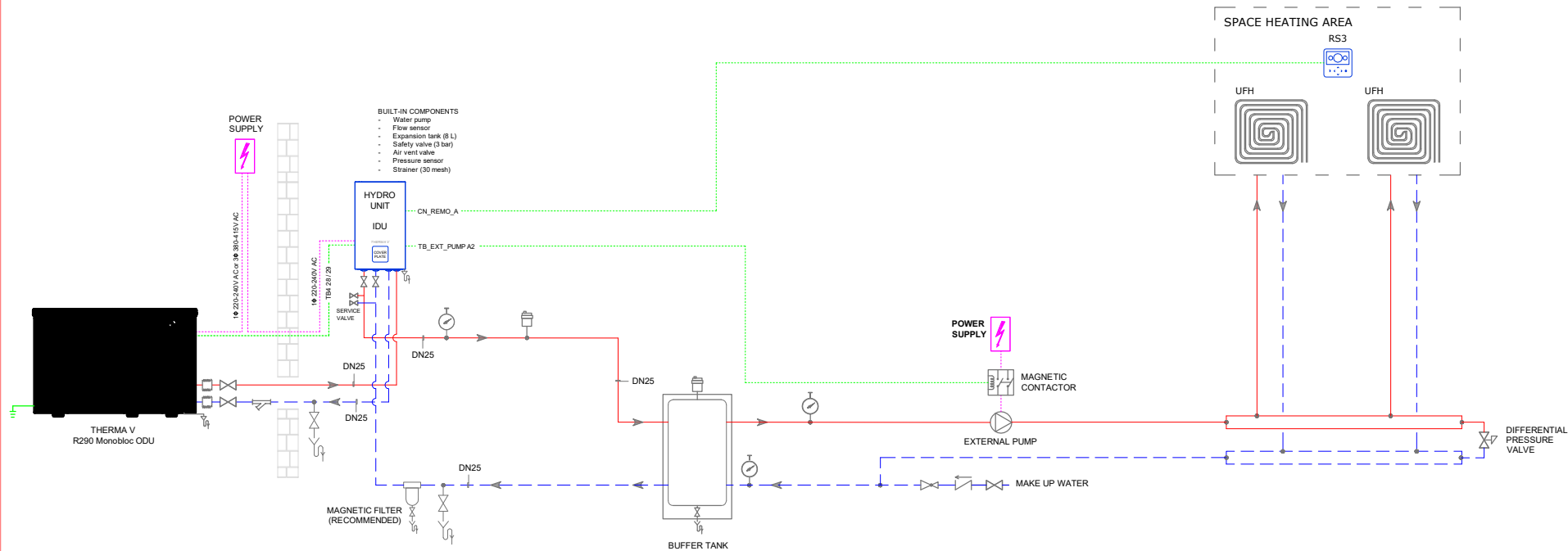


HYDRONIC DIAGRAM

SYMBOL & LEGENDS

	Circulation Pump		Motorized 3 Way Valve		Check Valve		RS3 Remote Controller
	Expansion Tank		Motorized 2 Way Valve		Safety Relief Valve with drain		Remote Room Air Sensor
	Air Vent		Differential Pressure Valve		Y-type strainer		Dry Contact
	Pressure Gauge		Thermostatic Mixing Valve		Flow Sensor		Wi-Fi Modem
	Flexible Connection		Shut Off Valve		Magnetic Contactor		Thermostat
	Drain		Pressure Reducing Valve		Drain Pan		Cover Plate



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2. It is essential to ensure the minimum amount of water contained in the heating or cooling system.
3. Must fit the insulations on the entire water piping including valves and connections.
4. In a cold climate region, water drainage from outdoor unit must be frost-proof.

ACCESSORIES LG

RS3 Controller (Default)

A wired remote controller with built-in temperature sensor.
Hydro Box & IWT : attached with indoor unit as a default, detachable and extendable up to max. 50m using extension cable (PZCWRC1)

Extension Wire for RS3 Controller (PZCWRC1)

Cable length 10m

Cover Plate (PDC-HK10)

A device to fill the blank space of the Indoor Unit front panel when the remote controller is relocated indoors.

3RD PARTY ACCESSORIES

External Pump

An external water pump that circulates the water inside piping when water circuit is segregated or pump discharge head is insufficient to overcome total system friction loss.

Magnetic Filter (Recommended)

A magnetic filter that collects metallic particle caused by corrosion or erosion. It is strongly recommended to install the magnetic filter to protect heat pump system.

