

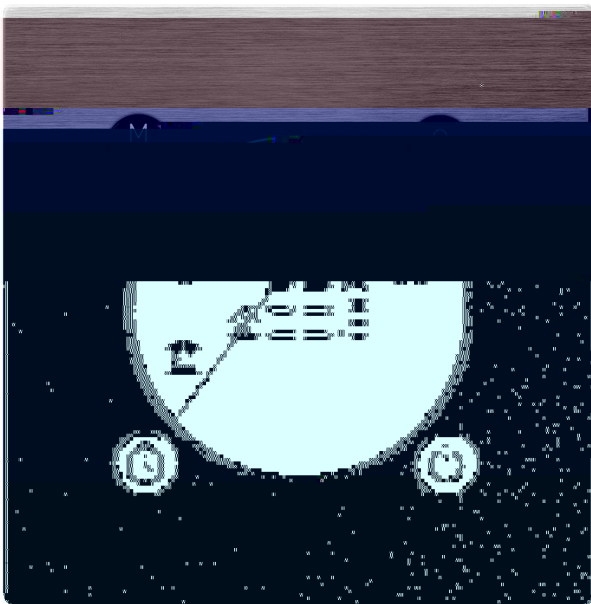
K-BUS

Multifunctional Thermostat with Rotary, 4 button_V1.1

CHMTR-04/00.1.2x

x=2

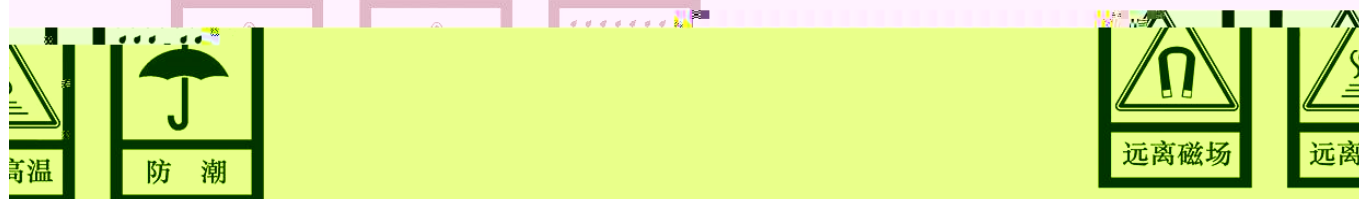
x=9



KNX/EIB

注意事项

1、请远离强磁场、高温、潮湿等环境；



摔落在地上或使之受到强力冲击；

2、不要将设备拆



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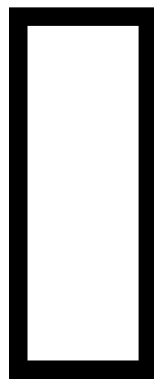
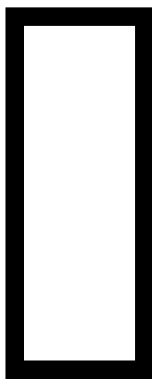
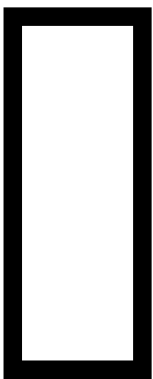
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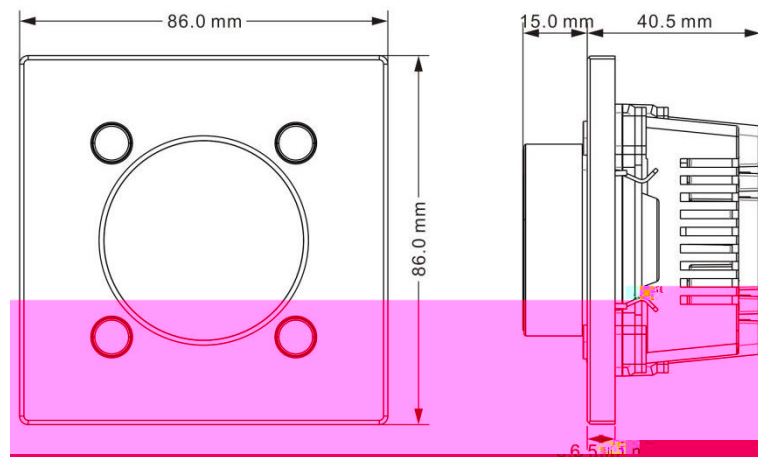
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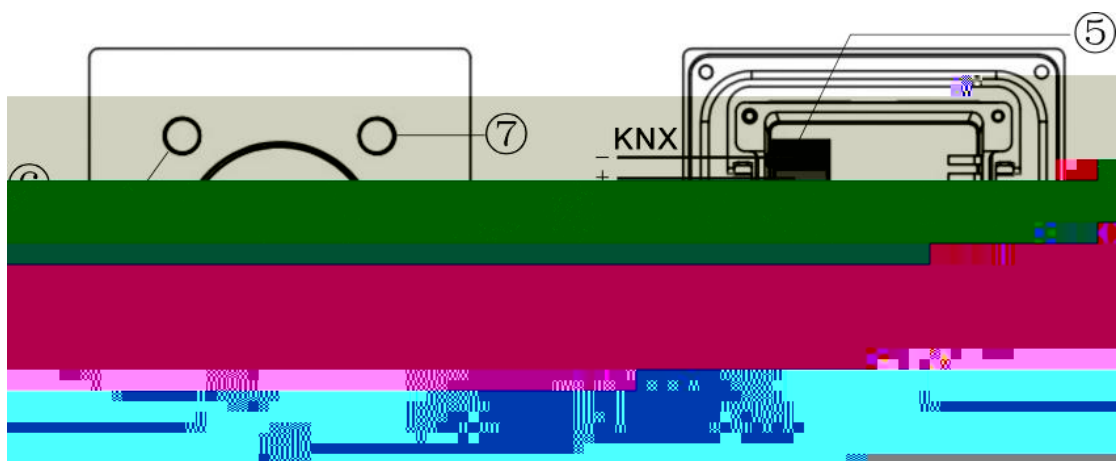
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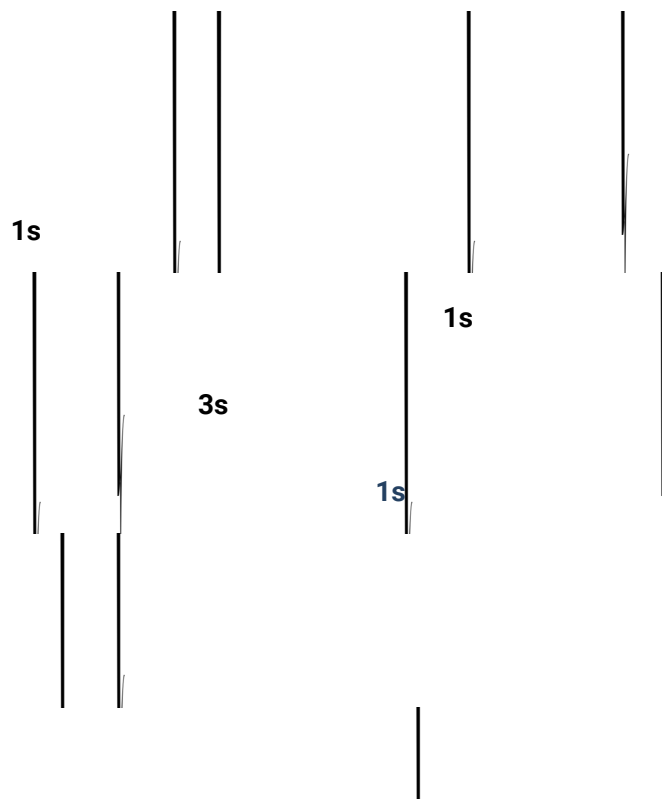


3.1



3.2





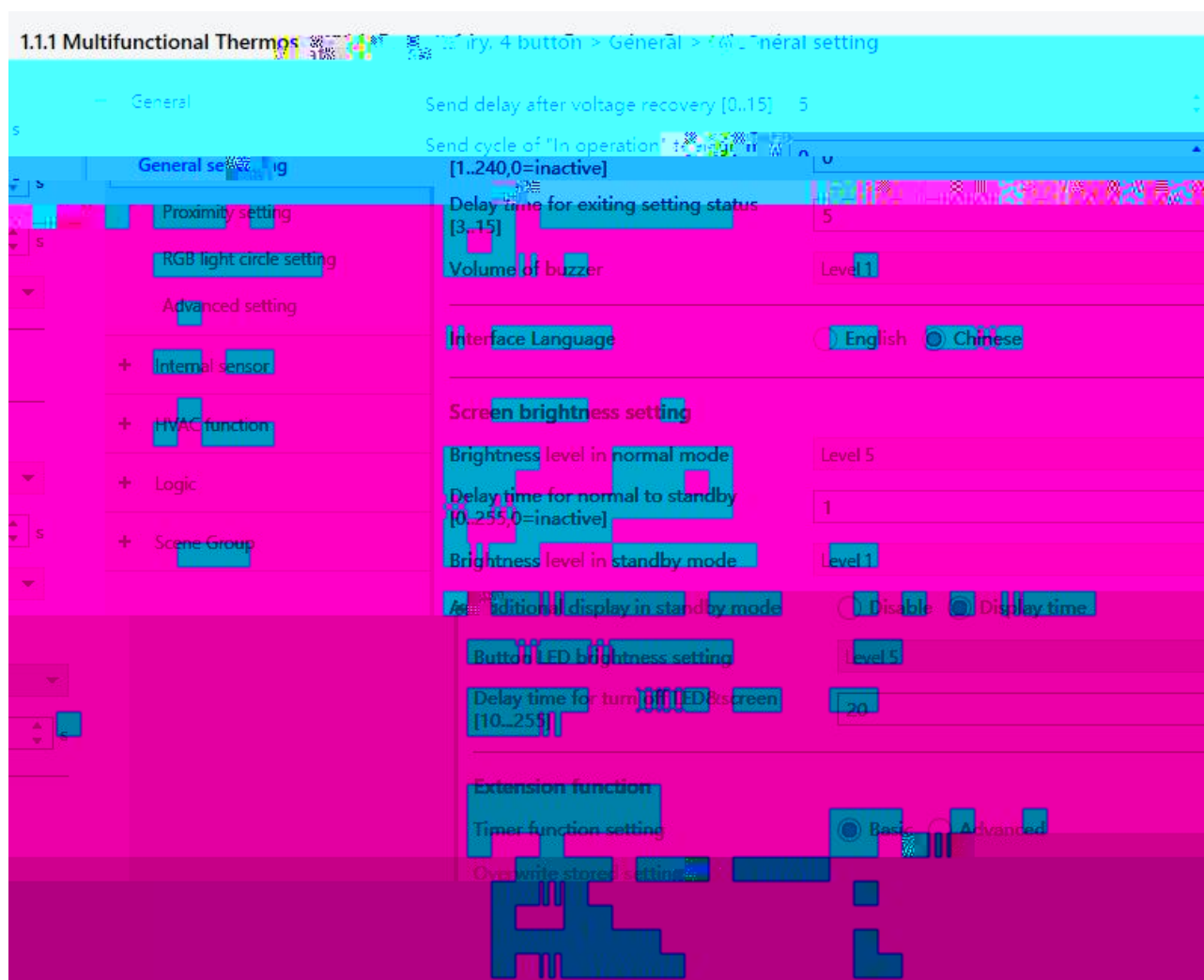
Multifunctional Thermostat with Rotary, 4 button/1.0	217	400	400

