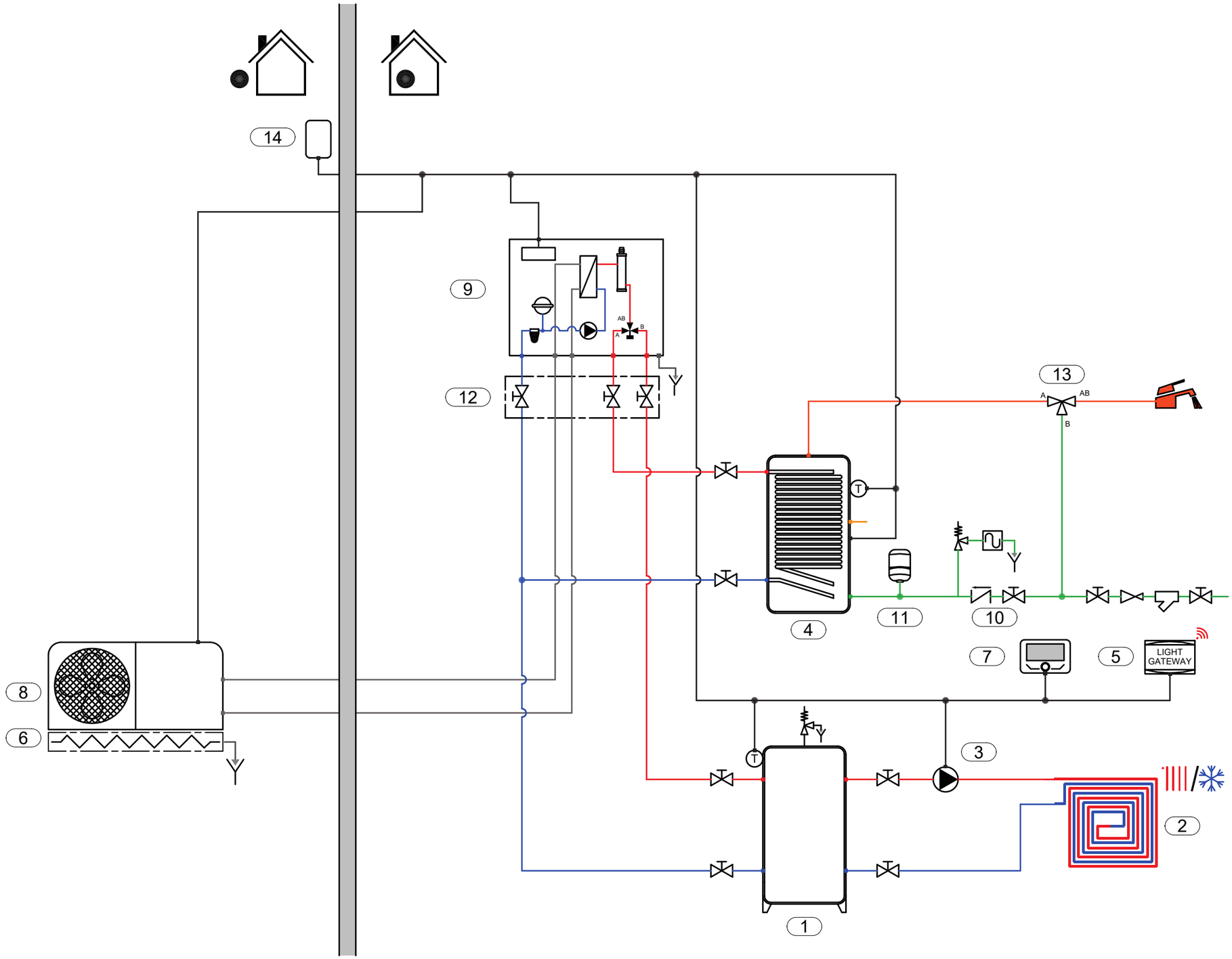
Pos.	Description
1	BUFFER TANK 4 ATTACKS WITH T PROBE
2	UNDER FLOOR HEATING-COOLING
3	CIRCULATOR GENERIC - 3 wires
4	DHW TANK HHP 1-COIL WITH T PROBE AND ANODE
5	LIGHT GATEWAY
6	HE KIT BELOW ODU + DRAIN PAN
7	SYSTEM INTERFACE
8	EXTERNAL UNIT HHP - SPLIT 1-PH OR 3-PH
9	IDU SPLIT WITH 3 WAY VALVE
10	SAFETY GROUP
11	EXPANSION VESSEL - DHW
12	KIT SHUT-OFF VALVES
13	THERMOSTATIC MIXING VALVE
14	EXTERNAL PROBE

