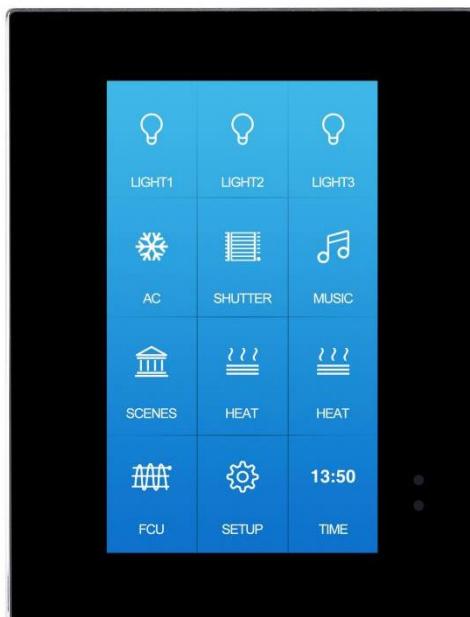




User Manual

MPTLC43 Controller(V1.0)

M/MPTLC43.1



www.hdlautomation.com

APPLICATION PROGRAM INFORMATION

HDL- MPTL43 controller(1.0)

Version: V1.0

KNX/EIB-BUS

Document Version: 1.1, Date: 26. dec.2017

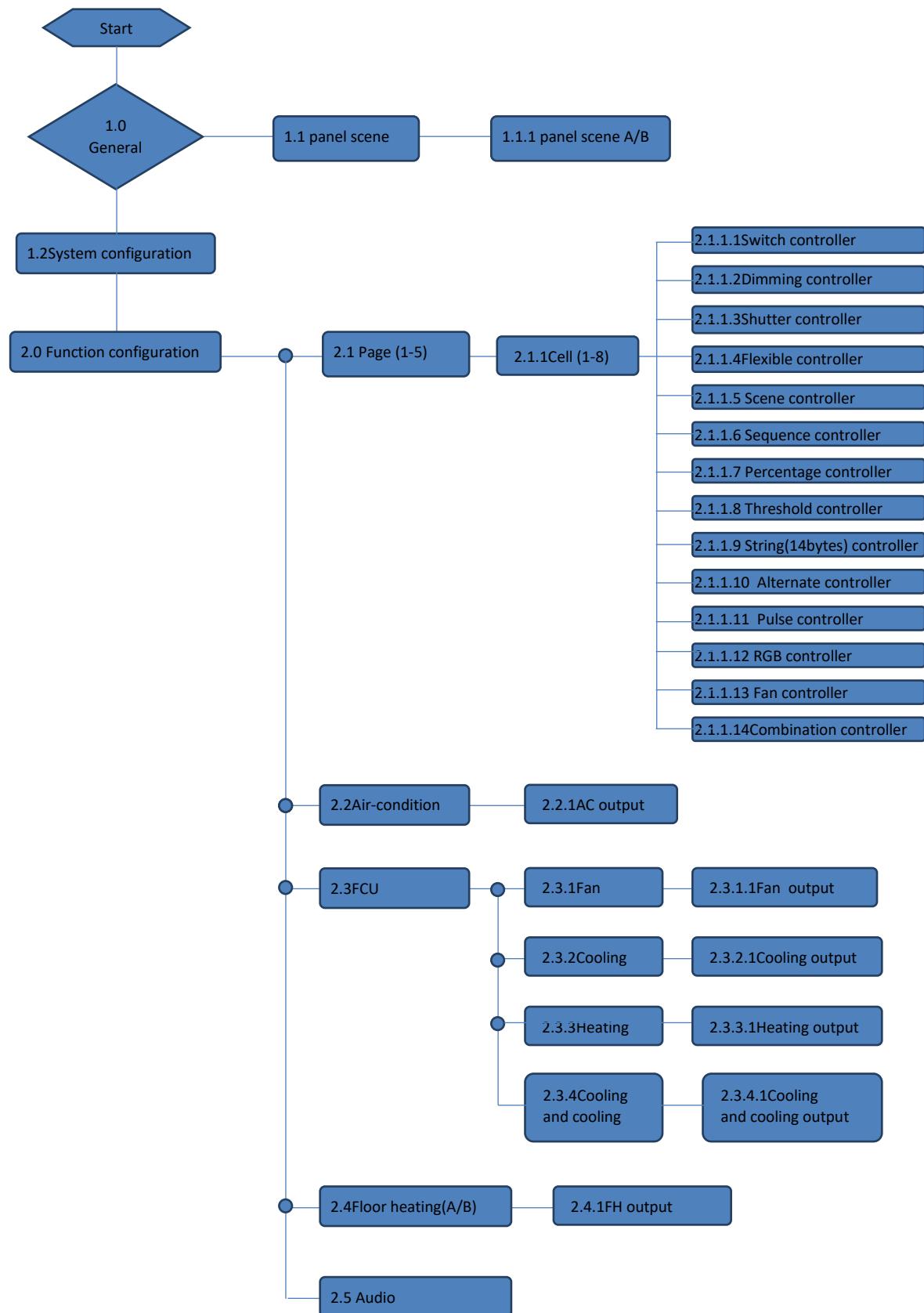
Document History			
Version	Date	Comments	Author (English name)
1.0	17.8.2015	First issue	
1.0	26.12.2017		

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

A.

HDL-M/MPTLC43.1 is a KNX multi-function touch LCD panel, The panel can control the lighting, AC, FCU, music, floor heating. This manual contains the programming of this device.

B.



C.

1.0_General

1.1.5 M/MPTLC43.1 > General

General	
Panel scene	System operation after a delay(1..255s) 2 <input type="radio"/> Disable <input checked="" type="radio"/> Enable
System configuration	Read objects after bus recovery Send value "1/0" inverted cyclically <input type="radio"/> Disable <input checked="" type="radio"/> Enable
Function configuration	Heartbeat telegram --Telegram is sent time interval(1..65535s) 5 <input type="radio"/> Inactive <input checked="" type="radio"/> Active
Page 1	Active infrared function via EIB <input checked="" type="radio"/> Disable <input type="radio"/> Enable
-->Cell 1	Infrared default status <input checked="" type="radio"/> Inactive <input type="radio"/> Active
-->Cell 2	Lock the screen via EIB "0"-Lock,"1"-Unlock <input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 3	Change brightness via EIB <input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 4	Enable slave clock <input checked="" type="radio"/> Degrees Celsius <input type="radio"/> Degrees Fahrenheit
-->Cell 5	Temperature show mode <input checked="" type="radio"/> Degrees Celsius <input type="radio"/> Degrees Fahrenheit
-->Cell 6	Internal temperature probe Temperature correction value(-5C..+5C) -2.5C <input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 7	Local temperature report(In range) --Temperature>=Threshold1(-30C..+99C) 0 <input type="radio"/> No <input checked="" type="radio"/> Yes
<input type="button" value="Group Objects"/> <input type="button" value="Parameter"/>	

No. ETS-Parameter Range (default) Description

| 1 System delay(1..255) after recovery 1...255 *Set the delay time can be operation after power on.* |
| 2 Read objects after bus recovery -Enable -Disable - Disable Enable *Enable/disable to read objects when power on again.* |
| 3 Heartbeat telegram -(Disable) -Send value"0" cyclically -Send value"1" cyclically -Send value"1/0" cyclically - Disable Enable *Defines which telegram should be sent to the bus. Disable: cannot send the heartbeat telegram Send value "0" cyclically: will send the telegram value "1" for heartbeat cyclically Send value "1" cyclically: will send the telegram value "1" for heartbeat cyclically Send value "1/0" inverted cyclically: will send the telegram value "1/0" for heartbeat inverted cyclically. If send the telegram value "1" at first, and then will send the telegram value "0"* |
| 4 -Telegram is send time interval(1..65535s) 1...(5)...65535 *Set the interval time for sending the telegram to the bus.* |
| 5 Active infrared function via EIB - Disable Enable *No this function.* |
| 6 Infrared default status - Inactive Active *No this function.* |
| 7 Lock the screen via EIB -Disable - "1"-Lock,"0"-Unlock - "0"-Lock,"1"-Unlock No Yes *Set the function of the lock screen* |
| 8 Change brightness via EIB - No Yes *Whether change the brightness via EIB.* |

9	Enable slave clock	-Enable -Disable	
10	Temperature show mode	-Degrees Celsius -Degrees Fahrenheit	<i>Set the temperature mode.</i>
<i>Internal temperature probe</i>			
11	Temperature correction value (-5C..+5C)	- -5C..+5C	<i>Set the correction value of temperature, it Used to correct the mistake of testing temperature and real temperature.</i>
12	Local temperature report (In range)	-No -Yes	<i>Yes: it will report to the bus when the local temperature in the setting range. No: it doesn't report to the bus.</i>
13	-Temperature>=Threshold1(-30C...99C)	-30C...99C	
14	-Temperature<=Threshold1(-30C...99C)	-30C...99C	
15	- Temperature report mode	-Report when changed -Report cyclic	<i>Set the report mode when local temperature report to the bus.</i>
16	-> temperature report of check period(1...65535s)	- 1...65535	
17	Enable buttons triggered via EIB	-Enable -Disable	<i>Enable/Disable buttons triggered via EIB. '1"0"1/0': the button will triggered when the panel receive the setting telegram .</i>
18	--The button trigger condition	'1'-Trigger '0'-Trigger '1/0'-Trigger	
19	Panel scene	-Enable -Disable	<i>Enable/Disable panel scene function.</i>