HVAC

ETS

5.1. "General"

5.1.1. "General setting"



"Send delay after voltage recovery [0..15]s"

0..15

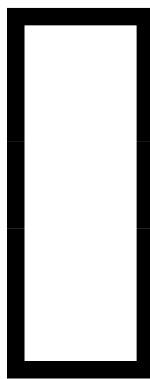
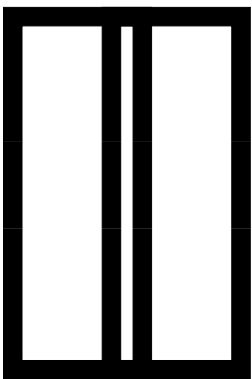
"Send cycle of Mh operation" telegram

'A9t_Sg

0...240 0=

mm t

NEOF230



Screen brightness setting

"Brightness level in normal mode"

Level 1

Level 2

...

Level 5

"Delay time for normal to standby [0..255, 0=inactive]s"

0..255

"Brightness level in standby mode"

OFF

Level 1

Level 2

...

Level 5

"Additional display in standby mode"

Disable

Display time

"Button LED brightness setting"

OFF

Level 1

Level 2

...

Level 5

"Delay time for turn off LED&screen [10..255]s"

10..255

Extension function

"Timer function setting"

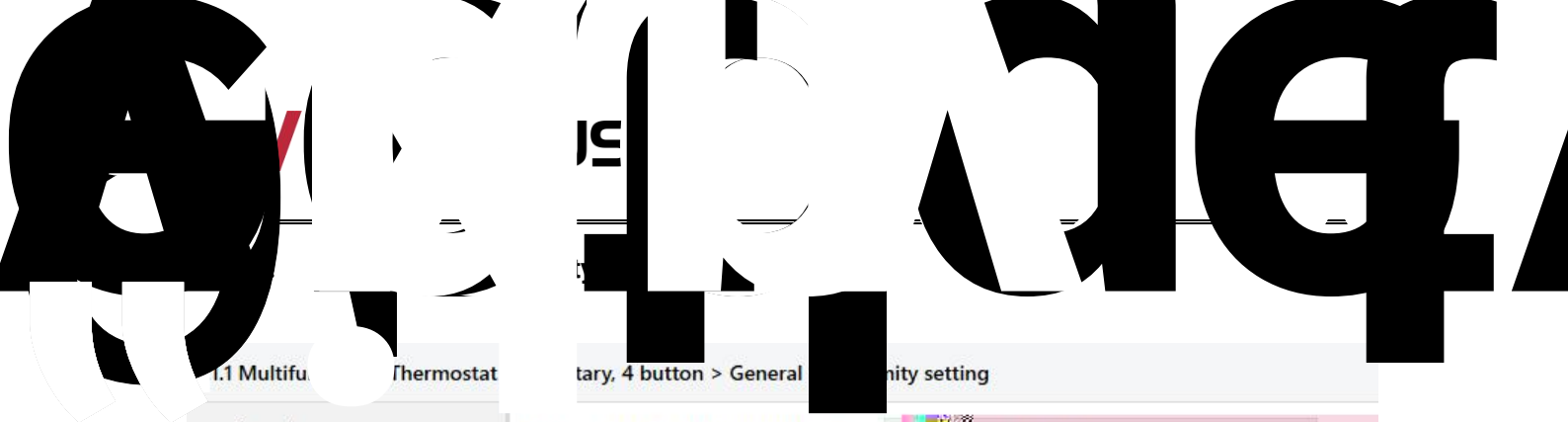
Basic

Advanced

"Overwrite stored setting for timer after download"

"Proximity function"

"RGB light circle function"



1.1 Multifunction Thermostat

Secondary, 4 button > General Proximity setting

- General

General setting

Proximity setting

RGB light circle setting

Advanced setting

+ Internal sensor

The Proximity function triggered via  Sensor Proximity object

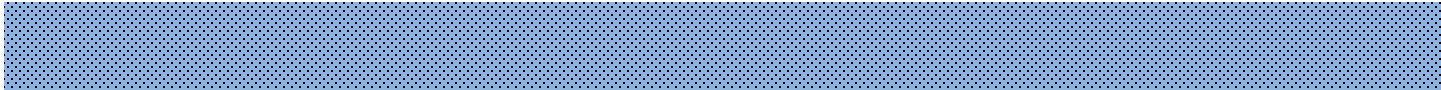
Sensor sensitivity High

Object type of output value 1bit[On/Off]

Reaction for proximity approaching ☐ No action ☒ Send a value

Output value [On/Off] ☐ OFF ☒ ON

Delay time for sending [0..65535] 0 s



1byte[scene control]

1byte[0..255]

1byte[0..100%]

"Reaction for proximity approaching"

No reaction

Send a value

"Output value"

"Delay time for sending [0..65535]s"

5.1.3. “RGB light circle setting”

1.1.1 Multifunctional Thermostat with Rotary, 4 button > General > RGB light circle setting

General	RGB light circle indication	☒ According to HVAC function... ☐ Independent configuration
General setting	Brightness level in normal mode	Level 5
Proximity setting	Brightness level in standby mode	Level 1
RGB light circle setting	FCU indication setting	According to control mode
Advanced setting	Colour in heating mode	Red
+ Internal sensor	Colour in cooling mode	Blue
+ HVAC function	Colour in floor heating function	Red
+ Logic		

1.1.1 Multifunctional Thermostat with Rotary, 4 button > General > RGB light circle setting

General	RGB light circle indication	☐ According to HVAC function... ☒ Independent configuration
General setting	Brightness level in normal mode	Level 5
Proximity setting		

"RGB light circle indication"

According to HVAC function HVAC

Independent configuration

"Brightness level in normal mode"

Level 1

Level 2

...

Level 5

"Brightness level in standby mode"

OFF

Level 1

Level 2

...

Level 5

"According to HVAC function"

"FCU/VRF indication setting"

"Colour in floor heating function"

"Colour in ventilation function"

Red

Cyan

Green

Purple

Blue

Orange

White

Cyan blue

Yellow

According to control mode

“Colour in auto/heating/cooling/fan/dehumidification/sleeping/refreshing mode”

Red

Cyan

Green

Purple

Blue

Orange

White

Cyan blue

Yellow

"Status after turn off HVAC function"

Keep current status

OFF

"Work mode after turn off screen"

Slowly breathing

Colour range cycle

Keep current status

OFF

"Interval time of colour shift [3..255]s"

3..255

"Colour setting"

Red

Cyan

Green

Purple

Blue

Orange

White

Cyan blue

Yellow

"Independent configuration"

"Indication work mode when active"

Permanent on

Slowly breathing

Color range cycle

"Interval time of colour shift [3..255]s"

3..255

"Indication object trigger polarity"

0=no trigger/1=trigger

1=no trigger/0=trigger

"Initial after device startup"

No trigger

Trigger

"Colour setting"

Red

Cyan

Green

Purple

Blue

Orange

White

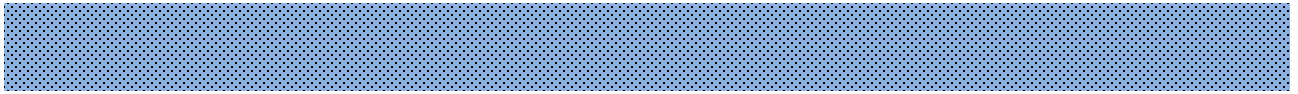
Cyan blue

Yellow

Receive a 3byte value

"Flashing function"

"Colour in flashing"



Disable

0.5K

1.0K

...

10.0K

"Cyclically send temperature [0...255,0=inactive]min"

0..255

"Send alarm telegram for low/high temperature"

No respond

Respond after read only

Respond after change

"Threshold value for low temperature alarm [0..15]°C"

0°C

1°C

...

15°C

5.3.2.

“FCU setting”

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > FCU setting

General	Work mode	Master
Room temperature sensor	Room temperature reference from	Internal sensor
Control function	Control value after temp. error [0..100] (If 2-point control, set value '0'=0, set value '>0'=1)	0 %
Interface setting	Interface display temperature	☐ Setpoint temperature ☒ Actual temperature
FCU setting	Setpoint temperature adjustment step	☒ 0.5K ☐ 1K
Heating setting	Min. setpoint temperature [5..37]	5 °C
Ventilation setting	Max. setpoint temperature [5..37]	37 °C
Group	Power on/off status after download	☐ OFF ☒ ON
	Power on/off status after voltage recovery	As before voltage failure
	Room temperature control mode	Heating and Cooling
	Heating/Cooling switchover	☐ Only via object ☒ Automatic changeover
	Heating/Cooling status after download	☐ Heating ☒ Cooling
	Heating/Cooling status after voltage recovery	As before voltage failure
	Room temperature control system	☐ 2 pipes system ☒ 4 pipes system
	Room temperature operation mode	☒
	Controller status after download	Standby mode
	Controller status after voltage recovery	As before voltage failure
	Extended comfort mode [0..255,0=inactive]	0 min
	Window contact input function	☒
	Delay for window contact [0..65535]	15 s
	Operation mode for open window	☐ Economy mode ☒ Frost/heat protection
	Bus presence detector function	☒
	Fan	☒
	Timer	☒
	Scene	☒

"Work mode"

Single

Master

Slave

"Room temperature reference from"

Internal sensor

External sensor

Internal sensor combine with External sensor

"Period for request external sensor [0...255]min"

0..255

“Internal sensor combine with External sensor”

“Combination ratio”

10% Internal to 90% External

20% Internal to 80% External

...

