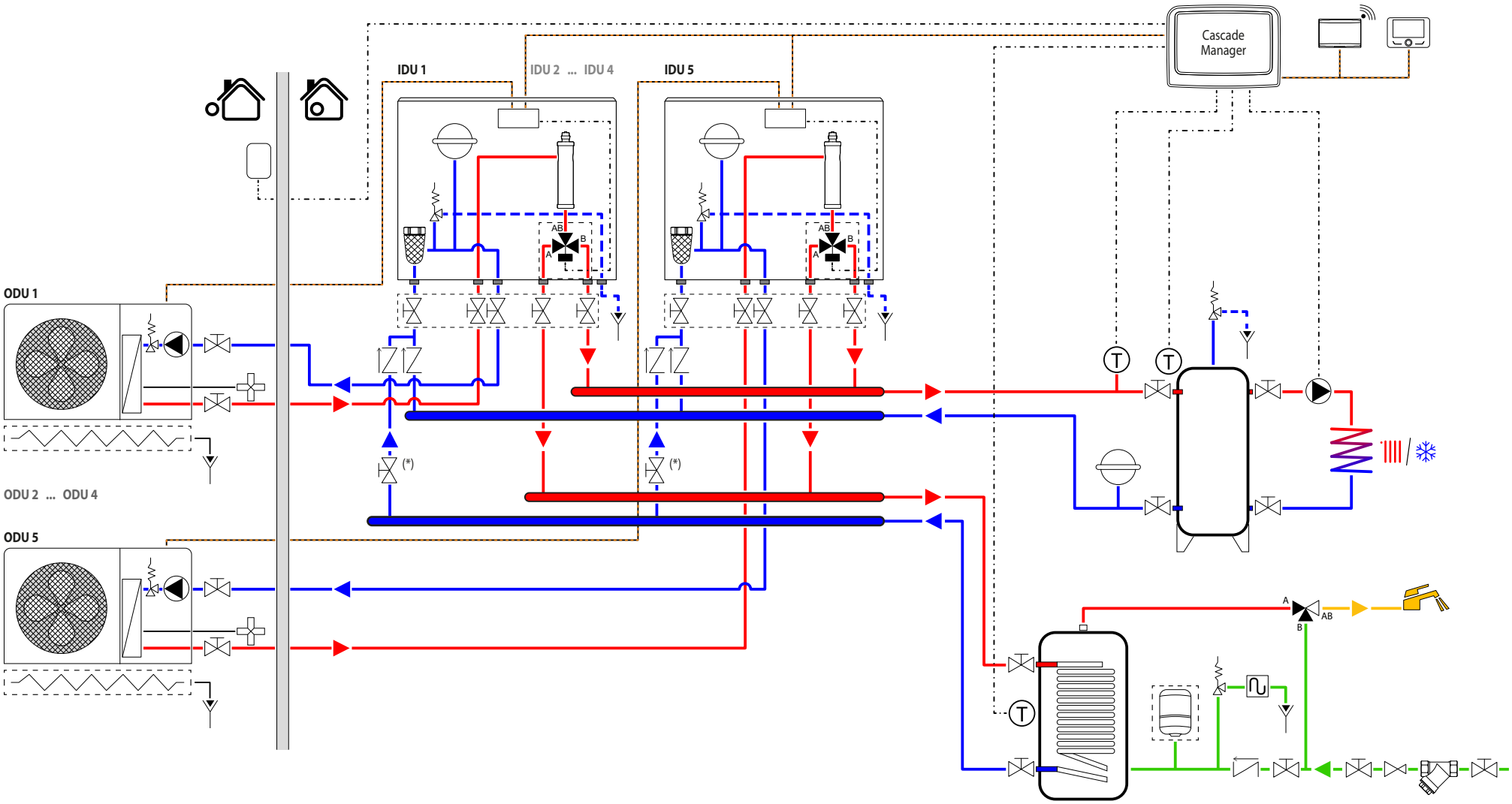

(*) To be opened in case of DHW enabled for the related HHP.