1.1_Panel scene																						
1.1.5 M/MPTLC43.1 > Panel scene <table border="0" style="width: 100%;"> <tr> <td style="width: 25%; vertical-align: top;"> <input type="radio"/> General <input type="radio"/> Panel scene --> Panel scene A --> Panel scene B System configuration </td> <td style="width: 25%; vertical-align: top;"> <input type="radio"/> Scene A Scene B </td> <td style="width: 25%; vertical-align: top;"> <input type="radio"/> Disable <input checked="" type="radio"/> Enable </td> <td style="width: 25%; vertical-align: top;"> <input type="radio"/> Disable <input checked="" type="radio"/> Enable </td> </tr> </table>				<input type="radio"/> General <input type="radio"/> Panel scene --> Panel scene A --> Panel scene B System configuration	<input type="radio"/> Scene A Scene B	<input type="radio"/> Disable <input checked="" type="radio"/> Enable	<input type="radio"/> Disable <input checked="" type="radio"/> Enable															
<input type="radio"/> General <input type="radio"/> Panel scene --> Panel scene A --> Panel scene B System configuration	<input type="radio"/> Scene A Scene B	<input type="radio"/> Disable <input checked="" type="radio"/> Enable	<input type="radio"/> Disable <input checked="" type="radio"/> Enable																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #90EE90;"> <th>No.</th> <th>ETS-Parameter</th> <th>Range (default)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td rowspan="2">1</td> <td>Scene A</td> <td>-Enable</td> <td>Enable/Disable panel scene A/B function.</td> </tr> <tr> <td>Scene B</td> <td>-Disable</td> <td>As below, take scene A as an example</td> </tr> <tr> <td colspan="4">1.1_Panel Scene A</td> </tr> <tr> <td colspan="4"></td> </tr> </tbody> </table>				No.	ETS-Parameter	Range (default)	Description	1	Scene A	-Enable	Enable/Disable panel scene A/B function.	Scene B	-Disable	As below, take scene A as an example	1.1_Panel Scene A							
No.	ETS-Parameter	Range (default)	Description																			
1	Scene A	-Enable	Enable/Disable panel scene A/B function.																			
	Scene B	-Disable	As below, take scene A as an example																			
1.1_Panel Scene A																						

1.1.5 M/MPTLC43.1 > --> Panel scene A

General	Output assigned to(scene1..64)	Scene 01
Panel scene	1 bit object control	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
--> Panel scene A	--1 bit object trigger	'1'-Trigger
--> Panel scene B	--1 bit object save	'1'-Save
System configuration	Entry delay time(0..255s)	0
Function configuration	Output objects settings	
Page 1	Output object <1> type	1byte value(0..100%)
--> Cell 1	--Output object 1 value(1 byte)	2%
--> Cell 2	Output object <2> type	1bit value
--> Cell 4	--Output object 2 value(1 bit)	'0'
--> Cell 5	Output object <3> type	1byte value(0..100%)
--> Cell 6	--Output object 3 value(1 byte)	25%
--> Cell 7	Output object <4> type	1byte value(0..100%)
Page 2	--Output object 4 value(1 byte)	50%(128)
--> Cell 1	Output object <5> type	Invalid
--> Cell 2	Output object <6> type	Invalid
	Output object <7> type	Invalid
	Output object <8> type	Invalid
	Output object <9> type	Invalid

No.	ETS-Parameter	Range (default)	Description
1	Output assigned to (Scene1..64)	- invalid - Scene 01...Scene64	Set the scene of output.
2	1 bit object control	-Enable -(Disable)	Enable/disable for 1 bit object control
3	--1 bit object control	-(Invalid) -“1”-Trigger -“0”-Trigger -“0/1”-Trigger	Set the telegram value for 1 bit object control -“1”-Trigger: if receives telegram value “1”, will trigger the object control - “0”-Trigger: if receives telegram value “0”, will trigger the object value -“0/1”-Trigger: if receives telegram value “0/1”, will trigger the object value
4	--1 bit object save	-(Invalid) -“1”-Save -“0”-Save -“0/1”-Save	Save the object. Set the telegram value for 1 bit object save -“1”-Trigger: if receives telegram value “1”, will trigger the object save - “0”-Trigger: if receives telegram value “0”, will trigger the object save -“0/1”-Trigger: if receives telegram value “0/1”, will trigger the object save
5	Entry delay time (0...255s)	(0)...255s	Set the delay time for entry the scene
<i>Output object settings</i>			
6	Output object <1> type	-(Invalid) -1 bit value -1 byte value (0...100%)	Set the value type for output object

		-1 byte value (0...255) -2 byte value (Float) -2 byte value (0...65535) -3 byte value (RGB)	
7	--Output objects 1 value (1 bit)	-(0) -1 -1/0	Set the telegram value for output objects
8	--Output objects 1 value (1 byte)	(0)...100%	Set the percentage for output objects
9	--Output objects 1 value (1 byte)	(0)...255	Set the parameter for output objects
10	--Scaling (2byte value(Float))	-0.01 -0.1 (-1.0)	Set the parameter for scaling
11	--Output objects 1 value (2 byte)	(0)...255	Set the parameter for output objects
12	--Output objects 1 value (2 byte)	(0)...255	Set the parameter for output objects
13	--Output objects 1 value (3 byte:R)	0...(255)	Set the parameter for 3byte: R
14	--Output objects 1 value (3 byte:G)	0...(255)	Set the parameter for 3byte: G
15	--Output objects 1 value (3 byte:B)	0...(255)	Set the parameter for 3byte: B
<i>Output object 2-10 are same to objects 1.</i>			

1.2 System configuration

1.1.5 M/MPTLC43.1 > System configuration

No.	ETS-Parameter	Range (default)	Description
Screen brightness setting			
1	Brightness	-Level(00%) ... -Level(100%)	Set the brightness of screen
2	Brightness adjust	-Brightness not change	Whether change the screen brightness

		-Darken after a certain time	<i>when standby.</i> <i>When select darken after a certain time, You should set the brightness level and time.</i>
3	--Auto darken brightness	-Level(00%) ... -Level(100%)	
4	--Time(3..255s)	-3..255s	
5	Screensaver enable	-Enable -Disable	<i>Whether use screensaver function.</i> <i>Enable: it will jump to screensaver page after 5 seconds no operation.</i>
6	--Screensaver after a delay(3..255s)	-3..255s	<i>Enable: it will Screensaver after the setting time no operation.</i>
7	Touch sound	-Enable -Disable	<i>When operation the panel whether need the sound.</i>
8	Sleep enable	-Enable -Disable	<i>Enable/Disable the sleep function.</i>
9	--Sleep after a delay(3..255s)	-3..255s	<i>Enable: it will sleep after the setting time no operation.</i>
Lock settings			
10	Unlock back to	-Homepage -Previous page	
11	Lock automatically	-Disable -Auto lock after a certain time	
12	--Lock after a delay(3..255s)	-3..255s	<i>Set the time for auto lock</i>
13	Unlock protected by password	-No -Yes	<i>Whether use the password after standby.</i>
Security protect			
14	Password (1)	-0...9	<i>Set the password.</i>
15	Password (2)		
16	Password (3)		
17	Password (4)		
18	Proximity sensor default active status	-Inactive -Active	<i>Set the status of proximity sensor.</i>
19	Proximity sensor sensitive	-1%...100%	<i>Set the proximity sensor sensitive. the bigger value the more sensitive.</i>
20	Recovery brightness	-Enable -Disable	<i>Whether recovery brightness when proximity the panel.</i>
21	Enable send to bus	-No -Yes	<i>whether send to bus when proximity the panel or darkness.</i>
22	Send to bus	-Invalid -Toggle -ON -OFF	<i>It will sent the statues to bus.</i>
23	-> send to bus after delay time	-Invalid -Toggle -ON -OFF	<i>It will send the status to the bus again after delay time</i>
24	->Delay time(1..255s)	-1..255s	

1.1.5 M/MPTLC43.1 > Function configuration

General	Page 1	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Panel scene	Page 2	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Panel scene A	Page 3	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Panel scene B	Page 4	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
System configuration	Page 5	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Function configuration	AC	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Page 1	FCU	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 1	Heating A	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 2	Heating B	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 4	Audio	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 5	Label display mode	Image
-->Cell 6	Display time	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 7	Display temperature	Internal Temperature probe

No.	ETS-Parameter	Range (default)	Description
1	Homepage number setting	-Only one page -Two pages	Select the number of home page Settings
2	Homepage 1 setting	-Home page 1	Set the home page corresponds to which function
3	Homepage 2 setting	-Home page 2 -Page 1...Page 5 -AC page -FCU page -Heating A page -Heating B page -Audio page	
4	Function page 1... Function page 10	-Home page 1 -Home page 2 -Page 1...Page 5 -AC page -FCU page -Heating A page -Heating B page -Audio page	Set the function page corresponds to which function
5	->page setting after bus recovery	-Invalid -Recover -Home page 1 -Home page 2 -Page 1...Page 5 -AC page -FCU page -Heating A page -Heating B page -Audio page	Set the page displayed after the bus response
6	Page 1...Page5	-Disable -Enable	Enable / Disable the page function. If enable, the panel will be displayed, otherwise it will not be displayed.
7	AC		
8	FCU		
9	Heating A		

10	Heating B		
11	Audio		
12	Label display mode	-Test -Image -Nome	Set the label display.
13	Display time	-No -Yes	Whether display the time on the home page.
14	Display temperature	-No -Internal temperature probe -External	Set the source of temperature.

2.1_Page 1-5

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the home page .
2	Icon source	-Preset -User-define	Set the icon source.
3	--Icon	-Menu page 1 ... -Idle 2	Set the icon of each page. (preset)

4	Cell 1....Cell8	-Disable -Enable	<i>There are 8 cells on each page, here, you can set the function of the cell disable or enable.</i>
---	-----------------	---------------------	--

The parameters are same of page 1 to 5, take page 1 as an example.

