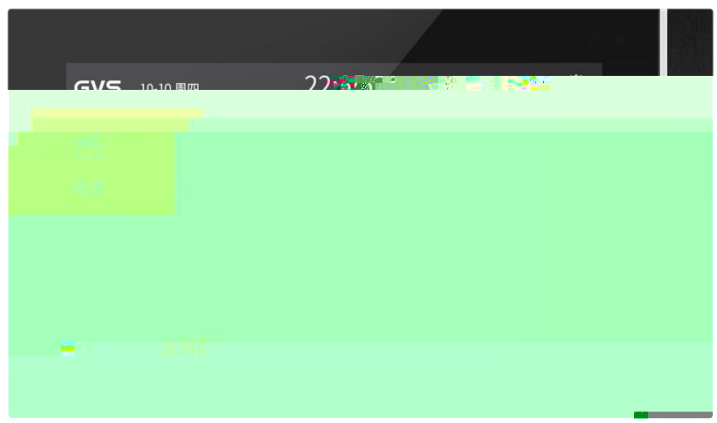
K-BUS KNX □

KNX Smart Touch V40s&V50s_V1.9

CHTF-4.0/9.5.2x

CHTF-5.0/15.5.2x

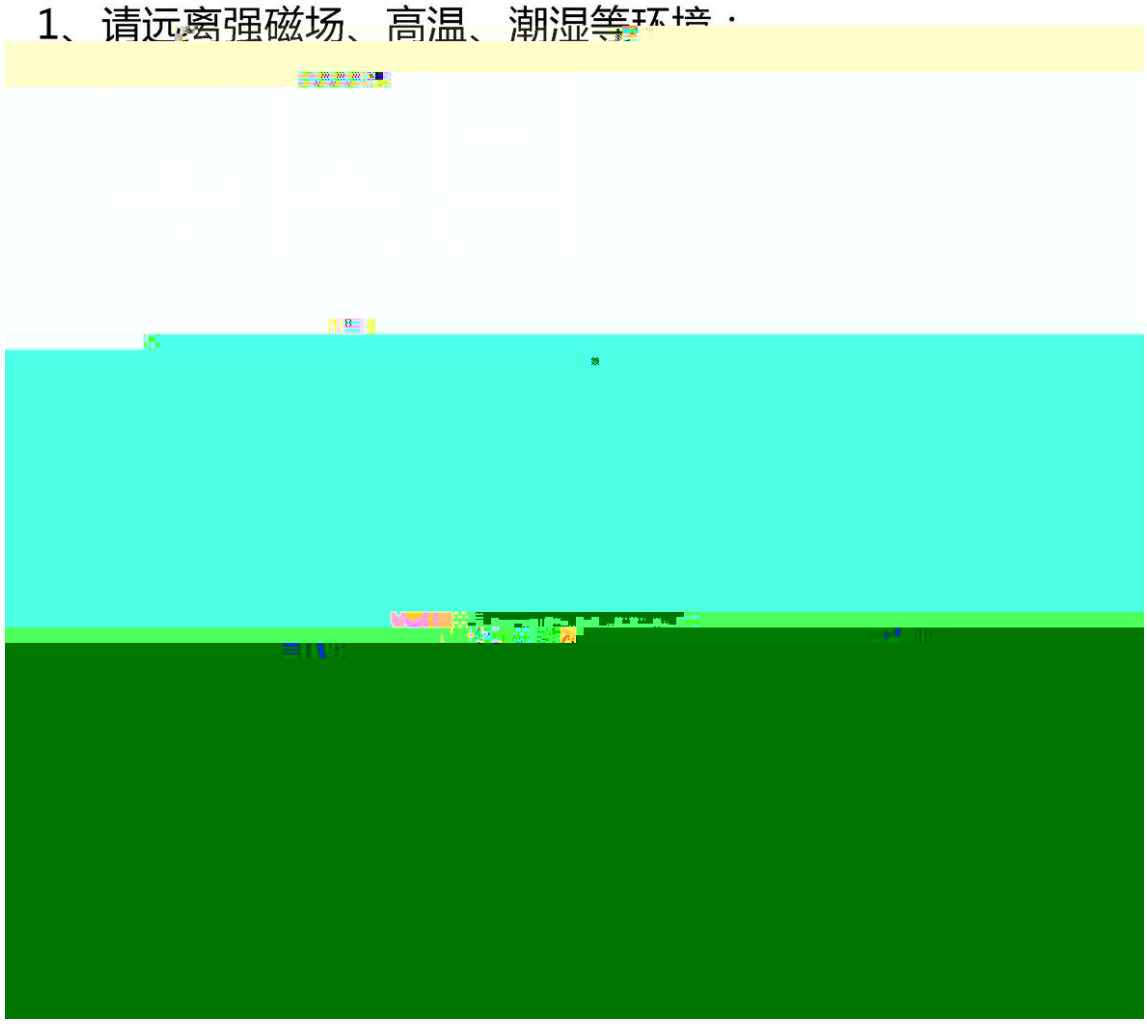
(x: Â 1-□ □ 2-)



KNX/EIB □ □

注意事项

1、请远离强磁场、高温、潮湿等环境；



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□2□ MicroSD ! ! □ □ □

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□3□ □ □ MicroSD

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- □HCL□Õ □ V50s□
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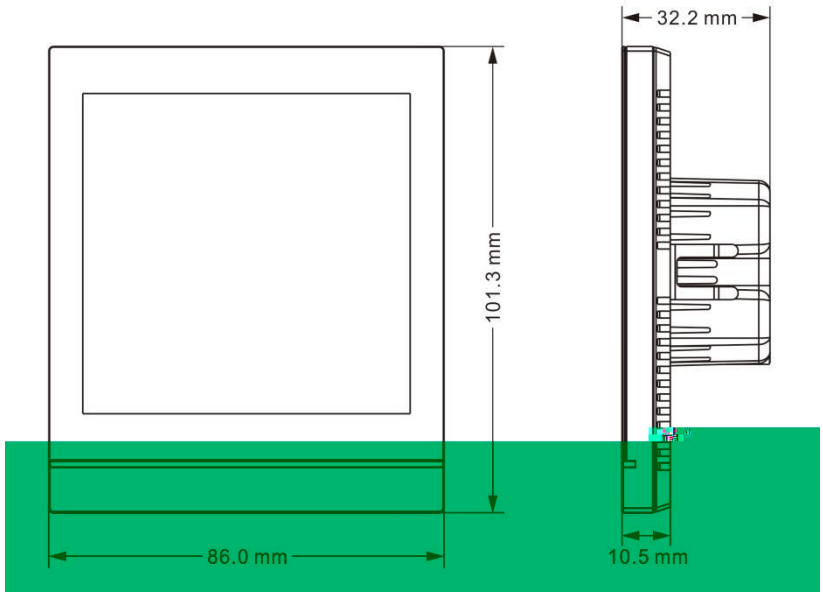
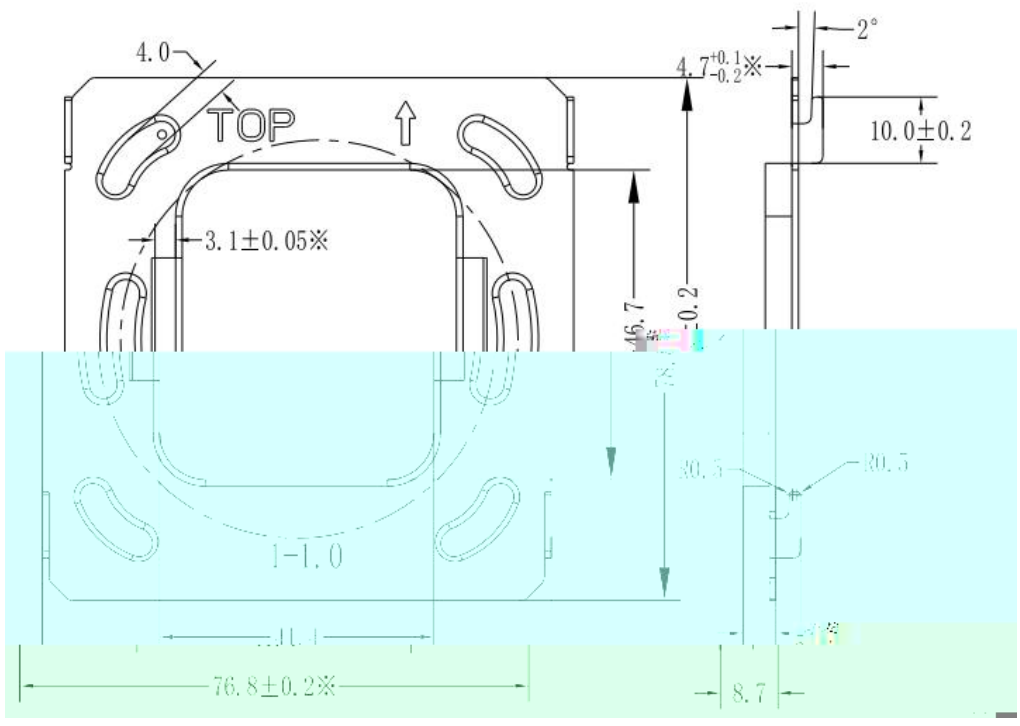
		21-30V DC
		<4.5mA/24V DC <4mA/30V DC (V40s) 6mA/24V DC 5mA/30V DC (V50s) <120mW (V40s) <150mW (V50s)
		24-30V DC
		<86mA/24V DC <71mA/30V DC (V40s) <125mA/24V DC <100mA/30V DC (V50s) <2.2W (V40s) <3W (V50s)
□	KNX	□ (□/□)
		KNX □□/ □
	Û □	–5 °C ... + 45 °C
	Û □	–25 °C ... + 55 °C – 25 °C ... + 70 °C
		<93%,□
□ □	□ 30cm □ □ □ k	
□	86 80	
	86 x 101.3 x 10.5mm (V40s) 86 x 148.8 x 11.5mm (V50s) (Õ V40s V50s 32.2mm ¦ 32.5mm)	
□ □	0.2KG (V40s) □ 0.3KG (V50s)	

3.1.

3.1.1.CHTF-4.0/9.5.2x

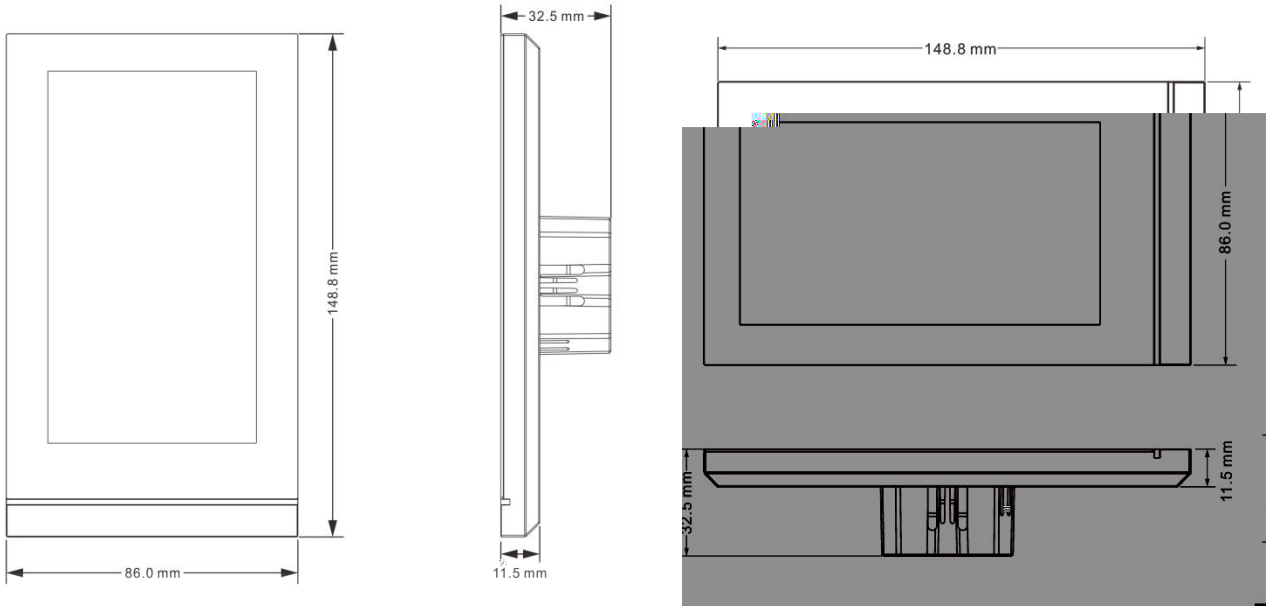


3.1.1 CHTF-4.0/9.5.2x

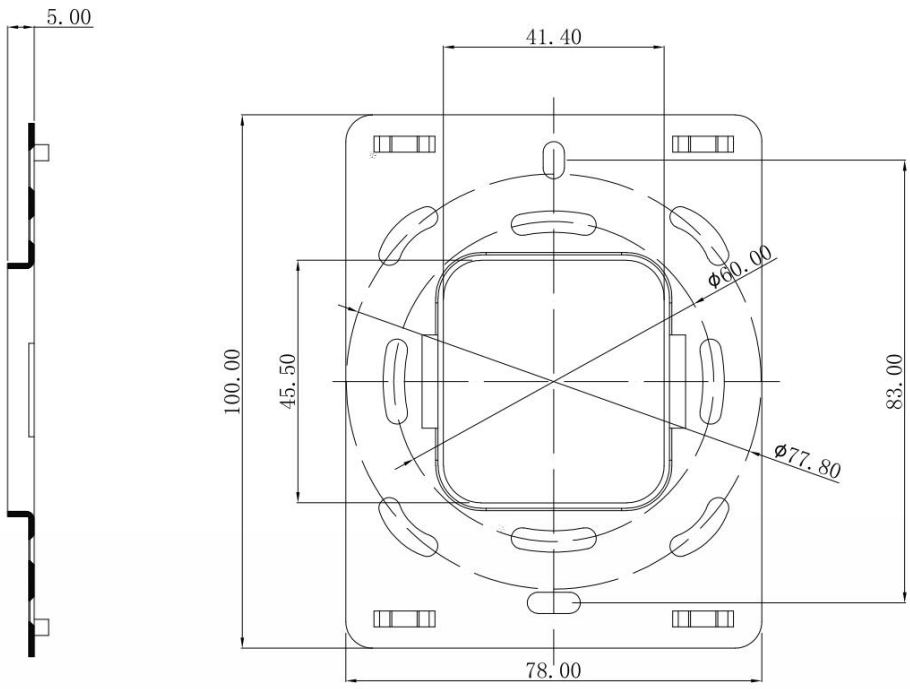


3.1.2 CHTF-4.0/9.5.2x

3.1.2.CHTF-5.0/15.5.2x



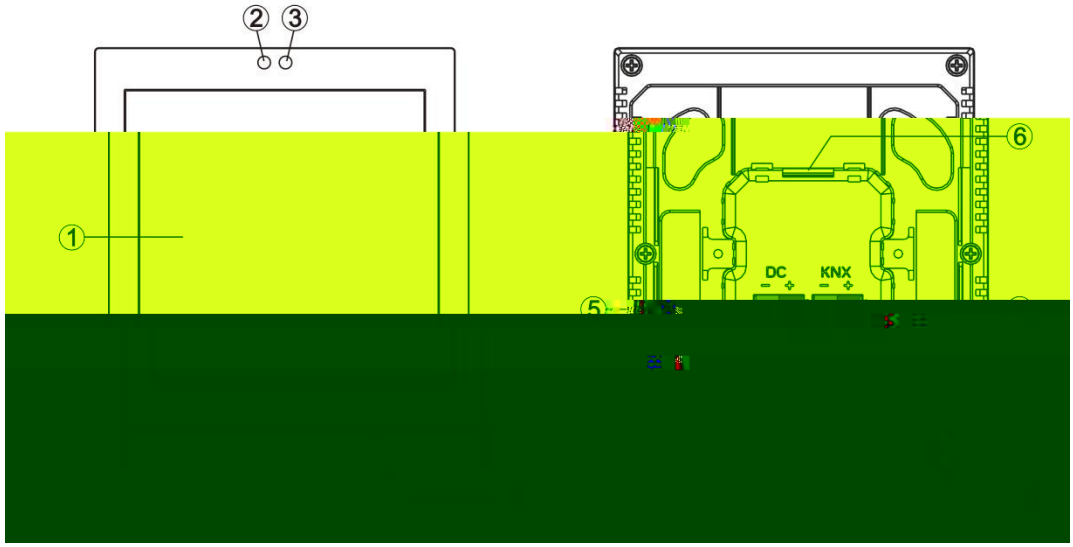
3.1.3 CHTF-5.0/15.5.2x



3.1.4 CHTF-5.0/15.5.2x

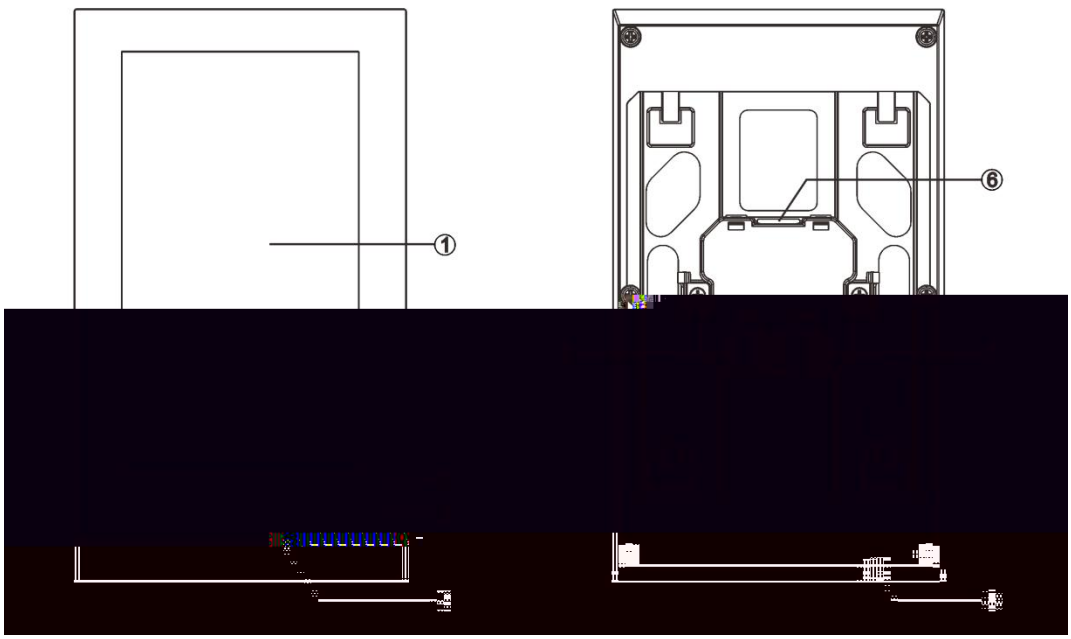
3.2.