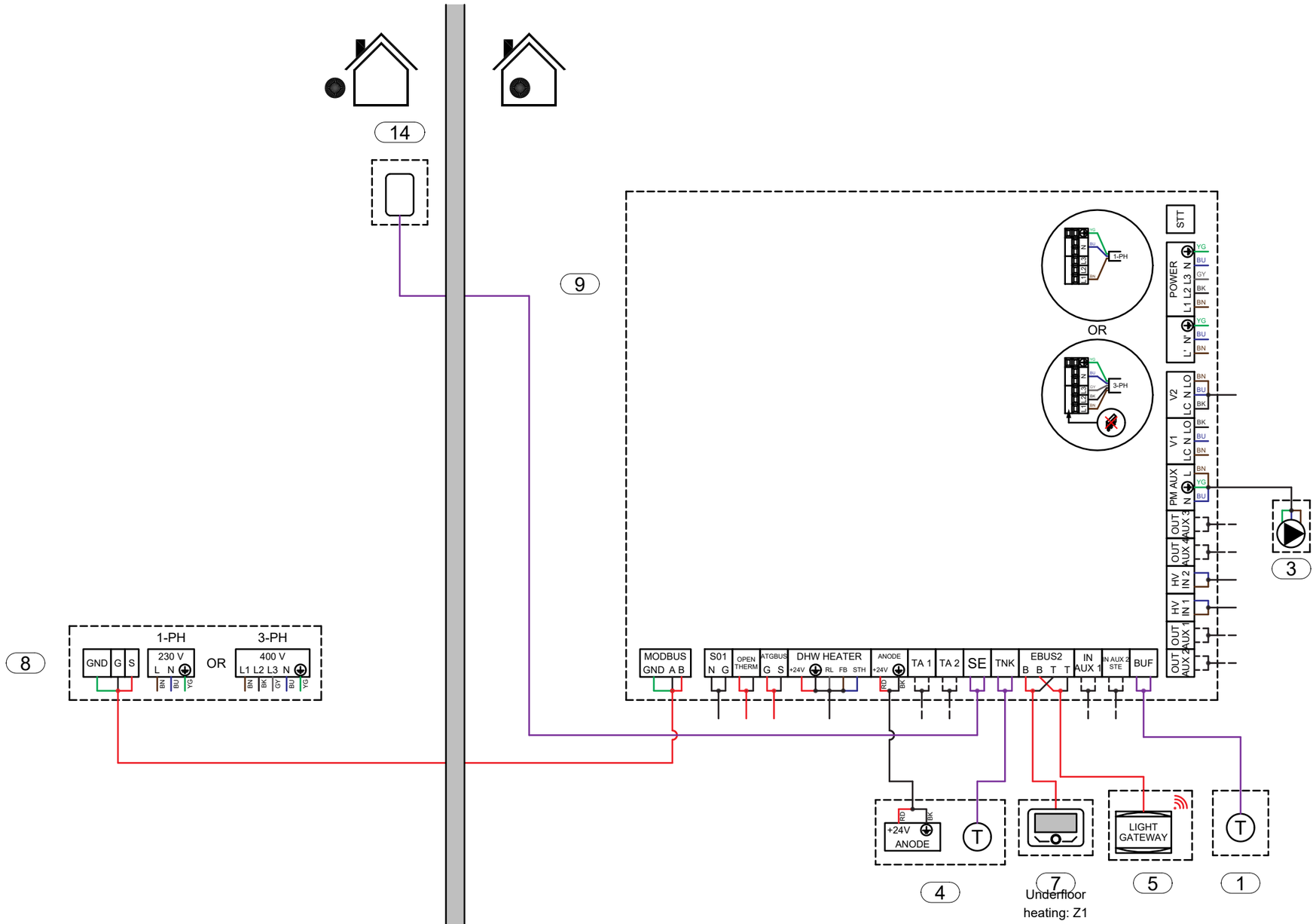


- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.