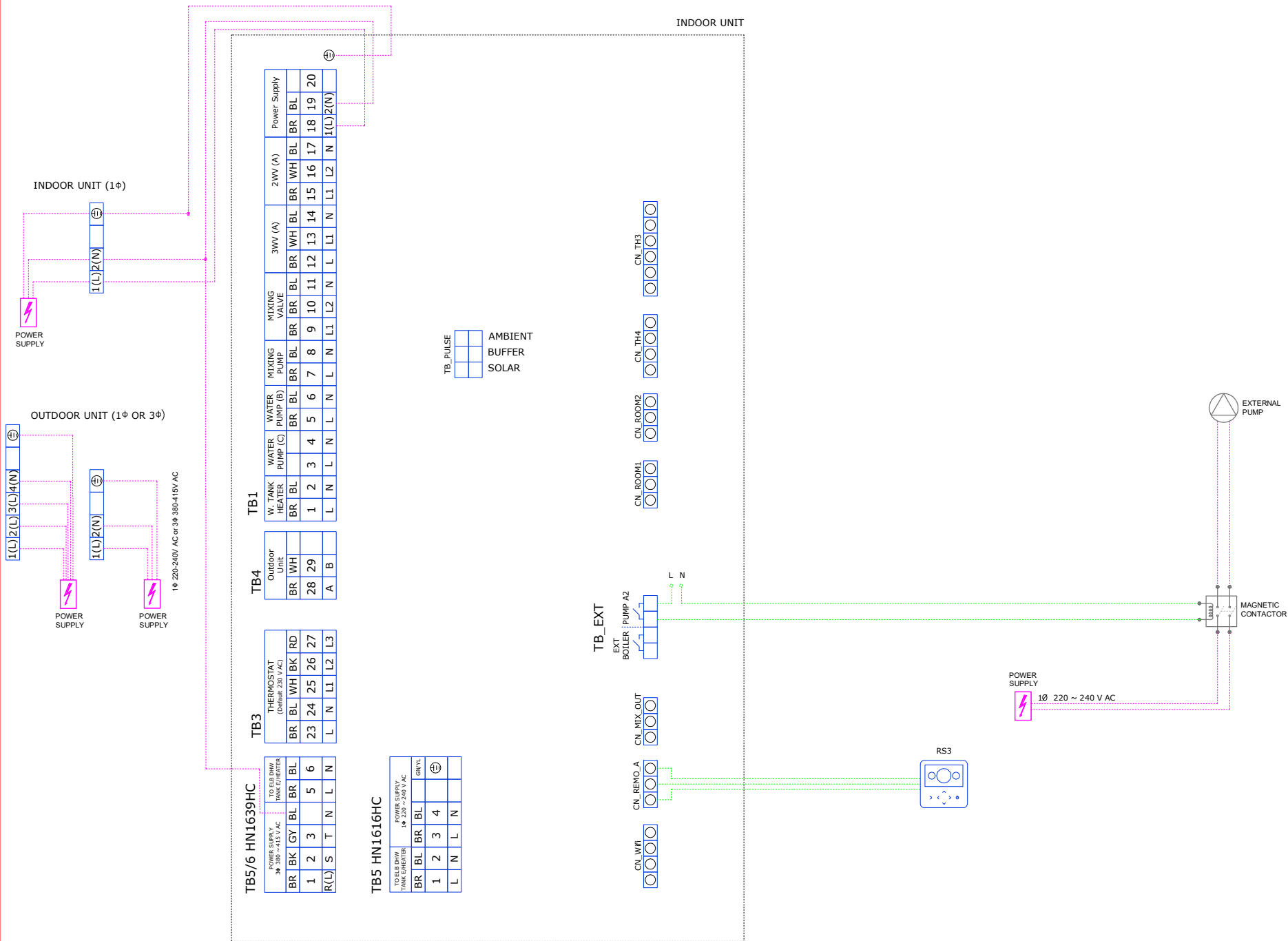
Buffer Tank

A water tank containing certain amount of water that secures the required minimum water volume for the system or stores heat energy which is needed for defrosting and reducing start up load.

Differential Pressure Valve

A self pressure regulating valve that provides constant differential pressure between supply and return headers.