3.2.1.CHTF-4.0/9.5.2x



3.2.1 CHTF-4.0/9.5.2x

3.2.2.CHTF-5.0/15.5.2x



3.2.2 CHTF-5.0/15.5.2x

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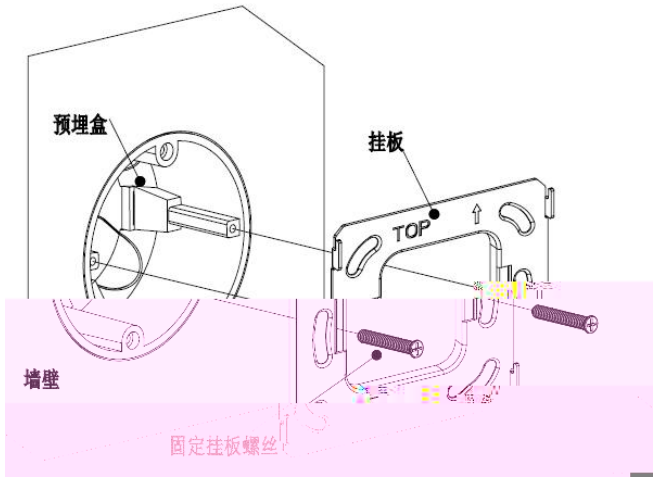
3.3. □

3.3.1.CHTF-4.0/9.5.2x □



3.3.1.1

1. □ □□ □ k

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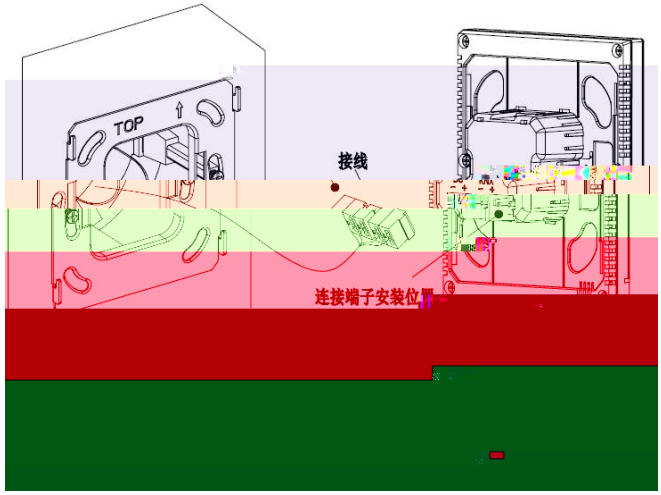
(1) □□ k **3.3.1.1** □

(2) **TOP** □

(3) □ □ □ k

□ **0.6~0.8N.M□6~8Kgf.cm□** k

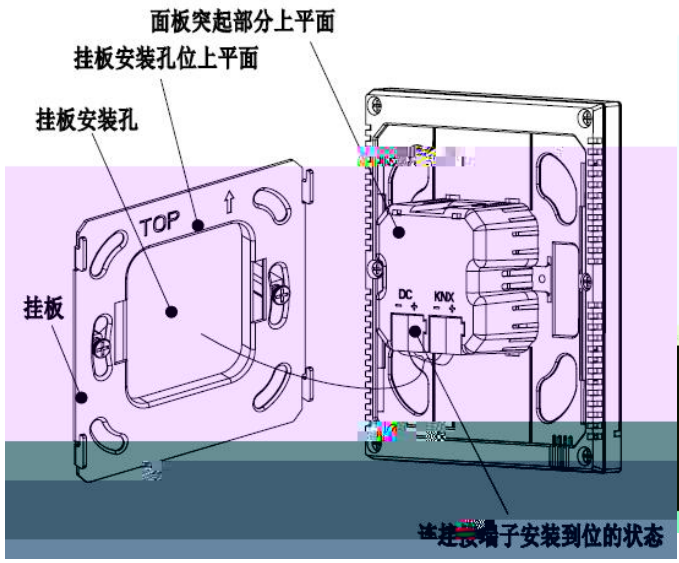
(4) ß **86** □ □ □ ß **M4** □ k



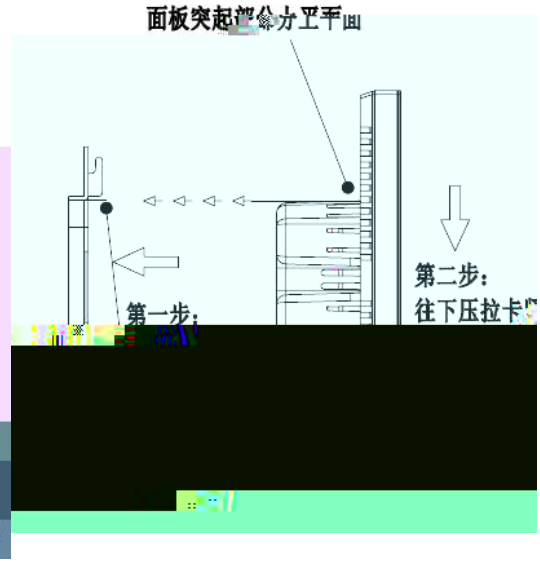
2. □ □□ k

□ k □ **3.3.1.2** k

3.3.1.2



3.3.1.3



3.3.1.4

3. □ :

(1) 1□ □ □ □ □ □

(2) 2□ □ □ □

□ □ kÑ 3.3.1.3 3.3.1.4

k

(3) 3□ 1 2 □ (3.3.1.4)

□ k

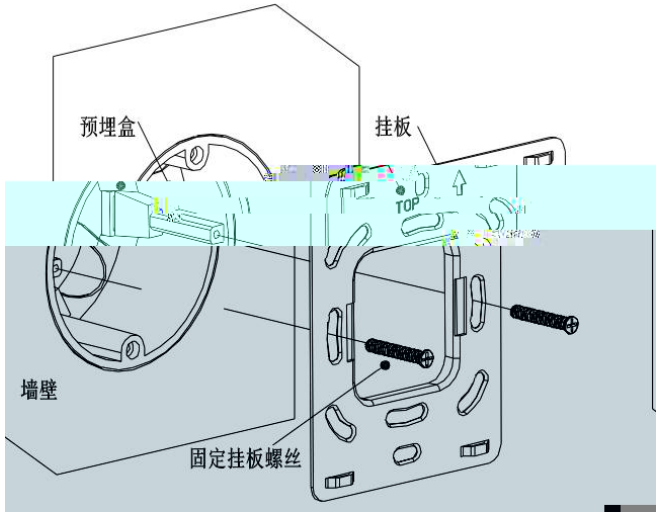
3.3.1.5

4. □ □□ □ □ □□ □

□ □ k 3.3.1.5

k

3.3.2.CHTF-5.0/15.5.2x □



1. □ □□ □ k

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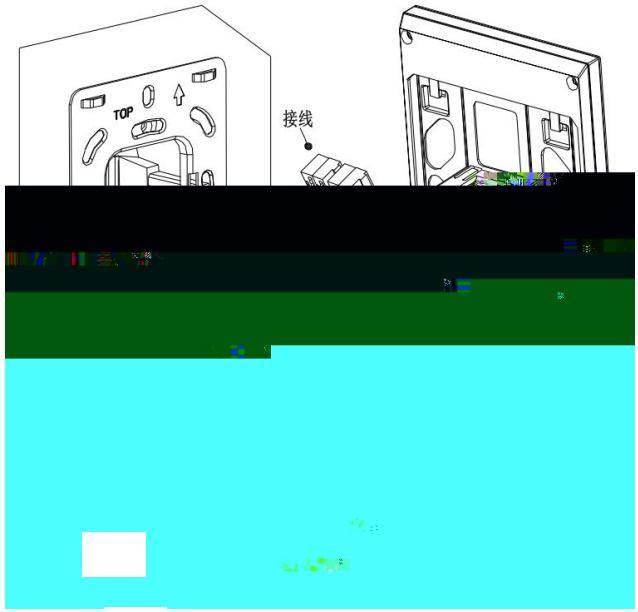
1. □□ k 3.3.2.1 □

2. TOP □

3. □ □ □ k □ 0.6~0.8N.M□6~8Kgf.cm□□

4. □ ß M4 □ k

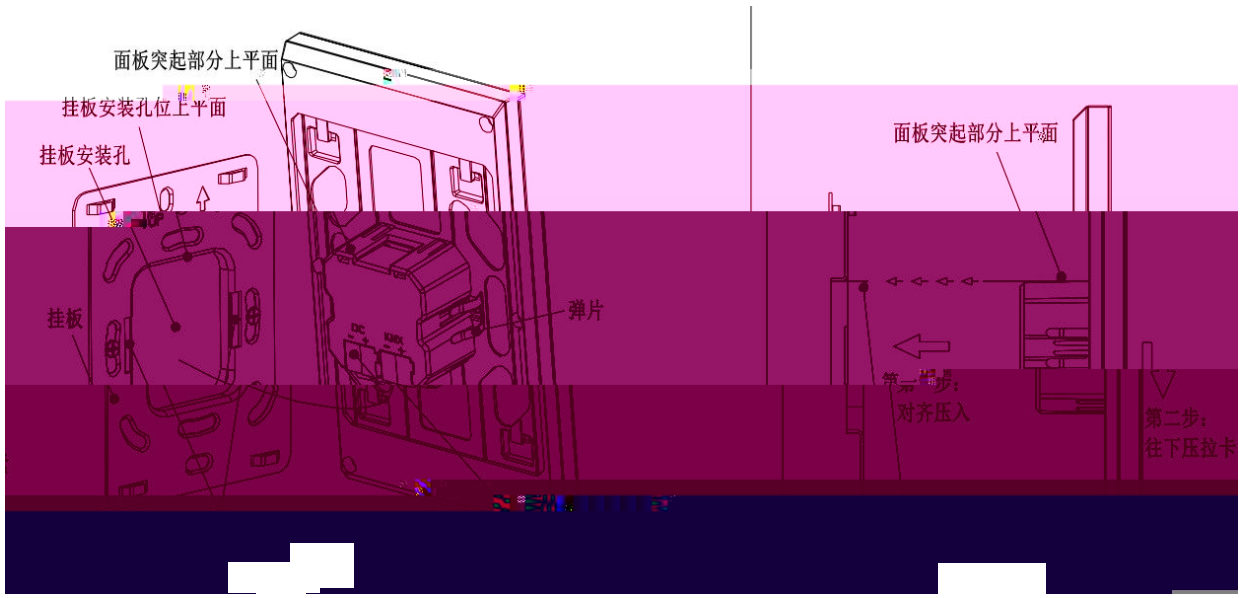
3.3.2.1



2. □ □□ k

□ k □ **3.3.2.2** k

3.3.2.2



3.3.2.3 3.3.2.4

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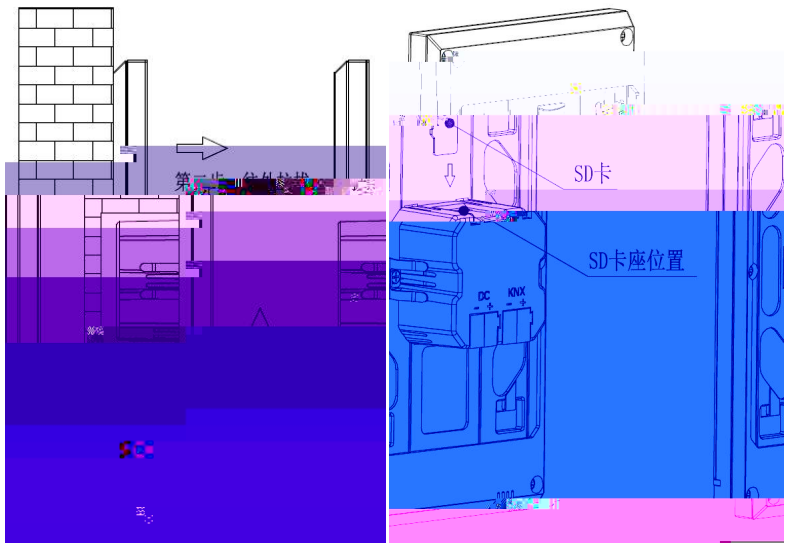
□ k



3.3.2.5

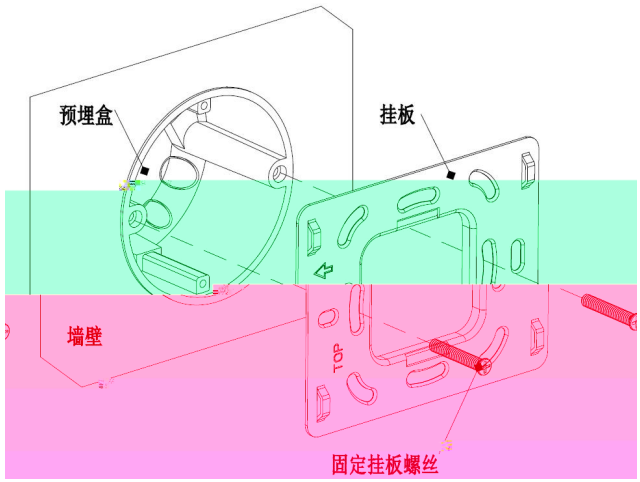
3.3.2.6

4. □ □□ □ □ □□

□ □ □

k 3.3.2.5 k SD □ 3.3.2.6 k

3.3.3.CHTF-5.0/15.5.2x □



3.3.3.1

1. □ □□ □ k

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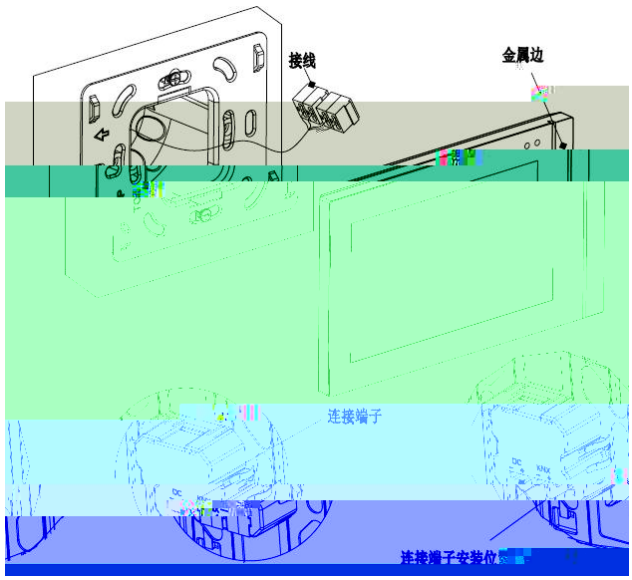
(1) □□ k 3.3.3.1 □

(2) TOP □□

(3) □ □ □ k

□ 0.6~0.8N.M□6~8Kgf.cm□□

(4)ß 86 □ □ □ß M4 □ k

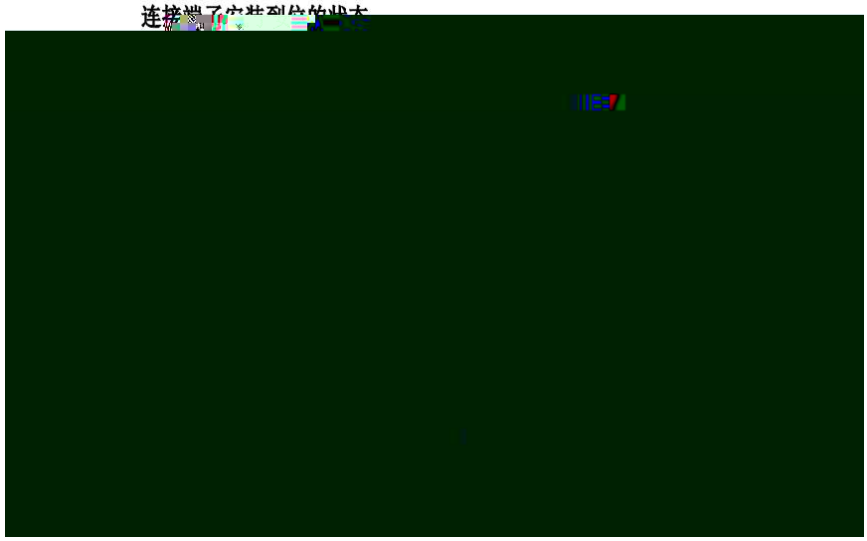


3.3.3.2

2.□1□ □ □□ k

□ k □ 3.3.3.2 k

□2□ □ □ □ k



3.3.3.3

3. □ :

(1) 1□ □ □ □ □ □

(2) 2□ □ □ □TOP □

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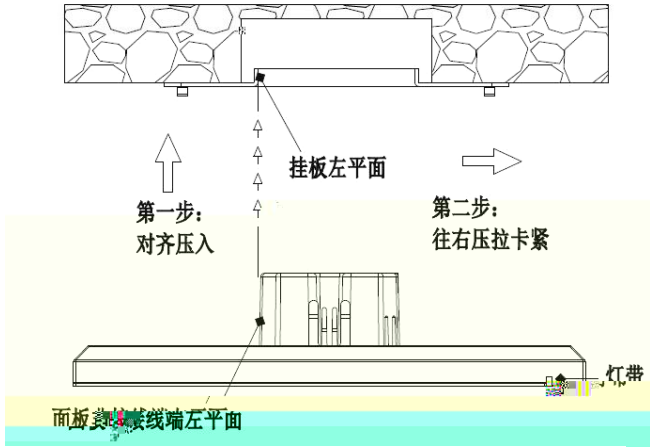
3.3.3.4 k

(3) 3□ 1 2 □ □ (

3.3.3.4) □ k



3.3.3.4 3.3.3.5

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k 3.3.3.5 k

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KNX Smart Touch V40s/1.0	**937**	**2000**	**2000**
KNX Smart Touch V50s/1.0	**948**	**2000**	**2000**

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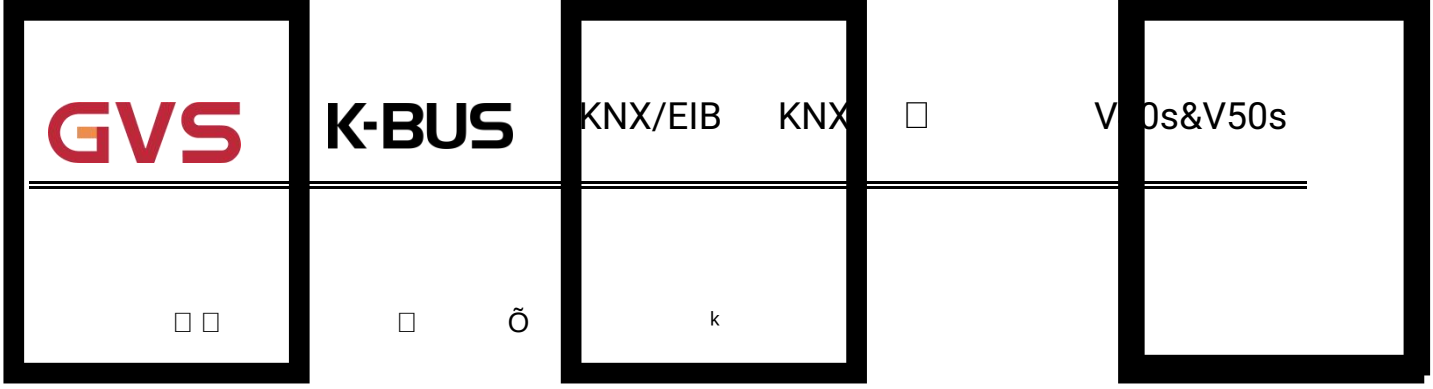

/ □ Ô □ □ □□ k

PM2.5 CO2 □□ □ Õ k

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□□HCL□

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Õ □ V50s k

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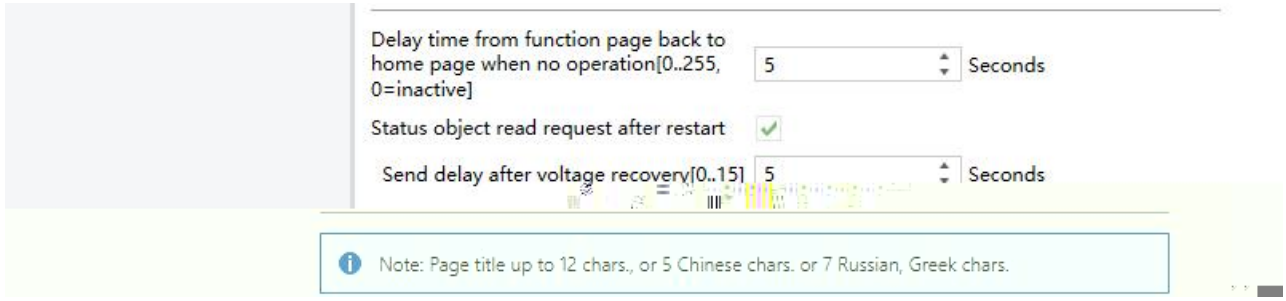
ETS Õ

5.1. Õ “General”

5.1.1. Õ “General setting”

Õ “General setting” 5.1.1 Õ Õ Õ Õ !

! Â ! ! ! !