SCHEME			SCHEME NAME
Hydraulic			EN_013_PCM4.PL.S_HCD_CD1_BUF.4_1D
DATE	REV.	PAGE	
05/12/2023		1 / 6	

ARISTON GROUP

Pos.	Description
1	BUFFER TANK 4 ATTACKS WITH T PROBE
2	UNDER FLOOR HEATING-COOLING
3	CIRCULATOR GENERIC - 3 wires
4	DHW TANK HHP 1-COIL WITH T PROBE AND ANODE
5	LIGHT GATEWAY
6	HE KIT BELOW ODU + DRAIN PAN
7	SYSTEM INTERFACE
8	EXTERNAL UNIT HHP - SPLIT 1-PH OR 3-PH
9	IDU SPLIT WITH 3 WAY VALVE
10	SAFETY GROUP
11	EXPANSION VESSEL - DHW
12	KIT SHUT-OFF VALVES
13	THERMOSTATIC MIXING VALVE
14	EXTERNAL PROBE



- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.

SCHEME			SCHEME NAME
Electrical			EN_013_PCM4.PL.S_HCD_CD1_BUF.4_1D
DATE	REV.	PAGE	
05/12/2023		2 / 6	

ARISTON GROUP

Legend	
Hydraulic	
	Hot water
	Cold water
	DHW hot water
	DHW cold water
	DHW mixed water
	DHW recirculation water
	Refrigerant fluid
	Gas connection
	Electric connection
Electric	
	BN Brown (L1)
	BU Blue (N)
	YG Yellow green (PE)
	BK Black (L2)
	GY Grey (L3)
	RD Red
	Dry contact
	BUS connection
	Generic signal
	Sensor signal

Legend	
Hydraulic components	
	2-WAY VALVE
	CIRCULATOR GENERIC
	BY-PASS VALVE
	MAGNETIC FILTER
	DISCHARGE
	POLYPHOSPHATE FEEDER
	SAFETY VALVE
	SYPHON
	NON RETURN VALVE
	SHUT-OFF VALVE
A AB B	THERMOSTATIC MIXING VALVE
	BALANCING VALVE

Legend	
Drawing symbols	
	INLET OR OUTLET AIR BLUE
	INLET OR OUTLET AIR RED
	COOLING
	HEATING
	HEATING-COOLING
	WIFI

- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.