- This schematic is for example 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 compliancewith 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_019-5xPCM4.PL.M_HCD-CD1_BUF.4_1D
DATE	REV.	PAGE	
02/2023	1	1/5	

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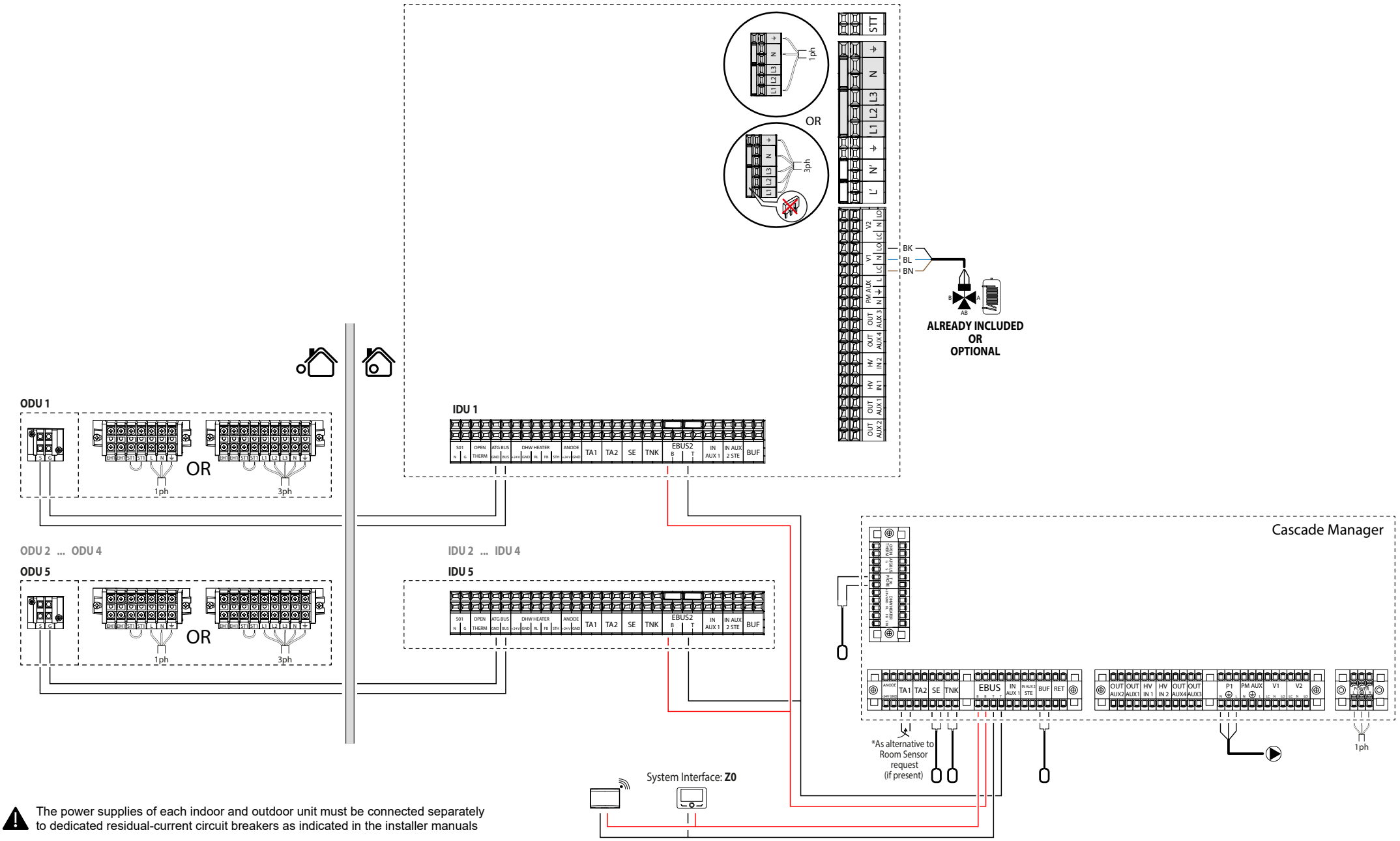

