

Yutaki Cascade installation 1/3 – schematic n°4

Individual heating / cooling household in combination with individual DHW production

Type of application

In the schematic below, the production of DHW and space heating/cooling is simultaneous. This installation is suitable when there are different demands of DHW applications (different DHW setting temperature, different DHW usage patterns, variety of DHW volume required).

Additional information:

In this scenario, Yutaki Cascade Controller can operate for space heating – cooling application and each configured Yutaki slave can operate for DHW when needed. Each circuit 2 will continue working by using mixing kit and accumulated water into C1 buffer tank (first circuit for Yutaki Cascade Controller).

Circuit 1 buffer tank is managed by Yutaki Cascade Controller without thermostat.

Each circuit 2 of each Yutaki slave unit is assigned to a specific household.

Each circuit 2 mixing kit of each Yutaki slave unit guarantees circuit 2 water temperature household.

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: Enabled at fixed setting temperature (buffer tank setting temperature)

Circuit 2: Disabled

DHW: Disabled

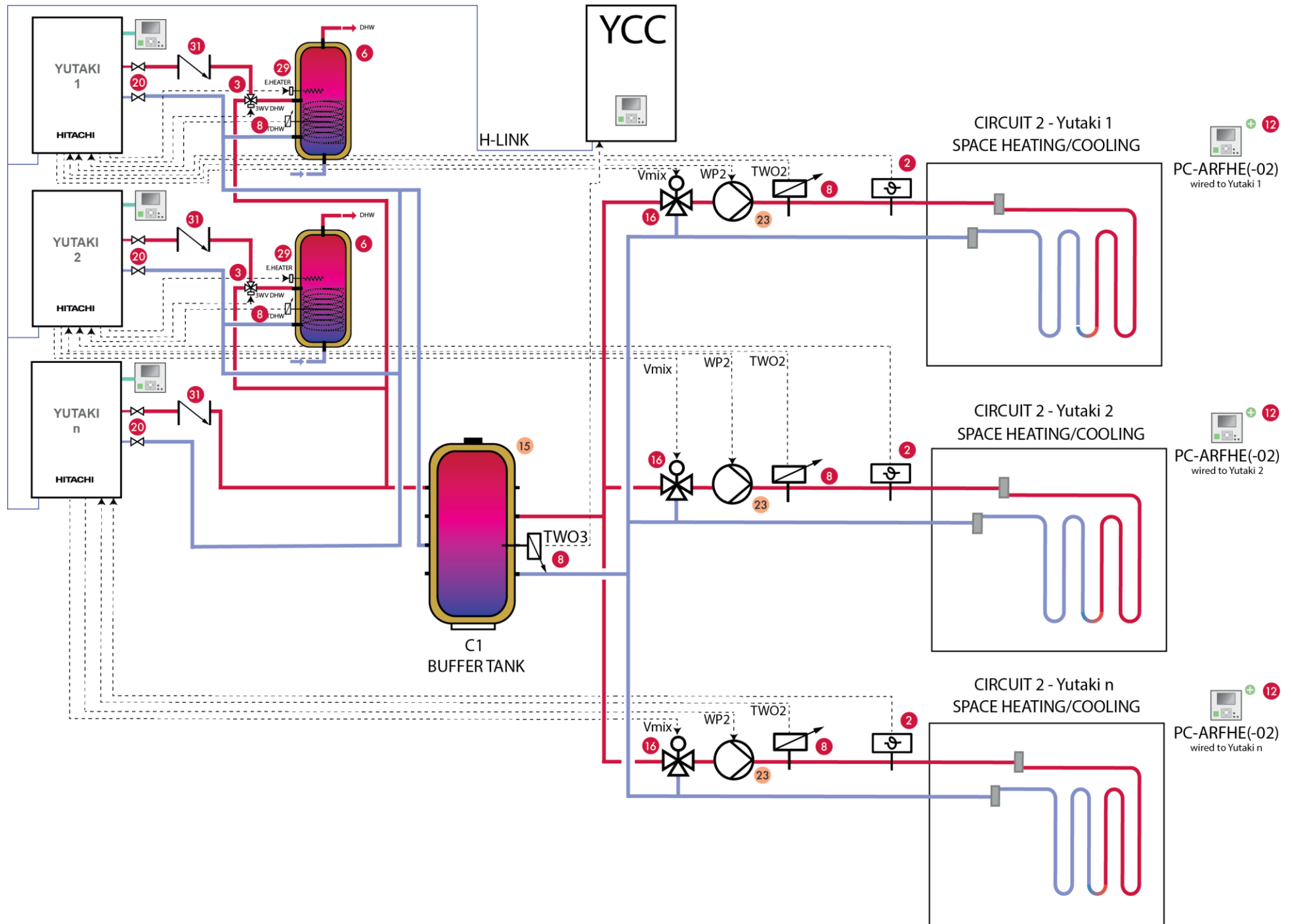
Cascade configuration menu (example in case that 6 modules are connected)