90% Internal to 10% External

%

%

%

%

%

%

□ □

“Send temperature when the result change by [0...10]K”

Disable

0.5K

1.0K

...

10.0

"Control value after temp. error[0..100]% (if 2-point control, set value '0'=0, set value '>0'=1)"

0..100

"Interface display temperature"

Setpoint temperature

Actual temperature

"Setpoint temperature adjustment step"

0.5K

1K

Min./Max. setpoint temperature [5..37] °C

5°C

6°C

...

37°C

ETS

"Power on/off status after download "

OFF

ON

"Power on/off status after voltage recovery"

OFF

ON

As before voltage failure

"Room temperature control mode"

Heating

Cooling

Heating and Cooling



Only via object

Via both button and object

Automatic changeover

2 pipes system

4 pipes system

"Operation mode"

"Controller status after download"

Standby mode

Comfort mode

Economy mode

"Controller status after voltage recovery"

Standby mode

Comfort mode

Economy mode

Frost/heat protection

As before voltage failure

“Extended comfort mode [0..255,0=inactive]min”

0..255

“Initial setpoint temperature (°C)”

10.0

10.5

...

35.0

✖ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✖ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

Automatic H/C mode changeover dead zone /

“ Upper/Lower dead zone”

0.5K

1.0K

...

10.0K

"Window contact input function"

"Delay for window contact [0..65535]s"

0..65535

"Controller mode for open window"

Economy mode

Frost/heat protection

"Bus presence detector function"

"Fan"

"Timer"

"Scene"

5.3.2.1.

"Setpoint"

1.1.1

Multifunctional Thermostat with Keypad, 4 buttons > HVAC function > FCU setting > Setpoint

General	Setpoint method for operating mode	☐ Relative ☐ Absolute	+
Internal sensor	Base setpoint temperature	20.0 °C	+
HVAC function	Automatic H/C mode changeover dead zone (only for comfort mode)		
Function setting	Upper dead zone	2.0 K	-
FCU setting	Lower dead zone	2.0 K	-
Setpoint	Heating		
Heating/Cooling control	Reduced heating in standby mode [0..10]	2 K	
Fan	Reduced heating in economy mode [0..10]	4 K	
Scene	Setpoint temperature in frost protection [5..10]	7 °C	
Floor heating setting	Cooling		
Ventilation setting	Increased cooling in standby mode [0..10]	2 K	
+ Logic	Increased cooling in economy mode [0..10]	4 K	
+ Scene Group	Setpoint temperature in heat protection [30..37]	35 °C	

+ General	Setpoint method for operating mode	☐ Relative ☒ Absolute
+ Internal sensor	Heating	
- HVAC function	Setpoint temperature in comfort mode [5..37]	21 °C
Function setting	Setpoint temperature in standby mode [5..37]	19 °C
- FCU setting	Setpoint temperature in economy mode [5..37]	17 °C
Setpoint	Setpoint temperature in frost protection [5..10]	7 °C
Heating/Cooling control	Cooling	
Fan	Setpoint temperature in comfort mode [5..37]	21 °C
Floor heating setting	Setpoint temperature in standby mode [5..37]	19 °C
+ Ventilation setting	Setpoint temperature in economy mode [5..37]	17 °C
+ Logic	Setpoint temperature in heat protection [30..37]	35 °C
+ Scene Group	Note: For heating setpoint must be always less than the cooling setpoint.	

"Setpoint method for operating mode"

Relative

Absolute

"Base setpoint temperature (°C)"

10.0

10.5

...

35.0

...

10K

"Setpoint temperature in frost protection mode [5...10] °C"

5°C

6°C

...

10°C

"Setpoint temperature in heat protection mode [30...37] °C"

30°C

31°C

...

37°C

"Setpoint temperature in comfort mode [5...37] °C"

"Setpoint temperature in standby mode [5...37] °C"

"Setpoint temperature in economy mode [5...37] °C"

✖ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✖ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

/

ETS

ETS

5.3.2.2.

“Heating/Cooling control”

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > FCU setting > Heating/Cooling control

+ General	Type of heating/cooling control	Switching on/off(use 2-point control)
+ Internal sensor	Invert control value	☐
- HVAC function	Heating	
Function setting	Lower Hysteresis [0..200]	10 *0.1K
- FCU setting	Upper Hysteresis [0..200]	10 *0.1K
Setpoint	Cooling	
Heating/Cooling Control	Lower Hysteresis [0..200]	10 *0.1K
Fan	Upper Hysteresis [0..200]	10 *0.1K
Scene	Cyclically send control value[0..255]	0 min

+ General	Type of heating/cooling control	Switching PWM(use PI control)
+ Internal sensor	Invert control value	☒
- HVAC function		

+ General	Type of heating/cooling control	Continuous control(use PI control)
+ Internal sensor	Invert control value	☒
- HVAC function	Heating speed	User defined
	Proportional range [10..255]	

"Type of heating/cooling control"

Switching on/off(use 2-point control)

Switching PWM(use PI control)

Continuous control(use PI control)

"Invert control value"

(2 point control)

"Lower Hysteresis [0...200]*0.1K "

"Upper Hysteresis [0...200]*0.1K "

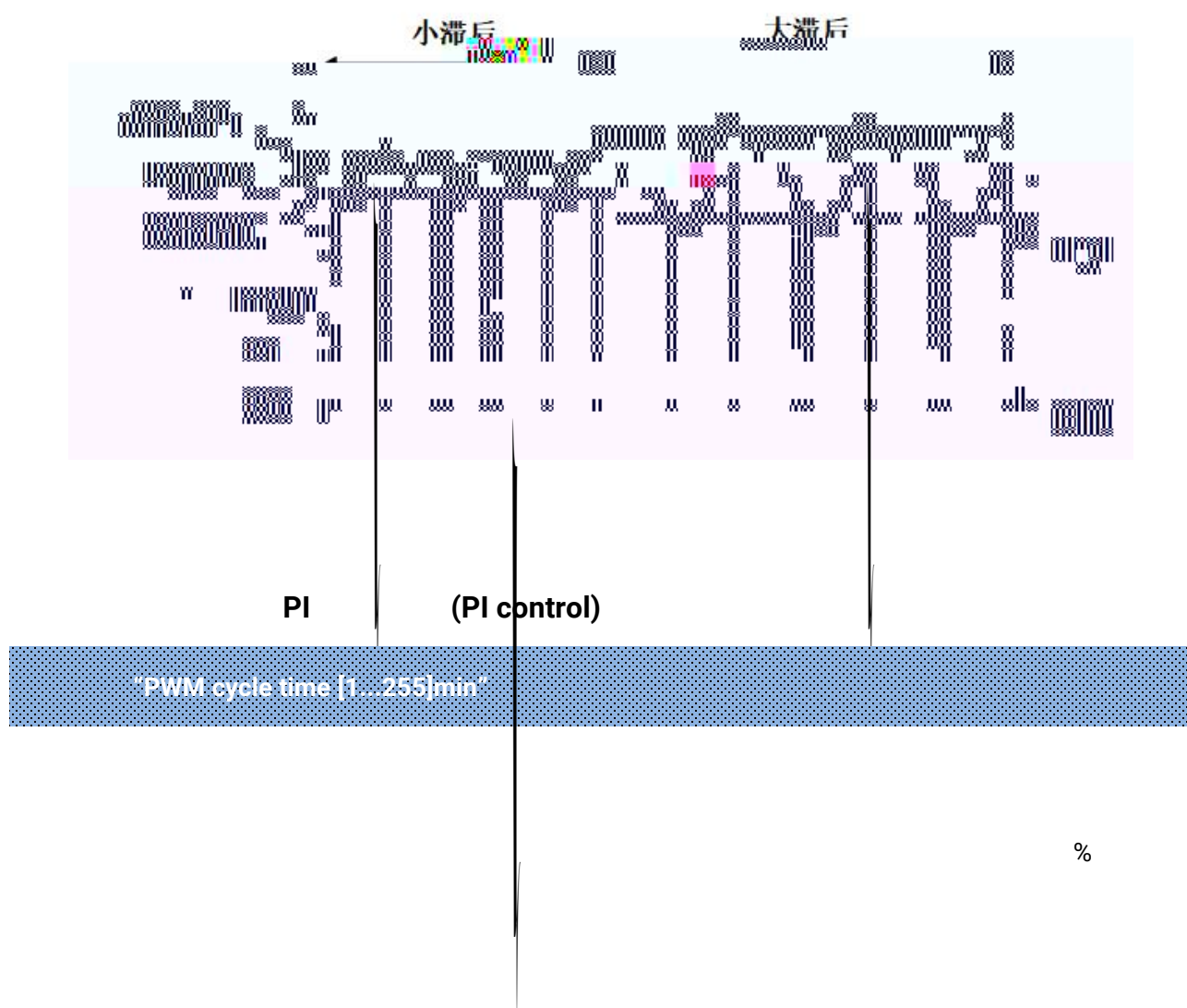
0..200

T > +

T < -

T < -

T > +





K-BUS

"Heating speed "

"Cooling speed"

Hot water heating (5K/150min)

Underfloor heating (5K/240 min)

Electrical heating (4K/100min)

Split unit (4K/90min)

Fan coil unit (4K/90min)

User defined

Cooling ceiling (5K/240min)

Split unit (4K/90min)

Fan coil unit(4K/90min)

User defined

"Proportional range [10..100]*0.1K"(P value)

"Reset time [0..255]min"(I value)

10..100 (P value)

0..255 (I value)

"Send control value on change by [0..100.0=inactive]%"