5.1.1(2) “General setting” Õ

“Display mode”

Õ V50s Õ □ Õ k □

Vertical

Horizontal

V40s ! k

“Interface Language”

Õ □

Chinese(Simplified) D

MM-dd

dd-MM

MM□ □dd□ k

"Send day/night status"

Õ / □ □ "Day/Night" Û k □

No

Depend to certain time

Depend to sunrise&sunset

No□ Û Ñ k

Depend to certain time□ / k 18□30

6□30 k

Depend to sunrise&sunset□ b / k□□ b □

□ 116°20' ! 39°56' k

"Depend to certain time" Ñ Õ k

- **"Time for switch to night at: Hours[0..23]"**
- **"Time for switch to night at: Minutes[0..59]"**

□ Õ 18h□0min k

- **"Time for switch to day at: Hours[0..23]"**
- **"Time for switch to day at: Minutes[0..59]"**

□ Õ k 6h□0min k

"Depend to sunrise&sunset" Ñ Õ / b

k

Time calibration

- **"Switching time move to night[-128..127]min"**

Õ b k b

KNX
V4
&V50s

k

"UI style for Multifunction page"

Õ (Multifunction(Lighting/Blind/Scene/Value send)) k

Grid view

List view

k

"Status indication"

"Grid view" Ñ Õ k

Icon

Grid block

Icon k

Grid block k

k

"Screen saver"

Õ k

Disable

Clock

Digital clock with air quality

Album(3 pictures)

Album(1 picture)

Disable k

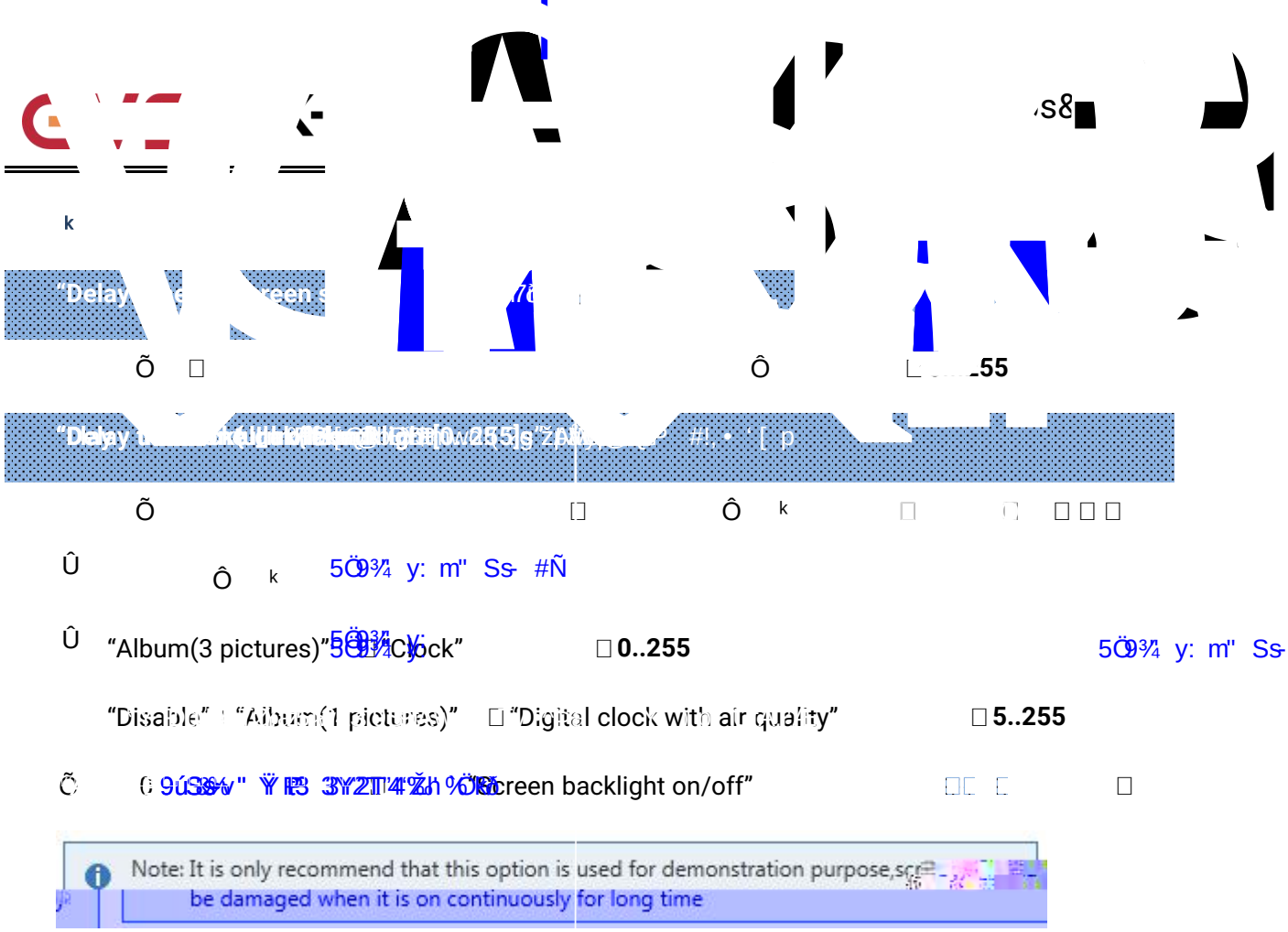
Clock k

Digital clock with air quality k

Album(3 pictures /1 picture) 1 3 k

3 5s 1 k

TF



Note: It is only recommend that this option is used for demonstration purpose,scr
be damaged when it is on continuously for long time

“Send delay after voltage recovery [0..15]s”

□ Ñ k Õ Õ □ Õ □ Û k **□0...15**

Ú □ Û Õ □ □ Û □ k

□ □ □ Û □

k □ k

Õ □ Û □ □ k

□ □ □ KNX Õ □ k

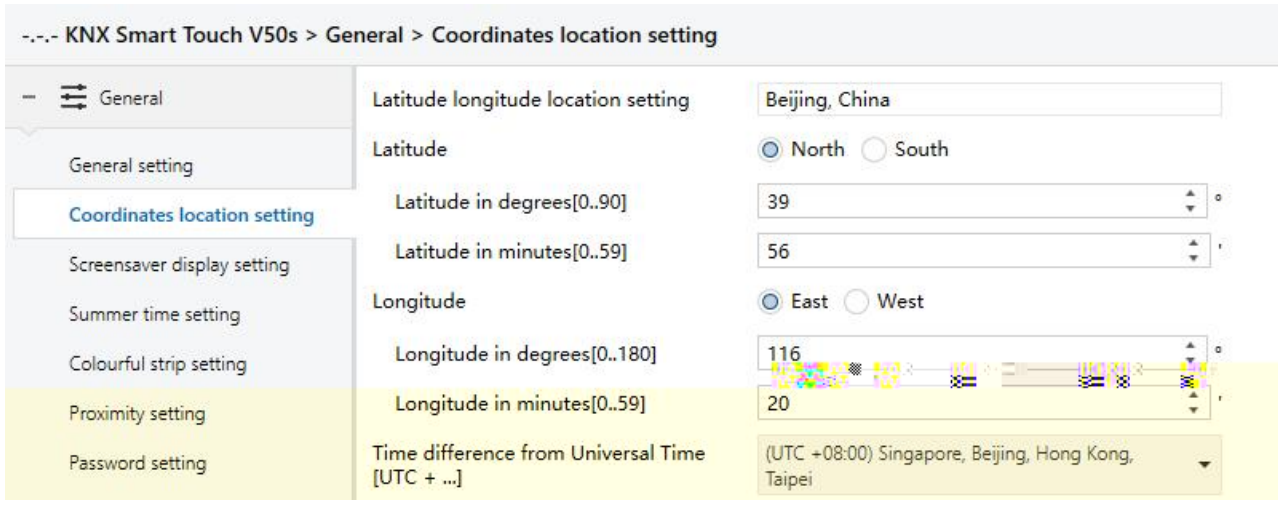
Note: Page title up to 12 chars., or 5 Chinese chars. or 7 Russian, Greek chars.

□ □ □ **12** **5** **7** k

5.1.2. Õ “Coordinates location setting”

/ □ “Depend to sunrise&sunset” Ñ Õ b

□ k



5.1.2 “Coordinates location setting” Õ

“Latitude longitude location setting”

Õ b □ “Beijing,China” k

"Latitude"

Õ b □ □ k □

South

North

"Latitude in degrees[0°..90°] "

"Latitude in minutes[0′ ..59′]"

□ Õ k 39°56' k

"Longitude"

Õ b □ □ □ Đ □ k □

East □

West Đ □

"Longitude in degrees[0°..180°] "

"Longitude in minutes[0′ ..59′]"

□ Õ □ k □ 116°20' k

"Time difference from Universal Time[UTC+...]"

Õ k □

(UTC -12□00) International Date Line West Đ

(UTC -11□00) Samoa □ □

...

(UTC +11□00) Magadan, Salomon Islands, New Caledonia □ □ □ □

(UTC +12□00) Aukland, Wellington, Fiji □

5.1.3. Õ “Screensaver display setting”

“Digital clock with air quality” Ñ Õ k

5.1.3 “Coordinates location setting” Õ

“Items x display function” □x=1~4□

Õ □ Õ 4 □□ k □

None	**CO2**
Int. Temperature	**VOC**
Ext. temperature	**Brightness**
Humidity	**Wind speed**
PM2.5	
PM10	

“Time period for request external sensor [5..255]min”

Õ Õ □ □ Û Õ □ k

□5..255

“Object datatype of display PM2.5/PM10”

Õ PM2.5/PM10 k □

Value i m3(DPT_7.001)

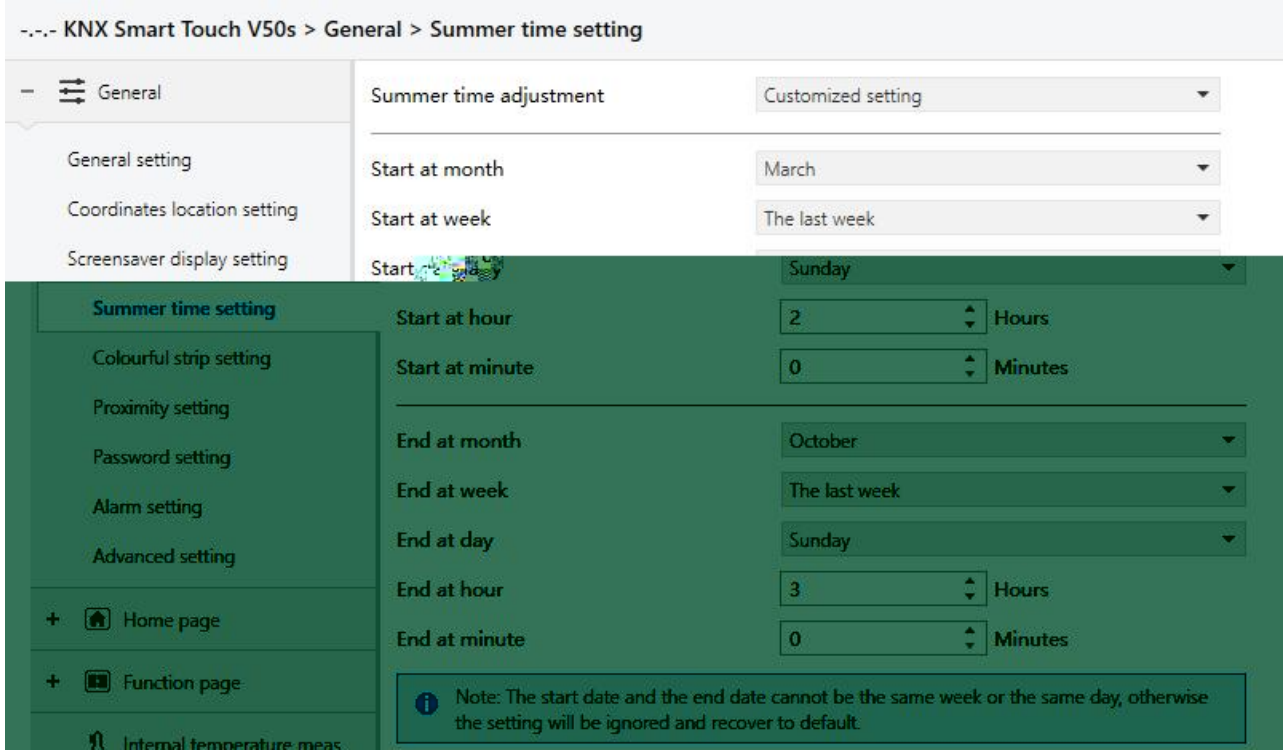
in ug/m3(DPT_9.030)

"Object datatype of d ay CO2"

Õ

5.1.4. Õ "Summer time setting"

Õ "Summer time setting" 5.1.4 □ □ □ Õ □ k



5.1.4 "Summer time setting" Õ

"Summer time adjustment"

Õ k □

No

Always

Customized setting

No □ □ k

Always □ k

Customized setting □ Õ □ k

"Customized setting" Ñ Õ □ k

"Start/End at month"

Õ □ k □□□ □□□

February

...

December

• **"Start/End at week"**

Õ □ k □

The first week

The second week

...

The last week

• **"Start/End at day"**

Õ □ k □

Monday

Tuesday

...

Sunday

• **"Start/End at hour[0..23]"**

• **"Start/End at minute[0..59]"**

□ Õ □ 18h:00min k

□ Õ 3 02h:00min □ 11

02h:00min □ □ □ □ Õ

03h:00min □ □ □ □ Õ 02h:00min k

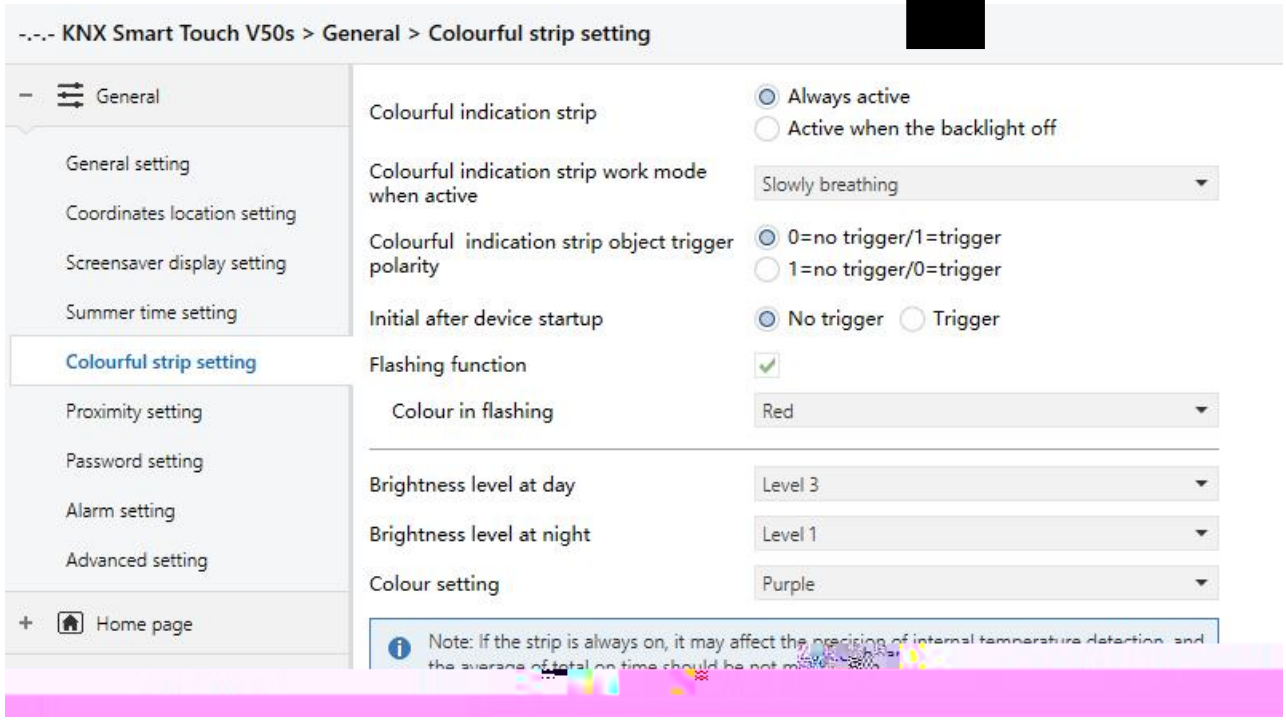
Note: The start date and the end date cannot be the same week or the same day, otherwise the setting will be ignored and recover to default.

□ □ □Õ k □ Õ !

õõ □k õ k

5.1.5. Õ p setti

Õ “Colourful strip setting” 5.1.5 □ □ □ Õ Â k



5.1.5 “Colourful strip setting” Õ

“Colourful indication strip”

Õ Â k □

Always active

Active when the backlight is off

Always active □ Â k

Active when the backlight is off □ Â Â

k

“Colourful indication strip work mode when active”

Õ Â k □

Permanent on

S k m

Slowly breathing □ 5s 25s LED □ k

White dynamic display □ Â □ □

Â Â □ k

Colour range cycle □ Â □/ / / /□/□/ / /□ □ k

• • **“Interval time of dynamic display [1..5]s”**

“White dynamic display” Ñ Õ □ ç k □**1...5**

• • **“Interval time of colour shift [3..255]s”**

“Colour range cycle” Ñ Õ Â ç Â

Â ç k □**1...255**

“Colourful indication strip object trigger polarity”

Õ Â □ □ k □

0=no trigger/1=trigger

1=no trigger/0= trigger

“0=no trigger/1=trigger” “Colourful strip trigger” “1”

“0” □ k

“Initial after device startup”

Õ Õ k □

No trigger

Trigger

No trigger □ k

Trigger □ Õ □ □ k

“Flashing function”

Õ □ □ □ k

□ □ □ □ □ □ □ □ □

□ □ k □ □ 2.5s 2.5s □ Â k

“Colour in flashing”

Õ □ Â k □

Red	□	**Cyan**	□
Green		**P**	

White **Automatically adjust via seasons**

Â

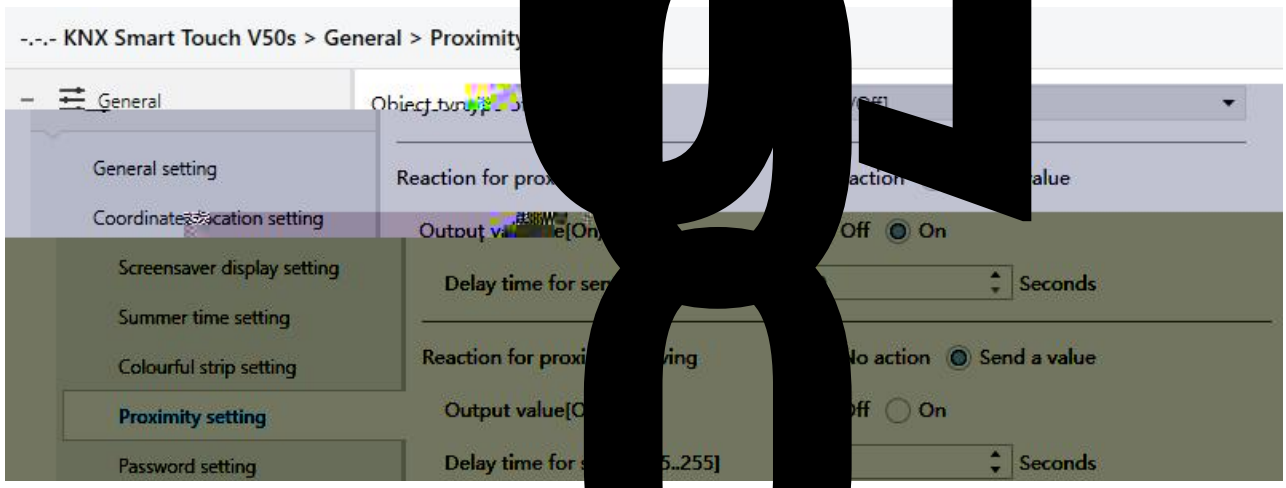
Yellow **Receive a 3byte value** **3byte** **RGB**