MENU	N° PARAMETER	NAME	DESCRIPTION-OPTIONS	VALUE TO BE SET	RANGE	DEFAULT
HHP Energy Manager	1.0.0	IDU type	Defines the type of the internal unit: 0 = None ¦ 2 = Hydraulic module ¦ 3 = Light	2 = Hydraulic module	[0-3]	2
	1.0.1	ODU type	Defines the type of the outdoor unit: 1 = Heat Pump	1 = Heat pump	1	1
	1.0.6	Thermoregulation	Activates or deactivates temperature control: 0 = Not Active ¦ 1 = Active	Up to user	[0-1]	1
	1.1.8	System flow T selection	Defines which kind of device is used by the product to determine flow temperature to system: 0 = HP water flow temp ¦ 1 = System flow T	1 = System flow T	[0-1]	1
	1.2.5	AUX P2 circulator setting	Defines AUX P2 circulator configuration: 0 = Auxiliary circulator ¦ 1 = Cooling circulator ¦ 2 = Buffer circulator (visible with par. 20.0.0 = 1) ¦ 3 = DHW circulator ¦ 4 = Time programmed output ¦ 5 = De-stratification pump	2 = Buffer circulator (visible with par. 20.0.0 = 1)	[0-5]	0
	1.3.0	CH aux heat source activation logic	Defines which is the activation logic of secondary heat sources during heating cycle: 0 = Heat integr. and backup ¦ 1 = HP failure backup	Up to user	[0-1]	1
	1.3.1	CH active resistance stages	Defines how many resistance stages are enabled during heating cycle: 0 = 0 Stage ¦ 1 = 1 Stage ¦ 2 = 2 Stages ¦ 3 = 3 Stages	Up to user	[0-3]	2 or 3 According to the IDU size
	1.3.2	ECO / COMFORT	Defines increasing reactivity of secondary heat sources during heating cycle from most economical/ecological (longer delay time) to most comfortable (shorter delay time): 0 = Eco Plus ¦ 1 = Eco ¦ 2 = Average ¦ 3 = Comfort ¦ 4 = Comfort Plus ¦ 5 = Customizable	Up to user	[0-5]	2
	1.8.0	Cooling mode activation	Activates the cooling mode: 0 = Not active ¦ 1 = Active	Up to user	[0-1]	0
HHP Energy Manager (DHW service)	1.0.2	Tank management	In case of DHW tank, to set which kind of sensor the DHW charge is managed through: 0 = None ¦ 1 = Storage with NTC ¦ 2 = Storage with Thermostat	1 = Storage with NTC	[0-2]	0
	1.2.6	Pro-Tech anode active	Indicates the presence of the impressed-current anode on the DHW calorifier: 0 = OFF ¦ 1 = ON	1 = ON	[0-1]	0
	1.4.0	DHW aux heat source activation logic	Defines which is the activation logic of secondary heat sources during DHW cycle: 0 = Heat integr. and backup ¦ 1 = HP failure backup	Up to user	[0-1]	0
	1.4.1	DHW active resistance stages	Defines how many resistance stages are enabled during DHW cycle: 0 = 0 Stage ¦ 1 = 1 Stage ¦ 2 = 2 Stages ¦ 3 = 3 Stages	Up to user	[0-3]	2 or 3 According to the IDU size
	1.4.2	Delay timer	Time required for starting the calculation of the DHW integration with the auxiliary sources or with the heating elements.	Up to user	[10 - 120] min	120 min
	1.4.3	Release integral threshold	Activation threshold for DHW integration expressed in °C*min	Up to user	[15 - 200] °C*min	200°C*min

- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.

