User Manual

LCDPanelController (V1.1)

M/DLP04.1-A2-48

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APPLICATION PROGRAM INFORMATION

HDL- M/DLP04.1-A2-48(V1.1)

Version: V1.1

KNX/EIB-BUS

Document Version: 1.1, Date: Mar.2018

A. General description
B. Function overview flowchart
C. Function description
D. Communication objects

A. General description

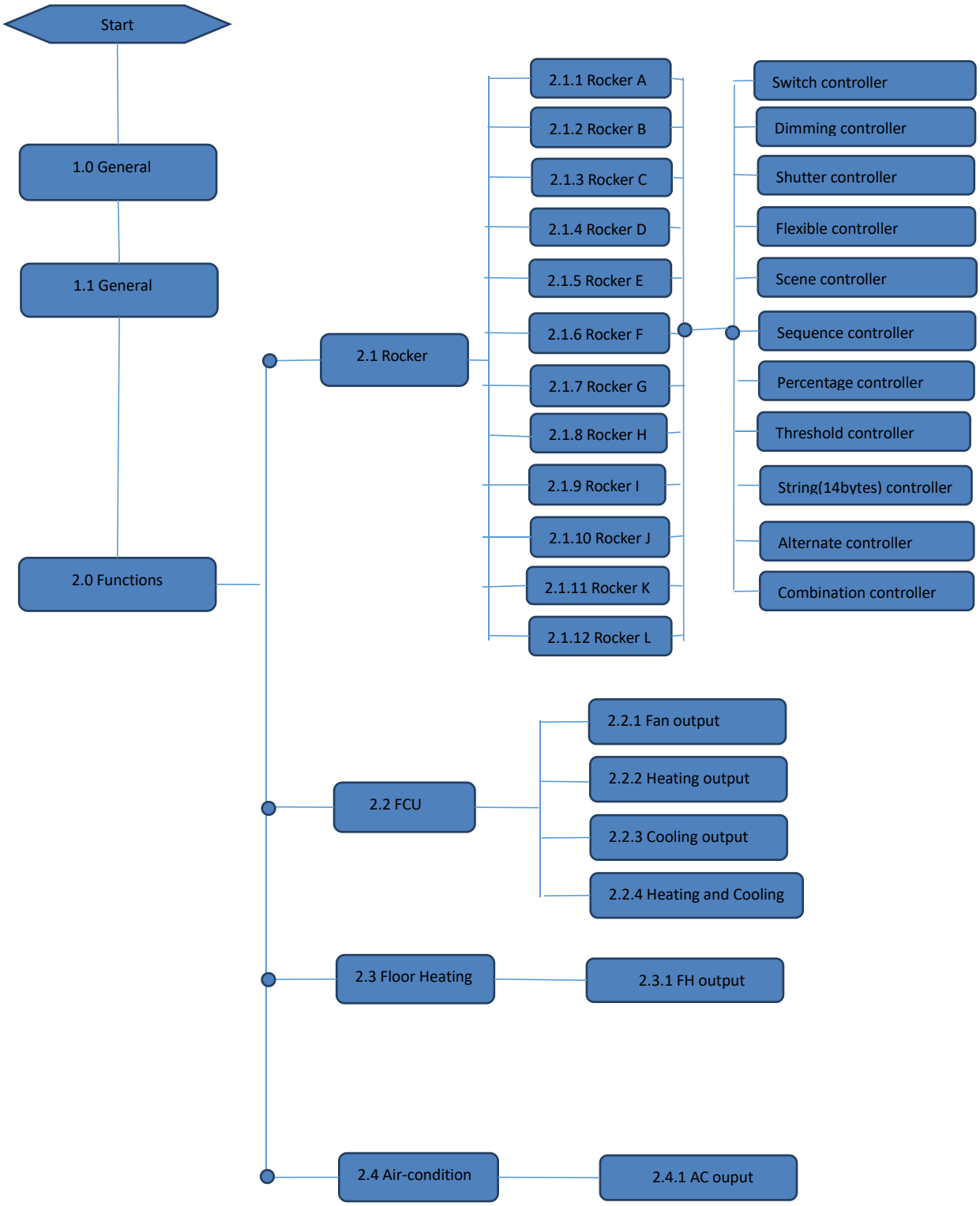
HDL KNX / EIB M/DLP04.1-A2-48 wall switch Panel controller have 3 page for lighting and curtain control, one page for floor heating, one page for HVAC control.This manual contains the programming information for this module.

Note:

Programming: 1 button + 10 button
Lock or Unlock: 2 button + 9 button
Basic information setting: 9 button +10 button

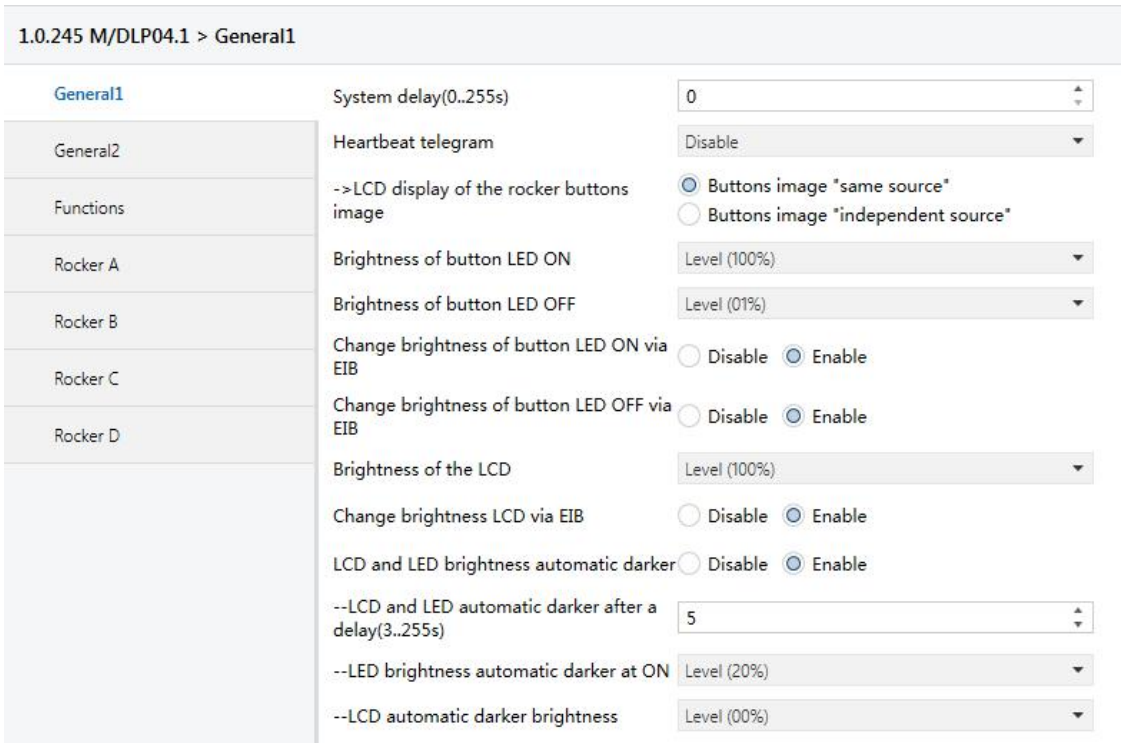
Programming: Keep pressing 1 and 10 buttons together for 2 seconds, the LED Indicators will flashing.
Lock or Unlock: keep pressing 2 and 9 buttons together for 2s, will lock the panel or unlock the panel.
Basic information setting: keep pressing 9 and 10 buttons together for 2s, Will enter the main menu page.
In this page can set LCD and LED brightness, Conversion from degrees Celsius to Fahrenheit, or form Fahrenheit to degrees Celsius, etc.

B. Function overview flowchart



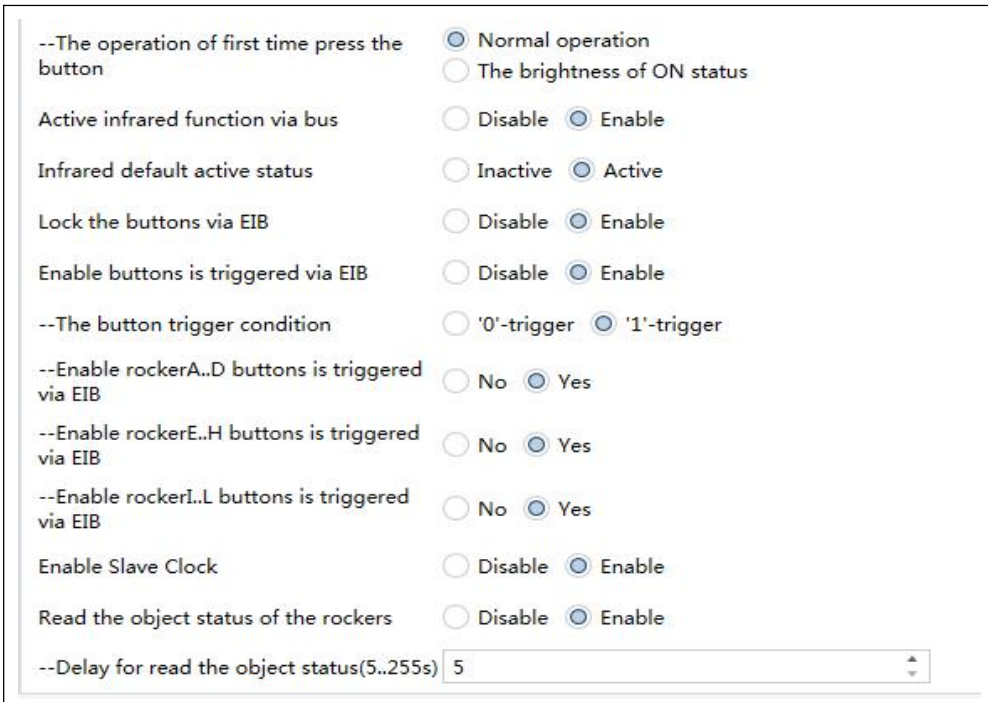
C. Function description

1.0_general 1



No.	ETS-Parameter	Range (default)	Description
1	System delay(0...255s)	(0)...255s	Set system delsy time.
2	Hearbeat telegram	-Disable -Send value“0”cyclically -Send value“1”cyclically -Send value“1/0” inverted cyclically	Disable: No hearbeat telegram. Send value“0”cyclically: Cycling to send the hearbeat telegram “0”. Send value“1”cyclically: Cycling to send the hearbeat telegram “1”. Send value“1/0” inverted cyclically: Cycling to send the hearbeat telegram “0/1”.
3	->LCD display of the rocker buttons image	-Buttons image “same source” -Buttons image “independent source”	Buttons image “same source”: All button’s images are the same image source. Buttons image “independent source”: You can download different images for every button.
_Brightness of button LED			
4	Brightness of button LED ON	Level 00%...(100%)	Set brightness of button LED ON.
5	Brightness of button LED OFF	Level (00%)...100%	Set brightness of button LED OFF.
6	Change brightness of button	-Disable	Disable: The LED ON brightness of

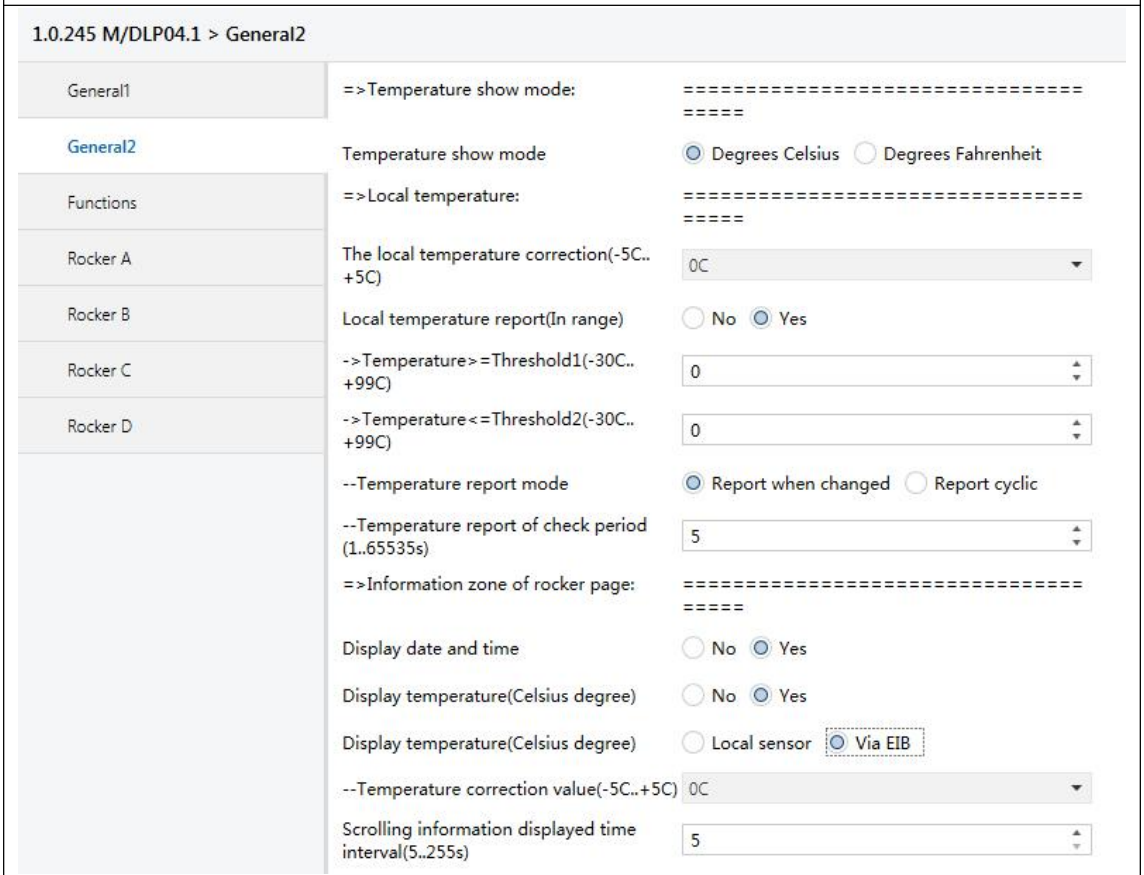
	LED ON via EIB	-Enable	the buttons can't changed by other KNX/EIB devices. Enable: Other devices on the bus can send telegram to change the LED ON brightness of the buttons.
7	Change brightness of button LED OFF via EIB	-Disable -Enable	Disable: The LED OFF brightness of the buttons can't changed by other KNX/EIB devices. Enable: Other devices on the bus can send telegram to change the LED OFF brightness of the buttons.
_Brightness of the LCD			
8	Brightness of the LCD	Level 00%...(100%)	Set the LCD level of the backlight.
9	Change brightness of LCD via EIB	-Disable -Enable	Disable: The LCD's brightness can't changed by other KNX/EIB devices. Enable: Other devices on the bus can send telegram to change LCD's brightness.
_Automatic darker			
10	LCD and LED brightness automatic darker	-Disable -Enable	It's energy- saving mode.if enable, LCD and LED brightness will automatic darker after a set delay.
11	--LCD and LED brightness automatic darker after a delay	3...(5)...255s	Set the delay time of LCD and LED brightness automatic darker.
12	--LED brightness automatic darker at ON	Level 00%...(20%)...100%	Set the LED brightness level of automatic darker at ON.
13	--LCD brightness automatic darker	Level (00%)...100%	Set the LCD brightness level of automatic darker.



14	--The operation of first time press the button	-Normal operation -The brightness of ON status	Normal operation: Operate normally according to the setting of the button. The brightness of ON status: The operation of first time press the button the brightness of ON status.
15	Active infrared function via bus	-Disable -Enable	Enable or disable for Active infrared function via bus.
16	Infrared default active status	-Inactive -Active	Inactive: Infrared default status is inactive. Active: Infrared default status is active.
17	Lock the buttons via EIB	-Disable -Enable	Disable: Can't lock the buttons via EIB. Enable: Can lock the buttons via EIB.
_ The button trigger			
18	Enable buttons is triggered via EIB	-Disable -Enable	Enable or disable for buttons is triggered via EIB.
19	--The button trigger condition	- '0'-trigger - '1'-trigger	'0'-trigger: Press '0' the button trigger. '1'-trigger:Press '1' the button trigger.
20	--Enable rocker A...D	-No	The DLP panel there are 5 pages,

	buttons is triggered via EIB	-Yes	the first include A,B,C,D buttons. This parameter is set can or can't trigger these buttons via EIB.
21	--Enable rocker E...H buttons is triggered via EIB	-No -Yes	This is the second page. This parameter is set can or can't trigger E...H buttons via EIB.
22	--Enable rocker I...L buttons is triggered via EIB	-No -Yes	This is the third page. This parameter is set can or can't trigger I...L buttons via EIB.
23	Enable Slave Clock	-Disable -Enable	Inside DLP panel has a slave clock, if enable and the time can displayed on DLP.
24	Read the object status of the rockers	-Disable -Enable	Set enable or disable read the object status of the rockers.
25	--Delay for read the object status(5...255s)	(5)...255s	Set the delay time for read the object status.

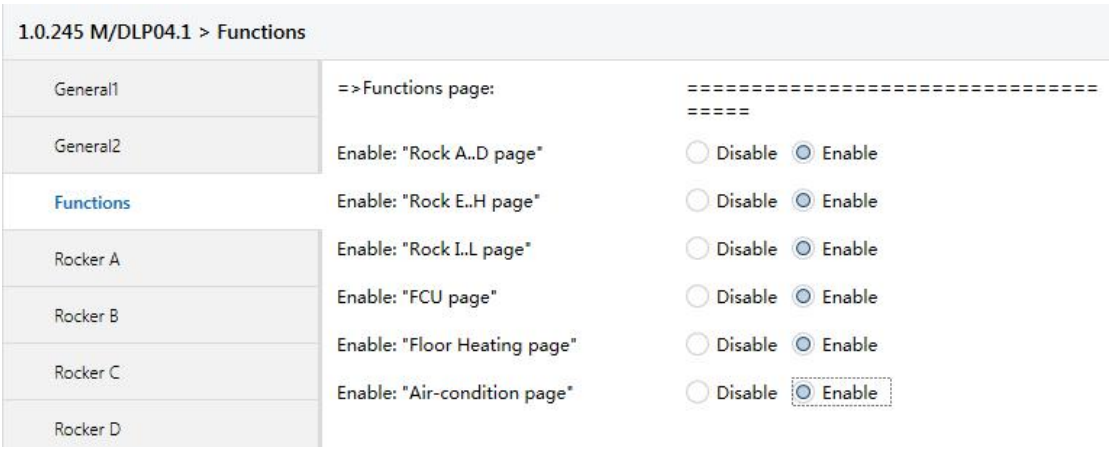
1.1_General 2



No.	ETS-Parameter	Range (default)	Description
=>Temperature show mode			
1	Temperature show mode	-Degrees Celsius -Degrees Fahrenheit	Set temperature show mode: Celsius(C) Fahrenheit(F)
=>Local temperature			
2	The local temperature correction(-5C...+5C)	-5C...(0C)...+5C	DLP panel embedded with a temperature sensor, sometimes has deviation, you can correction it by set the parameter.
3	Local temperature report(In range)	-No -Yes	Report the local temperaturein range.
4	->Temperature=>Threshold1 (-30C...+99C)	-30C...(0C)...+99C	Set the temperature show threshold1.
5	->Temperature=>Threshold2 (-30C...+99C)	-30C...(0C)...+99C	Set the temperature show threshold2.
6	--Temperature report mode	-Report when changed -Report cyclic	Report when changed: The temperature is reported when the temperature changed. Report cyclic: Always report temperature values in a loop.
7	--Temperature report of check period(1...65535s)	1...(5)...65535s	Set the time for temperature report of check period.
=>Information zone of rocker page			
8	Display date and time	-No -Yes	Set the rocker page whether dislay date and time.
9	Display temperatur(Celsius degrees)	-No -Yes	Set the rocker page whether dislay temperatur(Celsius degrees) .
10	Display temperatur(Celsius degrees)	-Local sensor -Via EIB	Local sensor:The display temperature is read through the local sensor. Via EIB: The display temperature is controlled via EIB.
11	--Temperature correction value(-5C...+5C)	-5C...(0C)...+5C	Set the temperature correction value.
12	Scrolling information displayed time interval(5...255s)	(5)...255s	Set the DLP panel scrolling information displayed time interval.

2.0_Functions

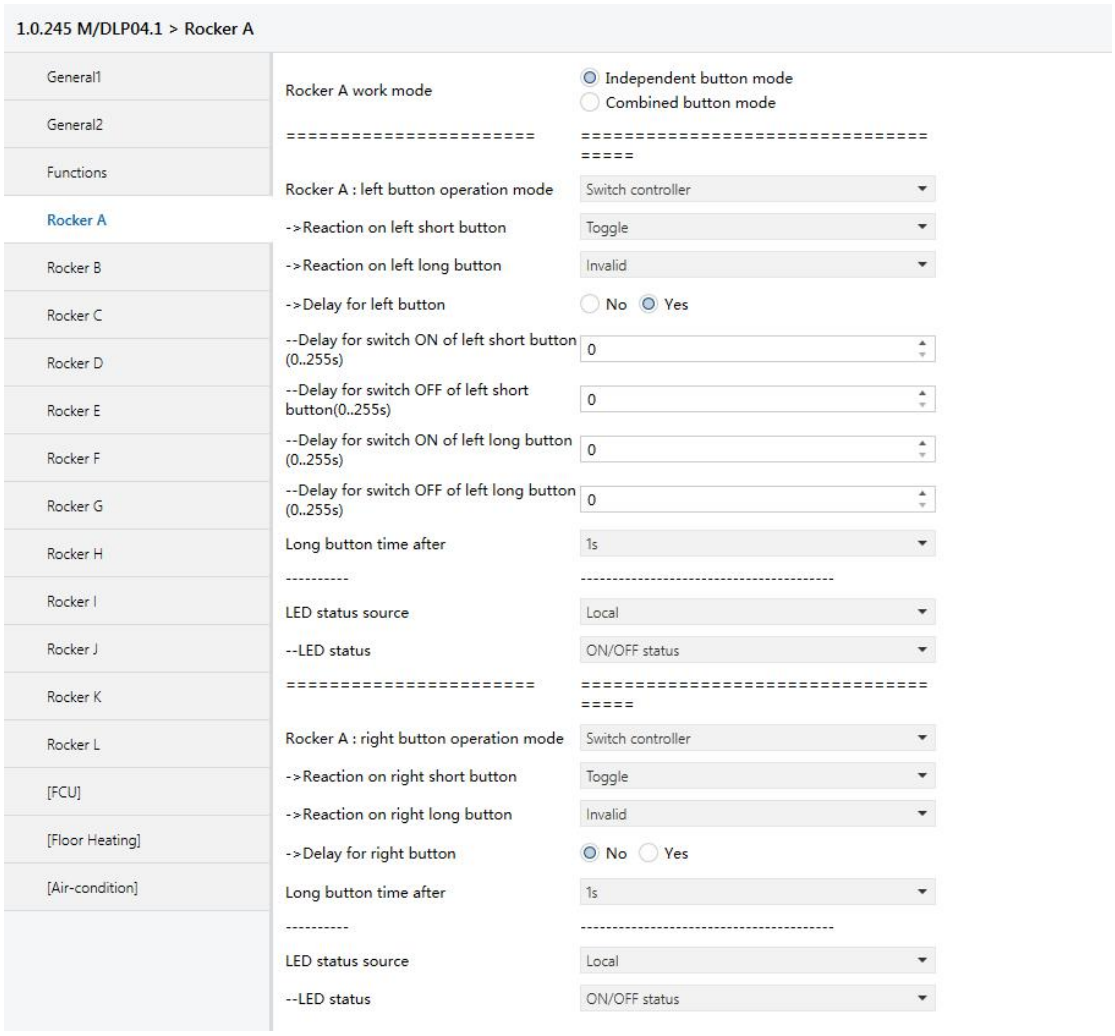
=>Functions page



No.	ETS-Parameter	Range (default)	Description
1	Enable:“Rocker A...D page”	-Disable -Enable	Enable or disable display “Rocker A...D page”.
2	Enable:“Rocker A...D page”	-Disable -Enable	Enable or disable display “Rocker E...H page”.
3	Enable:“Rocker A...D page”	-Disable -Enable	Enable or disable display “Rocker I...L page”.
4	Enable: “FCU page”	-Disable -Enable	Enable or disable display “FCU page”.
5	Enable: “Floor Heating page”	-Disable -Enable	Enable or disable display “Floor Heating page”.
6	Enable: “Air-condition page”	-Disable -Enable	Enable or disable display “Air-condition page”.