Cyan

Â “Colour range cycle” Ñ ᵏ

“White dynamic display” **White** ¦ **Automatically adjl** **<**

5.1.6 “Proximity setting”



“Object type of output value”

1bit[On/Off]

1byte [scene control]

1byte[0..255]

1byte[0..100%]

“Reaction for approaching/leaving”

No action

Send a value

Send a valu

KNX/EIB KNX □ V40s&V50s

"Object type of output value"

Õ Õ □ Û k □

1bit[On/Off]

1byte[scene control]

1byte[0..255]

1byte[0..100%]

"Password 1"

Õ □ 1 4 k

• • **"Description for password 1"**

Õ 1 □ 40 k

• • **"Password 1 applies to"**

Õ 1 ز □ Õ □ □ □ k □

Access setting page ز □ Õ

Wake-up the screen

Both access setting page and wake-up the screen ز □ Õ

Wake-up the screen Õ Û Ñ k ز □ Õ

□ Õ Û k

"Reaction for password 1"

Õ □ 1 Û k □

No action

Send a value

Send a value □ Ñ k

• • **" Output value[On/Off] "**

• • **" Output scene NO.[1..64] "**

• • **" Output value[0..255] "**

• • **" Output value[0..100%] "**

□ Õ Û k

• • **“ Delay time for sending[0..255]s ”**

Õ Û k □**0..255**

“Password 2”

Õ □ 2 k □ 2 3 Õ k

“Password 3”

Õ □ 3 k

2 3 Õ 1 Õ □ □ □ k 2 3

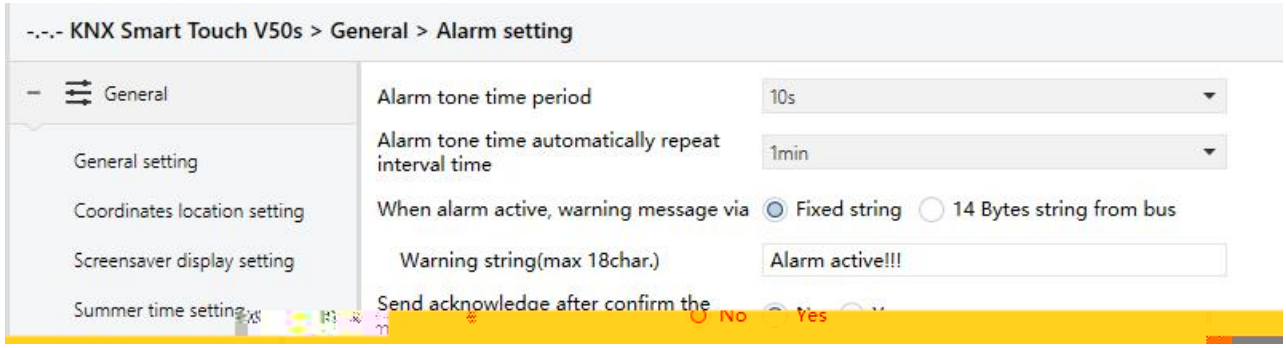
□ ز □ Õ k

□ Õ □ Õ Õ Û □

Û k

5.1.8. Õ “Alarm setting”

Õ “Alarm setting” 5.1.8 □ □ □ Õ □ □ k



5.1.8 “Alarm setting” Õ

“Alarm tone time period”

Õ □ □ k □

□ Ô □ □ □ k □

Disable
10s
20s
...

25min
30min

Disable□ □ □ □ □ □

□ □ □ □ k

"Alarm tone time automatically repeat interval time"

□ Ñ k Õ □ □ □ ç Ô □ □

k □

Disable
10s
20s
...
25min
30min

Disable□ □ □ □ □ □ □

□ □ □ □ Õ k

"When alarm active, warning message via"

□ Õ □ □ ETS □ □

14byte k □

Fixed string

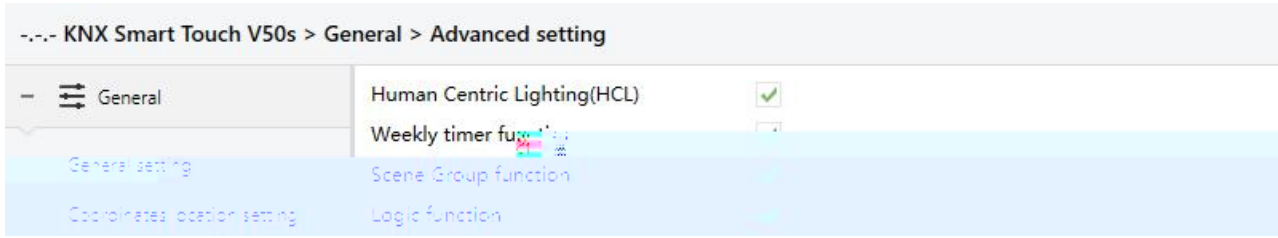
14 Bytes string from bus

"14 Bytes string from bus" □

5.1.9. Õ "Advanced setting"

Õ "Advanced setting" 5.1.8 □ □ ! □ !

□ □□ □ k



5.1.8 "Advanced setting" Õ

"Human Centric Lighting(HCL)"

□ □HCL□ □ Õ Ñ k

"Weekly timer function"

□ □ Õ Ñ k

"Scene Group function"

□ □ Õ Ñ k

"Logic function"

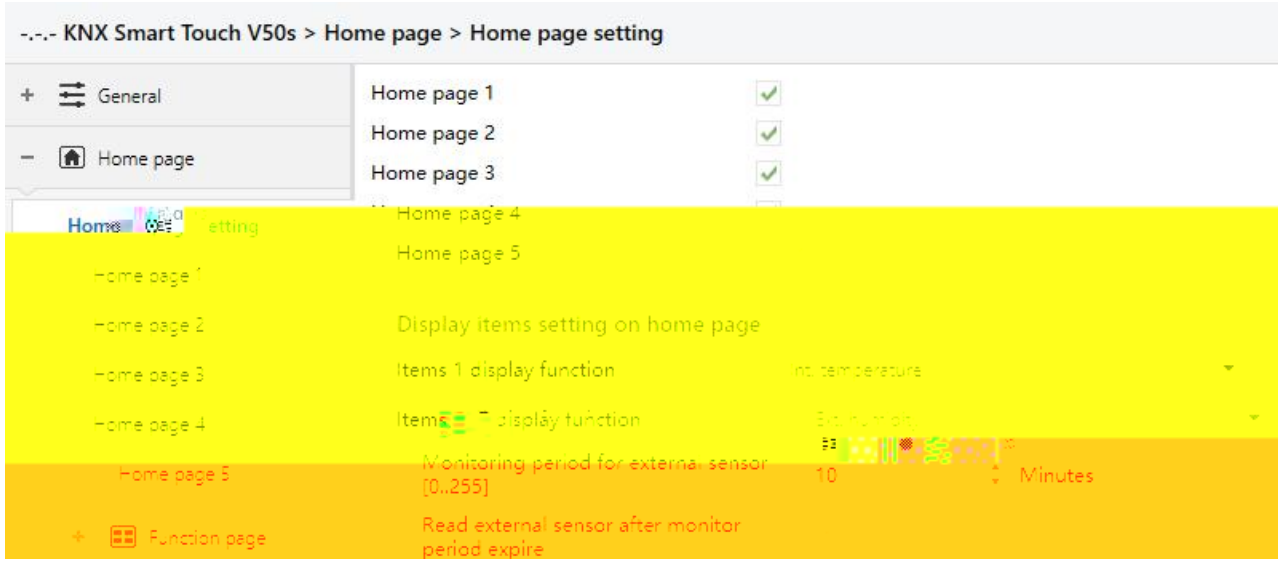
□ □□ □ Õ Ñ k

5.2. Õ “Home page”

5.2.1. Õ “Home page setting”

Õ “Home page setting” 5.2.1 □ □ □ Õ 5 □ □ k

□ □ □ □ □ □ □ □ □ □ k



5.2.1 “Home page setting” Õ

“Home page x”(x=1~5)

□ □ x Õ Ñ k Õ 5 □ k

□ **V40s** **Õ 3** □ k

Display items setting on home page

□ Õ Õ

“Items 1 display function”

Õ Õ □ □ k □

Disable

Int. temperature

Ext. temperature

Int. temperature □ □ Õ □ “Actual temperature” Û Õ

□

Ext. temperature “External temperature value”

k

"Items 2 display function"

k

Disable

Ext. temperature

Ext. humidity

k

"When Ext. temperature sensor fault occurs, Internal sensor display"

k

"Monitoring period for external sensor [0..255]min"

k k

0...255

“When Ext. temperature sensor fault occurs, Internal sensor display” k

k

"Read external sensor after monitor period expire"

Õ Û Õ □ k

□ Û Õ □ k

□ Õ Û Õ □ k

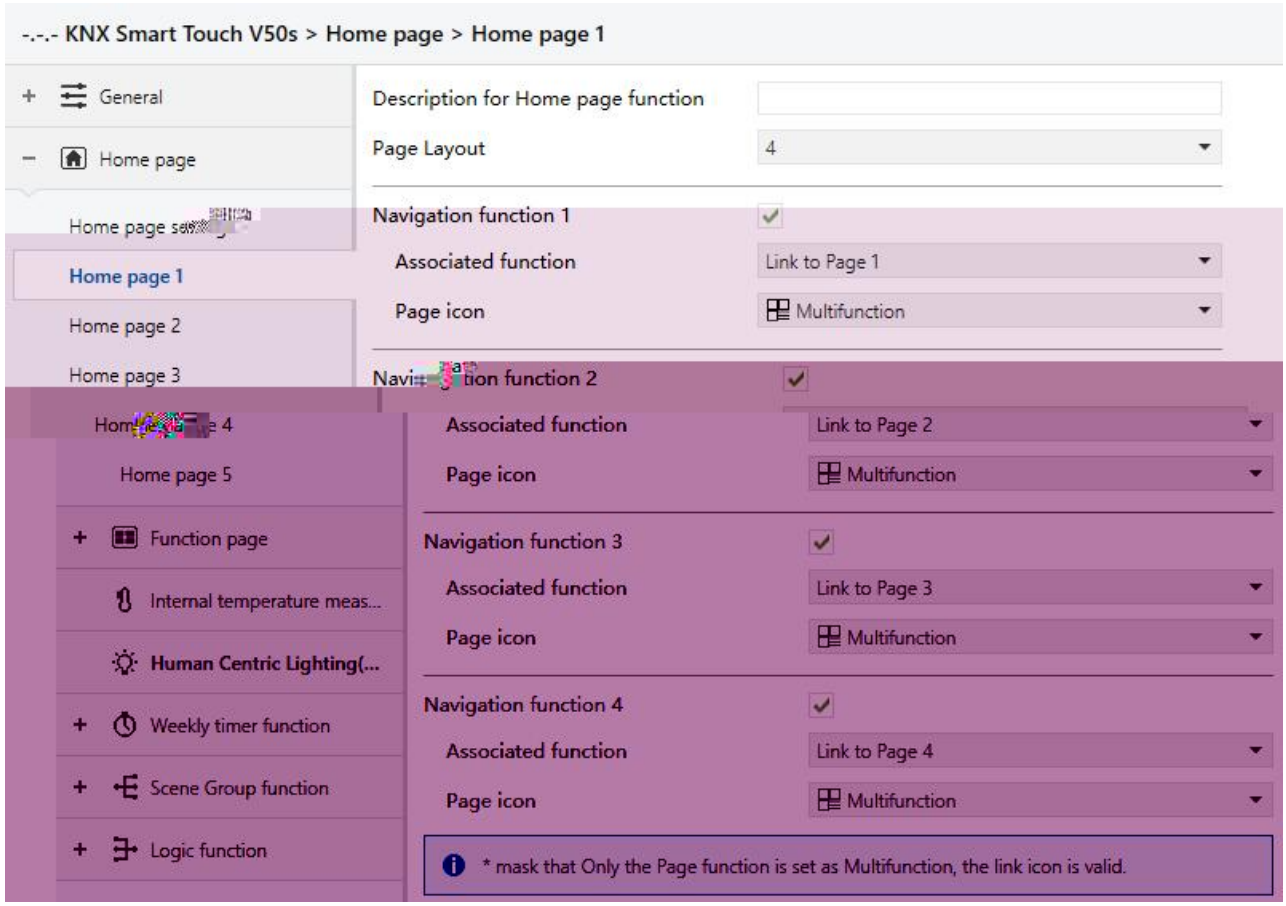
□ LCD □ □ □ Õ 5~15s k

5.2.2. Õ "Home page x"

Õ "Home page x" 5.2.2 Õ □ □ □ Õ 5

□ □ Õ 8 □ □ □ □ k □

□ □ □ □ k □ □ Õ k



5.2.2 "Home page x" Õ

"Description for Home page function"

Õ □ □ 15 5 k

"Page Layout"

Õ □ □ □ □ □ k □**3/4/6/8**

□ Õ 8 □ □ k □ □ □ □

k

□ **V40s** □ **Õ 6** □ k

"Navigation function x x=1...9"

Õ □ □ x k □ Ñ k

" Associated function "

Õ □ x □ □ □ □ □ k □

Link to Page 1

...

Link to Page 15

Link to icon in Page 1 *

...

Link to icon in Page 15 *

15 □ □ □ 15 □ □ □ k

□ **V40s** □ **x** □ □ □ □ □ **Õ 9** k

□ □ □ □ □ □ □ □ □ k □ □ □ □ □

□ k

" Page icon "

□ □ □ Ñ Õ □ □ k □

Multifunction

Lighting

Scenario

...

Reception

“ Icon number ”

“Associated function”

1/2/3/4/5/6/7/8

V40s **6**

“Associated function” Õ “Link to icon in Page 2 *” Õ 5

t

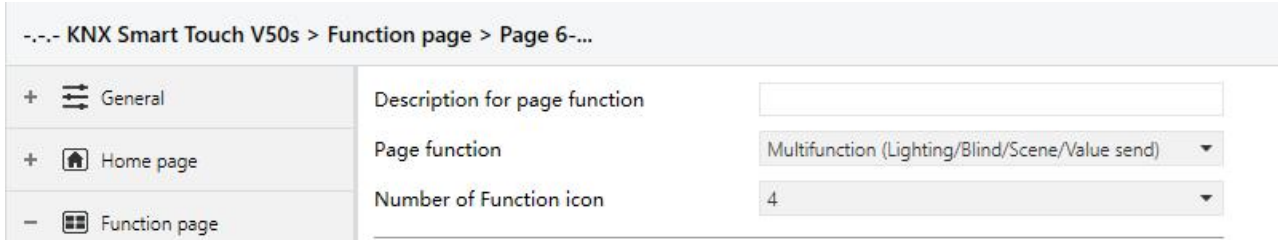
2 5

* Õ **“ Associated function ”**

Õ **“ Link to icon in Page 6 ***

5.3. Õ “Function Page”

5.3(1) “Function page” Õ



5.3(2) “Function page” Õ

“Function page x (x=1..15)”

Õ □ □□ x k

□ “Page x-...” Ñ 5.3.1(1) Õ □ x □ k

Õ 15 □□ k

“Description for page function”

Õ □□ □ □ 15 5 k

“Page function”

Õ □ □ k □

Multifunction (Lighting/Blind/Scene/Value send) □ (/ / / Û)

Room temperature control

Air conditioner

Audio control □

Colour and colour temperature control **RGB** Â

Air Quality display □

Floor heating

Ventilation System □

Energy Metering display □

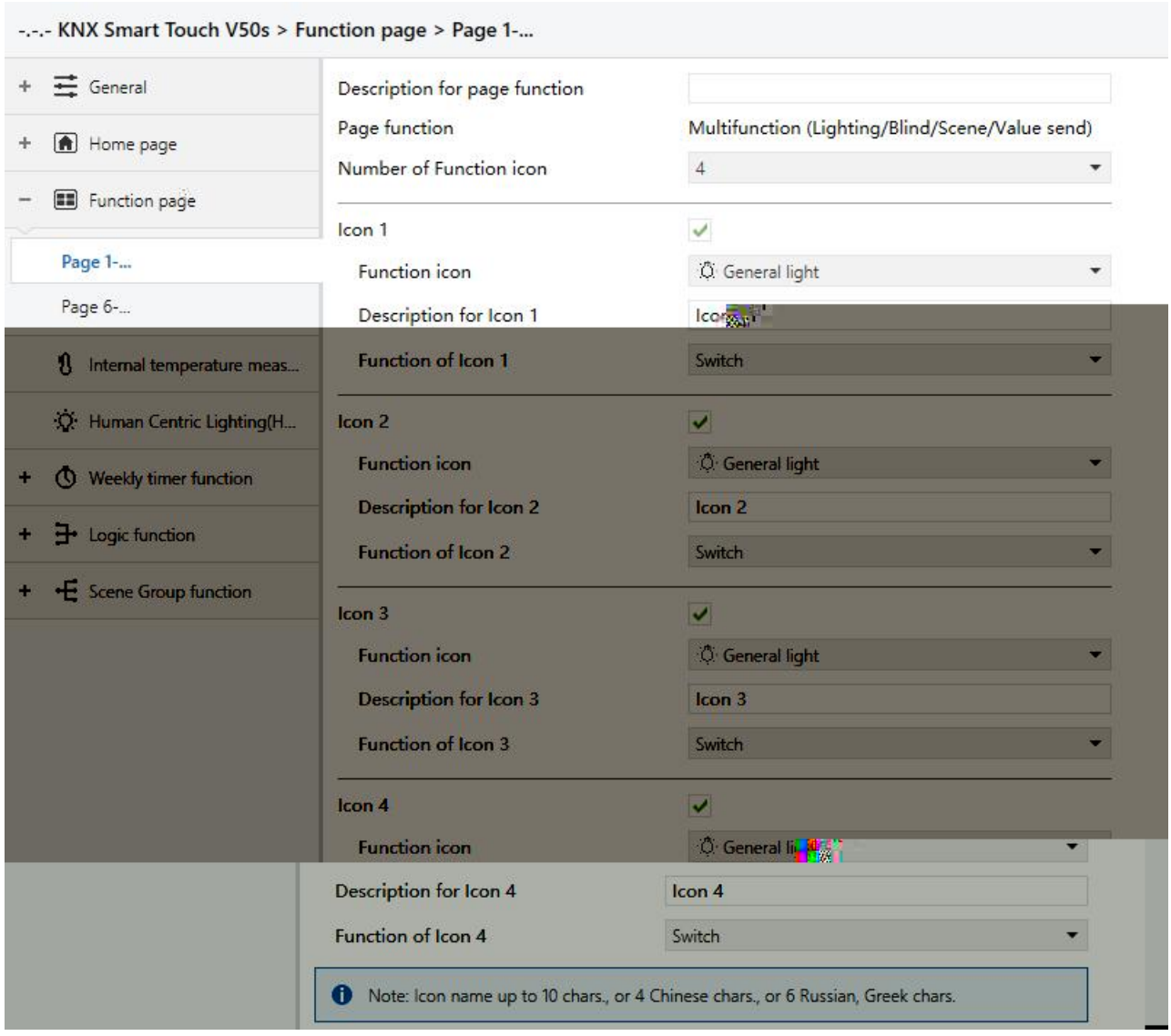
□ **5** □□ □ □□ **10** □□ □ k

□ **V40s** Õ **9** □□ k **5** □□ □ □□ **4** □

□ □ k

□ Õ □□ k

5.3.1. Õ "Multifunction"



5.3.1 "Multifunction (Lighting/Blind/Scene/Value send)" Õ

□ □ □ □ □ Õ ! ! Û Õ □

"Number of Function icon"

Õ k 3 6/8

V40s Õ 6 k

"Icon x"(x=1~8)

Õ x k Ñ k

"Function icon"

Õ k

No icon, only text

General light

MUR

k

"Description for Icon x"

Õ x 12 k

9 4 k

"Function of Icon x"

