

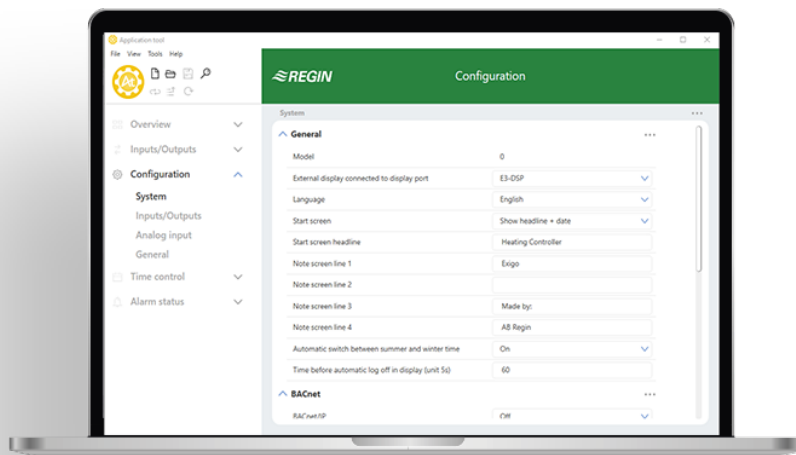
Exigo 4.3

Predefined examples

There are predefined examples available for easy configuration. They can be selected in the internal or external text display or can be downloaded as atf-files on Regin's webpage.

The atf-files can be used in Application tool for further offline modification and adaption.

The predefined examples are a part of Regin's Ready-Steady-Go concept which makes it much easier and faster to configure the controller.



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THE CHALLENGER

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Examples for Ardo-controllers with 15 and 28 IO's

Example 001

Function description: Mixed Heating system 1 (continuous)



	G	1	G	50		
	G0	2	G0	51		P1 B
	Gnd	3	24V AC/DC	52		P1 A
	+C	4	+C	53		P1 N
	Gdo	10	Gd0	60		P1 E
HS1 pump A	DO1	11	DO1	61		P2 B
	DO2	12	DO2	62		P2 A
	DO3	13	DO3	63		P2 N
	DO4	14	DO4			P2 E
	DO5	15	DO5			
	DO6	16	DO6			Ext D
	DO7	17	DO7			
	Agnd	30	Agnd			
Outdoor temperature	AI1	31	AI1	71		DI1
HS1 Supply temp.	AI2	32	AI2	72		DI2
	Agnd	33	Agnd	73		DI3
	AI3	34	AI3	74		DI4
	AI4	35	AI4	75		DI5
	Agnd	40	Agnd	76		DI6
	Agnd	41	UI1 : AI5/DI9	77		DI7
	UI1	42	UI2 : AI6/DI10	78		DI8
	UI2	43	Agnd	90		Agnd
	Agnd	44	UI3 : AI7/DI11	91		AO1
	UI3	45	UI4 : AI8/DI12	92		AO2
	UI4			93		AO3
				94		AO4
				95		AO5
	TCP					

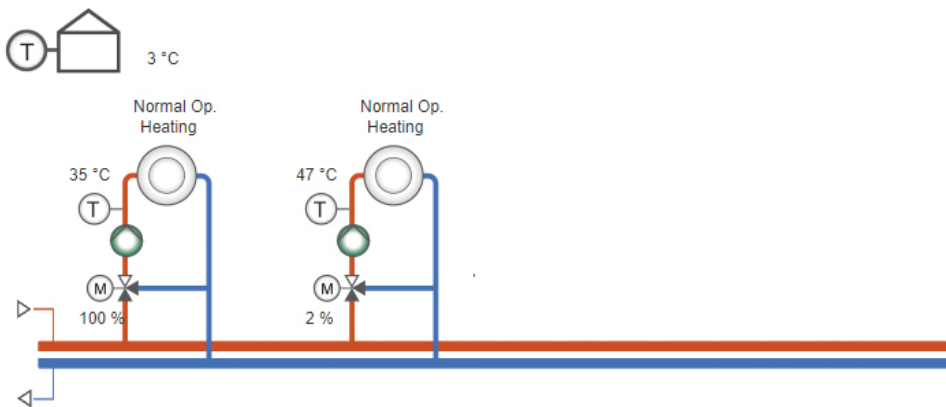
Terminal connection

Available for: HCA152W-4, HCA152DW-4, HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file: 001_HCAxxxxx_HSco

Example 002

Function description: Mixed Heating system 1 (continuous), Mixed Heating system 2 (continuous)



	G	1	G	50		
	G0	2	G0	51		P1 B
	Gnd	3	-	52		P1 A
	+C	4	+C	53		P1 N
	Gdo	10	Gd0	54		P1 E
HS1 pump A	DO1	11	DO1	55		P2 B
HS2 pump A	DO2	12	DO2	60		P2 A
	DO3	13	DO3	61		P2 N
	DO4	14	DO4	62		P2 E
	DO5	15	DO5	63		
	DO6	16	DO6			Ext D
	DO7	17	DO7			
	Agnd	30	Agnd			
	Agnd	31	AI1			DI1
Outdoor temperature	AI1	32	AI2	71		DI2
HS1 Supply temp.	AI2	33	Agnd	72		DI3
	Agnd	34	AI3	73		DI4
HS2 supply temp.	AI3	35	AI4	74		DI5
	AI4	40	Agnd	75		DI6
	Agnd	41	UI1 : AI5/DI9	76		DI7
	Agnd	42	UI2 : AI6/DI10	77		DI8
	UI1	43	Agnd	78		
	UI2	44	UI3 : AI7/DI11	90		Agnd
	Agnd	45	UI4 : AI8/DI12	91		AO1
	UI3			92		AO2
	UI4			93		AO3
				94		AO4
				95		AO5
	TCP					

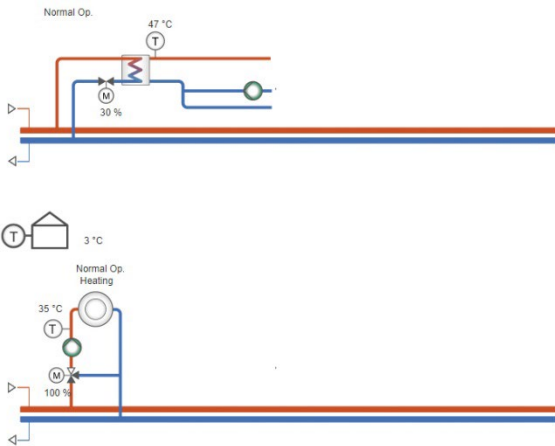
Terminal connection

Available for: HCA152W-4, HCA152DW-4, HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file : 002_HCAxxxxx_HSc0_HSc0

Example 003

Function description: Hot Water 1 (supply), mixed Heating system 1 (continuous)