2.1_Rocker (A...L)

_Independent button mode

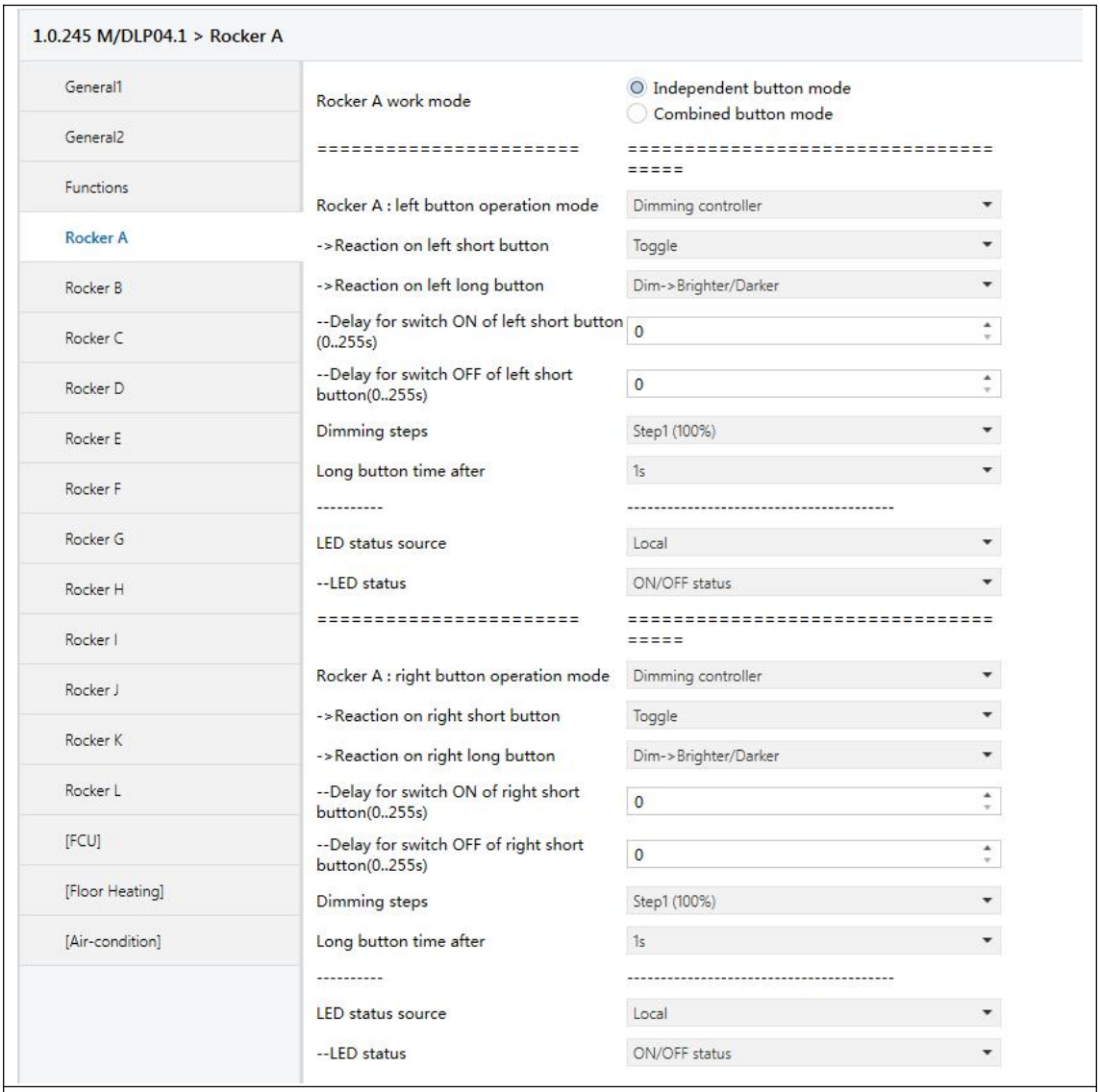


No.	ETS-Parameter	Range (default)	Description
1	Rocker A work mode	-Independent button mode -Combined button mode	Independent button mode: Rocker A divided into left button and right button, The left button and the right button are independent. Combined button mode: Control is combined with left and right buttons.
_Switch controller (left /right button operation mode: Switch controller)			
_ left button			
2	Rocker A: left button operation mode	-Switch controller -Dimming controller -Shutter controller -Flaxible controller -Scene controller -Sequence controller	The function of the Rocker “A” work mode can be selected with the following parameter.

		-Percentage controller -Threshold controller -String(14bytes)controller -Alternate controller -Combination controller	
3	->Reaction on left short button	-Invalid -Toggle -ON -OFF	Invalid: Left short button is no reaction. Toggle: Left short button is toggle. ON: Left short button is on. OF: Left short button is off.
4	->Reaction on left long button	-Invalid -Toggle -ON -OFF	Invalid: Left long button is no reaction. Toggle: Left long button is toggle. ON: Left long button is on. OF: Left long button is off.
5	->Delay for left button	-No -Yes	No: There is not delay for operation left button. Yes: If you select yes, will appears some parameter as follows.
6	--Delay for switch ON of left short button(0...255s)	(0)...255s	Set the delay time for switch ON of left short button delay operation. The delay time range is 0-255s.
7	--Delay for switch OFF of left short button(0...255s)	(0)...255s	Set the delay time for switch OFF of left short button delay operation. The delay time range is 0-255S.
8	--Delay for switch ON of left long button(0...255s)	(0)...255s	Set the delay time for switch ON of left long button delay operation. The delay time range is 0-255S.
9	--Delay for switch OFF of left long button(0...255s)	(0)...255s	Set the delay time for switch OFF of left long button delay operation. The delay time range is 0-255S.
10	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
11	LED status source	-Local -From bus -Mutually exclusive display	Local: The LED status root in local. From bus: The LED status root in bus control.

			Mutually exclusive display: The LED status root in mutually exclusive display.
12	--LED status	-Flashing, then ON -Flashing, then OFF -Flashing, then status -ON/OFF status	Set the status of LED. Flashing, then ON: When pressing the button LED will flashing, then theLED remain ON. Flashing, then OFF: When pressing the button LED will flashing,then theLED remain OFF. Flashing, then status: When pressing the button LED will flashing, then LED's status is same to the object's status. ON/OFF status: The LED's status is same to the object's status.
_Right button			
13	Rocker A: Right button operation mode	-Switch controller -Dimming controller -Shutter controller -Flaxible controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String(14bytes)controller -Alternate controller -Combination controller	The function of the Rocker "A" work mode can be selected with the following parameter.
14	->Reaction on right short button	-Invalid -Toggle -ON -OFF	Invalid: Right short button is no reaction. Toggle: Right short button is toggle. ON: Right short button is on. OF: Right short button is off.
15	->Reaction on right long button	-Invalid -Toggle -ON -OFF	Invalid: Right long button is no reaction. Toggle: Right long button is toggle. ON: Right long button is on. OF: Right long button is off.
16	--Delay for right button	-No	No: There is not delay for

		-Yes	operation right button. Yes: If you select yes, will appears some parameter as follows.
17	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
18	LED status source	-Local -From bus -Mutually exclusive display	Local: The LED status root in local. From bus: The LED status root in bus control. Mutually exclusive display: The LED status root in mutually exclusive display.
19	--LED status	-Flashing, then ON -Flashing, then OFF -Flashing, then status -ON/OFF status	Set the status of LED. Flashing, then ON: When pressing the button LED will flashing, then theLED remain ON. Flashing, then OFF: When pressing the button LED will flashing,then theLED remain OFF. Flashing, then status: When pressing the button LED will flashing, then LED's status is same to the object's status. ON/OFF status: The LED's status is same to the object's status.
_Dimming controller (left /right button operation mode: Dimming controller)			

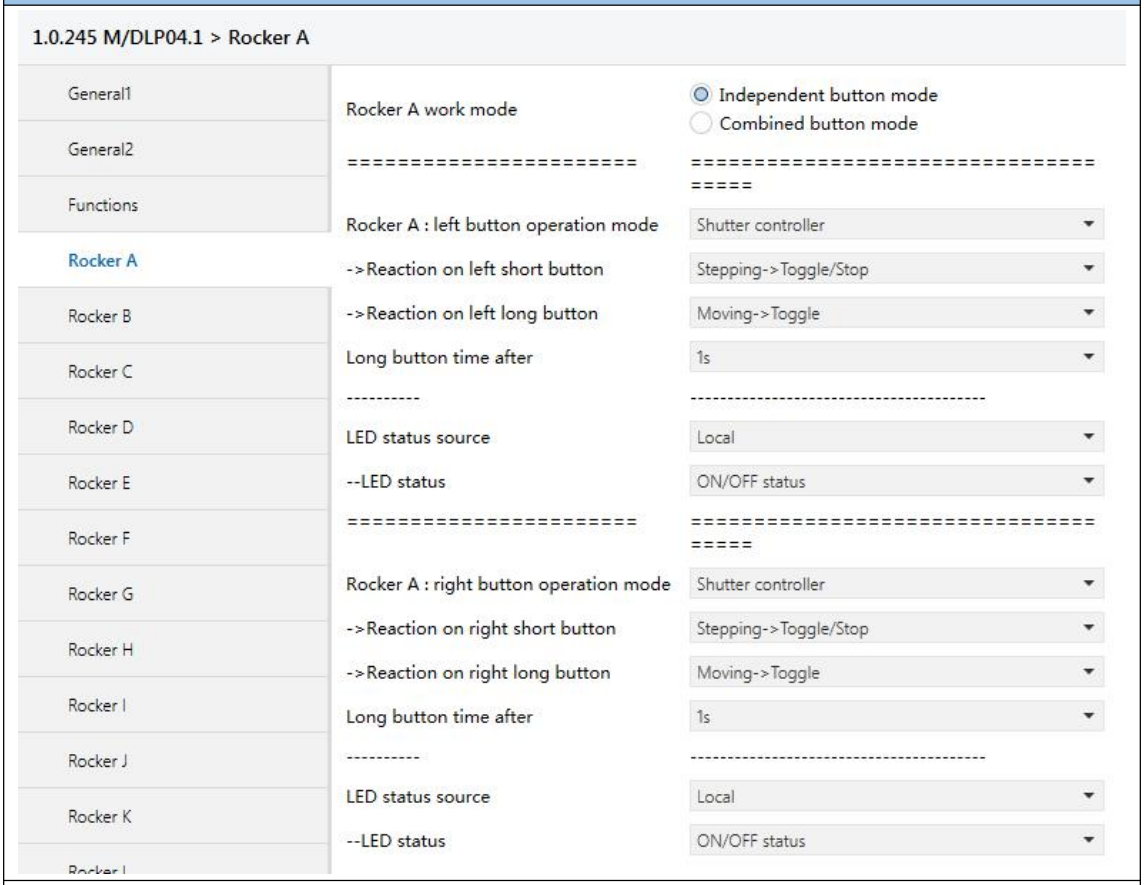


_Left button

20	->Reaction on leftt short button	-Invalid -Toggle -ON -OFF	Invalid: Left short button is no reaction. Toggle: Left short button is toggle. ON: Left short button is on. OF: Left short button is off.
21	->Reaction on left long button	-Invalid -Dim->Brighter -Dim->Darker -Dim->Brighter/Darker	Invalid: Left short button is no reaction. Dim->Brighter:Long press left button to increase light brightness. Dim->Darker: Long press left button to decrease light brightness.

			Dim->Brighter/Darker: Long press left button to increase light brightness, then long press left button again to decrease light brightness.
22	--Delay for switch ON of left short button(0...255s)	(0)...255s	Set the delay time for switch ON of left short button delay operation. The delay time range is 0-255s.
23	--Delay for switch OFF of left short button(0...255s)	(0)...255s	Set the delay time for switch OFF of left short button delay operation. The delay time range is 0-255S.
24	Dimming steps	-Step 1(100%) -Step 2(50%) -Step 3(25%) -Step 4(12.5%) -Step 5(6.25%) -Step 6(3.123%) -Step 7(1.56%)	Press left button, the first press the lightness is brightest, the second decrease light brightness by half, and so on, the seventh decrease light brightness to the weak.
25	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_right button			
26	->Reaction on right hort button	-Invalid -Toggle -ON -OFF	Invalid: Right short button is no reaction. Toggle: Right short button is toggle. ON: Right short button is on. OF: Right short button is off.
27	->Reaction on right long button	-Invalid -Dim->Brighter -Dim->Darker -Dim->Brighter/Darker	Invalid: Right short button is no reaction. Dim->Brighter:Long press right button to increase light brightness. Dim->Darker: Long press right button to decrease light brightness. Dim->Brighter/Darker: Long press right button to increase light brightness, then long press right button again to decrease light

			brightness.
28	--Delay for switch ON of right short button(0...255s)	(0)...255s	Set the delay time for switch ON of right short button delay operation. The delay time range is 0-255s.
29	--Delay for switch OFF of right short button(0...255s)	(0)...255s	Set the delay time for switch OFF of right short button delay operation. The delay time range is 0-255S.
30	Dimming steps	-Step 1(100%) -Step 2(50%) -Step 3(25%) -Step 4(12.5%) -Step 5(6.25%) -Step 6(3.123%) -Step 7(1.56%)	Press right button, the first press the lightness is brightest, the second decrease light brightness by half, and so on, the seventh decrease light brightness to the weak.
31	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_ Shutter controller (left /right button operation mode: Shutter controller)			

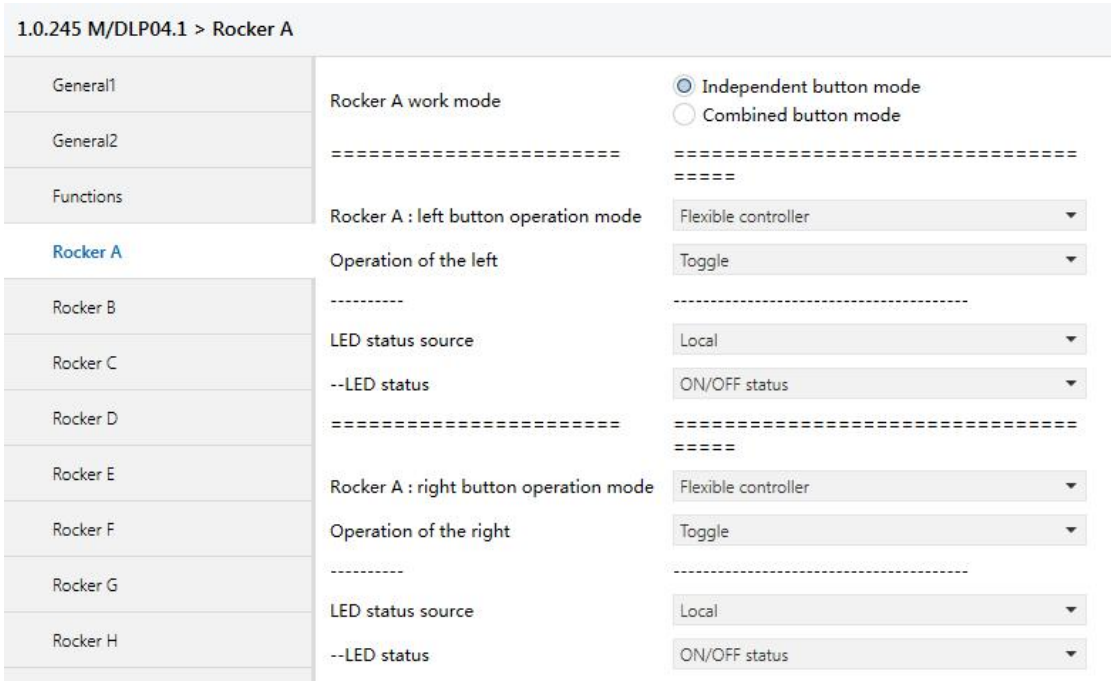


_Left button			
32	->Reaction on leftt short button	-Invalid -Stepping->Increase/ Stop	Invalid: Short press left button is no reaction.

		-Stepping->Decrease/ Stop -Stepping->Toggle/Stop -Moving->Up -Moving->Down -Moving->Toggle	Stepping->Increase/Stop: Short press left button to increase/ stop. Stepping->Decrease/Stop: Short press left button to Decrease/ Stop. Stepping->Toggle/Stop: Short press left button to toggle/stop. Moving->Up: Short press left button to up. Moving->Down: Short press left button to down. Moving->Toggle: Short press left button to toggle.
33	->Reaction on left long button	-Invalid -Stepping->Increase/ Stop -Stepping->Decrease/ Stop -Stepping->Toggle/Stop -Moving->Up -Moving->Down -Moving->Toggle -Press: Move->Up Release: Stop -Press: Move->Down Release: Stop -Press: Move->Toggle Release: Stop	Invalid: Long press left button is no reaction. Stepping->Increase/Stop: Long press left button to increase / stop. Stepping->Decrease/Stop: Long press left button to Decrease/ Stop. Stepping->Toggle/Stop: Long press left button to toggle/stop. Moving->Up: Long press left button to up. Moving->Down: Long press left button to down. Moving->Toggle: Long press left button to toggle. Press: Move->Up Release: Stop: Long press left button to move up, Release to stop. Press: Move->Down Release: Stop: Long press left button to move down, Release to stop. Press: Move->Toggle Release: Stop: Long press left button to move toggle, Release to stop.

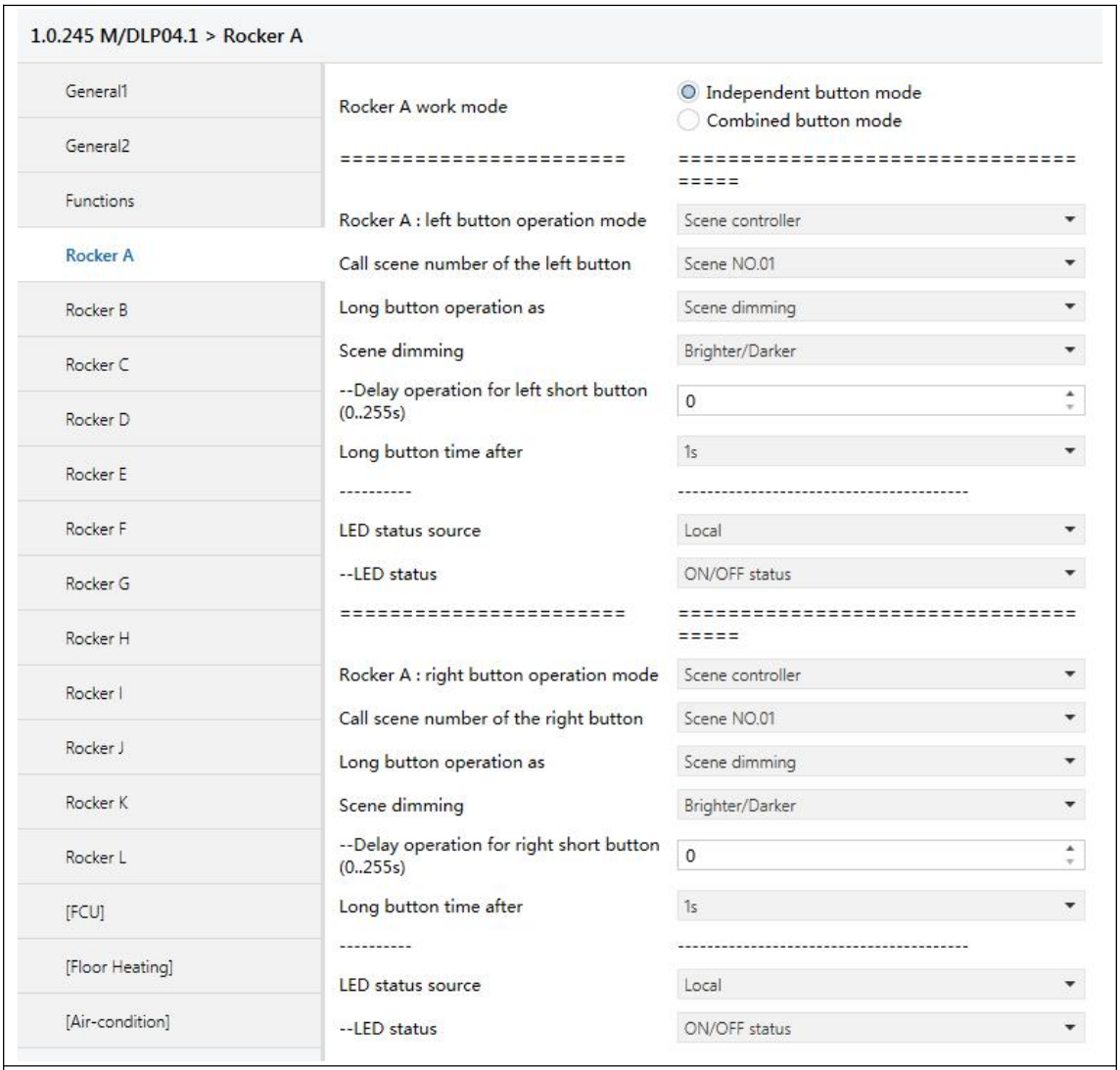
34	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Right button			
35	->Reaction on right short button	-Invalid -Stepping->Increase/ Stop -Stepping->Decrease/ Stop -Stepping->Toggle/Stop -Moving->Up -Moving->Down -Moving->Toggle	Invalid: Short press right button is no reaction. Stepping->Increase/Stop: Short press right button to increase/ stop. Stepping->Decrease/Stop: Short press right button to Decrease/ Stop. Stepping->Toggle/Stop: Short press right button to toggle/stop. Moving->Up: Short press right button to up. Moving->Down: Short press right button to down. Moving->Toggle: Short press right button to toggle.
36	->Reaction on left long button	-Invalid -Stepping->Increase/ Stop -Stepping->Decrease/ Stop -Stepping->Toggle/Stop -Moving->Up -Moving->Down -Moving->Toggle -Press: Move->Up Release: Stop -Press: Move->Down Release: Stop -Press: Move->Toggle Release: Stop	Invalid: Long press right button is no reaction. Stepping->Increase/Stop: Long press left button to increase / stop. Stepping->Decrease/Stop: Long press right button to Decrease/ Stop. Stepping->Toggle/Stop: Long press right button to toggle/stop. Moving->Up: Long press right button to up. Moving->Down: Long press right button to down. Moving->Toggle: Long press right button to toggle. Press: Move->Up Release: Stop: Long press right button to move up, Release to stop.

			Press: Move->Down Release: Stop: Long press right button to move down, Release to stop. Press: Move->Toggle Release: Stop: Long press right button to move toggle, Release to stop.
37	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Flexible controller (left /right button operation mode: Flexible controller)			



_Left button			
38	Operation of the left	-Invalid -Toggle -Press= “ON” -Release= “ON” -Press= “ON”, Release= “ON” -Press= “OFF” -Release= “OFF” -Press= “OFF”, Release= “OFF” -Press= “ON”, Release= “OFF” -Press= “OFF”, Release= “ON”	Invalid: The left button is invalid. Toggle: The left button is toggle. Press= “ON”: Press left button is on. Release= “ON”: Release left button is on. Press= “ON”, Release= “ON”: Press and release left button are all on. Press= “OFF”: Press left button is off. Release= “OFF”: Release left button is off. Press= “OFF”, Release= “OFF”:

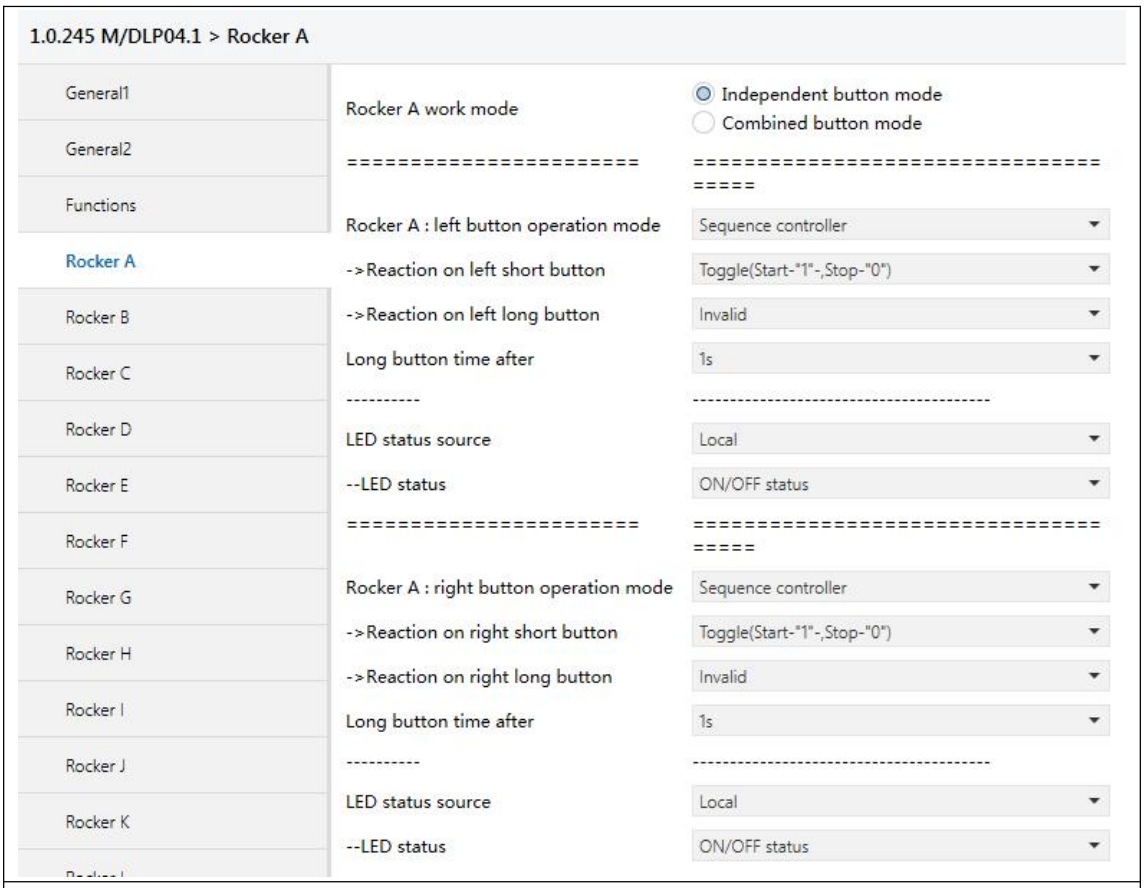
			Press and release left button are all off. Press= “ON”, Release= “OFF”：Press left button is on, release is off. Press= “OFF”, Release= “ON”：Press left button is off, release is on.
_Right button			
39	Operation of the right	-Invalid -Toggle -Press= “ON” -Release= “ON” -Press= “ON”, Release= “ON” -Press= “OFF” -Release= “OFF” -Press= “OFF”, Release= “OFF” -Press= “ON”, Release= “OFF” -Press= “OFF”, Release= “ON”	Invalid: The right button is invalid. Toggle: The right button is toggle. Press= “ON”: Press right button is on. Release= “ON”: Release right button is on. Press= “ON”, Release= “ON”: Press and release right button are all on. Press= “OFF”: Press right button is off. Release= “OFF”: Release right button is off. Press= “OFF”, Release= “OFF”：Press and release right button are all off. Press= “ON”, Release= “OFF”：Press right button is on, release is off. Press= “OFF”, Release= “ON”：Press right button is off, release is on.
_Scene controller (left /right button operation mode: Scene controller)			



_Left button

40	Call scene number of the left button	Scene NO.01...64	Call the scene number of left button, the range is 64 scene.
41	Long button operation as	-Invalid -Scene dimming -Scene saving -Dimming and Saving	Invalid: Long button operation is invalid. Scene dimming: Long press button for dimming up/down. Scene saving: Long button to saving the scene, and the scene number is 1..64. Dimming and Saving: Dimming and saving together. Long press button for dimming up/down, Long release button for stop dimming and scene save.
42	Scene dimming	-Brighter -Darker	Brighter: Long press button can increase light brightness.

