remote address to its zone number - 1 eg. If VR92 is in zone 3, then remote address must be set to 2.

- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.
- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV:

C

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

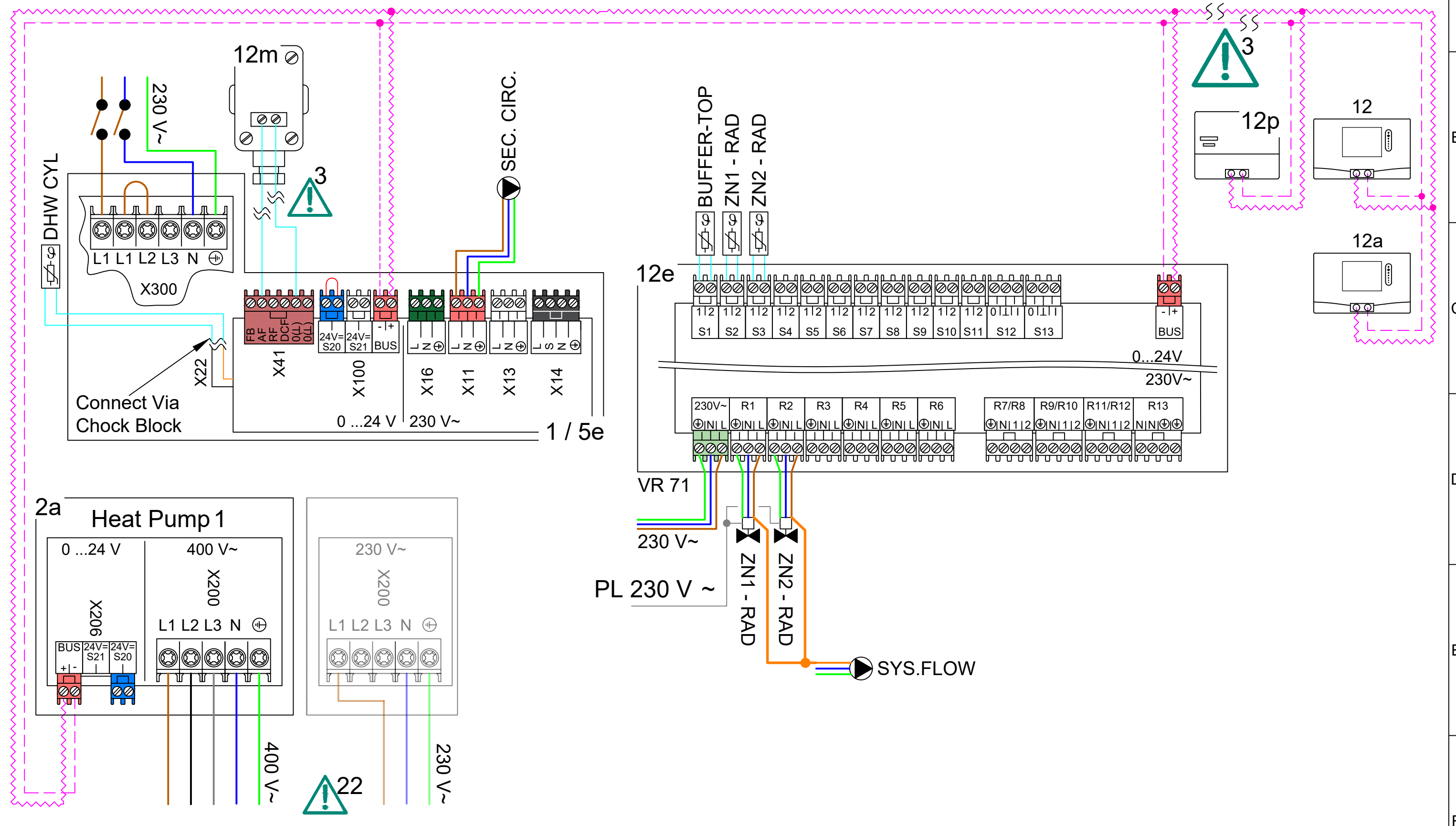
30170-1012

-See page 2 for detailed wiring.

1. See page 3 for relevant controller system configuration settings.
2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless

7. Optional for metering purposes.
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV:

C

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

30170-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler*1:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
<b>HP control module configuration</b>		<b>Zone 2</b>	
MO 2:	Circulation pump	Zone activated:	Yes
<b>Circuit 1</b>		Zone assignment:	Rem. contr. 1
Circuit type:	Heating	<b>Domestic hot water</b>	
OT switch-off threshold:	30°	Cylinder:	Active
Heat curve:	**Site specific	Anti-legio. day:	**User preference
Min. target flow temperature:	15°	Anti-legio. time:	**User preference
Max. target flow temperature:	45°	Cylinder charging offset:	15 K
Set-back mode:	Normal	Cyl. charg. anti-cycl. time:	5 min
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
C	30/08/2023	Added aroTHERM 400V option	2,E
Domestic Cold Water			
Domestic Hot Water			
Heating Flow			
Heating Return			
Glycol Flow			
Glycol Return			
230/400V Wire			
Low Voltage Sensor Wire			
Low Voltage eBUS			
Low Voltage Demand Signal			
eBUS +			
eBUS -			
Indicates Cable Junction			
Indicates No. of cable cores			

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: C

Appliance(s): aroTHERM Plus, Hydraulic Station, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

30171-1012

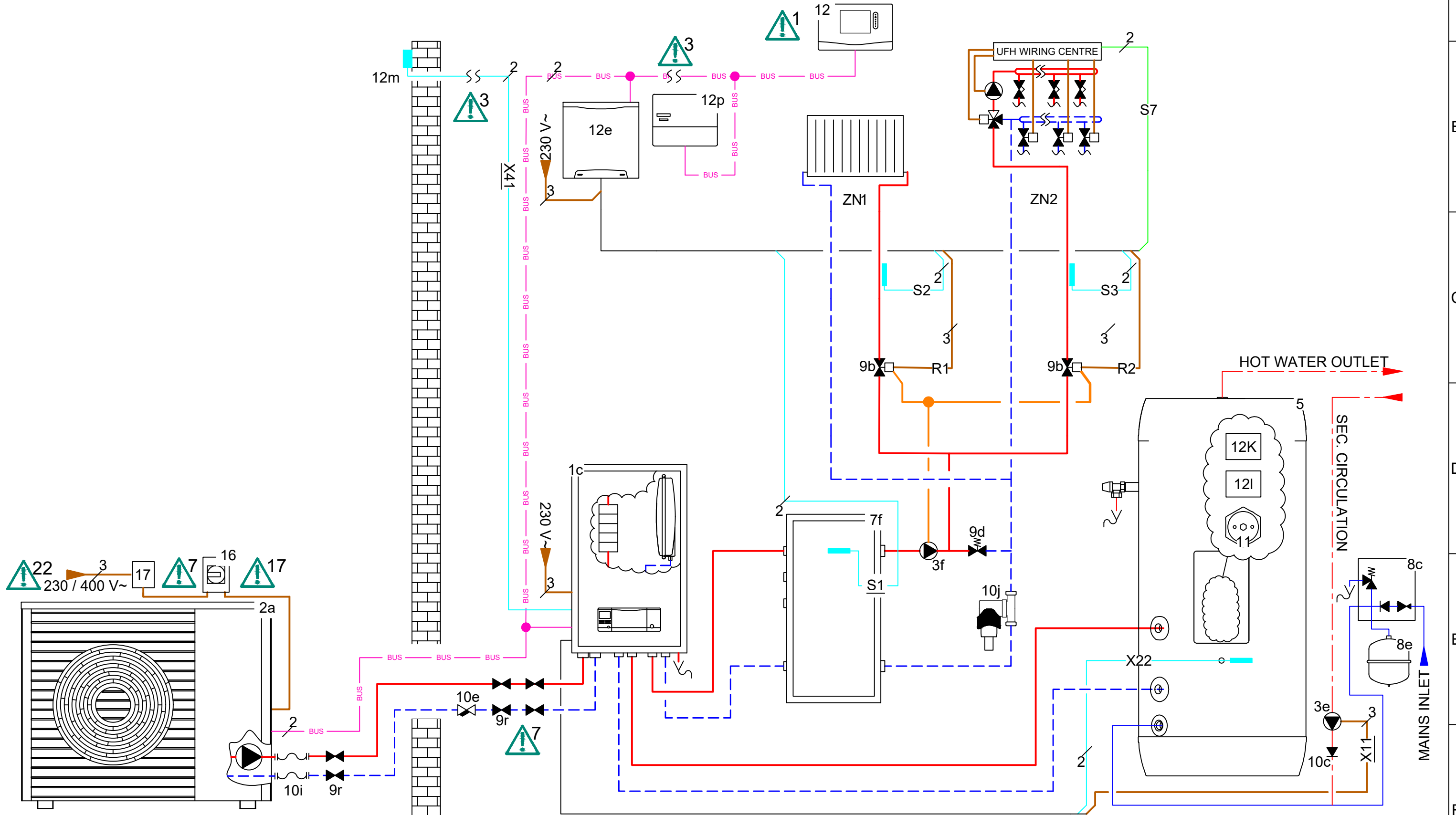


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

31/08/2023

REV: D

Appliance(s): 1x aroTHERM Plus, 1x Hydraulic Station, 1x Buffer (45/100L)

Control(s): 1x sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH(X) - 3rd Party,

Domestic Hot Water: 1x Cylinder

30171-1012

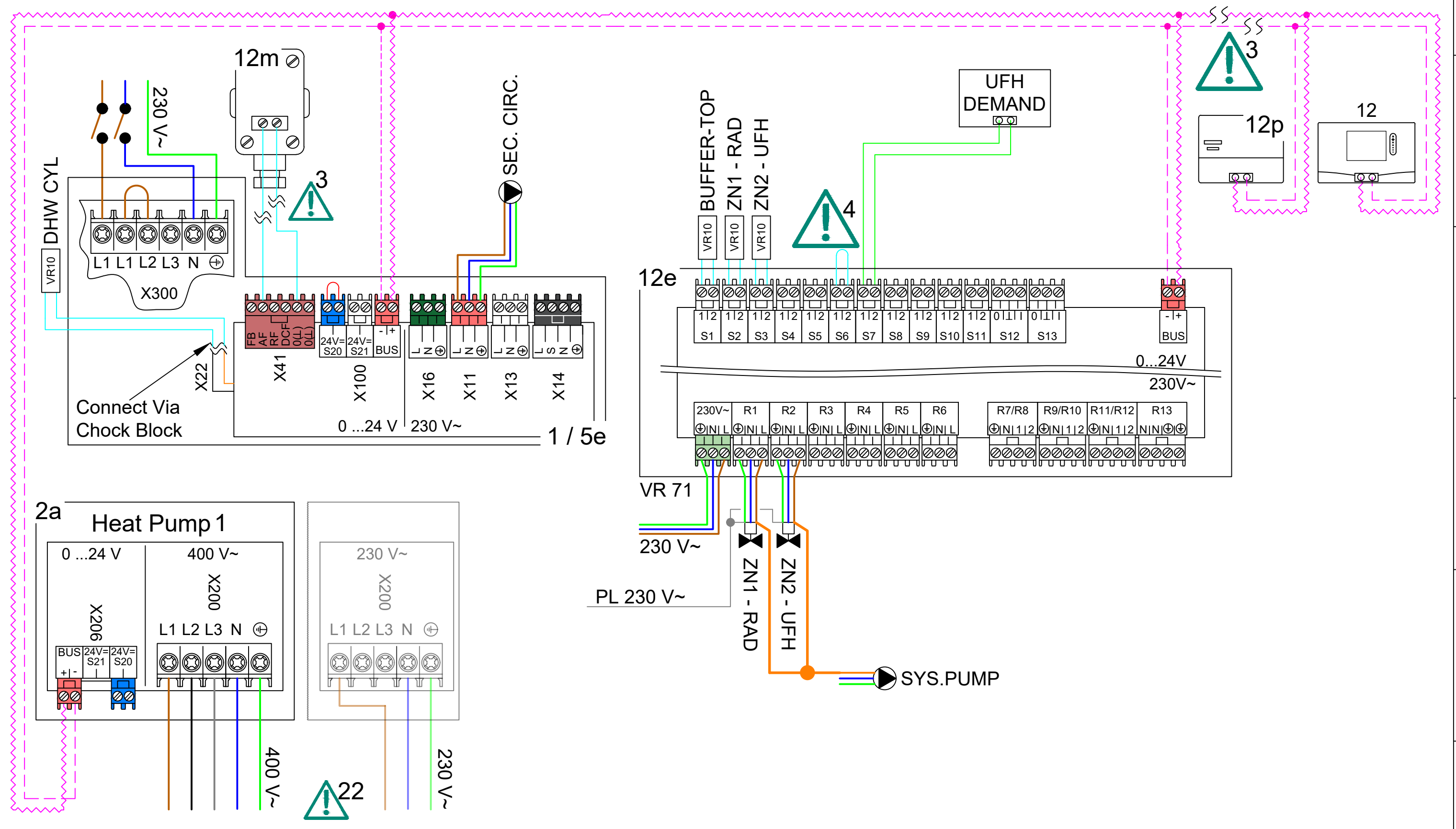


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

31/08/2023

REV: D

Appliance(s): 1x aroTHERM Plus, 1x Hydraulic Station, 1x Buffer (45/100L)

Control(s): 1x sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH(X) - 3rd Party,

Domestic Hot Water: 1x Cylinder

30171-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Zone 1</b>	
Adapt. heat curve:	Deactivated	Zone activated:	Yes
Hybrid manager:	Bivalence pt	Zone assignment:	Control
Heating bivalence point:	-20°	<b>Zone 2</b>	
DHW bivalence point:	-20°	Zone activated:	Yes
Alternative point:	Off	Zone assignment:	No assignmt
ESCO:	HP + BUH Off	<b>Domestic hot water</b>	
Back-up boiler *1:	Off	Cylinder:	Active
Conf. ext. input:	Open, deactiv.	Anti-legio. day:	**User preference
<b>Basic system diagram config.</b>		Anti-legio. time:	**User preference
Basic system diagram code:	8	Cylinder charging offset:	15 K
<b>HP control module configuration</b>		Cyl. charg. anti-cycl. time:	5 min
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		
<b>Circuit 2</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		

D	31/08/2023	Added aroTHERM Plus 400V option	2,E
---	------------	---------------------------------	-----

Updated basic system diagram number to: 8			2,D
---	--	--	-----

REV	DATE	DESCRIPTION	ZONE
		Domestic Cold Water	
		Domestic Hot Water	
		Heating Flow	
		Heating Return	
		Glycol Flow	
		Glycol Return	
		230/400V Wire	
		Low Voltage Sensor Wire	
		Low Voltage eBUS	BUS
		Low Voltage Demand Signal	
		eBUS +	
		eBUS -	
		Indicates Cable Junction	BUS
		Indicates No. of cable cores	3

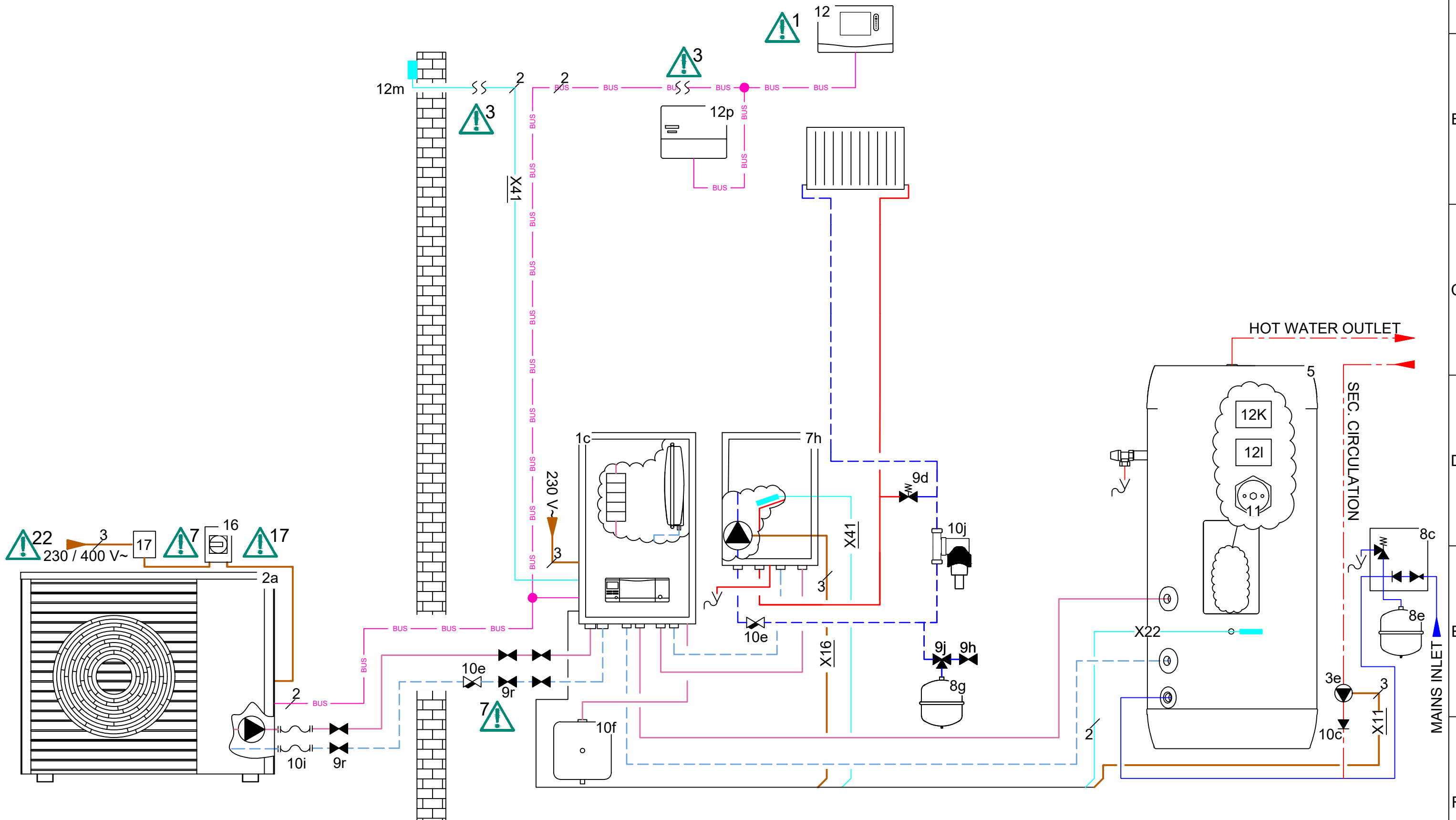
30180-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
15/09/2023 REV: D

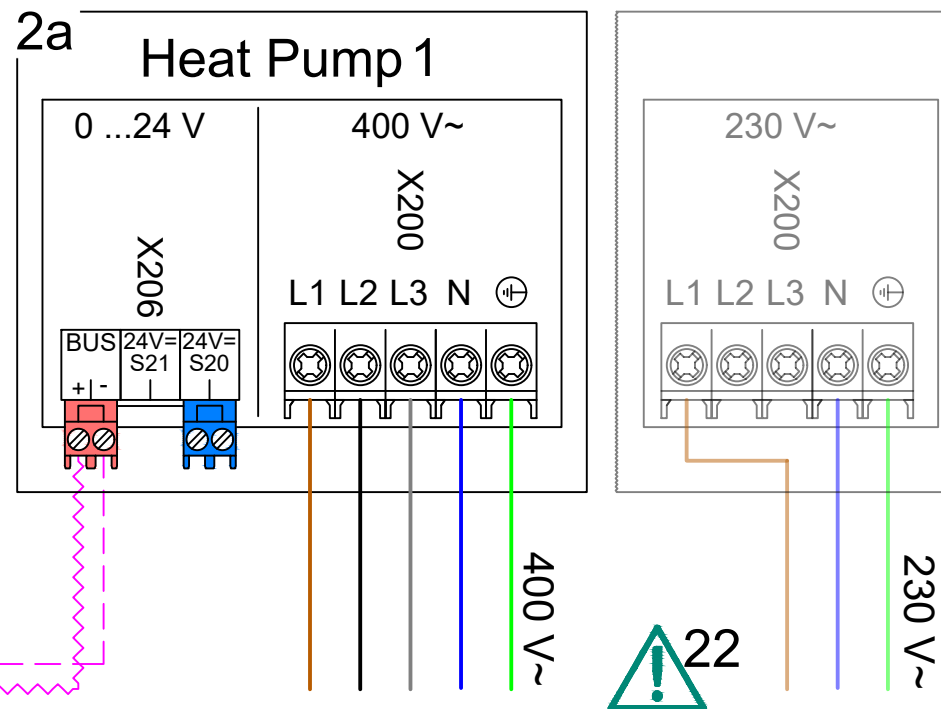
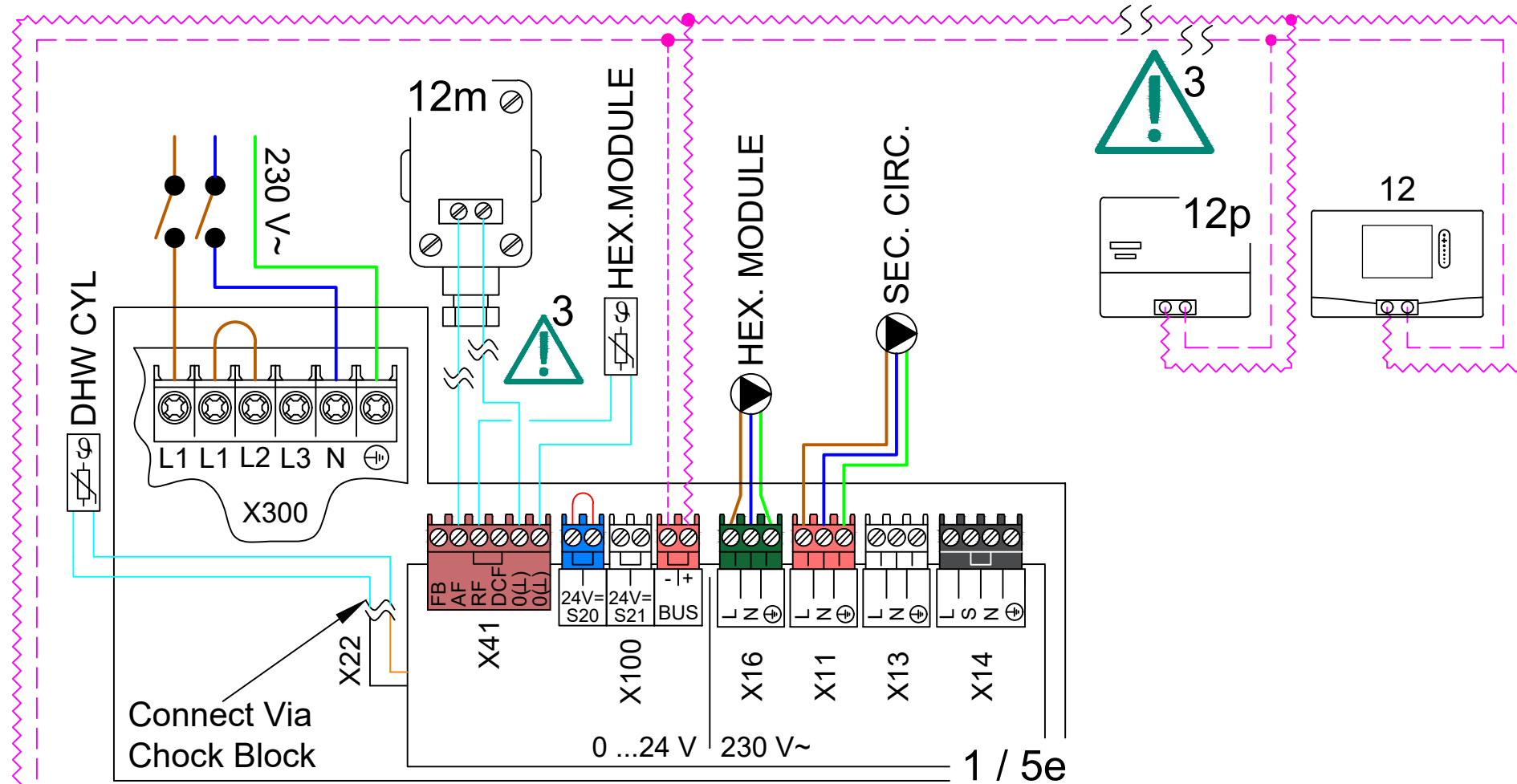
Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module  
Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,  
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V





30180-1011

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC 720/2 System Configuration

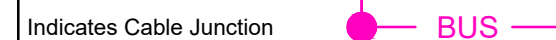
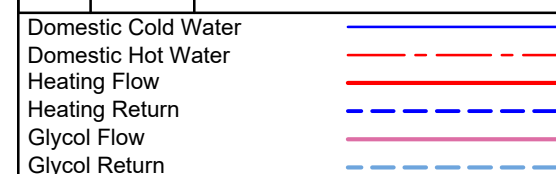
Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	HP + BUH off		
Back-up boiler*1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	Control		

D 15/09/2023 Added aroTHERM plus 400V option

REV	DATE	DESCRIPTION



Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

15/09/2023

REV: D

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

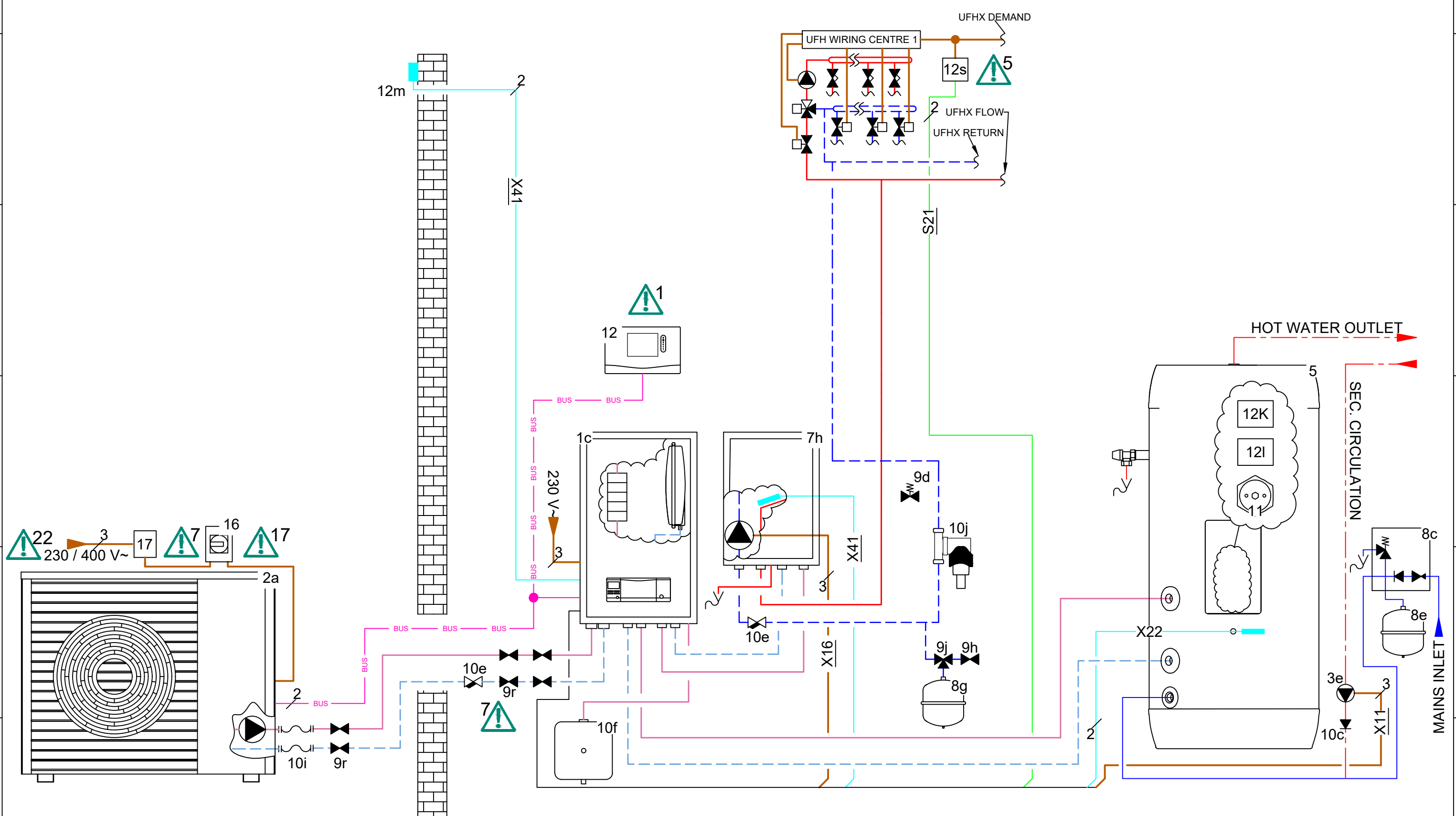
30181-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
15/09/2023 REV: D

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module  
Control(s): sensoCOMFORT VRC720

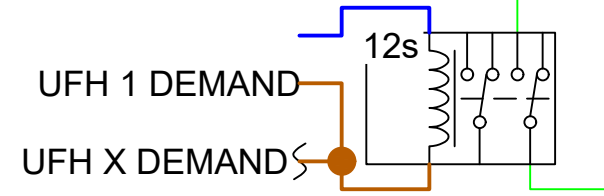
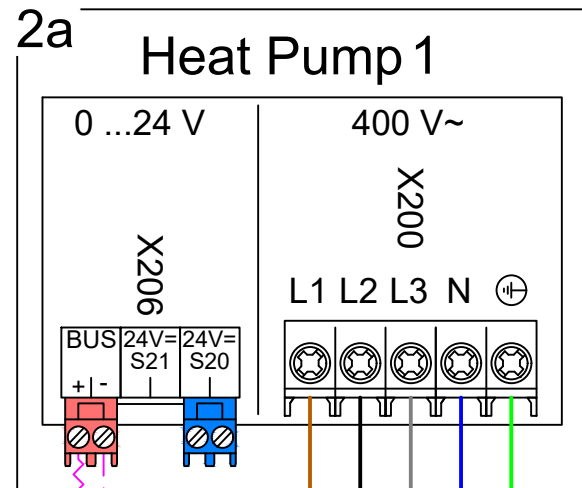
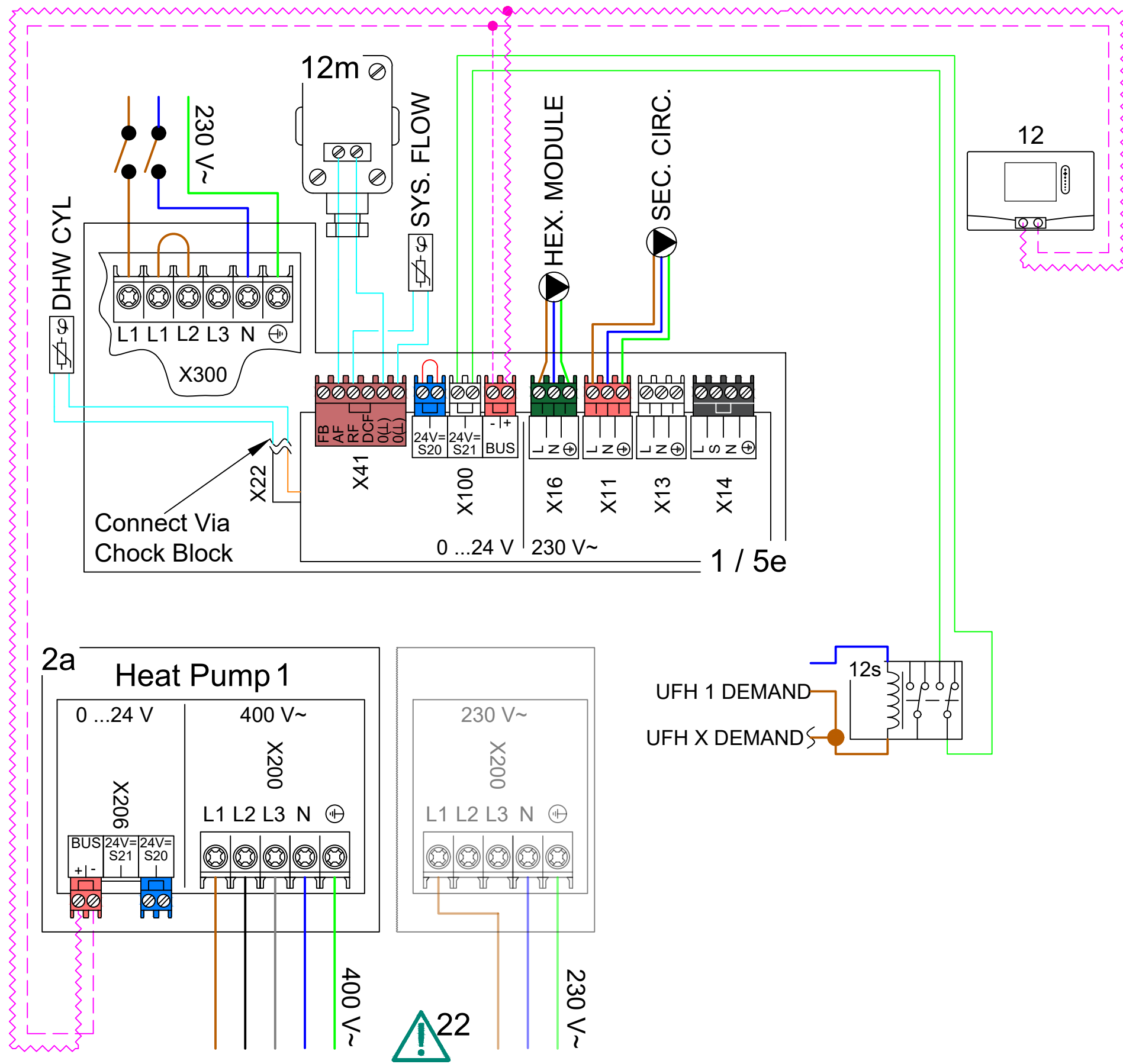
HTG. Circuit(s): 1x UFH(X) - 3rd Party, .  
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30181-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