	G	1	G				
	G0	2	G0				P1 B
	Gnd	3					P1 A
	+C	4	+C				P1 N
	Gdo	10	Gp0				P1 E
HS1 pump A	DO1	11	DO1				P2 B
	DO2	12	DO2				P2 A
HW1 circ. pump A	DO3	13	DO3				P2 N
	DO4	14	DO4				P2 E
	DO5	15	DO5				
	DO6	16	DO6				Ext D
	DO7	17	DO7				
	Agnd	30	Agnd				DI1
Outdoor temperature	AI1	31	AI1				DI2
HS1 Supply temp.	AI2	32	AI2				DI3
	Agnd	33	Agnd				DI4
	AI3	34	AI3				DI5
	AI4	35	AI4				DI6
HW1 supply temp.	AI4	40	Agnd				DI7
	Agnd	41	UI1 : AI5/DI9				DI8
	UI1	42	UI2 : AI6/DI10				Agnd
	UI2	43	Agnd				AO1
	Agnd	44	UI3 : AI7/DI11				AO2
	UI3	45	UI4 : AI8/DI12				AO3
	UI4						AO4
	TCP						AO5

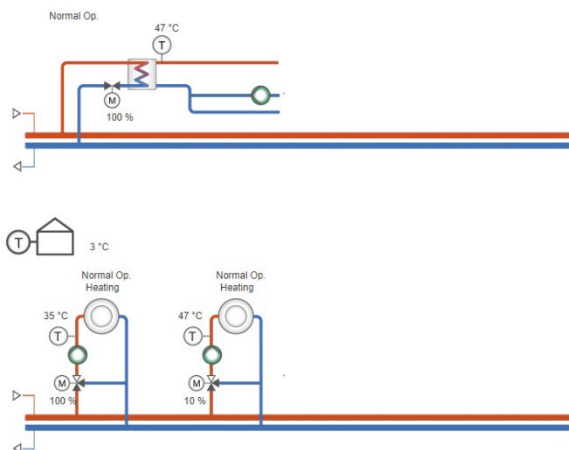
Terminal connection

Available for: HCA152W-4, HCA152DW-4, HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file : 003_HCAxxx_HWSu_HSco

Example 004

Function description: Hot Water 1 (supply), mixed Heating system 1 (cont.), mixed Heating system 2 (cont.)



	G	1	G	50	
	G0	2	G0	51	P1 B
	Gnd	3	+	52	P1 A
	+C	4	-	53	P1 N
	Gdo	10	+C	53	P1 E
HS1 pump A	DO1	11	Gp0	60	P2 B
HS2 pump A	DO2	12	DO1	61	P2 A
HW1 circ. pump A	DO3	13	DO2	62	P2 N
	DO4	14	DO3	63	P2 E
	DO5	15	DO4		
	DO6	16	DO5		
	DO7	17	DO6		
	DO7	30	DO7		
	Agnd	31	Agnd		Ext D
Outdoor temperature	AI1	32	AI1	71	DI1
HS1 Supply temp.	AI2	33	AI2	72	DI2
	Agnd	34	Agnd	73	DI3
HS2 Supply temp.	AI3	35	AI3	74	DI4
HW1 supply temp.	AI4	40	AI4	75	DI5
	Agnd	41	Agnd	76	DI6
	UI1	42	UI1 : AI5/DI9	77	DI7
	UI2	43	UI2 : AI6/DI10	78	DI8
	UI3	44	Agnd	90	Agnd
	UI4	45	UI3 : AI7/DI11	91	AO1
			UI4 : AI8/DI12	92	AO2
				93	AO3
				94	AO4
				95	AO5
	TCP				

Terminal connection

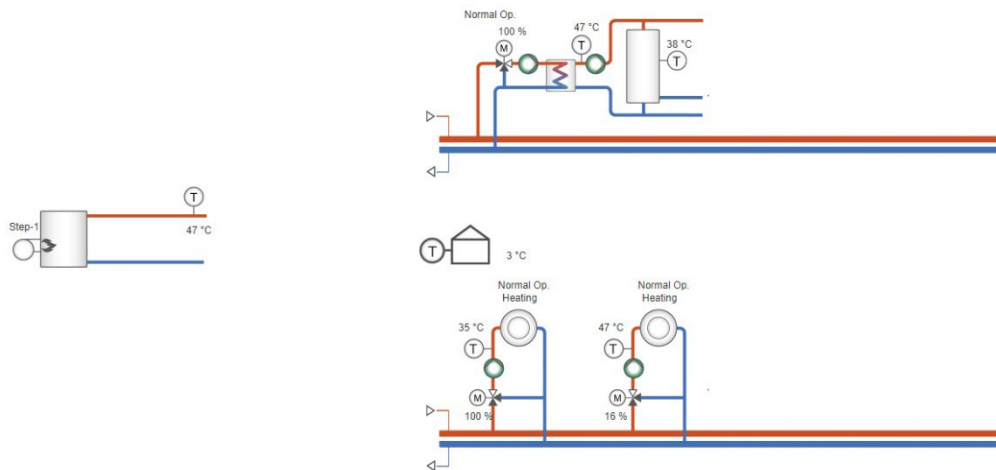
Available for: HCA152W-4, HCA152DW-4, HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file : 004_HCAxxxxx_HWSu_HSco_HSco

Examples for Ardo-controllers with 28 IO's

Example 201

Function description: Boiler (1-step + demand), Hot Water 1 (storage tank + PI-load-supply), mixed Heating system 1 (continuous), mixed Heating system 2 (continuous)



	G	1	G	50	P1 B
	G0	2	G0	51	P1 A
	Gnd	3	+	52	P1 N
	+C	4	-	53	P1 E
	Gdo	10	G Do	60	P2 B
HS1 pump A	DO1	11	DO1	61	P2 A
HS2 pump A	DO2	12	DO2	62	P2 N
HW1 exch. pump A	DO3	13	DO3	63	P2 E
HW1 tank pump A	DO4	14	DO4		
Boiler 1 step 1	DO5	15	DO5		
	DO6	16	DO6		
	DO7	17	DO7		
	Agnd	30	Agnd		
Outdoor temperature	AI1	31	AI1	71	DI1
HS1 supply temp.	AI2	32	AI2	72	DI2
	Agnd	33	Agnd	73	DI3
HS2 supply temp.	AI3	34	AI3	74	DI4
	Agnd	35	AI4	75	DI5
HW1 supply temp.	AI4	40	Agnd	76	DI6
	Agnd	41	UI1 :AI5/DI9	77	DI7
HW1 tank middle temp	UI1	42	UI2 :AI6/DI10	78	DI8
Boiler supply temp.	UI2	43	Agnd	90	Agnd
	Agnd	44	UI3 :AI7/DI11	91	AO1 HS1 Valve
	UI3	45	UI4 :AI8/DI12	92	AO2 HS2 Valve
	UI4			93	AO3 HW1 valve
	TCP			94	AO4 Heat demand
				95	AO5

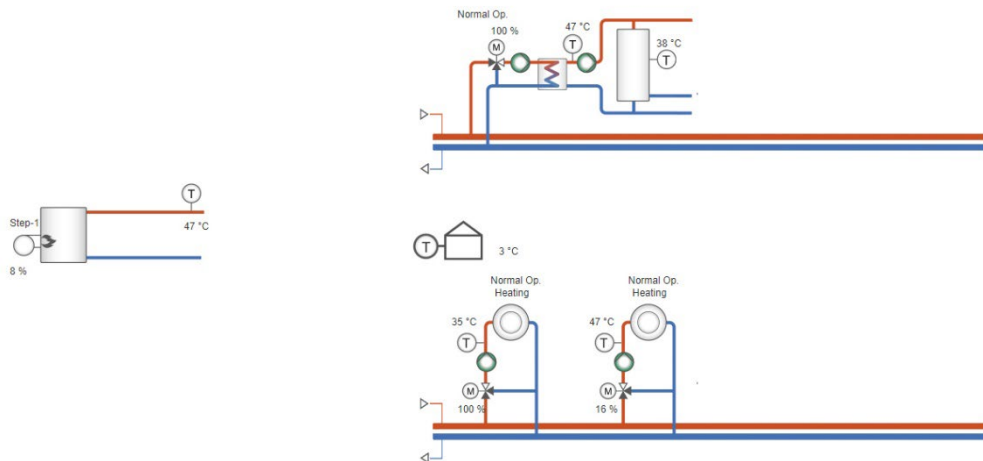
Terminal connection

Available for: HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file : 201_HCAxxxxx_HB1S_HWTS_HSco_HSco