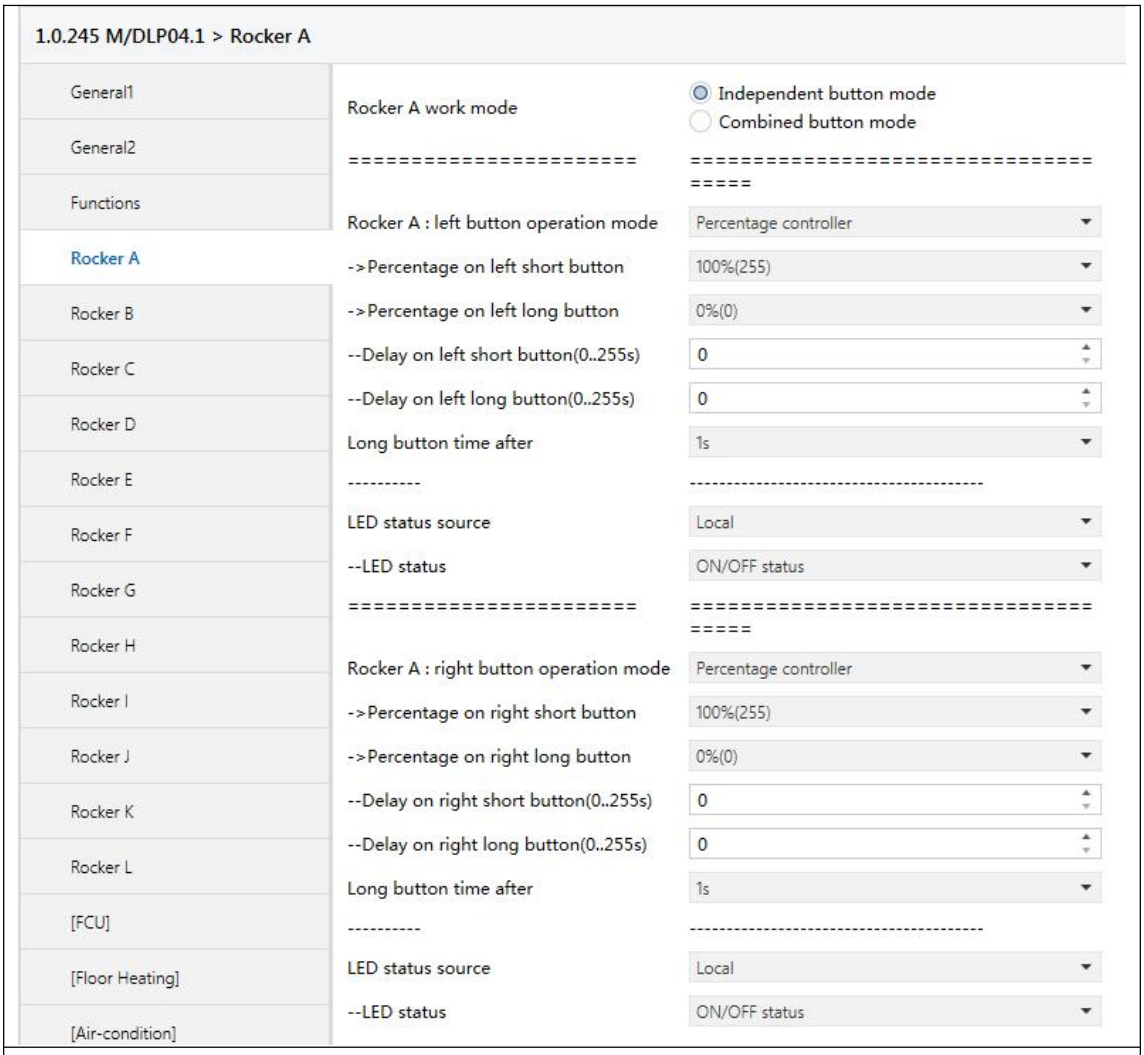
		-Brighter/Darker	Darker: Long press button can decrease light brightness. Brighter/Darker: Long press button, first, the light brighter, second, the light darker.
43	--Delay operation for left short button(0...255s)	(0)...255s	Set the delay operation time for left short button.
44	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
-Right button			
45	Call scene number of the right button	Scene NO.01...64	Call the scene number of right button, the range is 64 scene.
46	Long button operation as	-Invalid -Scene dimming -Scene saving -Dimming and Saving	Invalid: Long button operation is invalid. Scene dimming: Long press button for dimming up/down. Scene saving: Long button to saving the scene, and the scene number is 1..64. Dimming and Saving: Dimming and saving together. Long press button for dimming up/down, Long release button for stop dimming and scene save.
47	Scene dimming	-Brighter -Darker -Brighter/Darker	Brighter: Long press button can increase light brightness. Darker: Long press button can decrease light brightness. Brighter/Darker: Long press button, first, the light brighter, second, the light darker.
48	--Delay operation for right short button(0...255s)	(0)...255s	Set the delay operation time for right short button.
49	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Sequence controller (left /right button operation mode: Scene controller)			



_Left button

50	->Reaction on left short button	-Invalid -Toggle(Start-“1”,Stop-“0”) -Start with “1” -Stop with “0”	Invalid: Rocker A’s left short button is invalid. Toggle(Start-“1”,Stop-“0”): Rocker A’s left short button is a toggle, telegram value “1” is start, telegram value “0” is stop. Start with “1”: Telegram value “1” is start. Stop with “0”: Telegram value “0” is stop.
51	->Reaction on left long button	-Invalid -Toggle(Start-“1”,Stop-“0”) -Start with “1” -Stop with “0”	Invalid: Rocker A’s left short button is invalid. Toggle(Start-“1”,Stop-“0”): Rocker A’s left short button is a toggle, telegram value “1” is start, telegram value “0” is stop. Start with “1”: Telegram value “1” is start. Stop with “0”: Telegram value “0”

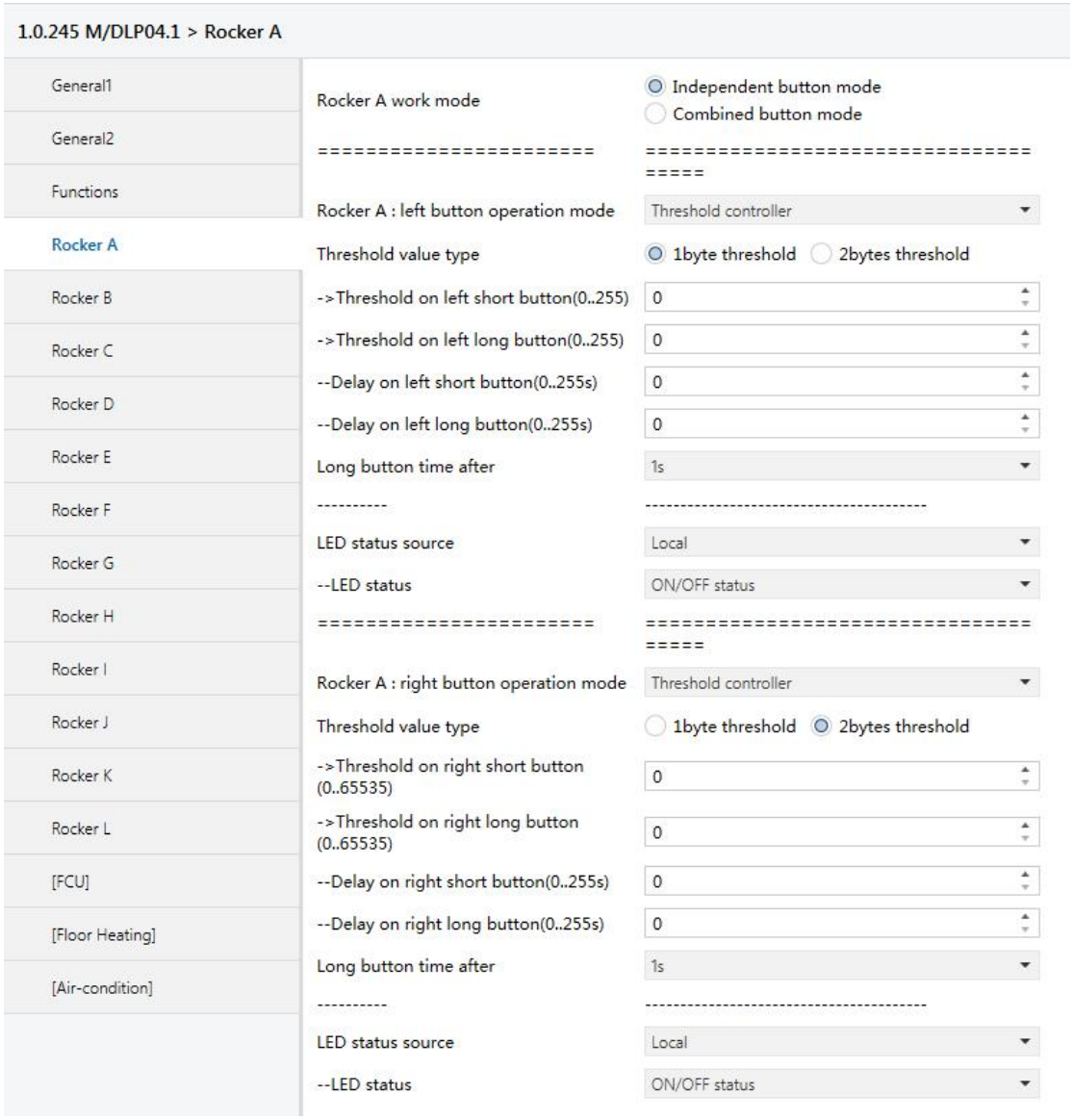
			is stop.
52	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Right button			
53	->Reaction on right short button	-Invalid -Toggle(Start-“1”,Stop-“0”) -Start with “1” -Stop with “0”	Invalid: Rocker A’ s right short button is invalid. Toggle(Start-“1”,Stop-“0”): Rocker A’s right short button is a toggle, telegram value “1” is start, telegram value “0” is stop. Start with “1”: Telegram value “1” is start. Stop with “0”: Telegram value “0” is stop.
54	->Reaction on right long button	-Invalid -Toggle(Start-“1”,Stop-“0”) -Start with “1” -Stop with “0”	Invalid: Rocker A’ s right short button is invalid. Toggle(Start-“1”,Stop-“0”): Rocker A’s right short button is a toggle, telegram value “1” is start, telegram value “0” is stop. Start with “1”: Telegram value “1” is start. Stop with “0”: Telegram value “0” is stop.
55	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Percentage controller (left /right button operation mode: Percentage controller)			



_Left button			
56	->Percentage on left short button	0%(0)...[100%(255)]	Set the light level of left short button.
57	->Percentage on left long button	[0%(0)]...100%(255)	Set the light level of left long button.
58	--Delay on left short button(0...255s)	(0)...255s	Set the delay time of left short button after press. The delay time range is 0-255S.
59	--Delay on left long button(0...255s)	(0)...255s	Set the delay time of left long button after press. The delay time range is 0-255S.
60	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Right button			
61	->Percentage on right short button	0%(0)...[100%(255)]	Set the light level of right short button.
62	->Percentage on right long button	[0%(0)]...100%(255)	Set the light level of right long button.
63	--Delay on right short	(0)...255s	Set the delay time of right short

	button(0...255s)		button after press. The delay time range is 0-255S.
64	--Delay on right long button(0...255s)	(0)...255s	Set the delay time of right long button after press. The delay time range is 0-255S.
65	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.

_Threshold controller (left /right button operation mode: Threshold controller)



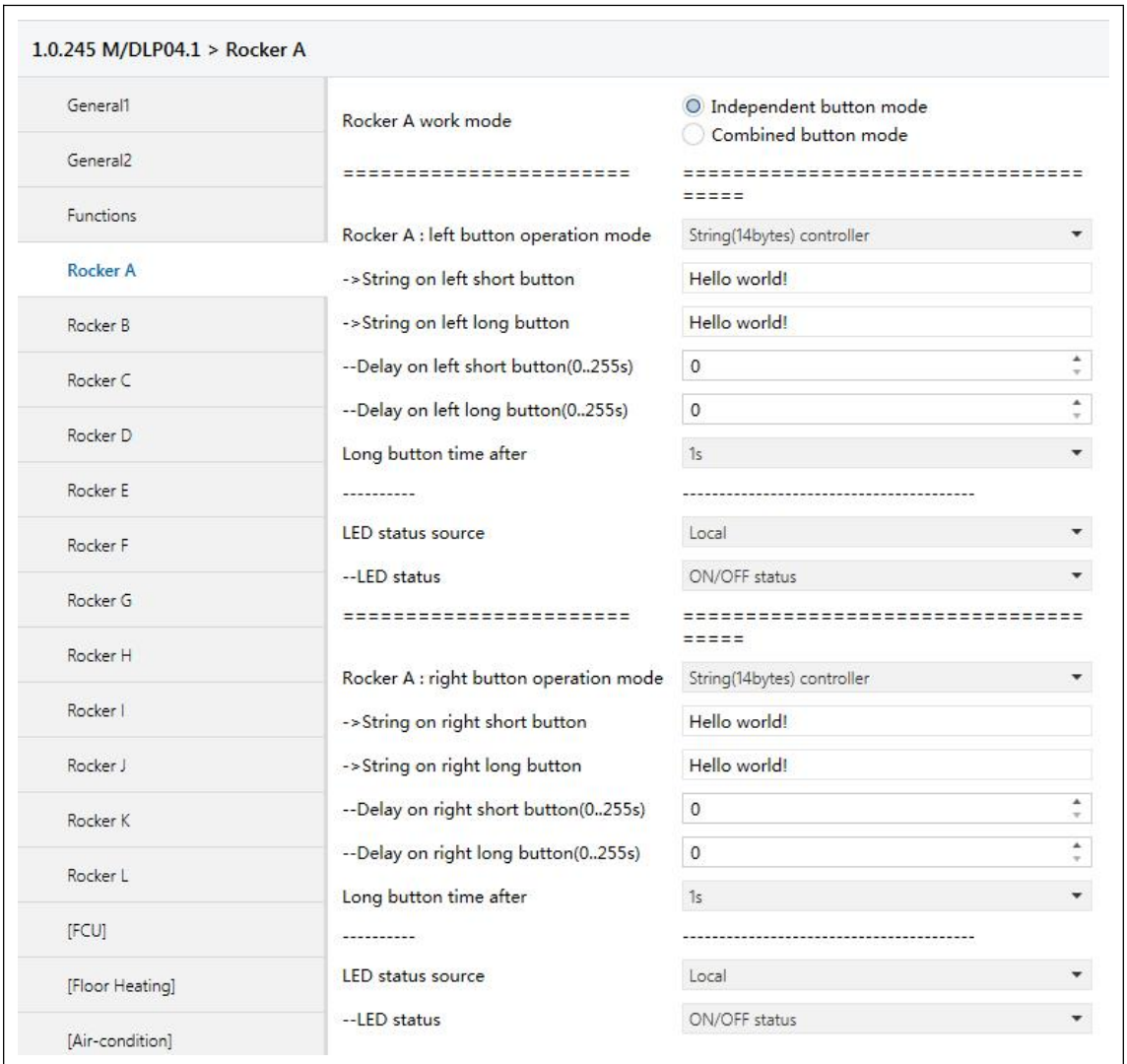
_Left button

66	Threshold value type	-1byte threshold -2byte threshold	Set threshold value type.

_1byte threshold

67	->Threshold on left short button(0...255)	(0)...255	Set the light level of left short button.
68	->Threshold on left long button(0...255)	(0)...255	Set the light level of left long button.

69	--Delay on left short button(0...255s)	(0)...255s	Set the delay time of left short button after press. The delay time range is 0-255s.
70	--Delay on left long button(0...255s)	(0)...255s	Set the delay time of left long button after press. The delay time range is 0-255s.
71	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.
_Right button			
72	Threshold value type	-1byte threshold -2byte threshold	Set threshold value type.
_2byte threshold			
73	->Threshold on right short button(0...65535)	(0)...255	Set the light level of right short button.
74	->Threshold on right long button(0...65535)	(0)...255	Set the light level of right long button.
75	--Delay on right short button(0...255s)	(0)...255s	Set the delay time of right short button after press. The delay time range is 0-255s.
76	--Delay on right long button(0...255s)	(0)...255s	Set the delay time of right long button after press. The delay time range is 0-255s.
77	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.
_String(14bytes) controller (left /right button operation mode: String(14bytes) controller)			



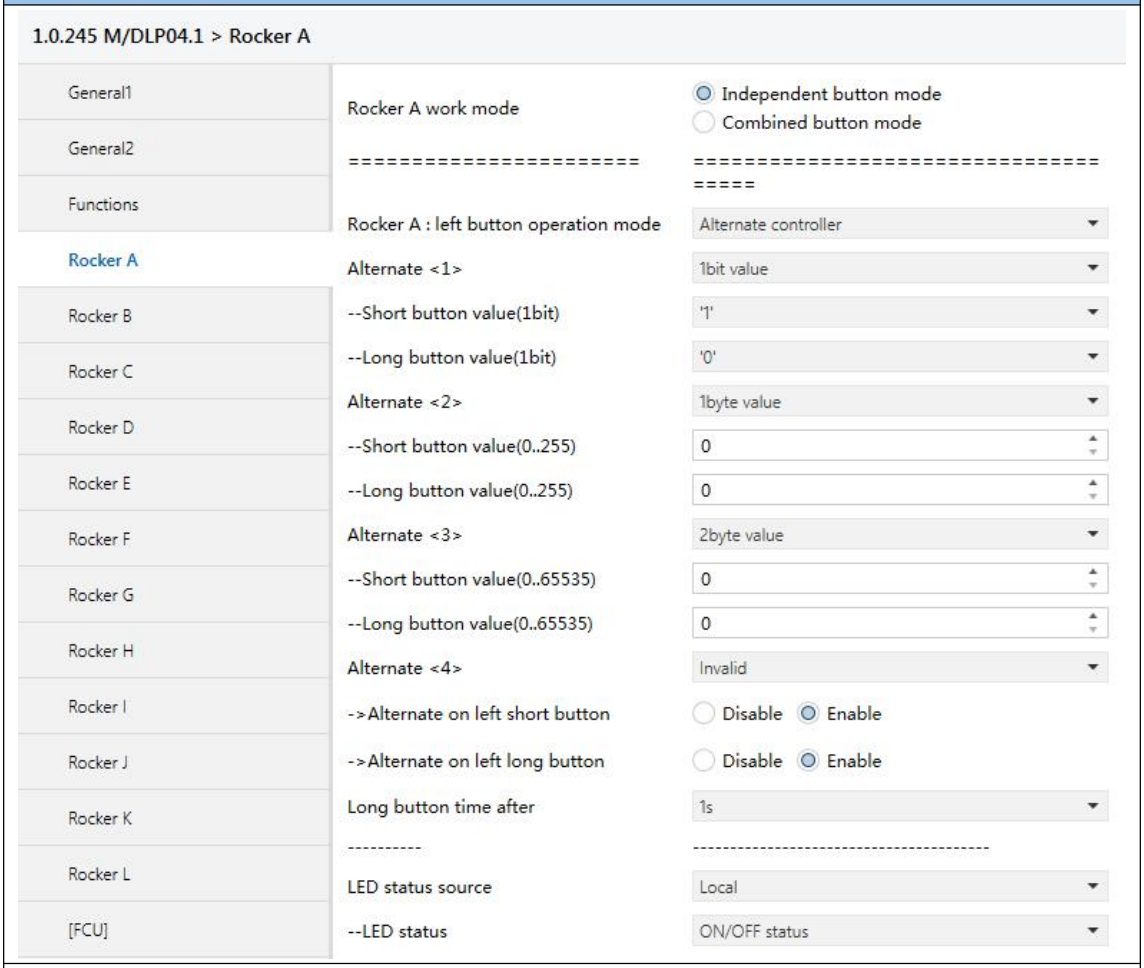
_Left button

78	->String on left short button	Hello world!	Short press left button can sends the value to the bus. The value type is string Max. length is 14bytes.
79	->String on left long button	Hello world!	Long press left button can sends the value to the bus. The value type is string.Max length is 14bytes.
80	--Delay on left short button(0...255s)	(0)...255s	Set the delay time after press short button. The delay time range is 0-255s.
81	--Delay on left long button(0...255s)	(0)...255s	Set the delay time after press long button. The delay time range is 0-255s.
82	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.

_Right button

83	->String on right short button	Hello world!	Short press right button can sends the value to the bus. The value type is string Max. length is 14bytes.
84	->String on right long button	Hello world!	Long press right button can sends the value to the bus. The value type is string.Max length is 14bytes.
85	--Delay on right short button(0...255s)	(0)...255s	Set the delay time after press short button. The delay time range is 0-255s.
86	--Delay on right long button(0...255s)	(0)...255s	Set the delay time after press long button. The delay time range is 0-255s.
87	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.

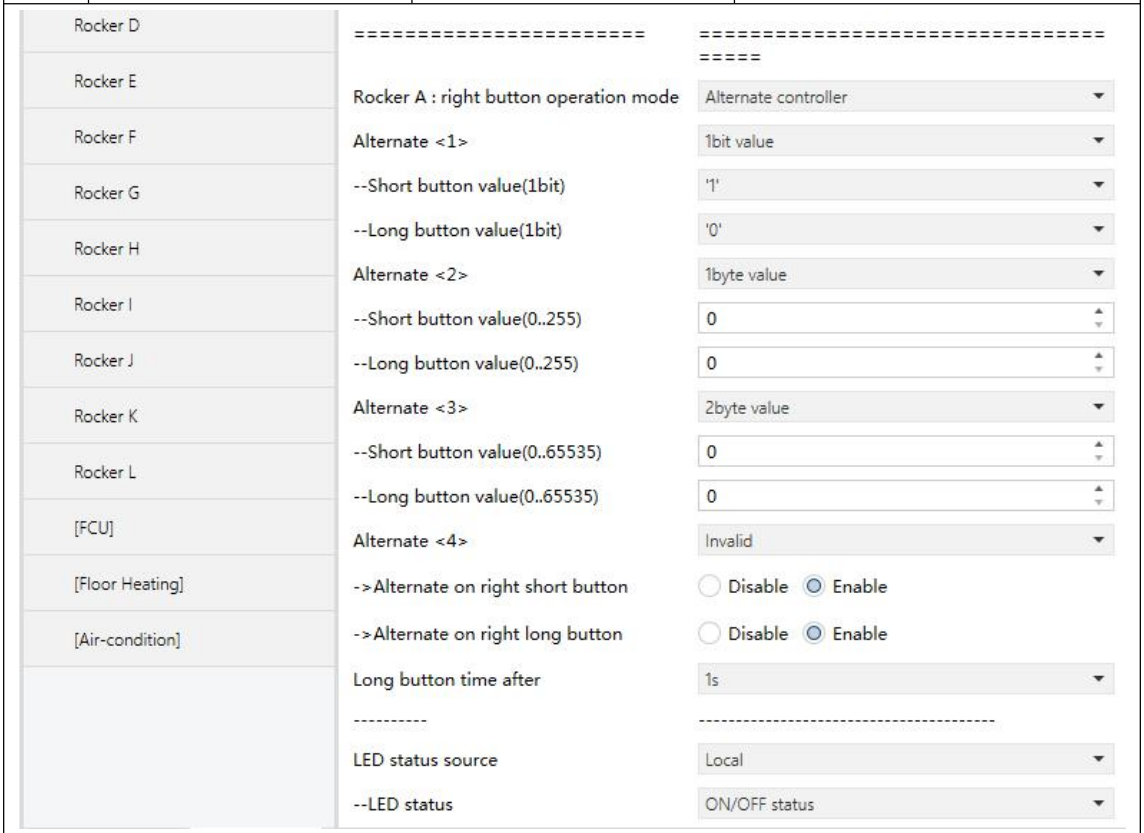
_Alternate controller (left /right button operation mode: Alternate controller)



_Left button

88	Alternate<1...4>	-Invalid -1bit value -1byte value	Set the alternate type and data. You can select 4 cycles every button and set different type.

		-2byte value	
89	--Short button value(1bit)	-Toggle -('1') - '0'	Enable 1bit, set the short button value.
90	--Long button value(1bit)	-Toggle - '1' -('0')	Enable 1bit, set the long button value.
91	--Short button value (0...255)	(0)...255	Enable 1byte, set the short button value.
92	--Long button value (0...255)	(0)...255	Enable 1byte, set the long button value.
93	--Short button value (0...65535)	(0)...65535	Enable 2bytes, set the short button value.
94	--Long button value (0...65535)	(0)...65535	Enable 2bytes, set the long button value.
95	->Alternate on left short button	-Disable -Enable	Set enable or disable alternate on left short button.
96	->Alternate on left long button	-Disable -Enable	Set enable or disable alternate on left long button.
97	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.