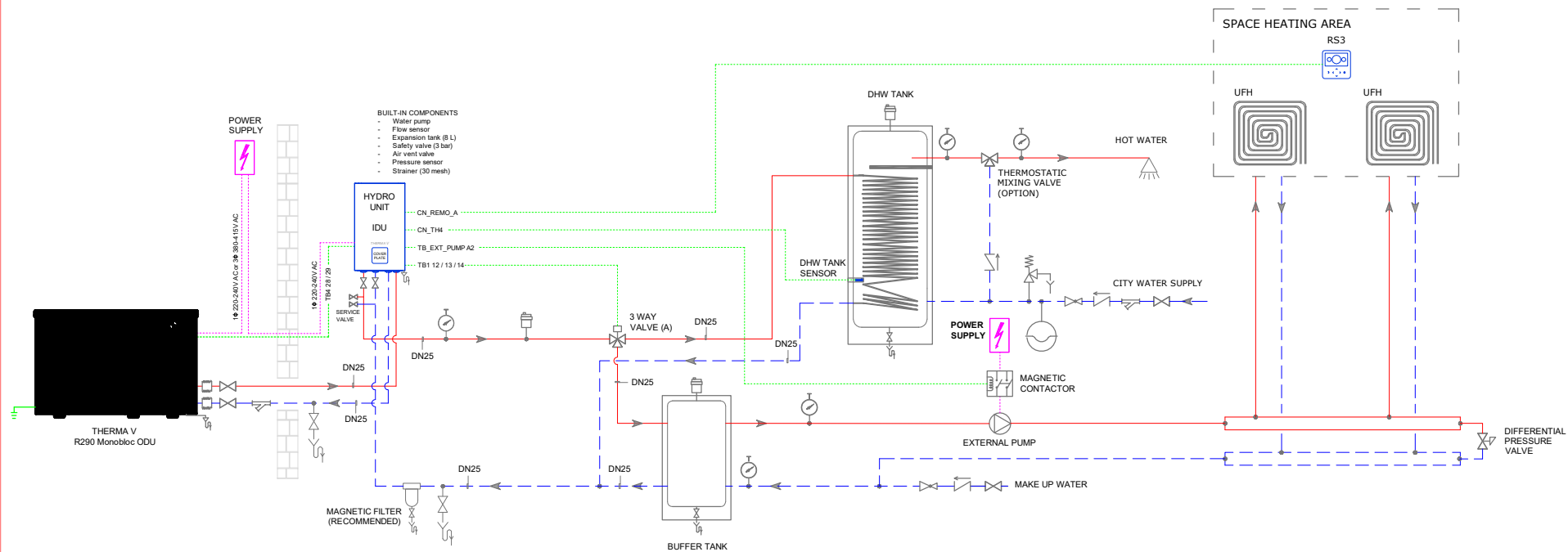
WIRING DIAGRAM



HYDRONIC DIAGRAM

SYMBOL & LEGENDS

	Circulation Pump		Motorized 3 Way Valve		Check Valve		RS3 Remote Controller
	Expansion Tank		Motorized 2 Way Valve		Safety Relief Valve with drain		Remote Room Air Sensor
	Air Vent		Differential Pressure Valve		Y-type strainer		Dry Contact
	Pressure Gauge		Thermostatic Mixing Valve		Flow Sensor		Wi-Fi Modem
	Flexible Connection		Shut Off Valve		Magnetic Contactor		Thermostat
	Drain		Pressure Reducing Valve		Drain Pan		Cover Plate



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ACCESSORIES LG

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Hydro Box & IWT : attached with indoor unit as a default, detachable and extendable up to max. 50m using extension cable (PZCWRC1)

Extension Wire for RS3 Controller (PZCWRC1)
Cable length 10m

Cover Plate (PDC-HK10)

A device to fill the blank space of the Indoor Unit front panel when the remote controller is relocated indoors.

3 Way Valve (A) (OSHA-3V)

A motorized 3-way diverting valve determining flow direction to either space heating or DHW tank. Controlled by THERMA V with 230V power. Operating time 3s.

Domestic Hot Water Tank

(OSHW-200F/300F/500F)

A insulated stainless steel hot water tank with 2.4kW electric heating (230V).
Single Coil : OSHW-200F(200L) / 300F(300L) / 500F(500L)

DHW Tank Sensor (PHRSTA0)

A temperature sensor for DHW tank. Cable length 12m.

3RD PARTY ACCESSORIES

External Pump

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Differential Pressure Valve

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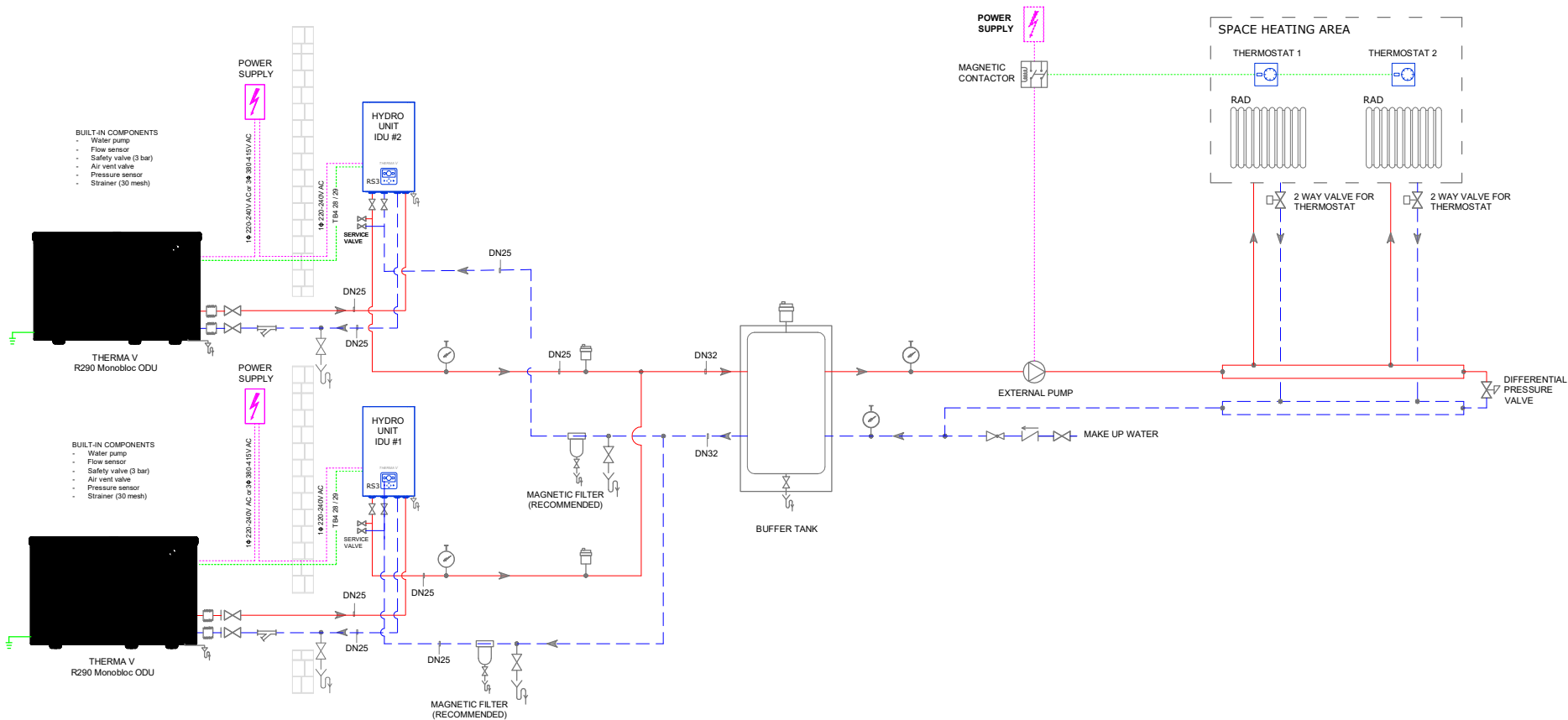
The diagram illustrates the electrical connections for the indoor unit of a heat pump system. It is divided into several functional areas:

- Power Supply:** A 1-phase power supply is connected to the indoor unit. The outdoor unit (1-phase or 3-phase) is also shown with its own power supply and connection to the indoor unit.
- Indoor Unit (1-phase):** The main control unit, featuring a terminal block with connections for 230V AC (space heating), 230V AC (DHW heating), and 230V AC (space heating).
- Outdoor Unit (1-phase or 3-phase):** The outdoor unit is connected to the indoor unit via a 1-phase or 3-phase power supply. The outdoor unit has a terminal block with connections for 230V AC (space heating), 230V AC (DHW heating), and 230V AC (space heating).
- Control Components:**
 - TB1:** A terminal block for the outdoor unit with connections for W. TANK HEATER, WATER PUMP (C), WATER PUMP (B), MIXING VALVE, and MIXING PUMP.
 - TB4:** A terminal block for the outdoor unit with connections for BR, WH, RD, and L.
 - TB3:** A terminal block for the thermostat with connections for BR, BL, WH, BK, RD, and L.
 - TB5/6 HN1639HC:** A terminal block for the power supply with connections for BR, BK, GY, BL, BR, BL, and L.
 - TB5 HN1616HC:** A terminal block for the power supply with connections for BR, BL, BK, BL, GN/YL, and L.
- External Components:**
 - TB_EXT:** A terminal block for the external unit with connections for EXT, BOILER, PUMP A2, CN MIX_OUT, CN REMO_A, CN WIRI, and CN TH3.
 - RS3:** A remote control unit with connections for CN REMO_A, CN WIRI, and CN TH3.
 - External Pump:** A pump connected to the system via a magnetic contactor.
 - DHW Tank Heating System:** A system for heating the domestic hot water tank, featuring a 3-way valve (A) and a DHW tank sensor.

The diagram uses color-coded lines to indicate the type of connection: red for power, blue for control, and green for signal. The outdoor unit is shown in a separate box, and the indoor unit is shown in a separate box. The power supply is shown in a separate box. The control components are shown in a separate box. The external components are shown in a separate box.

HYDRONIC DIAGRAM

SYMBOL & LEGENDS



ACCESSORIES LG

RS3 Controller (Default)

A wired remote controller with built-in temperature sensor.

Hydro Box & IWT : attached with indoor unit as a default, detachable and extendable up to max. 50m using extension cable (PZCWR1)

3RD PARTY ACCESSORIES

External Pump

An external water pump that circulates the water inside piping when water circuit is segregated or pump discharge head is insufficient to overcome total system friction loss.

Magnetic Filter (Recommended)

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Buffer Tank

A water tank containing certain amount of water that secures the required minimum water volume for the system or stores heat energy which is needed for defrosting and reducing start up load.

Thermostat

A control device that senses the temperature of a room and performs actions so that the room's temperature is maintained near a desired setpoint. Thermostat must be connected with Therma V, Valve, Pump, and FCU where applicable.

2 Way Valve for Thermostat

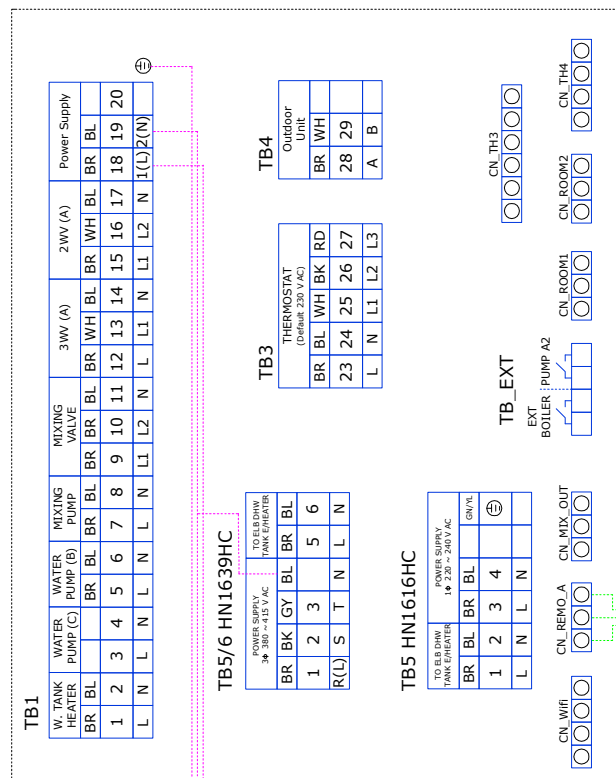
An isolation valve paired with thermostat to allow whether water flows into the water circuit.