Õ x k

Press/Release switch

Venetian Blinds position and slat

Curtain step/move

Roller blind step/move

Scene control

Switch indicator

Switch

2000~7000K Õ □ k □ **□ 2000~7000K** k

Value sender □ Û □ □ Û k

Curtain position □ □ □

□ □ ! □ ! Û □ k

Roller blind position □ □ □

□ □ □ ! ! Û □ k

Venetian blind position and slat □ □

□ □ □ ! ! Û □ k

Curtain step/move: □ □ □ ! □ ! Û □ k

Roller blind step/move: □ □ □ ! ! Û □ k

Scene control □ □ □ □ □ k

Switch indicator □ k “Switch, status” Ñ k “Switch, status” □

k

“Press/Release switch” □

• • **“ Work mode ”**

Õ / k □

Press - ON / Release - OFF - / -

Press - OFF / Release - ON - / -

“Brightness+Colour Temperature” Ñ □

• • **“ Reaction on "off "operation ”**

Õ Û 0 □ Û 0 k □

Only switch object send value 0

Brightness objects send value 0

• • **“ Colour temperature Control type ”**

Õ Â k □

Normal □

Directly(with warm/cool white algorithm) □ / □ □

Normal□ 1byte 2byte Â □

Directly(with warm/cool white algorithm)□ Õ “ +Â ” /

□ □ 2 1byte □ k

“Status feedback object”

“Directly(with warm/cool white algorithm)” Ñ kÕ □ k

□

Brightness+Colour Temperature

Warm/cool white brightness

Brightness+Colour Temperature□ +Â □ □ □

4byte float value

- **“ Object datatype ”**

“1byte value” Ñ ᵏ Õ 1byte ᵏ □

1byte[0..255]

1byte[0..100%]

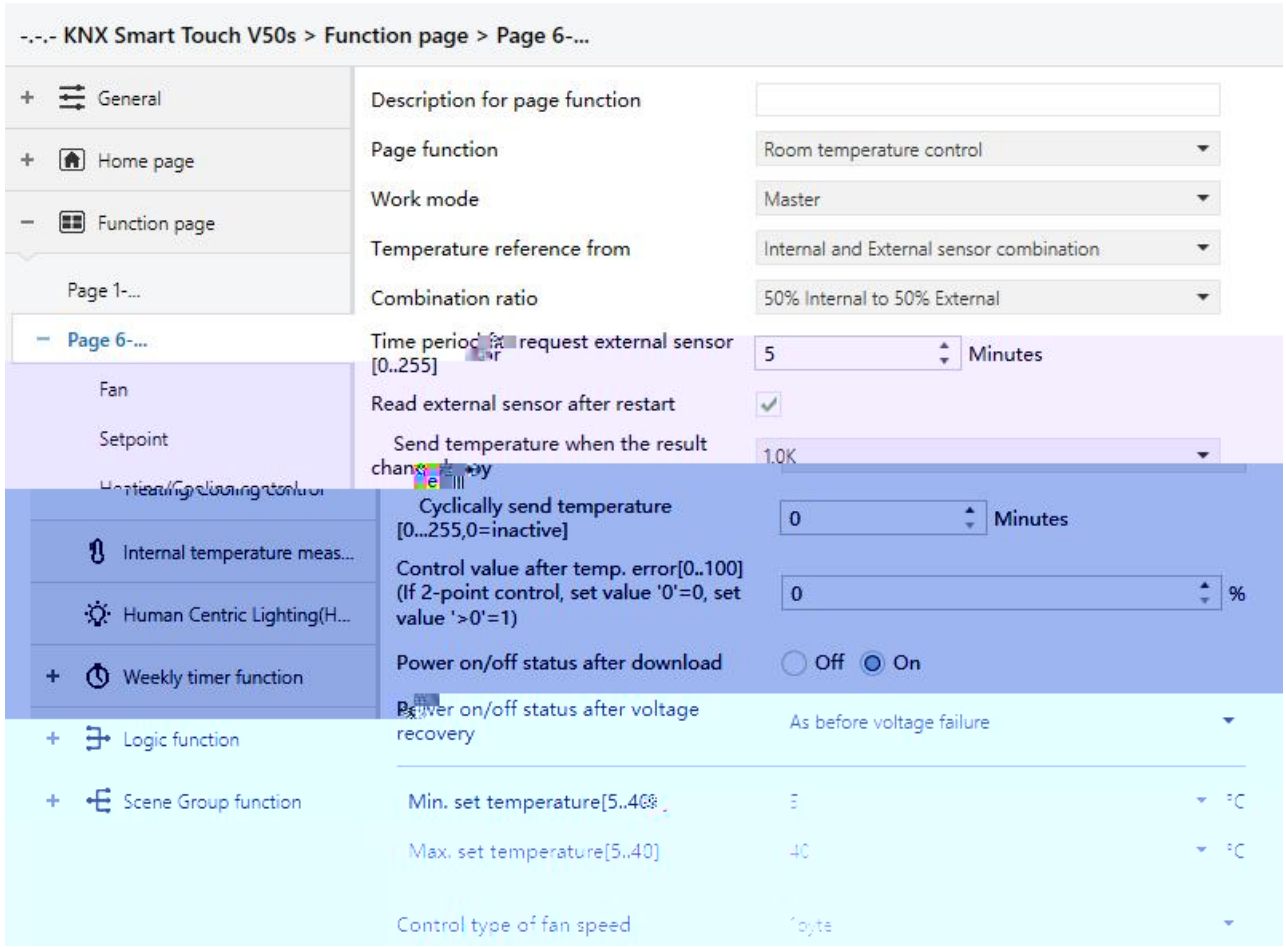
- **“ Output value when press ”**

Õ Û

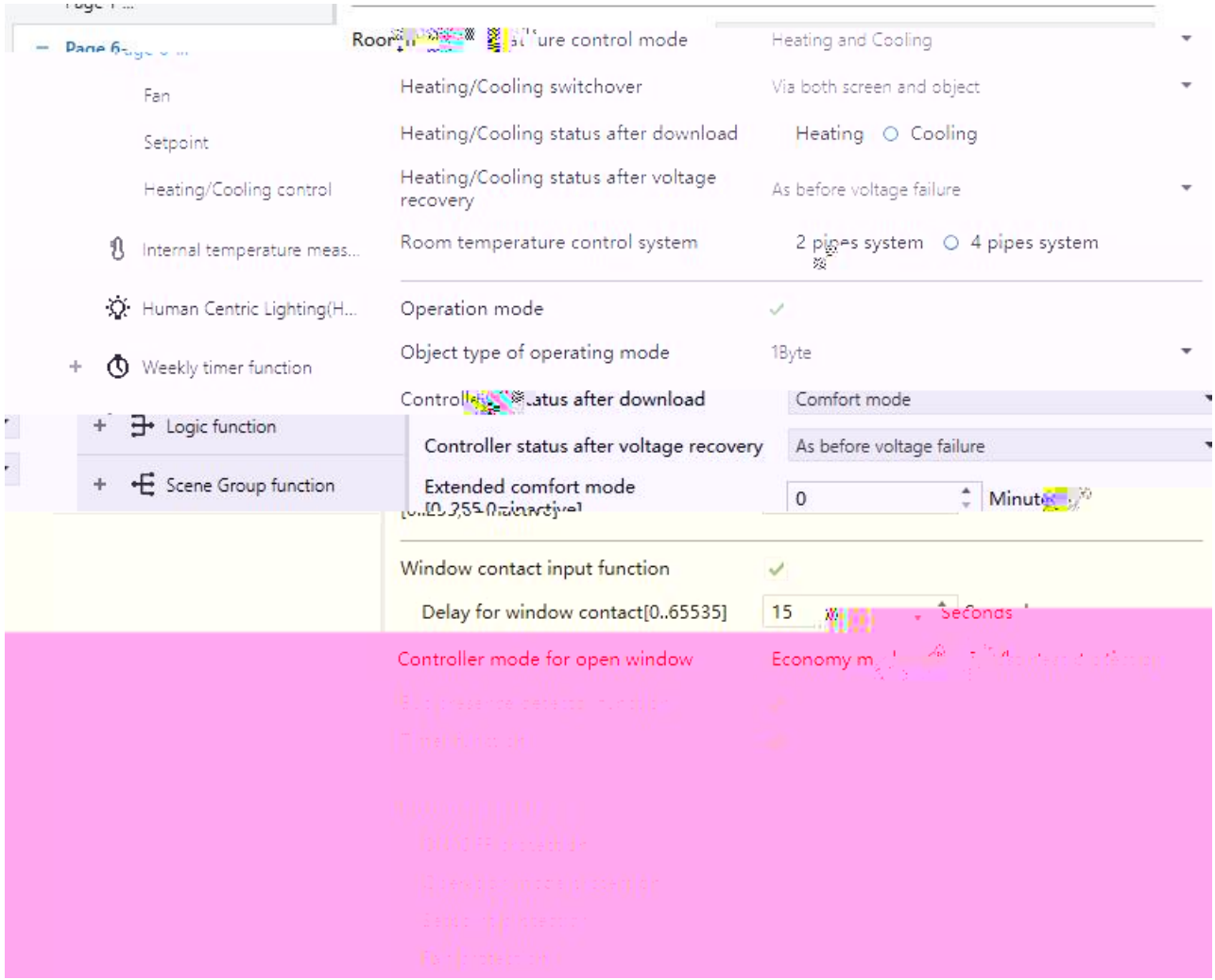
5.3.2. Õ “Room temperature control”

Õ “Room temperature control” 5.3.2 □ Õ

k



5.3.2 (1) “Room temperature control” Õ



5.3.2 (2) “Room temperature control” Õ

“Work mode”

Õ □ k □

Single

Master

Slave

Single □ Õ □ Õ □ □ □ □

Master □ Õ □ Õ □ □ Õ Õ k Õ □

Û Õ Û Õ □ □

Slave □ Õ □ Õ □ □ □ Õ □

Û Õ □ Õ k

"Temperature reference from"

Õ k □

Internal sensor

External sensor

Internal and External sensor combination

"Internal temperature measurement" Õ k

"...External sensor" Ñ □

"Time period for request external sensor [0..255]min"

Õ Õ Û Õ □ k □ **0...255**

"Read external sensor after restart"

Õ Õ □ Û Õ □ k

□ Õ □ Õ □ Û k

□ Õ □ Û Õ □ k

"Internal sensor combine with External sensor" Ñ k

"Combination ratio"

Õ □ □ k □

10% Internal to 90% External

20% Internal to 80% External

...

80% Internal to 20% External

90% Internal to 10% External

"40% Internal to 60% External" 40% 60%

= □ Ô 40% □ + □ Ô 60% □ Õ □

Ô □ □ □ k

ß k

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

"Slave" k Õ Õ ß k □**0..100**

0 0□ 0

1 k

"Power on/off status after download "

"Slave" k Õ Ú k □

Off

On

"Power on/off status after voltage recovery"

"Slave" k Õ Õ k □

On

Off

As before voltage failure

On □ Õ □ □ Û □

□

Off □ Õ □ □ Û □ □

As before voltage failure □ Õ

□ □ Û □ k

"Min./Max. set temperature [5..40]-C"

Õ k Õ □ Õ

□ k □ □ □ **5~40-C** k □ □

5°C

6°C

...

40°C

Õ □ □ **ETS** □ Õ k

"Control type of fan speed"

Õ k

Disable

1bit

1byte

Disable

1bit 1bit

1byte 1byte 5.3.2.1 Õ Ñ k

"Slave" "Single" 1bit k

"1 bit object for fan speed off "

Õ 1bit Ñ Õ 1bit k

"Fan speed auto"

Õ 1bit Ñ Õ k

k

"Room temperature control mode"

Õ k

Heating

Cooling

Heating and Cooling

Heating and Cooling k Ñ k

"Heating/Cooling switchover"

Õ / k

Only via screen

Only via object

Via both screen and object

Automatic changeover

"Slave" Õ **Only via object** k

- **“Heating/Cooling status after download”**

  “Slave” k Õ Ú Õ / k □

  Heating
  Cooling

- **“Heating/Cooling status after voltage recovery”**

  “Slave” k Õ Õ / k □

  Heating

  Cooling

  As before voltage failure

  As before voltage failure □ Õ □ k □ Õ

  □ □ □ Õ □ □ k

- **“Room temperature control system”**

  “Slave” k Õ □ □ □ □ □ k

  □

  2 pipes system
  4 pipes system

  2 pipes system: □ □ □ □ æ □ k

  4 pipes system: □ □ □ □ □ æ □

□ k

“Operation mode”

Õ □ k

□ Õ Ñ k

- **“Object type of operating mode”**

  Õ k □

  4x1 Bit
  1 Byte
  4x1 Bit & 1 Byte

"Slave" □"Single" **1byte**

4x1 Bit 4 1bit Ñ □Comfort mode□ □ ! Economy mode□

□ □ ! Standby mode □ □ Frost/Heat protection mode □ □ k

Û "1" "0" k Õ ON OFF k

0 k

1byte "Operation mode" "Operation mode, status" Ñ Û □1

! 2 ! 3 □ ! 4 k Õ

k

4x1 Bit & 1 Byte 1bit 1byte Ñ k

• • **"Controller status after download"**

"Slave" k Õ Ú k □

Standby mode

Comfort mode

Economy mode □

• • **"Controller status after voltage recovery"**

"Slave" k Õ Õ k □

Standby mode

Comfort mode

Economy mode □

As before voltage failure

• • **"Extended comfort mode[0..255,0=inactive]min"**

"Slave" k Õ □ k >0 □ 1bit

"Extended comfort mode" Ñ k □**0..255**

1 1 □ Ô

Ô k k

Ô / k

Õ Õ □ □ k □**0..65535**

“Controller mode for open window”

open □ k □

! Õ / □ □ □ k □

k □ □

Economy mode □

Frost/heat protection

“Bus presence detector function”

“Slave” k □ Ñ k Õ □ k

□ k /

□ Õ k □

k □ □ k □

“Timer function”

Õ □ □ k

□ □ □ □ □ □

k

□ □ 6 Õ □ □ Ú □ □ □

□ □ k

□ □ □ Ú □

□ k

Protection setting Õ

“ON/OFF protection”

“Setpoint protection”

“Operation mode protection”

“Fan protection”

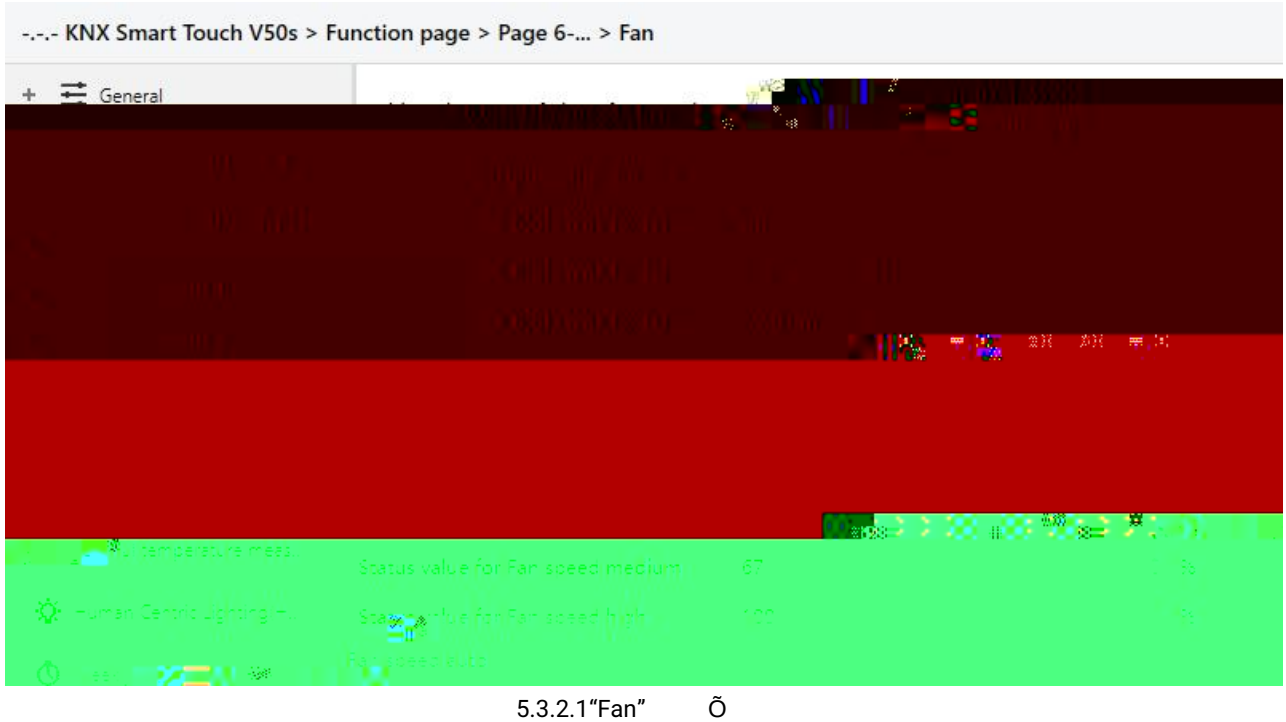
□ Õ □ □ □ k

□ ! Õ ! k □ □ □ □

Ñ k

□ □ □ k

5.3.2.1. Õ “Fan”



5.3.2.1“Fan” Õ

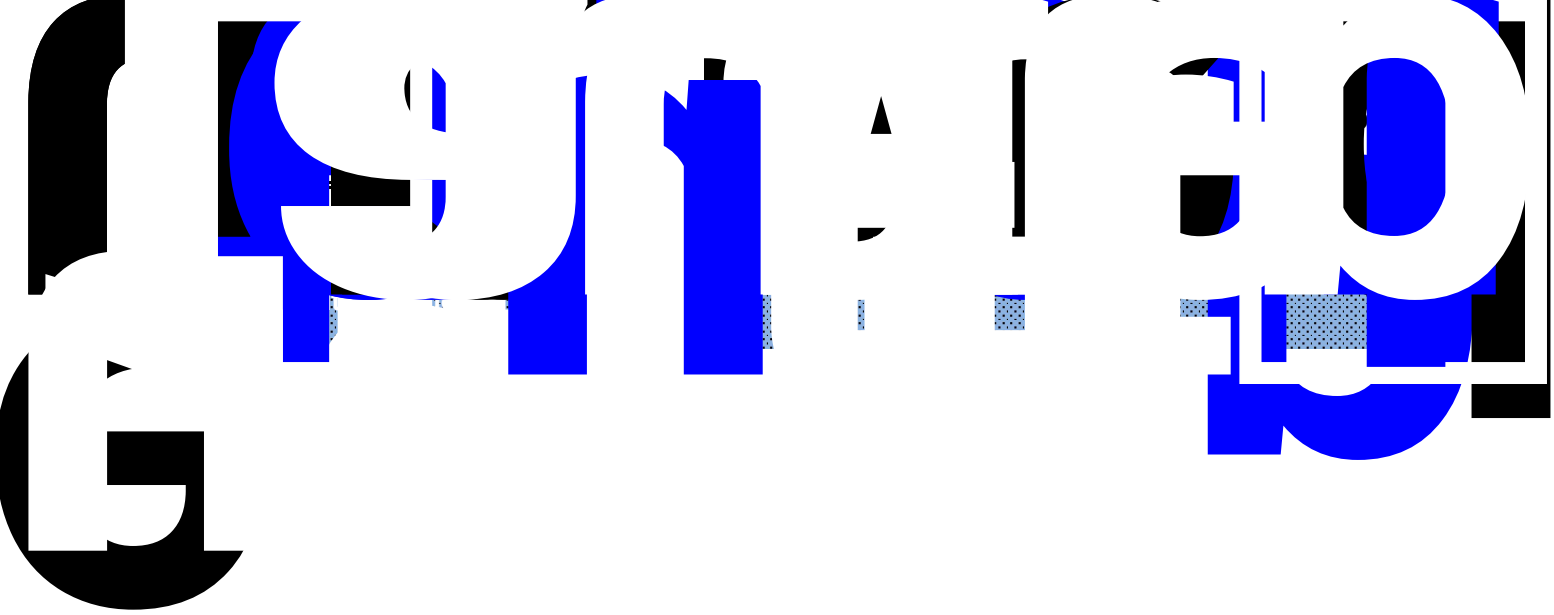
“1byte” Ñ 5.3.2.1 k

“Object datatype of 1byte fan speed”