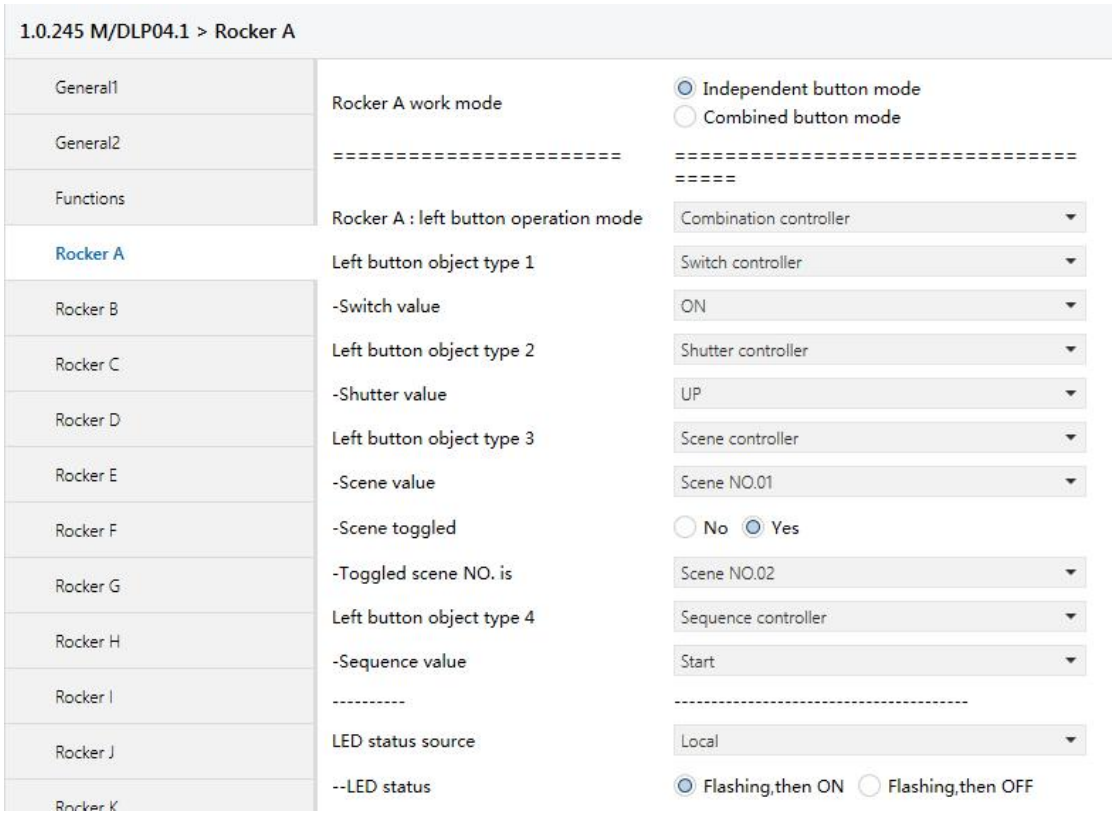


_Right button

98	Alternate<1...4>	-Invalid -1bit value	

		-1byte value -2byte value	
99	--Short button value(1bit)	-Toggle -(‘1’) - ‘0’	Enable 1bit, set the short button value.
100	--Long button value(1bit)	-Toggle - ‘1’ -(‘0’)	Enable 1bit, set the long button value.
101	--Short button value (0...255)	(0)...255	Enable 1byte, set the short button value.
102	--Long button value (0...255)	(0)...255	Enable 1byte, set the long button value.
103	--Short button value (0...65535)	(0)...65535	Enable 2bytes, set the short button value.
104	--Long button value (0...65535)	(0)...65535	Enable 2bytes, set the long button value.
105	->Alternate on left short button	-Disable -Enable	Set enable or disable alternate on left short button.
106	->Alternate on left long button	-Disable -Enable	Set enable or disable alternate on left long button.
107	Long button time after	0.2...(1)...60s	Set long button time, the default time is 1s.

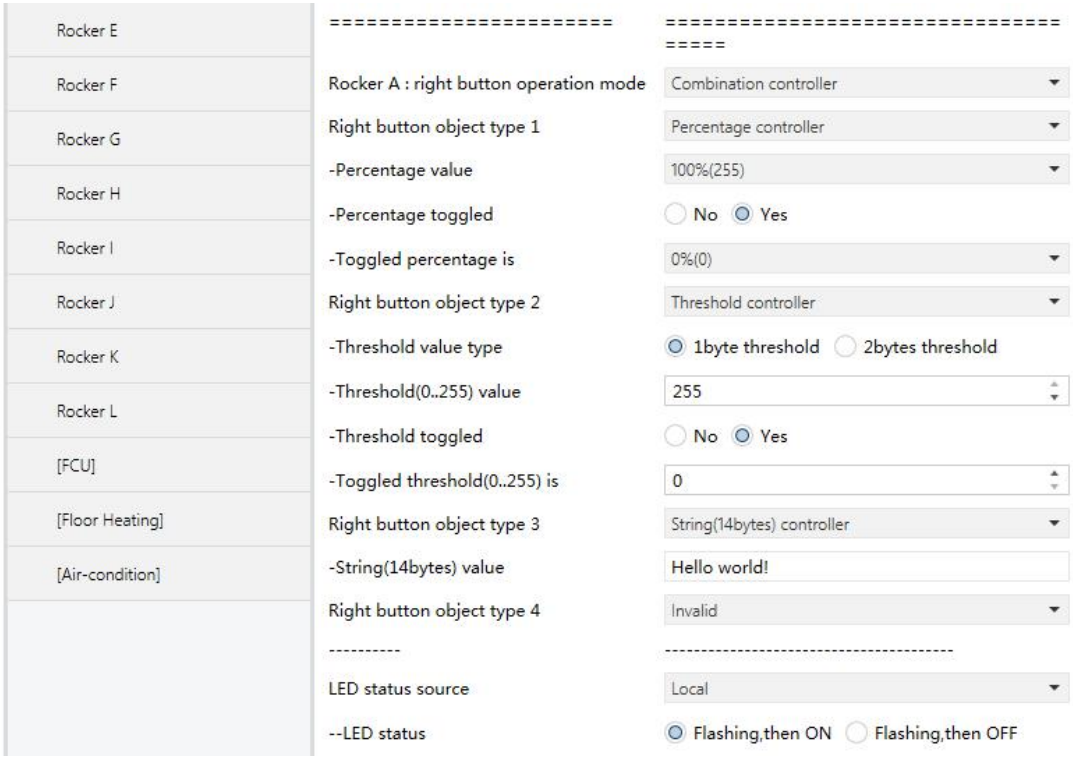
_Combination contoller (left /right button operation mode: Combination controller)



_Left button

108	Left button object type1...4	-Invalid -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -string(14bytes) controller	This mode is that left button can control several objects. If set some these items, and when press short button that can send several control telegram simultaneously. Maximum control object number of each button is 4.
_Switch controller			
109	-Swith value	-Toggle -ON -OFF	Toggle: When left button choose switch object, if press short button that switch toggle. ON: When left button choose switch object, if press short button that switch on. OFF: When left button choose switch object, if press short button that switch off.
_Shutter controller			
110	-Shutter value	-Toggle -UP -DOWN	Toggle: When left button choose shutter object, if press short button that shutter toggle. UP: When left button choose shutter object, if press short button that shutter up. DOWN: When left button choose shutter object, if press short button that shutter down.
_Scene controller			
111	-Scene value	Scene NO.01...64	When left button choose shutter object, you can choose the scene No.1...64.
112	-Scene toggled	-No -Yes	Set yes or no scene toggle.
113	-Toggled scene NO. is	Scene NO.01...64	Defined the scene when press short button toggle.
_Sequence controller			
114	-Sequence value	-Toggle -Start -Stop	Toggle: When left button choose sequence object, if press short button that sequence toggle. Start: When left button choose sequence object, if press short

			button that sequence start. Stop: When left button choose sequence object, if press short button that sequence stop.



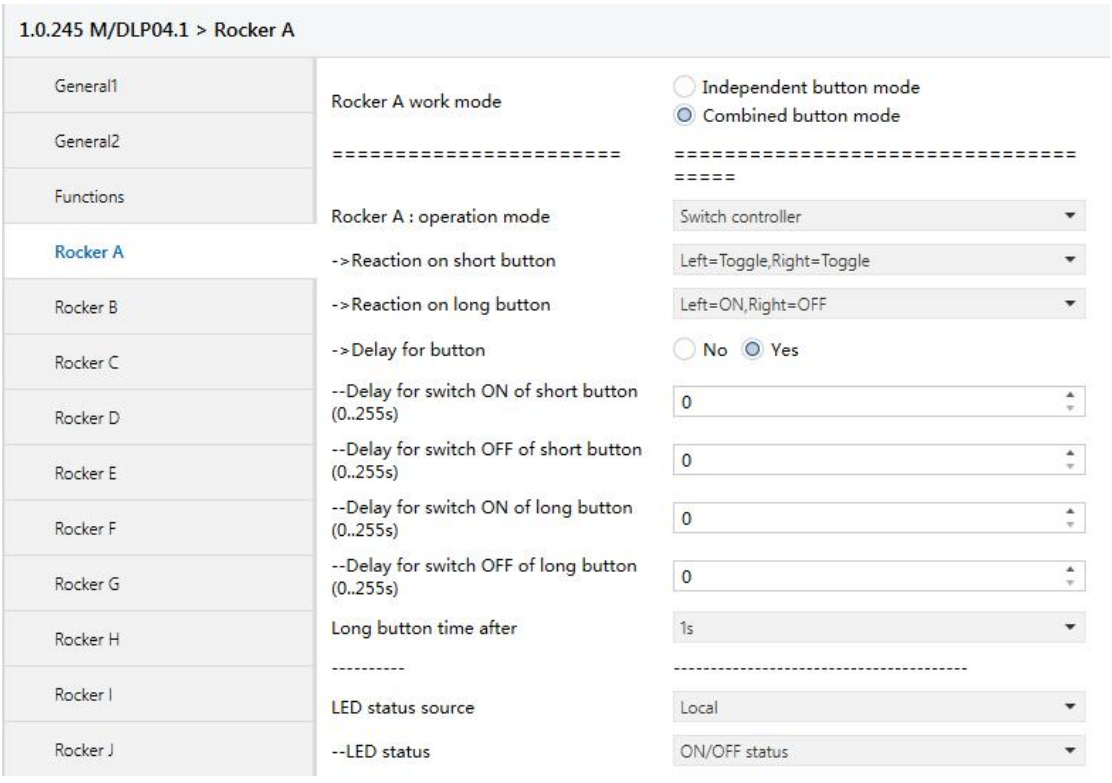
_Right button

_Percentage controller			
115	-Percentage value	0%(0)...[100%(255)]	When left button choose percentage object, you can set the chroma percentage.
116	-Percentage toggled	-No -Yes	Set yes or no control the percentage toggled.
117	-Toggled percentage is	[0%(0)]...100%(255)	Set the percentage of toggled.
_Threshold controller			
118	-Threshold value type	-1byte threshold -2bytes threshold	Set the threshold value type.
119	-threshold(0...255) value	0...(255)	Set the threshold value.
120	-threshold(0...65535) value	0...(1000)...65535	Set the threshold value.
121	-Threshold toggled	-No -Yes	Set yes or no control the threshold toggled.
122	-Toggled threshold(0...255) is	(0)...255	Set the toggled threshold.
123	-Toggled threshold(0...65535) is	(0)...65535	Set the toggled threshold.
-String(14bytes) controller			

124	-String(14bytes) value	Hello world!	Short press right button can sends the value to the bus. The value type is string Max. length is 14bytes.
125	LED status source	-Local -From bus -Mutually exclusive display	Local: The LED status root in local. From bus: The LED status root in bus control. Mutually exclusive display: The LED status root in mutually exclusive display.
126	--LED status	-Flashing, then ON -Flashing, then OFF	Flashing, then ON: When pressing the button LED will flashing, then theLED remain ON. Flashing, then OFF: When pressing the button LED will flashing,then theLED remain OFF.

_Combined button mode

_Switch controller

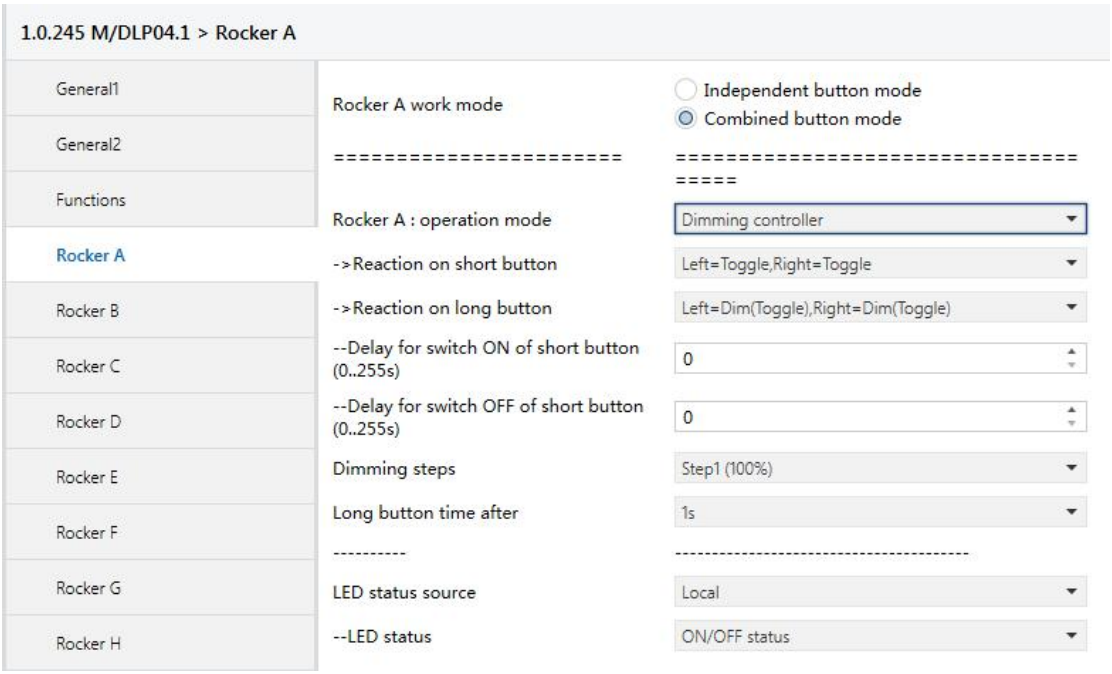


No.	ETS-Parameter	Range (default)	Description

1	->Reaction on short button	-Invalid -Left=Toggle, Right=Toggle -Left=ON, Right=OFF -Left=OFF, Right=ON -Left=ON, Right=ON -Left=OFF, Right=OFF	Invalid: Left and right short button are no reaction. Left=Toggle, Right=Toggle: Left and right short button are all toggle. Left=ON, Right=OFF: Left short button is on, right short button is off. Left=OFF, Right=ON: Left short button is off, right short button is on. Left=ON, Right=ON: Left and right short buttons are all on. Left=OFF, Right=OFF: Left and right short buttons are all off.
2	->Reaction on long button	-Invalid -Left=Toggle, Right=Toggle -Left=ON, Right=OFF -Left=OFF, Right=ON -Left=ON, Right=ON -Left=OFF, Right=OFF	Invalid: Left and right long button are no reaction. Left=Toggle, Right=Toggle: Left and right long button are all toggles. Left=ON, Right=OFF: Left long button is on, right long button is off. Left=OFF, Right=ON: Left long button is off, right long button is on. Left=ON, Right=ON: Left and right long buttons are all on. Left=OFF, Right=OFF: Left and right long buttons are all off.
3	->Delay for button	-No -Yes	Set yes or no delay for button.
4	--Delay for switch ON of short button(0...255s)	(0)...255s	Set the delay time for switch ON of short button delay operation. The delay time range is 0-255s.
5	--Delay for switch OFF of short button(0...255s)	(0)...255s	Set the delay time for switch OFF of short button delay operation. The delay time range is 0-255S.
6	--Delay for switch ON of long button(0...255s)	(0)...255s	Set the delay time for switch ON of long button delay operation. The delay time range is 0-255S.
7	--Delay for switch OFF of	(0)...255s	Set the delay time for switch OFF

	long button(0...255s)		of long button delay operation. The delay time range is 0-255S.
8	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.

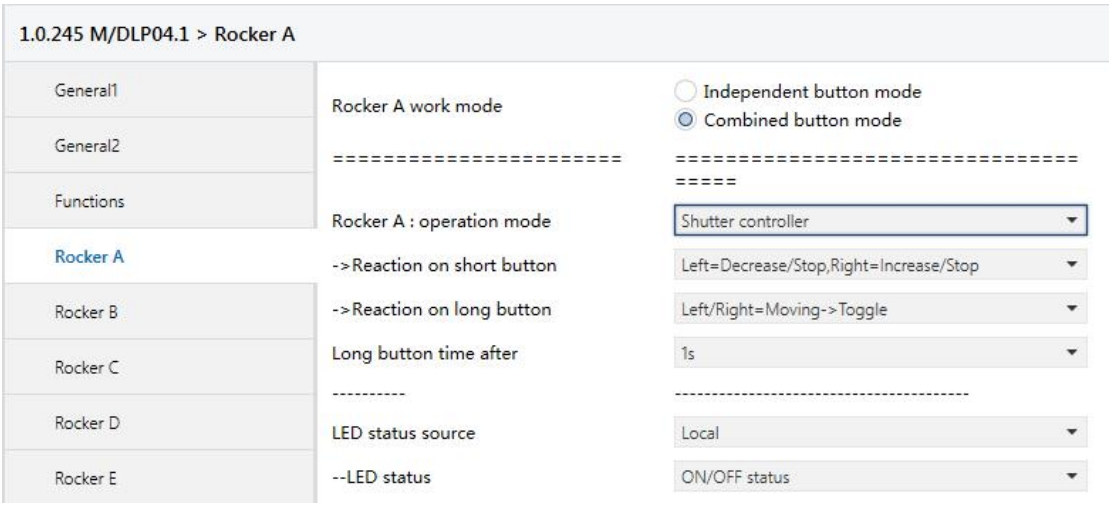
_Dimming controller



9	->Reaction on short button	-Invalid -Left=Toggle, Right=Toggle -Left=ON, Right=OFF -Left=OFF, Right=ON -Left=ON, Right=ON -Left=OFF, Right=OFF	Invalid: Left and right short button are no reaction. Left=Toggle, Right=Toggle: Left and right short button are all toggle. Left=ON, Right=OFF: Left short button is on, right short button is off. Left=OFF, Right=ON: Left short button is off, right short button is on. Left=ON, Right=ON: Left and right short buttons are all on. Left=OFF, Right=OFF: Left and right short buttons are all off.
10	->Reaction on long button	-Left=Dim(Toggle), Right=Dim(Toggle) -Left=Brighter, Right=Darker -Left=Darker, Right=Brighter	-Left=Dim(Toggle), Right= Dim (Toggle): Long press left and right are all toggles. -Left=Brighter, Right=Darker: Long press left button to increase

		-Left=Brighter, Right=Brighter -Left=Darker, Right=Darker	light brightness, long press right button to decrease light brightness. -Left=Darker, Right=Brighter: Long press left button to decrease light brightness, long press right button to increase light brightness. -Left=Brighter, Right=Brighter: Long press left and right buttons are all to increase light brightness. -Left=Darker, Right=Darker: Long press left and right buttons are all to decrease light brightness.
11	--Delay for switch ON of short button(0...255s)	(0)...255s	Set the delay time for switch ON of short button delay operation. The delay time range is 0-255s.
12	--Delay for switch OFF of short button(0...255s)	(0)...255s	Set the delay time for switch OFF of short button delay operation. The delay time range is 0-255S.
13	Dimming steps	-Step 1(100%) -Step 2(50%) -Step 3(25%) -Step 4(12.5%) -Step 5(6.25%) -Step 6(3.123%) -Step 7(1.56%)	Press button, the first press the lightness is brightest, the second decrease light brightness by half, and so on, the seventh decrease light brightness to the weak.
14	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.

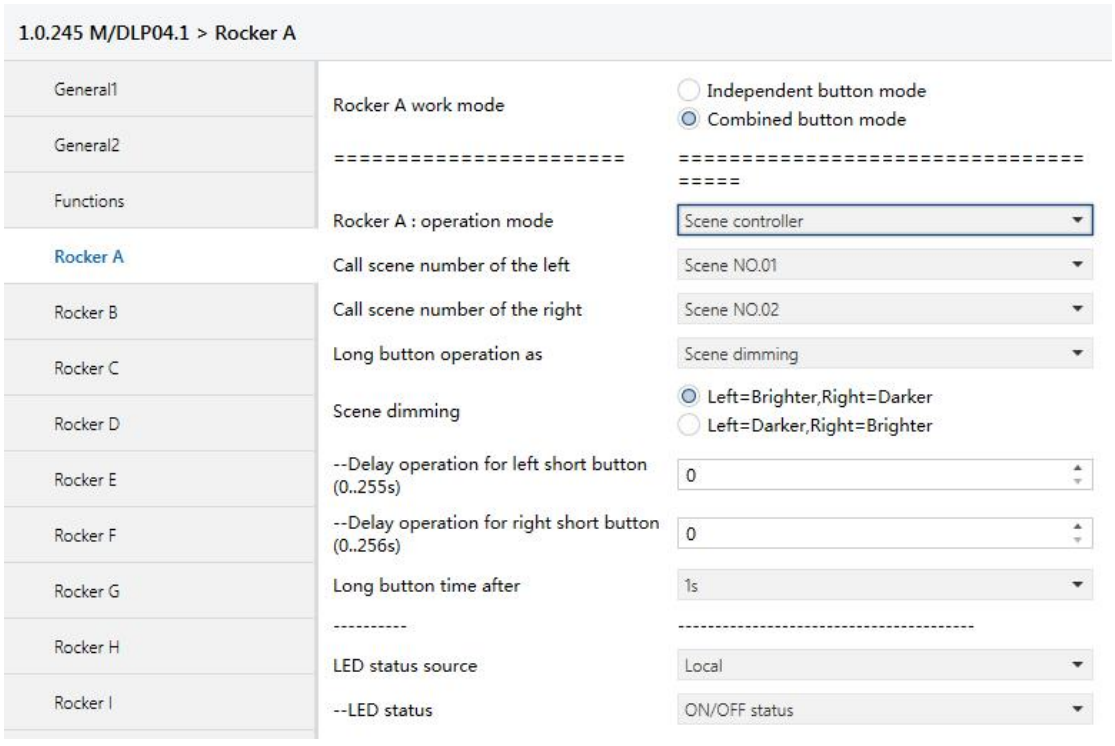
_Shutter controller



15	->Reaction on short button	-Invalid -Left=Decrease/Stop, Right=Increase/Stop -Left=Increase/Stop, Right=Decrease/Stop -Left/Right=Stepping-> Toggle/Stop -Left=UP, Right=DOWN -Left=DOWN, Right=UP -Left/Right=Moving-> Toggle	-Invalid: Left and right short button are no reaction. Left=Decrease/Stop, Right= Increase/Stop: Left short button to Decrease/Stop, Right short button to Increase/Stop. Left=Increase/Stop, Right= Decrease/Stop: Left short button to Increase/Stop, Right short button to Decrease/Stop. Left/Right=Stepping->Toggle/ Stop: Short press left and right button to Toggle/Stop. Left=UP, Right=DOWN: Left short button to up, right short button to down. Left=DOWN, Right=UP: Left short button to down, right short button to up. Left/Right=Moving-> Toggle: Short press left or right button to toggle.
16	->Reaction on long button	-Invalid -Left=Decrease/Stop, Right=Increase/Stop -Left=Increase/Stop, Right=Decrease/Stop -Left/Right=Stepping-> Toggle/Stop -Left=UP, Right=DOWN -Left=DOWN, Right=UP -Left/Right=Moving-> Toggle -Press: Left=Move->UP, Right=Move->DOWN, Release=Stop -Press: Left=Move-> DOWN,Right=Move->UP, Release=Stop -Press:Left/Right=Move-> Toggle, Release=Stop	Invalid: Left and right long button are no reaction. Left=Decrease/Stop, Right= Increase/Stop: Left long button to Decrease/Stop, Right long button to Increase/Stop. Left=Increase/Stop, Right= Decrease/Stop: Left long button to Increase/Stop, Right long button to Decrease/Stop. Left/Right=Stepping->Toggle/ Stop: Long press left and right button to Toggle/Stop. Left=UP, Right=DOWN: Left long button to up, right long button to down. Left=DOWN, Right=UP: Left long button to down, right long button to up.

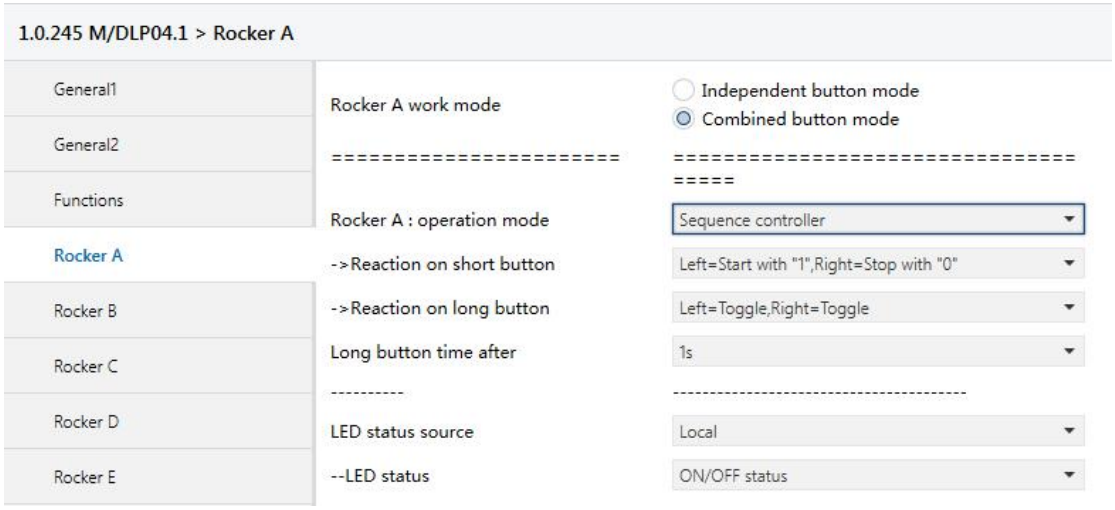
			Left/Right=Moving-> Toggle: Long press left or right button to toggle. Press: Left=Move->UP, Right= Move->DOWN, Release=Stop: Left long button to up, right long button to down, release to stop. Press: Left=Move-> DOWN, Right =Move->UP, Release=Stop: Left long button to down, right long button to up, release to stop. Press:Left/Right=Move->Toggle, Release=Stop: Long press left and right button to toggle, release to stop.
17	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.