Differential Pressure Valve

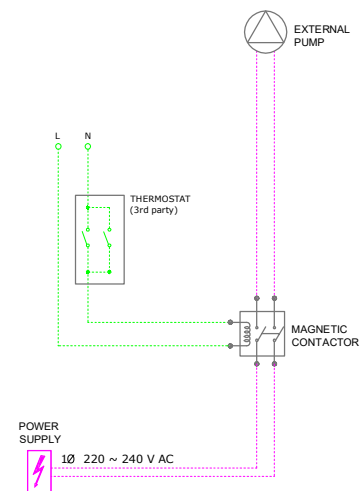
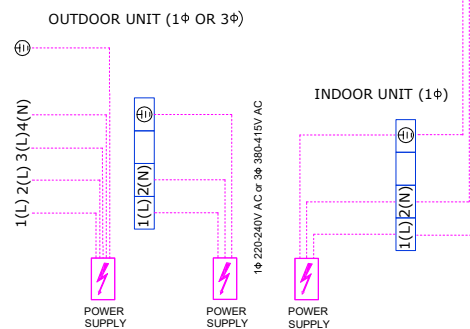
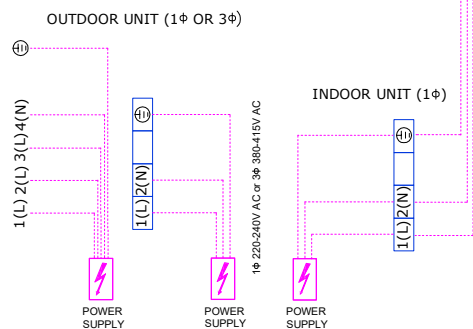
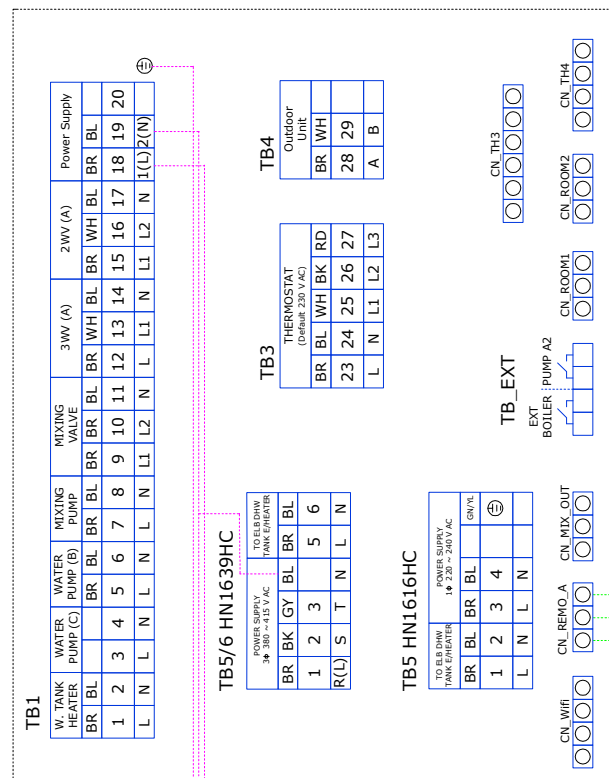
A self pressure regulating valve that provides constant differential pressure between supply and return headers.

WIRING DIAGRAM

INDOOR UNIT #1



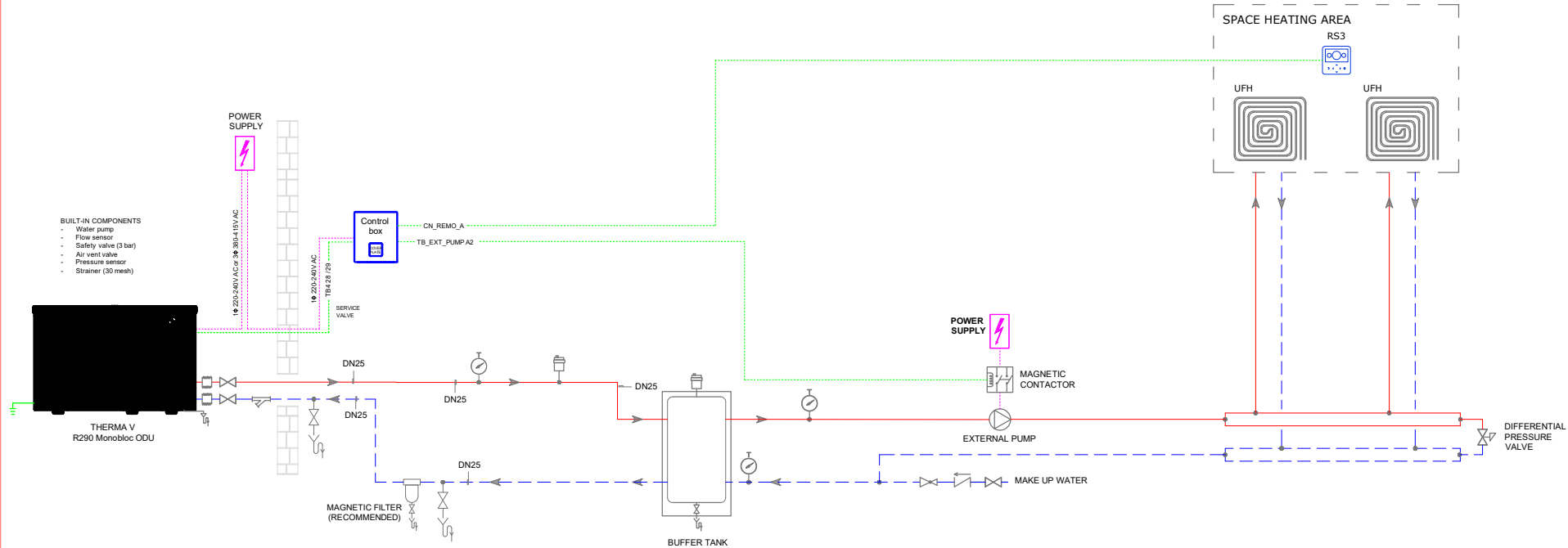
INDOOR UNIT #2



HYDRONIC DIAGRAM

SYMBOL & LEGENDS

	Circulation Pump		Motorized 3 Way Valve		Check Valve		RS3 Remote Controller
	Expansion Tank		Motorized 2 Way Valve		Safety Relief Valve with drain		Remote Room Air Sensor
	Air Vent		Differential Pressure Valve		Y-type strainer		Dry Contact
	Pressure Gauge		Thermostatic Mixing Valve		Flow Sensor		Wi-Fi Modem
	Flexible Connection		Shut Off Valve		Magnetic Contactor		Thermostat
	Drain		Pressure Reducing Valve		Drain Pan		Cover Plate



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ACCESSORIES LG

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Extension Wire for RS3 Controller (PZCWRC1)
Cable length 10m

Cover Plate (PDC-HK10)

A device to fill the blank space of the Indoor Unit front panel when the remote controller is relocated indoors.