2.1.1 cell (all cell's function are same)

2.1.1.1 Switch controller

No.	ETS-Parameter	Range (default)	Description
1	Function	-Switch controller -Dimming controller -Shutter controller -Flexible controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String(14 bytes) controller -Alternate controller -Pulse controller -RGB controller -Fan controller -Combination controller	<i>Set the function of cell 1.</i>
2	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
3	Icon source	-Preset -User-define	<i>Set the icon source.</i>
4	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between</i>

			<i>longpress and short press</i>
5	Short press action	-Invalid -Toggle -ON -OFF	Set the function of short press action. When short press the cell, Toggle: It will invert the last time's value then send it out. ON: it will send telegram 1 to the bus, then control the object. OFF: it will send telegram 0 to the bus, then control the object.
6	Long press action	-Invalid -Toggle -ON -OFF	Set the function of long press action. When long press the cell, Toggle: It will invert the last time's value then send it out. ON: it will send telegram 1 to the bus, then control the object. OFF: it will send telegram 0 to the bus, then control the object.
7	-Show icon	-No -Yes	<i>Whether show icon of the cell.</i>
8	--Icon for 'On' status	-Menu page 1 ... -Idle 2	<i>Set the icon of the Cell. (preset)</i>
9	--Icon for 'Off'		
10	Delay for button	-No -Yes	<i>Whether delay control the object when press the button.</i>
11	--Delay for switch ON of short button(0...255s)	-0...255	<i>Set the delay time after control the button.</i>
12	--Delay for switch OFF of short button(0...255s)		
13	--Delay for switch ON of long button(0...255s)		
14	--Delay for switch OFF of long button(0...255s)		
15	Delay send another object	-Disable -Enable	<i>This cell can be set another object if you select enable.</i>
16	--Delay send for short button	-Disable -Enable	<i>Set the condition of delay send another object.</i>
17	--Delay send for long button	-Disable -Enable	
18	--Delay send when button object value	-ON -OFF -ON/OFF	
19	--Delay send value:	-ON -OFF -ON/OFF -The same as object	
20	--Send after a delay(0...255s)	-0...255	
21	Status	-Local status -External from bus -Mutually exclusive display	<i>The status of cell 1.</i>
2.1.1.2 Dimming controller			

1.1.5 M/MPTLC43.1 > --> Cell 2

General	Function	Dimming controller
Panel scene	Label	Cell 2
--> Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
--> Panel scene B	Long button time after	1s
System configuration	Short press action	Toggle
Function configuration	Long press action	Dimming up
Page 1	-Dimming step	Step3 (25%)
--> Cell 1	Show icon	<input type="radio"/> No <input checked="" type="radio"/> Yes
--> Cell 2	--Icon for 'On' status	Light ON
--> Cell 3	--Icon for 'Off' status	Light OFF
--> Cell 4	--Icon for dim up	Dimming Up
--> Cell 5	--Icon for dim down	Dimming Down
--> Cell 6	Delay for switch ON of short button (0..255s)	0
--> Cell 7	Delay for switch OFF of short button (0..255s)	0
--> Cell 8	Delay send another object	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Page 2	Status	Local status
--> Cell 1		

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press</i>
4	Short press action	-Invalid -Toggle -ON -OFF	<i>Set the function of short press action.</i> <i>When short press the cell,</i> <i>Toggle:</i> It will invert the last time's value then send it out. <i>ON:</i> it will send telegram 1 to the bus, then control the object. <i>OFF:</i> it will send telegram 0 to the bus, then control the object.
5	Long press action	-Invalid -Dimming toggle -Dimming up -Dimming down	<i>Set the function of long press action.</i> <i>When long press the cell,</i> <i>Dimming toggle:</i> It will invert the last time's value then send it out. <i>Dimming up:</i> it will dim up the object. <i>Dimming down:</i> it will dim down the object.
6	-Dimming step	- (Step1 (100%)) -Step2 (50%) -Step3 (25%)	<i>Set the step of dimming.</i>

		-Step4 (12.5%) -Step5 (6.25%) -Step6 (3.13%) -Step7 (1.56%)	
7	-Show icon	-No -Yes	<i>Whether show icon of the cell.</i>
8	--Icon for 'On' status	-Menu page 1 ... -Idle 2	<i>Set the icon of the Cell. (preset)</i>
9	--Icon for 'Off'		
10	--Icon for dim up	-Menu page 1 ... -Idle 2	<i>Set the dim up/down icon of the Cell when press it. (preset)</i>
11	--Icon for dim down		
12	Delay for switch ON of short button(0...255s)	-0...255	<i>Set the delay time after control the button.</i>
13	Delay for switch OFF of short button(0...255s)		
14	Delay send another object	-Disable -Enable	<i>This cell can be set another object if you select enable.</i>
15	--Delay send for short button	-Disable -Enable	<i>Set the condition of delay send another object.</i>
16	--Delay send when button object value	-ON -OFF -ON/OFF	
17	--Delay send value:	-ON -OFF -ON/OFF -The same as object	
18	--Send after a delay(0...255s)	-0...255	
19	Status	-Local status -External from bus -Mutually exclusive display	<i>The status of cell21.</i>

2.1.1.3 Dimming controller

1.1.5 M/MPTLC43.1 > -->Cell 2

System configuration	Function	Shutter controller
Function configuration	Label	Cell 2
Page 1	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
-->Cell 1	Long button time after	1s
-->Cell 2	Short press action	Stepping-> Decrease/Stop
-->Cell 3	Long press action	Moving-> DOWN
-->Cell 4	-Auto stop	<input checked="" type="radio"/> No <input type="radio"/> Yes
-->Cell 5	Show icon	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 6	--Icon for 'Up'	Shutter Up
-->Cell 7	--Icon for 'Down'	Shutter Down
-->Cell 8	--Icon for 'Increase'	Shutter Increase
-->Cell 9	--Icon for 'Decrease'	Shutter Decrease
Page 2	--Icon for 'open'	Shutter Open
-->Cell 1	--Icon for 'close'	Shutter Close

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press</i>
4	Short press action	-Invalid -Stepping->Increase/Stop - Stepping->Decrease/Stop -Stepping->Toggle/Stop -Moving->UP -Moving->DOWN -Moving->Toggle	<p>Invalid: no action when short press</p> <p>Stepping->Increase/Stop:when short press the button, it will increase/stop adjusting the angle of shutter</p> <p>Stepping-> Decrease/Stop:when short press the button, it will decrease/ stop adjusting the angle of shutter</p> <p>Stepping-> Toggle/Stop: when short press the button, it will toggle/ stop adjusting the angle of shutter</p> <p>Moving-> UP: when short press the button, it will it will send move up telegram, the position will be up.</p> <p>Moving-> Down: when short press the button, it will it will send move up telegram, the position will be up.</p> <p>Moving-> Toggle: when short press the</p>

			<i>button, it will send move up/down telegram, the position will be up/ down.</i>
5	Long press action	<ul style="list-style-type: none"> - (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 	<p>Invalid: no action when long press the button</p> <p>Stepping->Increase/Stop: when long press the button, it will increase/stop adjusting the angle of shutter</p> <p>Stepping-> Decrease/Stop: when long press the button, it will decrease/stop adjusting the angle of shutter</p> <p>Stepping-> Toggle/Stop: when long press the button, it will toggle/ stop adjusting the angle of shutter</p> <p>Moving-> UP: when long press the button, it will send move up telegram, the position will be up.</p> <p>Moving-> Down: when long press the button, it will send move down telegram, the position will be down.</p> <p>Moving-> Toggle: when long press the button, it will send move up/down telegram, the position will be up/ down.</p> <p>Press: Moving->UP, Release stop: when long press the button , it will send move up telegram, when release, it will send the telegram to stop</p> <p>Press: Moving->DOWN, Release stop: when long press the button, it will send move down telegram, when release, it will send the telegram to stop</p> <p>Press: Moving->Toggle, Release stop: when long press the button, it will send move down/up telegram, when release, it will send the telegram to stop</p>
6	-Auto stop	<ul style="list-style-type: none"> -No -Yes 	Whether or not auto stop.
7	--Stop after a delay(3..255s)	-3..255s	
8	Show icon	<ul style="list-style-type: none"> -No -Yes 	Whether show icon of the cell.
9	--Icon for 'UP'	<ul style="list-style-type: none"> -Menu page 1 ... -Idle 2 	Set the icon of the cell when press it. (preset)
10	--Icon for 'Down'		
11	--Icon for 'Increase'		
12	--Icon for 'Decrease'		
13	--Icon for 'open'		
14	--Icon for 'close'		
15	Status	<ul style="list-style-type: none"> -Local status -External from bus -Mutually exclusive display 	Set the cell's status.
2.1.1.4 Flexible controller			

1.1.5 M/MPTLC43.1 > -->Cell 2

System configuration	Function	Flexible controller
Function configuration	Label	Cell 2
Page 1	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
-->Cell 1	Action mode	<input type="radio"/> No Short & Long button <input checked="" type="radio"/> Short & Long button
-->Cell 2	Long button time after	1s
-->Cell 3	-Short press action	Toggle
-->Cell 4	-Long press action	Invalid
-->Cell 5	Show icon	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 6	--Icon for 'On' status	Light ON
-->Cell 7	--Icon for 'Off' status	Light OFF
-->Cell 8	Status	Local status
Page 2		
-->Cell 1		

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Action mode	-No short & Long button -Short & Long button	<i>Set the action mode.</i> <i>No short & Long button: there is not different when short or long press button.</i> <i>Short & Long button: short press button and long press button can be control different objects.</i>
4	-Long button time after	-0.2s-5s	<i>How long time as a long button.</i>
5	-Short press action	-Invalid -Toggle -ON -OFF	<i>The function of the button when short press it.</i>
6	-Long press action	-Incalid -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"	<i>The function of the button when long press action.</i>

7	Show icon	-No -Yes	Whether show icon of the cell.
8	--Icon for 'On' status	-Menu page 1	Set the icon of the cell when press it.
9	--Icon for 'Off' status	... -Idle 2	(preset)
10	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.