_Scene controller



18	Call scene number of the left	Scene NO.01...64	Set call scene number of the left button.
19	Call scene number of the right	Scene NO.01...64	Set call scene number of the right button.
20	Long button operation as	-Invalid -Scene dimming -Scene saving	Invalid: Long button operation is invalid. Scene dimming: Long press button

		-Dimming and Saving	for dimming up/down. Scene saving: Long button to saving the scene, and the scene number is 1..64. Dimming and Saving: Dimming and saving together. Long press button for dimming up/down, Long release button for stop dimming and scene save.
21	Scene dimming	-Left=Brighter, Right= Darker -Left=Darker, Right= Brighter	Left=Brighter, Right= Darker: If you choose the scene dimming, long press left button will increase light brightness, long press right button will decrease light brightness. Left=Darker, Right= Brighter: Long press left button will decrease light brightness, long press right button will increase light brightness.
22	--Delay operation for left short button(0...255s)	(0)...255s	Set the delay operation time for left dhort button.
23	--Delay operation for right short button(0...256s)	(0)...256s	Set the delay operation time for right dhort button.
24	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
_Sequence controller			



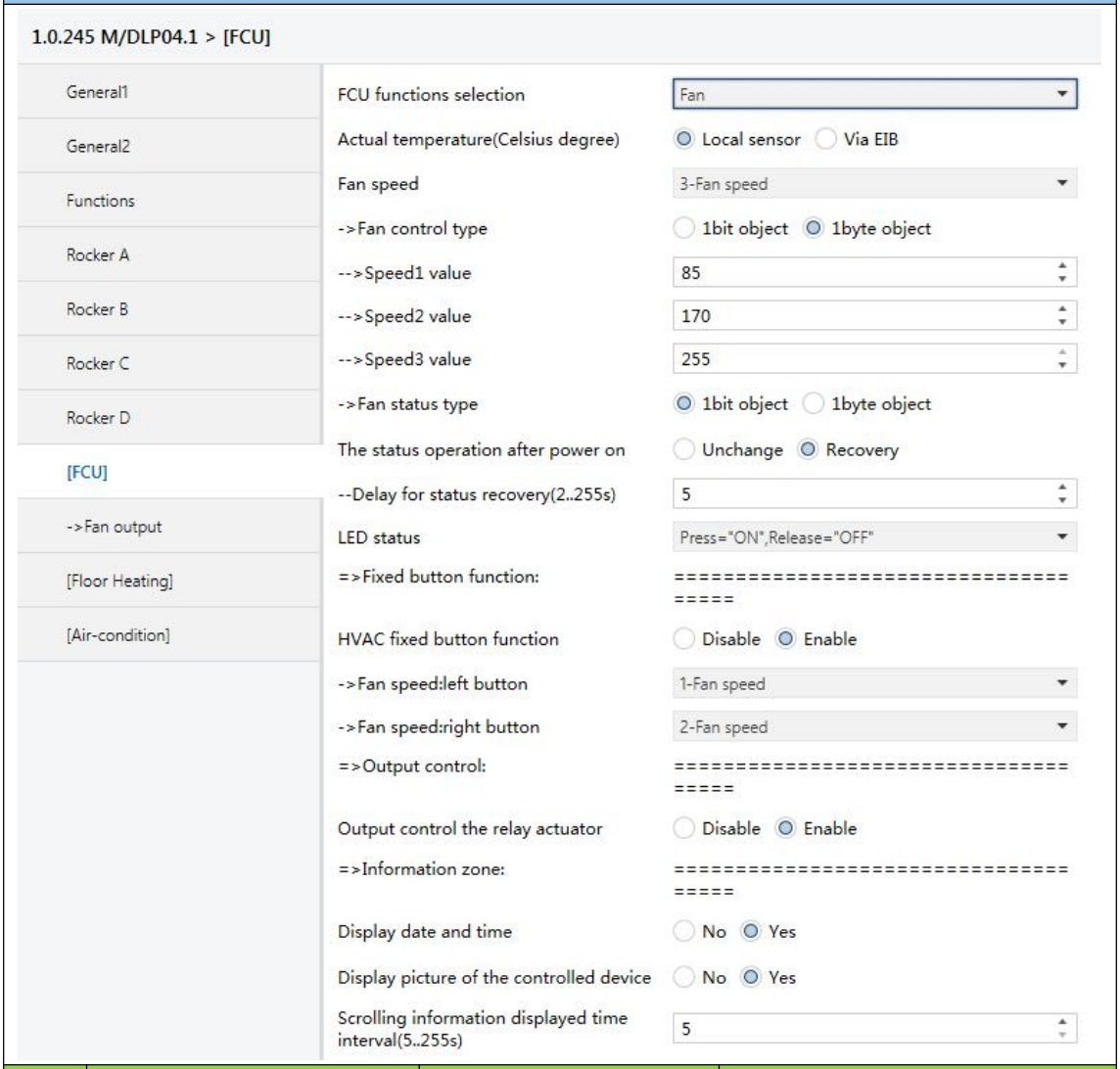
25	->Reaction on short button	-Invalid -Left=Toggle, Right=Toggle -Left=Start with “1”, Right	Invalid: Left and right short button are no reaction. Left=Toggle, Right=Toggle: Left and

		=Stop with “0” -Left=Stop with “0”, Right =Start with “1” -Left=Start with “1”, Right =Start with “1” -Left=Stop with “0”, Right =Stop with “0”	right short button are all toggle. Left=Start with “1”, Right =Stop with “0”: Left short button telegram value is “1”,Right short button telegram value is “0”. Left=Stop with “0”, Right =Start with “1”: Left short button telegram value is “0”,Right short button telegram value is “1”. Left=Start with “1”, Right =Start with “1”: Left short button telegram value is “1”,Right short button telegram value is “1”. Left=Stop with “0”, Right =Stop with “0”: Left short button telegram value is “0”,Right short button telegram value is “0”.
26	->Reaction on long button	-Invalid -Left=Toggle, Right=Toggle -Left=Start with “1”, Right =Stop with “0” -Left=Stop with “0”, Right =Start with “1” -Left=Start with “1”, Right =Start with “1” -Left=Stop with “0”, Right =Stop with “0”	Invalid: Left and right long button are no reaction. Left=Toggle, Right=Toggle: Left and right long button are all toggle. Left=Start with “1”, Right =Stop with “0”: Left long button telegram value is “1”,Right long button telegram value is “0”. Left=Stop with “0”, Right =Start with “1”: Left long button telegram value is “0”,Right long button telegram value is “1”. Left=Start with “1”, Right =Start with “1”: Left long button telegram value is “1”,Right long button telegram value is “1”. Left=Stop with “0”, Right =Stop with “0”: Left long button telegram value is “0”,Right long button telegram value is “0”.
27	Long button time after	0.2...(1)...60s	Set long button time,the default time is 1s.
28	LED status source	-Local	Local: The LED status root in local.

		-From bus -Mutually exclusive display	From bus: The LED status root in bus control. Mutually exclusive display: The LED status root in mutually exclusive display.
29	LED status	-Flashing, then ON -Flashing, then OFF -Flashing, then status -ON/OFF status	Set the status of LED. Flashing, then ON: When pressing the button LED will flashing, then theLED remain ON. Flashing, then OFF: When pressing the button LED will flashing,then theLED remain OFF. Flashing, then status: When pressing the button LED will flashing, then LED's status is same to the object's status. ON/OFF status: The LED's status is same to the object's status.

2.2_FCU

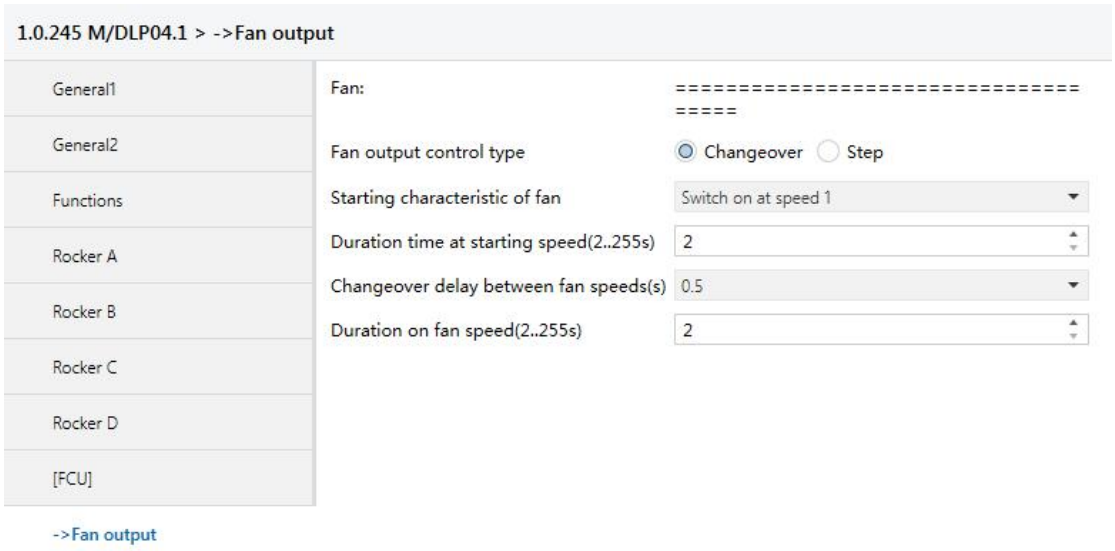
_Fan



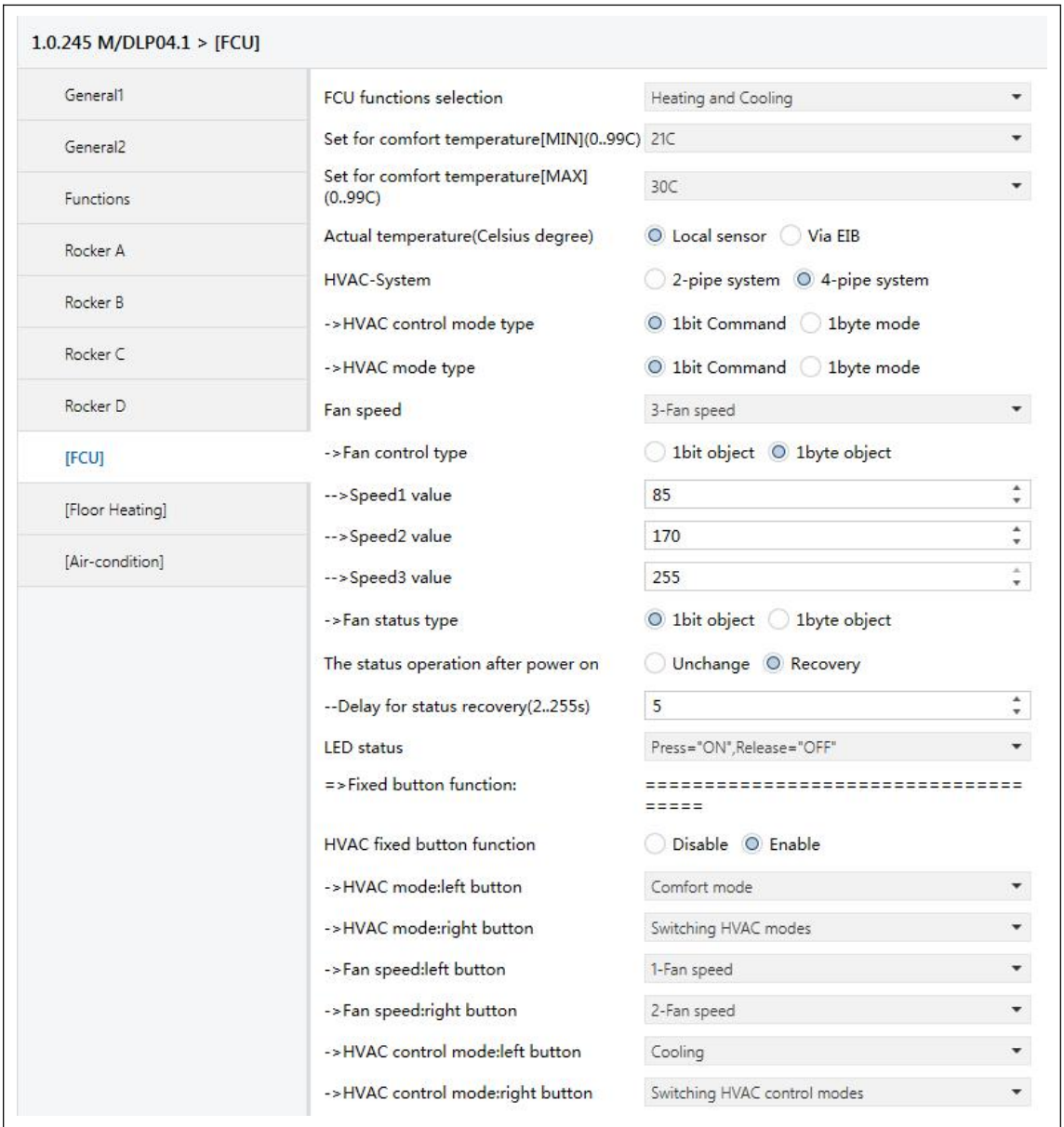
No.	ETS-Parameter	Range (default)	Description
1	FCU function selection	-Fan -Heating -Cooling -Heating and Cooling	Fan: The FCU's work mode is fan. Heating: The FCU's work mode is heating. Cooling: The FCU's work mode is cooling. Heating and Cooling: The FCU's work mode is heating and cooling.
2	Actual temperature(Celsius degree)	-Local sensor -Via EIB	Local sensor: The display actual temperature is depend on sensor itself. Via EIB:The display actual temperature is depend on other devices via EIB.
3	Fan speed	-1-Fan speed	1-Fan speed: If you select this one,

		-2-Fan speed -3-Fan speed	HVAC has 1 fan speed only. 2-Fan speed: If you select this one, HVAC has 2 fan speeds can be setting. 3-Fan speed: If you select this one, HVAC has 3 fan speeds can be setting.
->Fan control type			
4	->Fan control type	-1bit object -1byte object	Set the fan control type.
5	-->Speed 1 value	0...(85)...255	Set the value of speed 1.
6	-->Speed 2 value	0...(170)...255	Set the value of speed 2.
7	-->Speed 3 value	0...(255)	Set the value of speed 3.
->Fan status type			
8	Fan status type	-1bit object -1byte object	Set the fan status type.
9	The status operation after power on	-Unchange -Recovery	Unchange: The status operation remain unchange after the power on. Recovery: The status operation recovery after the power on.
10	--Delay for status recovery(2...255s)	2...(5)...255s	Set the delay time for status recovery.
11	LED status	-Flashing -Press= “ON”, Release= “OFF” -Press= “OFF”, Release= “ON”	Flashing: Press the button, the LED status flahing. Press= “ON”, Release= “OFF”: Press the button, the LED status is on, release is off. Press= “OFF”, Release= “ON”: Press the button, the LED status is off, release is on.
=>Fixed button function:			
12	HVAC fixed button function	-Disable -Enable	Set disable or enable select the HVAC fixed button function.
13	->Fan speed: left button	-1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	1-Fan speed: Press left button, select the 1-Fan speed. 2-Fan speed: Press left button, select the 2-Fan speed. 3-Fan speed: Press left button, select the 3-Fan speed.

			Stop: Press left button, the fan is stop. Switching speed: Press left button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
14	->Fan speed: right button	-1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	2-Fan speed: Press right button, select the 1-Fan speed. 2-Fan speed: Press right button, select the 2-Fan speed. 3-Fan speed: Press right button, select the 3-Fan speed. Stop: Press right button, the fan is stop. Switching speed: Press right button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
=>Output control:			
15	Output control the relay actuator	-Disable -Enable	Set disable or enable control the ouput of the relay actuator.
=>Information zone			
16	Display date and time	-No -Yes	Set yes or no display date and time.
17	Display picture of the controlled device	-No -Yes	Set yes or no display picture of the controlled device.
18	Scrolling information displayed time interval(5...255s)	(5)...255s	Set the time interval of scrolling information displayed.
_ Fan output			



_Fan:			
19	Fan output control type	-Changeover -Step	Set the fan output control type.
20	Starting characteristic of fan	-Switch on at speed 1 -Switch on at speed 2 -Switch on at speed 3	Switch on at speed 1: Starting fan characteristic is switch on at speed 1. Switch on at speed 2:Starting fan characteristic is switch on at speed 2. Switch on at speed 3:Starting fan characteristic is switch on at speed 3.
21	Duration time at starting speed(2...255s)	(2)...255s	Set the duration time at starting speed.
22	Changeover delay between fan speed(s)	0.5...10s	Set the changeover delay between fan speed.
23	Duration on fan speed(2...255s)	(2)...255s	Set the duration time on fan speed.
_Heating/Cooling/Heating and Cooling			



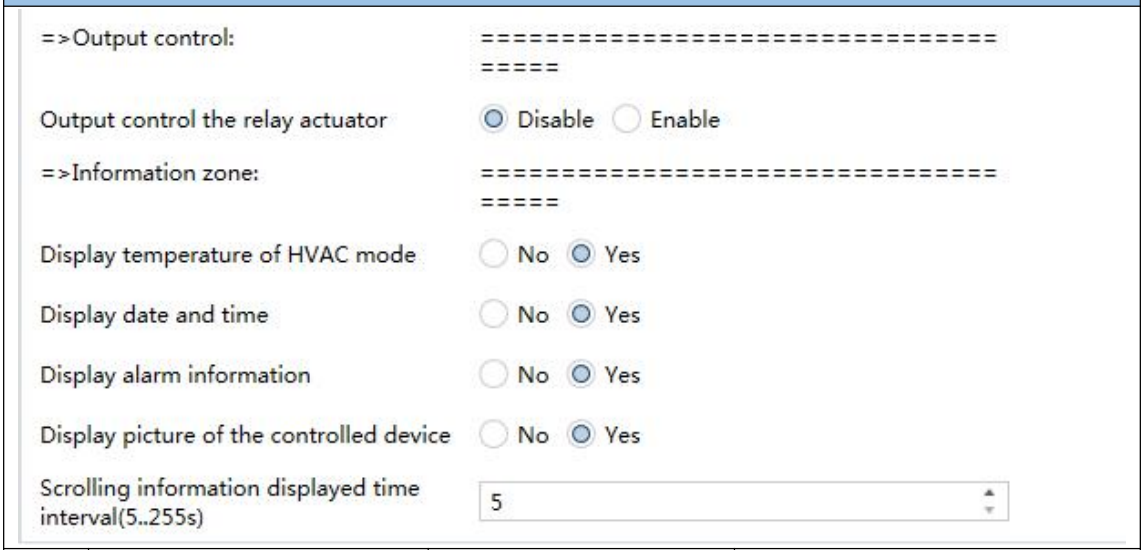
24	FCU function selection	-Fan -Heating -Cooling -Heating and Cooling	Fan: The FCU's work mode is fan. Heating: The FCU's work mode is heating. Cooling: The FCU's work mode is cooling. Heating and Cooling: The FCU's work mode is heating and cooling.
25	Set for comfort temperature [MIN](0...99C)	0...(21C)...99C	Set the minimum comfort temperature.
26	Set for comfort temperature [MAX]	0...(30C)...99C	Set the maximum comfort temperature.
27	Actual temperature(Celsius degree)	-Local sensor -Via EIB	Local sensor: The display actual temperature is depend on sensor itself.

			Via EIB: The display actual temperature is depend on other devices via EIB.
28	HVAC System	-2-pipe system -4-pipe system	2-pipe system: There is one single water circuit that is filled with cooling or heating medium according to the season. 4-pipe system: The system consists of two separate water circuits for heating and cooling.
29	->HVAC control moe type	-1bit command -1byte mode	Set the HVAC control moe type.
30	->HVAC moe type	-1bit command -1byte mode	Set the HVAC moe type.
31	Fan speed	-1-Fan speed -2-Fan speed -3-Fan speed	1-Fan speed: If you select this one, HVAC has 1 fan speed only. 2-Fan speed: If you select this one, HVAC has 2 fan speeds can be setting. 3-Fan speed: If you select this one, HVAC has 3 fan speeds can be setting.
->Fan control type			
32	->Fan control type	-1bit object -1byte object	Set the fan control type.
33	-->Speed 1 value	0...(85)...255	Set the value of speed 1.
34	-->Speed 2 value	0...(170)...255	Set the value of speed 2.
35	-->Speed 3 value	0...(255)	Set the value of speed 3.
->Fan status type			
36	Fan status type	-1bit object -1byte object	Set the fan status type.
37	The status operation after power on	-Unchange -Recovery	Unchange: The status operation remain unchange after the power on. Recovery: The status operation recovery after the power on.
38	--Delay for status recovery(2...255s)	2...(5)...255s	Set the delay time for status recovery.
39	LED status	-Flashing -Press= “ON”, Release= “OFF”	Flashing: Press the button, the LED status flahing. Press= “ON”, Release= “OFF”:

		-Press= “OFF”, Release= “ON”	Press the button, the LED status is on, release is off. Press= “OFF”, Release= “ON”: Press the button, the LED status is off, release is on.
=>Fixed button function			
40	HVAC fixed button function	-Disable -Enable	Set disable or enable select the HVAC fixed button function.
41	->HVAC mode: left button	-Comfort mode -Standby mode -Night mode -Protection mode -Switching HVAC modes -Invalid	Comfort mode: The HVAC mode select the comfort mode. Standby mode: The HVAC mode select the standby mode. Night mode: The HVAC mode select the night mode. Protection mode: The HVAC mode select the protection mode. Switching HVAC modes: The HVAC mode select the switching HVAC mode. Invalid: The HVAC mode fixed button function is invalid.
42	->HVAC mode: right button	-Comfort mode -Standby mode -Night mode -Protection mode -Switching HVAC modes -Invalid	Comfort mode: The HVAC mode select the comfort mode. Standby mode: The HVAC mode select the standby mode. Night mode: The HVAC mode select the night mode. Protection mode: The HVAC mode select the protection mode. Switching HVAC modes: The HVAC mode select the switching HVAC mode. Invalid: The HVAC mode fixed button function is invalid.
43	->Fan speed: left button	-Auto -1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed	Auto: Press left button, automatic selection mode. 1-Fan speed: Press left button, select the 1-Fan speed. 2-Fan speed: Press left button,

		-Invalid	select the 2-Fan speed. 3-Fan speed: Press left button, select the 3-Fan speed. Stop: Press left button, the fan is stop. Switching speed: Press left button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
44	->Fan speed: right button	-Auto -1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	Auto: Press left button, automatic selection mode. 1-Fan speed: Press right button, select the 1-Fan speed. 2-Fan speed: Press right button, select the 2-Fan speed. 3-Fan speed: Press right button, select the 3-Fan speed. Stop: Press right button, the fan is stop. Switching speed: Press right button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
45	->HVAC control mode: left button	-Auto -Cooling -Heating -Fan -Switching HVAC control modes -Invalid	Auto: Press left button, automatic selection mode. Cooling: Press left button, the HVAC control mode select the cooling mode. Heating: Press left button, the HVAC control mode select the heating mode. Fan: Press left button, the HVAC control mode select the fan mode. Switching HVAC control modes：Press left button, the HVAC control mode select the switching HVAC control modes mode.

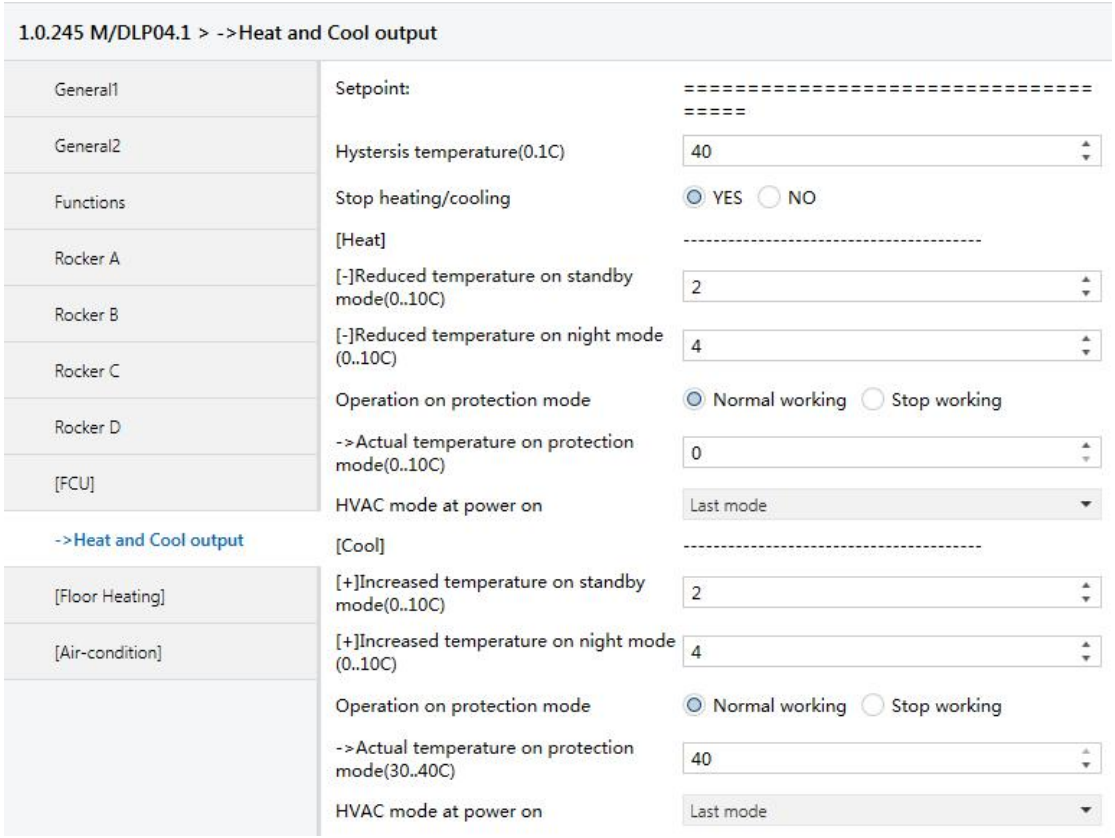
			Invalid: HVAC control mode fixed button function is invalid.
46	->HVAC control mode: right button	-Auto -Cooling -Heating -Fan -Switching HVAC control modes -Invalid	Auto: Press right button, automatic selection mode. Cooling: Press right button, the HVAC control mode select the cooling mode. Heating: Press right button, the HVAC control mode select the heating mode. Fan: Press right button, the HVAC control mode select the fan mode. Switching HVAC control modes：Press right button, the HVAC control mode select the switching HVAC control modes mode. Invalid: HVAC control mode fixed button function is invalid.
=>Output control			



47	Output control the relay actuator	-Disable -Enable	Set disable or enable control the ouput of the relay actuator.
=>Information zone			
48	Display temperature of HVAC mode	-No -Yes	Set yes or no display temperature of HVAC mode.
49	Display date and time	-No -Yes	Set yes or no display date and time.
50	Display alarm information	-No -Yes	Set yes or no display alarm information.