3RD PARTY ACCESSORIES

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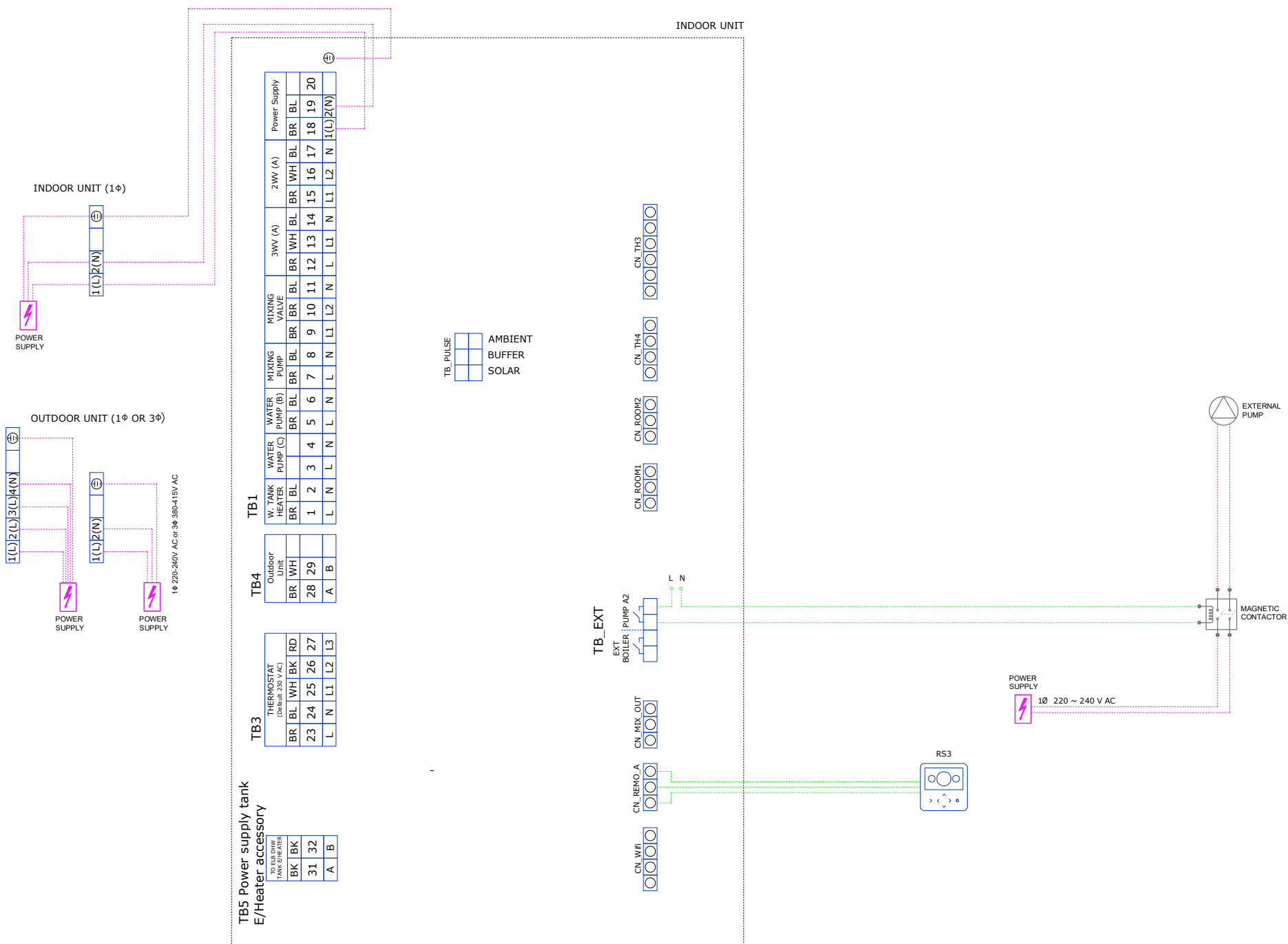
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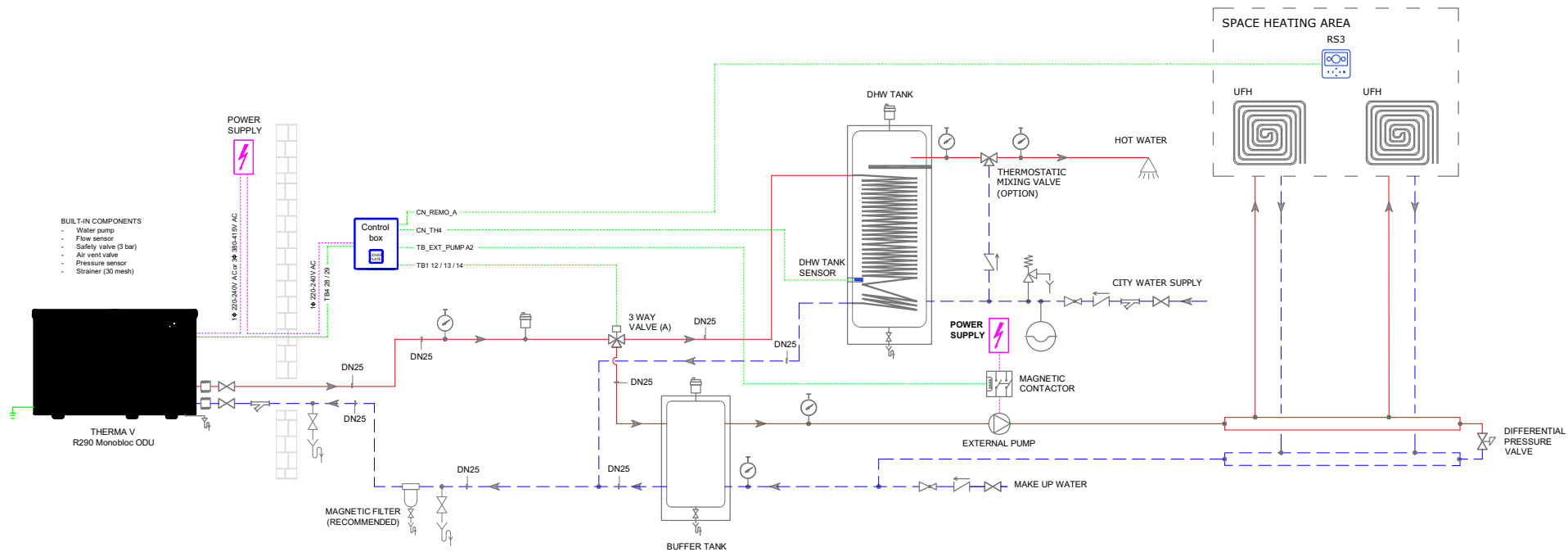
WIRING DIAGRAM