2.1.1.5 Scene controller

1.1.5 M/MPTLC43.1 > -->Cell 1

Function: Scene controller

Label: Cell 1

Icon source: Preset

Long button time after: 1s

Short press action: Scene NO.01

-Icon: Menu AC

-Name: Scene1

Scene toggle enable: Disable

Show icon: No

-Show status by text:

- Text for 'Save': Save
- Text for 'Up': Up
- Text for 'Down': Down

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Short press action	-Scene No.01 ... -Scene No.64	Set the function of button when short press it.
5	-Icon	-Menu page 1 ... -Idle 2	Set the icon of the cell when press it. (preset)
6	-Name	(8 character allowed)	Note of short press action.
7	Scene toggle enable	-Disable -Enable	Enable/Disable the scene toggle function.
8	-Toggled scene	-Scene No.01	The function of the button when press it.

		... -Scene No.64	
9	--Icon for scene	-Menu page 1 ... -Idle 2	Set the icon of scene.
10	--Name of the scene	(8 character allowed)	Note the scene.
11	Long press action	-Invalid -Scene dimming -Scene saving -Dimming and saving	Set the function of button when long press it.
12	-Dimming mode	-Brighter -Darker -Darker/Brighter	Set the dimming mode when the long press function is dimming.
13	Show icon	-No -Yes	
14	--Icon for 'Save'	-Menu page 1 ... -Idle 2	Set the icon of the cell when press it. (preset)
15	--Icon for 'Up'		
16	--Icon for 'Down'		
17	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.

2.1.1.6 Sequence controller

1.1.5 M/MPTLC43.1 > -->Cell 2

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Short press action	-Invalid -Toggle(Start-'1',Stop	Set the function of button when short press it.

		'0') -Start with '1' - Start with '0'	
5	Long press action	-Invalid -Toggle(Start-'1',Stop '0') -Start with '1' - Start with '0'	Set the function of button when long press it.
6	Show icon	-No -Yes	Whether or not show icon.
7	--Icon for 'Start' status	-Menu page 1 ... -Idle 2	Set the icon of the cell when press it. (preset)
8	--Icon for 'Stop' status	-Local status	Set the cell's status.
9	Status	-External from bus -Mutually exclusive display	

2.1.1.7 Percentage controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General	Function	Percentage controller
Panel scene	Label	Cell 2
-->Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
-->Panel scene B	Long button time after	1s
System configuration	Short press action	100%(255)
Function configuration	Percentage toggled	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Page 1	Long press action	Value select
-->Cell 1	Delay on short button(0..255s)	0
-->Cell 2	Delay on long button(0..255s)	0
-->Cell 3	Show icon	<input checked="" type="radio"/> No <input type="radio"/> Yes
-->Cell 4	-Show status by text	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 5	--Text for 'percentage'	Percentage value
-->Cell 6	Status	External from bus

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Short press action	-0%(0)...100%(255)	Set the function of button when short press it.
5	Percentage toggled	-Disable	Enable/Disable the percentage toggled

		-Enable	<i>function.</i>
6	-Toggled percentage value	-0%(0)...100%(255)	<i>Set the value to send to the object when you control the cell</i>
7	Long press action	-Invalid -Fixed value -Value select	<i>Set the function of button when long press it.</i>
8	Delay on short button(0...255s)	-0...255s	<i>Set the delay time of press button.</i>
9	Delay on long button(0...255s)	-No	<i>Whether or not show icon.</i>
10	Show icon	-Yes	
11	-Show status by text	-No -Yes	<i>Set the text of the display status</i>
12	--Text for 'percentage'		
13	Status	-Local status -External from bus -Mutually exclusive display	<i>Set the cell's status.</i>

2.1.1.8 Threshold controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General	Function	Threshold controller
Panel scene	Label	Cell 2
--> Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
--> Panel scene B	Long button time after	1s
System configuration	Threshold type	<input checked="" type="radio"/> 1byte threshold <input type="radio"/> 2bytes threshold
Function configuration	Short press action	100
Page 1	Threshold toggled	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
-->Cell 1	Long press action	Value select
-->Cell 2	Delay on short button(0..255s)	0
-->Cell 3	Delay on long button(0..255s)	0
-->Cell 4	Show icon	<input checked="" type="radio"/> No <input type="radio"/> Yes
-->Cell 5	-Show status by text	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 6	--Text for 'threshold'	Threshold value
	Status	Local status

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press</i>
4	Threshold type	-1byte threshold -2bytes threshold	<i>Set the threshold type</i>
5	Short press action	-0...255	<i>Set the value of short press action</i>
6	Threshold toggled	-Disable -Enable	<i>Enable/Disable the threshold toggled function.</i>

7	Long press action	-Invalid -Fixed value -Value select	<i>Set the value of long press action</i>
8	Delay on short button(0...255s)	-0...255s	<i>Set the delay time of press button.</i>
9	Delay on long button(0...255s)		
10	Show icon	-No -Yes	<i>Whether or not show icon.</i>
11	-Show status by text	-No -Yes	<i>Set the text of the display status</i>
12	--Text for 'percentage'		
13	Status	-Local status -External from bus -Mutually exclusive display	<i>Set the cell's status.</i>

2.1.1.9 Threshold controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General	Function	String(14bytes) controller
Panel scene	Label	Cell 2
-->Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
-->Panel scene B	Long button time after	1s
System configuration	Short press action	Hello!
Function configuration	Long press action	Hello!
Page 1	Delay on short button(0..255s)	0
-->Cell 1	Delay on long button(0..255s)	0
-->Cell 2	Show icon	<input checked="" type="radio"/> No <input type="radio"/> Yes
-->Cell 3	-Show status by text	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 4	--Short button	Short
-->Cell 5	--Long button	Long
-->Cell 6	--Idle status	String
	Status	Local status

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press</i>
4	Short press action	-14 character allowed	<i>Set the string of press action</i>
5	Long press action		
6	Delay on short button(0...255s)	-0...255s	<i>Set the delay time of press button.</i>
7	Delay on long button(0...255s)		
8	Show icon	-No -Yes	<i>Whether or not show icon.</i>
9	-Show status by text	-No -Yes	<i>Set the text of the display status</i>

10	--short button	-14 character allowed	
11	--Long button		
12	--Idle button		
13	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.

2.1.1.10 Alternate controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General	Function	Alternate controller
Panel scene	Label	Cell 2
--> Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
--> Panel scene B	Long button time after	1s
System configuration	Alternate<1>	1 bit value
Function configuration	-Short button value(1 bit)	1
Page 1	-Long button value(1 bit)	0
-->Cell 1	Icon	Light OFF
-->Cell 2	Name	Alt 1
-->Cell 3	Alternate<2>	1 bit value
-->Cell 4	-Short button value(1 bit)	1
-->Cell 5	-Long button value(1 bit)	0
-->Cell 6	Icon	Light ON
	Name	Alt 2

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Alternate<1> ... Alternate<4>	-Invalid -1 bit value -1 byte value -2 byte value	Set the type of alternate. Alternate<1> to Alternate<4>will alternate control when press this button
5	Alternate on short button	-Enable -Disable	Set the string of press action
6	Alternate on long button		
7	Short press action	-Invalid -Switch FWD -Switch RWD	The older of 1 to 4 alternate.
8	Long press action		
9	Show icon	-No -Yes	Whether or not show icon.

10	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.
----	--------	--	------------------------

2.1.1.11 Pulse controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General Panel scene --> Panel scene A --> Panel scene B System configuration Function configuration Page 1 -->Cell 1 -->Cell 2 -->Cell 3 -->Cell 4 -->Cell 5 -->Cell 6	On Icon : Pulse controller Cell 2 <input checked="" type="radio"/> Preset <input type="radio"/> User-define Long button time after : 1s Positive/Negative pulse: <input checked="" type="radio"/> Positive pulse <input type="radio"/> Negative pulse Output to bus after bus recovery : <input type="radio"/> No <input checked="" type="radio"/> Yes Output to bus after a delay(0..255s) : 0 Min hold time after bus recovery : 0 Pulse 1 setting Open status duration time(1..255s) : 5 Close status duration time(1..255s) : 5 Pulses number set : <input type="radio"/> Send continuously <input checked="" type="radio"/> Numbers Number : 1
---	---

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Positive/Negative pulse:	-Positive pulse -Negative pulse	Set the parameter for pulse controller
5	-Output to bus after bus recovery	-No -Yes	Whether or not output to bus after recovery.
6	--Output to bus after a delay (0...255s)	(0)...255	Set the delay time for output to bus
7	Minimum hold time after bus recovery (0...255s)	(0)...255	Set the minimum hold time when power on
<i>Pulse 1 setting</i>			
8	--Open status duration time (1...255s)	1...(5)...255	Set the duration time for opening status
9	--Close status duration time (1...255s)	1...(5)...255	Set the duration time for closing status
10	--Pulses number set	-(Number)	Set the parameter for pulses number