Example 202

Function description: Boiler (1-step + modulation), Hot Water 1 (storage tank + PI-load-supply), mixed Heating system 1 (continuous), mixed Heating system 2 (continuous)



	G	1	G	50	P1 B
	G0	2	G0	51	P1 A
	Gnd	3	24V AC/DC	52	P1 N
	+C	4	+C	53	P1 E
	Gdo	10	G _{DO}	60	P2 B
HS1 pump A	DO1	11	DO1	61	P2 A
HS2 pump A	DO2	12	DO2	62	P2 N
HW1 exch. pump A	DO3	13	DO3	63	P2 E
HW1 tank pump A	DO4	14	DO4		
Boiler 1 step 1	DO5	15	DO5		
	DO6	16	DO6		
	DO7	17	DO7		
	Agnd	30	Agnd		
Outdoor temperature	AI1	31	AI1	71	DI1
HS1 Supply temp.	AI2	32	AI2	72	DI2
	Agnd	33	Agnd	73	DI3
HS2 Supply temp.	AI3	34	AI3	74	DI4
	AI4	35	AI4	75	DI5
HW1 supply temp.	AI4	40	Agnd	76	DI6
	Agnd	41	UI1 : AI5/DI9	77	DI7
HW1 tank middle temp	UI1	42	UI2 : AI6/DI10	78	DI8
Boiler supply temp.	UI2	43	Agnd	90	Agnd
	Agnd	44	UI3 : AI7/DI11	91	AO1 HS1 Valve
	UI3	45	UI4 : AI8/DI12	92	AO2 HS2 Valve
	UI4			93	AO3 HW1 valve
	TCP			94	AO4 Boiler 1 modulation
				95	AO5

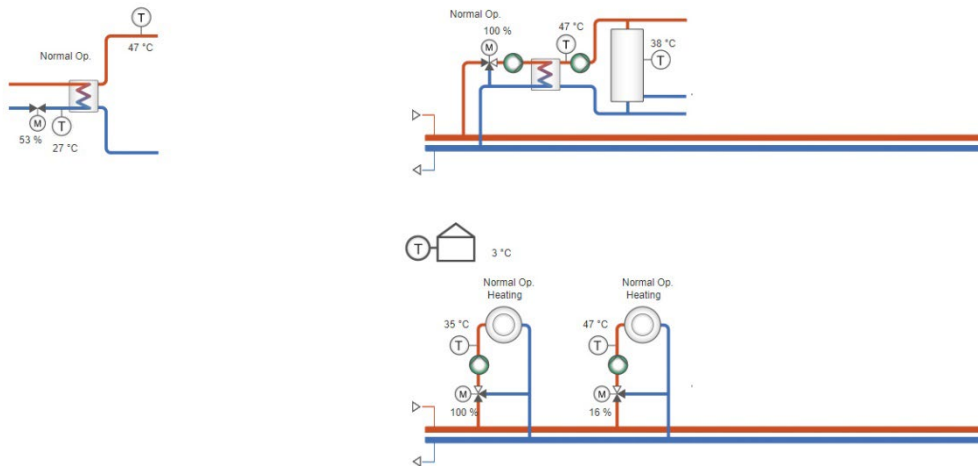
Terminal connection

Available for: HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file : 202_HCAxxxxx_HBmo_HWTS_HSco_HSco

Example 203

Function description: District Heating system (continuous), Hot Water 1 (storage tank + PI-load-supply), mixed Heating system 1 (continuous), mixed Heating system 2 (continuous)



	G	1	G	50	
	G0	2	G0	51	P1 B
	Gnd	3	Gnd	52	P1 A
	+C	4	+C	53	P1 N
	Gdo	10	G _{DO}	60	P1 E
HS1 pump A	DO1	11	DO1	61	P2 B
HS2 pump A	DO2	12	DO2	62	P2 A
HW1 exch. pump A	DO3	13	DO3	63	P2 N
HW1 tank pump A	DO4	14	DO4		P2 E
	DO5	15	DO5		
	DO6	16	DO6		
	DO7	17	DO7		
	Agnd	30	Agnd		Ext D
	AI1	31	AI1		
Outdoor temperature	AI1	32	AI2	71	DI1
HS1 supply temp.	AI2	33	Agnd	72	DI2
	Agnd	34	AI3	73	DI3
	AI3	35	AI4	74	DI4
HS2 supply temp.	AI3			75	DI5
HW1 supply temp.	AI4	40	Agnd	76	DI6
	Agnd	41	UI1 :AI5/DI9	77	DI7
HW1 tank middle temp	UI1	42	UI2 :AI6/DI10	78	DI8
DHS supply temp.	UI2	43	Agnd		
	Agnd	44	UI3 :AI7/DI11	90	Agnd
DHS primary ret. temp	UI3	45	UI4 :AI8/DI12	91	AO1 HS1 Valve
	UI4			92	AO2 HS2 Valve
				93	AO3 HW1 valve
				94	AO4 DHS valve
	TCP			95	AO5

Terminal connection

Available for: HCA282DW-4, HCA283WM-4, HCA283DWM-4

Application tool - file: 203_HCAxxxxx_HB1S_HWTS_HScO_HScO

Examples for Vido-controllers with 19 and 20 IO's

Example 101

Function-description: mixed Heating system 1 (3-point)



Outdoor temperature	AI1		N	
HS 1 supply temp.	AI2		L	
	AI3			
	AI4			
	UI1			
	UI2			
	UI3			
	UI4			
	DI1			
	DI2			
	AO1			DO7
	AO2			
	Agnd			DO6
	AO3			C5-6
	M-B			DO5
	M-A			
			DO4	HS1 Valve decrease
			C3-4	
			DO3	HS1 Valve increase
			DO2	
			C1-2	
			DO1	HS1 Pump A

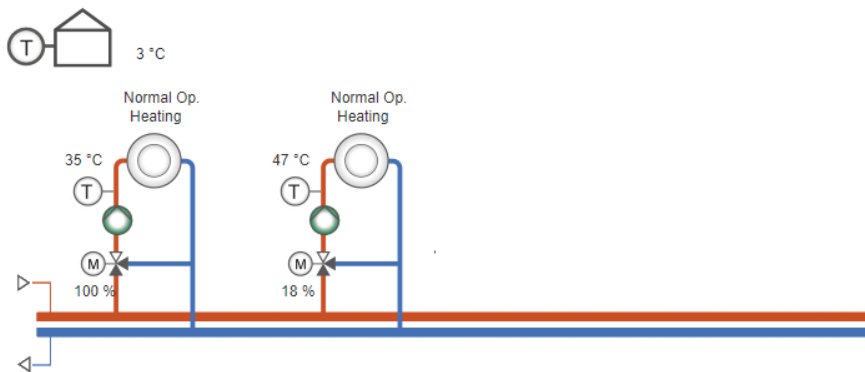
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 101_HCVxxxxx_HS3p