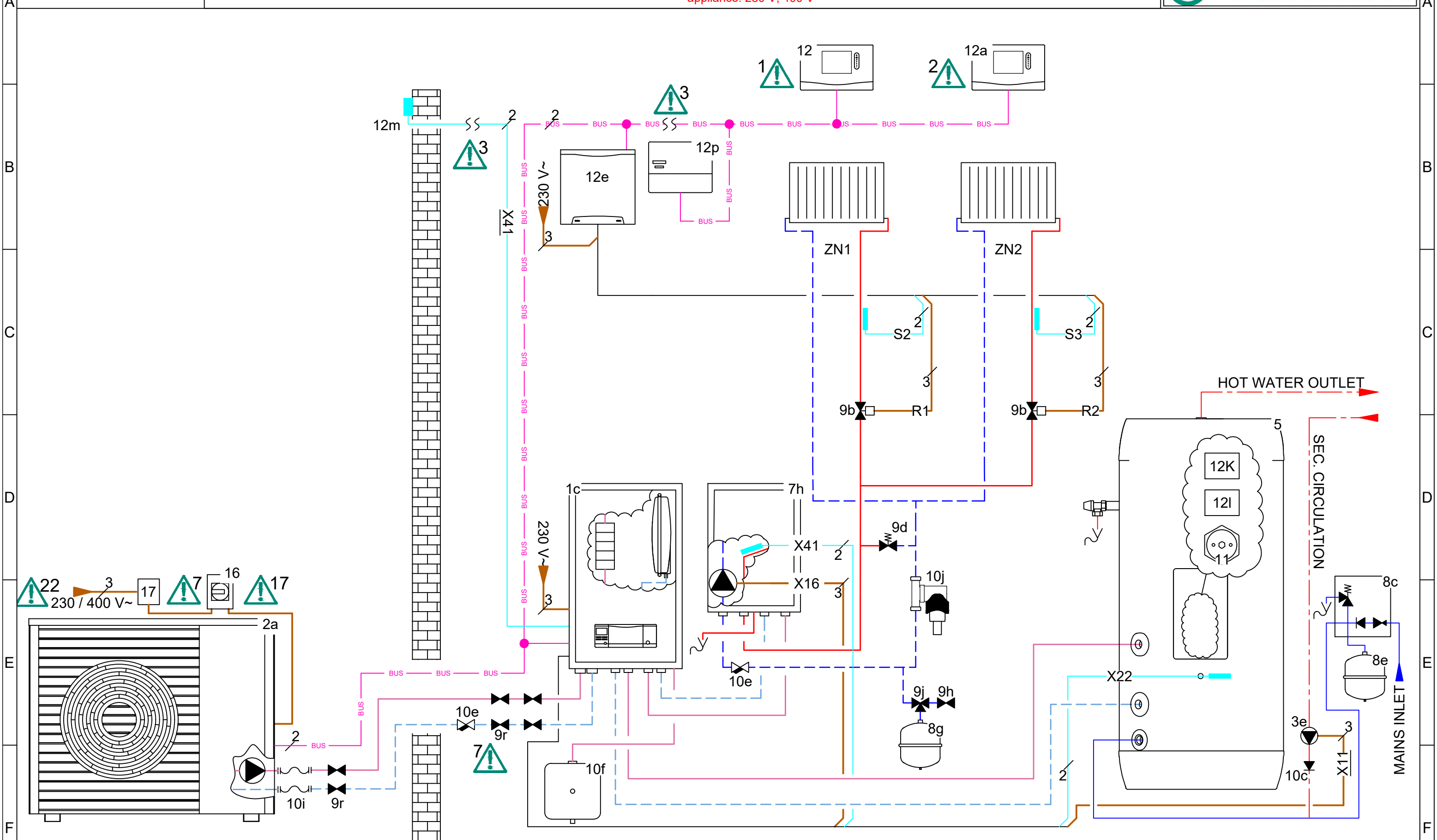
\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler*1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

REV	DATE	DESCRIPTION
D	15/09/2023	Added aroTHERM plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 2. Set VR92 remote address to its zone number - 1  
 eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

18/09/2023

REV:

C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module

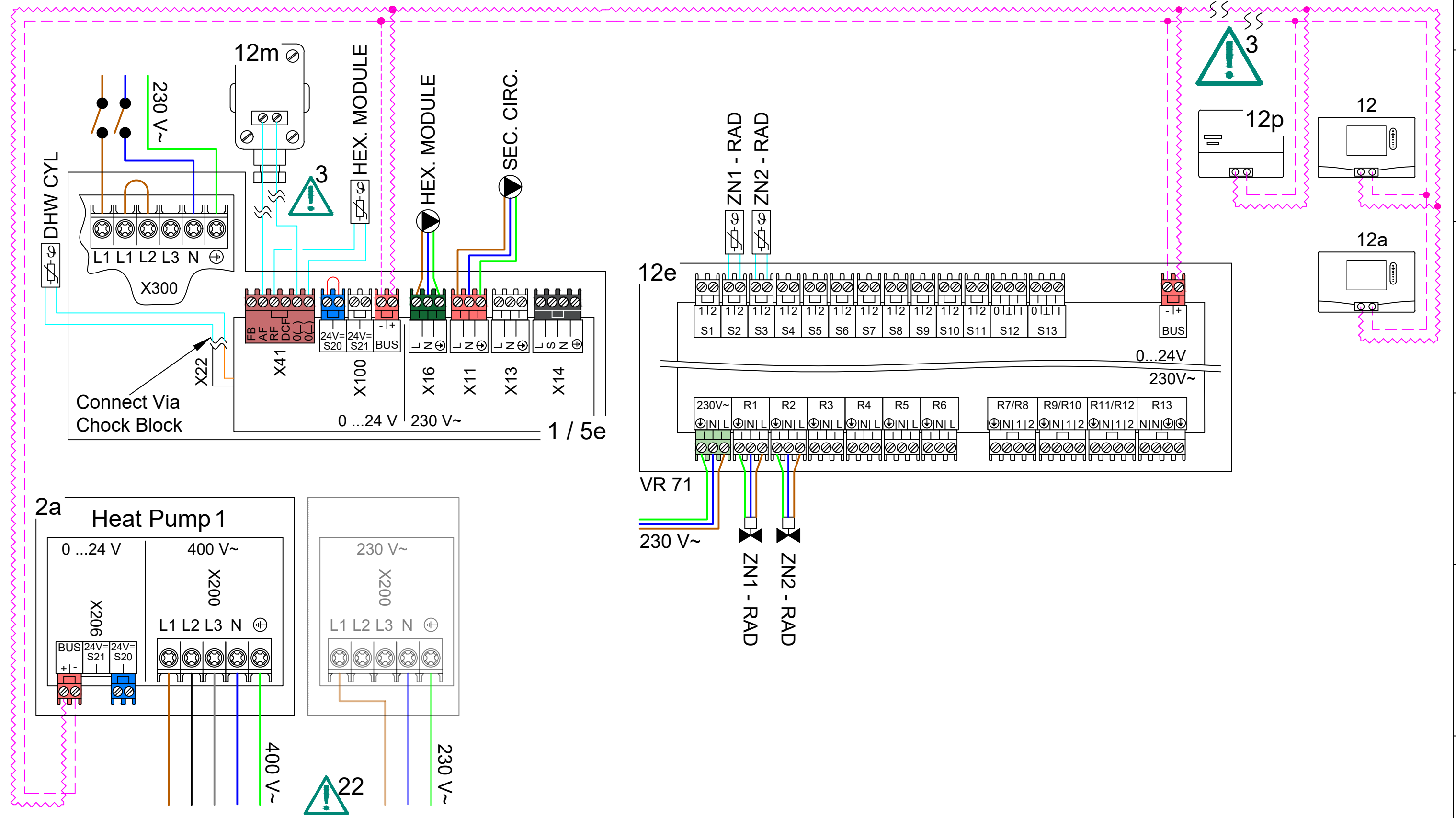
Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

- See page 2 for detailed wiring.
1. See page 3 for relevant controller system configuration settings.
  2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless
7. Optional for metering purposes.
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
18/09/2023 REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module  
Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,  
Domestic Hot Water: 1x Cylinder

30190-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12a VR92
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler *1:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
<b>HP control module configuration</b>		<b>Zone 2</b>	
MO 2:	Circulation pump	Zone activated:	Yes
<b>Circuit 1</b>		Zone assignment:	Rem. contr. 1
Circuit type:	Heating	<b>Domestic hot water</b>	
OT switch-off threshold:	30°	Cylinder:	Active
Heat curve:	**Site specific	Anti-legio. day:	**User preference
Min. target flow temperature:	15°	Anti-legio. time:	**User preference
Max. target flow temperature:	45°	Cylinder charging offset:	15 K
Set-back mode:	Normal	Cyl. charg. anti-cycl. time:	5 min
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
C	18/09/2023	Added aroTHERM plus 400V option	2,E
Domestic Cold Water			
Domestic Hot Water			
Heating Flow			
Heating Return			
Glycol Flow			
Glycol Return			
230/400V Wire			
Low Voltage Sensor Wire			
Low Voltage eBUS			
Low Voltage Demand Signal			
eBUS +			
eBUS -			
Indicates Cable Junction			
Indicates No. of cable cores			

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

18/09/2023

REV: C

Control(s): sensoCOMFORT

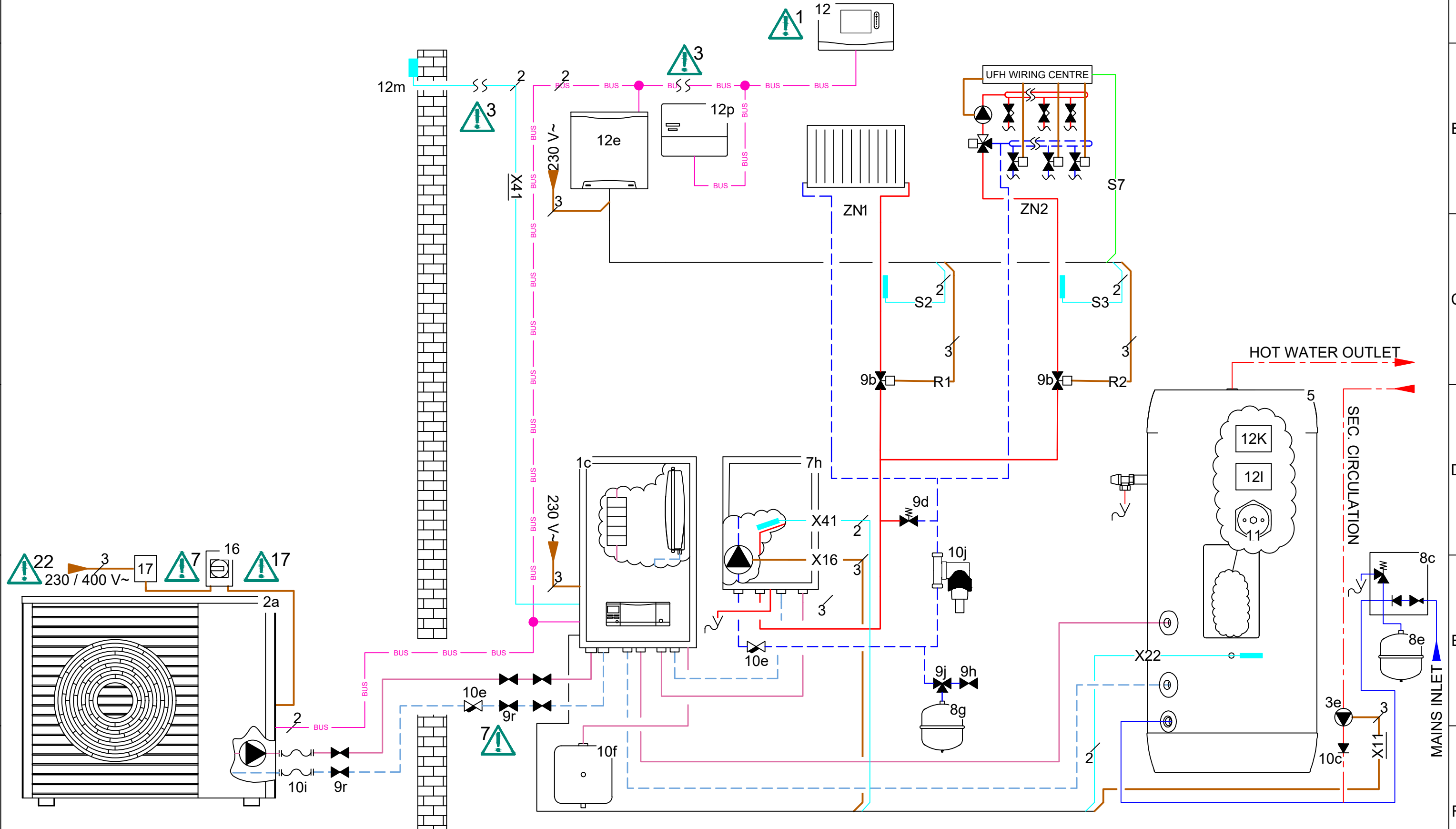
Domestic Hot Water: 1x Cylinder

30191-1012



-See page 2 for detailed wiring.  
1. See page 3 for relevant controller system configuration settings.  
3. Controls and outdoor sensor can be wired or wireless  
4. Link required (not factory fitted).

7. Optional for metering purposes.  
17. Rotary Isolator must be situated outside of the Protective Zone  
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
18/09/2023 REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module  
Control(s): sensoCOMFORT

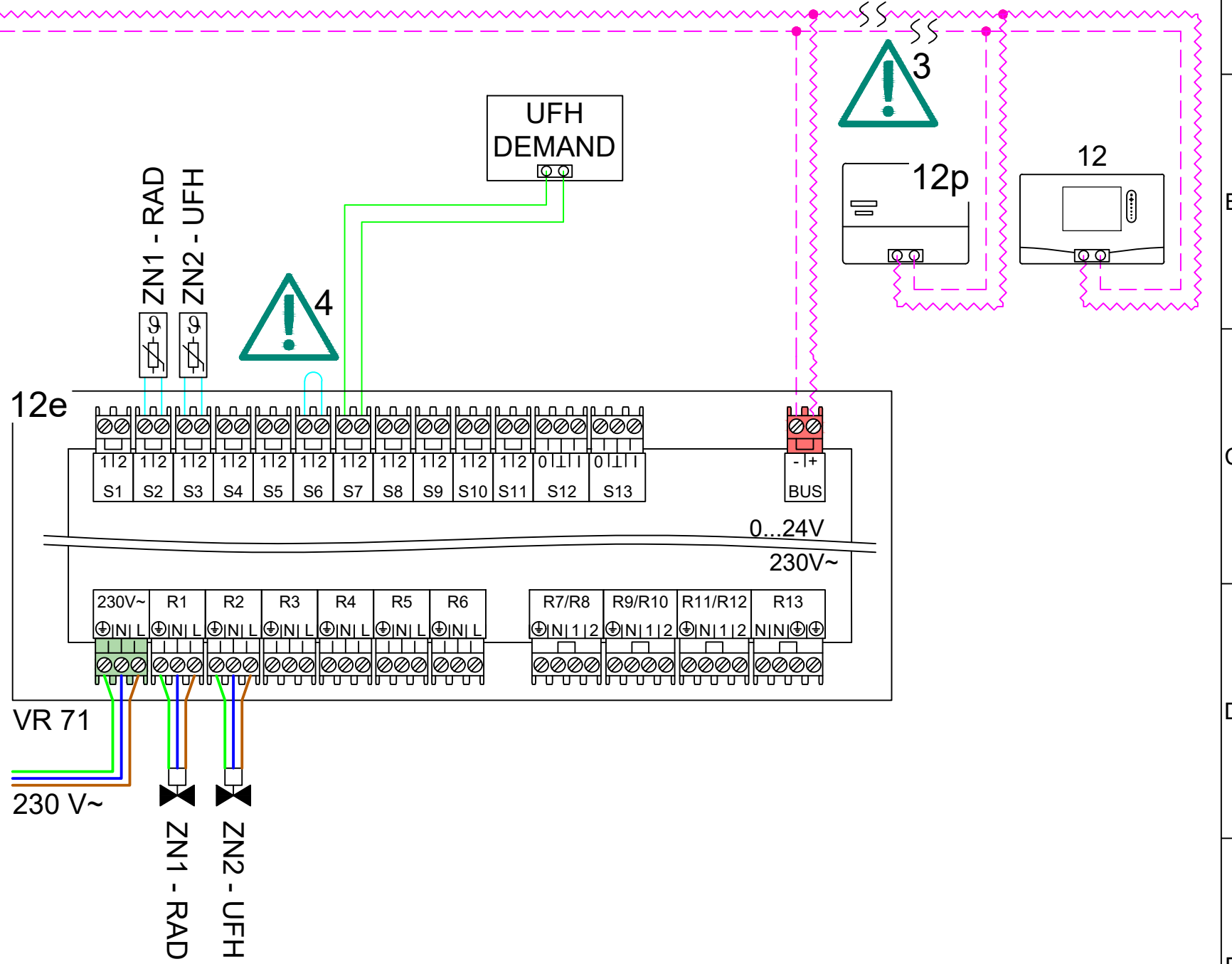
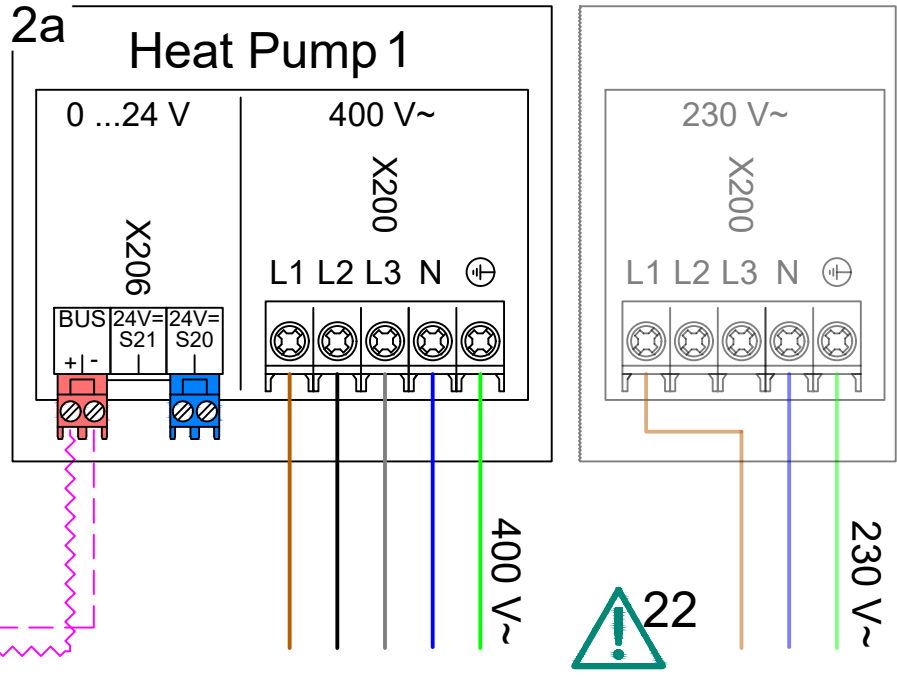
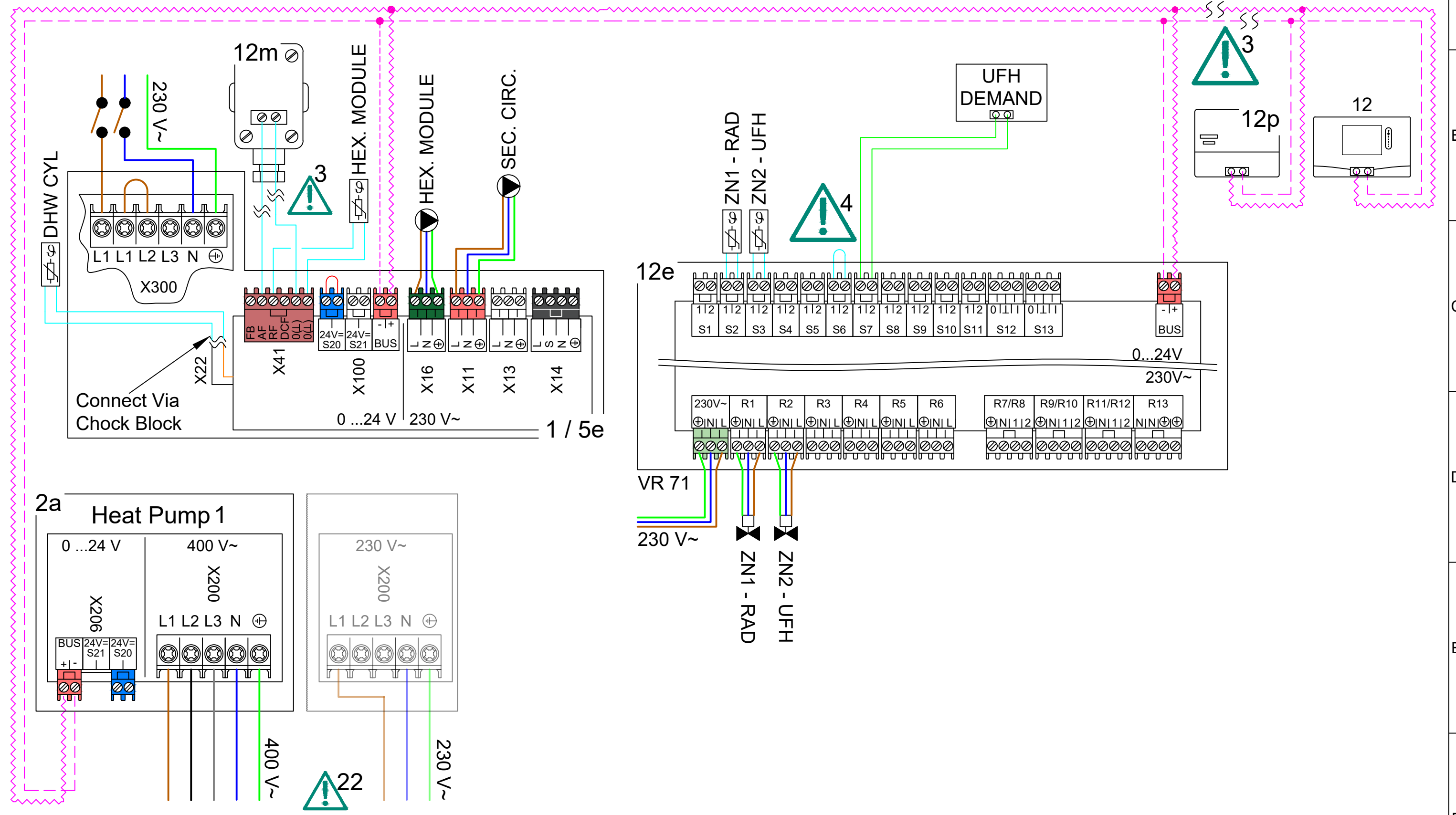
HTG. Circuit(s): 1x Radiator - Direct, 1x UHF - 3rd Party,  
Domestic Hot Water: 1x Cylinder



30191-1012

- ⚠️ -See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 4. Link required (not factory fitted).

7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
 18/09/2023 REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module  
 Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,  
 Domestic Hot Water: 1x Cylinder

30191-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Zone 1</b>	
Adapt. heat curve:	Deactivated	Zone activated:	Yes
Hybrid manager:	Bivalence pt	Zone assignment:	Control
Heating bivalence point:	-20°	<b>Zone 2</b>	
DHW bivalence point:	-20°	Zone activated:	Yes
Alternative point:	Off	Zone assignment:	No assignmt
ESCO:	HP + BUH off	<b>Domestic hot water</b>	
Back-up boiler*1:	Off	Cylinder:	Active
Conf. ext. input:	Open, deactiv.	Anti-legio. day:	**User preference
<b>Basic system diagram config.</b>		Anti-legio. time:	**User preference
Basic system diagram code:	10	Cylinder charging offset:	15 K
<b>HP control module configuration</b>		Cyl. charg. anti-cycl. time:	5 min
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		
<b>Circuit 2</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		

REV	DATE	DESCRIPTION	ZONE																												
C	18/09/2023	Added aroTHERM plus 400V option	2,E																												
<table border="0"> <tr> <td>Domestic Cold Water</td> <td></td> </tr> <tr> <td>Domestic Hot Water</td> <td></td> </tr> <tr> <td>Heating Flow</td> <td></td> </tr> <tr> <td>Heating Return</td> <td></td> </tr> <tr> <td>Glycol Flow</td> <td></td> </tr> <tr> <td>Glycol Return</td> <td></td> </tr> <tr> <td>230/400V Wire</td> <td></td> </tr> <tr> <td>Low Voltage Sensor Wire</td> <td></td> </tr> <tr> <td>Low Voltage eBUS</td> <td></td> </tr> <tr> <td>Low Voltage Demand Signal</td> <td></td> </tr> <tr> <td>eBUS +</td> <td></td> </tr> <tr> <td>eBUS -</td> <td></td> </tr> <tr> <td>Indicates Cable Junction</td> <td></td> </tr> <tr> <td>Indicates No. of cable cores</td> <td></td> </tr> </table>				Domestic Cold Water		Domestic Hot Water		Heating Flow		Heating Return		Glycol Flow		Glycol Return		230/400V Wire		Low Voltage Sensor Wire		Low Voltage eBUS		Low Voltage Demand Signal		eBUS +		eBUS -		Indicates Cable Junction		Indicates No. of cable cores	
Domestic Cold Water																															
Domestic Hot Water																															
Heating Flow																															
Heating Return																															
Glycol Flow																															
Glycol Return																															
230/400V Wire																															
Low Voltage Sensor Wire																															
Low Voltage eBUS																															
Low Voltage Demand Signal																															
eBUS +																															
eBUS -																															
Indicates Cable Junction																															
Indicates No. of cable cores																															

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

18/09/2023

REV: C

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

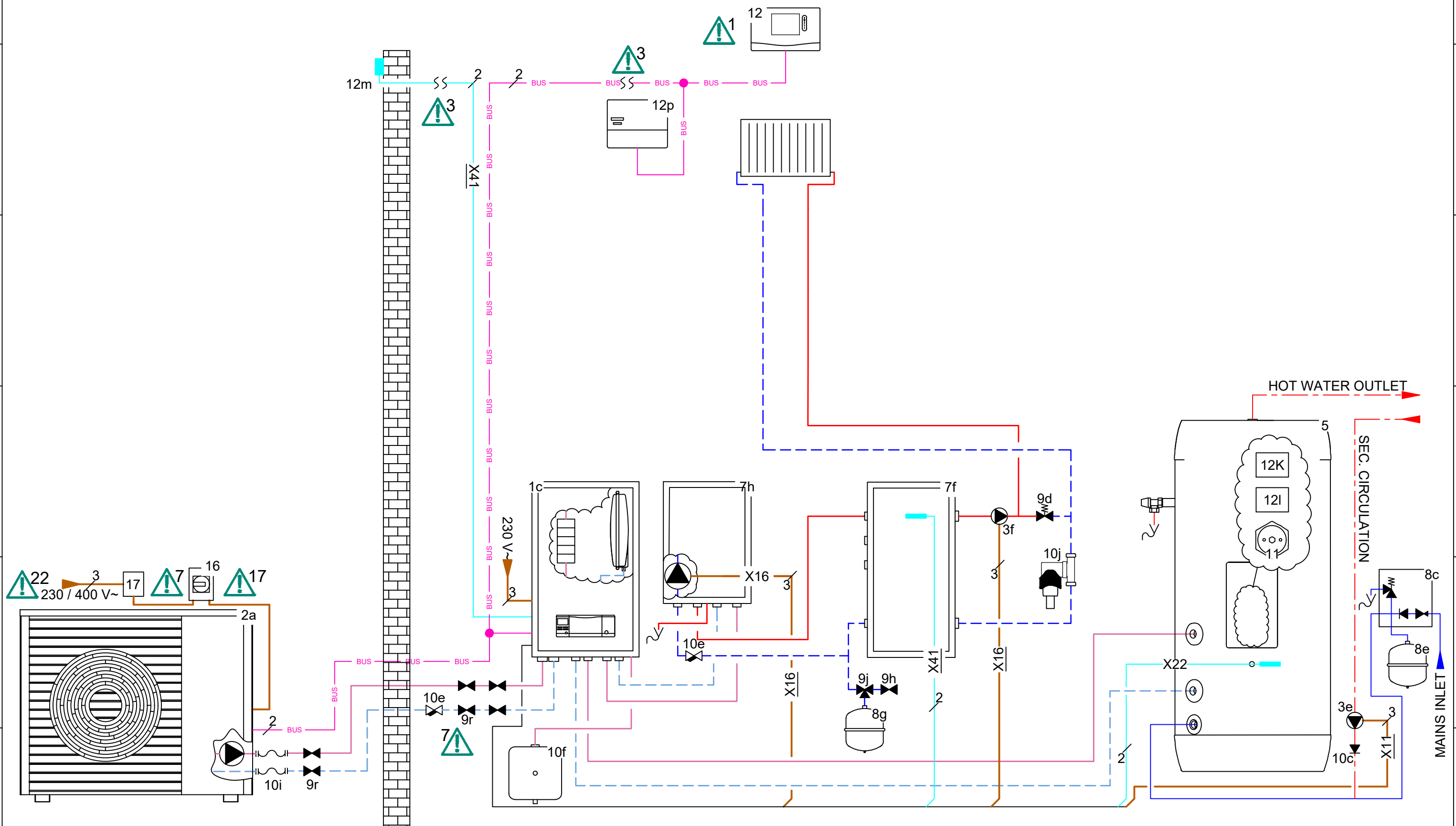
30200-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 18. Maximum current draw of 2 Amps on X16 terminal.
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
14/09/2023 REV: D