		-Send continuously	<i>Number: If you set one time, will send pulse for one time Send continuously: will always send pulse</i>
11	--Pulses number (1...65535)	(1)...65535	<i>Set the number for sending pulse</i>
<i>Pulse 2 setting, same as pulse 1.</i>			
12	Short press action	-Invalid	<i>Set the function of press the button.</i>
13	Long press action	-Pulse 1 -Pulse 2 -Toggle -Stop	
14	Show icon	-No -Yes	<i>Whether or not show icon.</i>
15	--Icon for pulse 1	-Menu page 1	<i>Set the icon of the cell when press it. (preset)</i>
16	--Icon for pulse 2	... -Idle 2	
17	Status	-Local status -External from bus -Mutually exclusive display	<i>Set the cell's status.</i>

2.1.1.12 RGB controller

1.1.5 M/MPTLC43.1 > -->Cell 2

General	Function	RGB controller
Panel scene	Label	Cell 2
-->Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
-->Panel scene B	Long button time after	1s
System configuration	Short press action	1 bit
Function configuration	-1 bit value	Toggle
Page 1	Long press action	Invalid
-->Cell 1	Show icon	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 2	--Icon for 'On'	Light ON
	--Icon for 'Off'	Light OFF
-->Cell 3		
-->Cell 4		
-->Cell 5		
-->Cell 6		

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
2	Icon source	-Preset -User-define	<i>Set the icon source.</i>
3	Long button time after	-0.2-5s	<i>How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press</i>
4	Short press action	-Invalid	<i>Set the function of press the button.</i>

5	Long press action	-1 bit -4 bit (Relative dimming)(only long press action) -1 byte(Absolute dimming) -3 byte (fix RGB) -RGB select	
6	Show icon	-No -Yes	Whether or not show icon.
7	-Icon for 'on'	-Menu page 1 ... Idle 2	Set the icon of the cell when press it. (preset)
8	-Icon for 'off'		
9	-Icon for dimming up		
10	-Icon for dimming down		
11	-Icon for percentage		
12	-Icon for fixing value		
13	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.

2.1.1.13 RGB controller

1.1.5 M/MPTLC43.1 > --> Cell 2

General	Function	Fan controller
Panel scene	Label	Cell 2
--> Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
--> Panel scene B	Long button time after	1s
System configuration	Total number of fan speed	3
Function configuration	=Speed 1=	
Page 1	Object 1 value set	ON
--> Cell 1	Object 2 value set	OFF
--> Cell 2	Object 3 value set	OFF
--> Cell 3	Icon for speed 1	Fan Speed Low
--> Cell 4	Text for speed 1	No.1
--> Cell 5	=Speed 2=	
--> Cell 6	Object 1 value set	OFF
--> Cell 7	Object 2 value set	ON
	Object 3 value set	OFF
	Icon for speed 2	Fan Speed Medi
	Text for speed ?	No.2

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between

			<i>longpress and short press</i>
4	Total number of fan speed	-2 -3 -4	<i>Set the total number of fan speed, if you select 4 that will has 4 speed the following.</i>
=Speed1=			
5	Object 1 value set	-Invalid -ON -OFF	<i>Set the state of object 1 to 4 when speed1.</i>
6	Object 2 value set		
7	Object 3 value set		
8	Object 4 value set		
=Speed2=,=Speed3=,=Speed4=, =Turn off fan= , these parameters are same to speed 1. Speed 1 to 4 and turn off are controlled in order when press the button.			
	Delay to send ON after OFF(0...255s)	-0...255	<i>Set the delay time when change the object statues.</i>
9	Short press action	-Invalid -Switch fan speed -Turn off fan	<i>Set the function of short press the button.</i>
10	--Switch speed direction	-FWD -RWD	<i>Set the older of the speed when press the button.</i>
11	--Speed 1	-Disable -Enable	<i>Enable/Disable the speed function.</i>
12	--Speed 2		
13	--Speed 3		
14	--Speed 4		
15	--Turn off fan		
16	Long press action	-Invalid -Switch fan speed -Turn off fan	<i>Set the function of long press the button.</i>
17	Show icon	-No -Yes	<i>Whether show the icon.</i>
18	Status	-Local status -External from bus -Mutually exclusive display	<i>Set the cell's status.</i>
2.1.1.14 Combination controller			

1.1.5 M/MPTLC43.1 > -->Cell 4

General	Function	Combination controller
Panel scene	Label	Cell 4
--> Panel scene A	Icon source	<input checked="" type="radio"/> Preset <input type="radio"/> User-define
--> Panel scene B	Long button time after	1s
System configuration	Button object type 1	Invalid
Function configuration	Button object type 2	Invalid
Page 1	Button object type 3	Invalid
-->Cell 1	Button object type 4	Invalid
-->Cell 2	Short press action	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
-->Cell 3	Show icon	<input checked="" type="radio"/> No <input type="radio"/> Yes
-->Cell 4	-Show status by text	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 5	--Short button	Combine
-->Cell 6	--Idle status	IDLE
-->Cell 7	Status	Local status

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Icon source	-Preset -User-define	Set the icon source.
3	Long button time after	-0.2-5s	How long time as a long button. Long press the button or short press the button can control the different objects. This parameter distinguish between long press and short press
4	Button object type 1	-Invalid -Switch controller -Shutter controller -Scene controller -Sequence controller -Percentage controller -Threshold controller -String(14bytes) controller	Set the function of the button.
5	Button object type 2		
6	Button object type 3		
7	Button object type 4		
8	Short press action	-Disable -Enable	Enable/Disable of short press action.
9	Show icon	-No -Yes	Whether show the icon.
10	--Short button	-Menu page 1 ... Idle 2	Set the icon of the cell when press it. (preset)
11	--Idle status		
12	Status	-Local status -External from bus -Mutually exclusive display	Set the cell's status.

2.2_Air-condition

1.1.5 M/MPTLC43.1 > Air-condition

-->Cell 2	Label	AC
-->Cell 3	Set for comfort temperature[MIN](0..99C)	0C
-->Cell 4	Set for comfort temperature[MAX](0..99C)	32C
-->Cell 5	Actual temperature(Celsius degree)	<input checked="" type="radio"/> Local sensor <input type="radio"/> Via EIB
-->Cell 6	=>Fan speed:	
-->Cell 7	->Fan speed control type	<input type="radio"/> 1bit object <input checked="" type="radio"/> 1byte object
-->Cell 8	-->Low speed value	85
Air-condition	-->Medium speed value	170
->AC Output	-->Hight speed value	254
FCU	Automatic speed	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
->Cool output	Low speed	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
Floor Heating A	Medium speed	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
->FH Output	Hight speed	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
Floor Heating B	=>Wind swing:	
->FH Output	Wind swing	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
Audio	=>Air condition mode:	
	->Control mode type	<input checked="" type="radio"/> 1bit object <input type="radio"/> 1byte object
	Automatic heating/cooling	<input type="radio"/> Inactive <input checked="" type="radio"/> Active
	Only cooling	<input type="radio"/> Inactive <input checked="" type="radio"/> Active

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Set for comfort temperature(MIN)(0..99C)	-0C..99C	Set the range of comfort temperature.
3	Set for comfort temperature(MAX)(0..99C)		
4	Actual temperature (Celsius degree)	-Local sensor -Via EIB	Set the source of actual temperature.
5	-> Fan speed control type	-1bit object -1byte object	Set the fan speed control type.
6	--> Low speed value	-0...255	Set the value of speed.
7	-->Medium speed value		
8	--> Hight speed value		
9	Automatic speed	-Inactive -Active	Set the speed is active or not.
10	Low speed		
11	Medium speed		
12	Hight speed		
13	Wind swing	-Inactive -Active	Set the wind swing is active or not.
14	->control mode type	-1bit object	Set the air condition control type.

		-1byte object	
15	Automatic heating/cooling	-Inactive -Active	<i>Set the function of air condition, you can't find the function in the panel when you select inactive.</i>
16	Only cooling		
17	Only heating		
18	Only dehumidification		
19	Only fan		
<i>==> Air condition status:</i>			
20	The status operation after power on	-Unchange -Recovery	<i>Set the air condition status after power on.</i>
21	--Delay for status recovery(2...255s)	-2...255s	<i>This parameter is for power on status is recovery.</i>
22	The status operation after AC switch ON	-Unchange -Recovery	<i>Set the AC switch status. When the status is on you can operation AC settings via panel.</i>
23	--Delay for status recovery(2...255s)	-2...255s	
<i>=>Fixed button function:</i>			
24	Fixed button function	-Disable -Enable	<i>Set the fixed button function after power on.</i>
25	->Fan speed: left button	-Auto -Low speed -Medium speed -Hight speed -Switching speed -Invalid	<i>Set the fan speed of the fixed button</i>
26	->Fan speed: right button		
27	->Mode: left button	-Auto -Cooling -Heating -Dehumidification -Fan -Switching control mode -Invalid	<i>Set the fan mode of the fixed button</i>
28	->Mode: right button		
<i>=>Output control:</i>			
29	Output control the relay actuator	-Disable -Enable	<i>Whether use Output control funcgion.</i>
<i>->AC output</i>			