Example 102

Function-description: mixed Heating system 1 (3-point), mixed Heating system 2 (3-point)



Outdoor temperature	AI1		N		
HS 1 supply temp.	AI2		L		
HS 2 supply temp.	AI3				
	AI4				
	UI1				
	UI2				
	UI3				
	UI4				
	DI1				
	DI2				
	AO1				
	AO2				
	Agnd				
	AO3				
	M-B				
	M-A				
				DO7	
				DO6	HS2 Valve close
				DO5	HS2 Valve increase
				DO4	HS1 Valve decrease
				DO3	HS1 Valve increase
				DO2	HS2 Pump A
				DO1	HS1 Pump A

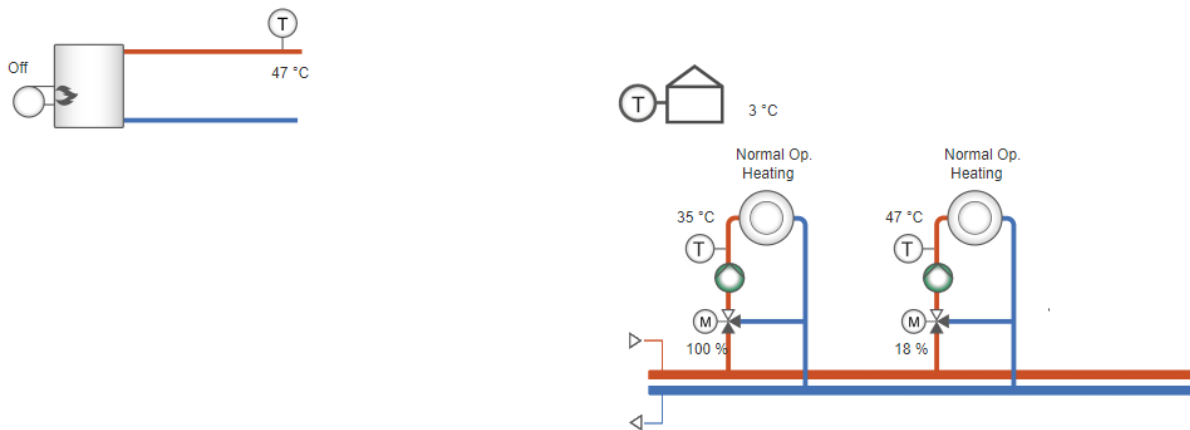
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 102_HCVxxxxx_HS3p_HS3p

Example 103

Function-description: Boiler (1-step + demand), mixed Heating system 1 (3-point), mixed Heating system 2 (3-point)



Outdoor temperature	AI1		N		
HS1 Supply temp.	AI2		L		
HS2 supply temp.	AI3			C7	
	AI4			DO7	Boiler 1 step 1
	UI1				
Boiler supply temp	UI2			DO6	HS2 valve close
	UI3			C5-6	
	UI4			DO5	HS2 valve increase
	DI1				
	DI2			DO4	HS1 valve decrease
Heat demand	AO1			C3-4	
	AO2			DO3	HS1 valve increase
	Agnd				
	AO3			DO2	HS2 Pump A
	M-B			C1-2	
	M-A			DO1	HS1 Pump A

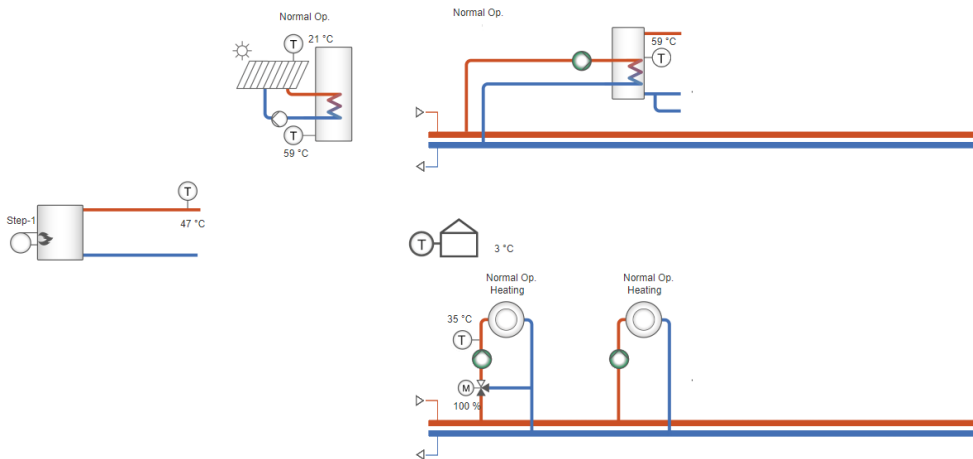
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 103_HCVxxxx_HB1s_HS3p_HS3p

Example 104

Function-description: Boiler (1-step + demand), Hot Water 1 (storage tank + load pump + solar system), mixed Heating system 1 (3-point), unmixed Heating system 2



Outdoor temperature	AI1		N		
HS1 Supply temp.	AI2		L		
	AI3			C7	
HW1 tank middle temp.	AI4			DO7	Boiler 1 step 1
	UI1				
Boiler supply temp	UI2			DO6	Solar system pump A
	UI3			C5-6	
Solar collector temp.	UI4			DO5	HW1 tank pump A
	DI1				
	DI2			DO4	HS1 valve decrease
Heat demand	AO1			C3-4	
	AO2			DO3	HS1 valve increase
	Agnd				
	AO3			DO2	HS2 Pump A
	M-B			C1-2	
	M-A			DO1	HS1 Pump A

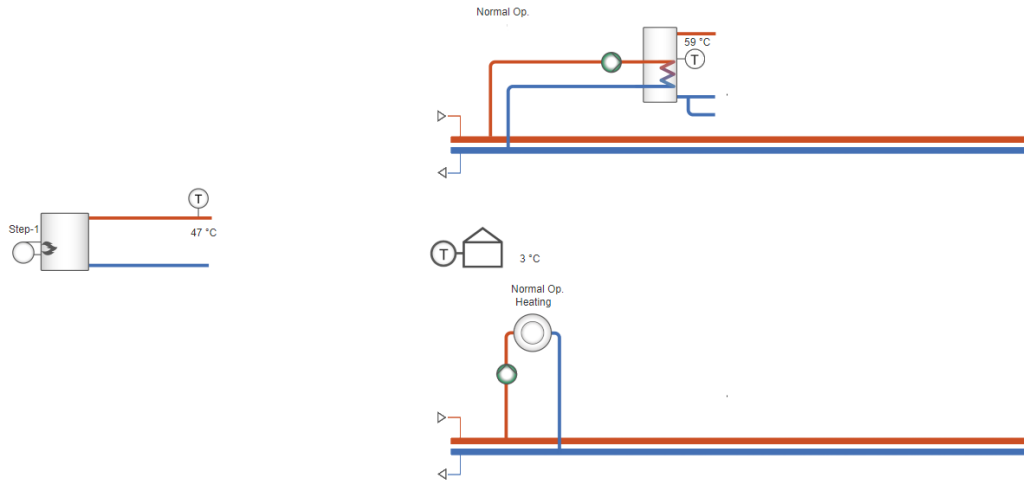
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 104_HCVxxxxx_HB1s_HWTSO_HS3p_HSpu