Appliance(s): aroTHERM Plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)  
Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,  
Domestic Hot Water: 1x Cylinder

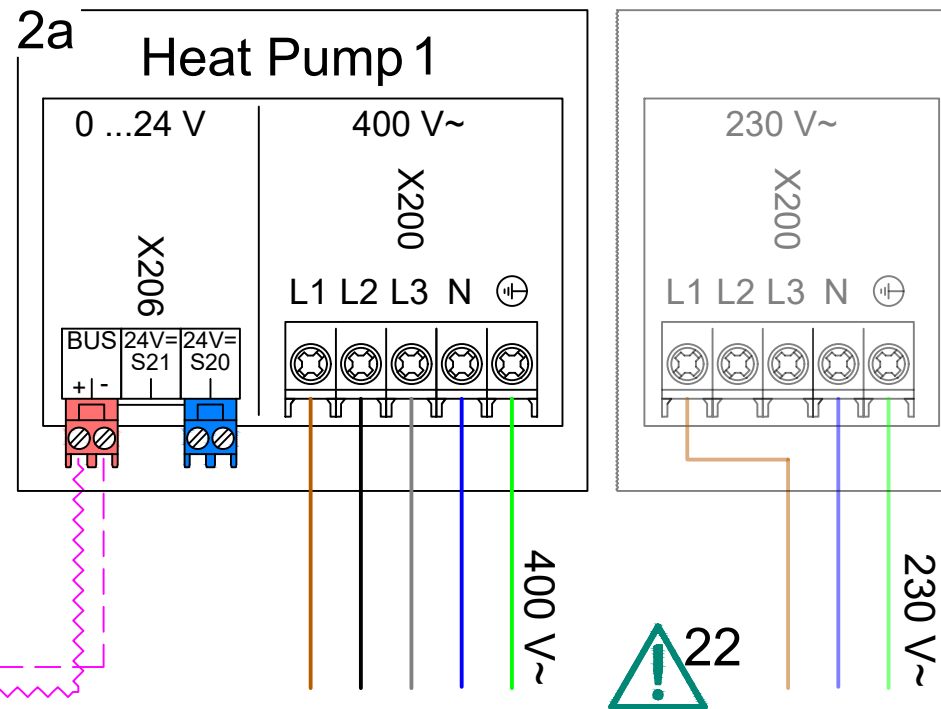
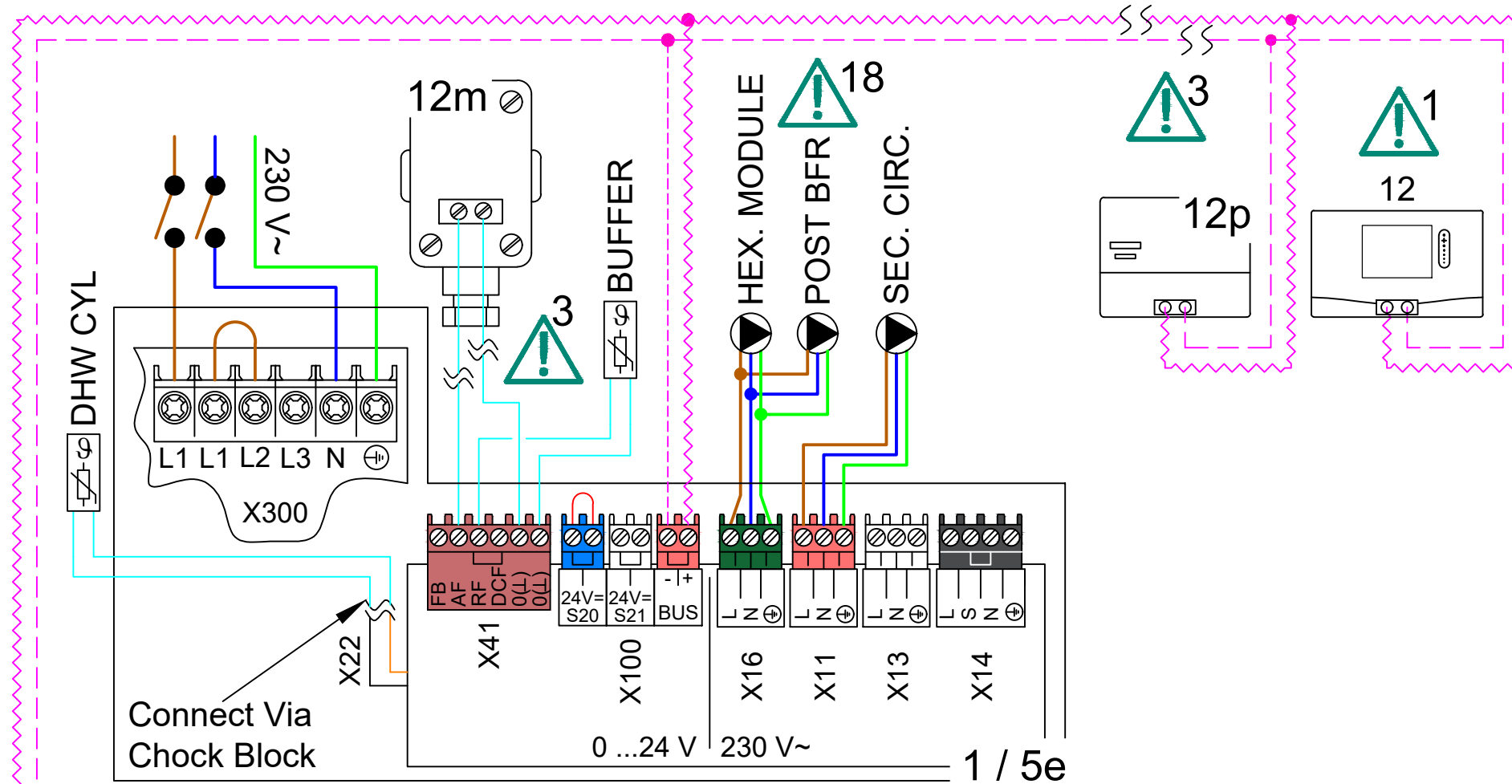
30200-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 18. Maximum current draw of 2 Amps on X16 terminal.
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: D

Appliance(s): aroTHERM Plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

30200-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

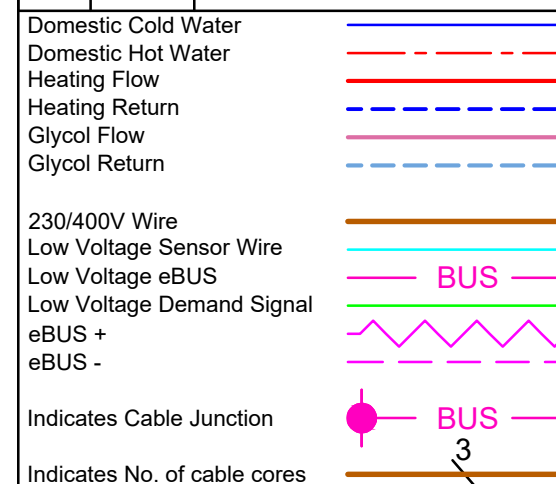
Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	HP + BUH off		
Back-up boiler *1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	Control		

D 11/09/2023 Added aroTHERM Plus 400V option

REV	DATE	DESCRIPTION



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: D

Appliance(s): aroTHERM Plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

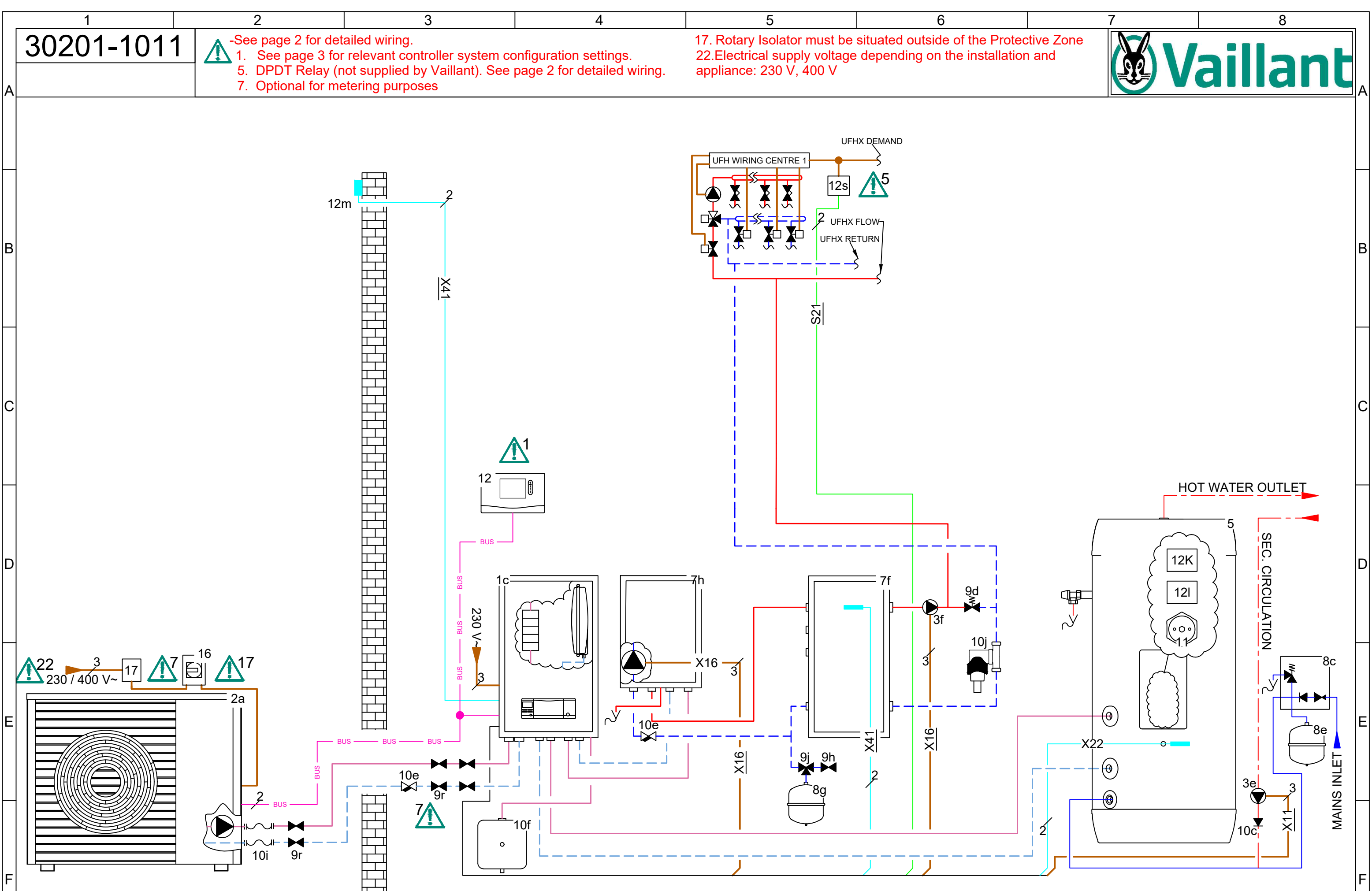
30201-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: D

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT VRC 720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

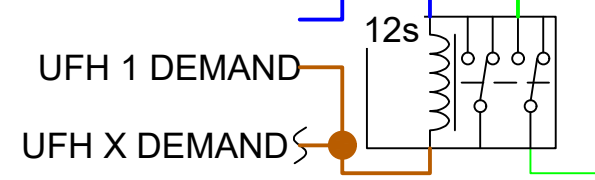
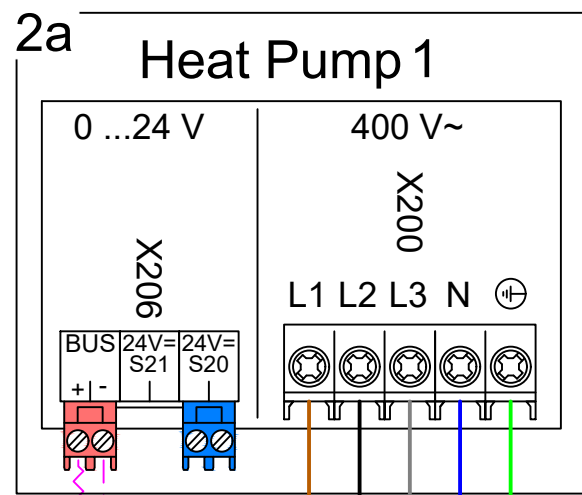
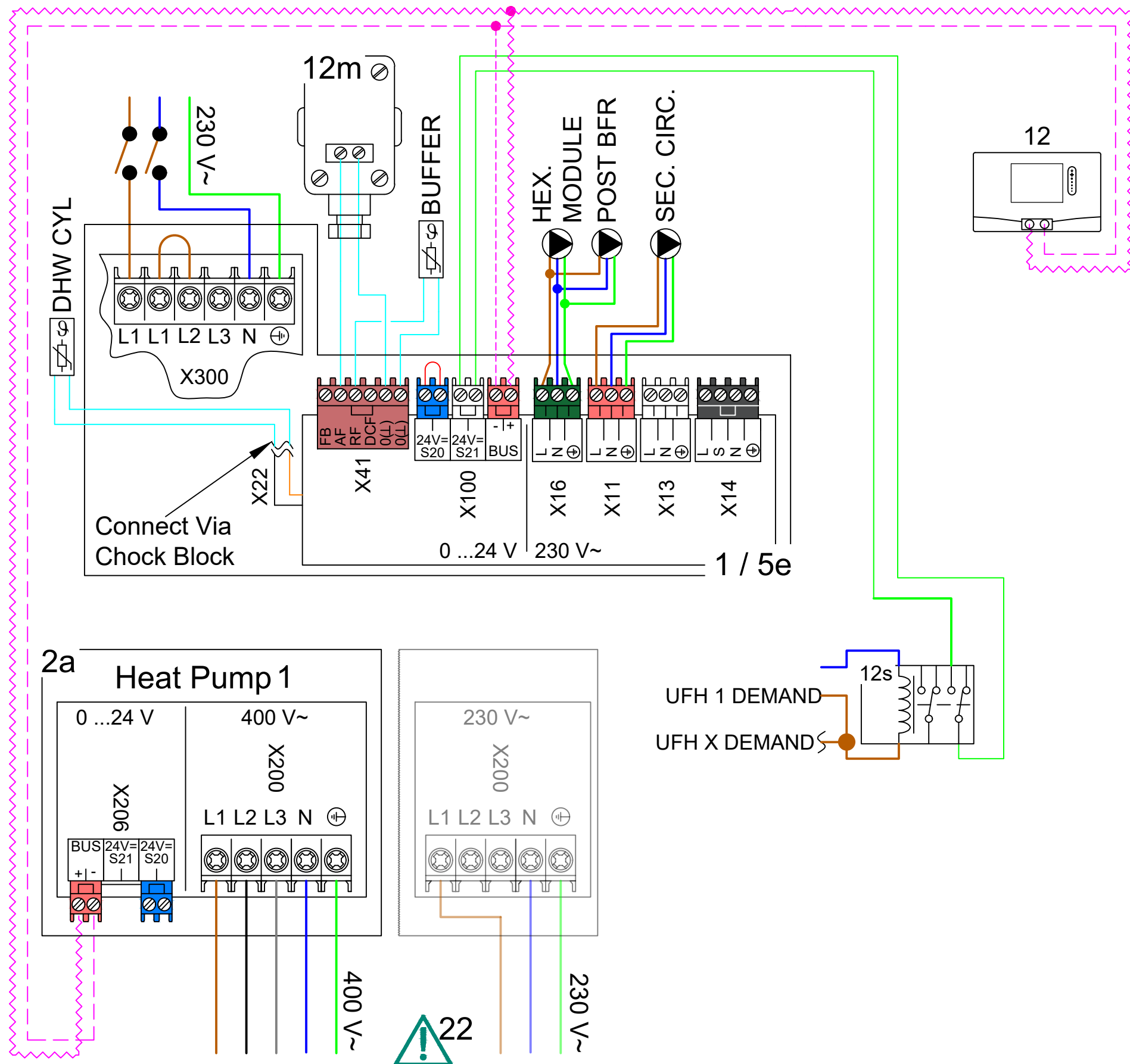
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30201-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler *1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

D 14/09/2023 Added aroTHERM plus 400V option

REV	DATE	DESCRIPTION

Domestic Cold Water  
 Domestic Hot Water  
 Heating Flow  
 Heating Return  
 Glycol Flow  
 Glycol Return

230/400V Wire  
 Low Voltage Sensor Wire  
 Low Voltage eBUS  
 Low Voltage Demand Signal  
 eBUS +  
 eBUS -

Indicates Cable Junction  
 Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: D

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT VRC 720

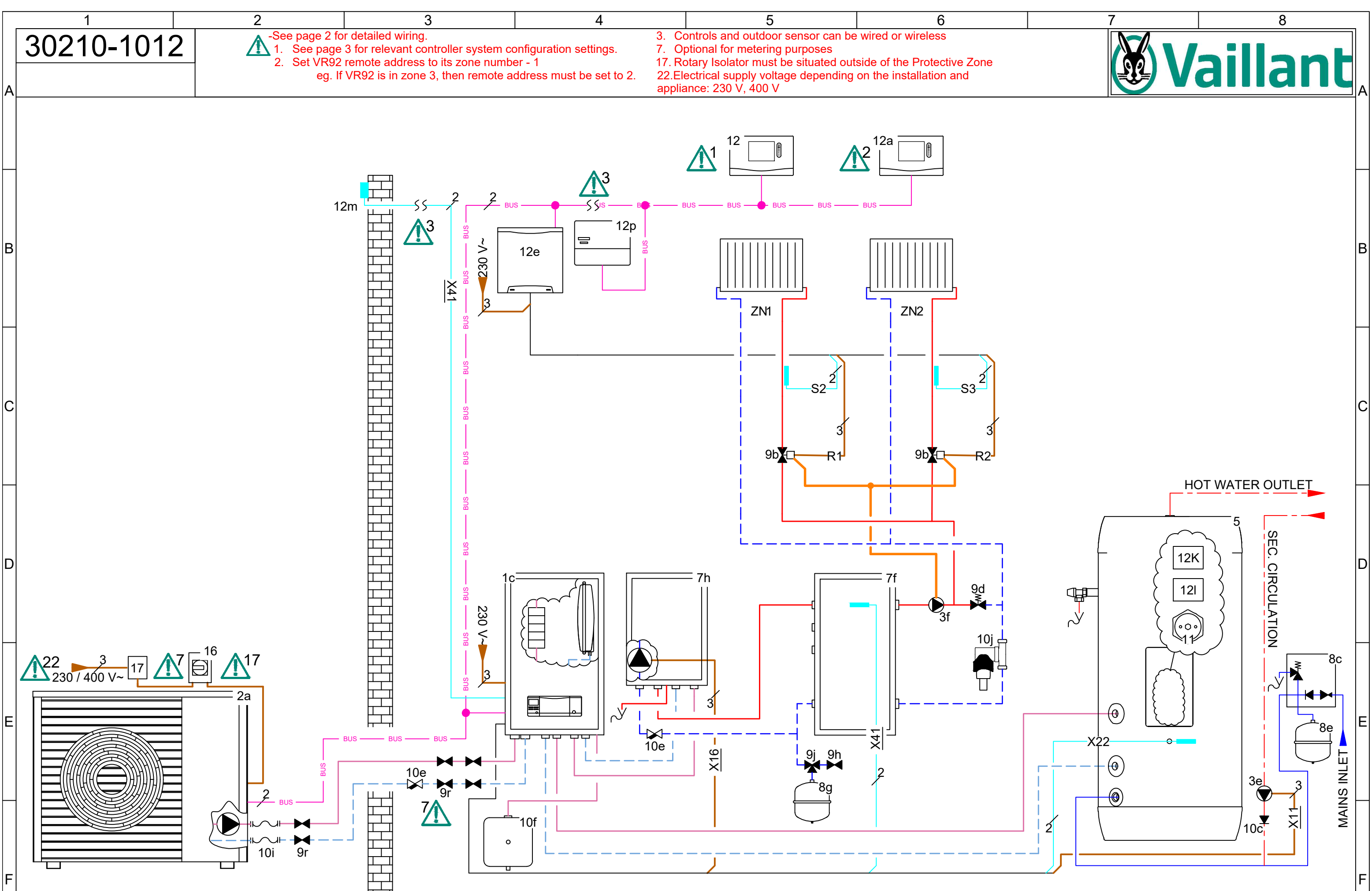
HTG. Circuit(s): 1x UFH(X) - 3rd Party, ,

Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 2. Set VR92 remote address to its zone number - 1  
 eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
 14/09/2023 REV: C

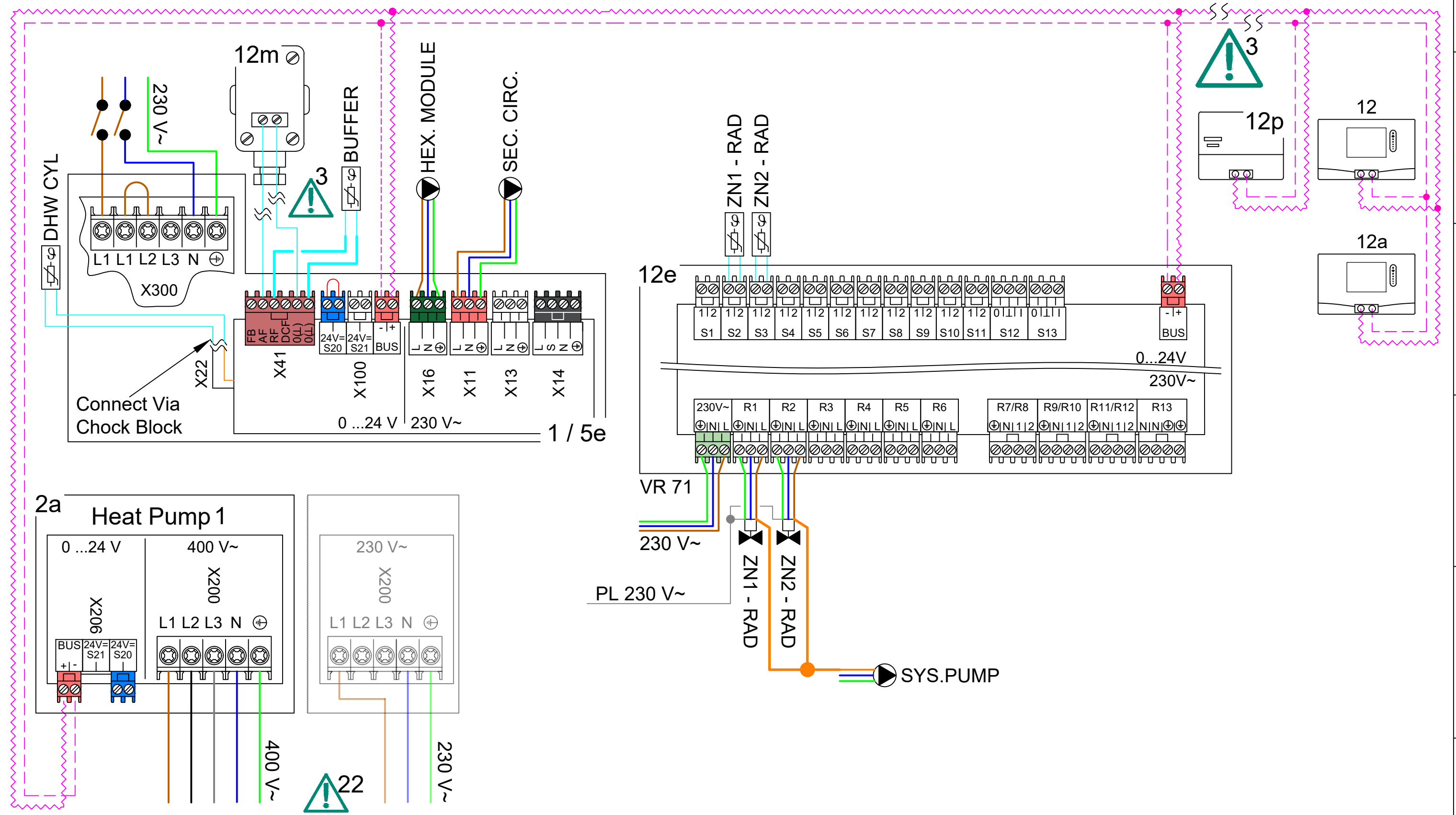
Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)  
 Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,  
 Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 2. Set VR92 remote address to its zone number - 1  
 eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30210-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler *1:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
<b>HP control module configuration</b>		<b>Zone 2</b>	
MO 2:	Circulation pump	Zone activated:	Yes
<b>Circuit 1</b>		Zone assignment:	Rem. contr. 1
Circuit type:	Heating	<b>Domestic hot water</b>	
OT switch-off threshold:	30°	Cylinder:	Active
Heat curve:	**Site specific	Anti-legio. day:	**User preference
Min. target flow temperature:	15°	Anti-legio. time:	**User preference
Max. target flow temperature:	45°	Cylinder charging offset:	15 K
Set-back mode:	Normal	Cyl. charg. anti-cycl. time:	5 min
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
C	14/09/2023	Added aroTHERM plus 400V option	2,E

Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

14/09/2023

REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,

Domestic Hot Water: 1x Cylinder

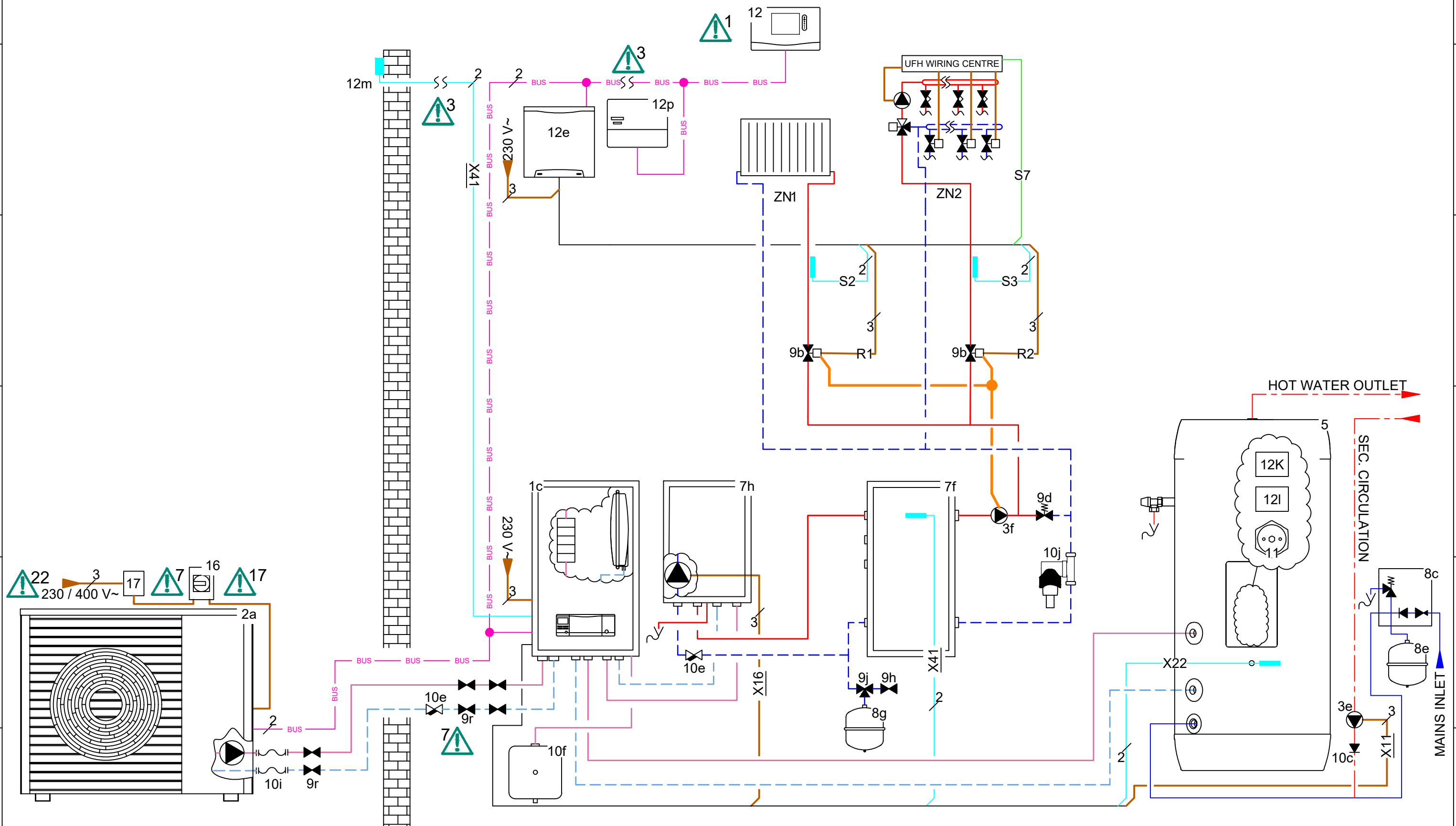


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
15/09/2023 REV: C

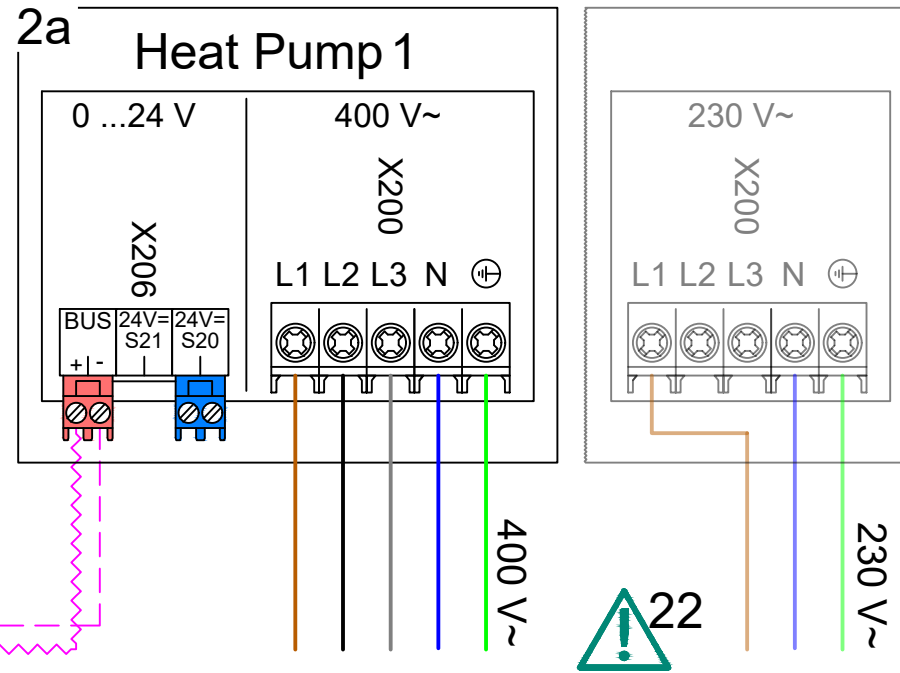
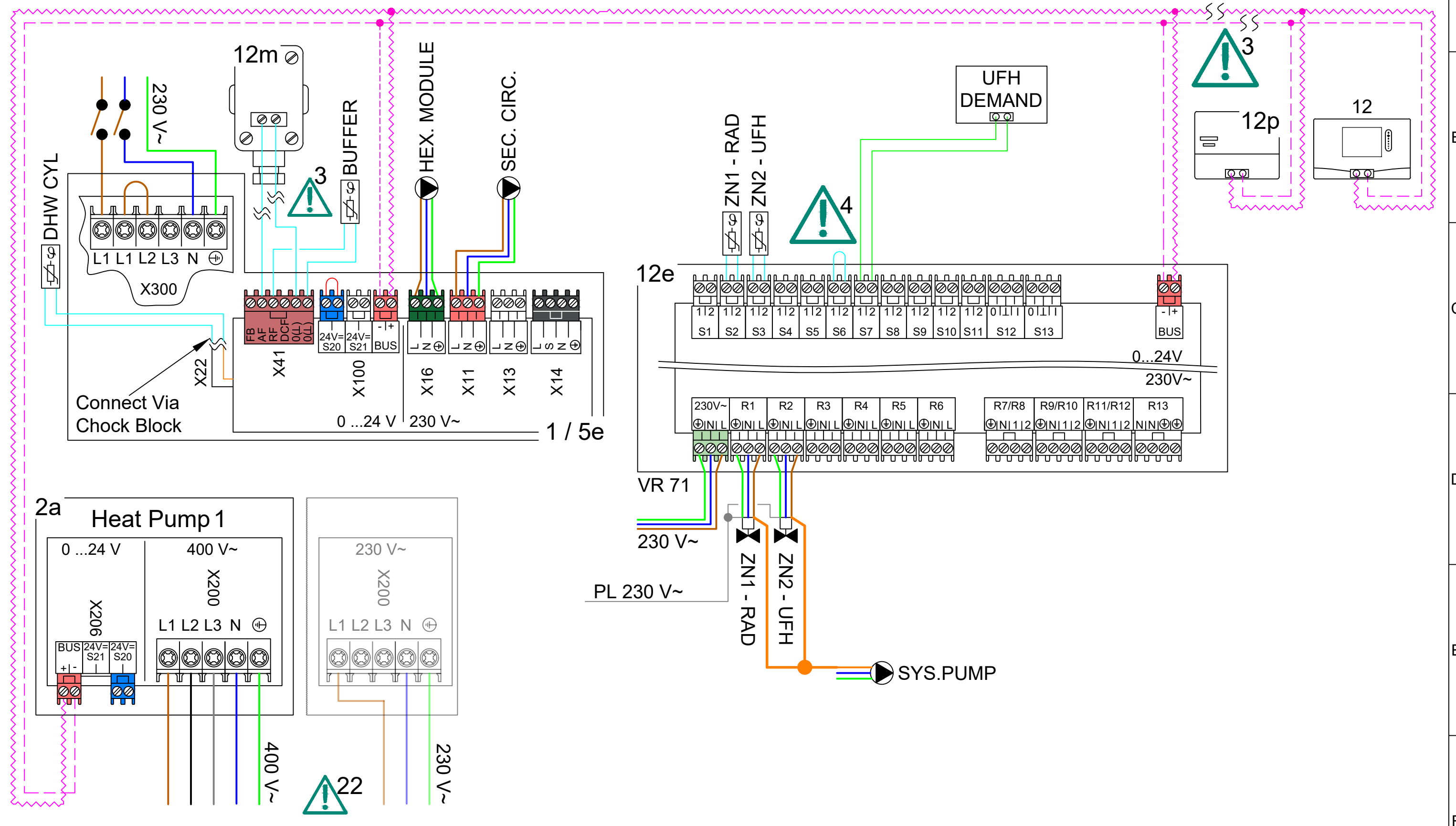
Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)  
Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH(X) - 3rd Party,  
Domestic Hot Water: 1x Cylinder

30211-1012

- ⚠️ -See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 4. Link required (not factory fitted).