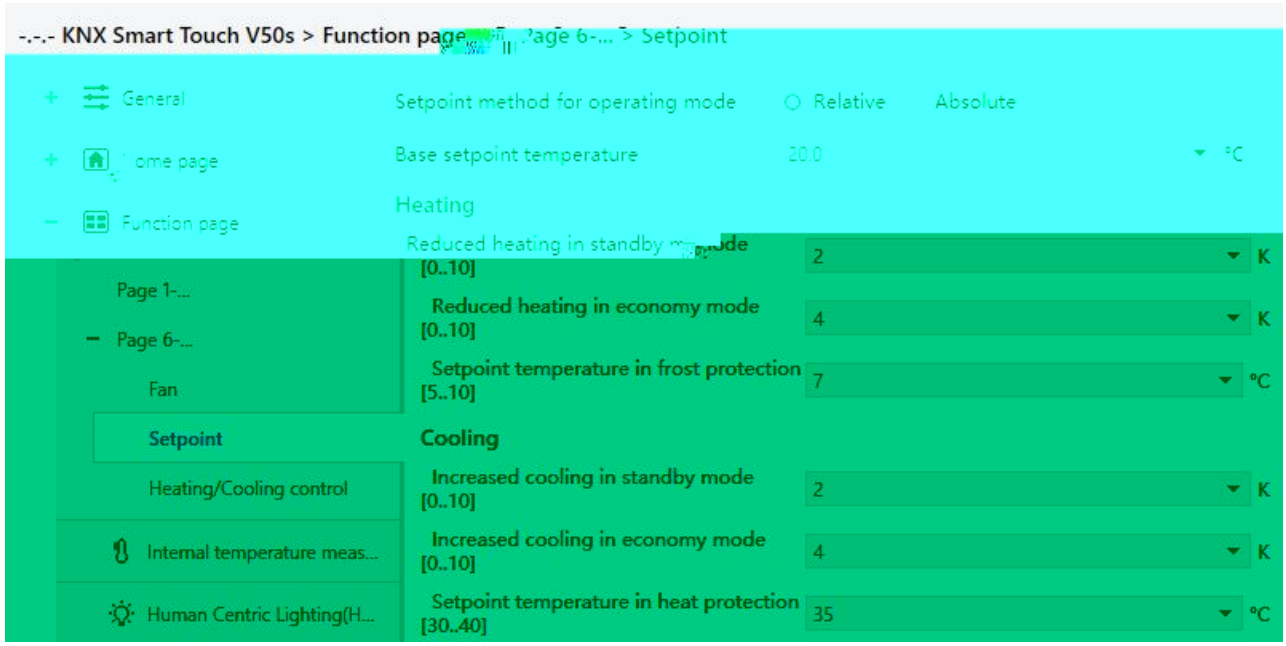
Õ 1byte k □

Fan stage (DPT 5.100)

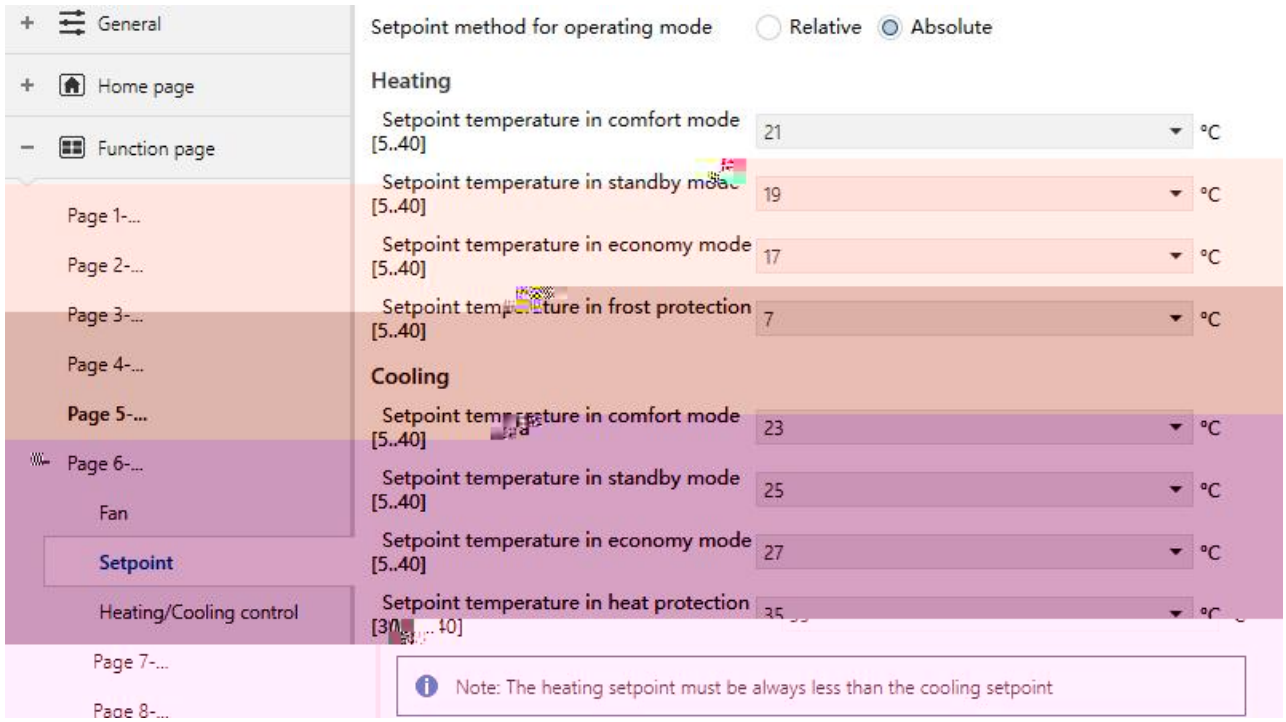
Percentage (DPT 5.001)



5.3.2.2. Õ “Setpoint”



5.3.2.2(1) Setpoint_Relative” Õ



5.3.2.2(2) “Setpoint_Absolute” Õ

“Slave” k □ Ñ k

" Setpoint method for operating mode "

Õ Õ k □

Relative

Absolute

Relative □ □ Õ □ Õ k

Absolute □ □ Õ k

Õ ß Õ Ñ k

" Base setpoint temperature(-C) "

Õ Õ Õ k □

10.0°C

10.5°C

...

35.0°C

Õ Õ □ "Current setpoint adjustment" □ □ Õ

k

Õ Õ □ □

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

Õ Õ □ □

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

Automatic H/C mode changeover dead zone (only for comfort mode)

"Upper/Lower dead zone"

"Heating and Cooling" "Automatic changeover" □ Ñ k Õ

□ k □

0.5K

1.0K

...

10.0K

Õ + □

Õ - k

" Reduced heating in standby mode [0..10]K "

" Increased cooling in standby mode [0..10]K "

Õ Õ k □

0K
1K
...
10K

Heating □ Õ Õ Õ □

Cooling □ Õ Õ Õ k

" Reduced heating during economy mode [0..10]K "

" Increased cooling during economy mode [0..10]K "

Õ □ Õ k □

0K
1K
...
10K

Heating □ □ Õ Õ Õ □

Cooling □ □ Õ Õ Õ k

"Setpoint temperature in frost protection mode [5...10]-C"(for Heating)

Õ □ □ Õ k □

5°C
6°C
...
10°C

□ □ □ Õ Õ □

□ k

"Setpoint temperature in heat protection mode [30...40]-C" (for Cooling)

Õ □ Õ k □

30°C

31°C

...

40°C

□ □ Õ Õ

□ □ □ k

Õ ß □ Õ Ñ k

"Setpoint temperature in comfort mode [5...40]-C"

"Setpoint temperature in standby mode [5...40]-C"

"Setpoint temperature in economy mode [5...40]-C"

□ Õ □ □ ! □ Õ k □

5°C

6°C

...

40°C

"Setpoint temperature in frost protection mode [5...40]-C"

Õ □ □ Õ k □

5°C

6°C

...

40°C

"Setpoint temperature in heat protection mode [30...40]-C"

Õ □ Õ k □

30°C

31°C

...

40°C

Note: The heating setpoint must be always less than the cooling setpoint.

□ **“ Heating and Cooling ”** □ □

Õ □ Õ □ ETS

□ Õ k

1. □ Õ □

Õ k

2. □ □ Õ k

Õ □ Õ k

3. Õ □ □ □

□ Õ □ □ □ Õ kETS Õ Õ

□ □

/ / □ Õ Õ □ □

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

/ / □ Õ Õ □ □

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

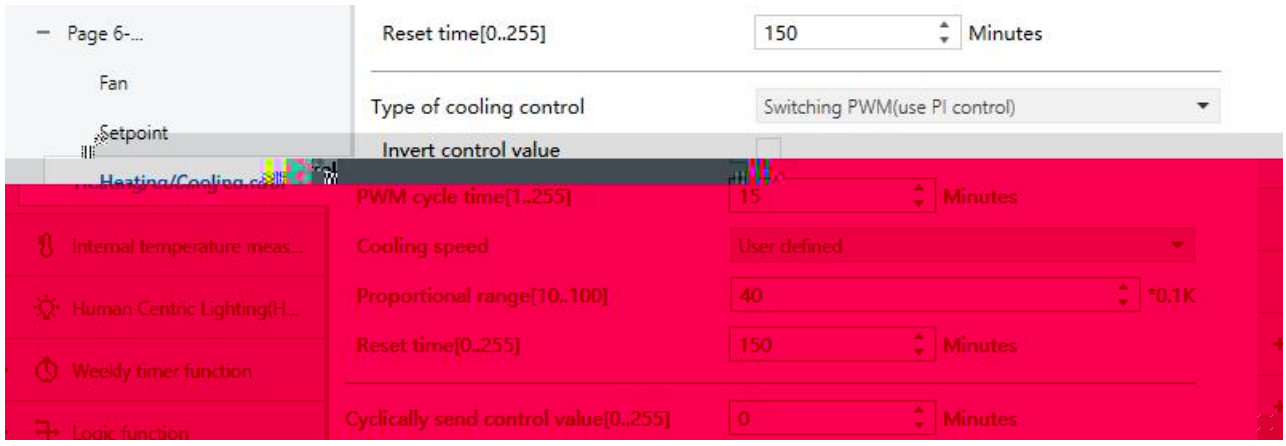
□ /□ Õ ETS □

□ Õ Õ k

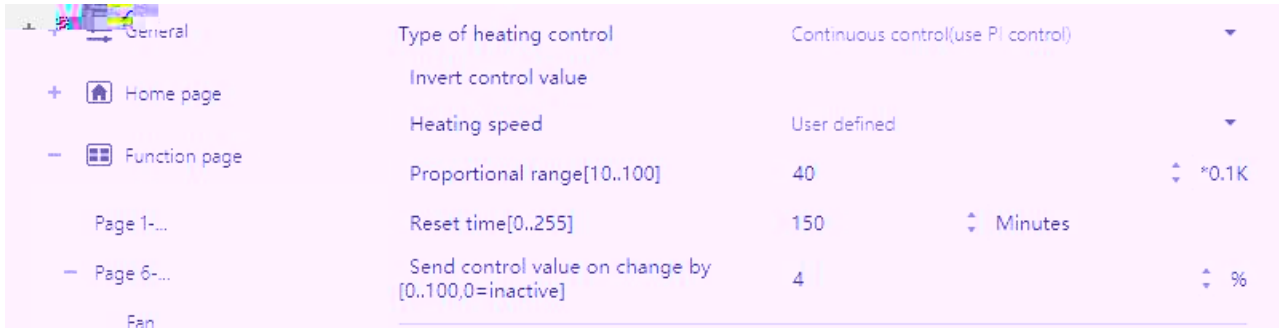
5.3.2.3. Õ “Heating/Cooling control”

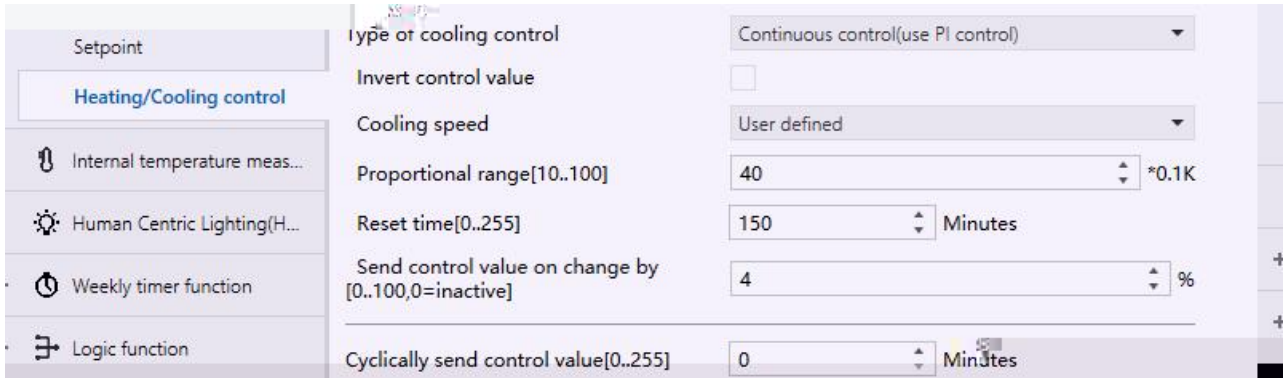
“Switching on/off(use 2-point control)” Õ

“Switching PWM(use PI control)” Õ (1)



“Switching PWM(use PI control)” Õ (2)





"Continuous control(use PI control)" Õ

5.3.2.3(1) "Heating/Cooling control" Õ

"Slave" k □ □2 □ 4 □ □ k

" Type of heating/cooling control "

Õ / □ □

Switching on/off (use 2-point control)

Switching PWM (use PI control) **PWM**

Continuous control (use PI control) □

" Invert control value "

Õ Û □ Û □ æ □ k

□ □ □ □ Û k

(2 point control) □

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

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

□ Õ RTC □ k **□0..200**

□T□>Õ +□ **□**

□T□<Õ - k

1K □ 2K Õ 22℃ T 24℃ □

T 21℃ □T 21~24℃ □ Û □ k

□T□<Õ - □

□T□>Õ +□ k

1K □ 2K Õ 26℃ T 25℃ □

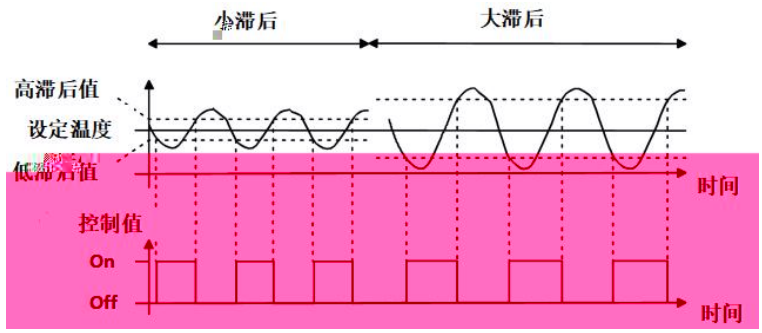
T □ 28℃ □T 28~25℃ □ Û □ k

□ D ß □□□ Õ

Õ □□□ □

1. □ □ □ Û □ □ □ □

2. □ □ □ k



5.3.2.3(2) (□□□ □□□ □□□

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)

"User defined" Ñ Õ PI PI

10..100 (P value)

0..255 (I value)

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

"Switching PWM (use PI control)" Ñ Õ Û Û Õ Õ 10min, 80% 8min Û 2min Û Û / Õ

1...255

"Switching PWM (use PI control)" "Continuous control (use PI control)" PI "Continuous control" PI (1byte) "Switching PWM" PI "on/off"

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

"Continuous control (use PI control)" Ñ Õ Û **0..100 0** Û

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

Õ Û k **□0..255**

PI □ PI □ :

□1□ □

	P	**I □**	**□ PI**	**□ PWM**
Hot water Heating	5K	150min	Continuous/PWM	15min
Underfloor heating	5K	240min	PWM	15-20min
Electrical heating	4K	100min	PWM	10-15min
Split unit	4K	90min	PWM	10-15min
Fan coil unit	4K	90min	Continuous	--

□2□

	P	**I □**	**□ PI**	**□ PWM**
Cooling ceiling	5K	240min	PWM	15-20mIn
Split unit	4K	90min	PWM	10-15min
Fan coil unit	4K	90min	Continuous	--

□3□

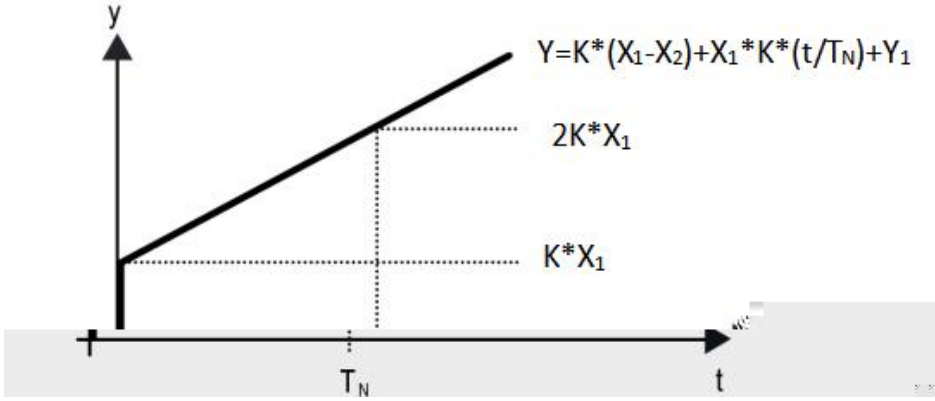
"Heating/Cooling speed" Õ "User defined" □ Õ P□ □ □

I□ □ k PI □□ □□

□ k

□Õ □ □

□ k 0 k



5.3.2.3(3) PI

Y□

Y1□

X1□ = Õ ’

X2□ = Õ ’

T_N□

K□ □ □ □ □

PI □ □Y=K*(X1-X2□+X1*K*t/T_N+Y1

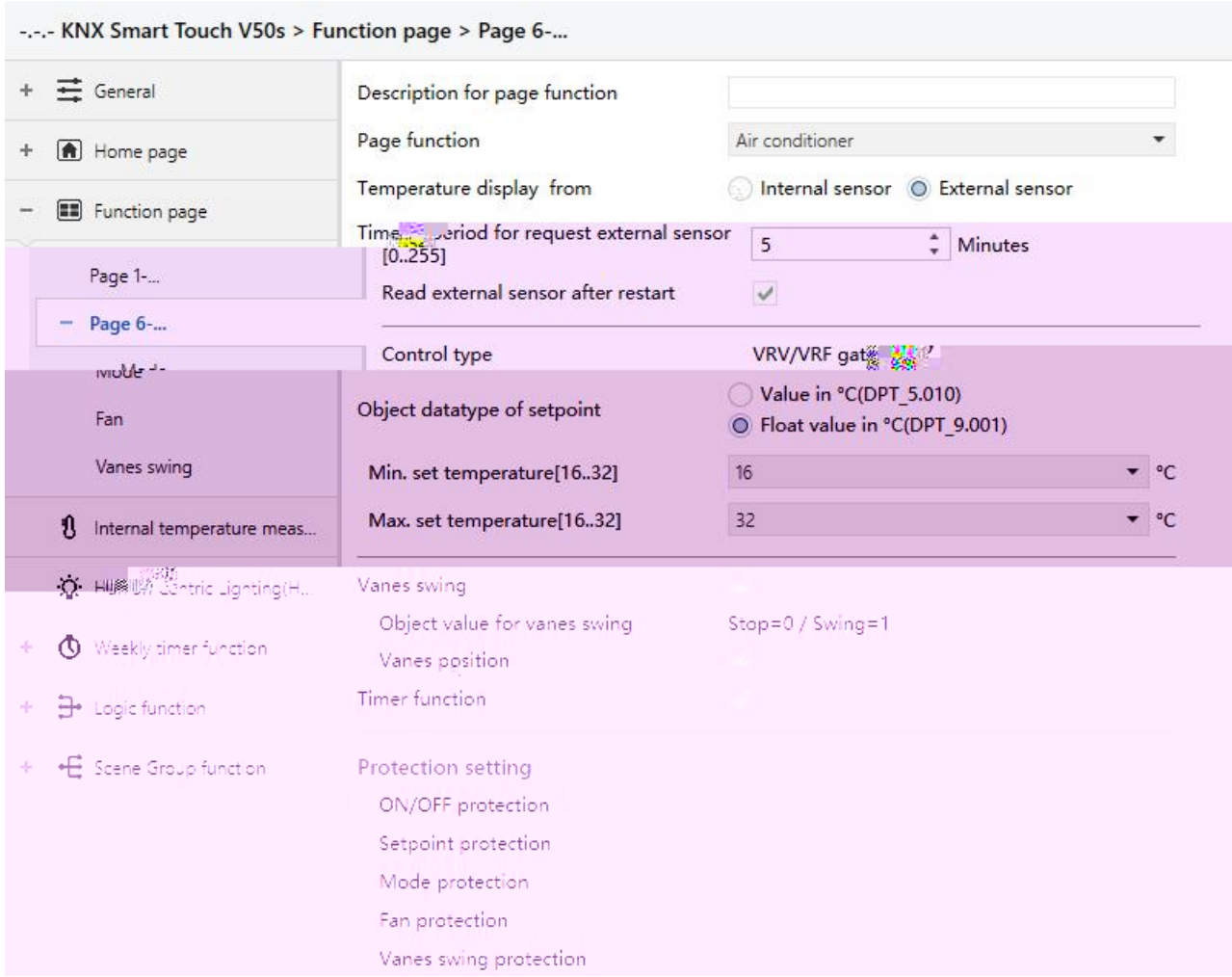
Õ PI □ □Y=K□X1-X2□+Y2

Õ □

Õ	
K:	
K:	
T_N:	□
T_N: □	□

5.3.3. Õ “Air conditioner”