Example 105

Function-description: Boiler (2-step + demand), Hot Water 1 (storage tank + load pump), unmixed Heating system 1



Outdoor temperature	AI1		N			
	AI2		16	L		
	AI3		15			
HW1 tank middle temp.	AI4		14	DO7	C7	
	UI1		13		DO7	HW1 tank pump A
Boiler supply temp	UI2		12			
	UI2		11	DO6	DO6	Boiler 1 step 2
	UI3		10		C5-6	
	UI4		9	DO5	DO5	Boiler 1 step 1
	DI1		8			
	DI2		7	DO4	DO4	
Heat demand	AO1		6		DO4	
	AO2		5	DO3	C3-4	
	Agnd		4	DO2	DO3	
	AO3		3			
	M-B		2	DO1	DO2	
	M-A		1		C1-2	
					DO1	HS1 Pump A

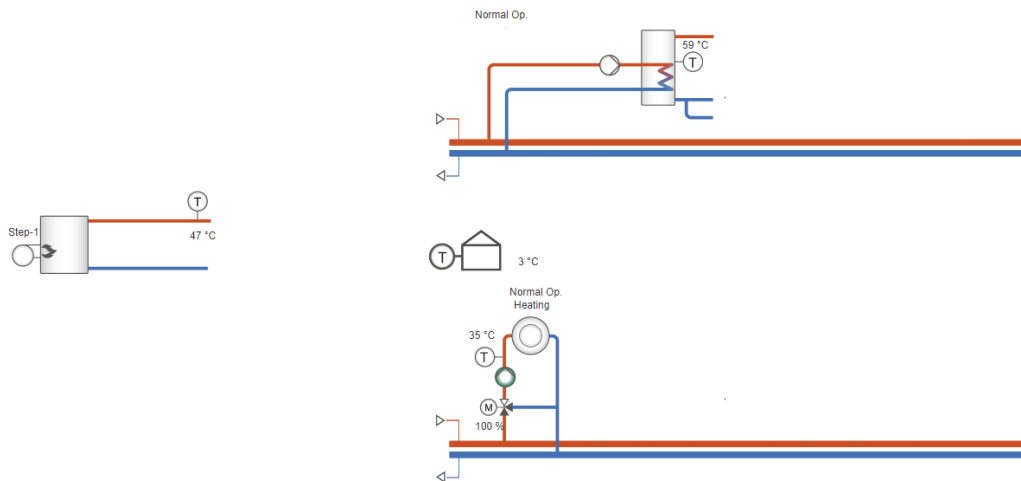
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 105_HCVxxxxx_HB2S_HWTP_HSpu

Example 106

Function-description: Boiler (2-step + demand), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point)



Outdoor temperature	AI1		N		
HS1 supply temp.	AI2		L		
	AI3				
HW1 tank middle temp.	AI4			DO7	HW1 tank pump A
	UI1				
Boiler supply temp	UI2			DO6	Boiler 1 step 2
	UI3			C5-6	
	UI4			DO5	Boiler 1 step 1
	DI1				
	DI2			DO4	HS1 Valve decrease
Heat demand	AO1			C3-4	
	AO2			DO3	HS1 Valve increase
	Agnd				
	AO3			DO2	
	M-B			C1-2	
	M-A			DO1	HS1 Pump A

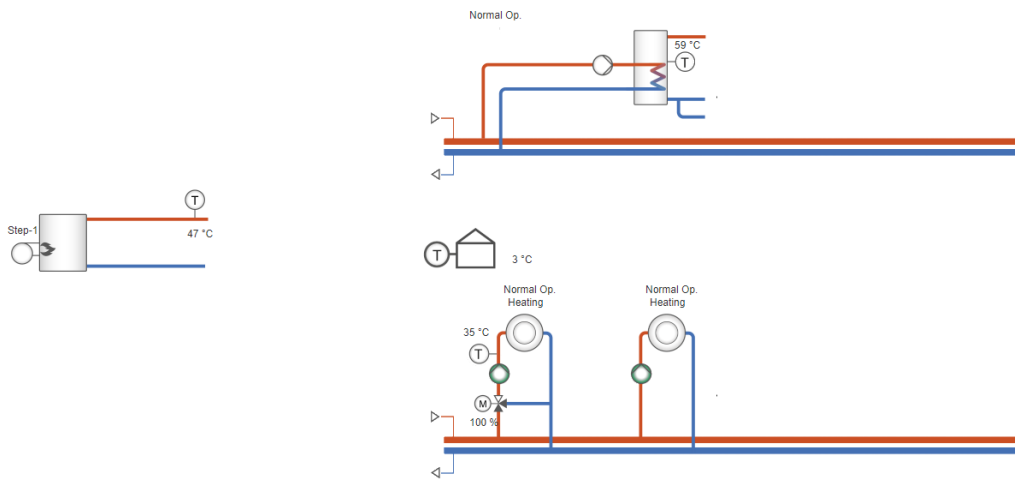
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 106_HCVxxxxx_HB2S_HWTP_HS3p

Example 107

Function-description: Boiler (2-step + demand), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point), unmixed Heating system 2



Outdoor temperature	AI1		N		
HS1 supply temp.	AI2		L		
	AI3			C7	
HW1 tank middle temp.	AI4			DO7	HW1 tank pump A
	UI1				
Boiler supply temp	UI2			DO6	Boiler 1 step 2
	UI3			C5-6	
	UI4			DO5	Boiler 1 step 1
	DI1				
	DI2			DO4	HS1 Valve decrease
Heat demand	AO1			C3-4	
	AO2			DO3	HS1 Valve increase
	Agnd				
	AO3			DO2	HS2 Pump A
	M-B			C1-2	
	M-A			DO1	HS1 Pump A

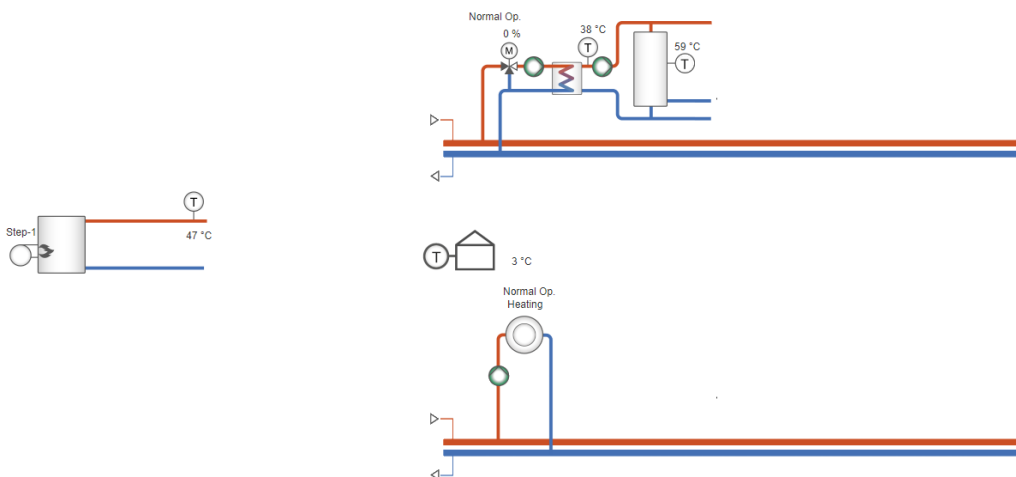
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 107_HCVxxxxx_HB2S_HWTP_HS3p_HSpu