1.1.5 M/MPTLC43.1 > ->AC Output

-->Cell 2	Setpoint:	
-->Cell 3	Temperature hysteresis(0.1C)	50
-->Cell 4	Stop heating/cooling	<input type="radio"/> Yes <input checked="" type="radio"/> No
-->Cell 5	Fan:	
-->Cell 6	Fan output control type	<input type="radio"/> changeover <input checked="" type="radio"/> step
-->Cell 7	Starting characteristic of fan	Switch on at speed 2
-->Cell 8	Duration time at starting speed(2..255s)	2
Air-condition	Changeover delay between fan speeds(s)	0.5
-->AC Output	Duration on fan speed(2..255s)	2
FCU	Auto fan speed1:if temperature deviation <=	2C
->Cool output	Auto fan speed2:else if temperature deviation <=	4C
Floor Heating A	Auto fan speed3:else	Speed 3
->FH Output	Fan speed when over setpoint temperature(for automatic fan speed)	<input type="radio"/> On speed 1 <input checked="" type="radio"/> OFF
Floor Heating B	Heat valve:	<input checked="" type="radio"/> Two-step(ON/OFF) control <input type="radio"/> PWM control
->FH Output	Cool valve:	<input checked="" type="radio"/> Two-step(ON/OFF) control <input type="radio"/> PWM control

No.	ETS-Parameter	Range (default)	Description
<i>Setpoint:</i>			
1	Temperature hysteresis(0.1C)	-1...200	<i>Set the temperature hysteresis</i>
2	Stop heating/cooling	-Yes -No	<i>Disable/Enable Stop heating/cooling.</i>
<i>Fan:</i>			
3	Fan output control type	-changevoer -Step	<i>Set the fan output control type.</i>
4	Starting characteristic of fan	-Switch on at speed 1 -Switch on at speed 2 -Switch on at speed 3	<i>Set the starting characteristic of fan</i>
5	Duration time at starting speed(2..255s)	-2..255	<i>Set the starting speed of fan</i>
6	Changeover delay between fan speeds(s)	-0.5-10	<i>Set the Changeover delay between off speed</i>
7	Duration on fan speed(2...255s)	-2..255	<i>Set the fan speed duration time.</i>
8	Auto fan speed1: if temperature deviation <=	-0.5-30C	<i>Set the auto fan mode temperature to determine the value</i>
9	Auto fan speed2:else if temperature deviation <=	-0.5-30C	
10	Auto fan speed3:else	-	
11	Fan speed when over setpoint temperature (for automatic fan speed)	-On speed 1 -OFF	<i>Set the fan state parameters.</i> <i>On speed 1: The fan state is set to speed 1.</i> <i>OFF: The fan is turned off.</i>
<i>Heat valve:</i>			
12	Control type	-Two-step (ON/OFF)control -PWM control	<i>Set the control type.</i>

<i>Cool valve:</i>			
13	Control type	-Two-step (ON/OFF)control -PWM control	Set the control type.

2.3_FCU

1.1.5 M/MPTLC43.1 > FCU

-->Cell 2	Label	FCU
-->Cell 3	FCU functions selection	Cooling
-->Cell 4	Set for comfort temperature[MIN](0..99C)	16C
-->Cell 5	Set for comfort temperature[MAX](0..99C)	35C
-->Cell 6	Actual temperature(Celsius degree)	<input checked="" type="radio"/> Local sensor <input type="radio"/> Via EIB
-->Cell 7	->HVAC control mode type	<input checked="" type="radio"/> 1bit Command <input type="radio"/> 1byte mode
-->Cell 8	->HVAC mode type	<input checked="" type="radio"/> 1bit Command <input type="radio"/> 1byte mode
Air-condition	Fan speed	3-Fan speed
->AC Output	->Fan control type	<input checked="" type="radio"/> 1bit object <input type="radio"/> 1byte object
	->Fan status type	<input checked="" type="radio"/> 1bit object <input type="radio"/> 1byte object
FCU	The status operation after power on	<input type="radio"/> Unchange <input checked="" type="radio"/> Recovery
->Cool output	--Delay for status recovery(2..255s)	5
Floor Heating A	HVAC fixed button function	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
->FH Output	->HVAC mode:left button	Comfort mode
Floor Heating B	->HVAC mode:right button	Switching HVAC modes
->FH Output	->Fan speed:left button	1-Fan speed
Audio	->Fan speed:right button	2-Fan speed

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	<i>This label will displayed on the page 1.</i>
	FCU function selection	-Fan -Heating -Cooling -Heating and Cooling	<i>Set the function of FCU.</i>
<i>FCU function is heating and cooling</i>			
2	Set for comfort temperature(MIN)(0..99C)	-0C..99C	<i>Set the range of comfort temperature.</i>
3	Set for comfort temperature(MAX)(0..99C)		
4	Actual temperature (Celsius degree)	-Local sensor -Via EIB	<i>Set the source of actual temperature.</i>
5	-Temperature correction value(-5C...+5C)	--5C...+5C	<i>Set the correction value.</i>
6	HVAC-System	-2-pipe system -4-pipe system	<i>Select the HVAC system.</i>
7	->HVAC control mode type	-1bit Command	<i>Set the HVAC mode type.</i>
8	->HVAC mode type	-1byte mode	
9	Fan speed	-1-Fan speed -2-Fan speed -3-Fan speed	<i>Set the fan speed</i>

10	-> Fan control type	-1bit object -1byte object	<i>Set the fan speed control type.</i>
11	-->Speed1 value	-0...255	<i>Set the value of speed.</i>
12	--> Speed2 value		
13	--> Speed3 value		
14	->Fan status type	-1bit object -1byte object	<i>Set the fan status type.</i>
15	The status operation after power on	-Unchange -Recovery	<i>Set FCU status after power on.</i>
16	--Delay for status recovery(2...255s)	-2...255s	<i>This parameter is for power on status is recovery.</i>
17	HVAC fixed button function	-Disable -Enable	<i>Disable/Enable HVAC fixed button function</i>
18	->HVAC mode: left button	-Comfort mode -Standby mode -Night mode -Protection mode -Switching HVAC modes -Invalid	<i>Set the mode of left and right button.</i>
19	->HVAC mode: right button		
20	->Fan speed: left button	-Auto	<i>Set the fan speed of left and right button.</i>
21	->Fan speed: right button	-1-Fan speed -2-Fan speed -3-Fan speed -Stop -Switching speed -Invalid	
22	->HVAC control mode: left button	-Cooling -Fan	<i>Set the HVAC control mode of left and right button.</i>
23	->HVAC control mode: right button	-Switching HVAC control modes -Invalid	
<i>=>Output control:</i>			
24	Output control the relay actuator	-Disable -Enable	<i>Disable/Enable output function.</i>
<i>=>Information zone:</i>			
25	Display temperature of HVAC mode	-No -Yes	<i>Whether or not display temperature of HVAC mode</i>
26	Display alarm information	-No -Yes	<i>Whether or not alarm information</i>
<i>Heat and Cool output</i>			

1.1.5 M/MPTLC43.1 > ->Heat and Cool output

-->Cell 7	Setpoint:	Temperature hysteresis(0.1C) <input type="text" value="40"/>
-->Cell 8	Stop heating/cooling	<input type="radio"/> Yes <input checked="" type="radio"/> No
Page 5	[Heat]	
-->Cell 1	[+]Reduced temperature on standby mode(0..10C)	<input type="text" value="2"/>
-->Cell 2	[+]Reduced temperature on night mode(0..10C)	<input type="text" value="4"/>
-->Cell 3	Operation on protection mode	<input type="radio"/> Normal working <input checked="" type="radio"/> Stop working
-->Cell 4	HVAC mode at power on	<input type="text" value="Last mode"/>
[Cool]		
-->Cell 5	[+]Increased temperature on standby mode(0..10C)	<input type="text" value="2"/>
-->Cell 6	[+]Increased temperature on night mode(0..10C)	<input type="text" value="4"/>
-->Cell 7	Operation on protection mode	<input type="radio"/> Normal working <input checked="" type="radio"/> Stop working
-->Cell 8	HVAC mode at power on	<input type="text" value="Last mode"/>
Air-condition	Fan:	
->AC Output	->Fan output control type	<input checked="" type="radio"/> changeover <input type="radio"/> step
FCU	Starting characteristic of fan	<input type="text" value="Switch on at speed 1"/>
->Heat and Cool output	Duration time at starting speed(2..255s)	<input type="text" value="2"/>
Floor Heating A	Changeover delay between fan speeds(s)	<input type="text" value="0.5"/>
->FH Output	Duration on fan speed(2..255s)	<input type="text" value="2"/>
Floor Heating B	Auto fan speed1:if temperature deviation <=	<input type="text" value="2C"/>
	Auto fan speed2:else if temperature deviation <=	<input type="text" value="4C"/>

No.	ETS-Parameter	Range (default)	Description
Setpoint:			
1	Temperature hysteresis(0.1C)	-1...200	<i>Set the temperature hysteresis</i>
2	Stop heating/cooling	-Yes -No	<i>Disable/Enable Stop heating/cooling.</i>
Heat			
3	Reduced temperature on standby mode(0..10C)	-0...10	<i>Modify the heating mode relative to set the temperature reduction degree</i>
4	Reduced temperature on night mode(0..10C)	-0...10	
5	Operation on protection mode	-Normal working -Stop working	<i>Set the mode of operation protection mode</i>
6	HVAC mode at power on	-Last mode -Comfort mode -Standby mode -Night mode -Protection mode	<i>Set the HVAC mode after power on.</i>
<i>Cool , this function's parameters are same to the heat's.</i>			
Fan:			
7	Fan output control type	-changevoer -Step	<i>Set the fan output control type.</i>
8	Starting characteristic of fan	-Switch on at speed 1 -Switch on at speed 2 -Switch on at speed 3	<i>Set the starting characteristic of fan</i>
9	Duration time at starting speed(2..255s)	-2..255	<i>Set the starting speed of fan</i>

10	Changeover delay between fan speeds(s)	-0.5-10	<i>Set the Changeover delay between of fan speed</i>
11	Duration on fan speed(2...255s)	-2..255	<i>Set the fan speed duration time.</i>
12	Auto fan speed1: if temperature deviation <=	-0.5-30C	<i>Set the auto fan mode temperature to determine the value</i>
13	Auto fan speed2:else if temperature deviation <=	-0.5-30C	
14	Auto fan speed3:else	- /	
15	Fan speed when over setpoint temperature (for automatic fan speed)	-On speed 1 -OFF	<i>Set the fan state parameters.</i> <i>On speed 1: The fan state is set to speed 1.</i> <i>OFF: The fan is turned off.</i>
<i>Heat valve:</i>			
16	Control type	-Two-step (ON/OFF)control -PWM control	<i>Set the control type.</i>
17	Enable purge	-No -Yes	<i>Whether use purge funcgion.</i>
<i>Cool valve:</i>			
18	Control type	-Two-step (ON/OFF)control -PWM control	<i>Set the control type.</i>
19	Enable purge	-No -Yes	<i>Whether use purge funcgion.</i>
Now, take the heat and cool output as an example, others refernce this one.			