7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

15/09/2023

REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH(X) - 3rd Party,

Domestic Hot Water: 1x Cylinder

30211-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 01c Hydraulic Station
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09h Fill / Drain Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the hydraulic station will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Eco
Back-up boiler *1:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
<b>HP control module configuration</b>		<b>Zone 2</b>	
MO 2:	Circulation pump	Zone activated:	Yes
<b>Circuit 1</b>		Zone assignment:	No assignmt
Circuit type:	Heating	<b>Domestic hot water</b>	
OT switch-off threshold:	30°	Cylinder:	Active
Heat curve:	**Site specific	Anti-legio. day:	**User preference
Min. target flow temperature:	15°	Anti-legio. time:	**User preference
Max. target flow temperature:	45°	Cylinder charging offset:	15 K
Set-back mode:	Normal	Cyl. charg. anti-cycl. time:	5 min
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
C	15/09/2023	Added aroTHERM plus 400V option	2,E
		Domestic Cold Water	
		Domestic Hot Water	
		Heating Flow	
		Heating Return	
		Glycol Flow	
		Glycol Return	
		230/400V Wire	
		Low Voltage Sensor Wire	
		Low Voltage eBUS	BUS
		Low Voltage Demand Signal	
		eBUS +	
		eBUS -	
		Indicates Cable Junction	BUS
		Indicates No. of cable cores	3

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

15/09/2023

REV: C

Appliance(s): aroTHERM plus, Hydraulic Station, Heat Ex. Module, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH(X) - 3rd Party,

Domestic Hot Water: 1x Cylinder

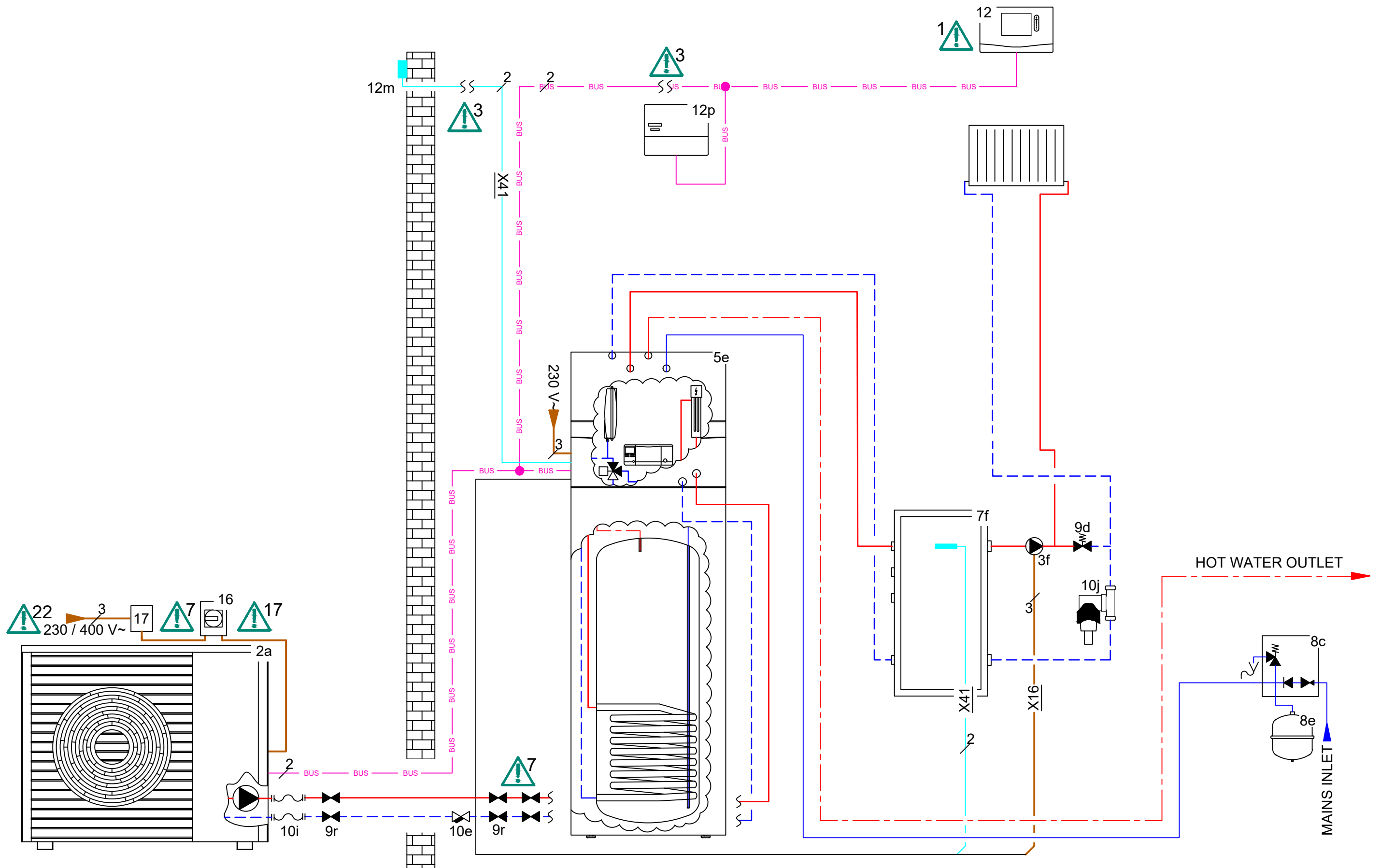
30220-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct ,

Domestic Hot Water: uniTOWER

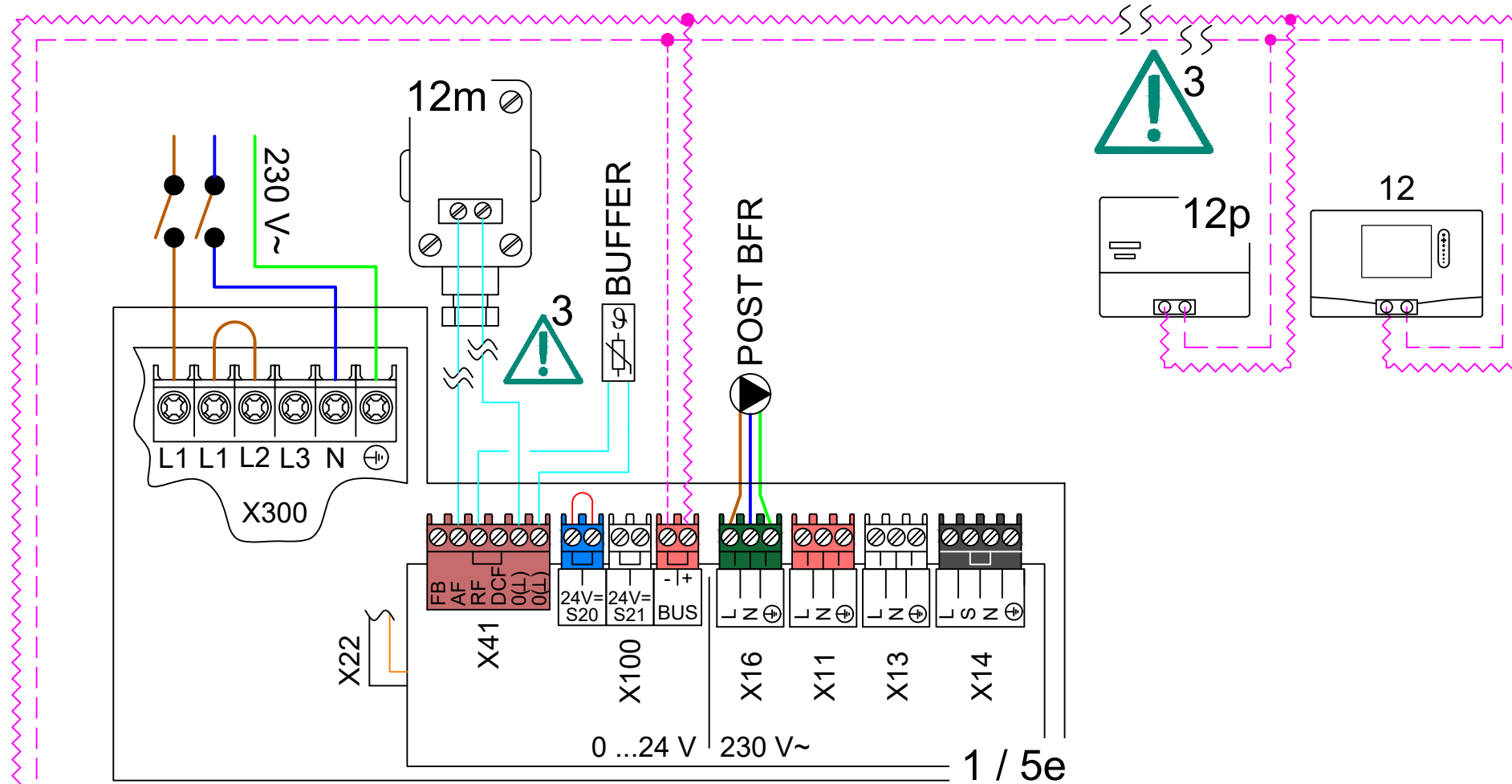
30220-1011



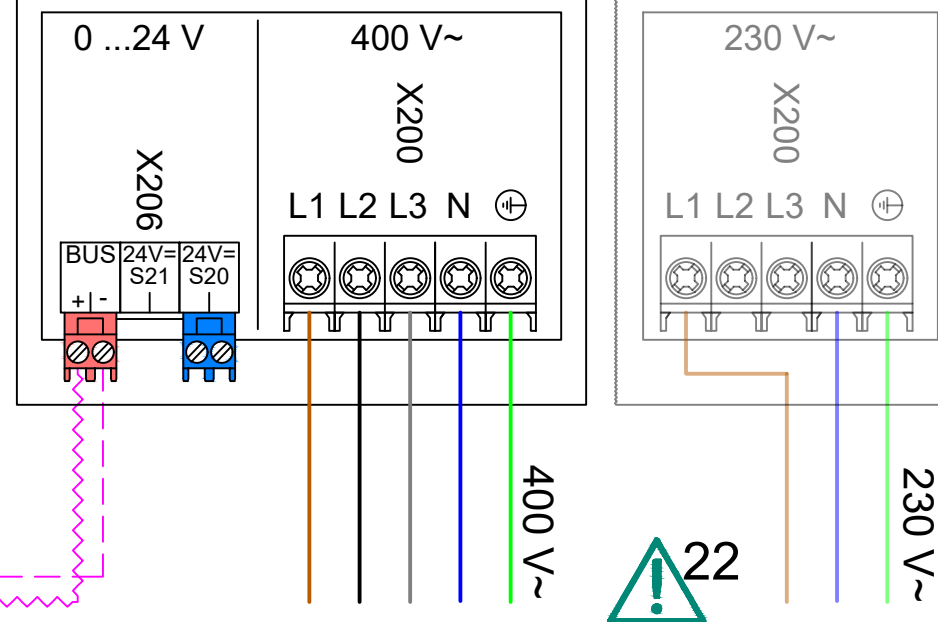
-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



### 2a Heat Pump 1



Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct ,

Domestic Hot Water: uniTOWER



30220-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03f General Pump
- 05e uniTOWER
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09r Isolation Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 12 sensoCOMFORT
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

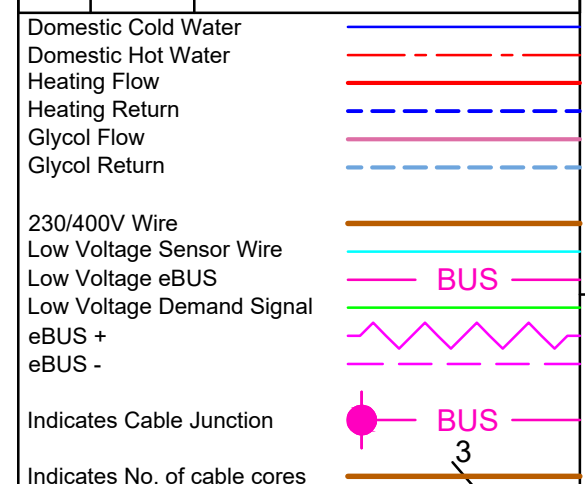
Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the uniTOWER will not function as support in this setup.

Setting	Value
<b>Installation</b>	
Adapt. heat curve:	Deactivated
Hybrid manager:	Bivalence pt
Heating bivalence point:	-20°
DHW bivalence point:	-20°
Alternative point:	Off
ESCO:	HP + BUH off
Back-up boiler*1:	Off
<b>Basic system diagram config.</b>	
Basic system diagram code:	10
<b>HP control module configuration</b>	
MO 2:	Not connected
<b>Circuit 1</b>	
Circuit type:	Heating
OT switch-off threshold:	30°
Heat curve:	**Site specific
Min. target flow temperature:	15°
Max. target flow temperature:	45°
Set-back mode:	Normal
Room temp. mod.:	Expanded
<b>Zone 1</b>	
Zone activated:	Yes
Zone assignment:	Control
<b>Domestic hot water</b>	
Cylinder:	Active
Anti-legio. day:	**User preference
Anti-legio. time:	**User preference
Cylinder charging offset:	15 K
Cyl. charg. anti-cycl. time:	5 min

D 19/09/2023 Added aroTHERM plus 400V option

REV	DATE	DESCRIPTION



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

HTG. Circuit(s): 1x Radiator - Direct ,

19/09/2023

REV: D

Control(s): sensoCOMFORT

Domestic Hot Water: uniTOWER

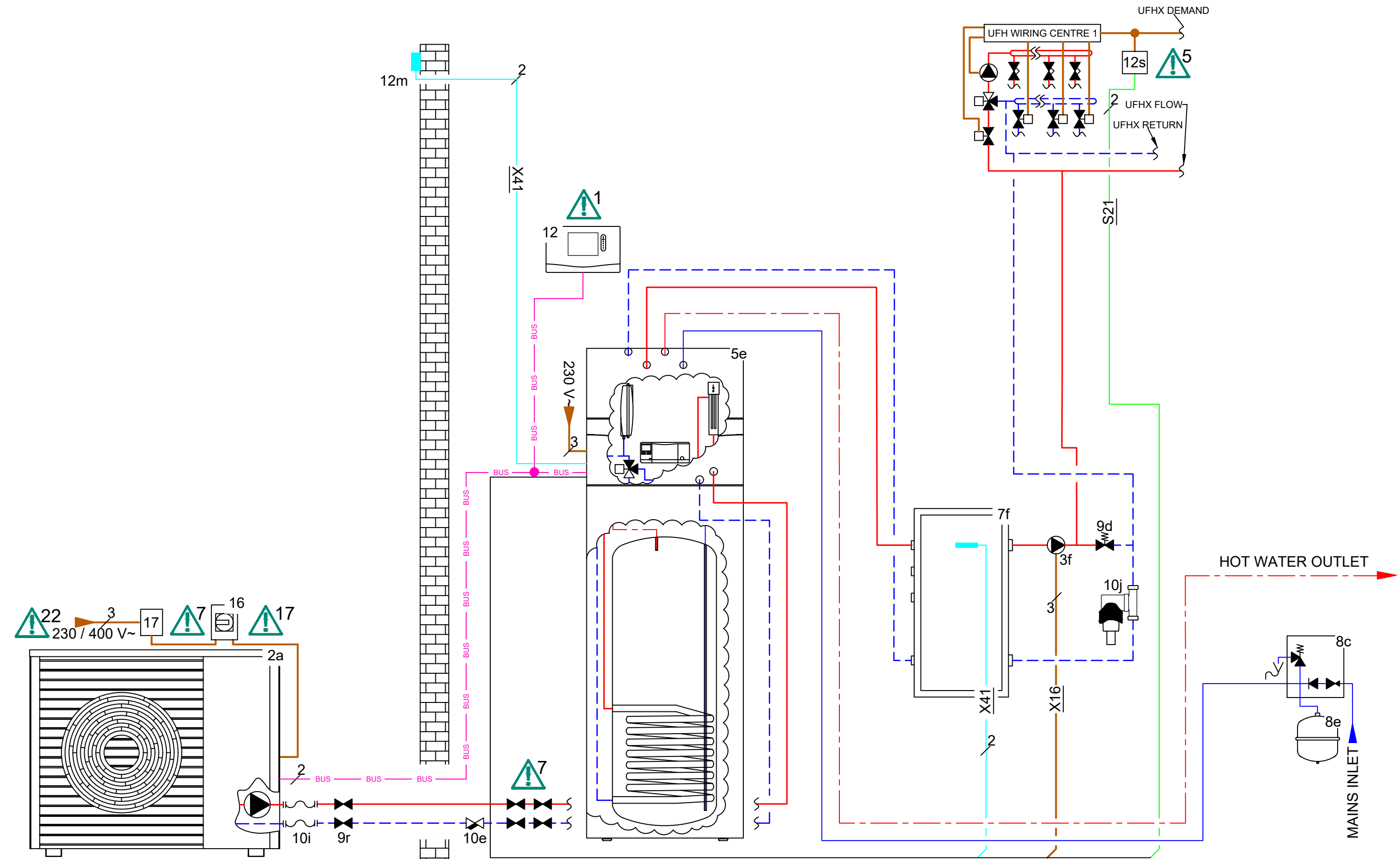
30221-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT VRC720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

Domestic Hot Water: uniTOWER

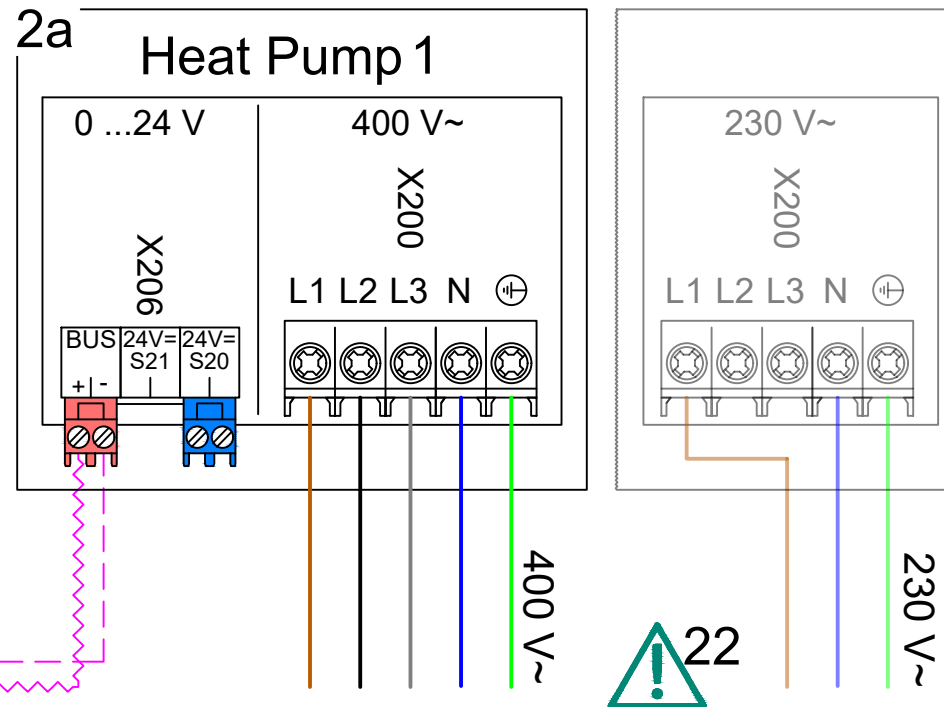
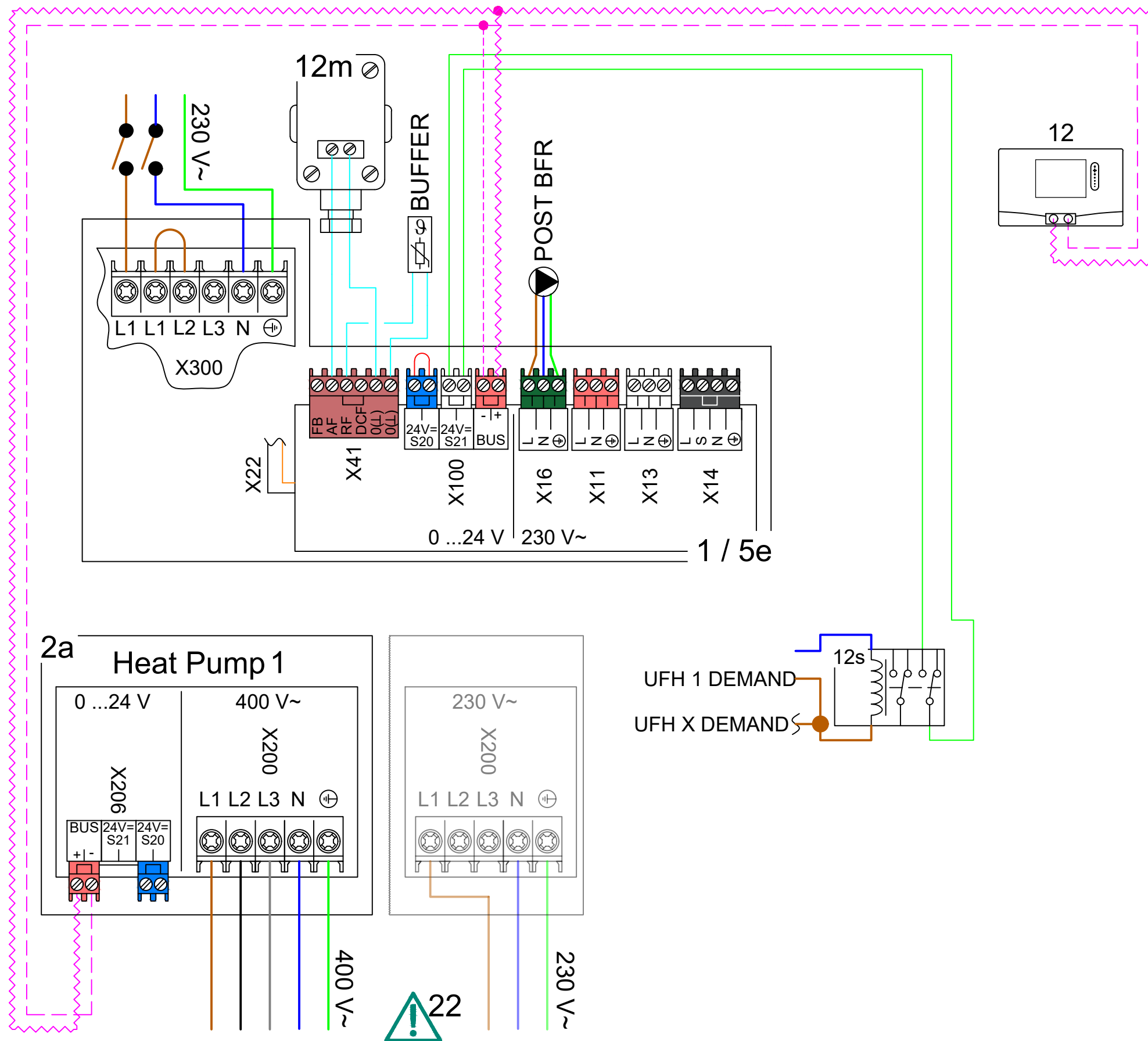
30221-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT VRC720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

Domestic Hot Water: uniTOWER

30221-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03f General Pump
- 05e uniTOWER
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09r Isolation Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 12 sensoCOMFORT
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the uniTOWER will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler*1:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Not connected		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

D 19/09/2023 Added aroTHERM plus 400V option

REV	DATE	DESCRIPTION

Domestic Cold Water	
Domestic Hot Water	
Heating Flow	
Heating Return	
Glycol Flow	
Glycol Return	

230/400V Wire	
Low Voltage Sensor Wire	
Low Voltage eBUS	
Low Voltage Demand Signal	
eBUS +	
eBUS -	

Indicates Cable Junction		BUS
Indicates No. of cable cores		3

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

HTG. Circuit(s): 1x UFH(X) - 3rd Party, ,

19/09/2023

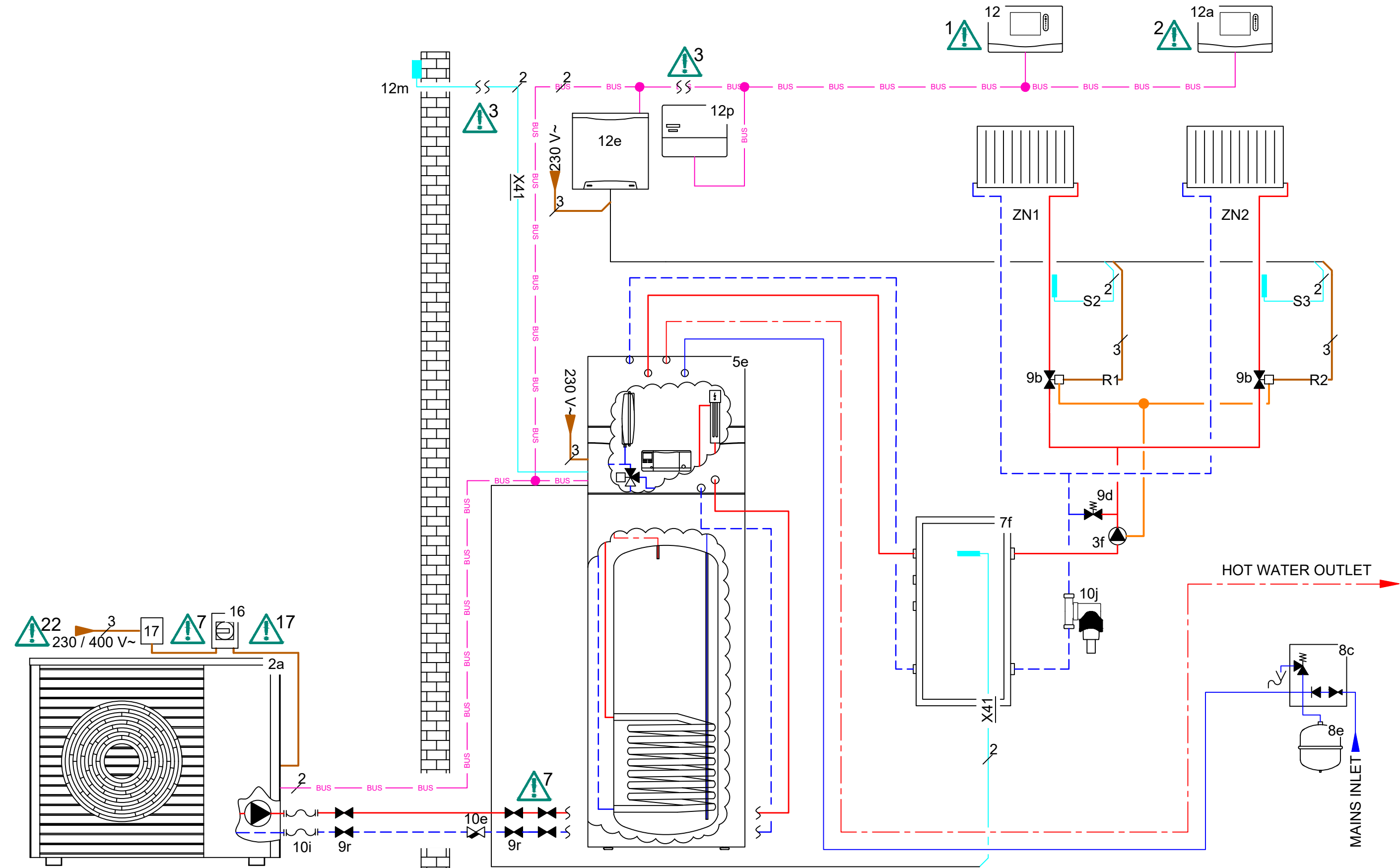
REV: D

Control(s): sensoCOMFORT VRC720

Domestic Hot Water: uniTOWER

- See page 2 for detailed wiring.
- 1. See page 3 for relevant controller system configuration settings.
- 2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.
- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023 REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