The power supplies of each indoor and outdoor unit must be connected separately to dedicated residual-current circuit breakers as indicated in the installer manuals

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SECTION	MENU	PARAMETER	DESCRIPTION	VALUE TO BE SET	RANGE	DEFAULT
Cascade Manager HHP	Max CH Adjustable	50.0.0	Define maximum Cascade power percentage in CH Mode	Up to user	0-100 %	100%
	Cascade Turnover Logic	50.0.2	0 = Minimum Switches Off-On	Nr. HHP< 4 Minimum Switches Off-On	0-1	0
			1 = Maximum Power Division	Nr. HHP≥ 4 Maximum Power Division		
	Thermoregulation	50.1.0	0 = Not Active 1 = Active	1	0-1	0
	Heating reaction level	50.2.4 (Visible only in web app and not on Sensys HD)	**Define the reaction level for the Cascade System** (Max speed=4, Min speed =0; 0-1 suggested for LT, while 2-3-4 suggested for HT to encourage the secondary heat source intervention)	Up to user	0-4	0 if 50.7.3 ≠ 1 or 50.7.6 < 35 kW 3 if 50.7.3=1 and 50.7.6 >35 kW
	Cooling Mode activation	50.3.0	0 = Not Active 1 = Active	Up to user	0-1	0
	CH resistances integration logic	50.6.0	0 = Off 1 = Integration 2 = HP failure backup	Up to user	0-2	2
	Max resistances size	50.6.2	Max kW of Backup resistances that the Cascade Manager can active in heating	Up to user	0 - 30 kW	6 kW
	ECO/COMFORT	50.7.0	Define the speed of the intervention of secondary auxiliary sources (0= Min speed, 4= Max speed, 5 =Custom) 0 = ECO plus; 1 = ECO; 2 = Average 3 = Comfort; 4 = Comfort Plus 5 = Customizable	Up to user	0-5	2
	Aux P1 circulator setting	50.9.4	0 = None 1 = System circulator 2 = Auxiliary Circulator 3 = Cooling circulator 4 = Buffer charge circulator 5 = DHW charge circulator	**1 = System circulator**	0-5	0
Buffer	Buffer activation	20.0.0	0 = Off 1 = On	1 = On	0-1	1
	Buffer charge mode	20.0.1	1 = Partial charge 2 = Full charge	**1 = Partial charge**	1-2	1
	Buffer Comfort setpoint heating	20.0.3	Comfort temperature for Buffer	Up to user	20-70 °C	40 °C
	Buffer Comfort setpoint cooling	20.0.4	Comfort temperature for Buffer cooling	Up to user	5-23 °C	18 °C
	Reduced setpoint heating	20.3.1	Reduced temperature for Buffer	Up to user	20 °C – 20.0.3	35 °C
	Reduced setpoint cooling	20.3.2	Reduced temperature for Buffer cooling	Up to user	20.0.4 - 23 °C	23 °C
	Buffer set point mode	20.0.7	0 = fixed 1 = variable	Up to user	0-1	0
	Control mode	20.3.0	0 = Disabled; 1 = Time Based; 2 = Always Active	Up to user	0-2	2
	Buffer integration scheme	20.4.0	0 = Series 1 = Parallel	**0 = Series**	0-1	0