Example 108

Function-description: Boiler (2-step + demand), Hot Water 1 (storage tank + PI-load-supply), unmixed Heating system 1



Outdoor temperature	AI1		N		
	AI2		L		
	AI3				
HW1 tank middle temp.	AI4		DO7	DO7	HW1 tank pump A
HW1 supply temp.	UI1			DO6	Boiler 1 step 2
Boiler supply temp	UI2			C5-6	
	UI3			DO5	Boiler 1 step 1
	UI4				
	DI1			DO4	HW1 valve close
	DI2			C3-4	
Heat demand	AO1			DO3	HW1 valve open
	AO2				
	Agnd			DO2	HW1 exch. pump A
	AO3			C1-2	
	M-B			DO1	HS1 Pump A
	M-A				

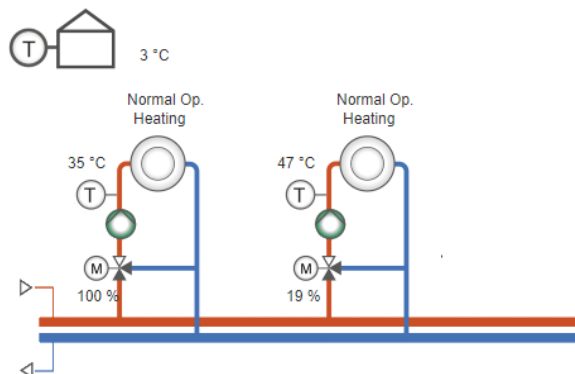
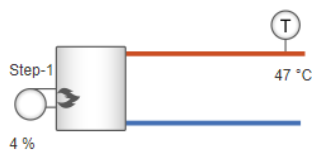
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 108_HCVxxxxx_HB2S_HWTS_HSpu

Example 109

Function-description: Boiler (1-step + modulation), mixed Heating system 1 (3-point), mixed Heating system 2 (3-point)



Outdoor temperature	AI1		N	
HS1 supply temp.	AI2		L	
HS2 supply temp.	AI3			
	AI4			
	UI1			
Boiler supply temp	UI2			
	UI3			
	UI4			
	DI1			
	DI2			
	AO1			
Boiler 1 modulation	AO2			
	Agnd			
	AO3			
	M-B			
	M-A			
				DO7
			DO6	
			DO5	
			DO4	
			DO3	
			DO2	
			DO1	
				C7
				Boiler 1 step 1
				DO6
				HS2 Valve close
				C5-6
				DO5
				HS2 Valve increase
				DO4
				HS1 Valve decrease
				C3-4
				DO3
				HS1 Valve increase
				DO2
				HS2 Pump A
				C1-2
				DO1
				HS1 Pump A

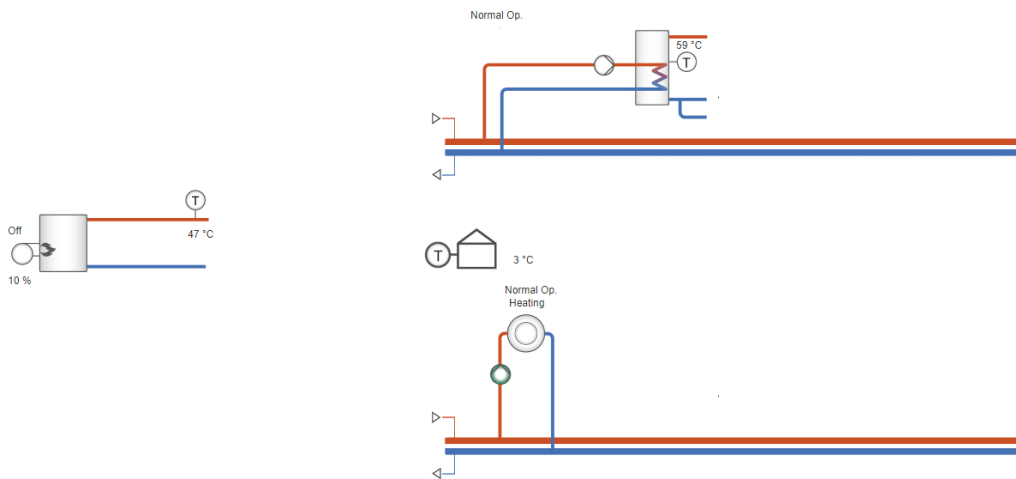
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 109_HCVxxxxx_Hbmo_HS3p_HS3p

Example 110

Function-description: Boiler (1-step + modulation), Hot Water 1 (storage tank + load pump), unmixed Heating system
1



Outdoor temperature	AI1		N	
	AI2		L	
	AI3			
HW1 tank middle temp.	AI4		DO7	Boiler 1 step 1
	UI1			
Boiler supply temp	UI2		DO6	DO6
	UI3			C5-6
	UI4		DO5	DO5 HW1 tank pump A
	DI1			
	DI2		DO4	DO4
	AO1			C3-4
Boiler 1 modulation	AO2		DO3	DO3
	Agnd			
	AO3		DO2	DO2
	M-B			C1-2
	M-A		DO1	DO1 HS1 Pump A

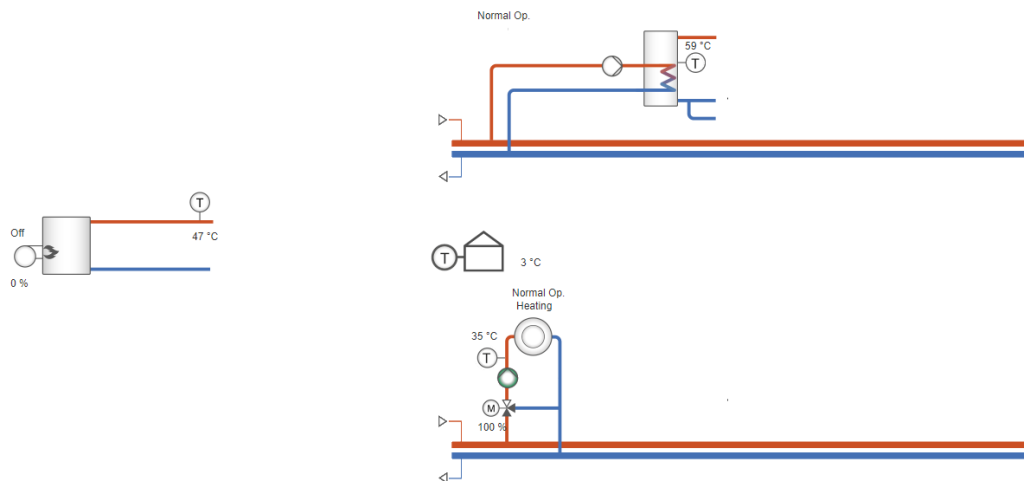
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 110_HCVxxxxx_Hbmo_HWTP_HSpu

Example 111

Function-description: Boiler (1-step + modulation), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point)