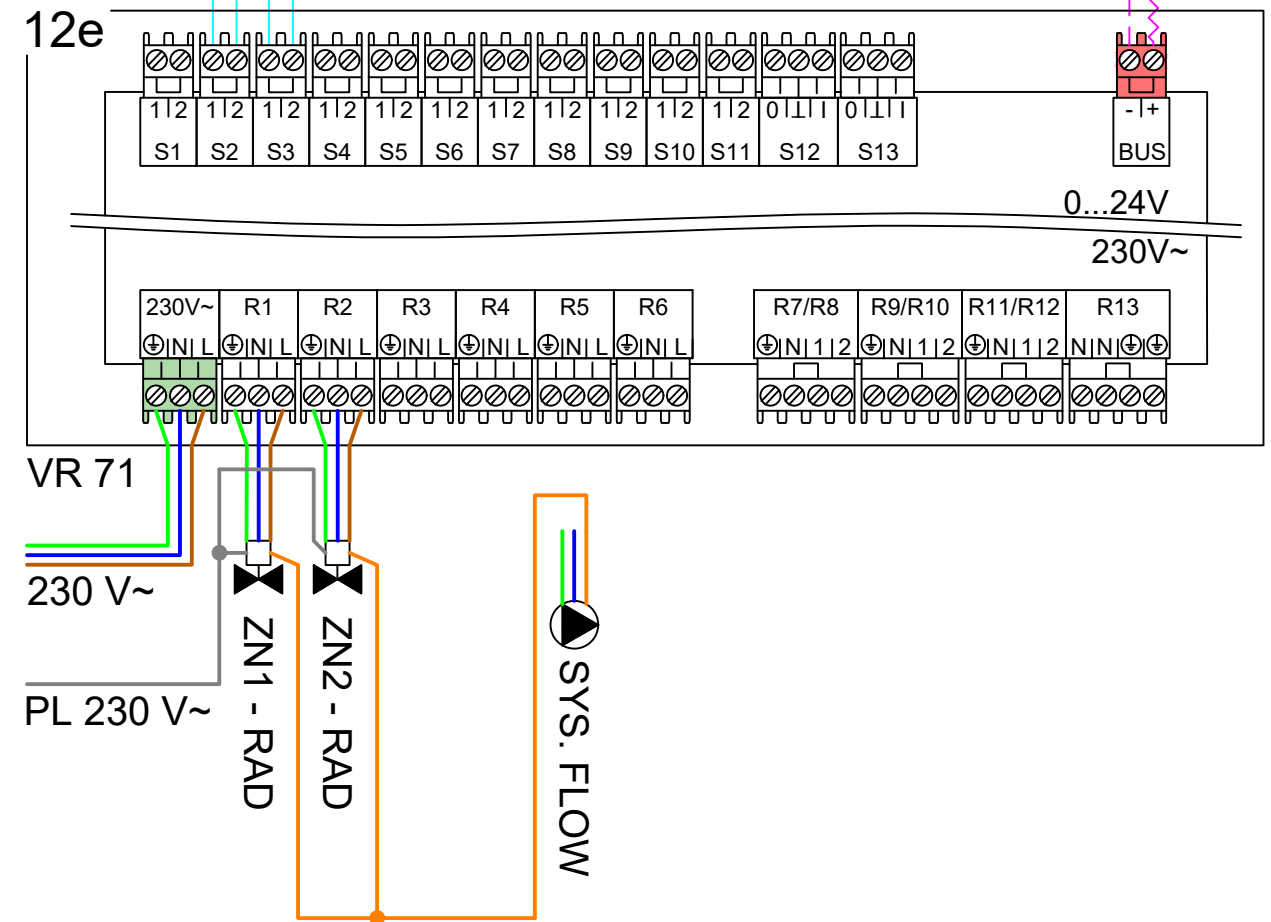
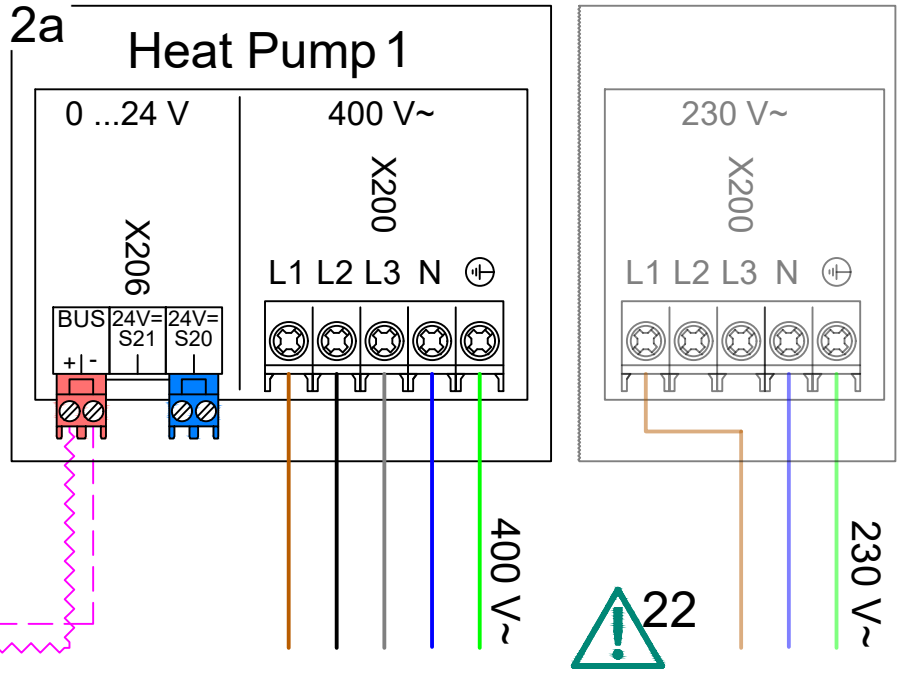
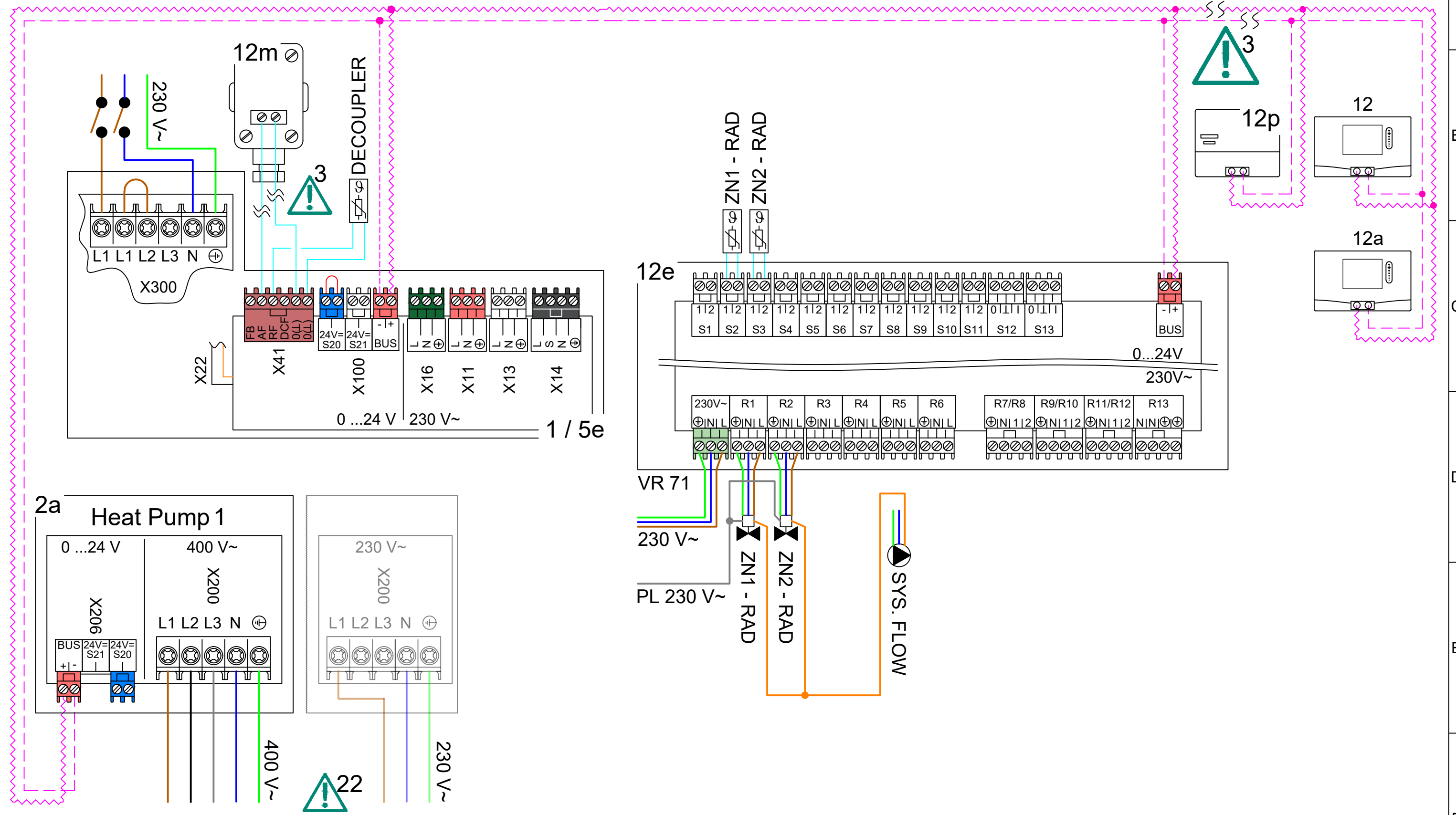
Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Direct ,

Domestic Hot Water: uniTOWER

-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 2. Set VR92 remote address to its zone number - 1  
 eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.  
 17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30230-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03f General Pump
- 05e uniTOWER
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09r Isolation Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 12 sensoCOMFORT
- 12a VR92
- 12e Wiring Centre - VR 71
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the uniTOWER will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler*1:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	Rem. contr. 1
MO 2:	Not connected	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
D	19/09/2023	Added aroTHERM plus 400V option	2,E
Domestic Cold Water			
Domestic Hot Water			
Heating Flow			
Heating Return			
Glycol Flow			
Glycol Return			
230/400V Wire			
Low Voltage Sensor Wire			
Low Voltage eBUS			
Low Voltage Demand Signal			
eBUS +			
eBUS -			
Indicates Cable Junction			
Indicates No. of cable cores			

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: D

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Direct ,

Domestic Hot Water: uniTOWER

30231-1012

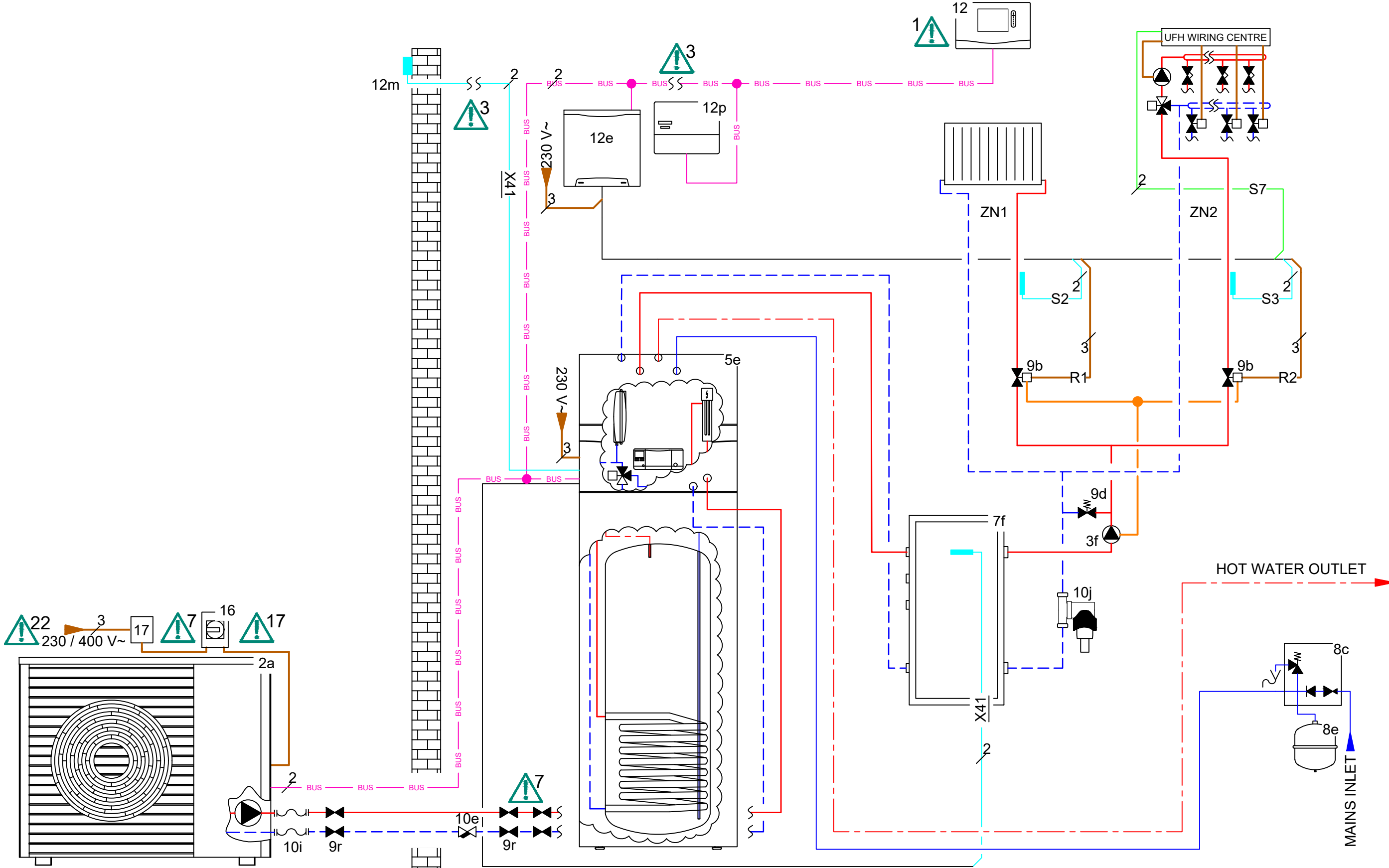


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: C

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

Control(s): sensoCOMFORT

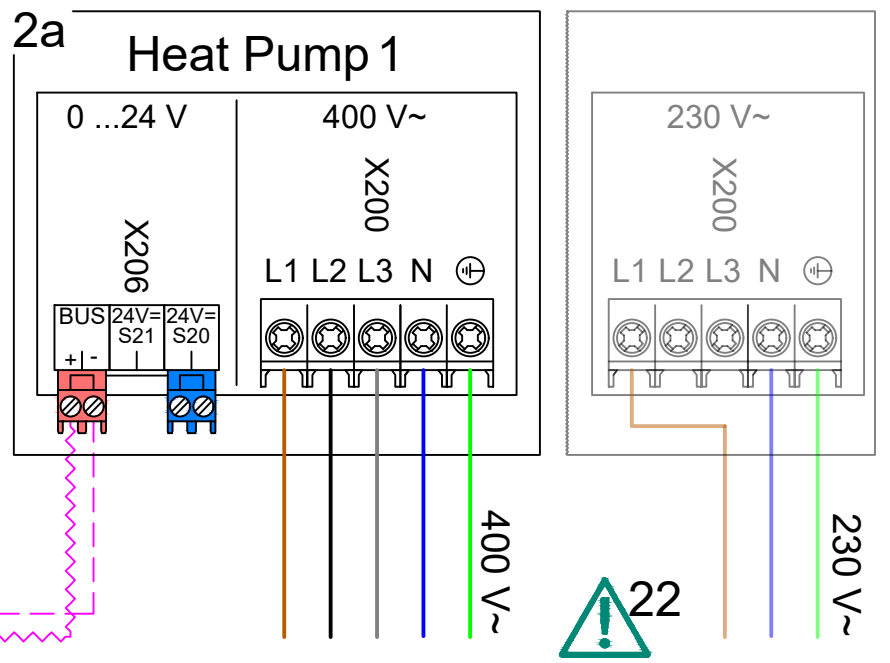
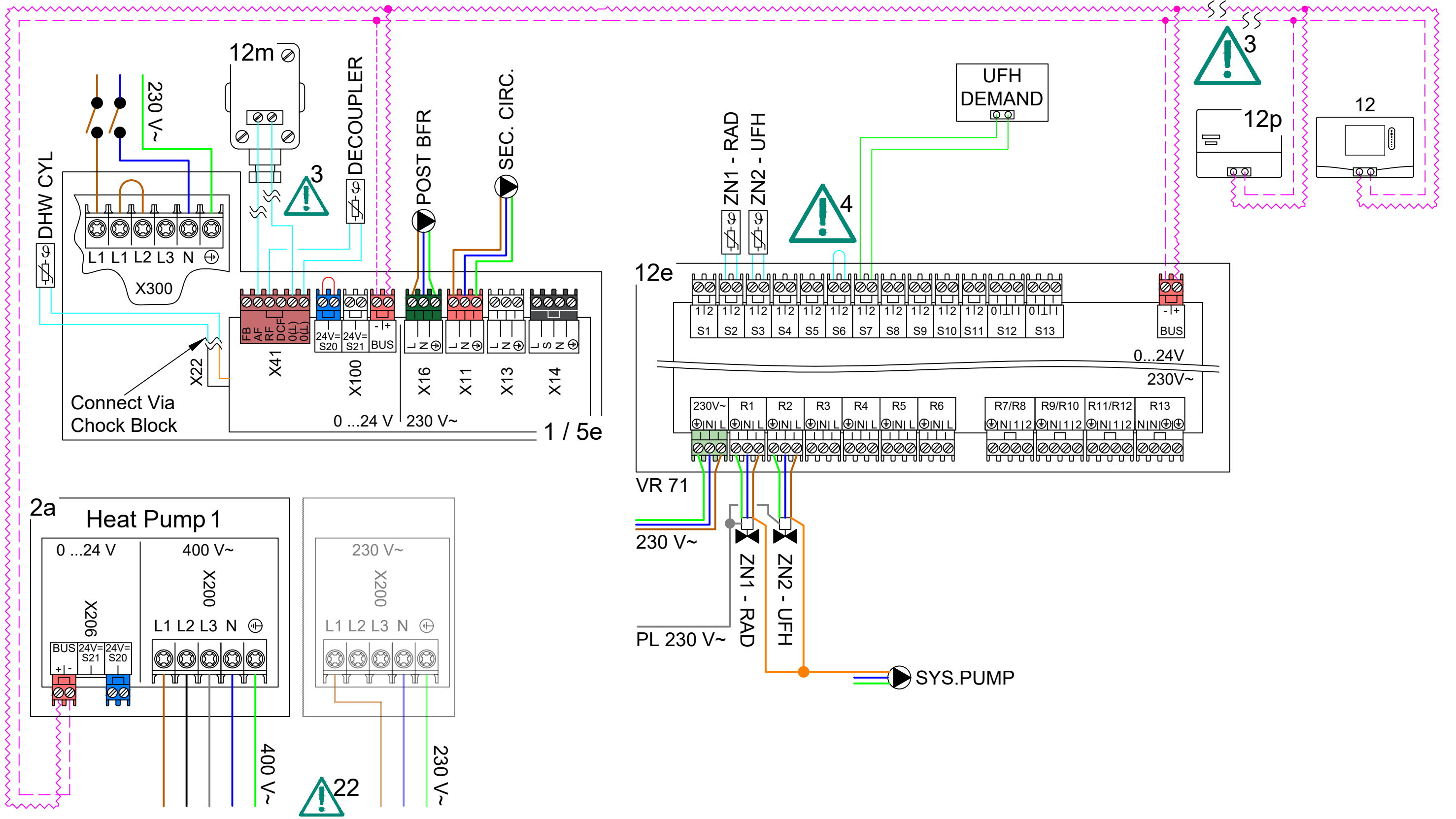
HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

Domestic Hot Water: uniTOWER



- ⚠️ -See page 2 for detailed wiring.
- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

- 7. Optional for metering purposes
- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30231-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03f General Pump
- 05e uniTOWER
- 07f 45/100L Buffer
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09r Isolation Valve
- 10e Y Strainer
- 10i Flexible Connection
- 10j Magnetic Filter
- 12 sensoCOMFORT
- 12e Wiring Centre - VR 71
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

\*1 If back-up boiler is set to Off then the back-up heater inside the uniTOWER will not function as support in this setup.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Eco
Back-up boiler*1:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	No assignmt
MO 2:	Not connected	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
C	19/09/2023	Added aroTHERM 400V option	2,E
Domestic Cold Water			
Domestic Hot Water			
Heating Flow			
Heating Return			
Glycol Flow			
Glycol Return			
230/400V Wire			
Low Voltage Sensor Wire			
Low Voltage eBUS			
Low Voltage Demand Signal			
eBUS +			
eBUS -			
Indicates Cable Junction			
Indicates No. of cable cores			

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, uniTOWER, Buffer (45/100L)

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

19/09/2023

REV: C

Control(s): sensoCOMFORT

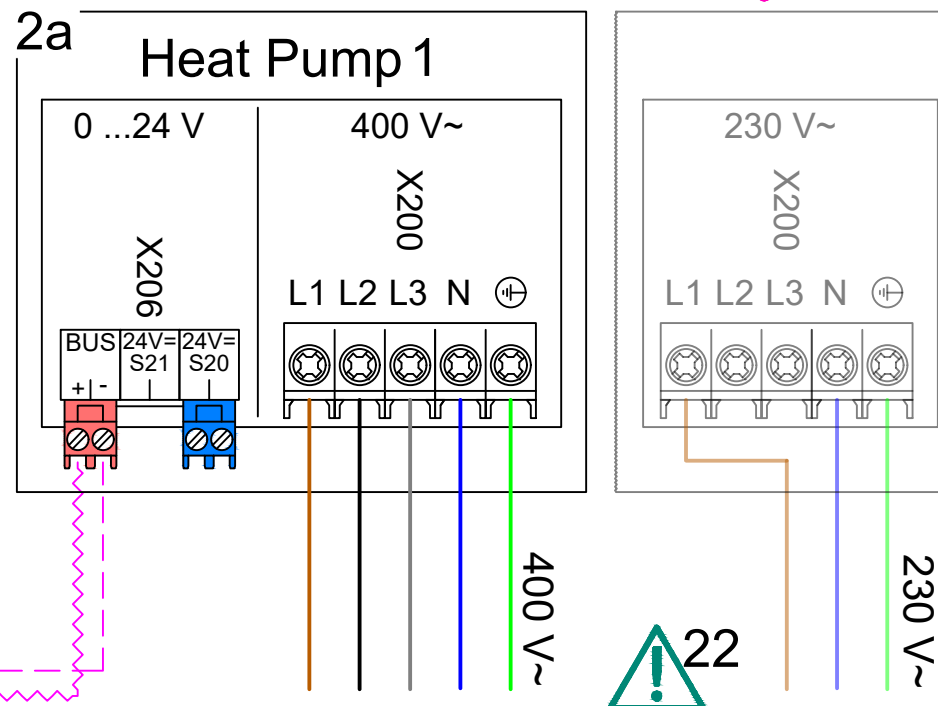
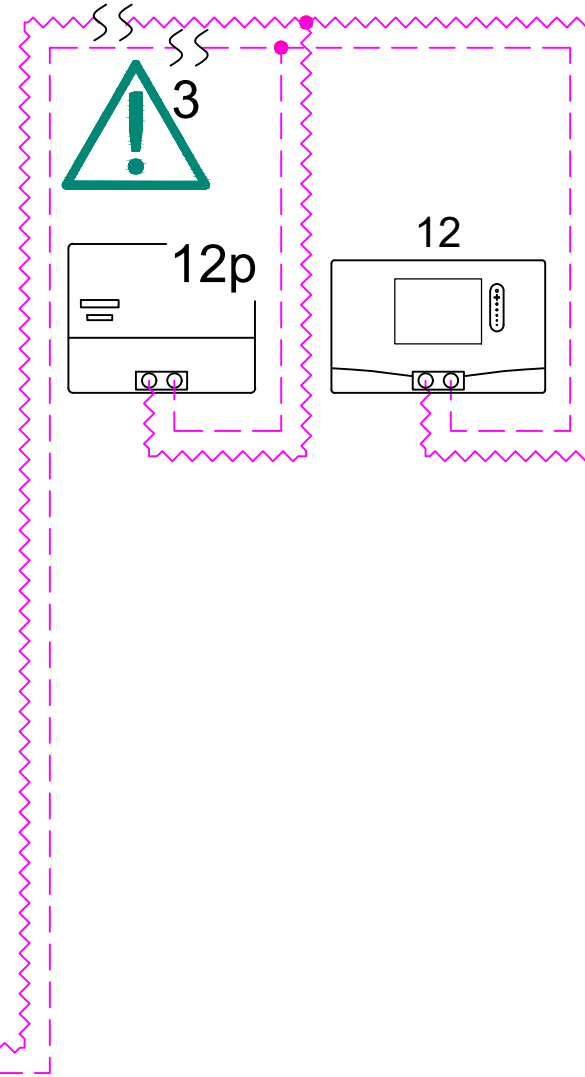
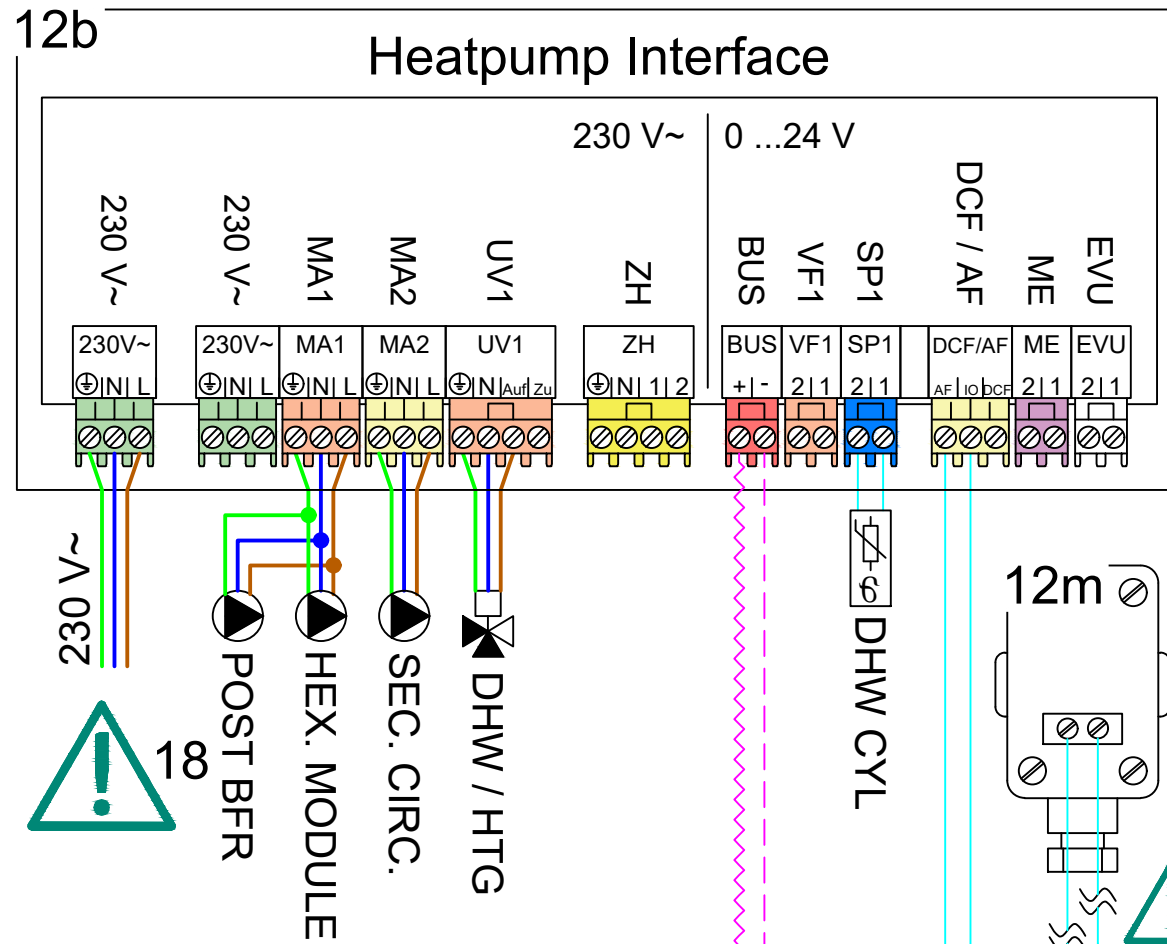
Domestic Hot Water: uniTOWER





-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone.  
 18. Maximum current draw of 2 Amps on MA1 terminal.  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



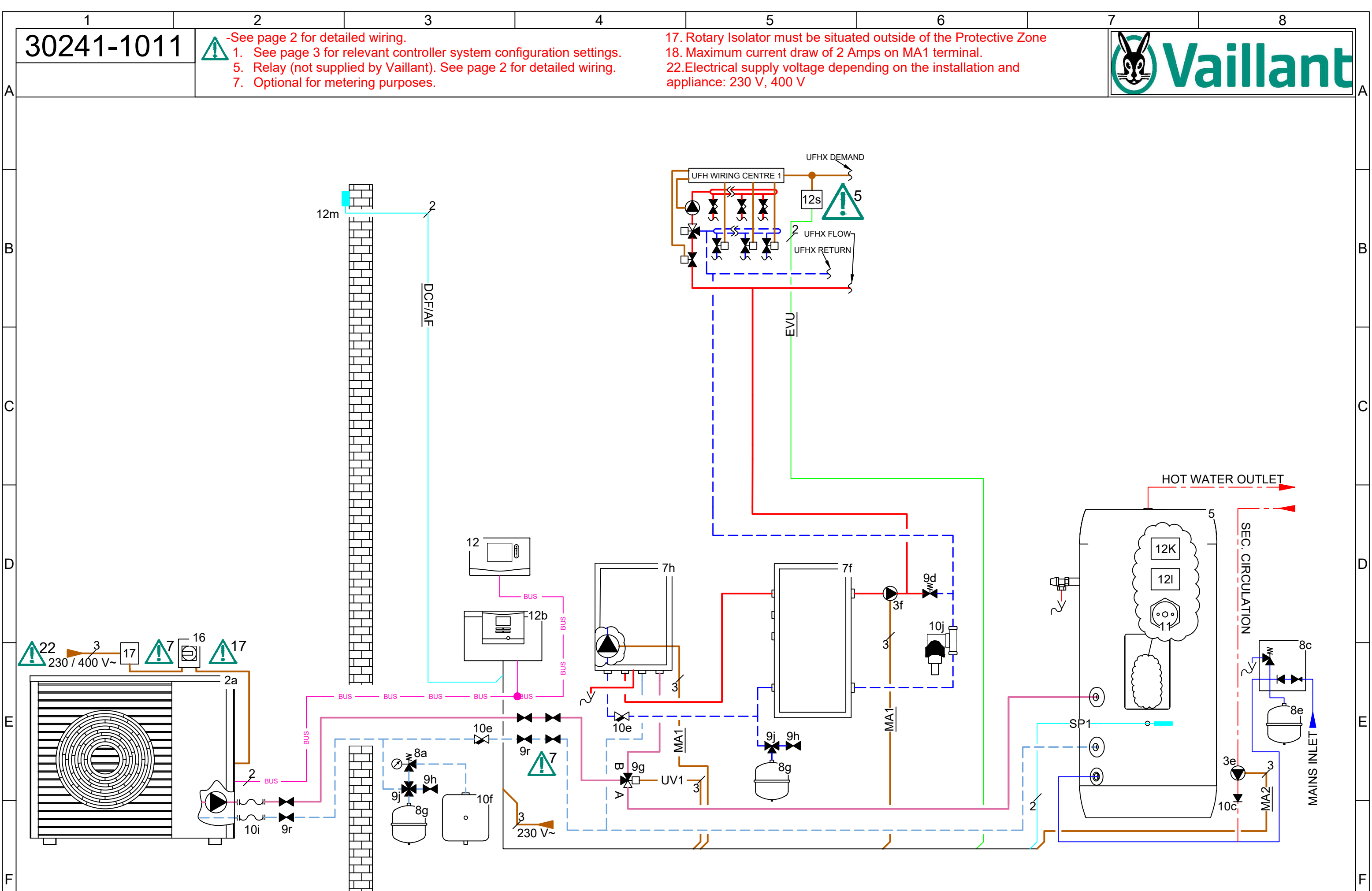


30241-1011



-See page 2 for detailed wiring.  
1. See page 3 for relevant controller system configuration settings.  
5. Relay (not supplied by Vaillant). See page 2 for detailed wiring.  
7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone  
18. Maximum current draw of 2 Amps on MA1 terminal.  
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV: E