0..100 0

PI

PI

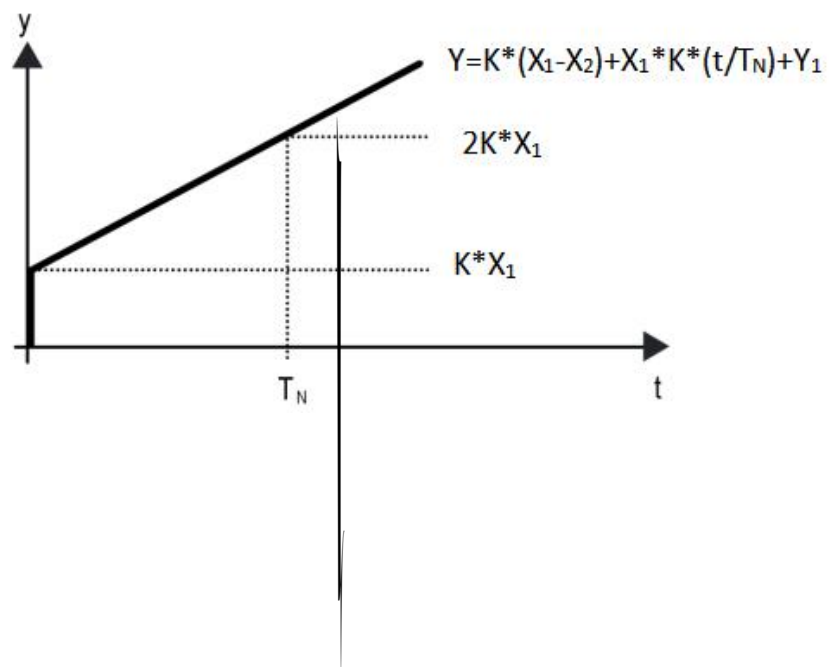
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1

	P	I	PI	PWM
Hot water Heating				
Underfloor heating				
Electrical heating				
Split unit				
Fan coil unit				

2

	P	I	PI	PWM
Cooling ceiling				
Split unit				
Fan coil unit				



"Cyclically send control value [0...255]min"

0..255

5.3.2.3.

"Fan"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > FCU setting > Fan

+ General	Object datatype of 1byte fan speed	☒ Percentage (DPT_5.001)
+ Internal sensor		☐ Fan stage (DPT_5.100)
Output value for Fan speed		
- HVAC function	Output value for Fan speed low	33 %
Function setting	Output value for Fan speed medium	67 %
- FCU setting	Output value for Fan speed high	100 %
Setpoint	Status feedback for Fan speed	
Heating/Cooling control	Status value for Fan speed low	33 %
Fan	Status value for Fan speed medium	67 %
Scene	Status value for Fan speed high	100 %
+ Floor heating setting	Automatic operation function	Local controller
+ Ventilation setting	Fan speed auto control setting	
+ Logic	Condition setting for using PI control	
- Scene Group	Threshold value speed OFF<->low [1..255]	80
Scene Group setting	Threshold value speed low<->medium [1..255]	150
	Threshold value speed medium<->high [1..255]	200
	Hysteresis threshold value in +/- [0..50]	10
	Temperature difference speed low<->medium [1..200]	30 *0.1°C
	Temperature difference speed medium<->high [1..200]	40 *0.1°C
	Hysteresis temperature difference in [0..50]	10 *0.1°C
	Minimum time in fan speed [0..65535]	60

"Object datatype of 1byte fan speed"

Percentage (DPT_5.001)

Fan stage (DPT_5.100)

Output value for fan speed

"Output value for fan speed low/medium/high"

1..255 /1..100

Status feedback for fan speed

"Status value for fan speed low/medium/high"

1..255 /1..100

Fan speed π control setting

Condition setting for using PI control PI

"Threshold value speed OFF<-->low [1..255]"

π j= \$? m'ó 1..255

□ □ □

Threshold value speed OFF<->low
[1..255]

150

Threshold value speed low<->medium
[1..255]

Threshold value speed medium<->high
[1..255]

OFF <->

<->

<->

<->

"Hysteresis threshold value in +/-[0..50]"

0..50

Condition setting for using 2-point control

"Temperature difference speed OFF<->low [1..200] *0.1K"

1..200

"Temperature difference speed low<-->medium [1..200]*0.1K"

1..200

"Temperature difference speed medium<-->high [1..200]*0.1K"

1..200

OFF <-->

<-->

<-->

ETS

Temperature difference speed OFF<->low [1..200]	30	*0.1°C
Temperature difference speed low<->medium [1..200]	30	*0.1°C
Temperature difference speed medium<->high [1..200]	40	*0.1°C

"Hysteresis temperature difference in [0..50] *0.1K"

0..50

"Minimum time in fan speed [0..65535]s"

0..65535

5.3.2.4. "Scene "



"x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

0..64 0=

"ON/OFF"

OFF

ON

Unchange

"Temperature"

5°C

6°C

..

37°C

Unchange

✗ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✗ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

"Operation mode"

Standby mode

Comfort mode

Economy mode

Frost/heat protection

Unchange

5.3.3. "VRF setting"

Model

Functional thermostat with rotary, 4 button

HVAC function > VRF setting

1.1.1

General

Room temperature reference from

Internal sensor ☐ External sensor

Internal sensor

Period for request external sensor [0...255]

10

min

HVAC function

Interface display temperature

Setpoint temperature ☐ Actual temperature

Function setting

0.1

datatype of setpoint

Value in °C(DPT_5.010)

Float value in °C(DPT_9.001)

VRF setting

Mode

Setpoint temperature adjustment step

0.5K ☐ 1K

Fan

Min. setpoint temperature [16..32]

16

°C

Scene

Max. setpoint temperature [16..32]

32

°C

+ Floor heating setting

Vanes swing

✓

+ Ventilation setting

Timer

✓

+ Logic

Scene

✓

Send delay between telegrams

100ms

"Room temperature reference from"

Internal sensor

External sensor

"Period for request external sensor [0...255]min"

0..255

"Interface display temperature"

Setpoint temperature

Actual temperature

"Object datatype of setpoint"

Value in °C (DPT_5.010)

Float value in °C (DPT_9.001)

KNX

"Setpoint temperature adjustment step"

0.5K

1K

1K

Min./Max. setpoint temperature [16..32] °C

16°C

17°C

...

32°C

ETS

"Vanes swing"

1s

"Timer"

"Scene"

"Send delay between telegrams"

Disable

100ms

300ms

500ms

5.3.3.1.

"Mode"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > VRF setting > Mode

+	General	Auto mode	☒
+	Internal sensor	Output value for Auto	0
		Status value for Auto	0
-	HVAC function	Heating mode	☒
	Function setting	Output value for Heating	1
	- VRF setting	Status value for Heating	1
	Mode	Cooling mode	☒
	Fan	Output value for Cooling	3
	Scene	Status value for Cooling	3
+	Floor heating setting	Fan mode	☒
+	... Ventilation setting	Output value for Fan	9
		Status value for Fan	9
	Logic	Dehumidification mode	☒
	Scene Group	Output value for Dehumidification	14
	Scene Group setting	Status value for Dehumidification	14
		Sleeping mode	☒
		Output value for sleeping [0..255]	18
		Status value for sleeping [0..255]	18
		Refreshing mode	☒
		Output value for refreshing [0..255]	10

"Auto/Heating/Cooling/Fan/Dehumidification/Sleeping/Refreshing mode"

"Output value for auto/heating/cooling/fan/dehumidification/sleeping/refreshing [0..255]"

0..255

"Status value for auto/heating/cooling/fan/dehumidification/sleeping/refreshing [0..255]"

0..255

5.3.3.2. "Fan"

--- Multifunctional Thermostat with Rotary, 4 button > HVAC function > VRF setting > Fan

+ General

Fan speed level

☐ 3
☒ 5

+ Internal sensor

Object datatype of 1byte fan speed

Percentage

☒ 0.001
☐ 5.001

+ HVAC function

Output value for Fan speed

Function setting

Output value for Fan speed auto

0

%

+ VRF setting

Output value for Fan speed 1

20

%

Mode

Output value for Fan speed 2

40

%

Fan

Output value for Fan speed 3

60

%

Floor heating setting

Output value for fan speed 4

80

%

Ventilation setting

Output value for fan speed 5

100

%

+ Logic

Status feedback for Fan speed

Status value for Fan speed auto

0

%

+ Scene Group

Status value for Fan speed 1

20

%

Status value for Fan speed 2

40

%

Status value for Fan speed 3

60

%

Status value for fan speed 4

80

%

Status value for fan speed 5

100

%

"Fan speed level"

3

5

"Object datatype of 1byte fan speed"

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Output value for fan speed

"Output value"



7g+ñt3jP "G8 ?g

'Æ'Æ\ >

"Temperature"

□

16°C

17°C

..

32°C

Unchange

✗ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✗ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

"Mode"

✗ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

C

Medium

High

Unchange

5.3.4. “Floor heating setting”

1. Multifunctional Thermostat with Rotary, 4 button > HVAC function > Floor heating setting

+ General	Work mode	Single	▼
+ Internal sensor	Room temperature reference from	Internal and External sensor combination	▼
- HVAC function	Combination ratio	50% Internal to 50% External	▼
Function setting	Period for request external sensor, 'r' [0..255]	5	min
+ FCU setting	Send temperature when the result change by	1.0K	▼
- Floor heating setting	Cyclically send temperature [0...255,0=inactive]	0	min
Scene	Control value after temp. error [0..100] (if 2-point control, set value '0'=0, set value '>0'=1)	0	%
Ventilation setting			
+ Logic	Interface display temperature	Setpoint temperature	

GVS

K-BUS

"Work mode"

Single

Master

— **Slave**

"Room temperature reference from"

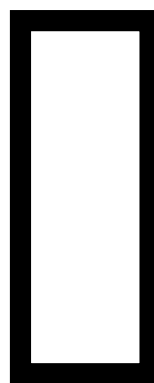
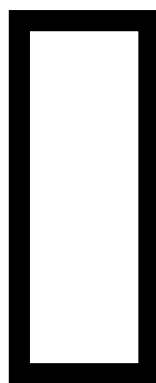
Internal sensor

External sensor

Internal sensor combine with External sensor

□ □ □

"Period for request external sensor [0...255]min



10% Internal to 90% External

20% Internal to 80% External

...

90% Internal to 10% External

%

%

%

%

%

%

"Send temperature when the result change by [0...10]K"

Disable

0.5K

1.0K

...