Outdoor temperature	AI1		N	
HS1 Supply temp.	AI2		L	
	AI3			
HW1 tank middle temp.	AI4		DO7	Boiler 1 step 1
	UI1			
Boiler supply temp	UI2		DO6	DO6
	UI3			C5-6
	UI4		DO5	DO5
	DI1			
	DI2		DO4	DO4
	AO1			C3-4
Boiler 1 modulation	AO2		DO3	DO3
	Agnd			
	AO3		DO2	DO2
	M-B			C1-2
	M-A		DO1	DO1

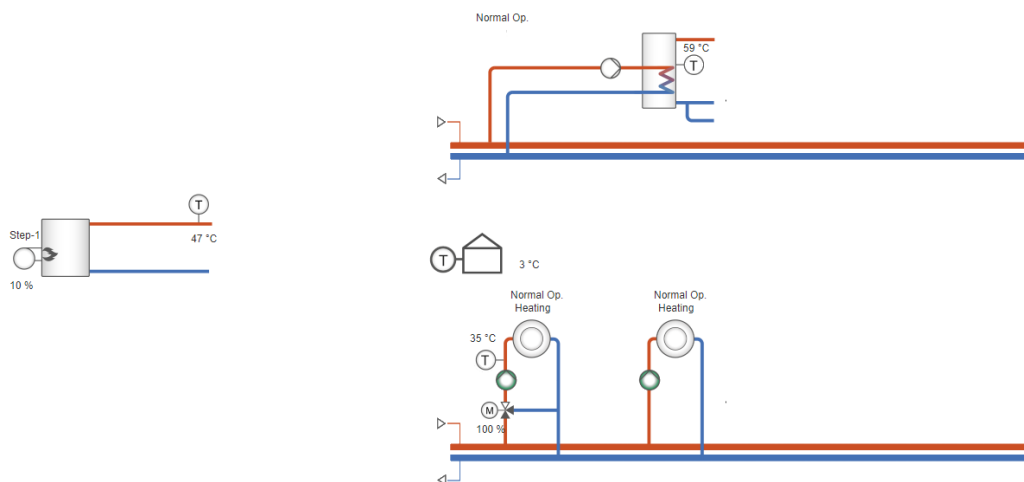
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 111_HCVxxxxx_Hbmo_HWTP_HS3p

Example 112

Function-description: Boiler (1-step + modulation), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point), unmixed Heating system 2



Outdoor temperature	AI1		N	
HS1 Supply temp.	AI2		L	
	AI3			
HW1 tank middle temp.	AI4			DO7
	UI1			
Boiler supply temp	UI2		DO6	DO6
	UI3		C5-6	
	UI4		DO5	HW1 tank pump A
	DI1			
	DI2		DO4	HS1 Valve decrease
	AO1		C3-4	
Boiler 1 modulation	AO2		DO3	HS1 Valve increase
	Agnd			
	AO3		DO2	HS2 Pump A
	M-B		C1-2	
	M-A		DO1	HS1 Pump A

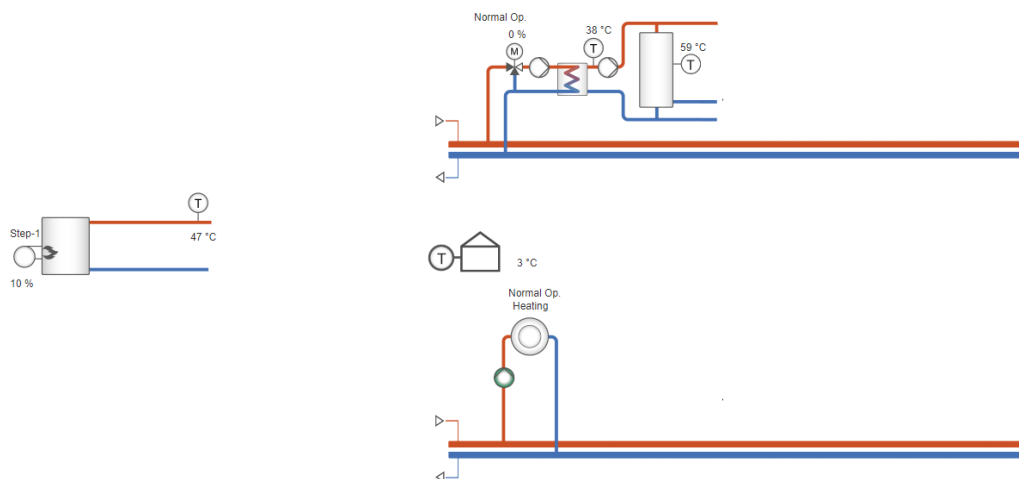
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 112_HCVxxxxx_Hbmo_HWTP_HS3p_HSpu

Example 113

Function-description: Boiler (1-step + modulation), Hot Water 1 (storage tank + PI-load-supply), unmixed Heating system 1



Outdoor temperature	AI1		N	
	AI2		L	
	AI3			
HW1 tank middle temp.	AI4		DO7	Boiler 1 step 1
HW1 supply temp.	UI1			
Boiler supply temp.	UI2		DO6	
	UI3			C5-6
	UI4		DO5	HW1 tank pump A
	DI1			
	DI2		DO4	HW1 valve close
	AO1			C3-4
Boiler 1 modulation	AO2		DO3	HW1 valve open
	Agnd			
	AO3		DO2	HW1 Exch. pump A
	M-B			C1-2
	M-A		DO1	HS1 Pump A

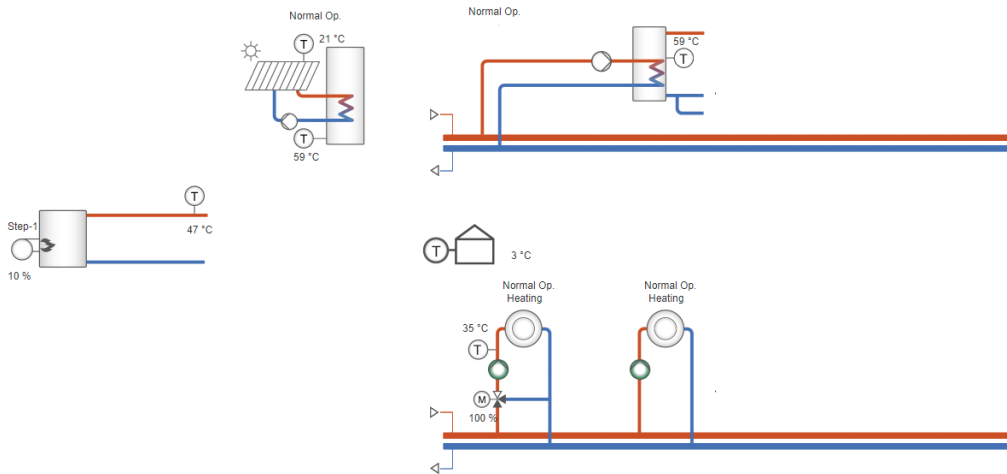
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 113_HCVxxxxx_Hbmo_HWTS_HSpu

Example 114

Function-description: Boiler (1-step + modulation), Hot Water 1 (storage tank + load pump + solar system), mixed Heating system 1 (3-point), unmixed Heating system 2