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100L)

Control(s): senoCOMFORT VRC720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

Domestic Hot Water: 1x Cylinder

30241-1011



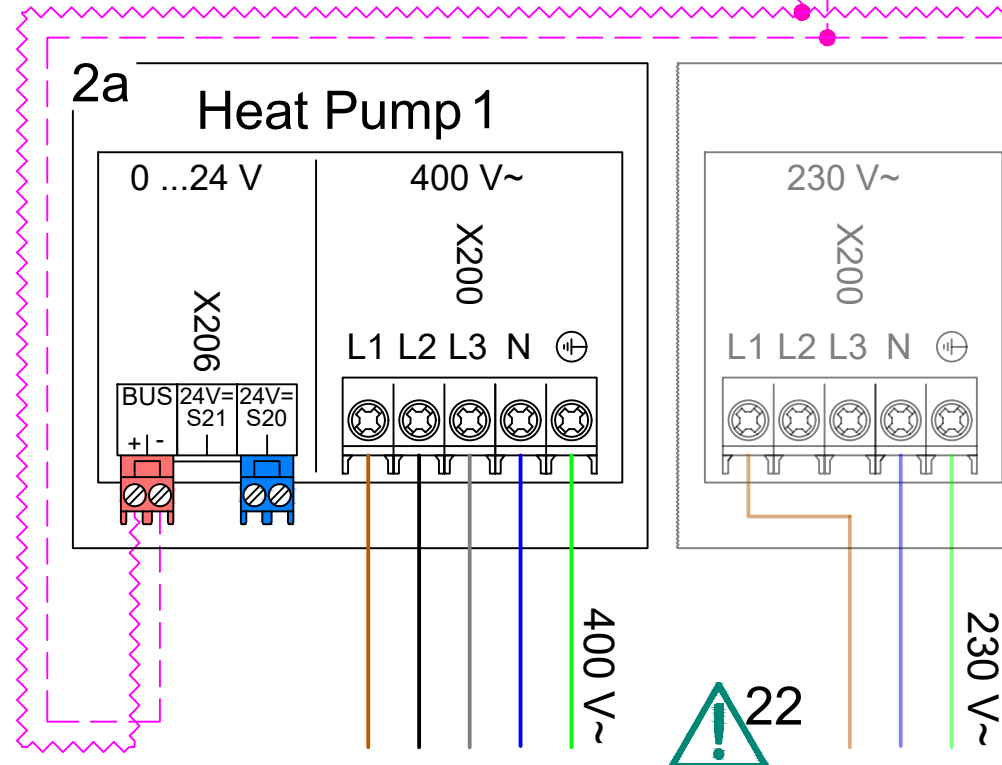
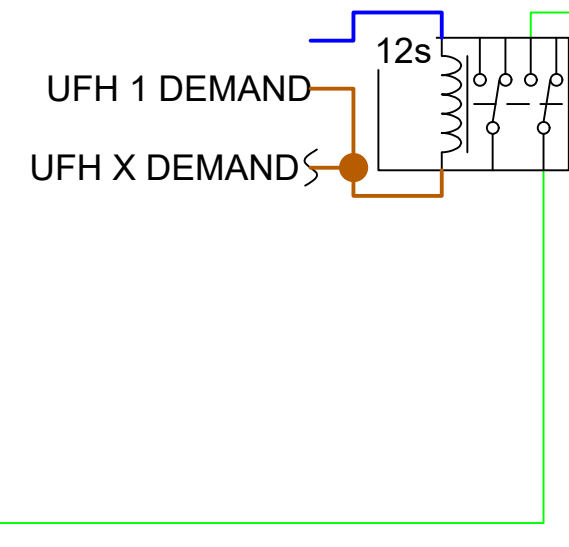
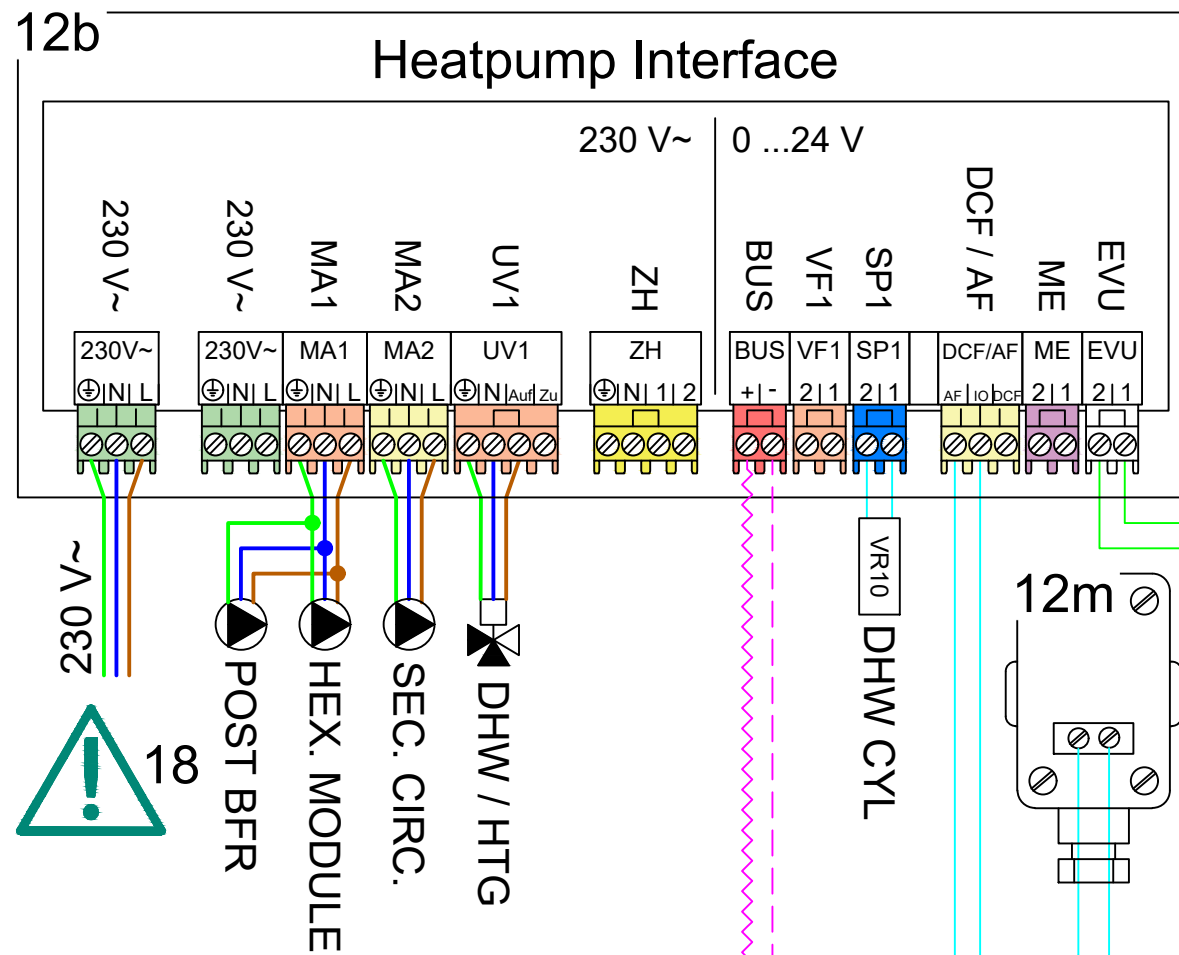
-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone

18. Maximum current draw of 2 Amps on MA1 terminal.

22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

29/08/2023

REV:

E

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100L)

Control(s): senoCOMFORT VRC720

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

Domestic Hot Water: 1x Cylinder

30241-1011

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank (If applicable)
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12s DPDT Relay (3rd Party)
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC720/2 System Configuration

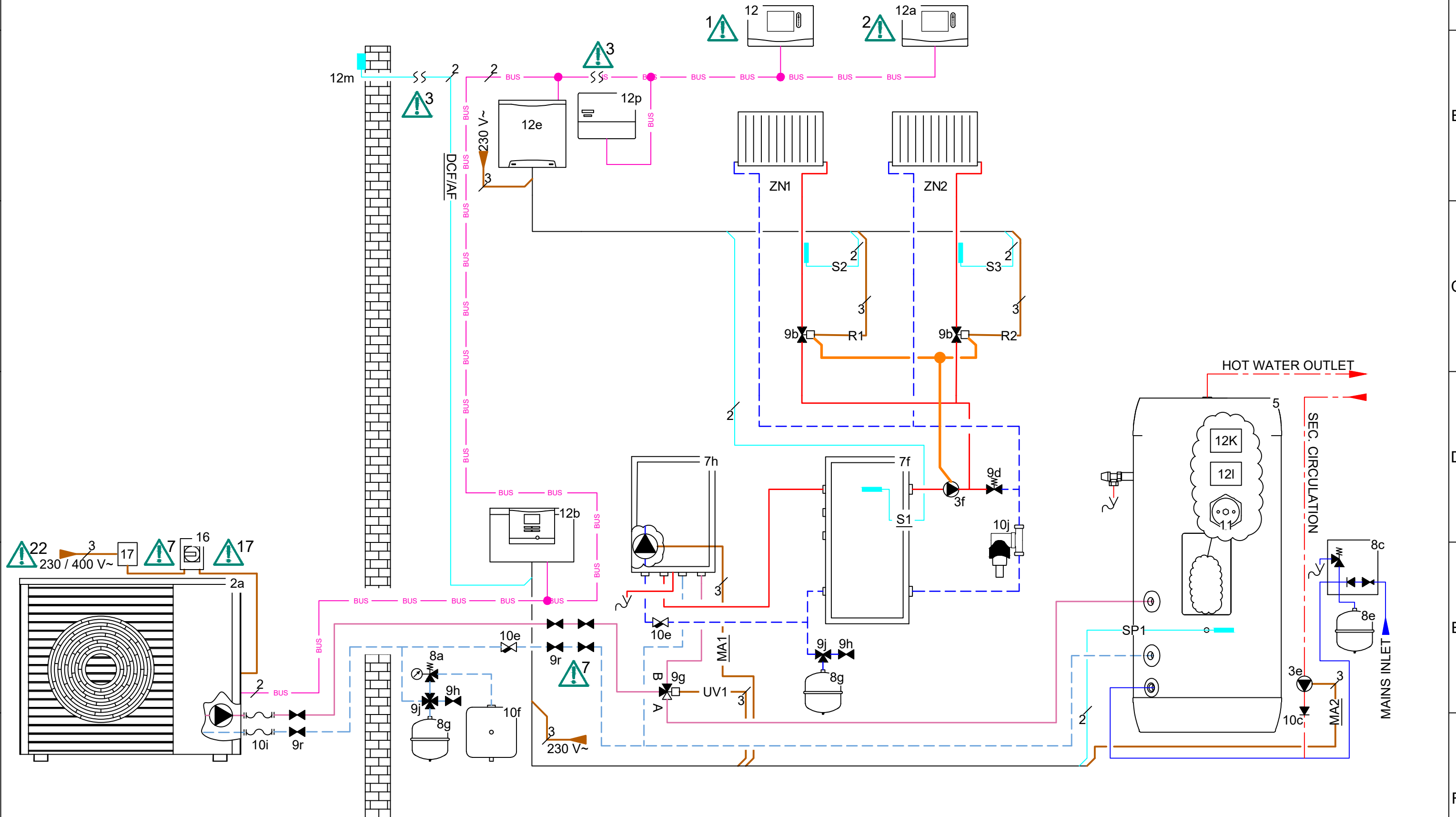
Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Domestic hot water</b>	
Adapt. heat curve:	Deactivated	Cylinder:	Active
Hybrid manager:	Bivalence pt	Anti-legio. day:	**User preference
Heating bivalence point:	-20°	Anti-legio. time:	**User preference
DHW bivalence point:	-20°	Cylinder charging offset:	15 K
Alternative point:	Off	Cyl. charg. anti-cycl. time:	5 min
ESCO:	Heating off		
Back-up boiler:	Off		
<b>Basic system diagram config.</b>			
Basic system diagram code:	10		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		
<b>Zone 1</b>			
Zone activated:	Yes		
Zone assignment:	No assignmt		

REV	DATE	DESCRIPTION
E	29/08/2023	Added aroTHERM Plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores



- See page 2 for detailed wiring.
1. See page 3 for relevant controller system configuration settings.
  2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.
  3. Controls and outdoor sensor can be wired or wireless
  7. Optional for metering purposes.
  17. Rotary Isolator must be situated outside of the Protective Zone
  22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



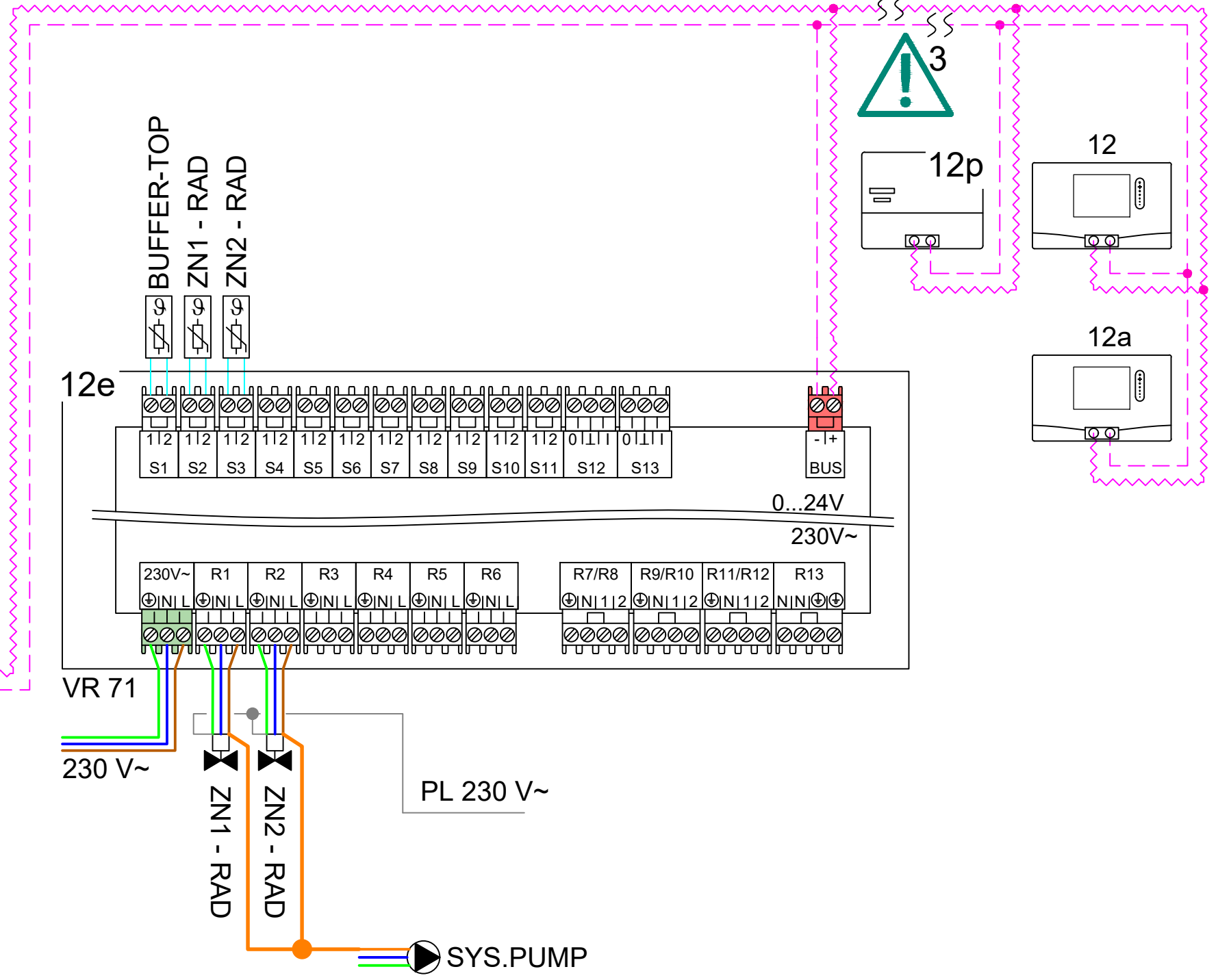
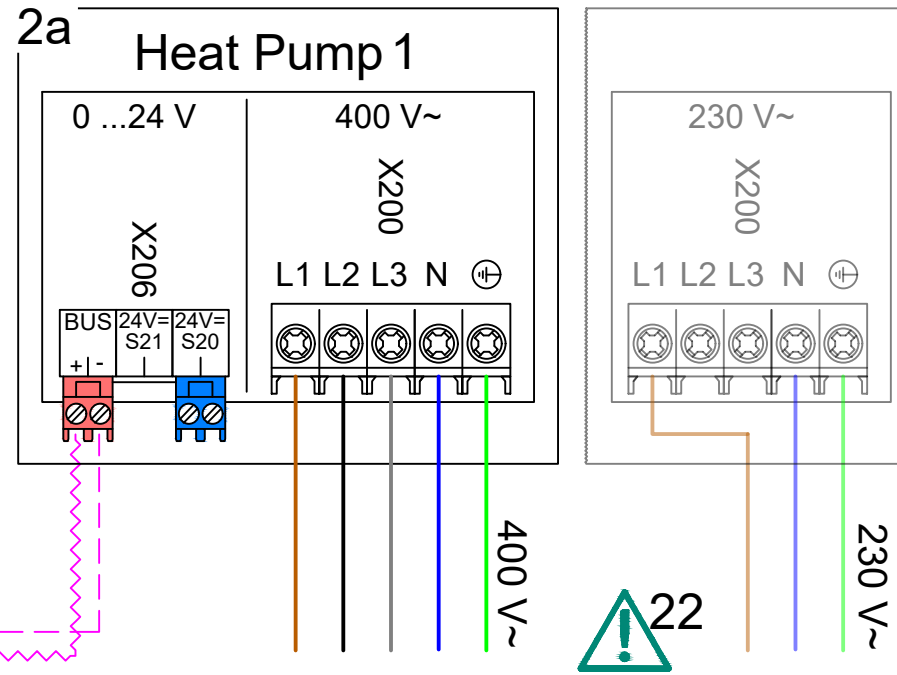
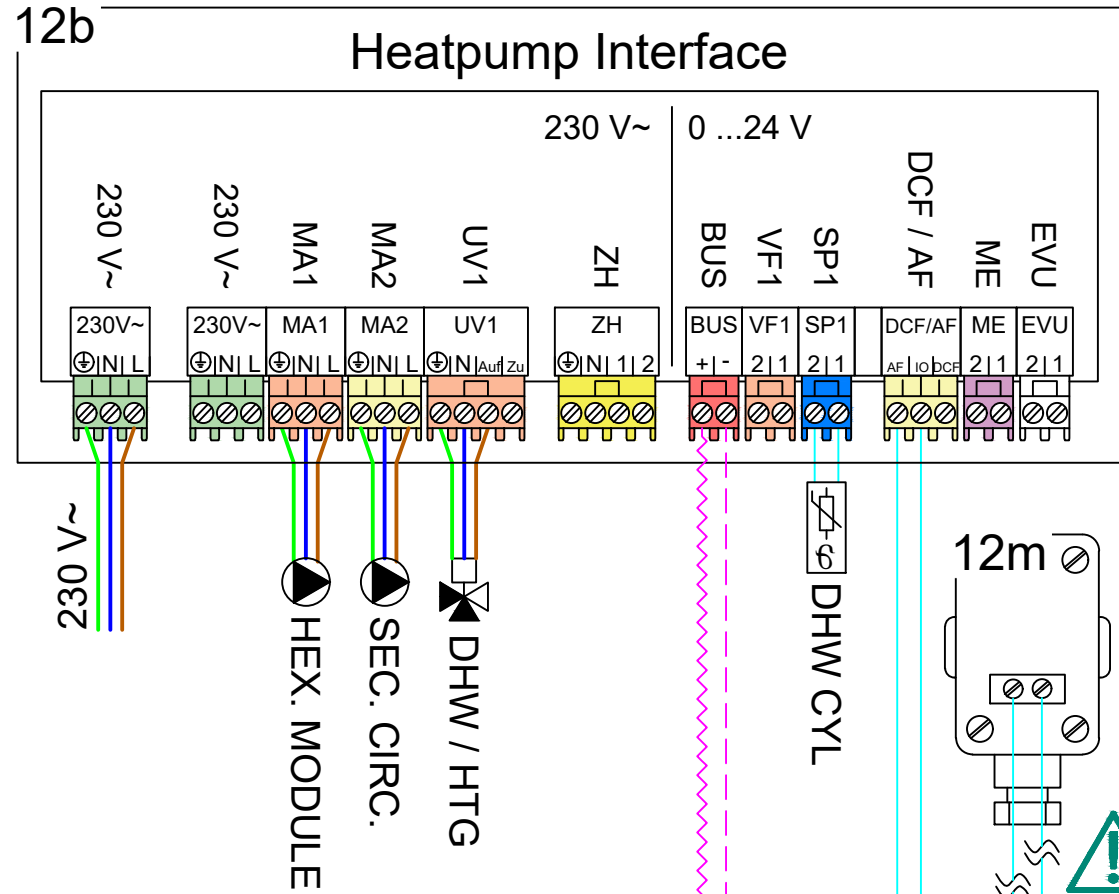
**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
29/08/2023 REV: D

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100L)  
Control(s): sensoCOMFORT & VR 92

HTG. Circuit(s): 2x Radiator - Vaillant Direct, ,  
Domestic Hot Water: 1x Cylinder

- See page 2 for detailed wiring.
1. See page 3 for relevant controller system configuration settings.
  2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.
  3. Controls and outdoor sensor can be wired or wireless
  7. Optional for metering purposes.
  17. Rotary Isolator must be situated outside of the Protective Zone
  22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30250-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

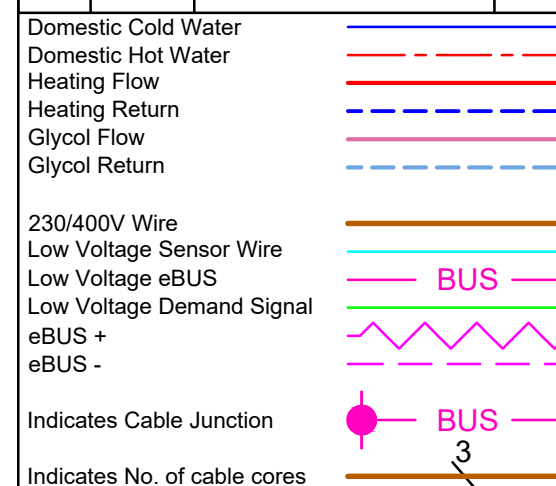
- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank (If applicable)
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH off	Set-back mode:	Normal
Back-up boiler:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	Rem. contr. 1
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

D	29/08/2023	Added aroTHERM Plus 400V option	2,E
		Updated ESCO settings	2,C
REV	DATE	DESCRIPTION	ZONE



30251-1012

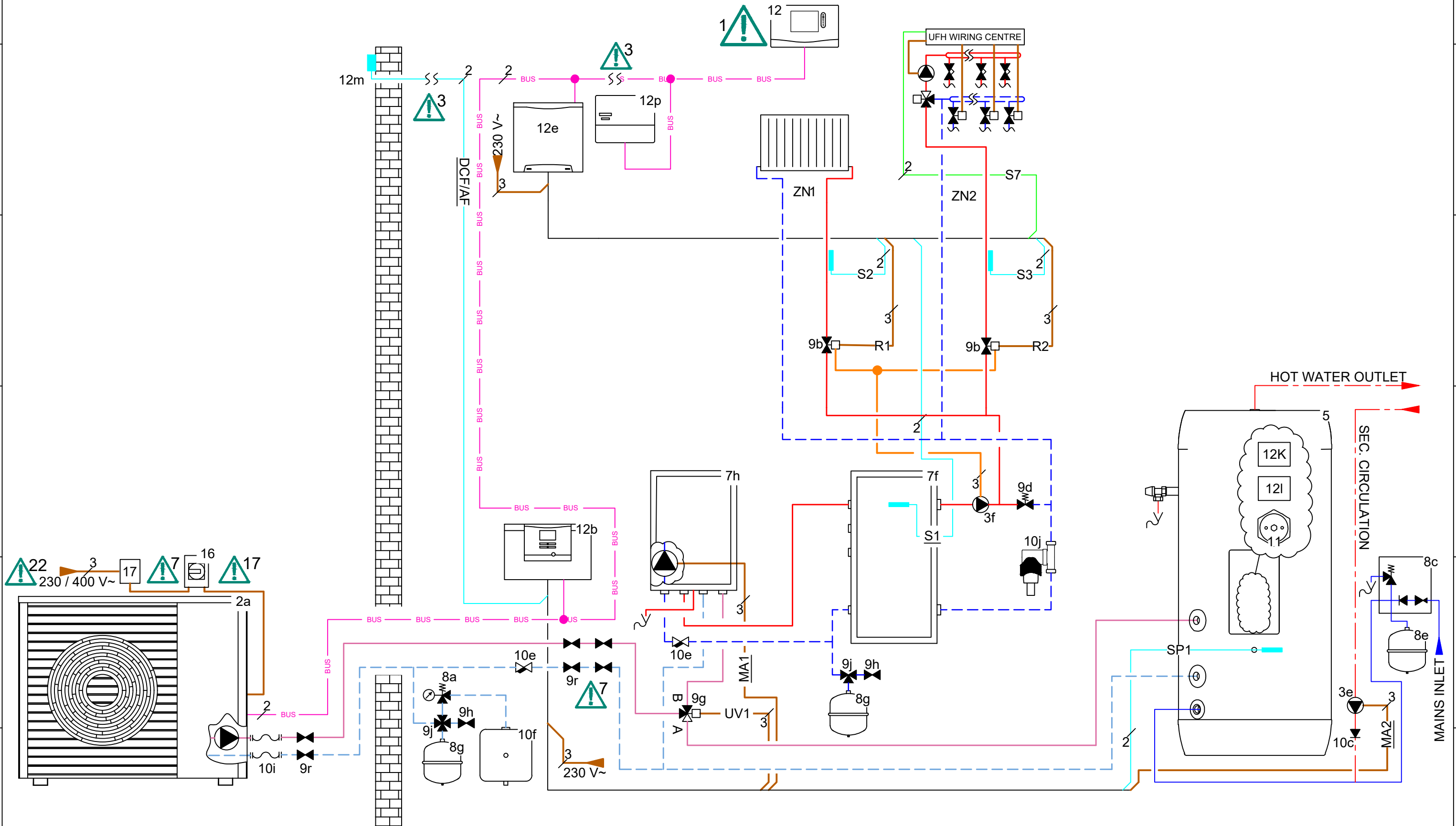


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless.
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
29/08/2023 REV: E

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100LBuffer)  
Control(s): sensoCOMFORT

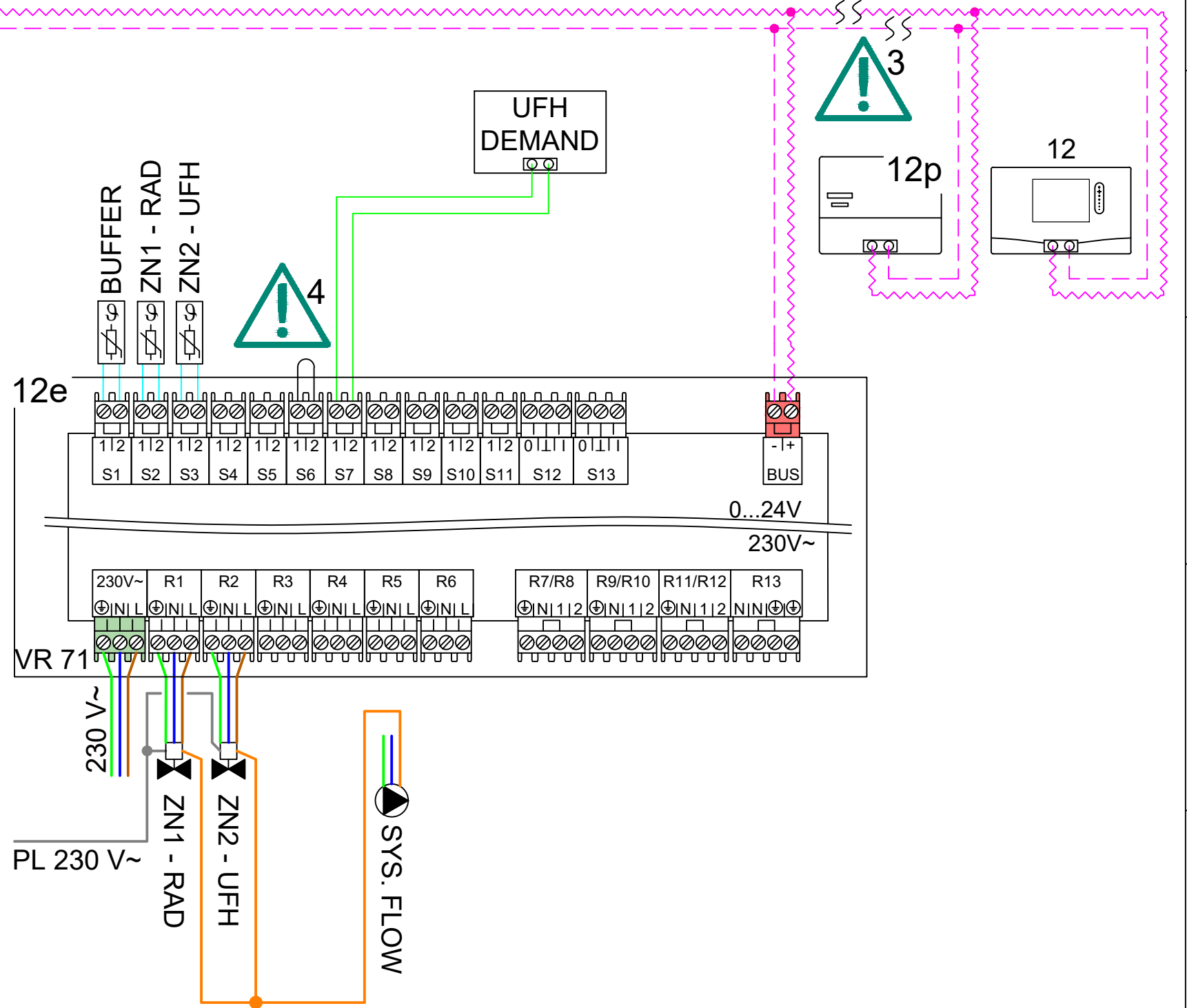
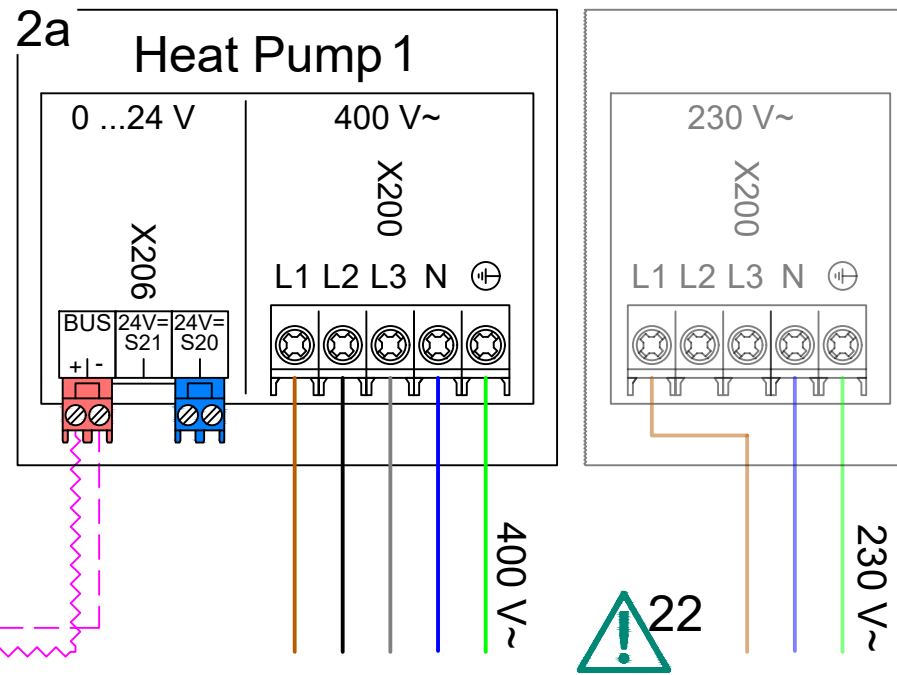
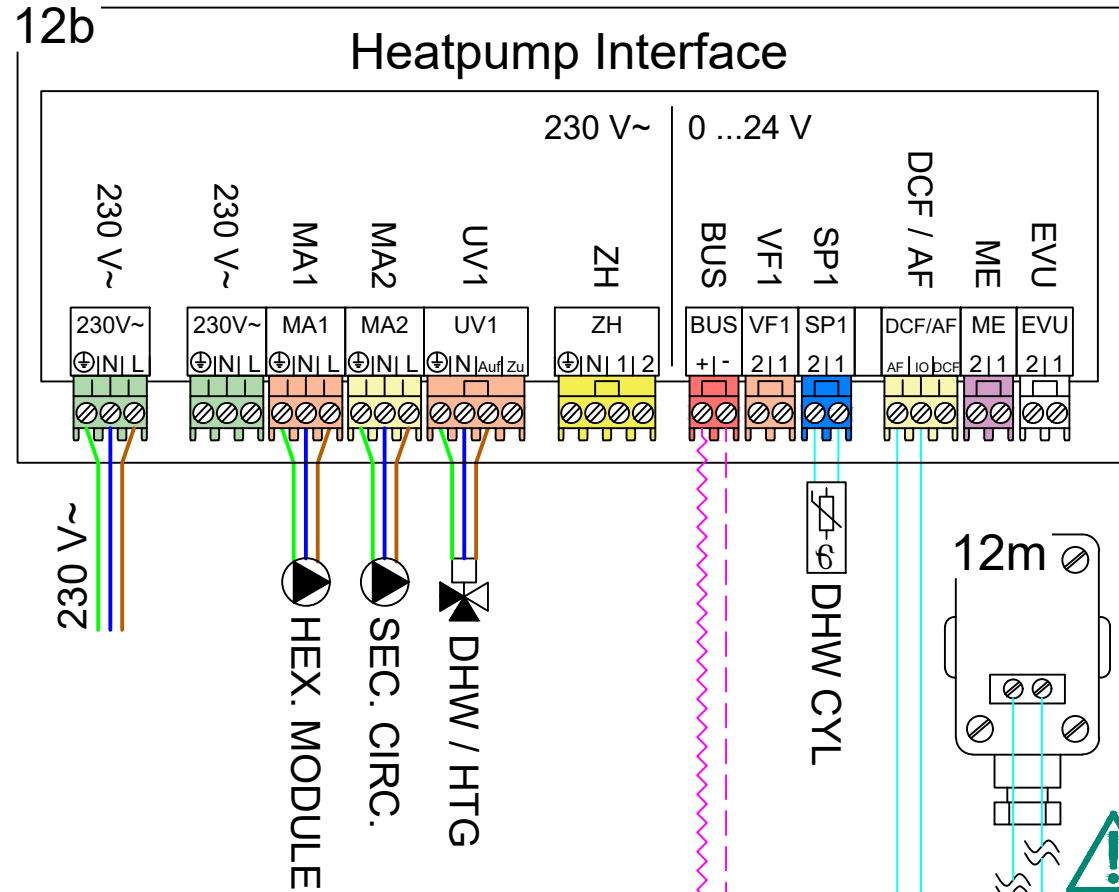
HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH - 3rd Party,  
Domestic Hot Water: 1x Cylinder

30251-1012



- See page 2 for detailed wiring.
- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless.
- 4. Link required (not factory fitted).