51	Display picture of the controlled device	-No -Yes	Set yes or no display picture of the controlled device.
52	Scrolling information displayed time interval(5...255s)	(5)...255s	Set the time interval of scrolling information displayed.

->Heating and Cooling output



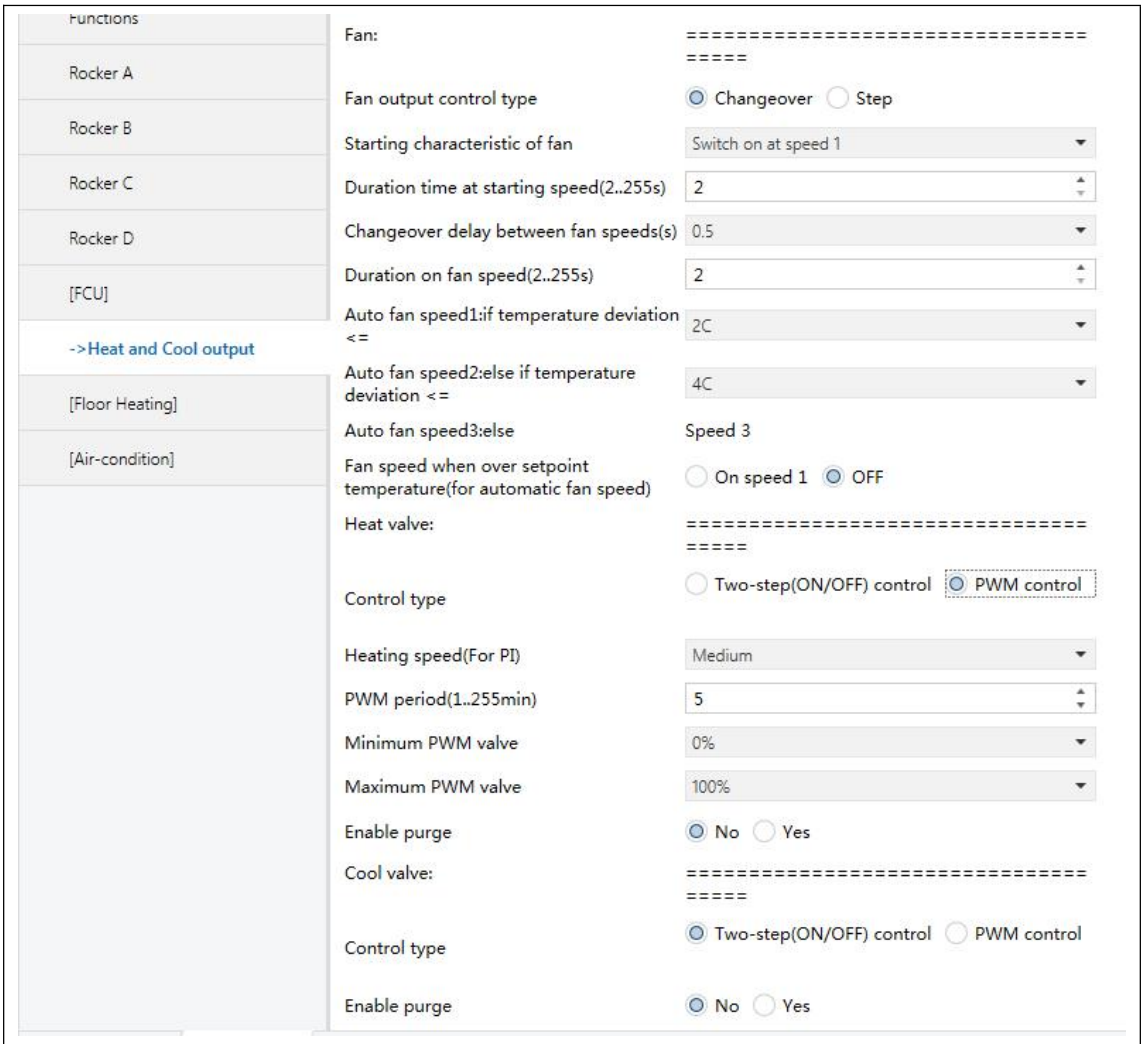
_Setpoint

53	Hystersis temperature(0.1C)	1...(40)...200	Set the hystersis temperature.
54	Stop heating/cooling	-YES -NO	Set yes or no stop heating/cooling

[Heat]

55	[-]Reduced temperature on standby mode(0...10C)	0...(2C)...10C	Set reduced temperature on standby mode.
56	[-]Reduced temperature on night mode(0...10C)	0...(4C)...10C	Set reduced temperature on night mode.
57	Operation on protection mode	-Normal working -Stop working	Normal working: Select the narmal working for operation on protection mode. Stop working: Select the stop working for operation on protection mode.
58	Actual temperature on	(0)...10C	Set actual temperature on

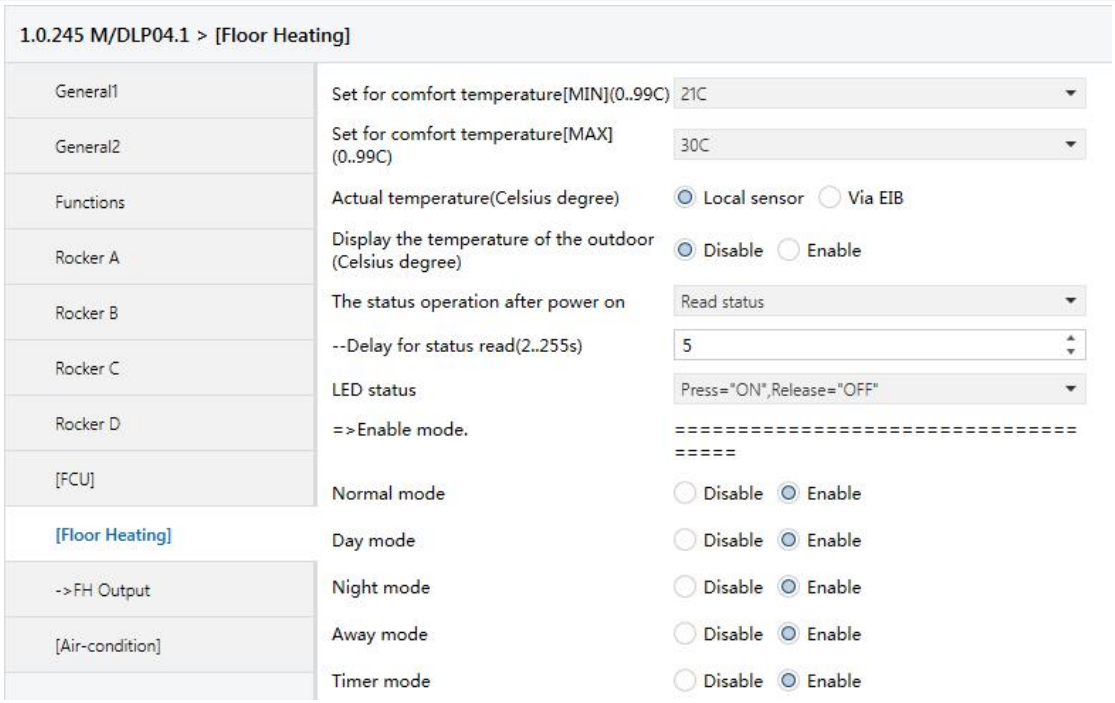
	protection mode(0...10C)		protection mode
59	HVAC mode at power on	-Last mode -Comfort mode -Standby mode -Night mode -Protection mode	Last mode: The HVAC mode is set to last mode at power on. Comfort mode: The HVAC mode is set to comfort mode at power on. Standby mode: The HVAC mode is set to standby mode at power on. Night mode: The HVAC mode is set to night mode at power on. Protection mode: The HVAC mode is set to protection mode at power on.
[Cool]			
60	[+]Increase temperature on standby mode(0...10C)	0...(2C)...10C	Set increase temperature on standby mode.
61	[+]Increase temperature on night mode(0...10C)	0...(4C)...10C	Set increase temperature on night mode.
62	Operation on protection mode	-Normal working -Stop working	Normal working: Select the narmal working for operation on protection mode. Stop working: Select the stop working for operation on protection mode.
63	Actual temperature on protection mode(30...40C)	30...(40C)	Set actual temperature on protection mode
64	HVAC mode at power on	-Last mode -Comfort mode -Standby mode -Night mode -Protection mode	Last mode: The HVAC mode is set to last mode at power on. Comfort mode: The HVAC mode is set to comfort mode at power on. Standby mode: The HVAC mode is set to standby mode at power on. Night mode: The HVAC mode is set to night mode at power on. Protection mode: The HVAC mode is set to protection mode at power on.



Fan:			
65	Fan output control type	-Changeover -Step	Set the fan output control type.
66	Starting characteristic of fan	-Switch on at speed 1 -Switch on at speed 2 -Switch on at speed 3	Switch on at speed 1: Starting fan characteristic is switch on at speed 1. Switch on at speed 2:Starting fan characteristic is switch on at speed 2. Switch on at speed 3:Starting fan characteristic is switch on at speed 3.
67	Duration time at starting speed(2...255s)	(2)...255s	Set the duration time at starting speed.
68	Changeover delay between fan speed(s)	0.5...10s	Set the changeover delay between fan speed.
69	Duration on fan speed(2...255s)	(2)...255s	Set the duration time on fan speed.

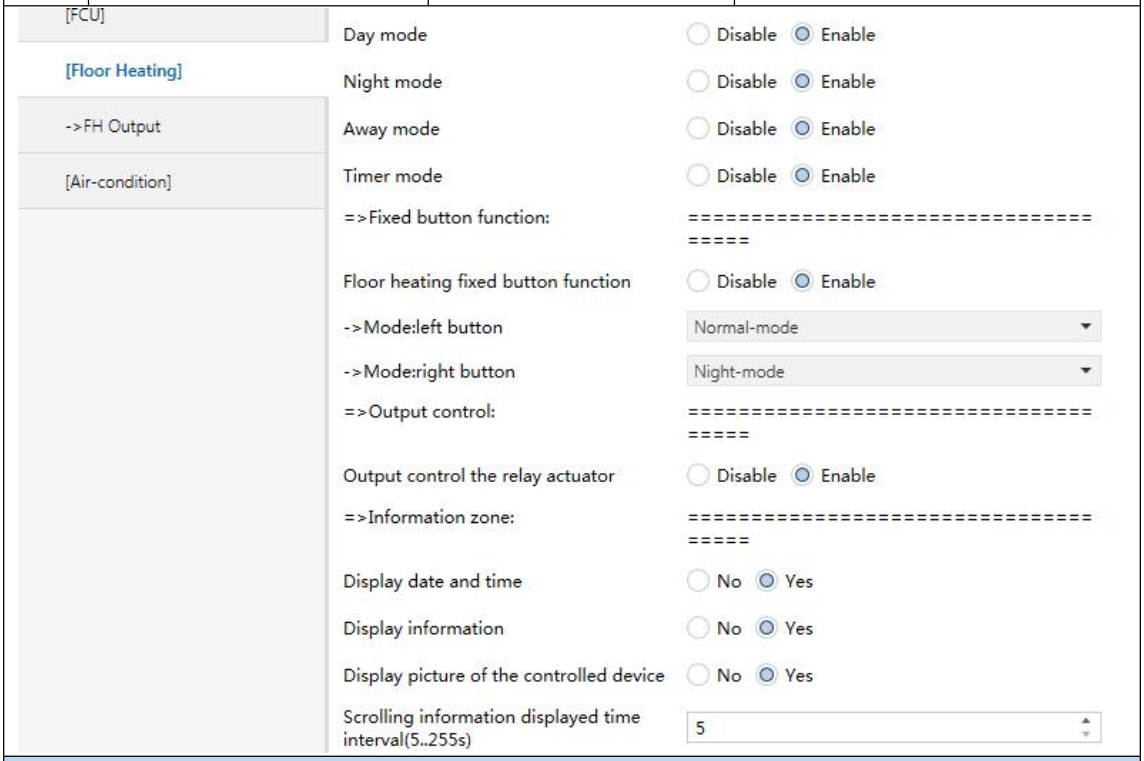
70	Auto fan speed 1: if temperature deviation<=	0.5C...(2C)...30C	Set base the temperature deviation, the fan automatic switch to fan speed 1.
71	Auto fan speed 2: if temperature deviation<=	0.5C...(4C)...30C	Set base the temperature deviation, the fan automatic switch to fan speed 2, else,the fan automatic switch to fan speed 3.
72	Fan speed when over setpoint temperature(for automatic fan speed)	-On speed 1 -OFF	On speed 1: When over setpoint temperature, the fan speed switch to speed 1. OFF: When over setpoint temperature, the fan is off.
Heat valve:			
73	Control type	-Two-step(ON/OFF) control -PWM control	Two-step(ON/OFF) control: With two-step controls, the first step, the valve on and start to heat, and the second step, the valve off and stop to heat. PWM control: The heating mode is controlled by pulse adjustment, control the heating time by controlling the duty ratio.
74	Heating speed(for PI)	-Lower -Low -Medium -Fast -Faster	If you select the PWM control heating, set the heating speed, with five speed levels to choose from.
75	PWM period(1...255min)	1...(5)...255min	Set the PWM period.
76	Mininum PWM valve	(0%)...100%	Set the mininum PWM valve.
77	Maxinum PWM valve	0%...(100%)	Set the maxinum PWM valve.
78	Enable purge	-No -Yes	Set yes or no purge data.

2.3_Floor Heating



No.	ETS-Parameter	Range (default)	Description
1	Set for comfort temperature [MIN](0...99C)	0...(21C)...99C	Set the minimum comfort temperature.
2	Set for comfort temperature [MAX]	0...(30C)...99C	Set the maximum comfort temperature.
3	Actual temperature(Celsius degree)	-Local sensor -Via EIB	Local sensor: The display actual temperature is depend on sensor itself. Via EIB: The display actual temperature is depend on other devices via EIB.
4	Display the temperature of the outdoor(Celsius degree)	-Disable -Enable	Set disable or enable display the temperature of the outdoor.
5	The status operation after power on	-Unchange -Recovery -Read status	Unchange: The status operation remain unchange after the power on. Recovery: After bus voltage recovery, The position will be back to the state of the power-down previous. Read status: After bus voltage recovery, the status read the set status.
6	--Delay for status	2...(5)...255s	Set the delay time for status read.

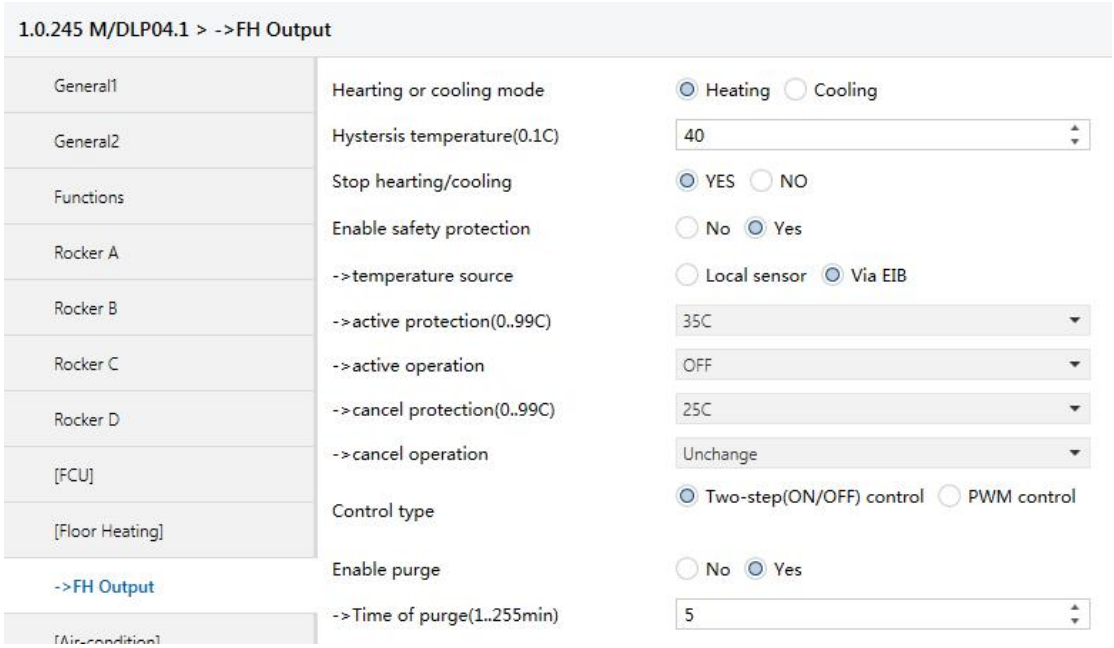
	read(2...255s)		
7	LED status	-Flashing -Press= “ON”, Release= “OFF” -Press= “OFF”, Release= “ON”	Flashing: Press the button, the LED status flahing. Press= “ON”, Release= “OFF”: Press the button, the LED status is on, release is off. Press= “OFF”, Release= “ON”: Press the button, the LED status is off, release is on.
=>Enable mode:			
8	Normal mode	-Disable -Enable	Set disable or enable select the normal mode.
9	Day mode	-Disable -Enable	Set disable or enable select the day mode.
10	Night mode	-Disable -Enable	Set disable or enable select the night mode.
11	Away mode	-Disable -Enable	Set disable or enable select the away mode.
12	Timer mode	-Disable -Enable	Set disable or enable select the timer mode.



=>Fixed button function:			
13	Floor heating fixed button function	-Disable -Enable	Set disable or enable fixed buton functionn of floor heating.
14	->Mode: left button	-Normal mode -Day mode	Normal mode: Press left button, select the normal mode for floor

		-Night mode -Away mode -Timer mode -Switching mode -Invalid	heating. Day mode: Press left button, select the day mode for floor heating. Night mode: Press left button, select the night mode for floor heating. Away mode: Press left button, select the away mode for floor heating. Timer mode: Press left button, select the timer mode for floor heating. Switching mode: Press left button, select the switching mode for floor heating. Invalid: Press left button is invalid.
15	->Mode: right button	-Normal mode -Day mode -Night mode -Away mode -Timer mode -Switching mode -Invalid	Normal mode: Press right button, select the normal mode for floor heating. Day mode: Press right button, select the day mode for floor heating. Night mode: Press right button, select the night mode for floor heating. Away mode: Press right button, select the away mode for floor heating. Timer mode: Press right button, select the timer mode for floor heating. Switching mode: Press right button, select the switching mode for floor heating. Invalid: Press right button is invalid.
=>Output control			
16	Output control the relay	-Disable	Set disable or enable control the

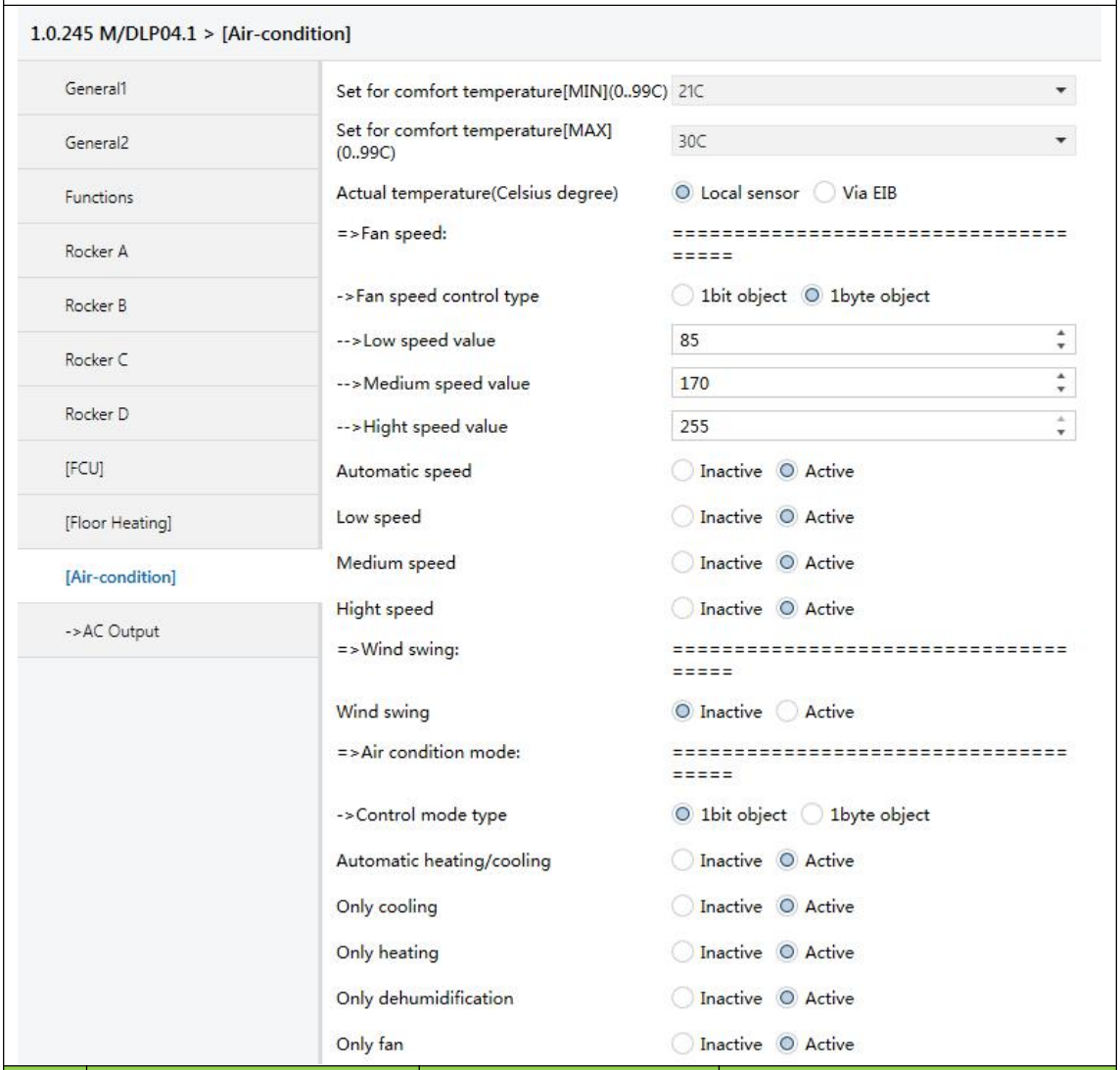
	actuator	-Enable	ouput of the relay actuator.
=>Information zone			
17	Display date and time	-No -Yes	Set yes or no display date and time.
18	Display information	-No -Yes	Set yes or no display information in information zone.
19	Display picture of the controlled device	-No -Yes	Set yes or no display picture of the controlled device.
20	Scrolling information displayed time interval(5...255s)	(5)...255s	Set the time interval of scrolling information displayed.
_FH Output			



21	Heating or cooling mode	-Heating -Cooling	Set the function mode as heating or cooling.
22	Hystersis temperature(0.1C)	1...(40)...200C	Set the hystersis temperature.
23	Stop heating/cooling	-YES -NO	Set yes or no stop heating/cooling.
24	Enable safety protection	-No -Yes	Set yes or no enable safety protection.
25	->temperature source	-Local sensor -Via EIB	Local sensor: The temperature is depend on sensor itself. Via EIB: The temperature is depend on other devices via EIB.
26	->active protection(0...99C)	0...(35)...99C	Set the temperature of active protection.
27	->active operation	-Unchange -ON	Unchange: In the state of safety protection, the active operation is

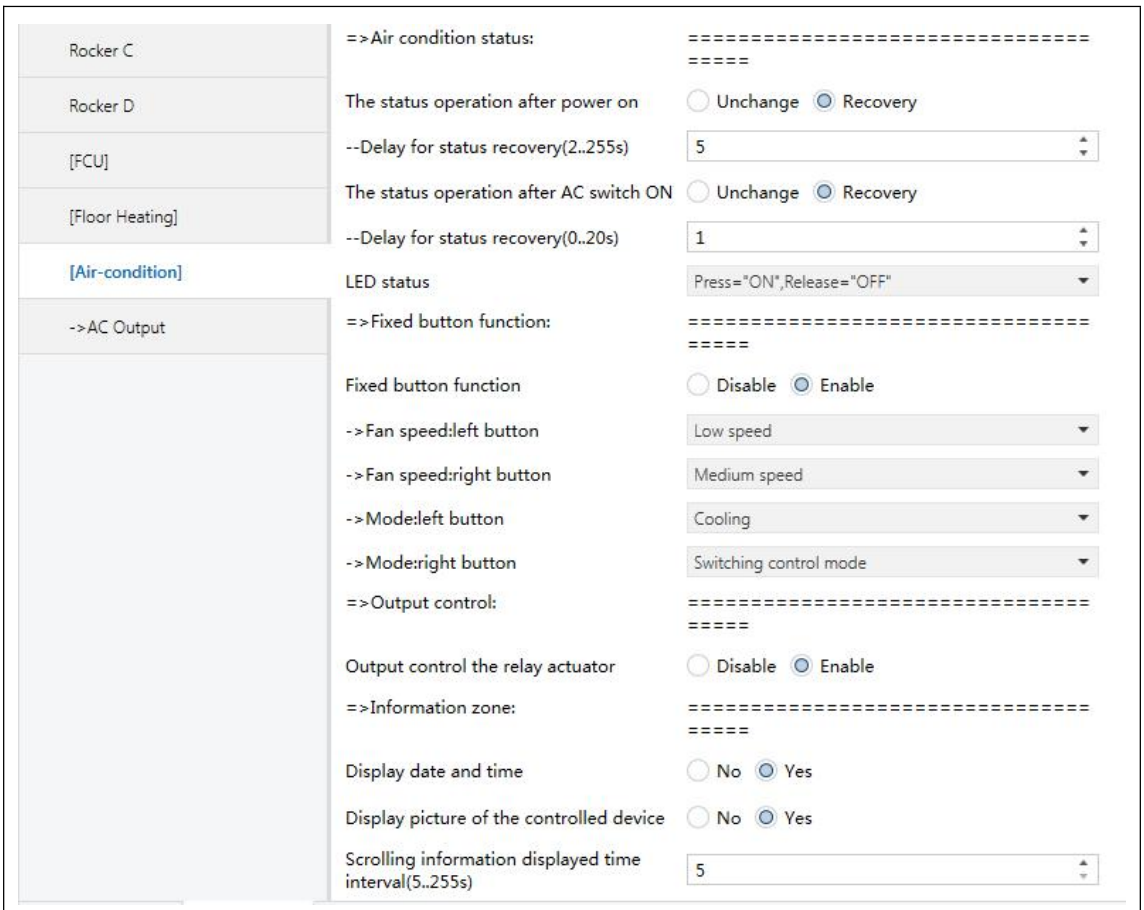
		-OFF	unchange. ON: In the state of safety protection, the active operation is on. OFF: In the state of safety protection, the active operation is off.
28	->cancel protection(0...99C)	0...(25)...99C	Set the temperture for cancel protection mode.
29	Control type	-Two-step(ON/OFF) control -PWM control	Two-step(ON/OFF) control: With two-step controls, the first step, the valve on and start to heat, and the second step, the valve off and stop to heat. PWM control: The heating mode is controlled by pulse adjustment, control the heating time by controlling the duty ratio.
30	Enable purge	-No -Yes	Set yes or no purge data.
31	->Time of purge(1...255min)	1...(5)...255min	Set the time of purge.