Outdoor temperature	AI1		N		
HS1 supply temp.	AI2		L		
	AI3				
HW1 tank middle temp.	AI4			DO7	Boiler 1 step 1
	UI1				
Boiler supply temp	UI2			DO6	Solar system pump A
	UI3			C5-6	
Solar collector temp.	UI4			DO5	HW1 tank pump A
	DI1				
	DI2			DO4	HS1 Valve decrease
	AO1			C3-4	
Boiler 1 modulation	AO2			DO3	HS1 Valve increase
	Agnd				
	AO3			DO2	HS2 Pump A
	M-B			C1-2	
	M-A			DO1	HS1 Pump A

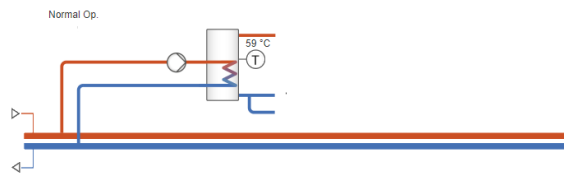
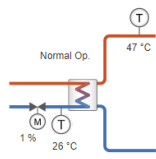
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file : 114_HCVxxxxx_Hbmo_HWTSO_HS3p_HSpu

Example 115

Function-description: District Heating system (3-point), Hot Water 1 (storage tank + load pump), unmixed Heating system 1



Outdoor temperature	AI1		N		
	AI2		L		
	AI3				
HW1 tank middle temp.	AI4		DO7	DO7	HW1 tank pump A
	UI1				
DHS supply temp.	UI2		DO6	DO6	DHS valve close
DHS primary ret. temp.	UI3			C5-6	
	UI4		DO5	DO5	DHS valve increase
	DI1				
	DI2		DO4	DO4	
	AO1			C3-4	
	AO2		DO3	DO3	
	Agnd				
	AO3		DO2	DO2	
	M-B			C1-2	
	M-A		DO1	DO1	HS1 Pump A

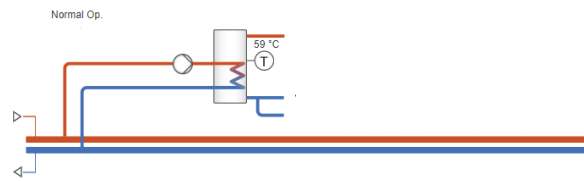
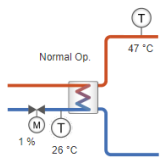
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 115_HCVxxxxx_DH3p_HWTP_HSpu

Example 116

Function-description: District Heating system (3-point), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point)



Outdoor temperature	AI1		N		
HS1 supply temp.	AI2		L		
	AI3				
HW1 tank middle temp.	AI4		DO7	DO7	HW1 tank pump A
	UI1				
DHS supply temp.	UI2		DO6	DO6	DHS valve close
DHS primary ret. temp.	UI3			C5-6	
	UI4		DO5	DO5	DHS valve increase
	DI1				
	DI2		DO4	DO4	HS1 valve decrease
	AO1			C3-4	
	AO2		DO3	DO3	HS1 valve increase
	Agnd				
	AO3		DO2	DO2	
	M-B			C1-2	
	M-A		DO1	DO1	HS1 Pump A

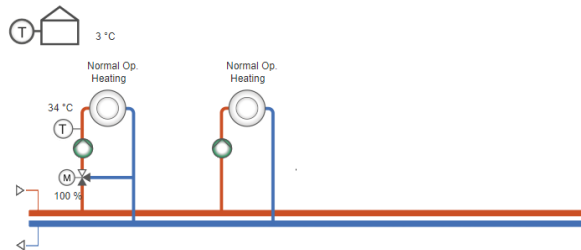
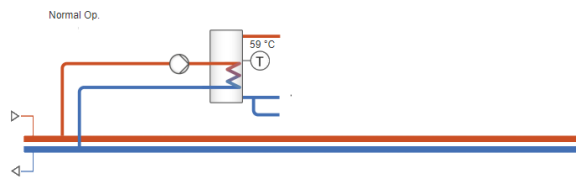
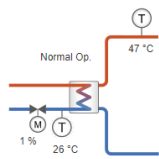
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 116_HCVxxxxx_DH3p_HWTP_HS3p

Example 117

Function-description: District Heating system (3-point), Hot Water 1 (storage tank + load pump), mixed Heating system 1 (3-point), unmixed Heating system 2



Outdoor temperature	AI1		N	
HS1 supply temp.	AI2		L	
	AI3		C7	
HW1 tank middle temp.	AI4		DO7	HW1 tank pump A
	UI1			
DHS1 supply temp.	UI2		DO6	DHS1 valve close
DHS1 primary ret. temp.	UI3		C5-6	
	UI4		DO5	DHS1 valve increase
	DI1			
	DI2		DO4	HS1 valve decrease
	AO1		C3-4	
	AO2		DO3	HS1 valve increase
	Agnd			
	AO3		DO2	HS2 Pump A
	M-B		C1-2	
	M-A		DO1	HS1 Pump A

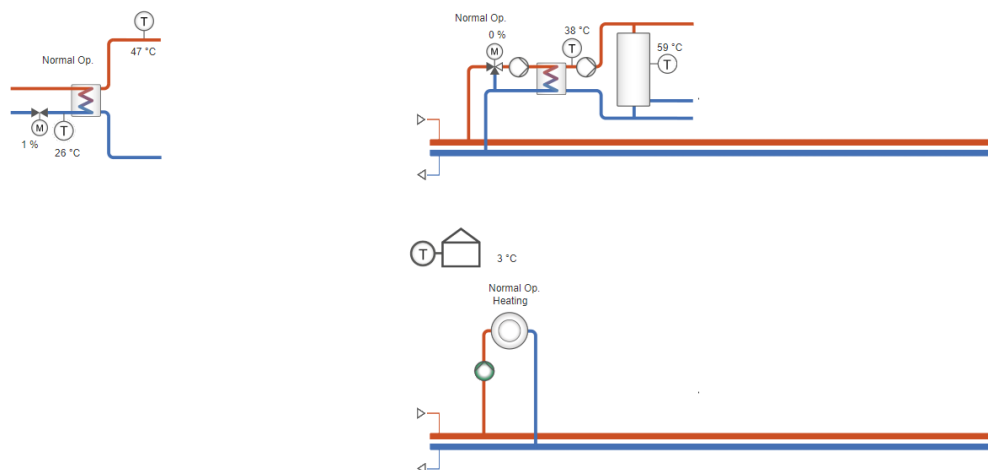
Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 117_HCVxxxxx_DH3p_HWTP_HS3p_HSpu

Example 118

Function-description: District Heating system (3-point), Hot Water 1 (storage tank + PI-load-supply), unmixed Heating system 1



Outdoor temperature	AI1		N	
	AI2		L	
	AI3		C7	
HW1 tank middle temp.	AI4		DO7	HW1 tank pump A
HW1 supply temp.	UI1			
DHS supply temp.	UI2		DO6	DHS valve close
DHS primary ret. temp.	UI3		C5-6	
	UI4		DO5	DHS valve increase
	DI1			
	DI2		DO4	HW1 valve close
	AO1		C3-4	
	AO2		DO3	HW1 valve open
	Agnd			
	AO3		DO2	HW1 exch. pump A
	M-B		C1-2	
	M-A		DO1	HS1 Pump A

Terminal connection

Available for: HCV191DW-2, HCV192DW-2, HCV203DWM-2

Application tool - file: 118_HCVxxxxx_DH3p_HWTS_HS3p