Õ “Air conditioner” 5.3.3 Õ



5.3.3“Air conditioner” Õ

“Temperature display from”

Õ k □

Internal sensor

External sensor

Õ □ □ □ □ □ □ 5.3.2

□ k

“Time period for request external sensor [0..255]min”

“External sensor” Ñ k Õ Õ Û Õ □ k

□ **0...255**

"Read external sensor after restart"

"External sensor" Ñ k Õ Õ □ Û Õ □ k

"Control type"

Õ k Õ **VRV/VRF gateway**

"Object datatype of setpoint"

Õ Õ k □

Value in °C (DPT_5.010)

Float value in °C (DPT_9.001) **KNX**

"Min./Max. set temperature [16..32]-C"

□ Õ k Õ □ Õ

□ k □ □ □ **16~32-C** k □ □

16°C
17°C
...
32°C

Õ □ □ **ETS** □ Õ k

"Vanes swing"

Õ □ □ □ k

- **"Object value for vanes swing"**

  □ Ñ k Õ □ Õ **Stop=0/Swing=1**

- **"Vanes position"**

  □ Ñ k Õ □ □ k

"Timer function"

Õ □ □ □ Õ k

Protection setting Õ

"ON/OFF protection"

"Setpoint protection"

"Mode protection"

"Fan protection"

"Vanes swing protection"

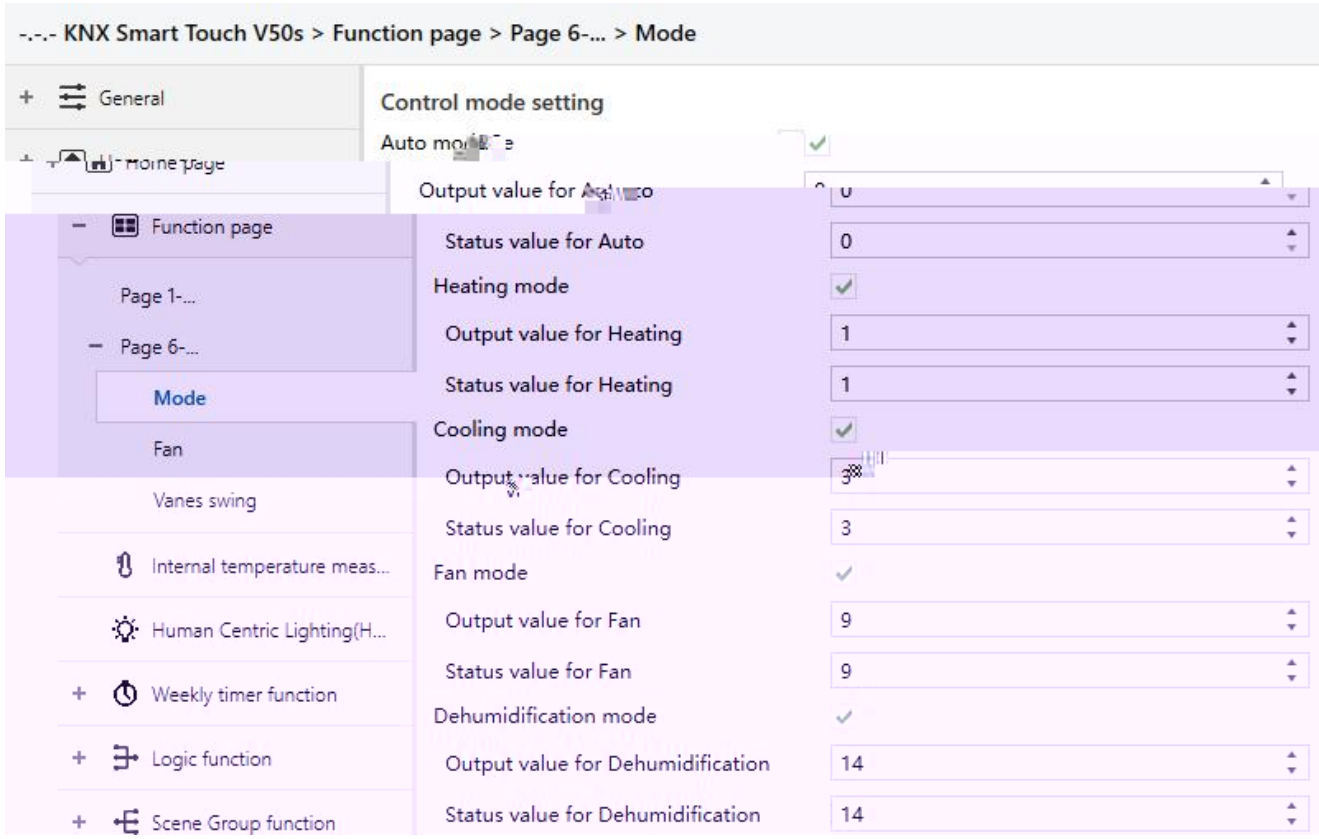
□ Õ □ □ □ k

□ ! Õ ! ! k □ □ □

□ Ñ k

□ □ □ k

5.3.3.1. Õ “Mode”



5.3.3.1 “Mode” Õ

“Auto/Heating/Cooling/Fan/Dehumidificaton mode”

□ □ Õ Ñ k

“Output value for Auto/Heating/Cooling/Fan/Dehumidification”

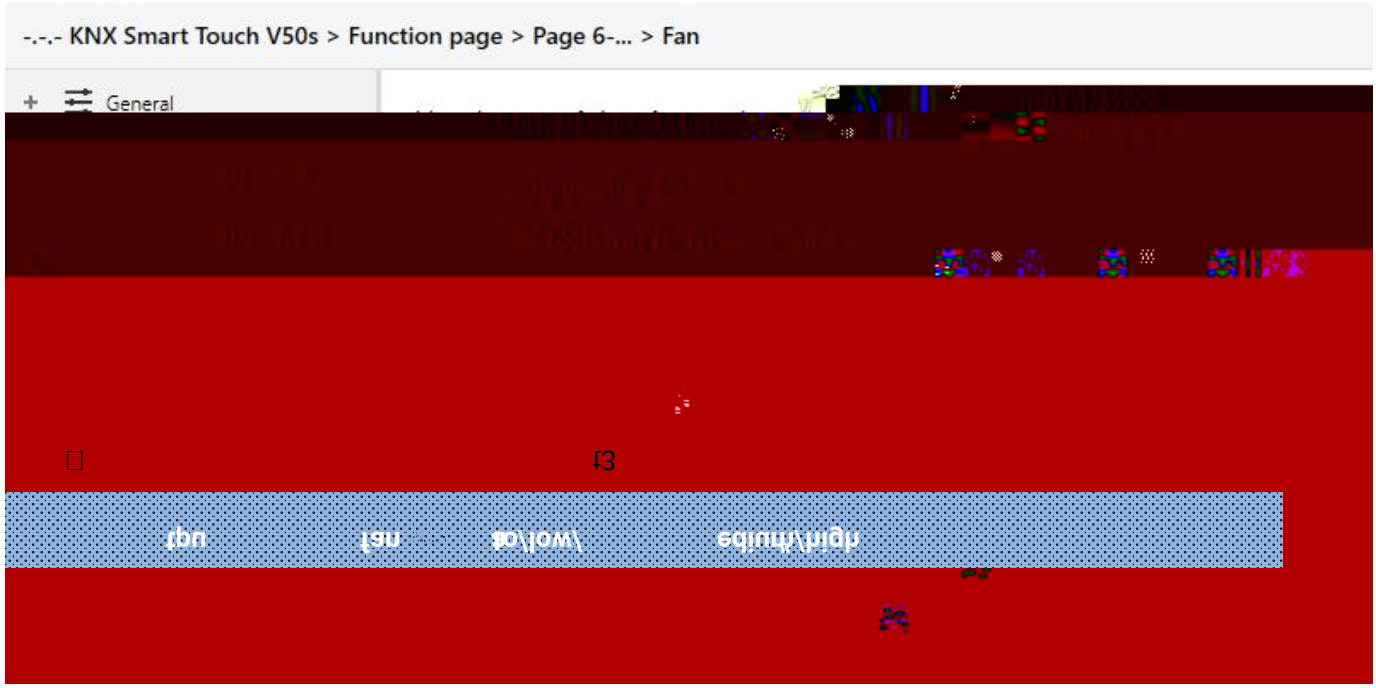
□ □ Ñ Õ □ k □**0..255**

“Status value for Auto/Heating/Cooling/Fan/Dehumidification”

□ □ Ñ Õ □ Õ □

k □**0..255**

5.3.3.2. Õ “Fan”



5.3.3.2 “Fan” Õ

“Object datatype of 1byte fan speed”

Õ 1byte k

Fan stage (DPT 5.100)

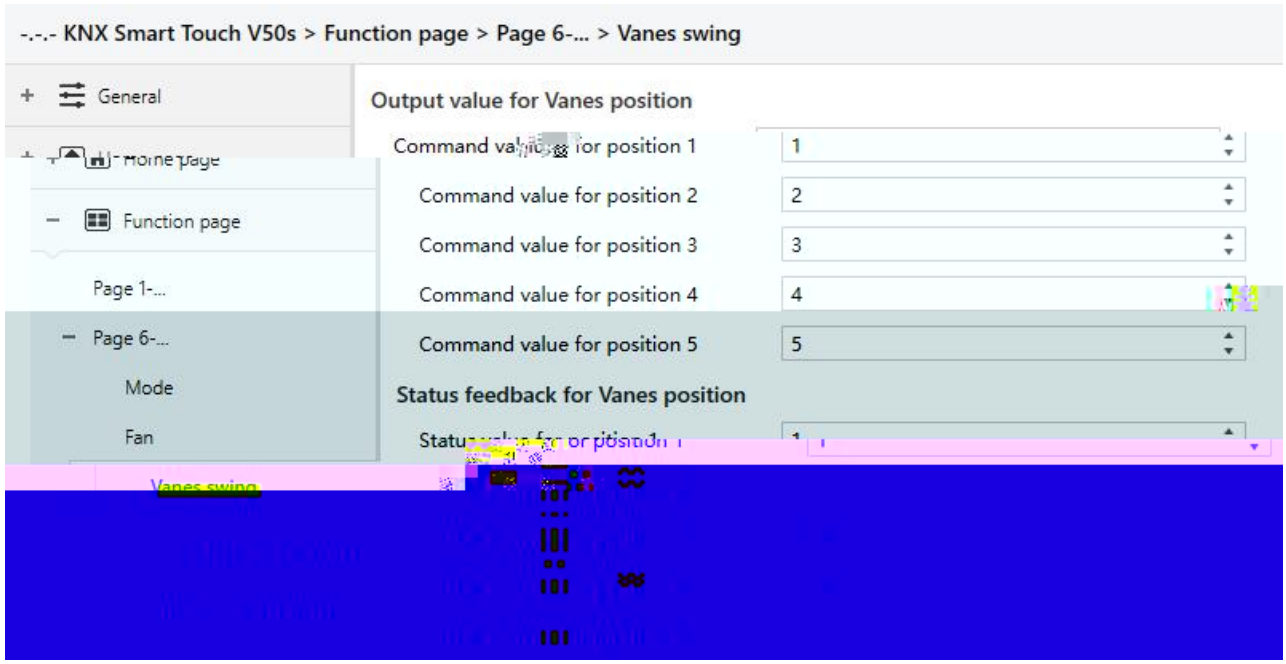
Percentage (DPT 5.001)

Output value for fan speed

“Output value for fan speed auto/low/medium/high”

Õ

5.3.3.3. Õ “Vanes swing”



5.3.3.3 “Vanes swing” Õ

□ Ñ 5 k

Output value for Vanes position

Õ **“Vanes position 1..5, status”** Û k

“Command value for position 1/2/3/4/5”

□ 5 k □ **0..255**

Status feedback for Vanes position

Õ □ k

“Status value for position 1/2/3/4/5”

□ Õ □ Õ □ k

□ **0..255**

KNX/EIB KNX □ V40s&V50s

Power on/off aft /o

"Object datatype"

1byte Ñ k Õ 1byte k

Percentage (DPT 5.001)

Percentage (DPT 5.004)

"Max. volume value [10..100]%"

1byte Ñ k Õ k **10..100**

"Mute"

1bit Ñ k Õ k

"Track name"

Õ k

D ß **UTF-8**

ß **ISO8859** k ! k

"Artist name"

Õ k

"Album name"

Õ k

"Play mode"

Õ Õ k Õ k

Output value for Play mode

"Output value for single cycle/random play/playlist cycle/play in order"

Õ k **0..255**

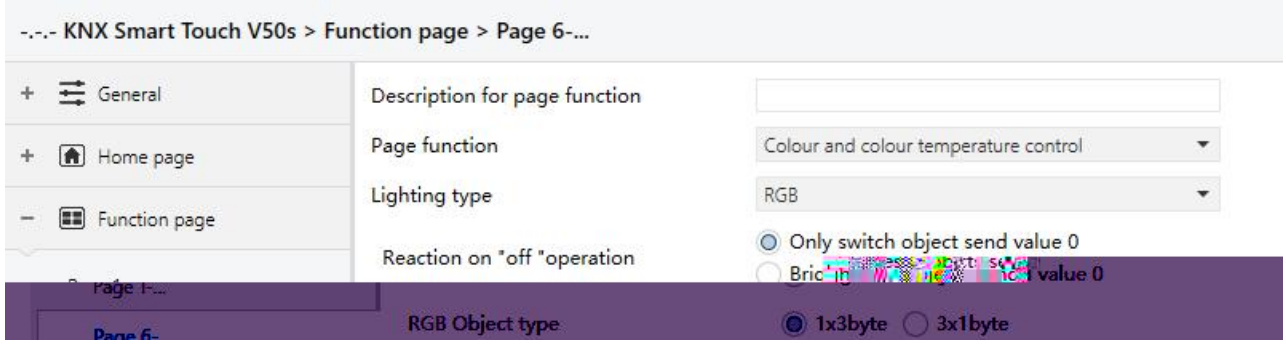
Status feedback for Play mode

"Status value for play in single cycle/random play/playlist cycle/play in order"

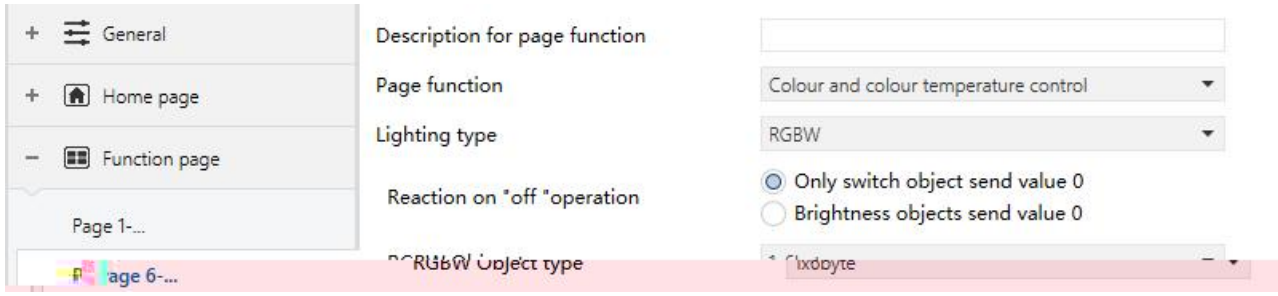
Õ k Õ k **0..255**

5.3.5. Õ “Colour and colour temperature control”

Õ “Colour and colour temperature control” 5.3.5 k

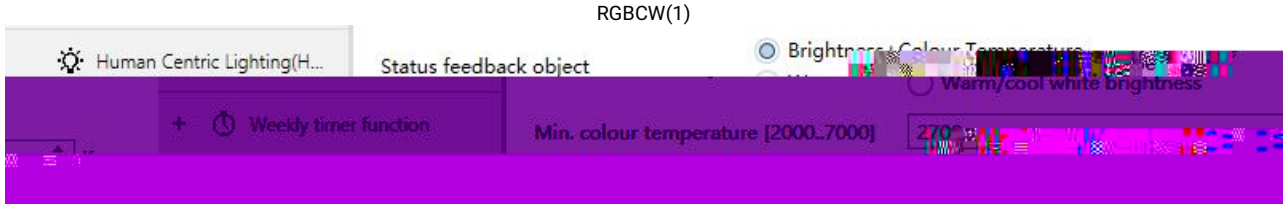


RGB



RGBW

RGBCW(1)



RGBCW(2)

5.3.5 “Colour and colour temperature control” Õ

"Lighting type"

Õ RGB □

RGB

RGBW

RGBCW

RGB □ RGB Â □

RGBW □ RGBW Â □

RGBCW □ RGB Â ! Â k

"Reaction on "off "operation"

Õ □ Û 0 □ Û 0 k □

Only switch object send value 0

Brightness objects send value 0

"Colour temperature control type"

Õ Â k □

Normal □

Directly(with warm/cool white algorithm) □ / □ □

Normal □ 1byte 2byte Â □

Directly(with warm/cool white algorithm) □ Õ " +Â " /

□ □ 2 1byte □ k

"RGB/RGBW Object type"

□ Õ RGB RGBW k □

RGB □

1x3byte □ **3byte** □ □ **RGB**

3x1byte □ **1byte** □ □ **RGB**

RGBW □

1x6byte □ **6byte** □ □ **RGBW**

4x1byte □ **1byte** □ □ **RGBW**

3byte+1byte □ **3byte** **1byte** □ □ **RGBW**

"Status feedback object"

RGBCW Â "Directly(with warm/cool white algorithm)"

Ñ ᵏ Õ □ ᵏ □

Brightness+Colour Temperature

Warm/cool white brightness

Brightness+Colour Temperature □ + Â □ □ □ □ □ □

Warm/cool white brightness □ □ □ □ □ □ □ ᵏ

"Min. colour temperature [2000..7000]K"