HYDRONIC DIAGRAM

SYMBOL & LEGENDS

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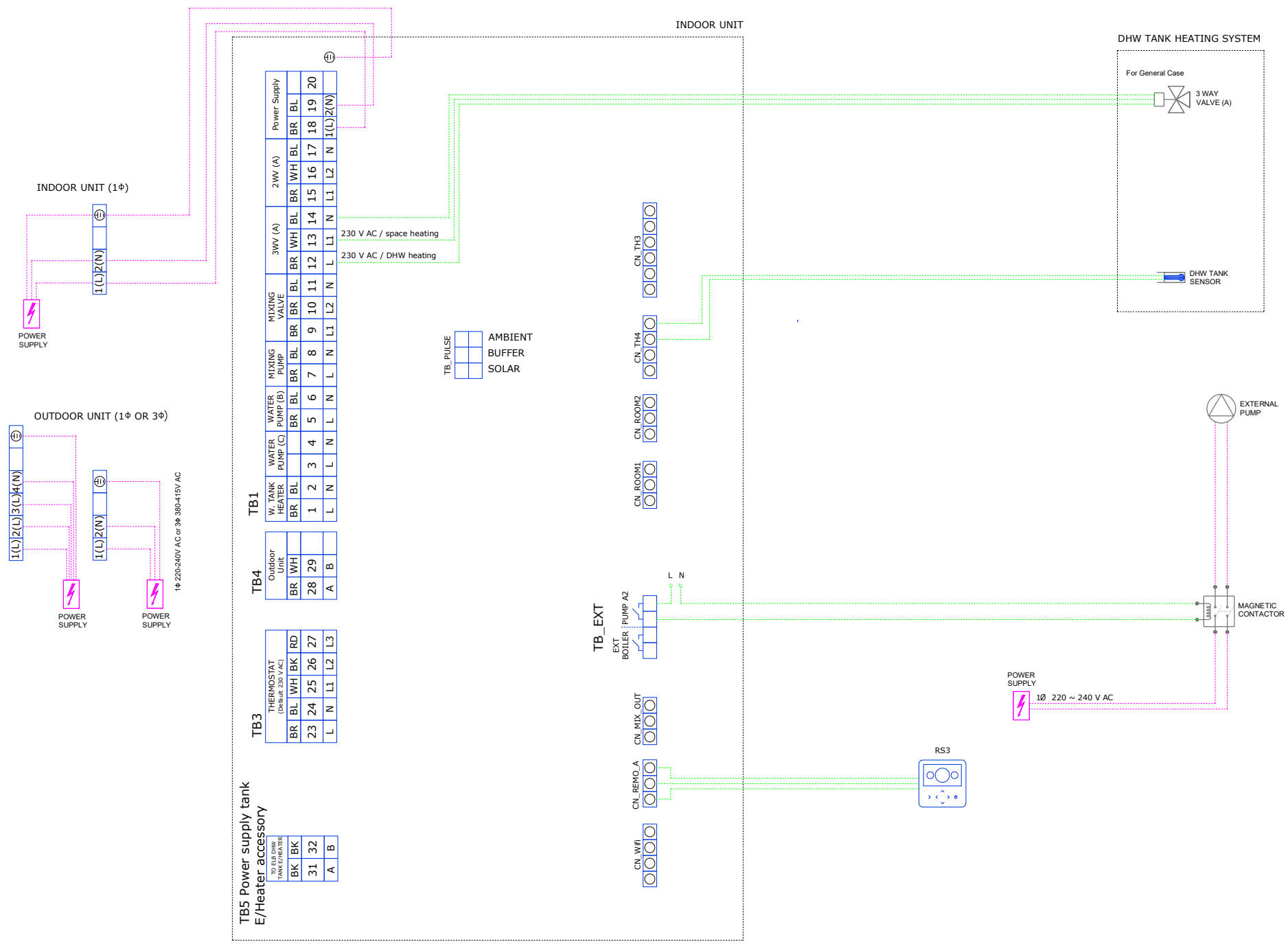
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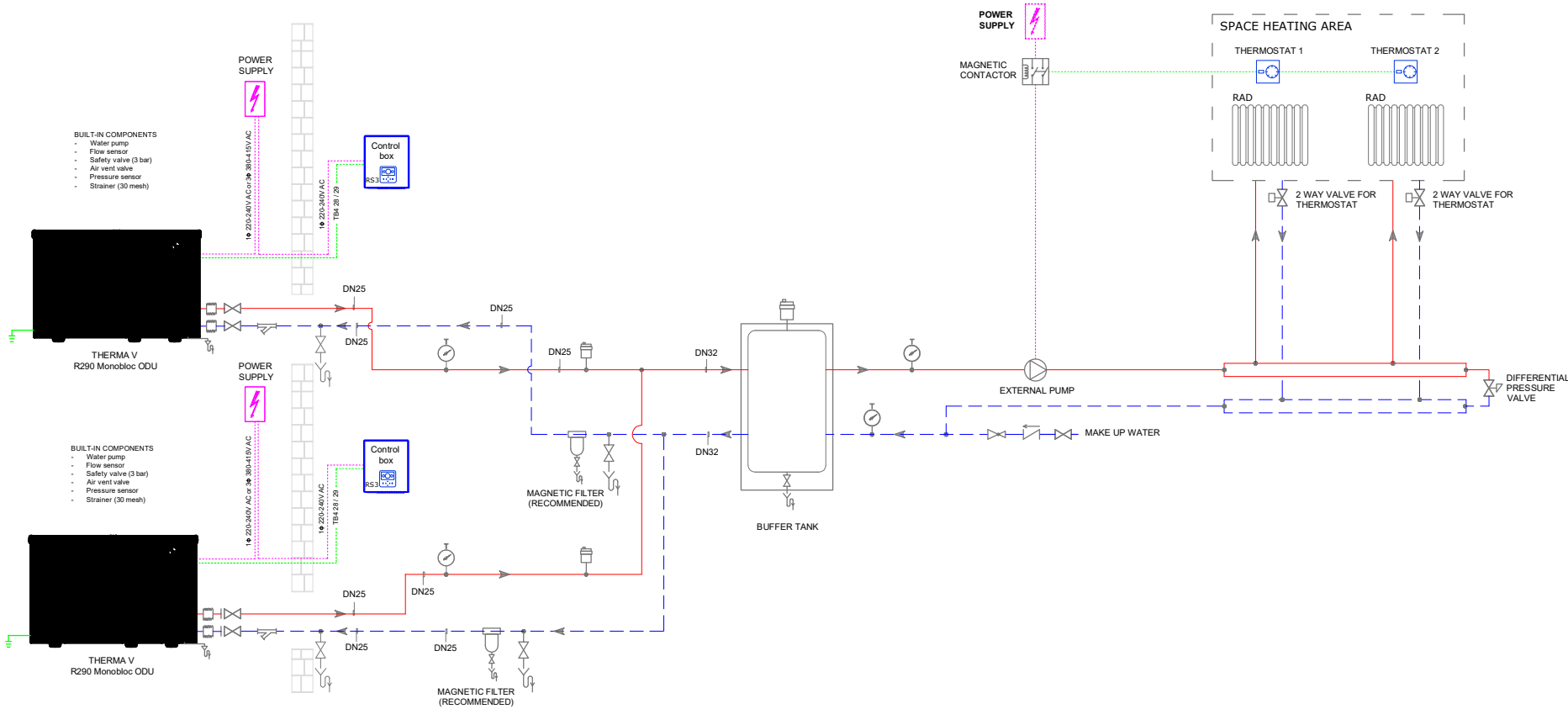
WIRING DIAGRAM