10.0K

"Cyclically send temperature [0...255]min"

0..255

"Control value after temp. error[0..100]% (if 2-point control, set value '0'=0, set value '>0'=1)"

0..100

"Interface display temperature"

Setpoint temperature

Actual temperature

"Setpoint temperature adjustment step"

0.5K

1K

"Default setpoint temperature [16..32]°C"

16°C

17°C

...

32°C

✖ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✖ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

"Min./Max. setpoint temperature [16..32]°C"

16°C

17°C

...

32°C

ETS

"Power on/off status after download "

OFF

ON

"Power on/off status after power on"

OFF

ON

As before voltage failure

"Temperature control method"

Heating on/off (2 point control)

Heating PWM (use PI control) PWM

Heating continuous control (use PI control)

“Heating on/off (2 point control)”

“Object value of Heating on/off”

Heat on=1, Heat off=0

Heat on=0, Heat off=1

“Lower Hysteresis [0..200]*0.1K”

“Upper Hysteresis [0..200]*0.1K”

0..200

T > +

T < -

“Heating PWM (use PI control)” “Heating continuous control (use PI control)”

“Invert control value”

"PWM cycle time [1..255] min"

%

1...255

"Heating speed"

Hot water heating (5K/150min)

Underfloor heating (5K/240 min)

Electrical heating (4K/100min)

User defined

"Proportional range [10..100]*0.1K"(P value)

"Reset time[0..255]min"(I value)

10..100 (P value)

0..255 (I value)

"Send control value on change by [0..100,0=inactive]%"

0..100 0

PI

5.3.2

"Cyclically send control value [0..255]min"

0..255

"Timer"

"Scene"

5.3.4.1. "Scene "

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > Floor heating setting > Scene

+ General	1->Assign scene NO.[1..64,0=inactive]	1
+ Internal sensor	ON/OFF	Unchange
	Temperature	Unchange °C
- HVAC function	2->Assign scene NO.[1..64,0=inactive]	2
Function setting	ON/OFF	Unchange
+ FCU setting	Temperature	Unchange °C
- Floor heating setting	3->Assign scene NO.[1..64,0=inactive]	3
Scene	ON/OFF	Unchange
+ Ventilation setting	Temperature	Unchange °C
+ Logic	4->Assign scene NO.[1..64,0=inactive]	4
- Scene Group	ON/OFF	Unchange
Scene Group setting	Temperature	Unchange °C
	5->Assign scene NO.[1..64,0=inactive]	5
	ON/OFF	Unchange
	Temperature	Unchange °C

"x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

0..64 0=

"ON/OFF"

OFF

ON

Unchange

"Temperature"

16°C

17°C

...

32°C

Unchange

✖ The setpoint is less than minimum,so minimum will regard as setpoint in fact

✖ The setpoint is greater than maximum,so maximum will regard as setpoint in fact

5.3.5. "Ventilation setting"



"Power on/off status after download"

OFF

ON

"Power on/off status after voltage recovery"

OFF

ON

As before voltage failure

"Default fan speed after ventilation on"

Low

Medium

High

Last status

"Object datatype of 1byte fan speed"

Fan stage (DPT 5.100)

Percentage (DPT 5.001)

Output value for fan speed

"Output value for fan speed low/medium/high"

1..255 /1..100

Status feedback for fan speed

"Status value for fan speed low/medium/high"

1..255 /1..100

Output value for Fan speed low	68	%
Output value for Fan speed medium	67	%
Output value for Fan speed high	100	%

"Automatic operation function"

"Filter timer counter"

"Evaluation time [100..10000]h"

100..10000

3s

"Scene"

5.3.5.1. "Fan auto.control"

1.1.1 Multifunctional Thermostat with Rotary button > HVAC function > Ventilation setting > Fan auto.control

General	Control value reference from	PM2.5
Internal sensor	Object datatype of PM2.5	☒ Value in ug/m3(DPT_7.001) ☐ Float value in ug/m3(DPT_9.030)
HVAC function	Period for request control value [0..255]	10 min
Function setting	The speed status after control value error	OFF
FCU setting	Threshold value speed low<->speed low	35
Floor heating setting	Threshold value speed low<->medium	75
Ventilation setting	Threshold value speed medium<->high	115
Fan auto.control	Hysteresis value is threshold value in +/-	10
Scene	Minimum time in fan speed [0..65535]	10

"Control value reference from"

CO2

PM2.5

VOC

"Object datatype of CO2"

Value in ppm(DPT_7.001)

Float value in ppm(DPT_9.008)

"Object datatype of PM2.5/VOC"

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

"Period for request control value [0...255]min"

2min

0..255

"Threshold value speed OFF<-->low [1..999]/ [1...4000]"

1..999/1..4000

"Threshold value speed low<-->medium [1..999]/ [1...4000]"

1..999/1..4000

"Threshold value speed medium<-->high [1..999]/ [1...4000]"

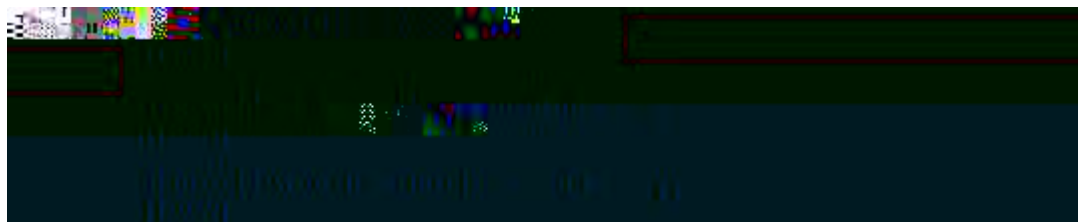
1..999/1..4000

OFF <->

<->

<->

ETS



OFF <->

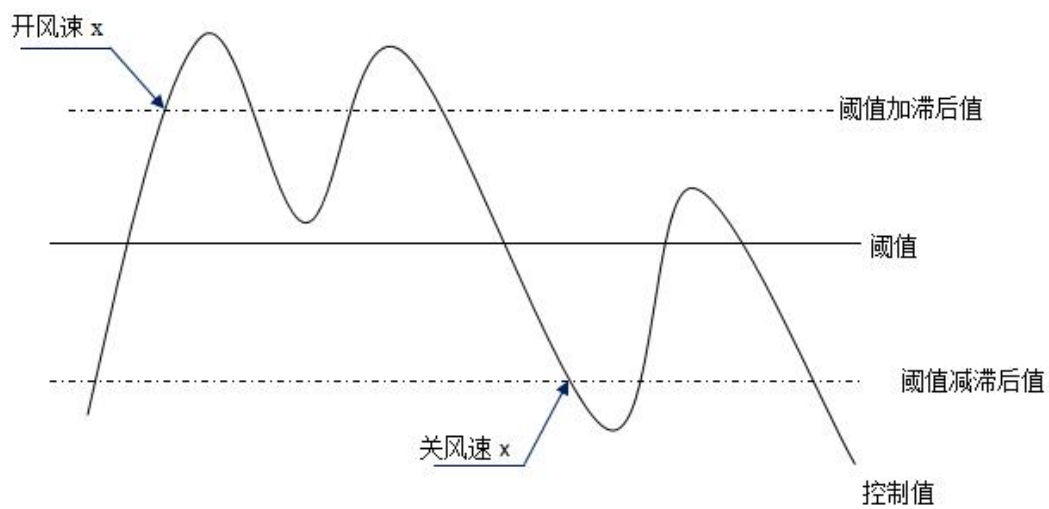
<->

<->

<->

"Hysteresis threshold value in +/- [10..30]/[100..400]"

10..30/100..400



1

2

1

PM2.5

OFF <->

35

<->

55

<->

75

25

OFF

OFF

60

25+35

60

55

75

50

<75-25

50

35

55

2

PM2.5

OFF <->

20

<->

40

<->

70

10

OFF

OFF

30

20+10

41

41

40

70

39

39

20

40

60 <70-10

39

39

20

40

3

0

"Minimum time in fan speed [0..65535]s"

0..65535

5.3.5.2.

"Scene "

1.1.1 Multifunctional Thermostat with Rotary, 4 button > HVAC function > Ventilation setting > Scene

General		1->Assign scene NO.[1..64,0=inactive]	1
+ Internal sensor	Fan level	Unchange	
- HVAC function	Heat Recovery	Unchange	
Function setting		2->Assign scene NO.[1..64,0=inactive]	2
+ FCU setting	Fan level	Unchange	
+ Floor heating setting	Heat Recovery	Unchange	
- Ventilation setting	3->Assign scene NO.[1..64,0=inactive]	3	
	Fan level	Unchange	

to.control Heat Recovery Unchange Fan aut

"x->Assign scene NO.[1..64,0=inactive]"(x=1~5)

0..64 0=

"Fan"

OFF

Low

Medium

High

"Heat recovery"

OFF

ON

Unchange

5.4. "Logic"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Logic > Logic function setting

+ General	1st logic function	☒
	2nd logic function	☒
+ Internal sensor	3rd logic function	☒
+ HVAC function	4th logic function	☒
- Logic	5th logic function	☒
Logic function setting	6th logic function	☒
	7th logic function	☒
	8th logic function	☒

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Logic > 1st Logic

+ General	Function of channel	AND
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"1st/2nd/3rd... Logic function"

"Function of channel"

AND

OR

XOR

Gate forwarding

Threshold comparator

Format convert

5.4.1. "AND/OR/XOR"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Logic > 1st Logic

+ General	Function of channel	AND
+ Internal sensor	Input a	Disconnected
+ HVAC function	Default value	☒ 0 ☐ 1
- Logic	Input b	Disconnected
Logic function setting	Default value	☒ 0 ☐ 1
1st Logic	Input c	Disconnected
2nd Logic	Default value	☒ 0 ☐ 1
3rd Logic	Input d	Disconnected
4th Logic	Default value	☒ 0 ☐ 1
5th Logic	Input e	Disconnected
6th Logic	Default value	☒ 0 ☐ 1
7th Logic	Input f	Disconnected
	Default value	☒ 0 ☐ 1

Input g	Disconnected
Default value	☒ 0 ☐ 1
Input h	Disconnected
Default value	☒ 0 ☐ 1
Result is inverted	☒ No ☐ Yes
Read input object value after bus voltage recovery	☒ No ☐ Yes
Output send when	☒ Receiving a new telegram ☐ Every change of output object
Send delay time: Base	None
Factor: 1..255	1

"Input a/b/c/d/e/f/g/h"

Disconnected

Normal

Inverted

"Default value"

0

1

"Result is inverted"

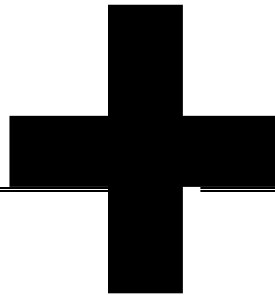
No

Yes

"Read input object value after voltage recovery"

No

Yes



5.4.2. "Gate forwarding"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Logic

General	Function of channel	Gate forwarding
Internal sensor	Object type of Input/Output	1bit
HVAC function	Default scene NO. of Gate after startup [1~64,0=inactive]	0
Logic	1->Gate trigger scene NO. is [1~64,0=inactive]	0
Logic function setting	Input A send on	Output A
1st Logic	Input B send on	Output B
2nd Logic	Input C send on	Output C
3rd Logic	Input D send on	Output D
4th Logic	2->Gate trigger scene NO. is [1~64,0=inactive]	0
5th Logic	Input A send on	Output A
6th Logic	Input B send on	Output B
7th Logic	Input C send on	Output C
8th Logic	Input D send on	Output D

"Object type of Input/Output"

°Å Ú

1bit

4bit

1byte

"Default scene NO."

