

Yutaki Cascade installation 1/3 – schematic n°3

Individual heating / cooling household in combination with common DHW production

Type of application

In the schematic below, the production of DHW and space heating/cooling is not simultaneous. When the cascade installation is generating water for the DHW tank, production of hot or chilled water for space heating or cooling application is stopped until DHW production stops. This installation is suitable in case a high amount of DHW at a specific setting temperature is required.

Additional information:

In this scenario, Yutaki cascade controller manage both DHW tank and water temperature production for space heating/cooling.

Circuit 1 buffer tank correspond to the first circuit for the Yutaki cascade controller. Management is performed by the Yutaki cascade controller without thermostat.

Each circuit 2 of each Yutaki slave unit is assigned to a specific household. Water temperature of each circuit 2 is guaranteed by the second temperature kit of each slave unit.

Each circuit 2 can have a wired or wireless thermostat which is connected to each slave unit. Each circuit 2 can have an outdoor OTC temperature by outdoor unit or wired sensor accessory.

Configuration in Yutaki cascade controller side

Circuit 1: Enable at fixed setting temperature (buffer tank setting temperature)

Circuit 2: Disabled

DHW: Enabled

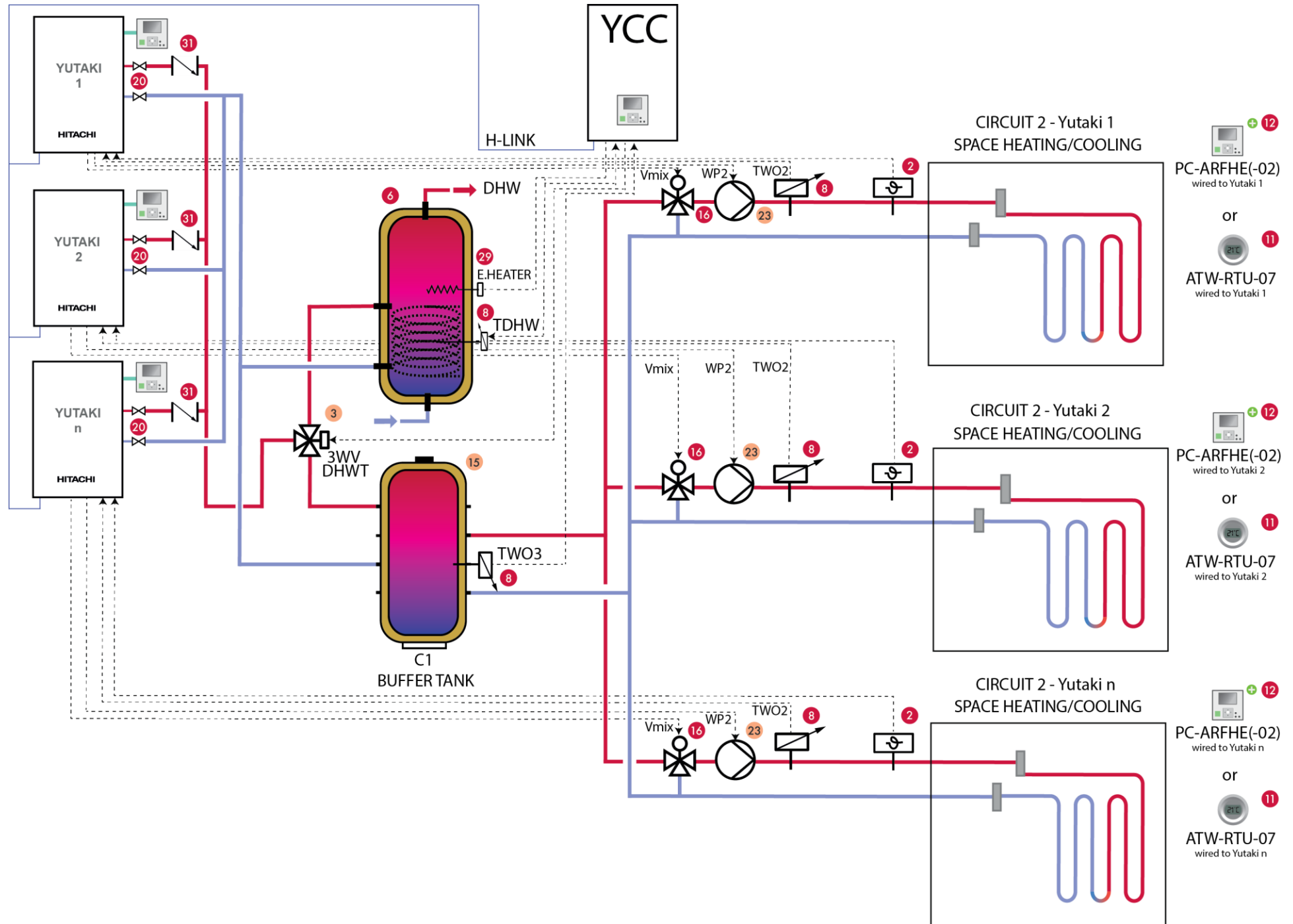
Cascade configuration menu (example in case that 6 modules are connected)