HYDRONIC DIAGRAM

SYMBOL & LEGENDS

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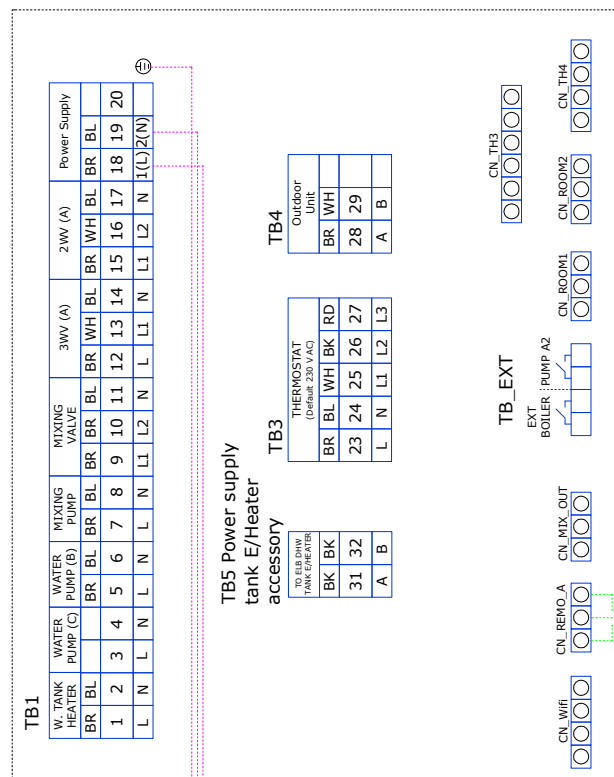
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WIRING DIAGRAM

INDOOR UNIT #1



INDOOR UNIT #2