MENU	N° PARAMETER	NAME	DESCRIPTION-OPTIONS	VALUE TO BE SET	RANGE	DEFAULT
HHP Energy Manager (DHW service)	1.9.0	DHW Comfort Setpoint Temperature	Defines the comfort DHW set-point temperature.	Up to user	[35 - 65]°C	55°C
	1.9.1	DHW Reduced Set Point Temperature.	DHW Reduced Set Point Temperature	Up to user	[35 - 60]°C	35°C
	1.9.2	Comfort function	Defines when comfort function must be active: 0 = Disabled ¦ 1 = Time Based ¦ 2 = Always active	Up to user	[0-2]	2
	1.9.3	DHW Operation Mode	0 = Standard ¦ 1 = Green ¦ 2 = HC - HP ¦ 3 = HC - HP 40	Up to user	[0-3]	1
	1.9.6	Thermal cleanse function	0 = OFF ¦ 1 = ON	Up to user	[0-1]	1
	1.9.7	Thermal Cleanse start time [hh :mm]	Start time of Thermal cleanse function	Up to user	[00:00 - 23:45] [hh:mm]	01:00
	1.9.8	Thermal cleanse cycle frequency	Frequency of Thermal cleanse cycle	Up to user	[24 h-30 d]	30 d
	1.23.0*	Thermal Cleanse target temp	Defines the setpoint of thermal cleanse cycle	Up to user	[60-70°]	60°C
	1.23.1*	Antilegionella target temperature duration	Defines the time in which the Thermal cleanse Target temp has to be mantained	Up to user	[1-2] h	1h
	1.23.2*	Max Duration Antilegionella	Defines the Max time in which the system can perform and complete the Thermal cleanse cycle.	Up to user	[4-12] h	6h
Buffer	20.0.0	Buffer activation	To activate buffer service: 0 = OFF ¦ 1 = ON	1 = ON	[0-1]	0
	20.0.1	Buffer charge mode	Defines the type of the buffer charge: 1 = Partial charge ¦ 2 = Full charge	1 = Partial Charge	[1-2]	1
	20.0.3	Buffer Comfort setpoint heating	Comfort temperature for Buffer in heating	Up to user	[20-70] °C	40°C
	20.0.4 (visible if par. 1.8.0 = 1)	Buffer Comfort setpoint cooling	Comfort temperature for Buffer in cooling	Up to user	[5-23] °C	18°C
	20.3.1	Reduced setpoint heating	Defines the buffer reduced set point in heating	Up to user	[20-40] °C	35°C
	20.3.2 (visible if par. 1.8.0 = 1)	Reduced setpoint cooling	Defines the buffer reduced set point in cooling	Up to user	[18-23] °C	23°C
	20.0.7	Buffer set point mode	Defines if dependent by menu 20 setting and time programming (fixed) or by zones thermoregulation calculation (variable): 0 = Fixed ¦ 1 = Variable	Up to user	[0-1]	0
	20.3.0	Control mode	Defines the buffer charge time programming: 0 = Disabled ¦ 1 = Time Based ¦ 2 = Always active	Up to user	[0-2]	2
	20.4.0	Buffer integration scheme	Defines which is the buffer integration scheme: 0 = Series ¦ 1 = Parallel	0 = Series	[0-1]	0
	20.4.5	CH switch off offset	Defines the offset over the Buffer Target to switch off the Heat generators (HHPs and auxiliary sources) during Heat Request	Up to user	[0-10] °C	0°C
	20.4.6 (visible if par. 1.8.0 = 1)	Cooling switch off offset	Defines the offset that has to be subtracted to the Buffer Target to switch off the Heat generators (HHPs and auxiliary sources) during Cooling Request	Up to user	[0-10] °C	0°C

- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.

MENU	N° PARAMETER	NAME	DESCRIPTION-OPTIONS	VALUE TO BE SET	RANGE	DEFAULT
Zone 1 parameter (For all thermoregulation parameters refer to the installer manual)	4.8.3	Heating Controller	Define with which device the heat request is performed 0 = None 1 = Room thermostat (Thermostat connected to TA1 of Energy Manager) 2 = Room sensor (Room sensor on eBus2)	2 = Room sensor	[0-2]	2
	4.8.4	Cooling controller	Define with which device the heat request is performed 0 = None | 1 = Room thermostat | 2 = Room sensor	If the cooling mode is active (1.8.0 = 1) set: 2 = Room sensor	[0-2]	2
	User Menu/Zones Management	Operatione Mode	Define the operation mode of the zone: - Off (heat request inhibited) - Manual (setpoint temperature for the zone is maintained for 24h) - Time program (setpoint temperature of the zone follows the hourly programme profile. In case of Room thermostat, the reduced temperature level inhibits the heat request)	Up to user		
	4.2.9	Heat request mode	Define the Heat request mode for the zone 0 = Standard 1 =RT time program exclusion (In case of Room thermostat, the reduced temperature level doesn't inhibit the heat request) 2 = Forcing heat demand (Heat request always true)	Up to user	[0-2]	0

SOFTWARE COMPATIBILITY	
New Sensys	Starting from 00.07.12
	*Starting from 00.28.03
Energy Manager 2.0	Starting from 22.05.27
	*Starting from 22.26.05
TDM	Starting from 21.01.186

- This schematic has to be considered as example of the system functionality only and does not replace design by a qualified technician;
- The final schematic must be prepared respecting all the laws, norms and decrees in force, in order to facilitate a correct installation in compliance with the rule of the art;
- For the proper functioning of all system components, follow the instructions in the design, installation and user manuals provided by the manufacturer;
- This outline may be amended by the Ariston Group at any time without prior notice.