2.4_Floor heating

1.1.5 M/MPTLC43.1 > Floor Heating A

Page 5	Label	Heating
	-->Cell 1	Set for comfort temperature[MIN](0..99C) 10C
	-->Cell 2	Set for comfort temperature[MAX] (0..99C) 40C
	-->Cell 3	Actual temperature(Celsius degree) <input checked="" type="radio"/> Local sensor <input type="radio"/> Via EIB
	-->Cell 4	Display the temperature of the outdoor (Celsius degree) <input type="radio"/> Disable <input checked="" type="radio"/> Enable
	-->Cell 5	--Temperature correction value of the outdoor(-5C..+5C) 0C
	-->Cell 6	--Temperature monitoring time interval of the outdoor(s) 200
	-->Cell 7	The status operation after power on Read status
	-->Cell 8	--Delay for status read(2..255s) 5
	=>Enable mode:	
Air-condition	Normal mode <input type="radio"/> Disable <input checked="" type="radio"/> Enable	
->AC Output	Day mode <input type="radio"/> Disable <input checked="" type="radio"/> Enable	
FCU	Night mode <input type="radio"/> Disable <input checked="" type="radio"/> Enable	
->Heat and Cool output	Away mode <input type="radio"/> Disable <input checked="" type="radio"/> Enable	
Floor Heating A		
->FH Output	=>Fixed button function: Floor heating fixed button function <input checked="" type="radio"/> Disable <input type="radio"/> Enable	
Floor Heating B	->Mode:left button Normal-mode	
->FH Output	->Mode:right button Switching mode	
=>Output control:		
Audio	Output control the relay actuator <input type="radio"/> Disable <input checked="" type="radio"/> Enable	

No.	ETS-Parameter	Range (default)	Description
1	Label	(14 character allowed)	This label will displayed on the page 1.
2	Set for comfort temperature(MIN)(0..99C)	-0C..99C	Set the range of comfort temperature.
3	Set for comfort temperature(MAX)(0..99C)		
4	Actual temperature (Celsius degree)	-Local sensor -Via EIB	Set the source of actual temperature.
5	Display the temperature of the outdoor(Celsius degree)	-Display -Enable	Disable /Enable display the temperature of the outdoor on the floor heating page.
6	--Temperature correction value(-5C...+5C)	--5C...+5C	Set the correction value.
7	--Temperature monitoring time interval of the outdoor(s)	-5...255s	Set the time interval of the outdoor temperature monitoring.
8	The status operation after power on	-Unchange -Recovery -Read status	Set the status after power on.
9	--Delay for status read(2..255s)	-2..255s	
=>Enable mode			
10	Normal mode	-Disable -Enable	Disable/enable the mode.
11	Day mode		
12	Night mode		
13	Away mode		
14	Time mode		
=> Fixed button function:			
15	Floor heating fixed button	-Disable	Disable/enable the fixed button function.

	function	-Enable	
16	->mode: left button	-Normal-Mode -Day-mode -Night-mode -Away-mode -Timer-mode -Switching mode -Invalid	<i>The function of left and right fixed button.</i>
17	->mode: right button		

=>Output control:

18	Output control the relay actuator	-Disable -Enable	Disable/Enable output function.
----	-----------------------------------	---------------------	---------------------------------

=>Information zone:

19	Display alarm information	-No -Yes	Whether or not alarm information
----	---------------------------	-------------	----------------------------------

FH output

1.1.5 M/MPTLC43.1 > -> FH Output

-->Cell 0	Heating or cooling mode	<input type="radio"/> Heating <input checked="" type="radio"/> Cooling
Page 5	Temperature hysteresis(0.1C)	40
-->Cell 1	Stop heating	<input checked="" type="radio"/> Yes <input type="radio"/> No
-->Cell 2	Enable safety protect	<input type="radio"/> No <input checked="" type="radio"/> Yes
-->Cell 3	->Temperature source	<input type="radio"/> Local sensor <input checked="" type="radio"/> Via EIB
-->Cell 4	->Active protection(0..99C)	35C
-->Cell 5	->Active operation	OFF
-->Cell 6	->Cancel protection(0..99C)	25C
-->Cell 7	->Cancel operation	ON
-->Cell 8	Control type	<input checked="" type="radio"/> Two-step(ON/OFF) control <input type="radio"/> PWM control
Air-condition	Enable purge	<input type="radio"/> No <input checked="" type="radio"/> Yes
->AC Output	->Time of purge(1..255min)	5
FCU		
->Heat and Cool output		
Floor Heating A		
->FH Output		

No.	ETS-Parameter	Range (default)	Description
1	Heating or cooling mode	-Heating -Cooling	Select the FH output function.
2	Temperature hysteresis(0.1C)	-1..200	Set the temperature hysteresis
3	Stop heating	-No -Yes	Whether or not stop heating. If you select yes, It according the temperature then decide stop heating or not. If you select No, it will always working.
4	Enable safety protect	-No -Yes	Whether to open security protection.
5	->Temperature source	-Local sensor -Via EIB	Set the temperature source.
6	->Active protection(0...99C)	-0...99	Set the protection temperature threshold
7	->Active operation	-Unchange	and operation

		-OFF -ON	
8	->Cancel protection(0...99C)	-0...99	<i>Set the threshold and operation to cancel the protection temperature</i>
9	->Cancel operation	-Unchange -OFF -ON	
10	Control type	-Two-step(ON/OFF) control -PWM control	<i>Set the control type.</i>
11	Enable purge	-No -Yes	<i>Whether use purge funcgion.</i>
12	->Time of purge(1..255min)	-1...255	<i>Set the time of purge.</i>

2.5_Floor heating

1.1.5 M/MPTLC43.1 > Audio

-->Cell 5	Label	Audio
-->Cell 6	The status operation after power on	<input type="radio"/> Recovery <input checked="" type="radio"/> Read status
-->Cell 7	Play operation	<input type="radio"/> Play/Stop <input checked="" type="radio"/> Resume/Pause
-->Cell 8	Select list mode	<input type="radio"/> Invalid <input checked="" type="radio"/> Step by step
Page 5	Select source mode	Step by step
-->Cell 1	Adjust volume operation mdoe	<input type="radio"/> Step by step <input checked="" type="radio"/> Absolute
-->Cell 2	--Volume minimum value	0%(0)
-->Cell 3	--Volume maximum value	100%
-->Cell 4	--Increment value	10%
-->Cell 5	Bass:	
-->Cell 6	Adjust bass operation mdoe	<input type="radio"/> Step by step <input checked="" type="radio"/> Absolute
-->Cell 7	--Bass value minimum	0%(0)
-->Cell 8	--Bass value maximum	100%
-->Cell 9	--Increment value	10%
Air-condition	Treble:	
-->AC Output	Adjust treble operation mdoe	<input type="radio"/> Step by step <input checked="" type="radio"/> Absolute
FCU	--Treble value minimum	0%(0)
-->Heat and Cool output	--Treble value maximum	100%
-->FH Output	--Increment value	10%
Audio	Display 14byte object receive (ASCII)	<input type="radio"/> No <input checked="" type="radio"/> Yes

No.	ETS-Parameter	Range (default)	Description
-----	---------------	-----------------	-------------

398 - 402	Air-condition mode	ON CMD for automatic	C W T U	DPT1.001 1 bit
		ON CMD for low speed		DPT1.001 1 bit
		ON CMD for medium speed		
		ON CMD for high speed		

This communication object is for air-condition mode.

403 - 407	Air-condition output	Relay-Heating	C W T	DPT1.001
		Relay-Cooling		1 bit
		Relay-Fan low speed		
		Relay-Fan medium speed		
		Relay-Fan high speed		

This communication object is for air-condition output.