- 7. Optional for metering purposes.
- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100LBuffer)

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH - 3rd Party,

29/08/2023

REV: E

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

30251-1012

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM Plus
- 03e Secondary Circulation Pump
- 03f General Pump
- 05 uniSTOR DHW Cylinder
- 07f 45/100L Buffer
- 07h HEX. Module
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 08g Brine Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10f Brine Collection Tank
- 10i Flexible Connection
- 10j Magnetic Filter
- 11 Immersion Heater
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Receiver
- 16 Rotary Isolator
- 17 Electric Meter

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45° (Assumed)
ESCO:	HP + BUH Off	Set-back mode:	Eco
Back-up boiler:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	10	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	No assignmt
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

E	29/08/2023	Added aroTHERM Plus 400V Option	2,E
		ESCO set to default setting HP + BUH off	2,C

REV	DATE	DESCRIPTION	ZONE
		Domestic Cold Water	
		Domestic Hot Water	
		Heating Flow	
		Heating Return	
		Glycol Flow	
		Glycol Return	
		230/400V Wire	
		Low Voltage Sensor Wire	
		Low Voltage eBUS	BUS
		Low Voltage Demand Signal	
		eBUS +	
		eBUS -	
		Indicates Cable Junction	BUS
		Indicates No. of cable cores	3

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM Plus, Heat Ex. Module, Buffer (45/100LBuffer)

HTG. Circuit(s): 1x Radiator - Vaillant Direct, 1x UFH - 3rd Party,

29/08/2023

REV: E

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

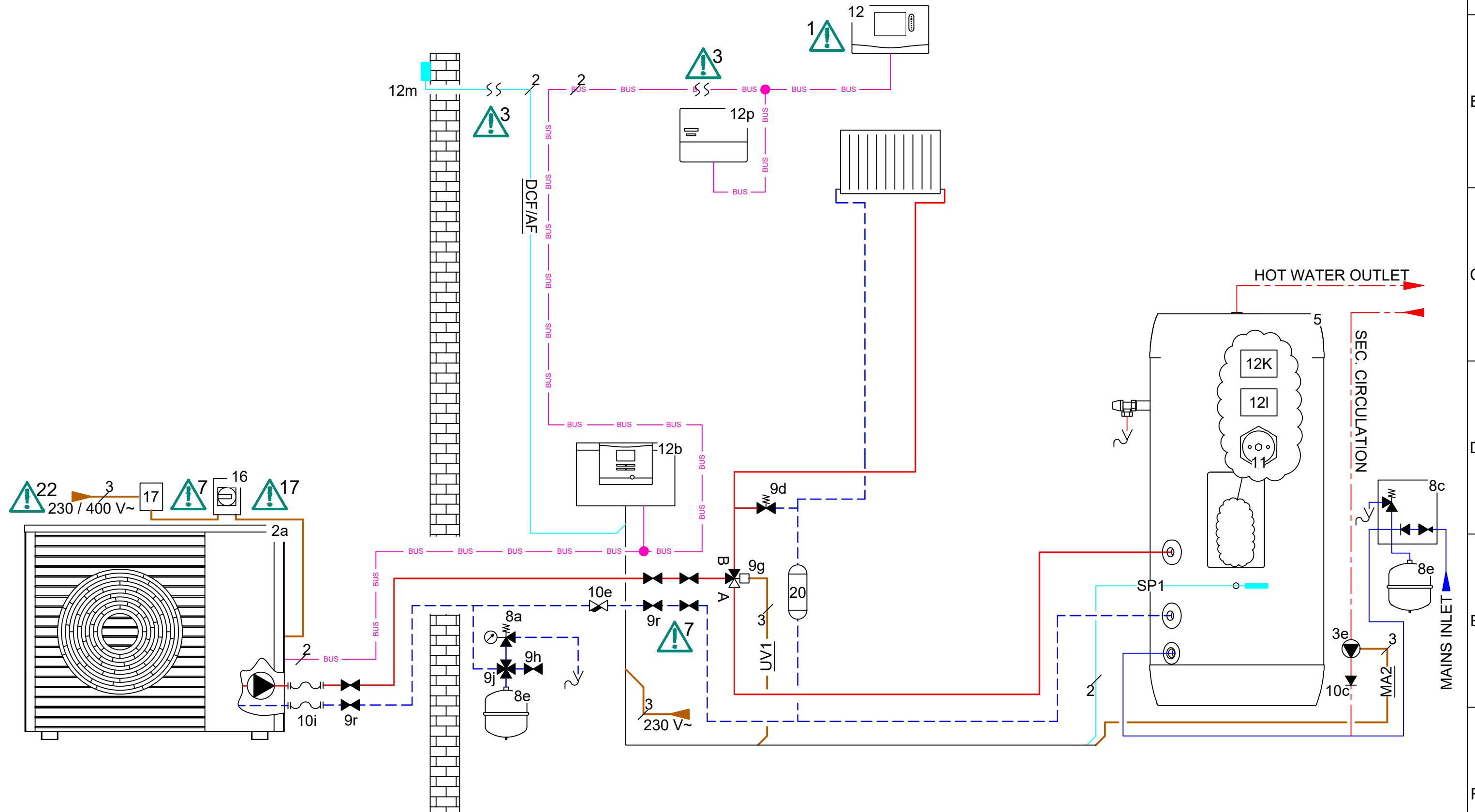
30260-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: I

Appliance(s): 1x aroTHERM plus,

Control(s): 1x sensoCOMFORT

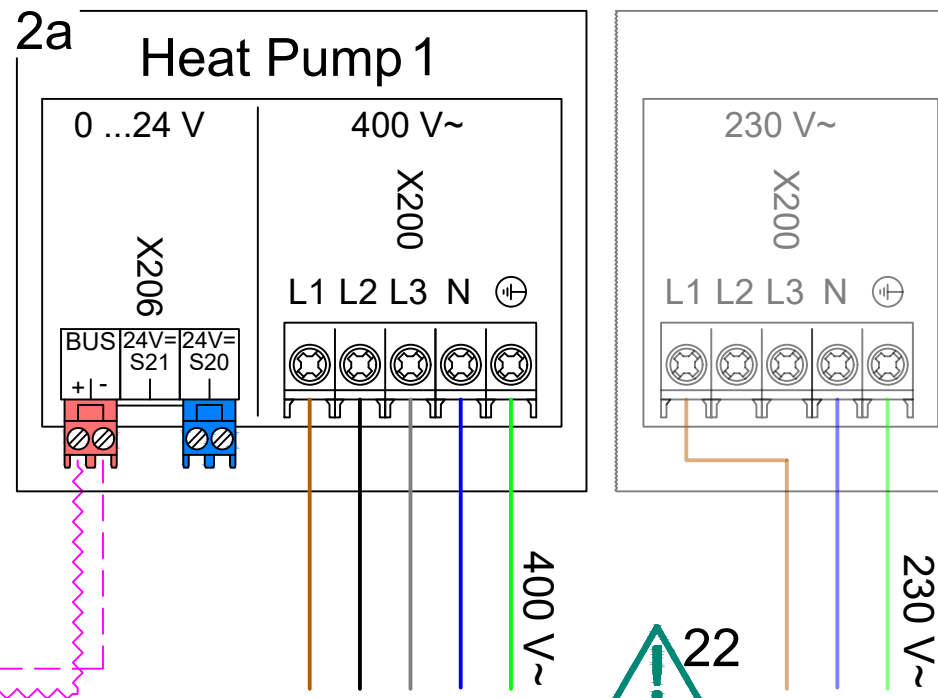
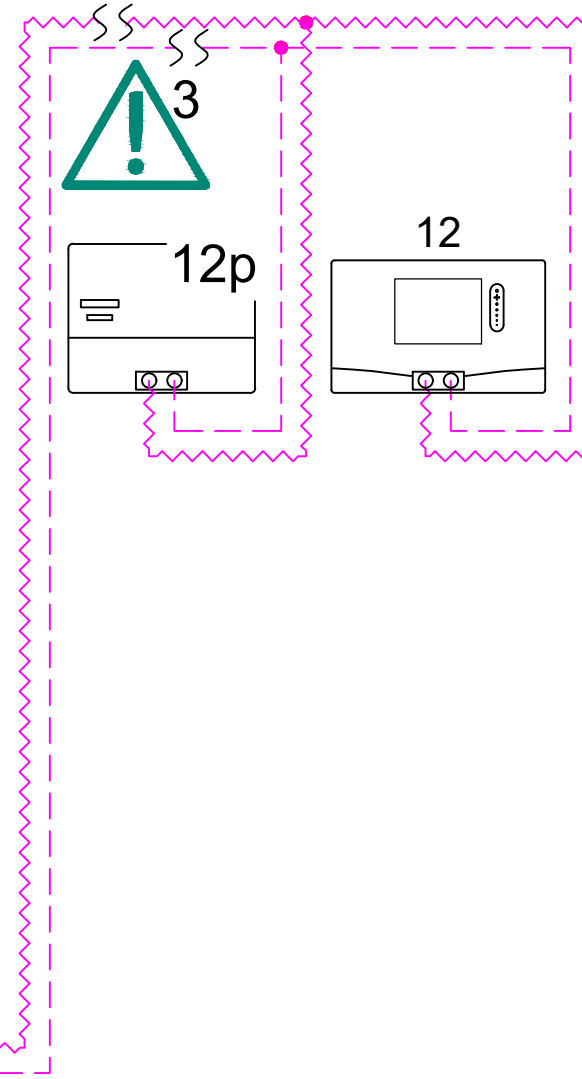
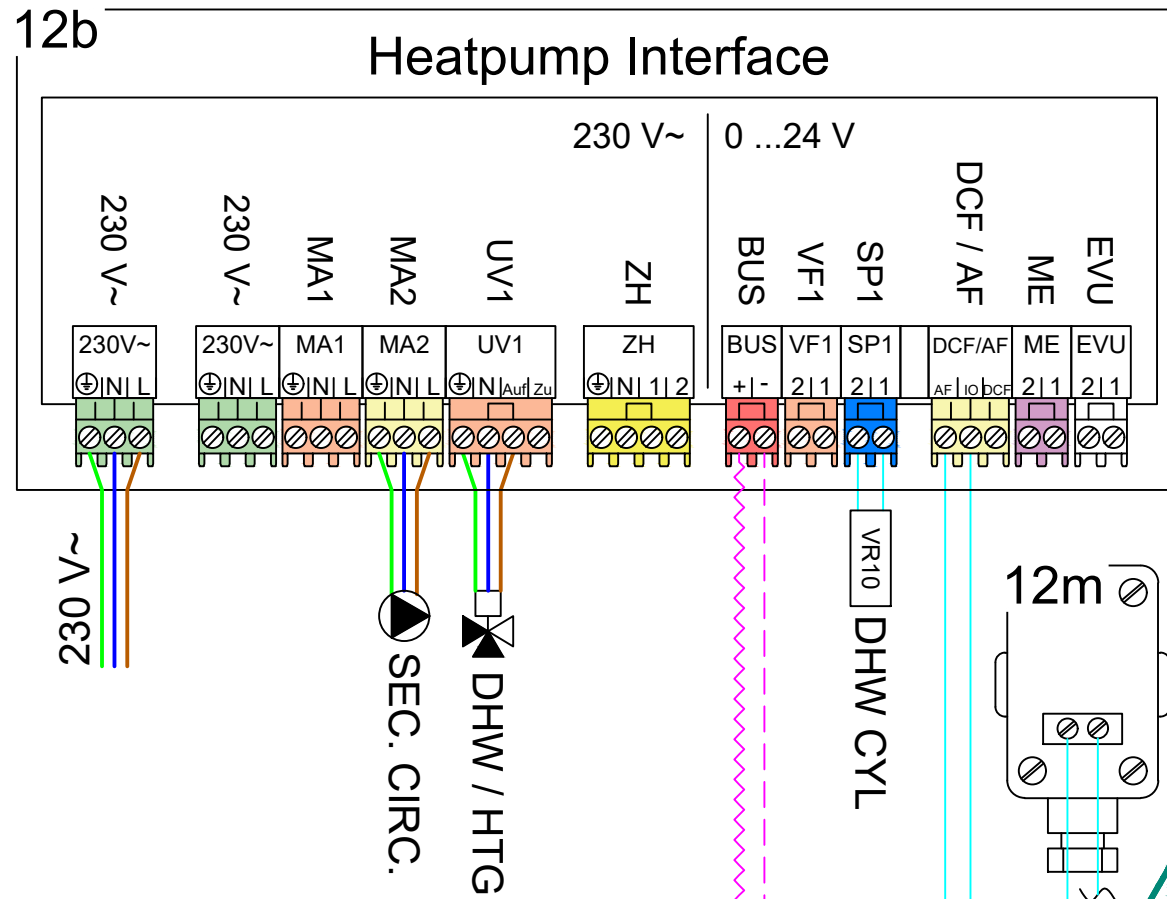
HTG. Circuit(s): 1x Radiator - Direct ,

Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.  
 1. See page 3 for relevant controller system configuration settings.  
 3. Controls and outdoor sensor can be wired or wireless  
 7. Optional for metering purposes.

17. Rotary Isolator must be situated outside of the Protective Zone  
 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V





30260-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter
- 20 Volumiser

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value
<b>Installation</b>	
Adapt. heat curve:	Deactivated
Hybrid manager:	Bivalence pt
Heating bivalence point:	-20°
DHW bivalence point:	-20°
Alternative point:	Off
ESCO:	HP + BUH Off
Back-up boiler:	Off
<b>Basic system diagram config.</b>	
Basic system diagram code:	8
<b>HP control module configuration</b>	
MO 2:	Circulation pump
<b>Circuit 1</b>	
Circuit type:	Heating
OT switch-off threshold:	30°
Heat curve:	**Site specific
Min. target flow temperature:	15°
Max. target flow temperature:	45°
Set-back mode:	Normal
Room temp. mod.:	Expanded
<b>Zone 1</b>	
Zone activated:	Yes
Zone assignment:	Control
<b>Domestic hot water</b>	
Cylinder:	Active
Anti-legio. day:	**User preference
Anti-legio. time:	**User preference
Cylinder charging offset:	15 K
Cyl. charg. anti-cycl. time:	5 min

REV	DATE	DESCRIPTION
I	19/09/2023	Added aroTHERM plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): 1x aroTHERM plus,

HTG. Circuit(s): 1x Radiator - Direct ,

19/09/2023

REV: I

Control(s): 1x sensoCOMFORT

Domestic Hot Water: 1x Cylinder

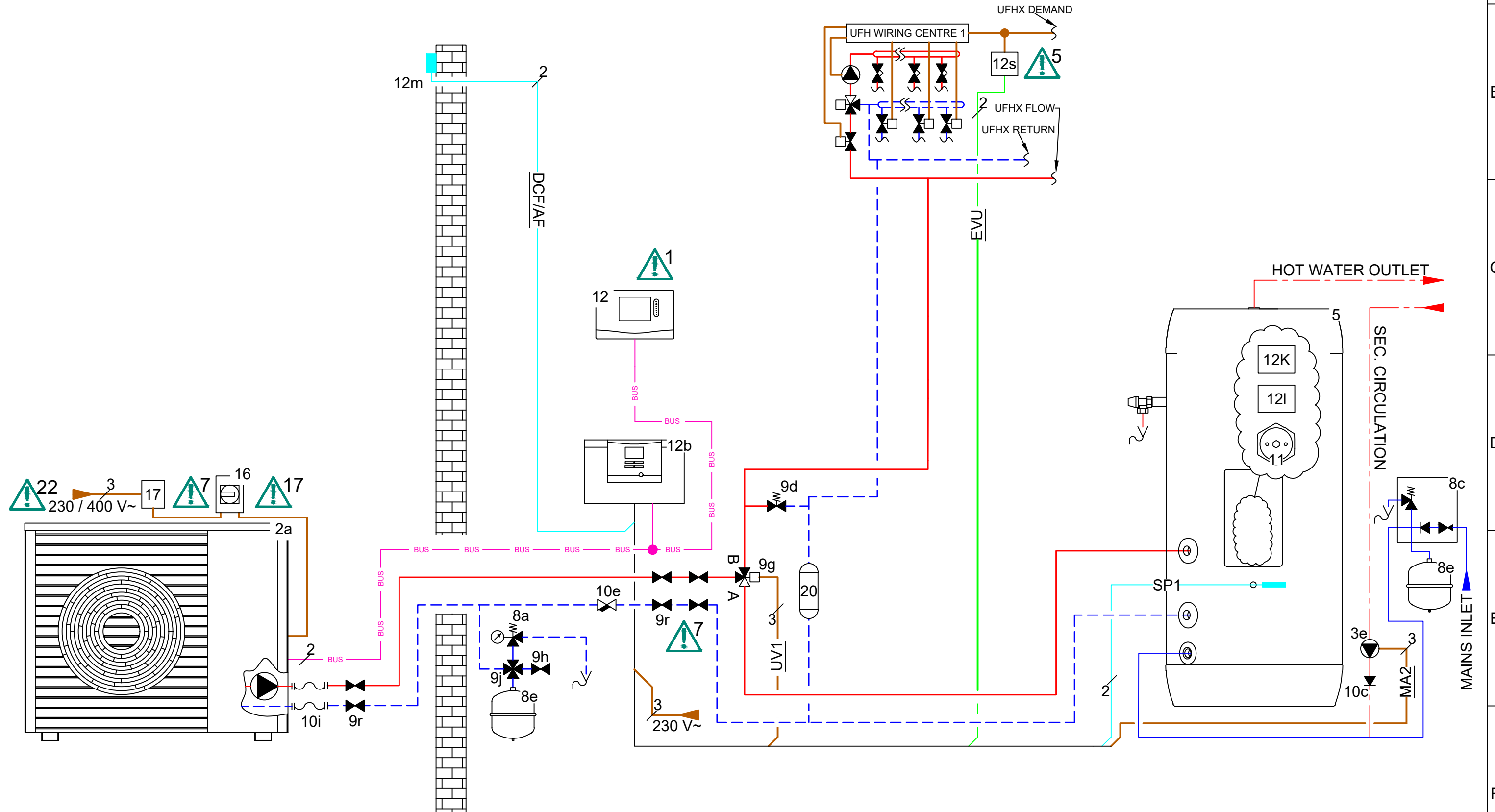
30261-1011



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus, ----

HTG. Circuit(s): 1x UFH(X) - 3rd Party, .

19/09/2023

REV: H

Control(s): sensoCOMFORT VRC 720

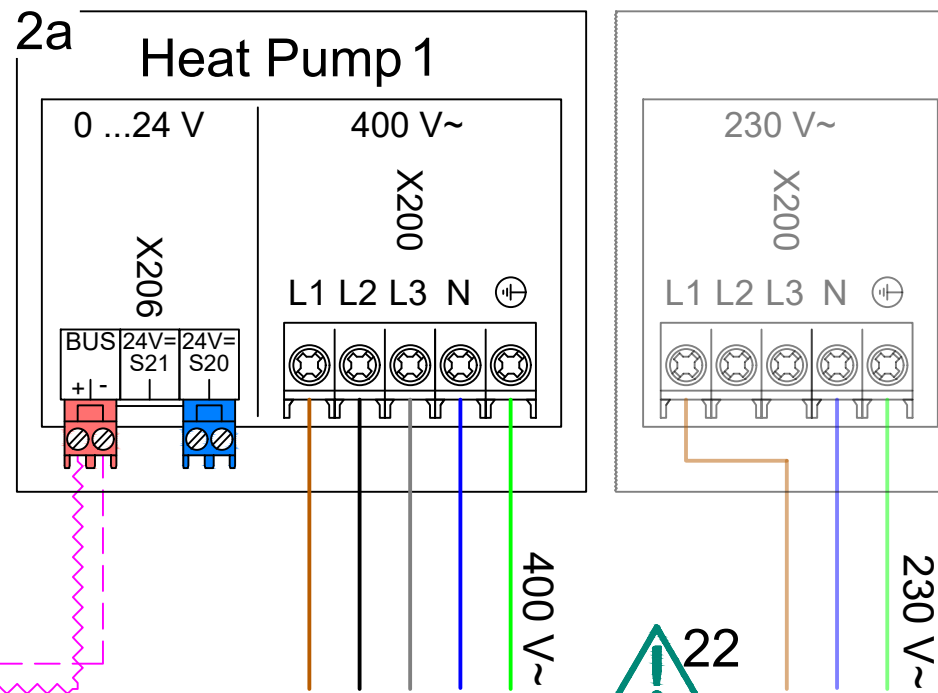
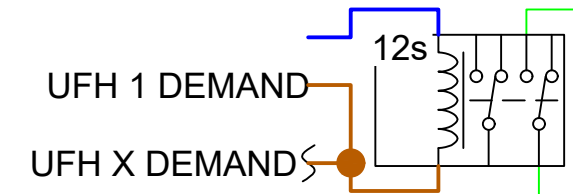
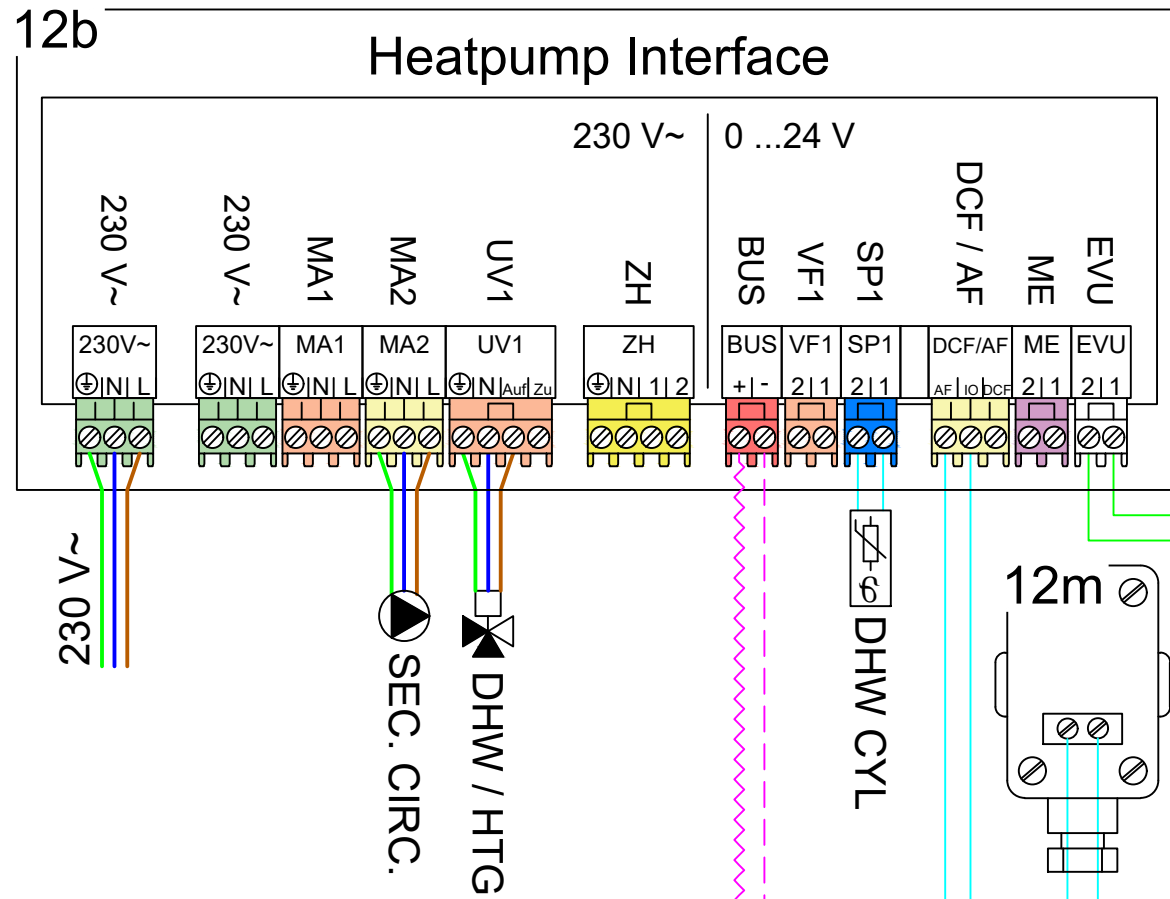
Domestic Hot Water: 1x Cylinder



-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 5. DPDT Relay (not supplied by Vaillant). See page 2 for detailed wiring.
- 7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



30261-1011

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 16 Rotary Isolator
- 17 Electric Meter
- 20 Volumiser

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

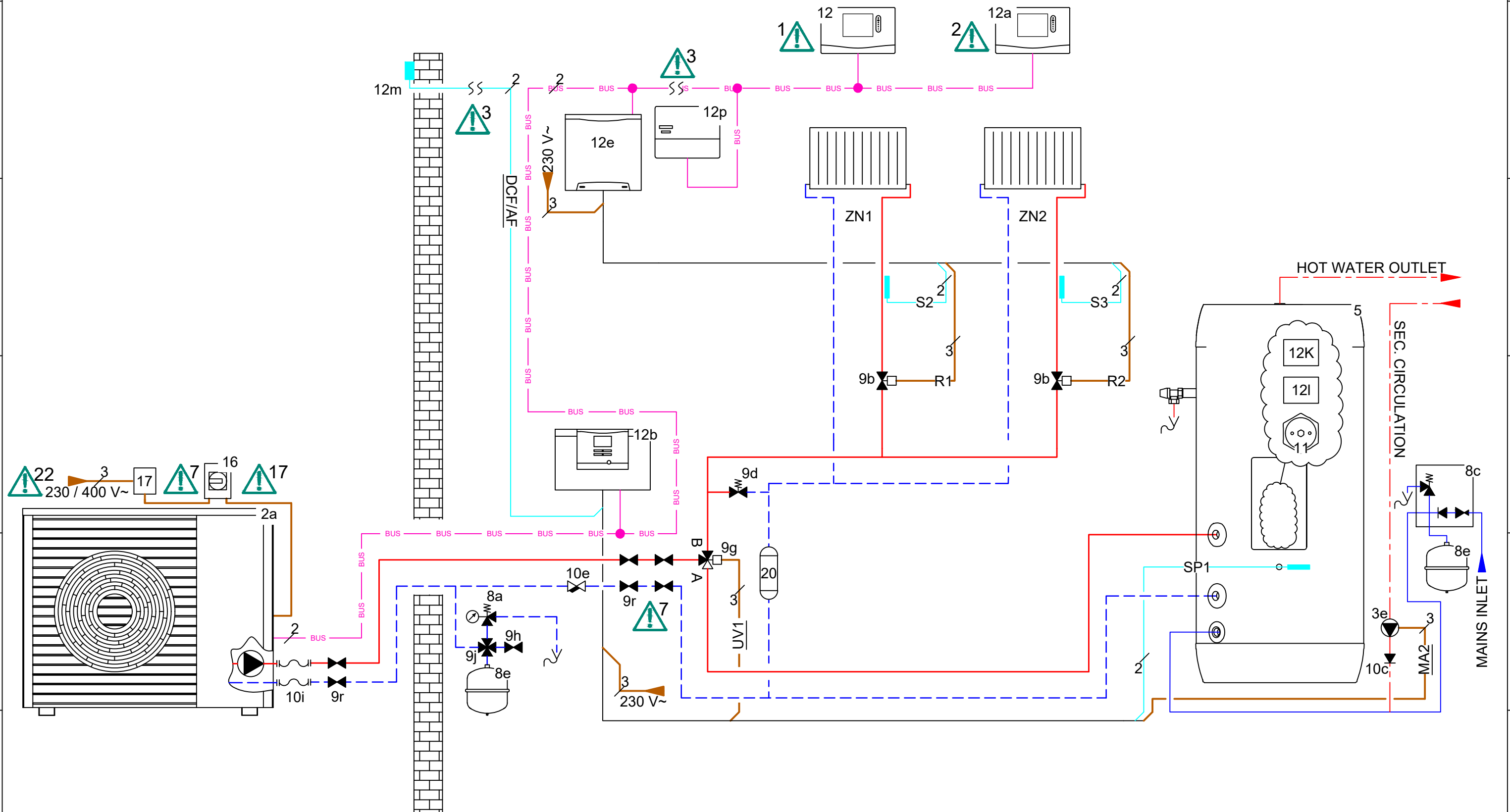
Setting	Value	Setting	Value
<b>Installation</b>		<b>Zone 1</b>	
Adapt. heat curve:	Deactivated	Zone activated:	Yes
Hybrid manager:	Bivalence pt	Zone assignment:	No assignmt
Heating bivalence point:	-20°	<b>DHW circuit</b>	
DHW bivalence point:	-20°	Cylinder	active
Alternative point:	Off	Anti-legionella day	**User preference
ESCO:	Heating off	Anti-legionella time	**User preference
Back-up boiler:	Off	Cylinder boost offset	15 K
<b>Basic system diagram config.</b>		DHW req. anti-cy time	5 min
Basic system diagram code:	8		
<b>HP control module configuration</b>			
MO 2:	Circulation pump		
<b>Circuit 1</b>			
Circuit type:	Heating		
OT switch-off threshold:	30°		
Heat curve:	**Site specific		
Min. target flow temperature:	15°		
Max. target flow temperature:	45°		
Set-back mode:	Eco		
Room temp. mod.:	Inactive		