"Input A/B/C/D send on"

Disable

Output A

Output B

...

Output B,C,D

5.4.3. "Threshold comparator"

1.1.1 Multifunctional Thermostat with Rotary 4 button > Logic > 1st Logic

+	General	Function of channel	Threshold comparator
+	Internal sensor	Threshold value data type	1byte
+	HVAC function	Threshold value 0..255	0
-	Logic	If Object value<Threshold value	Do not send telegram
		If Object value=Threshold value	Do not send telegram
		If Object value!=Threshold value	Do not send telegram
	Logic function setting	If Object value>Threshold value	Do not send telegram
	1st Logic	If Object value<=Threshold value	Do not send telegram
	2nd Logic	If Object value>=Threshold value	Do not send telegram
	3rd Logic		

"Threshold value data type"

4bit

1byte

2byte

4byte

"Threshold value "

4bit 0..15 / 1byte 0..255 / 2byte 0..65535 / 4byte 0..4294967295

"If Object value<Threshold value"

"If Object value=Threshold value"

"If Object value!=Threshold value"

"If Object value>Threshold value"

"If Object value<=Threshold value"

"If Object value>=Threshold value"

Do not send telegram

Send value "0"

Send value "1"

If Object

value=Threshold value Send value 0 If Object value<=Threshold value Send value

1

1

"Output send when"

Receiving a new telegram

Every change of output object

"Send delay time"

Base: None

0.1s

1s

...

10s

25s

Factor: 1..255

5.4.4. "Format convert"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Logic > 1st Logic

+ General	Function of channel	Format convert ▼
+ Internal sensor	Function	2x1Bit-->1x2Bit ▼
+ HVAC function	Output send when	☒ Receiving a new telegram ☐ Every change of output object

"Function"

2x1bit-->1x2bit

8x1bit-->1x1byte

1x1byte-->1x2byte

2x1byte-->1x2byte

2x2byte-->1x4byte

1x1byte-->8x1bit

1x2byte-->2x1byte

1x4byte-->2x2byte

1x3byte-->3x1byte

3x1byte-->1x3byte

"Output send when"

Receiving a new telegram

Every change of output object

5.5. "Scene Group"

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Scene Group > Scene Group setting

+ General	Scene Group 1 Function	☒
+ Internal sensor	Scene Group 2 Function	☒
	Scene Group 3 Function	☒

1.1.1 Multifunctional Thermostat with Rotary, 4 button > Scene Group > Group 1 > Output 1 Function

+ General	Object type of Output 1	1bit
+ Internal sensor	1->Output 1 trigger scene NO. is [1~64,0=inactive]	0
+ HVAC function	Object value of Output 1 [0..1]	☒ 0 ☐ 1
+ Logic	Delay time for sending [0..255]	0 *0.1s
- Scene Group	2->Output 1 trigger scene NO. is [1~64,0=inactive]	0
	Object value of Output 1 [0..1]	☒ 0 ☐ 1
Scene Group setting	Delay time for sending [0..255]	0 *0.1s

"Scene Group x Function" (x=1~8)

"Object type of Output y" (y=1~8)

1bit

1byte

2byte

"z->Output y trigger scene NO. is [1~64,0=inactive]" (z=1~8)

0..64 0=

"Object value of Output y"

1bit 0..1 / 1byte 0..255 / 2byte 0..65535

"Delay time for sending [0...255]*0.1s"

0..255

"C"

"W"

212	Dis/En Proximity function	Extension function	1bit	C,W	1.003 enable
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213

6.2. "Internal sensor"

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
	5	Internal sensor	Actual temperature			2 bytes	C	R	-	T	-	temperature (°C)	Low
	6	Internal sensor	Low temperature alarm			1 bit	C	R	-	T	-	alarm	Low
	7	Internal sensor	High temperature alarm			1 bit	C	R	-	T	-	alarm	Low

5	Actual temperature	Internal sensor	2byte	C,R,T	9.001 temperature

6	Low temperature alarm	Internal sensor	1bit	C,R,T	1.005 alarm
7	High temperature alarm	Internal sensor	1bit	C,R,T	1.005 alarm

6.3. "HVAC controller"

6.3.1. "FCU"

Master

/

Single

Slave

/

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
145	FCU	Locking function			1 bit	C	-	W	-	-	enable	Low
146	FCU	Power on/off, status			1 bit	C	-	W	-	U	switch	Low
147	FCU	External temperature sensor			2 bytes	C	-	W	-	U	temperature (°C)	Low
148	FCU	Base temperature setpoint, status			2 bytes	C	-	W	-	U	temperature (°C)	Low
149	FCU	Heating/cooling mode, status			1 bit	C	-	W	-	U	cooling/heating	Low
150	FCU	Operation mode, status			1 byte	C	-	W	-	U	HVAC mode	Low
151	FCU	Fan speed, status			1 byte	C	-	W	-	U	fan speed	Low

145	Locking function	FCU	1bit	C,W	1.003 enable
146	Power on/off, status	FCU	1bit	C,W,U C,W,T,U	1.001 switch
C,W,U			C,W,T,U		
147	External temperature sensor	FCU	2byte	C,W,T,U	9.001 temperature

148	Current temperature setpoint, status	FCU	2byte	C,W,U	9.001 temperature
	Base temperature setpoint, status			C,W,T,U	
C,W,U C,W,T,U					
149	Heating/Cooling mode, status	FCU	1bit	C,W,U C,W,T,U	1.100 cooling/heating
C,W,U C,W,T,U					
150	Operation mode, status	FCU	1byte	C,W,U C,W,T,U	20.102 HVAC mode
C,W,U C,W,T,U					
151	Fan speed, status	FCU	1byte	C,W,T,U	5.001 percentage 5.100 fan stage

156	Timer	FCU	1bit	C,W	1.003 enable
157	Scene	FCU	1byte	C,W	18.001 scene control
158	Power on/off	FCU	1bit	C,T C,R,T	1.001 switch
C,R,T C,T					
159	Actual temperature	FCU	2byte	C,R,T	9.001 temperature
160	Current base setpoint temperature	FCU	2byte	C,T	9.001 temperature
161	Current setpoint adjustment	FCU	2byte	C,T C,R,T	9.001 temperature
C,R,T C,T					

162	Heating/Cooling mode	FCU	1bit	C,T C,R,T	1.100 cooling/heating
C,R,T					
163	Operation mode	FCU	1byte	C,T C,R,T	20.102 HVAC mode
C,R,T					
164	Heating control value	FCU	1bit 1byte	C,R,T	1.001 Switch 5.001 percentage
165	Cooling control value	FCU	1bit 1byte	C,R,T	1.001 Switch 5.001 percentage
166	Fan speed	FCU	1byte	C,T C,R,T	5.001 percentage 5.100 fan stage
C,R,T					
167	Fan automatic operation	FCU	1bit	C,T C,R,T	1.003 enable
C,R,T					

6.3.2. "VRF"

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
171	VRF	171	Current temperature setpoint, status	171	2						float	1
172	VRF	172	Control mode status	172	1						enum	1
173	VRF	173	Fan speed status	173	1						byte	1
174	VRF	174	Vanes swing (flapping) status	174	1						byte	1
175	VRF	175	...	175	1						byte	1
176	VRF	176	...	176	1						byte	1
177	VRF	177	...	177	1						byte	1
178	VRF	178	...	178	1						byte	1
179	VRF	179	...	179	1						byte	1
180	VRF	180	...	180	1						byte	1
181	VRF	181	...	181	1						byte	1
182	VRF	182	...	182	1						byte	1
183	VRF	183	...	183	1						byte	1
184	VRF	184	...	184	1						byte	1
185	VRF	185	...	185	1						byte	1
186	VRF	186	...	186	1						byte	1
187	VRF	187	...	187	1						byte	1
188	VRF	188	...	188	1						byte	1
189	VRF	189	...	189	1						byte	1
190	VRF	190	...	190	1						byte	1
191	VRF	191	...	191	1						byte	1
192	VRF	192	...	192	1						byte	1
193	VRF	193	...	193	1						byte	1
194	VRF	194	...	194	1						byte	1
195	VRF	195	...	195	1						byte	1
196	VRF	196	...	196	1						byte	1
197	VRF	197	...	197	1						byte	1
198	VRF	198	...	198	1						byte	1
199	VRF	199	...	199	1						byte	1
200	VRF	200	...	200	1						byte	1

168	Locking function	VRF	1bit	C,W	1.003 enable
169	Power on/off, status	VRF	1bit	C,W,T,U	1.001 switch
170	External temperature sensor	VRF	2byte	C,W,T,U	9.001 temperature
171	Current temperature setpoint, status	VRF	1byte	C,W,T,U	5.010 counter pulses
			2byte		9.001 temperature
172	Control mode, status	VRF	1byte	C,W,T,U	20.105 HVAC control mode