SECTION	MENU	PARAMETER	DESCRIPTION	VALUE TO BE SET	RANGE	DEFAULT
Buffer	CH switch off offset	20.4.5	Offset to be added to Buffer target to consider the Buffer loaded during heat request	Up to user	0 – 12 °C	8 °c
	Cooling switch off offset	20.4.6	Offset to be subtracted to Buffer target to consider the Buffer loaded during cooling request	Up to user	0 – 10 °C	5 °C
DHW Parameters (if required)	Tank management	51..55.0.2	0 = None 1 = Storage with NTC 2 = Storage with thermostat	1 = Storage with NTC **(if the selected HHP has to be assigned to DHW production)**	0-2	0
	Comfort function	50.4.2	0 = Disabled 1 = Time based 2 = Always active	Up to user	0-2	2
	DHW Comfort setpoint temp.	50.4.0	Comfort temperature for DHW	Up to user	35-65 °C	55 °C
	DHW Reduced setpoint temp.	50.4.1	Reduced temperature for DHW	Up to user	35 °C - 50.4.0	35 °C
	DHW operation mode	51..55.9.3	0 = Standard 1 = Green 2 = HC HP 3 = HC HP 40	Up to user	0-3	1 - Green
	DHW Aux source activation Logic	51..55.4.0	Define the Aux source logic for DHW Integration: 0 = Heat integr. and backup; 1 = HP Failure backup	Up to user	0-1	0
	DHW active resistances stages	51..55.4.1	Number of Resistances active for DHW Cycles	Up to user	0-3 if Aux Output (51..55.2.0/1/2/3)=5 1-3 if Aux Output (51..55.2.0/1/2/3)≠5	2 or 3 According to the IDU size
	Thermal cleanse function	50.5.0	0 = Off 1 = On	Up to user	0-1	1
	Thermal cleanse start time[hh:mm]	50.5.1	Start time of Thermal cleanse function	Up to user	00:00-23:45	01:00
	Thermal cleanse cycle frequency	50.5.2	Frequency of Thermal cleanse cycle	Up to user	24 h-30 d	30 d
	Thermal cleanse target temp	50.5.6	Target temperature for Thermal cleanse cycle	Up to user	60-70 °C	60 °C
	Antilegionella Target temperature duration	50.5.7	Time of maintenance of the target for the thermal cleanse cycle	Up to user	1-2 h	1 h
	Max Duration Antilegionella	50.5.8	Maximum time within the Thermal cleanse cycle should be performed	Up to user	4-12 h	6 h
HHPs slave parameters	IDU Type	51..55.0.0	0 = None 2 = Hydraulic Module 3 = Light	2	0-3	2
	ODU Type	51..55.0.1	1 = Heat Pump	1	1-1	1
	Aux P2 circulator setting	51..55.2.5	0 = Auxiliary circulator 3 = DHW circulator 4 = Time programmed Output 5 = Destratification pump	**0 (circulator not used in the scheme)**	0-5	0
	CH active resistances stages	51..55.3.1	Number of Resistances active for Heating Cycles	Up to user	0-3	2 or 3 According

SECTION	MENU	PARAMETER	DESCRIPTION	VALUE TO BE SET	RANGE	DEFAULT
HHPs slave parameters	Hydraulic scheme diagnostic	51..55.16.1	Hydraulic scheme of the considered HHP slave	If 51..55.0.2 =2 -> Pacman Flex with Thermostat If 51..55.0.2 =1 -> Pacman Flex If 51..55.0.2= 0 -> Pacman Plus		If 51..55.0.2 =2 -> Pacman Flex with Thermostat If 51..55.0.2 =1 -> Pacman Flex If 51..55.0.2= 0 -> Pacman Plus
Zone 1 parameter	Heating controller	4.8.3	Define with which device the heat request is performed 0 = None 1 = Room thermostat (Thermostat connected to TA1 of Cascade Manager) 2 = Room sensor (Room sensor on eBus2)	According to the zone devices used.	0-2	2
	Operation Mode	User Menu/Zones Management	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		
	Heat request Mode	4.2.9	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 00.17.00
Cascade Manager	Starting from 01.40.00
EM2.0	Starting from 22.07.12
TDM	21.01.192