	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	Enabled	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Type	Master	Master	-	-	-	-	-	-

Configuration in Yutaki slave side

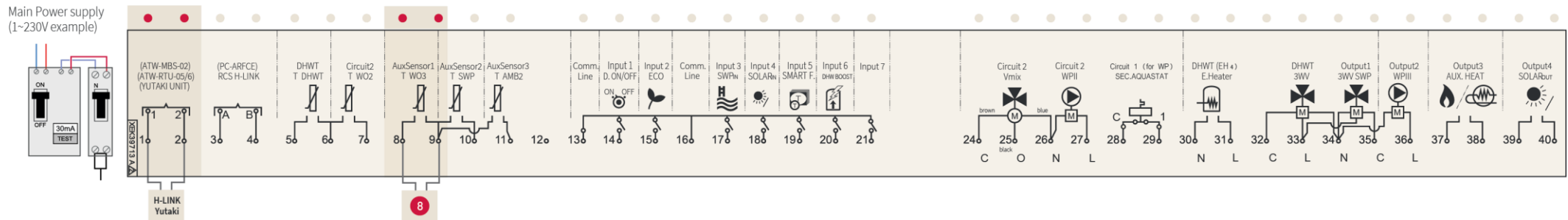
- 1. Central control:** Cascade mode – enabled
- 2. Circuit 1:** Enabled at fixed setting temperature (without room thermostat)
- 3. Circuit 2:** Enabled at gradient/point/fixed temperature setting (with wireless or wired room thermostat option)
- 4. DHW:** Enabled (automatic enabled by Yutaki Cascade Controller)
- 5. Additional configuration:**
 - a. Each unit need to assign refrigerant address (0/1/2/3/4/5/6/7) in accordance with Yutaki Cascade Controller modules configuration
 - b. 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°4

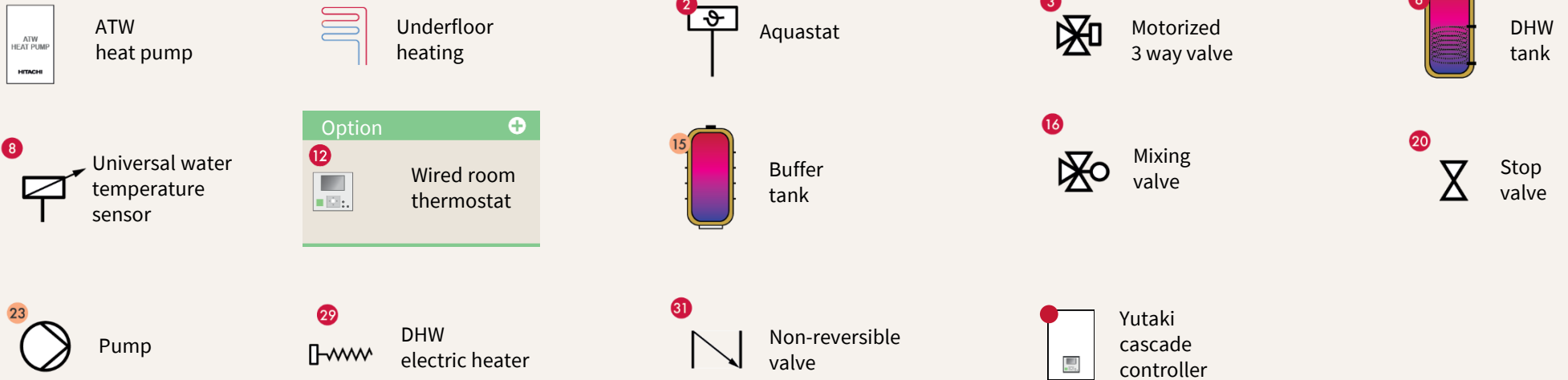


Yutaki Cascade installation 3/3 – schematic n°4

Yutaki cascade controller terminal board



Legends



- Hitachi accessories
- Field supply accessories