2.4_Air-condition



No.	ETS-Parameter	Range (default)	Description
1	Set for comfort temperature [MIN](0...99C)	0...(21C)...99C	Set the minimum comfort temperature.
2	Set for comfort temperature [MAX]	0...(30C)...99C	Set the maximum comfort temperature.
3	Actual temperature(Celsius degree)	-Local sensor -Via EIB	Local sensor: The display actual temperature is depend on sensor itself. Via EIB: The display actual temperature is depend on other devices via EIB.
=>Fan speed			
4	->Fan speed control type	-1bit object -1byte object	Set the fan speed control type.
5	->Low speed value	0...(85)...255	Set the low speed value.
6	->Medium speed value	0...(170)...255	Set the medium speed value.

7	->Hight speed value	0...(255)	Set the hight speed value.
8	Automatic speed	-Inactive -Active	Set whether active select automatic speed.
9	Low speed	-Inactive -Active	Set whether active select low speed.
10	Medium speed	-Inactive -Active	Set whether active select medium speed.
11	Hight speed	-Inactive -Active	Set whether active select hight speed.
=>Wind swing			
12	Wind swing	-Inactive -Active	Set whether active select wind swing.
=>Air-condition mode:			
13	->Control mode type	-1bit object -1byte object	Set the air-condition mode control type.
14	Automatic heating/cooling	-Inactive -Active	Set air-condition mode whether active select automatic heating/cooling.
15	Only heating	-Inactive -Active	Set air-condition mode whether active select only heating.
16	Only cooling	-Inactive -Active	Set air-condition mode whether active select only cooling.
17	Omly dehumidification	-Inactive -Active	Set air-condition mode whether active select omly dehumidification.
18	Only fan	-Inactive -Active	Set air-condition mode whether active select only fan.

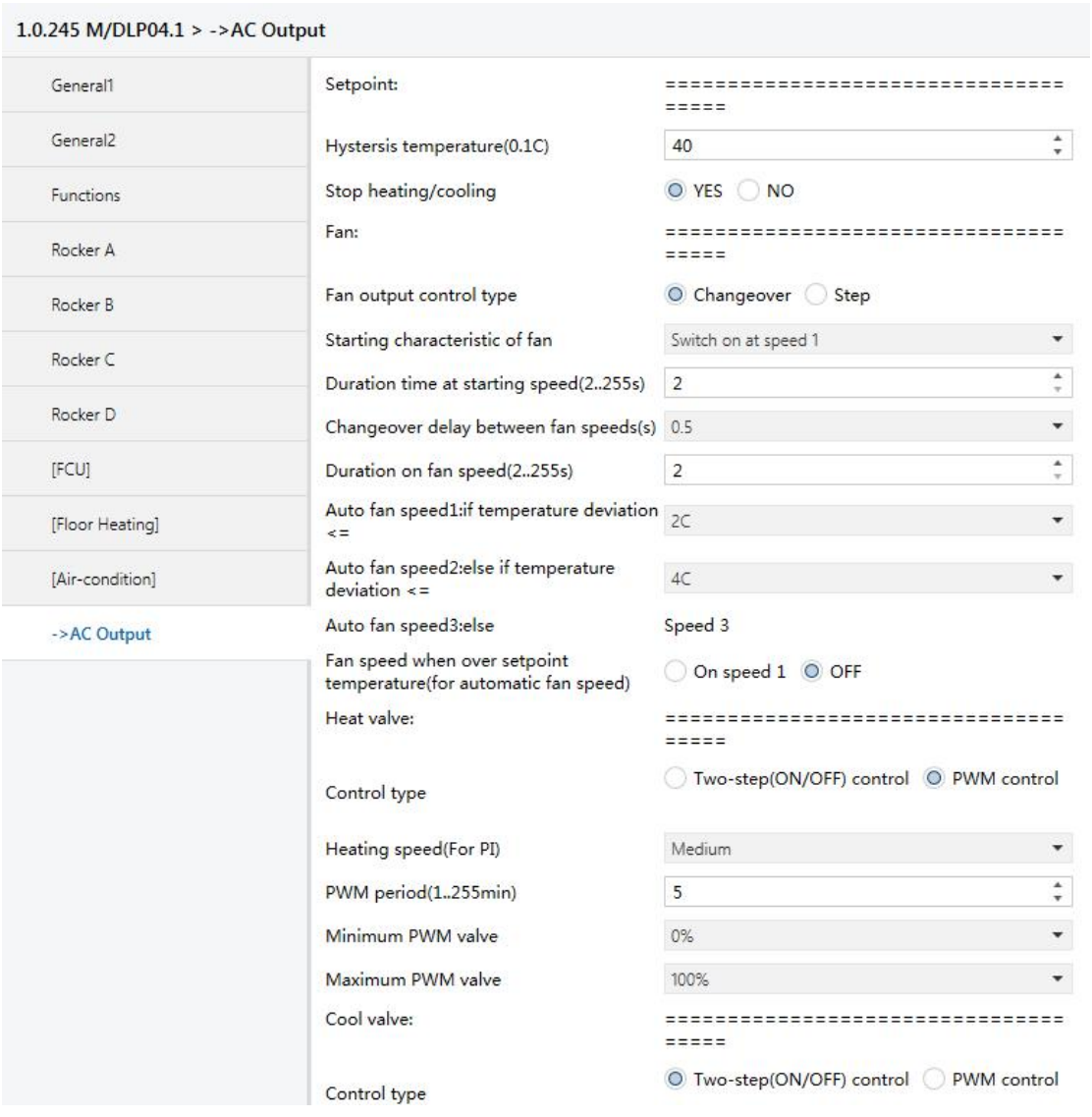


=>Air-condition status			
19	The status operation after power on	-Unchange -Recovery	Unchange: The status operation remain unchange after the power on. Recovery: The status operation recovery after the power on.
20	--Delay for status recovery(2...255s)	2...(5)...255s	Set the delay time for status recovery.
21	The status operation after AC switch ON	-Unchange -Recovery	Unchange: The status operation remain unchange after AC switch ON. Recovery: The status operation recovery after AC switch ON.
22	--Delay for status recovery(0...20s)	0...(1)...20s	Set the delay time for status recovery.
23	LED status	-Flashing -Press= “ON”, Release= “OFF” -Press= “OFF”, Release= “ON”	Flashing: Press the button, the LED status flahing. Press= “ON”, Release= “OFF”: Press the button, the LED status is on, release is off. Press= “OFF”, Release= “ON”:

			Press the button, the LED status is off, release is on.
=>Fixed button function			
24	Fixed button function	-Disable -Enable	Set disable or enable select the fixed button function.
25	->Fan speed: left button	-Auto -1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	Auto: Press left button, automatic selection mode. 1-Fan speed: Press left button, select the 1-Fan speed. 2-Fan speed: Press left button, select the 2-Fan speed. 3-Fan speed: Press left button, select the 3-Fan speed. Stop: Press left button, the fan is stop. Switching speed: Press left button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
26	->Fan speed: right button	-Auto -1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	Auto: Press left button, automatic selection mode. 1-Fan speed: Press right button, select the 1-Fan speed. 2-Fan speed: Press right button, select the 2-Fan speed. 3-Fan speed: Press right button, select the 3-Fan speed. Stop: Press right button, the fan is stop. Switching speed: Press right button, first, the fan speed is on, second, the fan speed is off. Invalid: Fan speed fixed button function is invalid.
27	->Mode: left button	-Auto -Cooling -Heating -Dehumidification -Fan	Auto: Press left button, automatic selection mode. Cooling: Press left button, the air-condition mode select the

		-Switching control modes -Invalid	cooling mode fixed function. Heating: Press left button, the air-condition mode select the heating mode fixed function. Dehumidification: Press left button, the air-condition mode select the dehumidification mode fixed function. Fan: Press left button, the air-condition mode select the fan mode fixed function. Switching control modes： Press left button, the air-condition mode select the switching control mode fixed function. Invalid: Air-conditionl mode fixed button function is invalid.
28	->Mode: right button	-Auto -Cooling -Heating -Dehumidification -Fan -Switching control modes -Invalid	Auto: Press right button, automatic selection mode. Cooling: Press right button, the air-condition mode select the cooling mode fixed function. Heating: Press right button, the air-condition mode select the heating mode fixed function. Dehumidification: Press right button, the air-condition mode select the dehumidification mode fixed function. Fan: Press right button, the air-condition mode select the fan mode fixed function. Switching control modes： Press right button, the air-condition mode select the switching control mode fixed function. Invalid: Air-conditionl mode fixed button function is invalid.
=>Output control			

29	Output control the relay actuator	-Disable -Enable	Set disable or enable control the ouput of the relay actuator.
=>Information zone			
30	Display date and time	-No -Yes	Set yes or no display date and time.
31	Display picture of the controlled device	-No -Yes	Set yes or no display picture of the controlled device.
32	Scrolling information displayed time interval(5...255s)	(5)...255s	Set the time interval of scrolling information displayed.
_AC Output			



Setpoint			
33	Hystersis temperature(0.1C)	1...(40)...200C	Set the hystersis temperature.
34	Stop heating/cooling	-YES -NO	Set yes or no stop heating/cooling.
Fan:			

35	Fan output control type	-Changeover -Step	Set the fan output control type.
36	Starting characteristic of fan	-Switch on at speed 1 -Switch on at speed 2 -Switch on at speed 3	Switch on at speed 1: Starting fan characteristic is switch on at speed 1. Switch on at speed 2:Starting fan characteristic is switch on at speed 2. Switch on at speed 3:Starting fan characteristic is switch on at speed 3.
37	Duration time at starting speed(2...255s)	(2)...255s	Set the duration time at starting speed.
38	Changeover delay between fan speed(s)	0.5...10s	Set the changeover delay between fan speed.
39	Duration on fan speed(2...255s)	(2)...255s	Set the duration time on fan speed.
40	Auto fan speed 1: if temperature deviation<=	0.5C...(2C)...30C	Set base the temperature deviation, the fan automatic switch to fan speed 1.
41	Auto fan speed 2: if temperature deviation<=	0.5C...(4C)...30C	Set base the temperature deviation, the fan automatic switch to fan speed 2, else,the fan automatic switch to fan speed 3.
42	Fan speed when over setpoint temperature(for automatic fan speed)	-On speed 1 -OFF	On speed 1: When over setpoint temperature, the fan speed switch to speed 1. OFF: When over setpoint temperature, the fan is off.
_Control type			
43	Control type	-Two-step(ON/OFF) control -PWM control	Two-step(ON/OFF) control: With two-step controls, the first step, the valve on and start to heat, and the second step, the valve off and stop to heat. PWM control: The heating mode is controlled by pulse adjustment, control the heating time by controlling the duty ratio.
44	Heating speed(for PI)	-Lower -Low -Medium	If you select the PWM control heating, set the heating speed, with five speed levels to choose

		-Fast -Faster	from.
45	PWM period(1...255min)	1...(5)...255min	Set the PWM period.
46	Mininum PWM valve	(0%)...100%	Set the mininum PWM valve.
47	Maxinum PWM valve	0%...(100%)	Set the maxinum PWM valve.
48	Enable purge	-No -Yes	Set yes or no purge data.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

M_DLP04.1 Datapoint.xls

D.Communication objects (you can query from this file:)

D.0 General 1

Objects “General”

1	General	Change brightness LED...	1 byte	C	-	W	T	U
2	General	Change brightness LED...	1 byte	C	-	W	T	U
3	General	Change LCD brightness	1 byte	C	-	W	T	U
4	General	Infrared active/inactive	1 bit	C	-	W	T	U
5	General	Lock buttons	1 bit	C	-	W	T	U
6	General	Trigger left of Rock A	1 bit	C	-	W	T	U
7	General	Trigger right of Rock A	1 bit	C	-	W	T	U
8	General	Trigger left of Rock B	1 bit	C	-	W	T	U
9	General	Trigger right of Rock B	1 bit	C	-	W	T	U
10	General	Trigger left of Rock C	1 bit	C	-	W	T	U
11	General	Trigger right of Rock C	1 bit	C	-	W	T	U
12	General	Trigger left of Rock D	1 bit	C	-	W	T	U
13	General	Trigger right of Rock D	1 bit	C	-	W	T	U
14	General	Trigger left of Rock E	1 bit	C	-	W	T	U
15	General	Trigger right of Rock E	1 bit	C	-	W	T	U
16	General	Trigger left of Rock F	1 bit	C	-	W	T	U
17	General	Trigger right of Rock F	1 bit	C	-	W	T	U
18	General	Trigger left of Rock G	1 bit	C	-	W	T	U
19	General	Trigger right of Rock G	1 bit	C	-	W	T	U
20	General	Trigger left of Rock H	1 bit	C	-	W	T	U
21	General	Trigger right of Rock H	1 bit	C	-	W	T	U
22	General	Trigger left of Rock I	1 bit	C	-	W	T	U
23	General	Trigger right of Rock I	1 bit	C	-	W	T	U
24	General	Trigger left of Rock J	1 bit	C	-	W	T	U
25	General	Trigger right of Rock J	1 bit	C	-	W	T	U
26	General	Trigger right of Rock K	1 bit	C	-	W	T	U
27	General	Trigger right of Rock K	1 bit	C	-	W	T	U
28	General	Trigger left of Rock L	1 bit	C	-	W	T	U
29	General	Trigger right of Rock L	1 bit	C	-	W	T	U

NO.	Object name	Function	Flags	Data type
1	General	Change brightness LED ON	CWTU	DPT 5.001 1 byte
2	General	Change brightness LED OFF	CWTU	DPT 5.001 1 byte
3	General	Change LCD brightness	CWTU	DPT 5.001 1 byte
These communication objects used to change LED and LCD brightness function.				
4	General	Infrared active/inactive	CWTU	DPT 1.003 1bit
This communication object used to enable or disable the infrared function. If receive the value "1, ,and the infrared function is enabled, if receive the value "0", and the infrared function is disabled.				
5	General	Lock buttons	CWTU	DPT 1.003 1bit
This communication object used to lock the button. If receive the value "0", and all buttons locked, if receive the value "1", and all buttons is unlocked.				
6	General	Trigger left of Rock A	CWTU	DPT 1.008 1bit
7	General	Trigger right of Rock A	CWTU	DPT 1.008 1bit
8	General	Trigger left of Rock B	CWTU	DPT 1.008 1bit
9	General	Trigger right of Rock B	CWTU	DPT 1.008 1bit
10	General	Trigger left of Rock C	CWTU	DPT 1.008 1bit
11	General	Trigger right of Rock C	CWTU	DPT 1.008 1bit
12	General	Trigger left of Rock D	CWTU	DPT 1.008 1bit
13	General	Trigger right of Rock D	CWTU	DPT 1.008 1bit
14	General	Trigger left of Rock E	CWTU	DPT 1.008 1bit
15	General	Trigger right of Rock E	CWTU	DPT 1.008 1bit
16	General	Trigger left of Rock F	CWTU	DPT 1.008 1bit
17	General	Trigger right of Rock F	CWTU	DPT 1.008 1bit
18	General	Trigger left of Rock G	CWTU	DPT 1.008 1bit
19	General	Trigger right of Rock G	CWTU	DPT 1.008

				1bit
20	General	Trigger left of Rock H	CWTU	DPT 1.008 1bit
21	General	Trigger right of Rock H	CWTU	DPT 1.008 1bit
22	General	Trigger left of Rock I	CWTU	DPT 1.008 1bit
23	General	Trigger right of Rock I	CWTU	DPT 1.008 1bit
24	General	Trigger left of Rock J	CWTU	DPT 1.008 1bit
25	General	Trigger right of Rock J	CWTU	DPT 1.008 1bit
26	General	Trigger left of Rock K	CWTU	DPT 1.008 1bit
27	General	Trigger right of Rock K	CWTU	DPT 1.008 1bit
28	General	Trigger left of Rock L	CWTU	DPT 1.008 1bit
29	General	Trigger right of Rock L	CWTU	DPT 1.008 1bit

These communication objects used to trigger the button. If receive the value "1", and the single button triggered, if receive the value "0", and the button not triggered.
It is only can get a short operation when using the remote trigger button objects, long operate is impossible.

Objects "Slave"

30	Slave clock	Network datetime	8 bytes	C	-	W	T	U
31	Slave clock	Network date	3 bytes	C	-	W	T	U
32	Slave clock	Network time	3 bytes	C	-	W	T	U

NO.	Object name	Function	Flags	Data type
30	Slave clock	Network datetime	CWTU	DPT 19.001 8 bytes
31	Slave clock	Network date	CWTU	DPT 11.001 3 bytes
32	Slave clock	Network time	CWTU	DPT 10.001 3 bytes

These communication objects used to set input time and date information synchronisation of master clock in the KNX system.

Objects “Temperature”				
33	Rocker information zone	Remote temperature	2 bytes	C - W - U
34	Local temperature	Temperature report	2 bytes	C R - T -

NO.	Object name	Function	Flags	Data type
33	Rocker information zone	Remote temperature	CWT	DPT 9.001 2 bytes
This communication objects used to set remote temperature display information zone.				
34	Local temperature	Temperature report	CRT	DPT 9.001 2 bytes
This communication objects used to set whether report the local temperature.				

D.1 Rocker (A...L)

Objects “Switch controller”				
40	Rocker A left short	Switching	1 bit	C - W T U
41	Rocker A left long	Switching	1 bit	C - W T U
45	Rocker A right short	Switching	1 bit	C - W T U
46	Rocker A right long	Switching	1 bit	C - W T U

NO.	Object name	Function	Flags	Data type
40	Rocker A left short	Switching	CWTU	DPT 1.001 1bit
41	Rocker A left long	Switching	CWTU	DPT 1.001 1bit
45	Rocker A right short	Switching	CWTU	DPT 1.001 1bit
46	Rocker A right long	Switching	CWTU	DPT 1.001 1bit
These communication objects used for switching other switch device. Send telegram value “1” for ON, send telegram value “0” for OFF.				

Tips: *Rocker A...L set up different work mode, will have different function, but the same object number. Other rockers are same.*

Objects “Dimming controller”				
50	Rocker B left short	Switching	1 bit	C - W T U
51	Rocker B left long	Dimming	4 bit	C - W T U
55	Rocker B right short	Switching	1 bit	C - W T U
56	Rocker B right long	Dimming	4 bit	C - W T U

NO.	Object name	Function	Flags	Data type

50	Rocker B left short	Switching	CWTU	DPT 1.001 1bit
51	Rocker B left long	Dimming	CWTU	DPT 3.007 4bit
55	Rocker B right short	Switching	CWTU	DPT 1.001 1bit
56	Rocker B right long	Dimming	CWTU	DPT 3.007 4bit
These communication objects used for switch or dimming the device. Rock short button for switching, Rocker long button for dimming.				

Objects “Shutter controller”

60	Rocker C	Adjust/Stop for shutter	1 bit	C - W T U
61	Rocker C	Move for shutter	1 bit	C - W T U
65	Rocker C	Adjust/Stop for shutter	1 bit	C - W T U
66	Rocker C	Move for shutter	1 bit	C - W T U

NO.	Object name	Function	Flags	Data type
60	Rocker C	Adjust/Stop for shutter	CWTU	DPT 1.007 1bit
61	Rocker C	Move for shutter	CWTU	DPT 1.008 1bit
65	Rocker C	Adjust/Stop for shutter	CWTU	DPT 1.007 1bit
66	Rocker C	Move for shutter	CWTU	DPT 1.008 1bit
These communication objects used for Adjust and Move for the shutter. Send the telegram value “1” to adjust or move, or send telegram value “0” to stop adjust or stop moving.				

Objects “Flexible controller”

50	Rocker B left	Flexible	1 bit	C - W T U
55	Rocker B right	Flexible	1 bit	C - W T U
60	Rocker C left	Flexible	1 bit	C - W T U
65	Rocker C right	Flexible	1 bit	C - W T U
70	Rocker D left	Flexible	1 bit	C - W T U
75	Rocker D right	Flexible	1 bit	C - W T U

NO.	Object name	Function	Flags	Data type
70	Rocker D left	Flexible	CWTU	DPT 1.001 1bit
75	Rocker D right	Flexible	CWTU	DPT 1.001 1bit
These communication objects used for flexible control some device.				

Objects “Scene controller”

NO.	Object name	Function	Flags	Data type
80	Rocker E left short	Call scene	CWTU	DPT 18.001 1 byte
81	Rocker E left long	Scene dimming	CWTU	DPT 3.007 4bit
85	Rocker E right short	Call scene	CWTU	DPT 18.001 1 byte
86	Rocker E right longt	Scene dimming	CWTU	DPT 3.007 4bit

These communication objects used for Call and Scene dimming. Call scene NO. is 1 to 64 and the value is 0 to 63. The Scene dimming is 4bits value.

Objects “Sequence controller”

NO.	Object name	Function	Flags	Data type
90	Rocker F left short	Sequence	CWTU	DPT 1.010 1bit
91	Rocker F left long	Sequence	CWTU	DPT 1.010 1bit
95	Rocker F right short	Sequence	CWTU	DPT 1.010 1bit
96	Rocker F right longt	Sequence	CWTU	DPT 1.010 1bit

These communication objects used for start and stop sequence. Send the telegram value “1” to start one sequence, and send the telegram value ‘0’ to stop on sequence.

Objects “Percentage controller”

NO.	Object name	Function	Flags	Data type
100	Rocker G left	Percentage	CWTU	DPT 5.001 1byte

105	Rocker G right	Percentage	CWTU	DPT 5.001 1 byte
This communication object used for control some device, eg: Absolute dimming the brightness.				

Objects “Threshold controller”

110	Rocker H left	Threshold(1byte)	1 byte	C	-	W	T	U		
115	Rocker H right	Threshold(2bytes)	2 bytes	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
110	Rocker H left	Threshold(1byte)	CWTU	DPT 5.004 1 byte
115	Rocker H right	Threshold(2byte)	CWTU	DPT 7.001 2 byte
This communication object used for threshold control.				

Objects “String(14bytes) controller”

120	Rocker I left	String(14bytes) value	14 bytes	C	-	W	T	U		
125	Rocker I right	String(14bytes) value	14 bytes	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
120	Rocker I left	String(14bytes)	CWTU	DPT 16.000 14 bytes
125	Rocker I right	String(14bytes)	CWTU	DPT 16.000 14 bytes
This communication object used for control 14 bytes string value. According to the set and send corresponding string variables.				

Objects “Alternate controller”

130	Rocker J left	Alternate <1> (1bit)	1 bit	C	-	W	T	U		
131	Rocker J left	Alternate <2> (1byte)	1 byte	C	-	W	T	U		
132	Rocker J left	Alternate <3> (2bytes)	2 bytes	C	-	W	T	U		
133	Rocker J left	Alternate <4> (1bit)	1 bit	C	-	W	T	U		
135	Rocker J right	Alternate <1> (1bit)	1 bit	C	-	W	T	U		
136	Rocker J right	Alternate <2> (1byte)	1 byte	C	-	W	T	U		
137	Rocker J right	Alternate <3> (2bytes)	2 bytes	C	-	W	T	U		
138	Rocker J right	Alternate <4> (1bit)	1 bit	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
130	Rocker J left	Alternate<1> (1bit)	CWTU	DPT 1.001 1bit
131	Rocker J left	Alternate<2> (1byte)	CWTU	DPT 5.004 1 byte
132	Rocker J left	Alternate<1> (2 bytes)	CWTU	DPT 7.001

				2 bytes
133	Rocker J left	Alternate<1> (1bit)	CWTU	DPT 1.001 1bit
135	Rocker J right	Alternate<1> (1bit）	CWTU	DPT 1.001 1bit
136	Rocker J right	Alternate<1> (1byte)	CWTU	DPT 5.004 1 byte
137	Rocker J right	Alternate<1> (2 bytes)	CWTU	DPT 7.001 2 bytes
138	Rocker J right	Alternate<1> (1bit)	CWTU	DPT 1.001 1bit
These communication objects used for start and stop alternate. Send the telegram value "1" or send corresponding string to start alternate, and send the telegram value '0' or send corresponding string to stop alternate.				