	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8
Status	Enabled	Enabled	Enabled	Enabled	Enabled	Enabled	Disabled	Disabled
Refrigerant cycle address	0	1	2	3	4	5	6	7
Indoor unit address	0	0	0	0	0	0	0	0
Individual DHW	-	-	-	-	-	-	-	-
Status	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Type	-	-	-	-	-	-	-	-

Configuration in Yutaki slave side

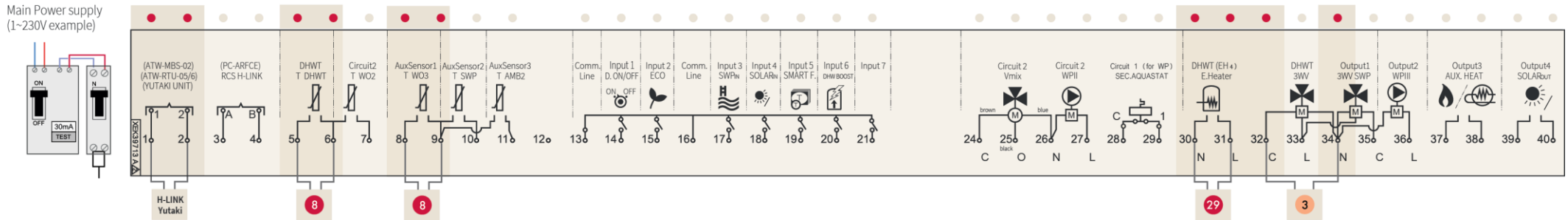
- 1. Central control:** Cascade mode – enabled
- 2. Circuit 1:** Enabled at fixed setting temperature (without room thermostat)
- 3. Circuit 2:** Enabled at gradient / point / fixed temperature setting (with wireless or wired room thermostat as option)
- 4. DHW:** Disabled
- 5. Additional configuration:**
 - Each unit need to assign refrigerant address (0/1/2/3/4/5/6/7) in accordance with Yutaki Cascade Controller modules configuration
 - The water pump in each slave unit can be set to Standard (continuous operation) or Economic mode (operation only in case there is operation demand from the Cascade Controller or if the slave unit has its own tank and is in demand ON conditions)

Yutaki Cascade installation 2/3 – schematic n°3

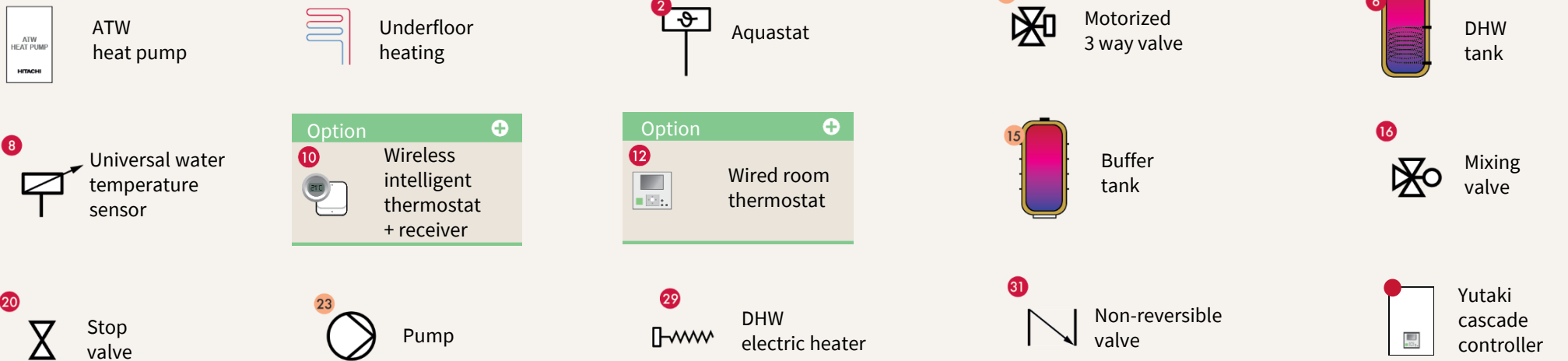


Yutaki Cascade installation 3/3 – schematic n°3

Yutaki cascade controller terminal board



Legends



- Hitachi accessories
- Field supply accessories