REV	DATE	DESCRIPTION
H	19/09/2023	Updated settings Added aroTHERM plus 400V option
		Domestic Cold Water
		Domestic Hot Water
		Heating Flow
		Heating Return
		Glycol Flow
		Glycol Return
		230/400V Wire
		Low Voltage Sensor Wire
		Low Voltage eBUS
		Low Voltage Demand Signal
		eBUS +
		eBUS -
		Indicates Cable Junction
		Indicates No. of cable cores

30270-1012-

- See page 2 for detailed wiring.
- 1. See page 3 for relevant controller system configuration settings.
- 2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

- 3. Controls and outdoor sensor can be wired or wireless.
- 7. Optional for metering purposes
- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE  
19/09/2023 REV: F

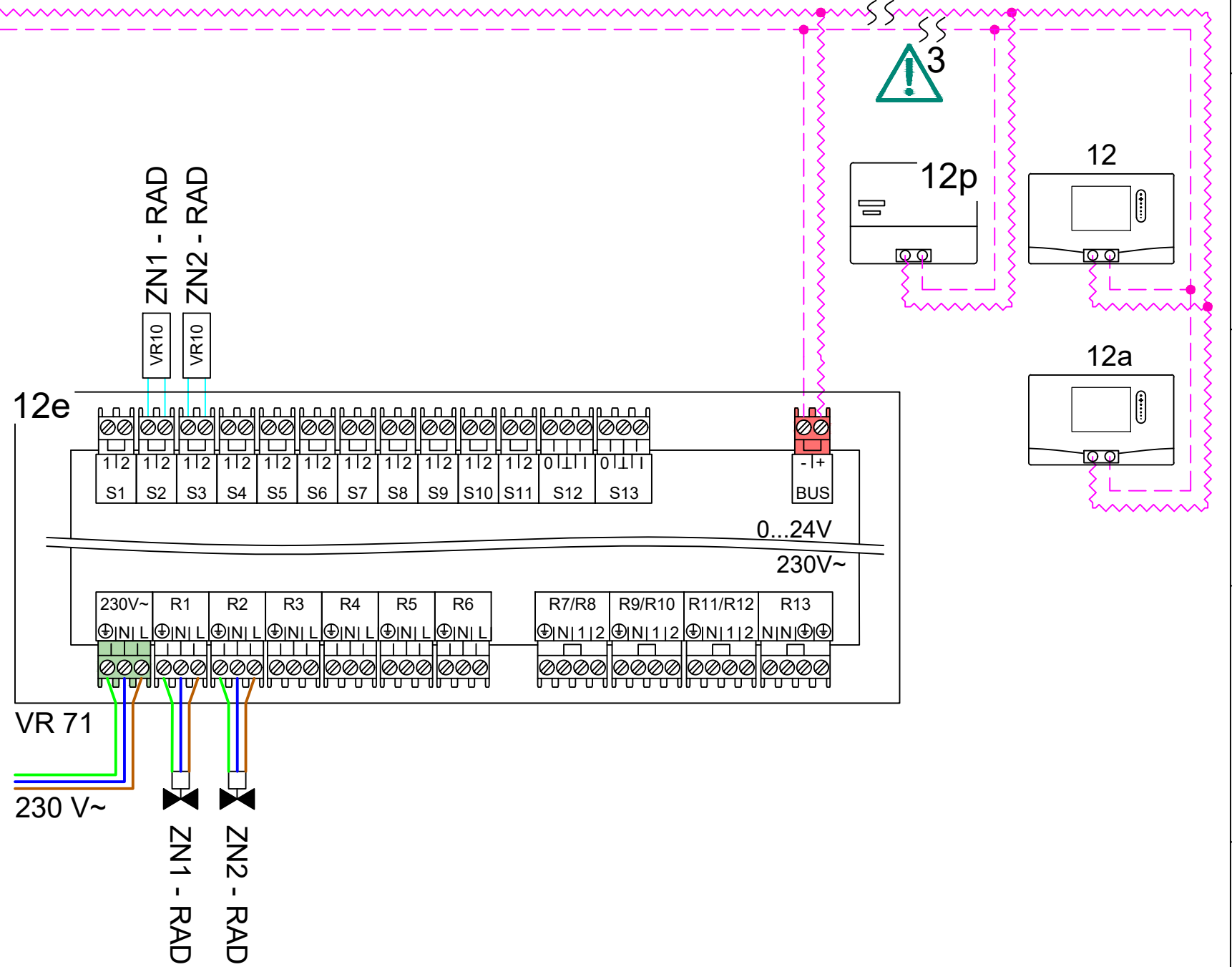
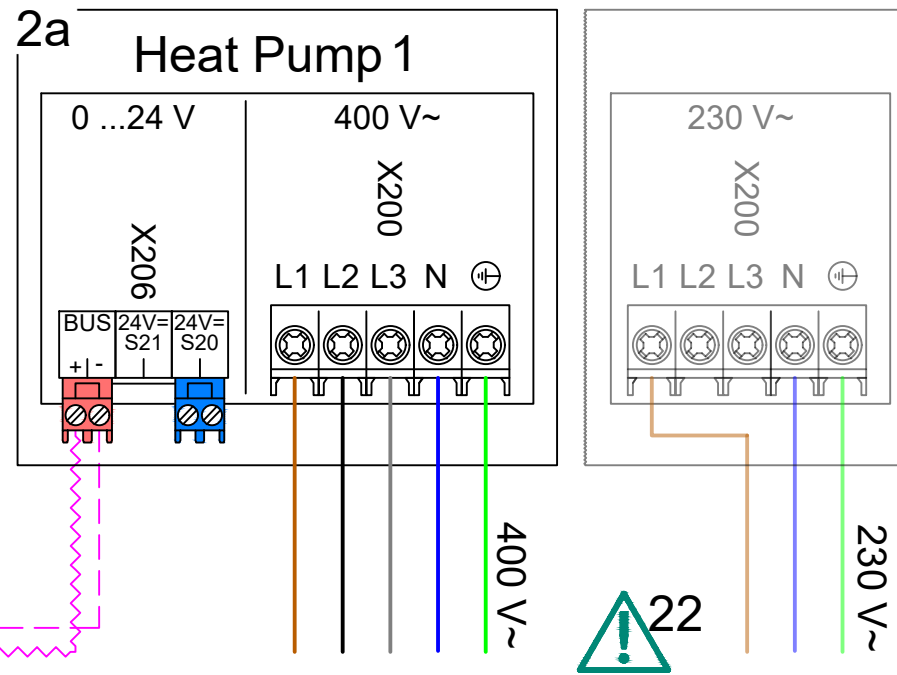
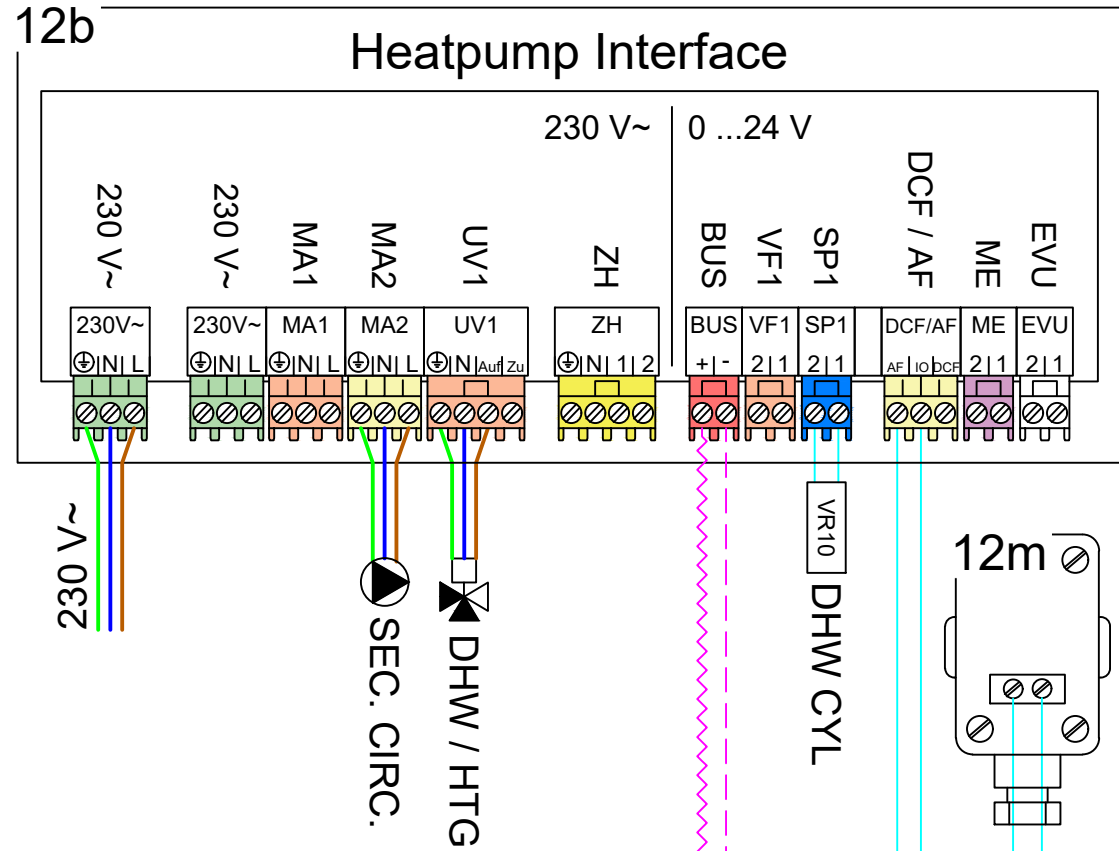
Appliance(s): aroTHERM plus,  
Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Direct ,  
Domestic Hot Water: 1x Cylinder

30270-1012-

- ⚠ -See page 2 for detailed wiring.**
1. See page 3 for relevant controller system configuration settings.
  2. Set VR92 remote address to its zone number - 1  
eg. If VR92 is in zone 3, then remote address must be set to 2.

3. Controls and outdoor sensor can be wired or wireless.
7. Optional for metering purposes
17. Rotary Isolator must be situated outside of the Protective Zone
22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus,

HTG. Circuit(s): 2x Radiator - Direct ,

19/09/2023

REV:

F

Control(s): sensoCOMFORT, VR 92

Domestic Hot Water: 1x Cylinder

30270-1012-

**Terms and Conditions for Vaillant Schematic Diagrams**



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12a VR92
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter
- 20 System Volumiser

**sensoCOMFORT VRC 720/2 System Configuration**

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45°
ESCO:	HP + BUH Off	Set-back mode:	Normal
Back-up boiler:	Off	Room temp. mod.:	Expanded
Conf. ext. input:	Bridge, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	Rem. contr. 1
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45°		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

F	19/09/2023	Added aroTHERM plus 400V option	2,E
		Updated settings	-

REV	DATE	DESCRIPTION	ZONE
		Domestic Cold Water	
		Domestic Hot Water	
		Heating Flow	
		Heating Return	
		Glycol Flow	
		Glycol Return	
		230/400V Wire	
		Low Voltage Sensor Wire	
		Low Voltage eBUS	BUS
		Low Voltage Demand Signal	
		eBUS +	
		eBUS -	
		Indicates Cable Junction	BUS
		Indicates No. of cable cores	3

**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: F

Appliance(s): aroTHERM plus,

Control(s): sensoCOMFORT, VR 92

HTG. Circuit(s): 2x Radiator - Direct ,

Domestic Hot Water: 1x Cylinder

30271-1012

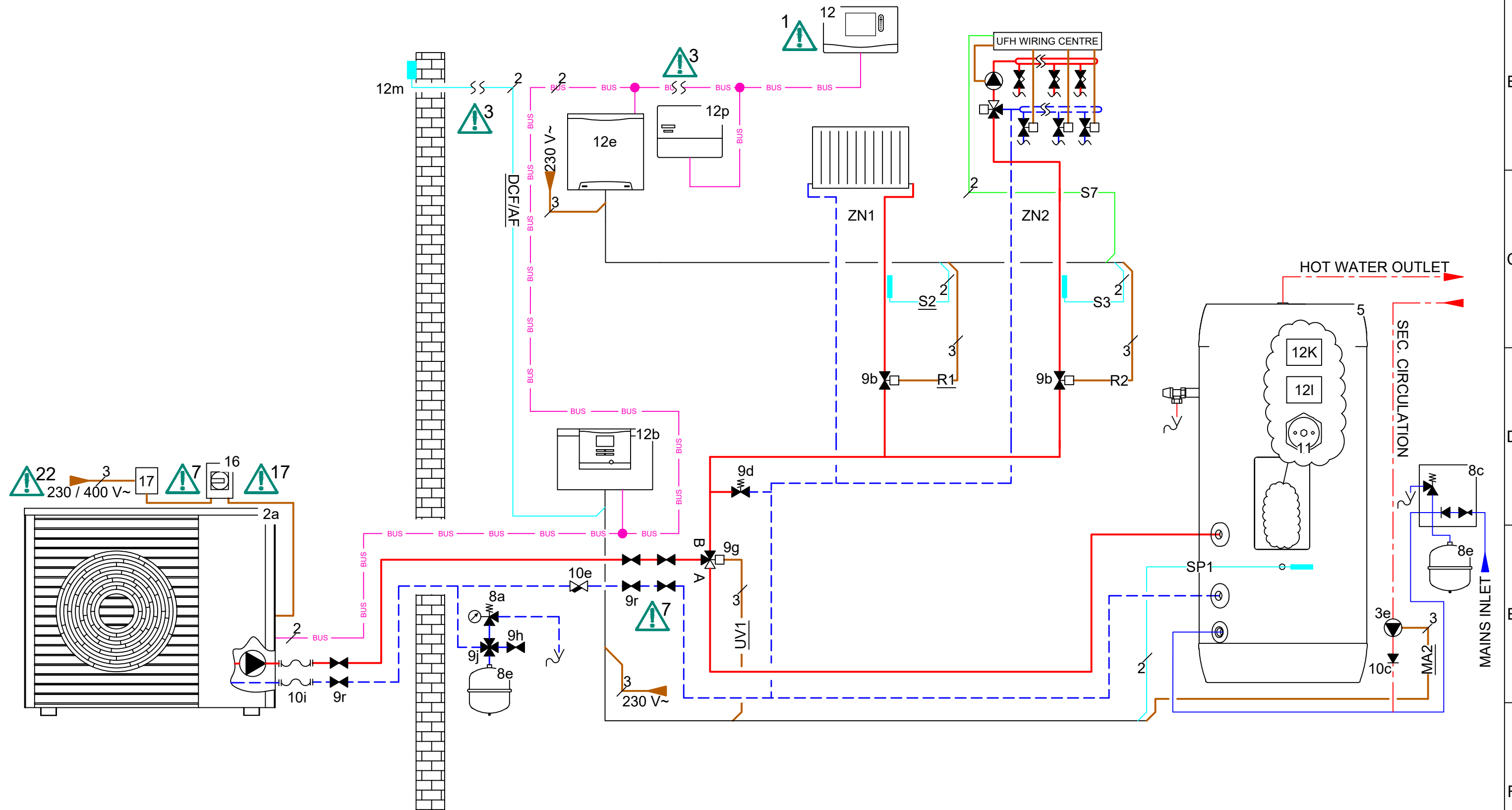


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

19/09/2023

REV: I

Appliance(s): aroTHERM plus,

Control(s): sensoCOMFORT

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

Domestic Hot Water: 1x Cylinder



30271-1012

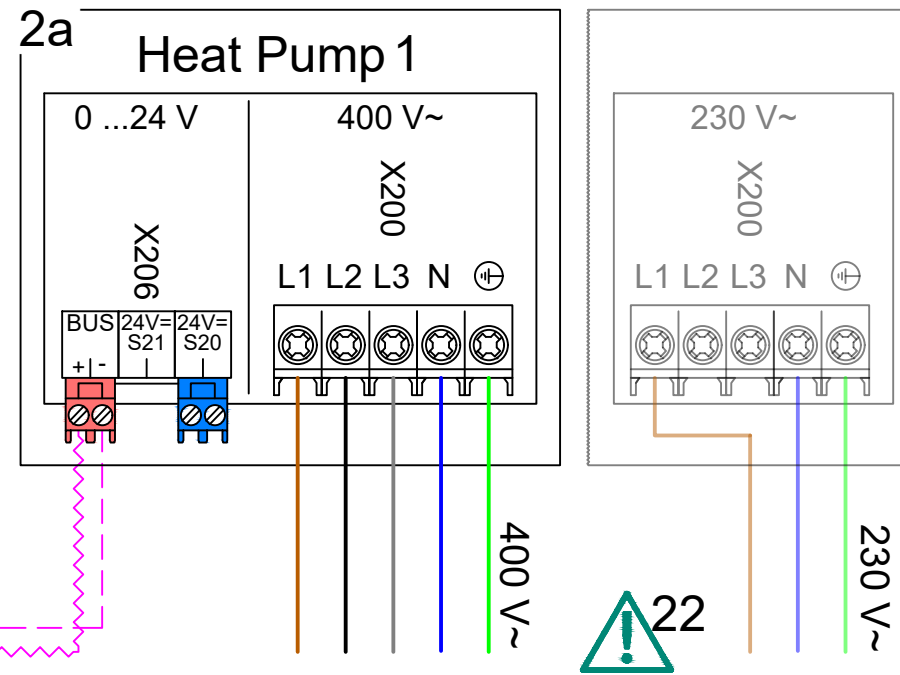
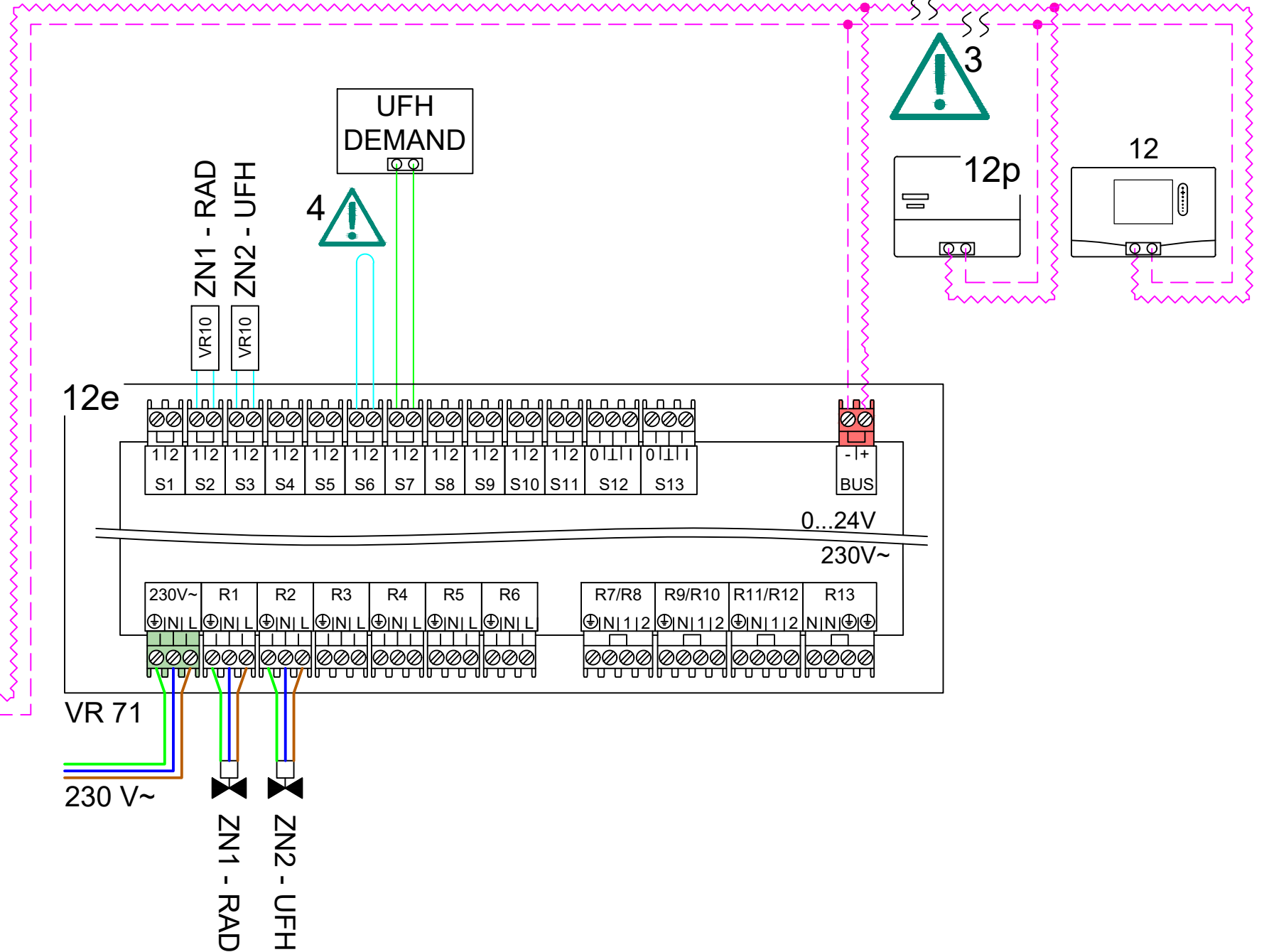
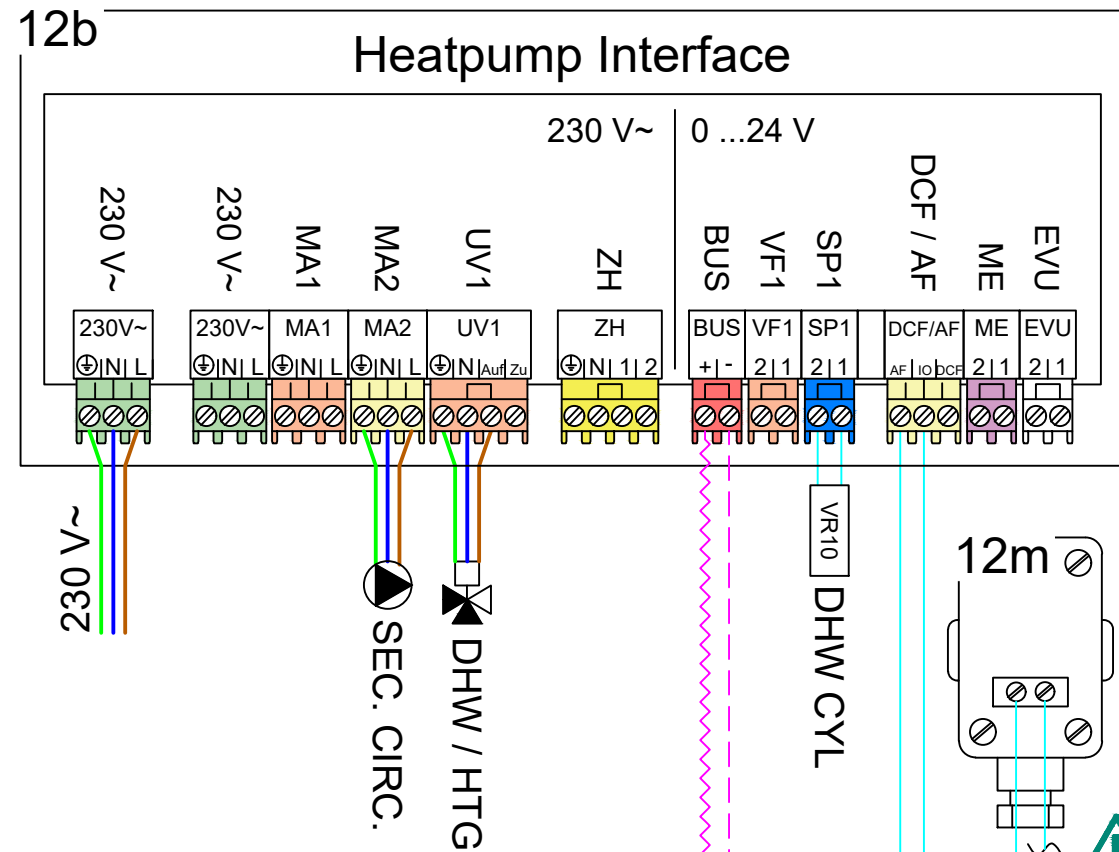


-See page 2 for detailed wiring.

- 1. See page 3 for relevant controller system configuration settings.
- 3. Controls and outdoor sensor can be wired or wireless
- 4. Link required (not factory fitted).

7. Optional for metering purposes.

- 17. Rotary Isolator must be situated outside of the Protective Zone
- 22. Electrical supply voltage depending on the installation and appliance: 230 V, 400 V



**Vaillant Group disclaimer:** This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus,

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

19/09/2023

REV: I

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

30271-1012

Terms and Conditions for Vaillant Schematic Diagrams



PLEASE NOTE THAT THE DIAGRAM PROVIDED IS FOR GENERAL INFORMATION PURPOSES ONLY. THE ADVICE AND INPUT OF A PROFESSIONAL, QUALIFIED, GAS SAFE / MCS INSTALLER MUST BE SOUGHT. VAILLANT IS NOT RESPONSIBLE FOR INSTALLATIONS OR FOR THE PROFESSIONAL DESIGN OF THE SYSTEM.

- All applicable laws and regulations must be followed.
- The Diagram may be subject to alteration at any time.
- Vaillant is not responsible for any inaccuracies or omissions in the information and drawings provided to it and upon which it relies when constructing the diagrams.
- Any reproduction of the design must have the prior permission of Vaillant.
- During the planning, design, installation and later use of the system, all operating instructions must be followed.
- In no circumstances shall Vaillant be liable to you or any other third parties for any loss or damage (including, without limitation, damage for loss of business or loss of profits) arising directly or indirectly from your use of or inability to use, this diagram.
- Vaillant makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability or suitability of the diagram for any purpose. Any reliance you place on the diagram is therefore strictly at your own risk.
- These disclaimers and exclusions shall be governed by and construed in accordance with English law.

- 02 aroTHERM plus
- 03e Secondary Circulation Pump
- 05 uniSTOR DHW Cylinder
- 08a Pressure Relief Valve
- 08c DHW Inlet Safety Group
- 08e Heating / DHW Expansion Vessel
- 09b Zone Valve
- 09d Bypass Valve
- 09g Diverter Valve
- 09h Fill / Drain Valve
- 09j Expansion Vessel Service Valve
- 09r Isolation Valve
- 10c Non-return Valve
- 10e Y Strainer
- 10i Flexible Connection
- 11 Immersion Heater
- 12 sensoCOMFORT
- 12b Heat Pump Interface
- 12e Wiring Centre - VR 71
- 12K High Limit Cut Out
- 12l Cylinder Thermostat
- 12m Outdoor Temperature Sensor
- 12p Wireless Reciever
- 16 Rotary Isolator
- 17 Electric Meter

sensoCOMFORT VRC 720/2 System Configuration

Not all settings are displayed, commissioning of the controller should be done diligently; going through each adjustable option with consideration to the property and system requirements.

Setting	Value	Setting	Value
<b>Installation</b>		<b>Circuit 2</b>	
Adapt. heat curve:	Deactivated	Circuit type:	Heating
Hybrid manager:	Bivalence pt	OT switch-off threshold:	30°
Heating bivalence point:	-20°	Heat curve:	**Site specific
DHW bivalence point:	-20°	Min. target flow temperature:	15°
Alternative point:	Off	Max. target flow temperature:	45° (Assumed)
ESCO:	HP + BUH off	Set-back mode:	Eco
Back-up boiler:	Off	Room temp. mod.:	Inactive
Conf. ext. input:	Open, deactiv.	<b>Zone 1</b>	
<b>Basic system diagram config.</b>		Zone activated:	Yes
Basic system diagram code:	8	Zone assignment:	Control
FM5 configuration:	3	<b>Zone 2</b>	
FM5 MO:	Not working	Zone activated:	Yes
<b>HP control module configuration</b>		Zone assignment:	No assignmt
MO 2:	Circulation pump	<b>Domestic hot water</b>	
<b>Circuit 1</b>		Cylinder:	Active
Circuit type:	Heating	Anti-legio. day:	**User preference
OT switch-off threshold:	30°	Anti-legio. time:	**User preference
Heat curve:	**Site specific	Cylinder charging offset:	15 K
Min. target flow temperature:	15°	Cyl. charg. anti-cycl. time:	5 min
Max. target flow temperature:	45° (Assumed)		
Set-back mode:	Normal		
Room temp. mod.:	Expanded		

REV	DATE	DESCRIPTION	ZONE
I	19/09/2023	Added aroTHERM plus 400V option	2,E

Vaillant Group disclaimer: This drawing is supplied for information and general guidance only. No responsibility is accepted for any errors or omissions contained within or for any cost incurred in rectifying any work relating to it.

Drawn: A.RICE

Appliance(s): aroTHERM plus,

HTG. Circuit(s): 1x Radiator - Direct, 1x UFH - 3rd Party,

19/09/2023

REV: I

Control(s): sensoCOMFORT

Domestic Hot Water: 1x Cylinder

# Contacts

**Sales Support:**

Telephone: 0345 602 0262

**Technical Enquiries:**

Telephone: 0330 100 3540 Email:  
aftersales-uk@vaillant.co.uk

**General Enquiries:**

Telephone: 0345 602 2922

**Training Enquiries:**

Telephone: 0345 601 8885  
Email: training@vaillant.co.uk




**Spares Enquiries:**

Telephone: 01773 596 615

**System Sales and Design:**





Email: systemdesignuk@vaillant.com  
Telephone: 0330 1231767



 Heating  Hot water  Renewables

**Vaillant Group UK Ltd.**

Nottingham Road, Belper, Derbyshire DE56 1JT  
Telephone 0345 602 2922  
professional.vaillant.co.uk  
info@vaillant.co.uk

Search for VaillantUK on     

VALSCHEMB2BAP0224