Objects "Combination controller"

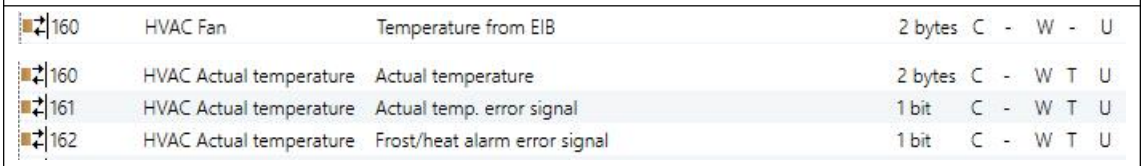
140	Rocker K left	COMB OBJ1 switching	1 bit	C	-	-	T	-
141	Rocker K left	COMB OBJ2 shutter	1 bit	C	-	-	T	-
142	Rocker K left	COMB OBJ3 scene	1 byte	C	-	-	T	-
143	Rocker K left	COMB OBJ4 sequence	1 bit	C	-	-	T	-
145	Rocker K right	COMB OBJ1 percentage	1 byte	C	-	-	T	-
146	Rocker K right	COMB OBJ2 threshold(0..255)	1 byte	C	-	-	T	-
147	Rocker K right	COMB OBJ3 String(14bytes)	14 bytes	C	-	-	T	-

NO.	Object name	Function	Flags	Data type
140	Rocker K left	COMB OBJ1 switching	CT	DPT 1.001 1bit
141	Rocker K left	COMB OBJ2 shutter	CT	DPT 1.008 1bit
142	Rocker K left	COMB OBJ3 scene	CT	DPT 18.001 1 byte
143	Rocker K left	COMB OBJ4 sequence	CT	DPT 1.010 1bit
145	Rocker K right	COMB OBJ1 percentage	CT	DPT 5.001 1 byte
146	Rocker K right	COMB OBJ2 threshold(0...255)	CT	DPT 5.004 1 byrte
147	Rocker K right	COMB OBJ3 String(14bytes)	CT	DPT 16.000 1 4byte
These communication objects used for control of multiple objects at the same time. So, Multiple objects can synchronization operation.				

Other rockers to the same

D.2 FCU

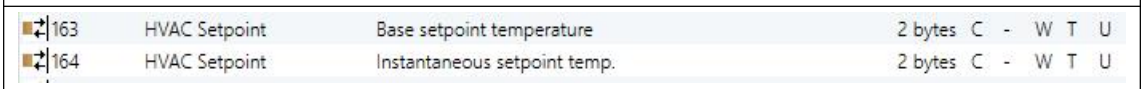
Objects “HVAC temperature”



160	HVAC Fan	Temperature from EIB	2 bytes	C	-	W	-	U		
160	HVAC Actual temperature	Actual temperature	2 bytes	C	-	W	T	U		
161	HVAC Actual temperature	Actual temp. error signal	1 bit	C	-	W	T	U		
162	HVAC Actual temperature	Frost/heat alarm error signal	1 bit	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
160	HVAC Fan	Temperature from EIB	CWU	DPT 9.001 2 bytes
160	HVAC Actual temperature	Actual temperature	CWTU	DPT 9.001 2 bytes
The temperature value can be transmited to KNX bus.HVAC or FCU on the KNX bus can receiving.				
161	HVAC Actual temperature	Actual tem.error signal	CWTU	DPT 1.005 1bit
162	HVAC Actual temperature	Frost/heat alarm error signal	CWTU	DPT 1.005 1bit
An error signal can be received from KNX/EIB with these objects.Telegram value: “0”: No error, “1”: Error.				

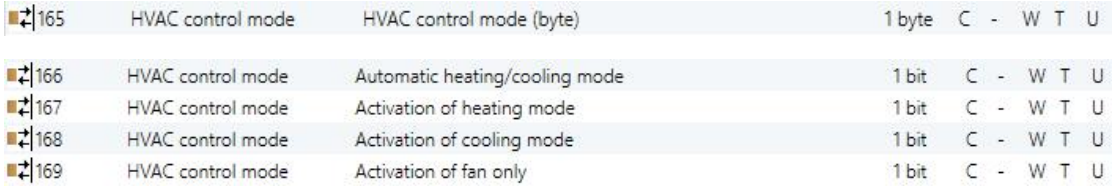
Objects “HVAC Setpoint”



163	HVAC Setpoint	Base setpoint temperature	2 bytes	C	-	W	T	U		
164	HVAC Setpoint	Instantaneous setpoint temp.	2 bytes	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
163	HVAC Setpoint	Base setpoint temperature	CWTU	DPT 9.001 2 byte
The temperature value can be transmited to KNX bus.HVAC or FCU on the KNX bus can receiving the temperature as base setpoint temperature.				
164	HVAC Setpoint	Instantaneous setpoint temperature	CWTU	DPT 9.001 2 byte
This object can receive the Instantaneous temperature via KNX bus.				

Objects “HVAC control mode”



165	HVAC control mode	HVAC control mode (byte)	1 byte	C	-	W	T	U		
166	HVAC control mode	Automatic heating/cooling mode	1 bit	C	-	W	T	U		
167	HVAC control mode	Activation of heating mode	1 bit	C	-	W	T	U		
168	HVAC control mode	Activation of cooling mode	1 bit	C	-	W	T	U		
169	HVAC control mode	Activation of fan only	1 bit	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
165	HVAC control mode	HVAC control mode(byte)	CWTU	DPT 20.105

				1 byte
These communication objects used for switching HVAC's control mode. The telegram send corresponding string is valid or invalid.				
166	HVAC control mode	Automatic heating/cooling mode	CWTU	DPT 1.003 1bit
167	HVAC control mode	Activation of heating mode	CWTU	DPT 1.003 1bit
168	HVAC control mode	Activation of cooling mode	CWTU	DPT 1.003 1bit
169	HVAC control mode	Activation of fan only	CWTU	DPT 1.003 1bit
These communication objects used for switching HVAC's control mode. Telegram value "1" is valid and telegram value '0' is invalid.				

Objects "HVAC mode"

170	HVAC mode	HVAC mode (byte)	1 byte	C	-	W	T	U		
171	HVAC mode	ON CMD for comfort mode	1 bit	C	-	W	T	U		
172	HVAC mode	ON CMD for standby mode	1 bit	C	-	W	T	U		
173	HVAC mode	ON CMD for night mode	1 bit	C	-	W	T	U		
174	HVAC mode	ON CMD for building protection	1 bit	C	-	W	T	U		

NO.	Object name	Function	Flags	Data type
170	HVAC mode	HVAC mode(byte)	CWTU	DPT 20.102 1 byte
These communication objects used for switching HVAC work mode. Enable 1 byte data, the telegram send corresponding string is valid or invalid.				
171	HVAC mode	ON CMD for comfort mode	CWTU	DPT 1.001 1bit
172	HVAC mode	ON CMD for standby mode	CWTU	DPT 1.001 1bit
173	HVAC mode	ON CMD for night mode	CWTU	DPT 1.001 1bit
174	HVAC mode	ON CMD for building protection	CWTU	DPT 1.001 1bit
These communication objects used for switching HVAC work mode. Telegram value "1" is valid and telegram value '0' is invalid.				

Objects "HVAC Fan"

175	HVAC Fan	Fan speed automatic	1 bit	C	-	W	T	U		
176	HVAC Fan	Fan speed with % value	1 byte	C	-	W	T	U		

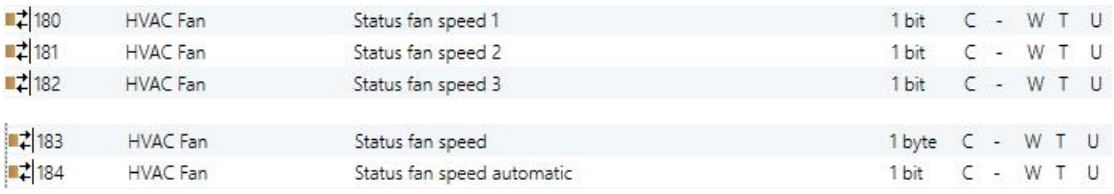
NO.	Object name	Function	Flags	Data type
175	HVAC Fan	Fan speed automatic	CWTU	DPT 1.003

				1bit
The above communication object is used to control the fan speed in automatic mode. If a telegram with a value of '1' is sent, the fan will switch on. If telegram with a value of '0' is sent, the fan will switch off.				
176	HVAC Fan	Fan speed with % value	CWTU	DPT 5.001 1 byte
This communication object is used to set the fan speed when the automatic mode is active.				

Objects "Fan speed"

NO.	Object name	Function	Flags	Data type
177	HVAC Fan	Fan speed 1	CWTU	DPT 1.001 1bit
178	HVAC Fan	Fan speed 2	CWTU	DPT 1.001 1bit
179	HVAC Fan	Fan speed 3	CWTU	DPT 1.001 1bit
These communication objects are used for the FCU actuator, a speed value of X (X=1,2,3) can be received. By default the automatic operation is disabled, if a telegram with a value of '1' is received, the fan will be ON. If a telegram with a value of '0' is received, the fan will be off.				

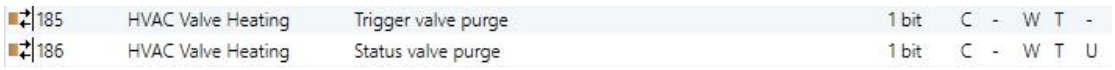
Objects "Status fan speed"



NO.	Object name	Function	Flags	Data type
180	HVAC Fan	Status fan speed 1	CWTU	DPT 1.001 1bit
181	HVAC Fan	Status fan speed 2	CWTU	DPT 1.001 1bit
182	HVAC Fan	Status fan speed 3	CWTU	DPT 1.001 1bit
These communication objects are used to control the fan status and speed. If 1bit object "Status fan speed X" is enabled, telegrams will always be sent via KNX or EIB, but only after a modification has been made. If a telegram value of '0' is received, the fan will deactivate. If a telegram value of '1' is received, the fan will activate.				

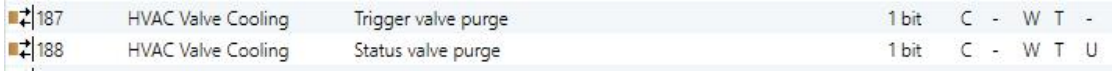
183	HVAC Fan	Status fan speed	CWTU	DPT 5.010 1byte
This communication object is used to control fan status and fan speed. *If 1bit object "Status fan speed X" is enabled, telegrams will always be sent via KNX or EIB, but only after a modification has been made. If a telegram value of '0' is received, the fan will deactivate. If a telegram value of '1' is received, the fan will activate.*				
184	HVAC Fan	Status fan speed automatic	CWTU	DPT 1.003 1bit
This communication object is used for status fan speed automatic, if enable 1 bit object "Status fan speed automatic", it will always send on the KNX/EIB or only send after a change if receive telegram value '0', the fan will be inactive, if receives telegram value '1', the fan speed will be activated.				

Objects "HVAC Valve Heating"



NO.	Object name	Function	Flags	Data type
185	HVAC Valve Heating	Trigger valve purge	CWT	DPT 1.017 1 bit
This communication object is used to trigger the valve purge. The purge cycle will automatically restart, if telegram '0' is received however the valve purge will end, and the valve will be closed. If telegram '1' is received, the purge valve will initiate, and the purge valve will be opened.				
186	HVAC Valve Heating	Status valve purge	CWTU	DPT 1.003 1bit
This communication object is used for valve status purge. If telegram '0' is received the purge valve will be inactive, if telegram '1' is received the purge valve will be active.				

Objects "HVAC Valve Cooling"



NO.	Object name	Function	Flags	Data type
187	HVAC Valve Cooling	Trigger valve purge	CWT	DPT 1.017 1 bit
This communication object is used to trigger the valve purge. The purge cycle will automatically restart, if telegram '0' is received however the valve purge will end, and the valve will be closed. If telegram '1' is received, the purge valve will initiate, and the purge valve will be opened.				
188	HVAC Valve Cooling	Status valve purge	CWTU	DPT 1.003 1bit
This communication object is used for valve status purge. If telegram '0' is received the purge valve will be inactive, if telegram '1' is received the purge valve will be active.				

Objects “HVAC Output”

189	HVAC Output	Relay-Heating	1 bit	C	-	W	T	-
190	HVAC Output	Relay-Cooling	1 bit	C	-	W	T	-
191	HVAC Output	Relay-Fan speed1	1 bit	C	-	W	T	-
192	HVAC Output	Relay-Fan speed2	1 bit	C	-	W	T	-
193	HVAC Output	Relay-Fan speed3	1 bit	C	-	W	T	-

NO.	Object name	Function	Flags	Data type
189	HVAC Output	Relay-Heating	CWT	DPT 1.001 1bit
These communication objects used for switching HVAC output relay-heating. Telegram value “1” is valid and telegram value ‘0’ is invalid.				
190	HVAC Output	Relay-Cooling	CWT	DPT 1.001 1bit
These communication objects used for switching HVAC output relay-cooling. Telegram value “1” is valid and telegram value ‘0’ is invalid.				
191	HVAC Output	Relay-Fan speed 1	CWT	DPT 1.001 1bit
192	HVAC Output	Relay-Fan speed 2	CWT	DPT 1.001 1bit
193	HVAC Output	Relay-Fan speed 3	CWT	DPT 1.001 1bit
These communication objects used for switching HVAC output relay-fan speed. Telegram value “1” is valid and telegram value ‘0’ is invalid.				

D.3 Floor Heating

Objects “Floor Heating”

195	Floor Heating	Pipe pressure protection	1 bit	C	-	W	T	U
196	Floor Heating	Actual temperature	2 bytes	C	-	W	T	U
197	Floor Heating	Actual temp. error signal	1 bit	C	-	W	T	U
198	Floor Heating	Outdoor temperature	2 bytes	C	-	W	T	U
199	Floor Heating	Normal-mode setpoint Temp.	2 bytes	C	-	W	T	U
200	Floor Heating	Day-mode setpoint Temp.	2 bytes	C	-	W	T	U
201	Floor Heating	Night-mode setpoint Temp.	2 bytes	C	-	W	T	U
202	Floor Heating	Away-mode setpoint Temp.	2 bytes	C	-	W	T	U
203	Floor Heating	Preset 1 Temp. for timer mode	2 bytes	C	-	W	T	U
204	Floor Heating	Time of day for preset 1	3 bytes	C	-	W	T	U
205	Floor Heating	Start/Stop heating for preset1	1 bit	C	-	W	T	U
206	Floor Heating	Preset 2 Temp. for timer mode	2 bytes	C	-	W	T	U
207	Floor Heating	Time of day for preset 2	3 bytes	C	-	W	T	U
208	Floor Heating	Start/Stop heating for preset2	1 bit	C	-	W	T	U
209	Floor Heating	Preset 3 Temp. for timer mode	2 bytes	C	-	W	T	U
210	Floor Heating	Time of day for preset 3	3 bytes	C	-	W	T	U
211	Floor Heating	Start/Stop heating for preset3	1 bit	C	-	W	T	U
212	Floor Heating	Floor heating(1-ON,0-OFF)	1 bit	C	-	W	T	U
213	Floor Heating	ON CMD for Normal-mode	1 bit	C	-	W	T	U
214	Floor Heating	ON CMD for Day-mode	1 bit	C	-	W	T	U
215	Floor Heating	ON CMD for Night-mode	1 bit	C	-	W	T	U
216	Floor Heating	ON CMD for Away-mode	1 bit	C	-	W	T	U
217	Floor Heating	ON CMD for Timer-mode	1 bit	C	-	W	T	U
218	Floor Heating	Trigger valve purge	1 bit	C	-	W	T	-
219	Floor Heating	Status valve purge	1 bit	C	-	W	T	U
220	Floor Heating Output	Relay-Heating	1 bit	C	-	W	T	U
221	Floor Heating Output	Safety protection temperature	2 bytes	C	-	W	T	U

NO.	Object name	Function	Flags	Data type
195	Floor Heating	Pipe pressure protection	CWTU	DPT 1.001 1bit
The communication objects used for set the pipe pressure protection. Telegram value “1” is open protection function and telegram value ‘0’ is close protection function.				
196	Floor Heating	Actual temperature	CWTU	DPT 9.001 2 bytes
This communication object is used to operate the temperature sensor TS/C 1.0. The actual temperature is sent to this communication object via KNX/EIB.				
197	Floor Heating	Actual tem.error signal	CWTU	DPT 1.005 1bit
This communication object is used to send the KNX/EIB with this object. The output of the error signal can occur 1…255 or cyclically. ‘0’:No error ‘1’: Error.				
198	Floor Heating	Outdoor temperature	CWTU	DPT 9.001 2 bytes
This communication object is used to operate the outdoor temperature. The outdoor temperature is sent to this communication object via KNX/EIB.				
199	Floor Heating	Normal-mode setpoint temp	CWTU	DPT9.001 2 byte

This communication object is used for setting the normal mode temperature, the temperature value an also be modified using this communication object. The temperature settings are stored in a non-volatile memory segment.				
200	Floor Heating	Day-mode setpoint Temp	CWTU	DPT9.001 2 byte
This communication object is used to set the day mode temperature, the temperature value an also be modified using this communication object. The temperature settings are stored in a non-volatile memory segment.				
201	Floor Heating	Night-mode setpoint Temp	CWTU	DPT9.001 2 byte
This communication object is used to set the night mode temperature, the temperature value an also be modified using this communication object. The temperature settings are stored in a non-volatile memory segment.				
202	Floor Heating	Away-mode setpoint Temp	CWTU	DPT9.001 2 byte
This communication object is used to set the away mode temperature, the temperature value an also be modified using this communication object. The temperature settings are stored in a non-volatile memory segment.				
203	Floor Heating	Preset 1 Temp. for timer mode	CWTU	DPT9.001 2 byte
This communication object is used to set the timer mode of temperature pre-set 1, the temperature value can also be modified using this communication object. The temperature settings are stored in a non-volatile memory segment.				
204	Floor Heating	Time of day for preset 1	CWTU	DPT10.001 3 byte
This communication object is used to configure the pre-set 1 time, the time value an also be modified using this communication object. The time settings are stored in a non-volatile memory segment.				
205	Floor Heating	Start/Stop heating for preset 1	CWTU	DPT 1.010 1bit
*This communication object is used to activate or deactivate the heating for pre-set 1. This communication object can also be used modify the start/stop settings.*The activation/ deactivation settings are stored in a non-volatile memory segment.				
206	Floor Heating	Preset 2 Temp. for timer mode	CWTU	DPT9.001 2 byte
This communication object is used configure the time mode in temperature pre-set 2 , the time value an also be modified using this communication object. The time settings are stored in a non-volatile memory segment.				
207	Floor Heating	Time of day for preset 2	CWTU	DPT10.001 3 byte
This communication object is used to set the time of day for pre-set 2, the time value an also be modified using this communication object. The time settings are stored in a non-volatile memory				

segment.				
208	Floor Heating	Start/Stop heating for preset 2	CWTU	DPT 1.010 1bit
This communication object is used to activate or deactivate the heating for pre-set 2, the heating status can also be modified using this communication object. The heating settings are stored in a non-volatile memory segment.				
209	Floor Heating	Preset 3 Temp. for timer mode	CWTU	DPT9.001 2 byte
This communication is used to activate or deactivate the timer mode in pre-set 3, the heating status can also be modified using this communication object. The timer settings are stored in a non-volatile memory segment.				
210	Floor Heating	Time of day for preset 3	CWTU	DPT10.001 3 byte
This communication object is used to set the time for pre-set 3, this command can also be used to modify the time for pre-set 3. The time settings are stored in a non-volatile memory segment.				
211	Floor Heating	Start/Stop heating for preset 3	CWTU	DPT 1.010 1bit
This communication object is used to activate or deactivate the heating for pre-set 3, the heating status can also be modified using this communication object. The heating settings are stored in a non-volatile memory segment.				
212	Floor Heating	Floor heating(1-ON,0-OFF)	CWTU	DPT 1.001 1bit
This communication object is used to activate or deactivate the floor heating. When a telegram value of '1' is received, the floor heating will be activated. When a telegram value of '0' is received, the floor heating will be deactivated.				
213	Floor Heating	ON CMD for Normal-mode	CWTU	DPT 1.001 1bit
This communication object is used to trigger switching in the normal mode. *Telegram value: "0": No function* *"1": Normal mode*				
214	Floor Heating	ON CMD for Day-mode	CWTU	DPT 1.001 1bit
This communication object is used to trigger switching in the day mode. *Telegram value: "0": No function* *"1": Day mode*				
215	Floor Heating	ON CMD for Night-mode	CWTU	DPT 1.001 1bit
This communication object is used to trigger switching in the night mode. *Telegram value: "0": No function* *"1": Day mode*				
216	Floor Heating	ON CMD for Away-mode	CWTU	DPT 1.001

				1bit
This communication object is used to trigger switching in the away mode. *Telegram value: "0": No function* *"1": Day mode*				
217	Floor Heating	ON CMD for Timer-mode	CWTU	DPT 1.001 1bit
This communication object is used to trigger switching in the timer mode. *Telegram value: "0": No function* *"1": Day mode*				
218	Floor Heating	Trigger valve purge	CWT	DPT 1.017 1bit
This communication object is used to triggera valve purge, the purge cycle can be automatically restarted. Telegram value: '0' = end valve purge, valve will be closed '1' = start valve purge, valve will be opened				
219	Floor Heating	Status valve purge	CWTU	DPT 1.003 1bit
This communication object is used for the purge valve status. Telegram value: '0' = valve purge not active '1' = valve purge active				
220	Floor Heating	Relay-Heating	CWTU	DPT 1.001 1bit
This communication object is used to activate or deactivate the floor heating. When a telegram value of '1' is received, the floor heating will be activated. When a telegram value of '0' is received, the floor heating will be deactivated.				
221	Floor Heating	Safety protection temperature	CWTU	DPT 9.001 2 byte
This communication object is used to set the safety protection temperature. Set the protection temperature to control whether open the protection function.				

D.4 Air-condition

Objects “Air-condition”

222	Air-condition	Switch ON/OFF	1 bit	C	-	W	T	U
223	Air-condition Temperature	Actual temperature from EIB	2 bytes	C	-	W	T	U
224	Air-condition Temperature	Setpoint temperature	2 bytes	C	-	W	T	U
225	Air-condition Fan	ON CMD for automatic	1 bit	C	-	W	T	U
226	Air-condition Fan	ON CMD for low speed	1 bit	C	-	W	T	U
227	Air-condition Fan	ON CMD for medium speed	1 bit	C	-	W	T	U
228	Air-condition Fan	ON CMD for high speed	1 bit	C	-	W	T	U
229	Air-condition Wind	Wind swing('1'-swing,'0'-stop)	1 bit	C	-	W	T	U
230	Air-condition Mode	ON CMD for automatic	1 bit	C	-	W	T	U
231	Air-condition Mode	ON CMD for cooling	1 bit	C	-	W	T	U
232	Air-condition Mode	ON CMD for heating	1 bit	C	-	W	T	U
233	Air-condition Mode	ON CMD for dehumidification	1 bit	C	-	W	T	U
234	Air-condition Mode	ON CMD for fan	1 bit	C	-	W	T	U
235	Air-condition Output	Relay-Heating	1 bit	C	-	W	T	-
236	Air-condition Output	Relay-Cooling	1 bit	C	-	W	T	-
237	Air-condition Output	Relay-Fan low speed	1 bit	C	-	W	T	-
238	Air-condition Output	Relay-Fan medium speed	1 bit	C	-	W	T	-
239	Air-condition Output	Relay-Fan hight speed	1 bit	C	-	W	T	-

NO.	Object name	Function	Flags	Data type
222	Air-condition	Switch ON/OFF	CWTU	DPT 1.001 1bit
This communication object used for control air condition. When a telegram value of ‘1’ is on, when a telegram value of ‘0’ is off.				
223	Air-condition Temperature	Actual temperature from EIB	CWTU	DPT 9.001 2 bytes
The temperature value can be transmited to KNX bus.HVAC or FCU on the KNX bus can receiving.				
224	Air-condition Temperature	Setpoint temperature	CWTU	DPT 9.001 2 bytes
This communication object used for setpoint temperature.				
225	Air-condition Fan	ON CMD for automatic	CWTU	DPT 1.001 1bit
226	Air-condition Fan	ON CMD for low speed	CWTU	DPT 1.001 1bit
227	Air-condition Fan	ON CMD for medium speed	CWTU	DPT 1.001 1bit
228	Air-condition Fan	ON CMD for high speed	CWTU	DPT 1.001 1bit
These communication objects used for switching air condition’s speed. When a telegram value of ‘1’ is valid, when a telegram value of ‘0’ is invalid.				
229	Air-condition Wind	Wind swing(‘1’-swing, ‘0’-stop)	CWTU	DPT 1.010 1bit
This communication object used for switching air condition wind. *Telegram value “1” start swing* *“0” is stop swing*				

230	Air-condition Mode	ON CMD for automatic	CWTU	DPT 1.001 1bit
231	Air-condition Mode	ON CMD for cooling	CWTU	DPT 1.001 1bit
232	Air-condition Mode	ON CMD for heating	CWTU	DPT 1.001 1bit
233	Air-condition Mode	ON CMD for high dehumidification	CWTU	DPT 1.001 1bit
234	Air-condition Mode	ON CMD for fan	CWTU	DPT 1.001 1bit
These communication objects used for switching air condition's mode. When a telegram value of '1' is valid, when a telegram value of '0' is invalid.				
235	Air-condition Output	Relay-Heating	CWT	DPT 1.001 1bit
These communication objects used for switching air condition's output relay-heating. When a telegram value of '1' is valid, when a telegram value of '0' is invalid.				
236	Air-condition Output	Relay-Cooling	CWT	DPT 1.001 1bit
These communication objects used for switching air condition's output relay-cooling. When a telegram value of '1' is valid, when a telegram value of '0' is invalid.				
237	Air-condition Output	Relay-Fan low speed	CWT	DPT 1.001 1bit
238	Air-condition Output	Relay-Fan medium speed	CWT	DPT 1.001 1bit
239	Air-condition Output	Relay-Fan high speed	CWT	DPT 1.001 1bit
These communication objects used for switching air condition's output speed. When a telegram value of '1' is valid, when a telegram value of '0' is invalid.				

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