D4 FCU

Objects "HVAC"														
	Number	Name	Object Function	Desc	Group	Address	Length	C	R	W	T	U	Data Type	Priority
301	HVAC Actual temperature	Actual temperature					2 bytes	C	-	W	T	U		Low
302	HVAC Actual temperature	Actual temp. error signal					1 bit	C	-	W	T	U		Low
303	HVAC Actual temperature	Frost/heat alarm error signal					1 bit	C	-	W	T	U		Low
304	HVAC Setpoint	Base setpoint temperature					2 bytes	C	-	W	T	U		Low
305	HVAC Setpoint	Instantaneous setpoint temp.					2 bytes	C	-	W	T	U		Low
307	HVAC control mode	Automatic heating/cooling mode					1 bit	C	-	W	T	U		Low
308	HVAC control mode	Activation of heating mode					1 bit	C	-	W	T	U		Low
309	HVAC control mode	Activation of cooling mode					1 bit	C	-	W	T	U		Low
310	HVAC control mode	Activation of fan only					1 bit	C	-	W	T	U		Low
312	HVAC mode	ON CMD for comfort mode					1 bit	C	-	W	T	U		Low
313	HVAC mode	ON CMD for standby mode					1 bit	C	-	W	T	U		Low
314	HVAC mode	ON CMD for night mode					1 bit	C	-	W	T	U		Low
315	HVAC mode	ON CMD for building protection					1 bit	C	-	W	T	U		Low
316	HVAC Fan	Fan speed automatic					1 bit	C	-	W	T	U		Low
317	HVAC Fan	Fan speed with % value					1 byte	C	-	W	T	U		Low
321	HVAC Fan	Status fan speed 1					1 bit	C	-	W	T	U		Low
322	HVAC Fan	Status fan speed 2					1 bit	C	-	W	T	U		Low
323	HVAC Fan	Status fan speed 3					1 bit	C	-	W	T	U		Low
325	HVAC Fan	Status fan speed automatic					1 bit	C	-	W	T	U		Low
326	HVAC Valve Heating	Trigger valve purge					1 bit	C	-	W	T	-		Low
327	HVAC Valve Heating	Status valve purge					1 bit	C	-	W	T	U		Low
328	HVAC Valve Cooling	Trigger valve purge					1 bit	C	-	W	T	-		Low
329	HVAC Valve Cooling	Status valve purge					1 bit	C	-	W	T	U		Low
330	HVAC Output	Relay-Heating					1 bit	C	-	W	T	-		Low
331	HVAC Output	Relay-Cooling					1 bit	C	-	W	T	-		Low
332	HVAC Output	Relay-Fan speed1					1 bit	C	-	W	T	-		Low
333	HVAC Output	Relay-Fan speed2					1 bit	C	-	W	T	-		Low
334	HVAC Output	Relay-Fan speed3					1 bit	C	-	W	T	-		Low

NO.	Object name	Function	Flags	Data type
301-303	HVAC Actual temperature	Actual temperature	C W T U	DPT 9.001 2byte

		Actual temp. error signal Frost/heat alarm error signal		DPT 1.005 1bit DPT 1.005 1bit
<i>This communication object is used to HVAC actual temperature.</i>				
304-305	HVAC setpoint	Base setpoint temperature Instantaneous setpoint temp.	C W T U	DPT 1.001 1 bit
<i>This communication object is for air-condition wind.</i>				
306 - 310	HVAC control mode	HVAC control mode (byte) Activation of heating mode Activation of cooling mode Activation of fan only HVAC control mode (byte) Automatic heating/cooling mode Activation of heating mode Activation of cooling mode Activation of fan only	C W T U	DPT20.105 1 byte DPT1.001 1 bit
<i>This communication object is for HVAC control mode.</i>				
311 - 315	HVAC mode	HVAC mode (byte) ON CMD for comfort mode ON CMD for standby mode ON CMD for night mode ON CMD for building protection	C W T U	DPT20.102 1 byte DPT1.001 1 bit
<i>This communication object is for HVAC mode.</i>				
316 - 325	HVAC Fan	Fan speed automatic Fan speed with % value Fan speed 1 Fan speed 2 Status fan speed 1 Status fan speed 2 Status fan speed Status fan speed automatic	C W T U	DPT1.001 1 bit DPT5.001 1 byte DPT1.001 1 bit DPT5.010 1 bit
<i>This communication object is for HVAC fan.</i>				
326-329	HVAC valve heating	Trigger valve purge Status valve purge	C W T U	DPT1.017 1 bit
	HVAC valve cooling	Trigger valve purge Status valve purge	C W T U	DPT1.003 1 bit
<i>This communication object is for HVAC heating/cooling.</i>				
330-334	HVAC output	Relay-Heating Relay-Cooling Relay-Fan speed1 Relay-Fan speed2	C W T U	DPT1.001 1 bit

		Relay-Fan speed3		
<i>This communication object is for HVAC output.</i>				

D5 Floor Heating

Objects "Floor heating"													
	Number	Name	Object Function	Desc	Group Address	Length	C	R	W	T	U	Data Type	Priority
336	Floor Heating 0	Pipe pressure protection				1 bit	C	-	W	T	U	Low	
338	Floor Heating 0	Actual temp. error signal				1 bit	C	-	W	T	U	Low	
339	Floor Heating 0	Outdoor temperature				2 bytes	C	-	W	T	U	Low	
340	Floor Heating 0	Normal-mode setpoint Temp.				2 bytes	C	-	W	T	U	Low	
341	Floor Heating 0	Day-mode setpoint Temp.				2 bytes	C	-	W	T	U	Low	
342	Floor Heating 0	Night-mode setpoint Temp.				2 bytes	C	-	W	T	U	Low	
343	Floor Heating 0	Away-mode setpoint Temp.				2 bytes	C	-	W	T	U	Low	
344	Floor Heating 0	Preset 1 Temp. for timer mode				2 bytes	C	-	W	T	U	Low	
345	Floor Heating 0	Time of day for preset 1				3 bytes	C	-	W	T	U	Low	
346	Floor Heating 0	Start/Stop heating for preset1				1 bit	C	-	W	T	U	Low	
347	Floor Heating 0	Preset 2 Temp. for timer mode				2 bytes	C	-	W	T	U	Low	
348	Floor Heating 0	Time of day for preset 2				3 bytes	C	-	W	T	U	Low	
349	Floor Heating 0	Start/Stop heating for preset2				1 bit	C	-	W	T	U	Low	
350	Floor Heating 0	Preset 3 Temp. for timer mode				2 bytes	C	-	W	T	U	Low	
351	Floor Heating 0	Time of day for preset 3				3 bytes	C	-	W	T	U	Low	
352	Floor Heating 0	Start/Stop heating for preset3				1 bit	C	-	W	T	U	Low	
353	Floor Heating 0	Floor heating(1-ON,0-OFF)				1 bit	C	-	W	T	U	Low	
354	Floor Heating 0	ON CMD for Normal-mode				1 bit	C	-	W	T	U	Low	
355	Floor Heating 0	ON CMD for Day-mode				1 bit	C	-	W	T	U	Low	
356	Floor Heating 0	ON CMD for Night-mode				1 bit	C	-	W	T	U	Low	
357	Floor Heating 0	ON CMD for Away-mode				1 bit	C	-	W	T	U	Low	
358	Floor Heating 0	ON CMD for Timer-mode				1 bit	C	-	W	T	U	Low	
359	Floor Heating 0	Trigger valve purge				1 bit	C	-	W	T	-	Low	
360	Floor Heating 0	Status valve purge				1 bit	C	-	W	T	U	Low	
361	Floor Heating 0 Output	Safety protect temperature				2 bytes	C	-	W	T	U	Low	
362	Floor Heating 0 Output	Relay-Heating				1 bit	C	-	W	T	U	Low	

NO.	Object name	Function	Flags	Data type

336-360	Floor heating	Pipe pressure protection Actual temperature Actual temp. error signal Outdoor temperature Normal-mode setpoint Temp. Day-mode setpoint Temp. Night-mode setpoint Temp. Away-mode setpoint Temp. Preset 1 Temp. for timer mode Time of day for preset 1 Start/Stop heating for preset1 Preset 2 Temp. for timer mode Time of day for preset 2 Start/Stop heating for preset2 Preset 3 Temp. for timer mode Time of day for preset 3 Start/Stop heating for preset3 Floor heating(1-ON,0-OFF) ON CMD for Normal-mode ON CMD for Day-mode ON CMD for Night-mode ON CMD for Away-mode ON CMD for Timer-mode Trigger valve purge Status valve purge	C W T U	DPT 1.001 1bit DPT 9.001 2byte DPT 1.005 1bit DPT 10.001 3byte
---------	---------------	--	---------	---

This communication object is used to HVAC actual temperature.

361-362	Floor heating output	Safety protect temperature	C W T U	DPT 9.001 2 byte
		Relay-Heating PWM(1bit) PWM valve(1byte)		DPT 1.001 1bit
				DPT 5.001 1 byte

This communication object is for floor heating.

The setting of Floor heating B is same to floor heating A. the NO. is from 363 to 389

D6 Audio controller

Objects "Audio controller"													
Number	Name	Object Function	Desc	Group	Address	Length	C	R	W	T	U	Data Type	Priority
409	Audio controller	Start play				1 bit	C	-	W	T	U		Low
410	Audio controller	Pause play				1 bit	C	-	W	T	U		Low
411	Audio controller	Select song				1 bit	C	-	W	T	U		Low
412	Audio controller	adjust volume				1 byte	C	-	W	T	U		Low
413	Audio controller	Audio mute				1 bit	C	-	W	T	U		Low
414	Audio controller	Select list				1 bit	C	-	W	T	U		Low
415	Audio controller	Select source				1 byte	C	-	W	T	U		Low
416	Audio controller	adjust bass				1 byte	C	-	W	T	U		Low
417	Audio controller	adjust treble				1 byte	C	-	W	T	U		Low
418	Audio controller	display play(first low)				14 bytes	C	-	W	T	U		Low
419	Audio controller	display play(second low)				14 bytes	C	-	W	T	U		Low
420	Audio controller	display play(three low)				14 bytes	C	-	W	T	U		Low

NO.	Object name	Function	Flags	Data type
409-420	Audio controller	Start play Pause play Select song adjust volume Audio mute Select list Select source Select source adjust bass adjust bass adjust treble adjust treble	C W T U	DPT 1.010 1bit DPT 1.003 1bit DPT 1.007 1bit DPT 5.001 1byte
		display play(first low) display play(second low) display play(three low)	C W T U	DPT 16.000 14byte
		<i>This communication object is used to Audio controller.</i>		

附件:

--- End of Document ---