173	Fan speed, status	VRF	1byte	C,W,T,U	5.001 percentage 5.100 fan stage
174	Vanes swing (1-swing,0-stop), status	VRF	1bit	C,W,T,U	1.010 start/stop
175	Timer	VRF	1bit	C,W	1.003 enable
176	Scene	VRF	1byte	C,W	18.001 scene control
177	Power on/off	VRF	1bit	C,T	1.001 switch
178	Current setpoint adjustment	VRF	1byte	C,T	5.001 percentage 5.100 fan stage
179	Fan speed	VRF	1byte	C,T	5.001 percentage 5.100 fan stage
180	Vanes swing (1-swing,0-stop)	VRF	1bit	C,T	1.010 start/stop
181	Control mode	VRF	1byte	C,T	20.105 HVAC control mode

6.3.3. "Floor heating"

Master

Single

Slave

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
182	Floor heating	Locking function			1 bit	C	-	W	-	-	enable	Low
183	Floor heating	Power on/off, status			1 bit	C	-	W	-	U	switch	Low
184	Floor heating	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
185	Floor heating	Current temperature setpoint, status			2 bytes	C	-	W	-	U	temperature (°C)	Low
186	Floor heating	Timer			1 bit	C	-	W	-	-	enable	Low
187	Floor heating	Scene			1 byte	C	-	W	-	-	scene control	Low
188	Floor heating	Power on/off			1 bit	C	R	-	T	-	switch	Low
189	Floor heating	Actual temperature			2 bytes	C	R	-	T	-	temperature (°C)	Low
190	Floor heating	Current setpoint adjustment			2 bytes	C	R	-	T	-	temperature (°C)	Low
191	Floor heating	Heating on/off			1 bit	C	-	-	T	-	switch	Low

182	Locking function	Floor heating	1bit	C,W	1.003 enable
183	Power on/off, status	Floor heating	1bit	C,W,U C,W,T,U	1.001 switch
C,W,U C,W,T,U					
184	External temperature sensor	Floor heating	2byte	C,W,T,U	9.001 temperature
185	Current temperature setpoint, status	Floor heating	2byte	C,W,U C,W,T,U	9.001 temperature
C,W,U C,W,T,U					

%

196	Heat recovery on/off, status	Ventilation	1bit	C,W	1.001 switch
197	En./Dis. Heat recovery	Ventilation	1bit	C,W	1.003 enable
198	Filter timer counter change	Ventilation	2byte	C,W	7.007 time(h)
199	Filter timer reset, status	Ventilation	1bit	C,W	1.015 reset
201	Scene	Ventilation	1byte	C,W	18.001 scene control
202	CO2 value	Ventilation	2byte	C,W,T,U	7.001 pulse 9.008 parts/million(ppm)
203	PM 2.5 value	Ventilation	2byte	C,W,T,U	7.001 pulse 9.030 concentration(ug/m3)
204	VOC value	Ventilation	2byte	C,W,T,U	7.001 pulse 9.030 concentration(ug/m3)
205	Power on/off	Ventilation	1bit	C,T	1.001 switch
206	Fan speed	Ventilation	1byte	C,T	5.001 percentage 5.100 fan stage

207	Fan automatic operation	Ventilation	1bit	C,T	1.003 enable
208	Heat recovery on/off	Ventilation	1bit	C,T	1.001 switch
209	Filter timer counter	Ventilation	2byte	C,T	7.007 time(h)
210	Filter alarm	Ventilation	1bit	C,T	1.005 alarm
211	Filter timer reset	Ventilation	1bit	C,W	1.015 reset
3s					

6.4.2. "Gate forwarding"

Number	Name	Object	Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priori
8	1st Logic	Gate value select				1 byte	C	-	W	-	-	scene number	Low
9	1st Logic	Input A				1 bit	C	-	W	-	-	switch	Low
10	1st Logic	Input B				1 bit	C	-	W	-	-	switch	Low
11	1st Logic	Input C				1 bit	C	-	W	-	-	switch	Low
12	1st Logic	Input D				1 bit	C	-	W	-	-	switch	Low
13	1st Logic	Output A				1 bit	C	-	-	T	-	switch	Low
14	1st Logic	Output B				1 bit	C	-	-	T	-	switch	Low
15	1st Logic	Output C				1 bit	C	-	-	T	-	switch	Low
16	1st Logic	Output D				1 bit	C	-	-	T	-	switch	Low

8	Gate value select	1st Logic	1byte	C,W	17.001 scene number
9/.../12	Input x	1st Logic	1bit 4bit 1byte	C,W	1.001 switch 3.007 dimming control 5.010 counter pulses(0..255)
13/..16	Output x	1st Logic	1bit 4bit 1byte	C,T	1.001 switch 3.007 dimming control 5.010 counter pulses(0..255)

6.4.3. "Threshold comparator"

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Threshold value input			4 bit	C	-	W	-	U	dimming control	Low
8	1st Logic	Threshold value input			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
8	1st Logic	Threshold value input			2 bytes	C	-	W	-	U	pulses	Low
8	1st Logic	Threshold value input			4 bytes	C	-	W	-	U	counter pulses (unsigned)	Low

8	Threshold value input	1st Logic	4bit 1byte 2byte 4byte	C,W, U	3.007 dimming 5.010 counter pulses 7.001 pulses 12.001 counter pulses
16	Logic result	1st Logic	1bit	C,T	1.002 boolean

6.4.4. "Format convert"

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1bit-bit0			1 bit	C	-	W	-	U	boolean	Low
9	1st Logic	Input 1bit-bit1			1 bit	C	-	W	-	U	boolean	Low
16	1st Logic	Output 2bit			2 bit	C	-	-	T	-	switch control	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1bit-bit0			1 bit	C	-	W	-	U	boolean	Low
9	1st Logic	Input 1bit-bit1			1 bit	C	-	W	-	U	boolean	Low
10	1st Logic	Input 1bit-bit2			1 bit	C	-	W	-	U	boolean	Low
11	1st Logic	Input 1bit-bit3			1 bit	C	-	W	-	U	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1byte			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
16	1st Logic	Output 2byte			2 bytes	C	-	-	T	-	pulses	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1byte-low			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
9	1st Logic	Input 1byte-high			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
16	1st Logic	Output 2byte			2 bytes	C	-	-	T	-	pulses	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 2byte-low			2 bytes	C	-	W	-	U	pulses	Low
9	1st Logic	Input 2byte-high			2 bytes	C	-	W	-	U	pulses	Low
16	1st Logic	Output 4byte			4 bytes	C	-	-	T	-	counter pulses (unsigned)	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1byte			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
9	1st Logic	Output 1bit-bit0			1 bit	C	-	-	T	-	boolean	Low
10	1st Logic	Output 1bit-bit1			1 bit	C	-	-	T	-	boolean	Low
11	1st Logic	Output 1bit-bit2			1 bit	C	-	-	T	-	boolean	Low
12	1st Logic	Output 1bit-bit3			1 bit	C	-	-	T	-	boolean	Low
13	1st Logic	Output 1bit-bit4			1 bit	C	-	-	T	-	boolean	Low
14	1st Logic	Output 1bit-bit5			1 bit	C	-	-	T	-	boolean	Low
15	1st Logic	Output 1bit-bit6			1 bit	C	-	-	T	-	boolean	Low
16	1st Logic	Output 1bit-bit7			1 bit	C	-	-	T	-	boolean	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 2byte			2 bytes	C	-	W	-	U	pulses	Low
15	1st Logic	Output 1byte-low			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
16	1st Logic	Output 1byte-high			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic											

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 3byte			3 bytes	C	-	W	-	U	RGB value 3x(0..255)	Low
14	1st Logic	Output 1byte-low			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
15	1st Logic	Output 1byte-middle			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
16	1st Logic	Output 1byte-high			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

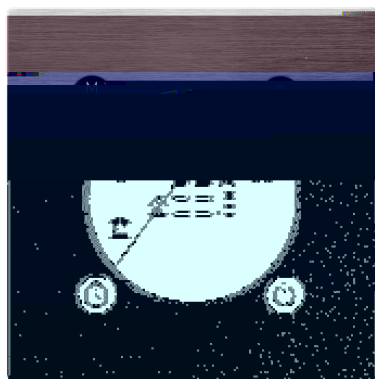
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
8	1st Logic	Input 1byte-low			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
9	1st Logic	Input 1byte-middle			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
10	1st Logic	Input 1byte-high			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
16	1st Logic	Output 3byte			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low

8	Input ...	1st Logic	1bit 1byte 2byte 3byte 4byte	C,W,U	1.001 switch 5.010 counter pulses(0..255) 7.001 pulses 232.600 RGB value 3x(0..255) 12.001 counter pulses
16	Output ...	1st Logic	1bit 2bit 1byte 2byte 3byte 4byte	C,T	1.001 switch 2.001 switch control 5.010 counter pulses(0..255) 7.001 pulses 232.600 RGB value 3x(0..255) 12.001 counter pulses

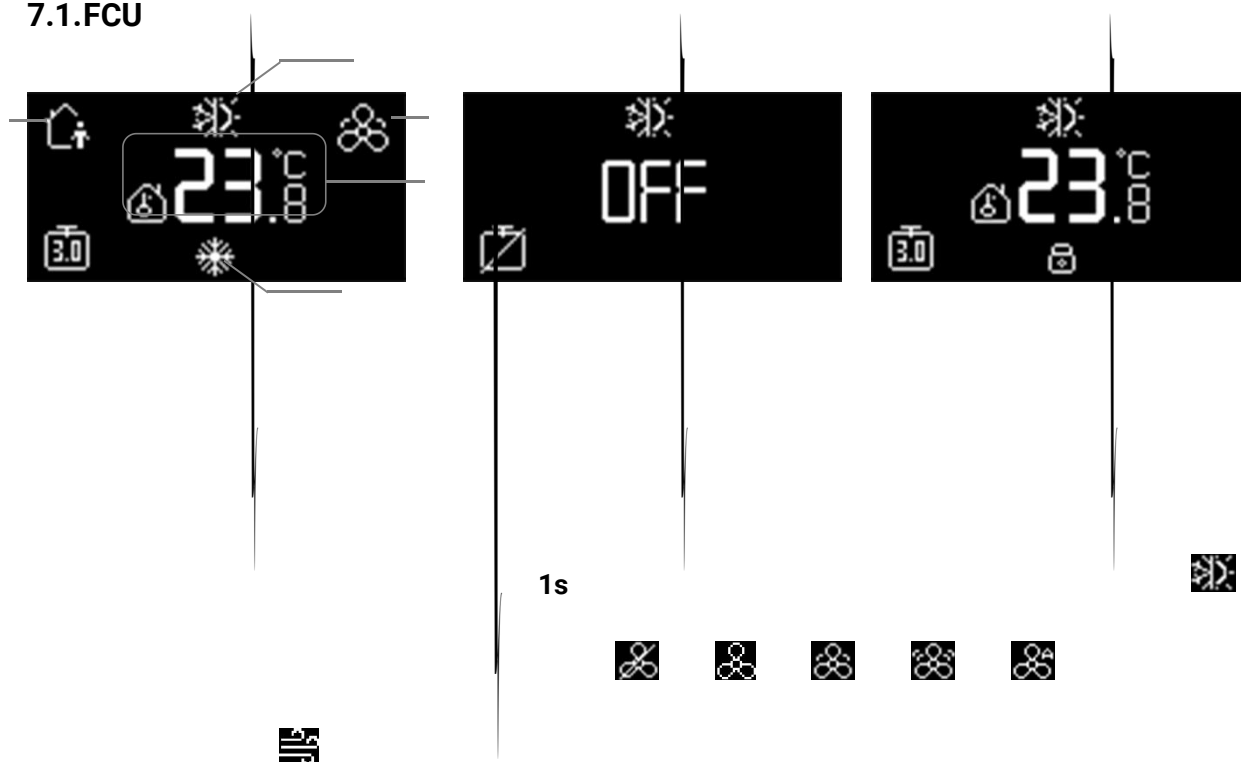
6.5. "Scene Group"

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
80	Scene Group	Main scene trigger			1 byte	C	-	W	-	-	scene number	Low
81	1st Scene Group	Sub scene output 1			1 bit	C	-	-	T	-	switch	Low
82	1st Scene Group	Sub scene output 2			1 bit	C	-	-	T	-	switch	Low
83	1st Scene Group	Sub scene output 3			1 bit	C	-	-	T	-	switch	Low
84	1st Scene Group	Sub scene output 4			1 bit	C	-	-	T	-	switch	Low
85	1st Scene Group	Sub scene output 5			1 bit	C	-	-	T	-	switch	Low
86	1st Scene Group	Sub scene output 6			1 bit	C	-	-	T	-	switch	Low
87	1st Scene Group	Sub scene output 7			1 bit	C	-	-	T	-	switch	Low
88	1st Scene Group	Sub scene output 8			1 bit	C	-	-	T	-	switch	Low

80	Main scene trigger	Scene Group	1byte	C,W	17.001 scene number
81/..	Sub scene output x	1st Scene Group	1bit 1byte 2byte	C,T	1.001 switch 5.010 counter pulses 7.001 pulses



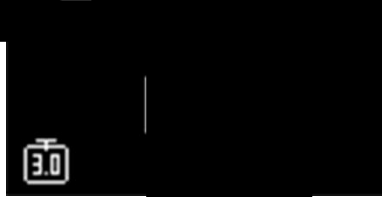
7.1.FCU



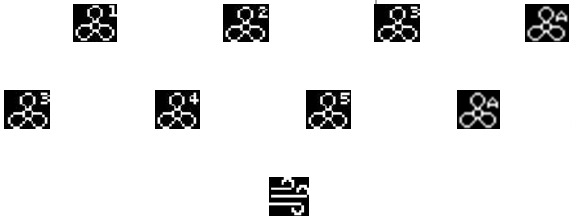
GVS

K-BUS





1s

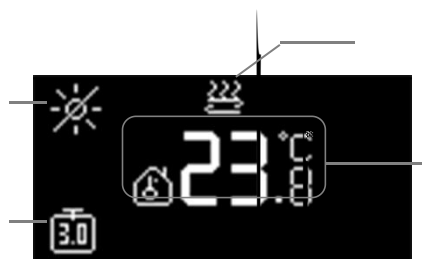




1s



7.3.

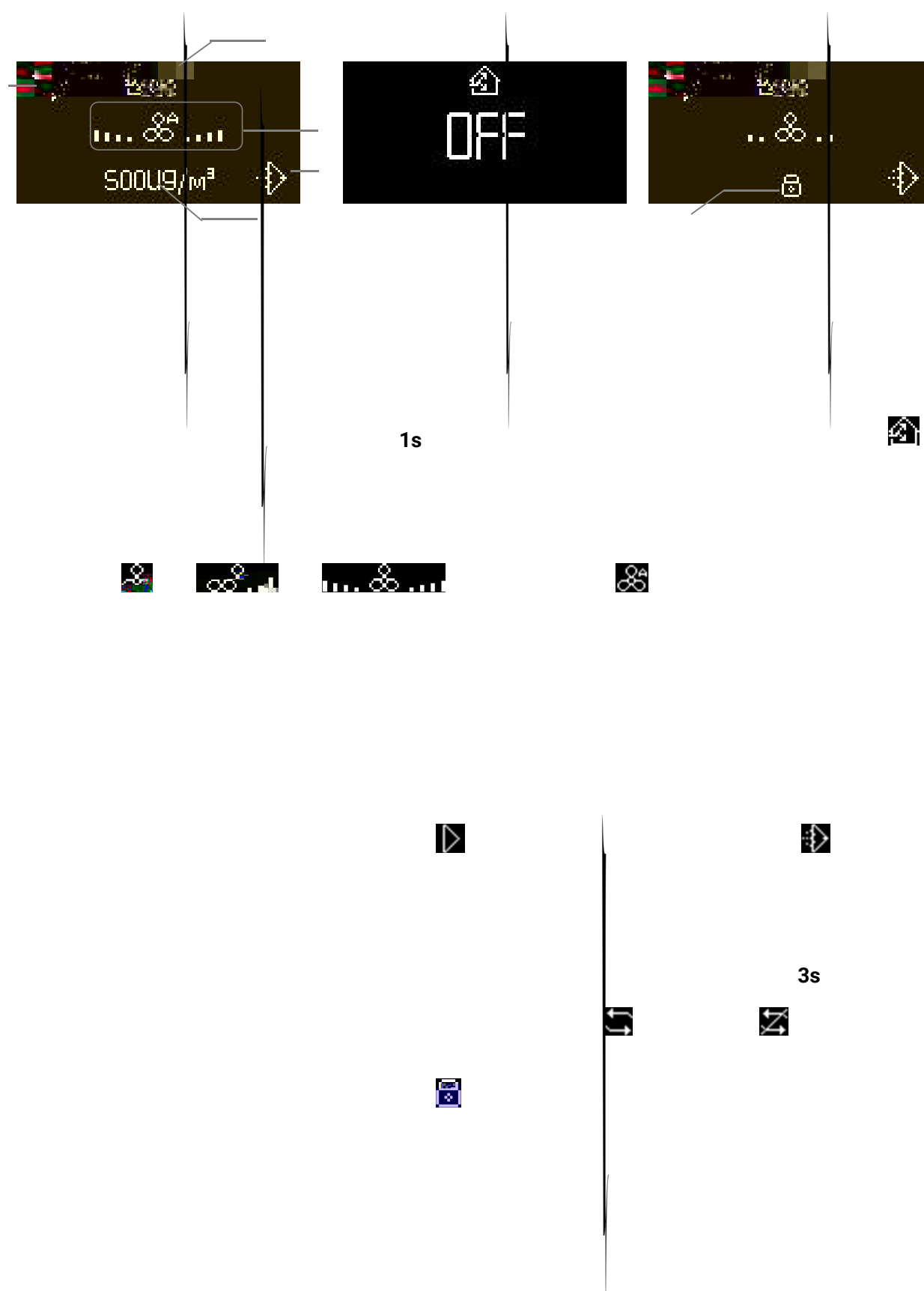


1s

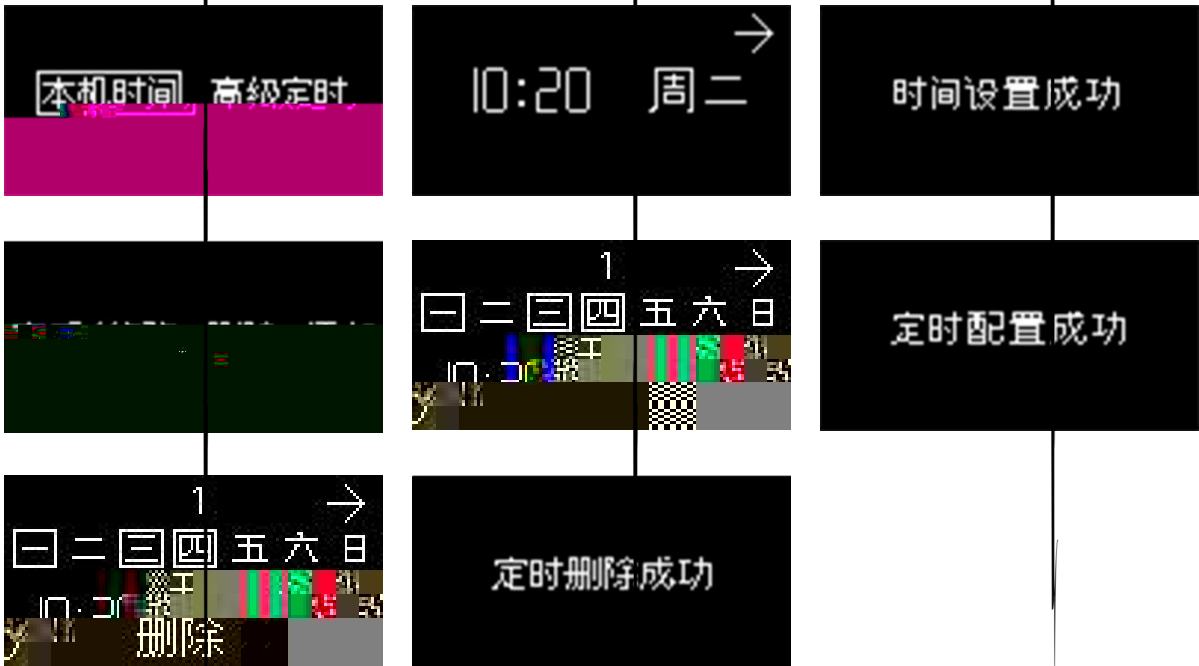


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7.4.



7.5.



FCU VRF

3s

FCU/VRF

4

7.6.