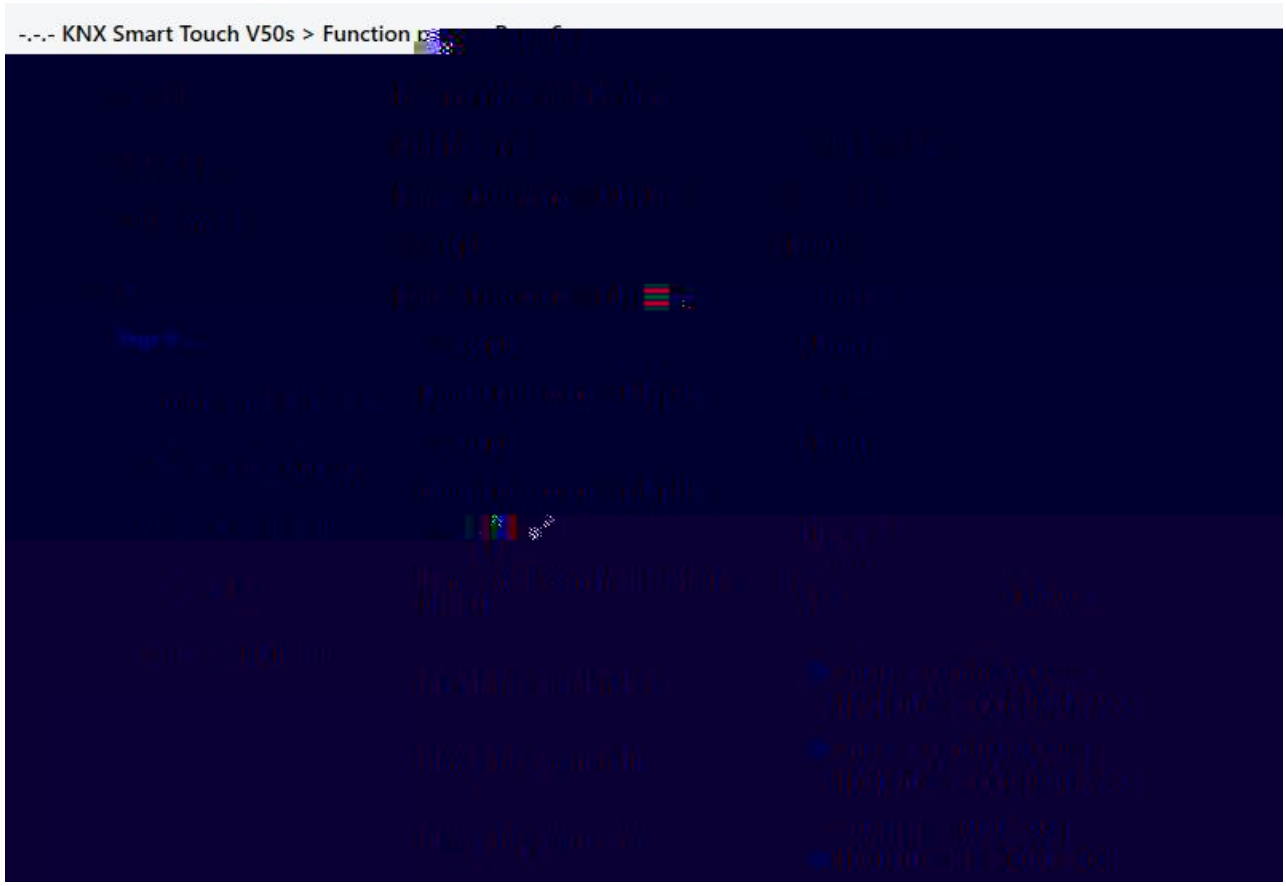
"Max. colour temperature [2000..7000]K"

RGBCW □ Ñ ᵏ Õ Â Õ ᵏ □ **2000..7000**

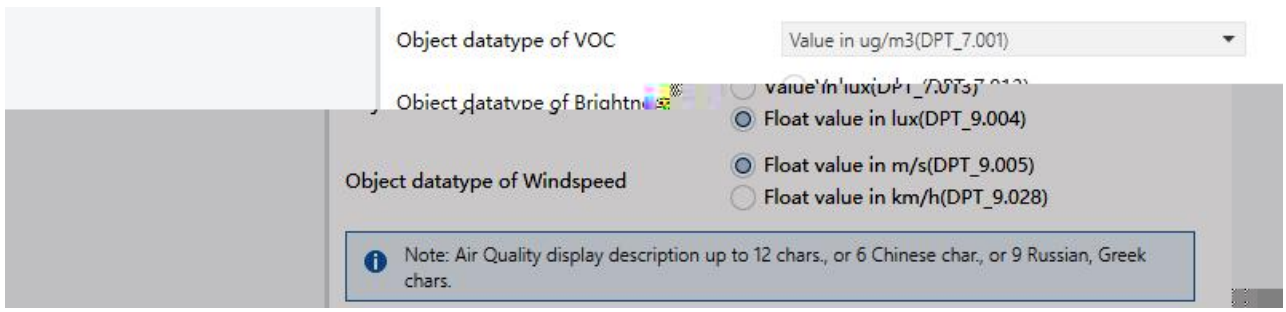
5.3.6. Õ “Air Quality display”

Õ “Air Quality display” 5.3.6 Õ □ □ Õ !

! PM2.5 ! PM10 ! CO_2 ! VOC ! AQI ! ! □ k Õ 4 k



5.3.6(1) “Air Quality display” Õ



5.3.6(2) “Air Quality display” Õ

”Items x function in List display”(x=1~4)

Õ Õ 4 k □

Disable

Temperature

Humidity

PM2.5 **2.5**

PM10 **10**

CO2

VOC

AQI

Brightness

Wind speed

Rain

: -40~99℃

: 0~100%

PM2.5: 0~999ug/m3
PM10: 0~999ug/m3
CO2: 0~4000ppm

VOC: 0~9.99mg/m3 **0~4000ppm**

AQI: 0~500

0~50000lux

0~50m/s **0~183km/h**

“Description”

18 6

*** Time period for request external sensor [5..255]min ***

5...255

" Object datatype of PM2.5 "

Õ PM2.5 k □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

" Object datatype of PM10 "

Õ PM10 k □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

" Object datatype of CO2 "

Õ CO2 k □

Value in ppm(DPT_7.001)

Float value in ppm(DPT_9.008)

" Object datatype of VOC "

Õ VOC k □

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

Float value in ppm(DPT_9.008)

" Object datatype of Brightness "

Õ k □

Value in lux(DPT_7.013)

Float value in lux(DPT_9.004)

" Object datatype of Windspeed "

Õ k □

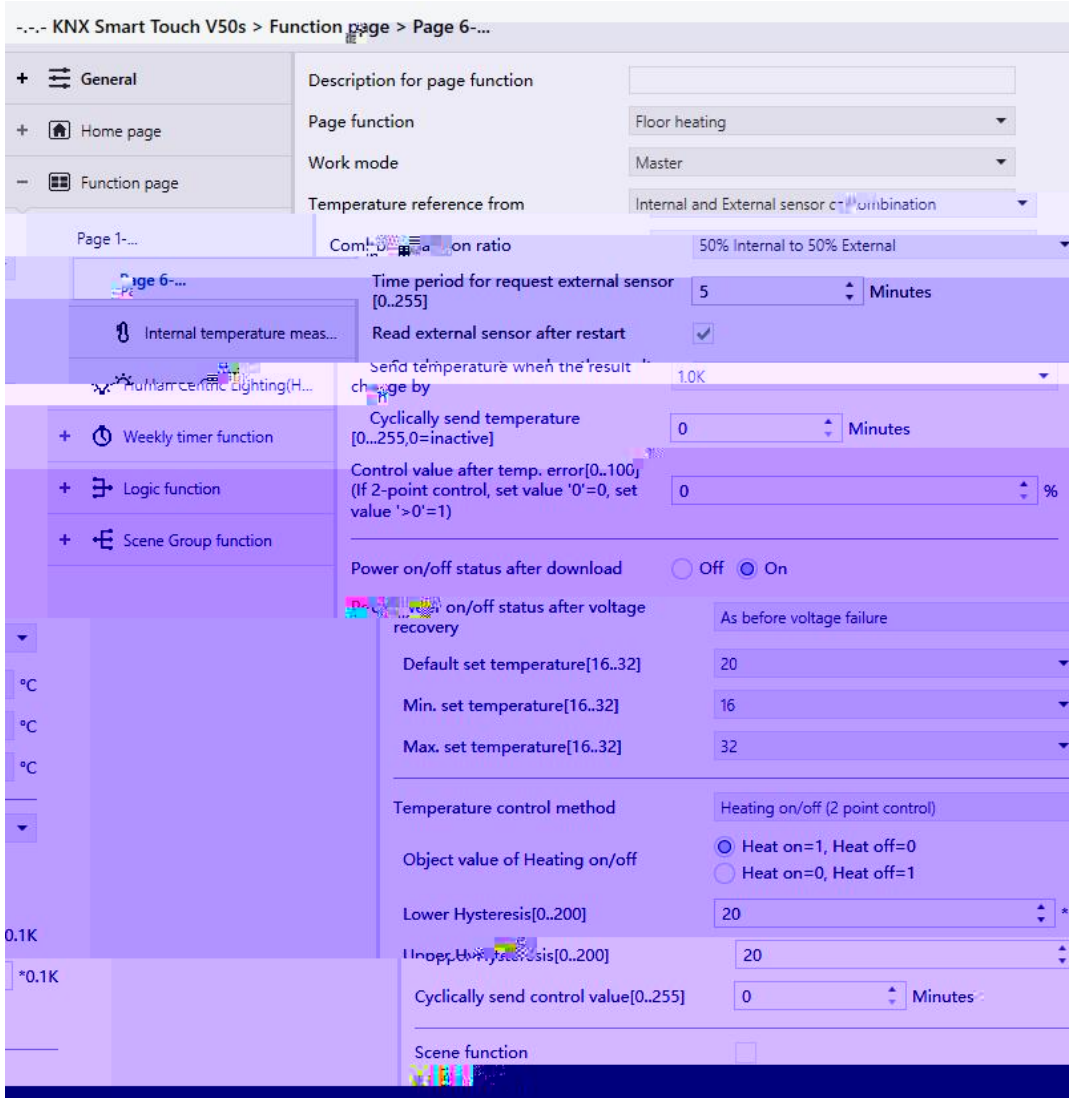
Float value in m/s(DPT_9.005)

Float value in km/h(DPT_9.028)

□ □ **12** **6** **9** k

5.3.7. Õ "Floor heating"

Õ "Floor heating" 5.3.7 □ Õ k



5.3.7 "Floor heating" Õ

"Work mode"

Õ □ k □

Single

Master

Slave

Single □ Õ □ Õ □ □ □ Õ □

Û Õ □

Master □ Õ □ Õ □ □ □ Õ Õ Õ □

Û Õ

Slave Õ Õ Õ Û
Õ Õ k

"Temperature reference from"

Õ k

Internal sensor

External sensor

Internal and External sensor combination

Õ 5.3.2 k

"Power on/off status after download "

"Slave" k Õ Ú k

Off

On

"Power on/off status after voltage recovery"

"Slave" k Õ Õ k

On

Off

As before voltage failure

On Õ Û

Off Õ !

As before voltage failure Õ

Û k

"Default set temperature[16..32]-C"

"Slave" k Õ Õ k

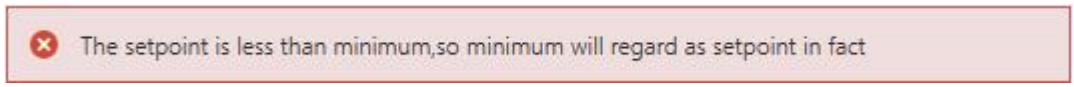
16°C

17°C

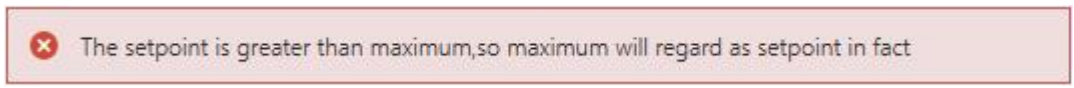
...

32°C

Õ Õ



Õ Õ



"Min./Max. set temperature[16..32]℃"

Õ k Õ k Õ

16~32-C

16°C

17°C

...

32°C

Õ **ETS** Õ k

"Temperature control method"

"Slave" k Õ

Heating on/off (use 2-point control)

Heating PWM (use PI control) **PWM**

Heating continuous control (use PI control)

"Heating on/off (use 2-point control)" Ñ

ß Õ Õ k

"Object value of Heating on/off"

/ k

Heat on=1, Heat off=0

Heat on=0, Heat off=1

• • **“Lower Hysteresis [0..200]*0.1K”**

• • **“Upper Hysteresis [0..200]*0.1K”**

□ Õ Õ □ k □**0..200**

□T□>Õ +□ □

□T□<Õ - k

1K □ 2K Õ 16℃ T 18℃ □

T 15℃ □T 15~18℃ □ Û □ k

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

Ñ□

ß PWM æ□□□ k

ß □ æ□ k

• • **"Invert control value”**

Õ Û □ Û □ æ□ k

□ □□ □ Û k

• • **“PWM cycle time [1..255] min”**

“Heating PWM (use PI control)” Ñ Õ Û

Û ÕÕ 10min, 80%

8min Û 2min Û Û /

Õ k □**1...255**

• • **“Heating speed”**

Õ PI k k □

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)**

“Heating speed” “User defined” Ñ Õ PI PI k

PI □□ □ 5.3.2 k

“ Cyclically send control value [0..255]min ”

Õ Û k **□0..255**

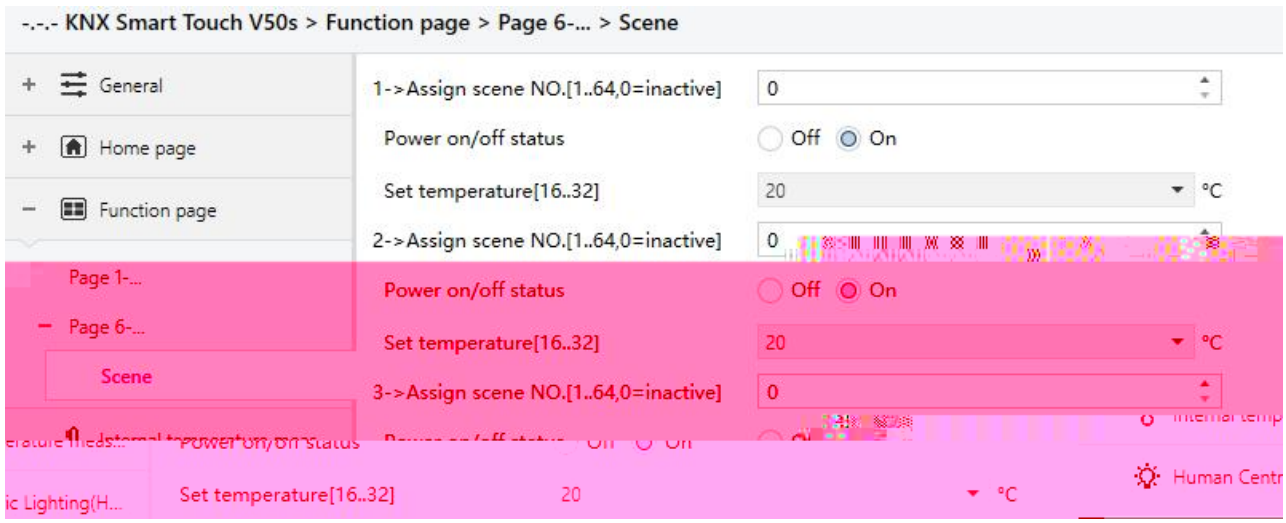
“Scene function”

“Slave” kÕ □ □□ Ñ k □ ! Õ k

“Timer function”

“Slave” k Õ □ □ k

5.3.7.1. Õ “Scene”



5.3.7.1 “Scene” Õ

“Slave” k □ □ Ñ k

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

Õ k 5 k **□0..64 0=**

k

k

“ON/OFF”

Õ □

Off

On

Off Ñ □

“Set temperature[16..32]-C”

Õ Õ □

5°C

6°C

...

32°C

Õ Õ □ □

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

Õ Õ □ □

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

5.3.8. Õ "Ventilation System"

Õ "Ventilation System" 5.3.8 □ Õ k

5.3.8 "Ventilation system" Õ

"Power on/off status after download"

Õ Ú k □

Off

On

"Power on/off status after voltage recovery"

Õ Õ k □

On

Off

As before voltage failure

On □ Õ □

Off □ Õ □ □ ! □

As before voltage failure □ Õ k

"Default fan speed after ventilation on"

Õ k □

Low

Medium

High

"Heat Recovery function"

Õ □ □ k □

Disable □

Disable=0/Enable=1 **0** **1** □

Disable=1/Enable=0 **1** **0** □

□ □ □ k

□ k

"Filter timer counter"

Õ □ □ Ô □ k

□ Ñ k

"Evaluation time[100..10000]h"

Õ □ □ k □**100..10000**

□ □ □ Õ □ □ □ k

□ □ □ "Filter timer reset" □ k

□ □ □ "Filter timer counter" □ □ Ô Ô □ Ô

Û □ □ Ô □ k

"Auto. operation function"

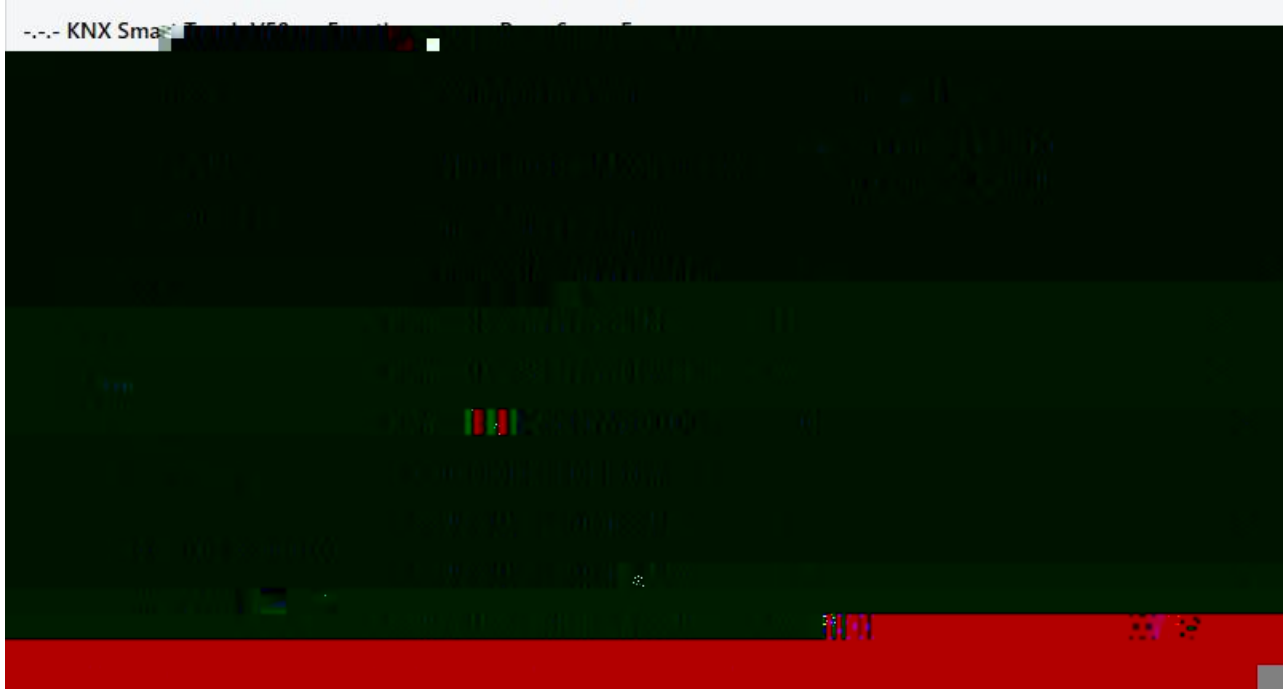
Õ □ □ Ñ k □ PM2.5 CO2

k 1 0 k

"Scene function"

□ □ k

5.3.8.1. Õ “Fan”



5.3.8.1 “Fan” Õ

“Data type of fan speed”

Õ k □

1bit

1byte

1bit Ñ □

“Object value for Fan speed off/low/medium/high”

Û 1bit Û k □

No.1=0, No.2=0, No.3=0

No.1=1, No.2=0, No.3=0

No.1=0, No.2=1, No.3=0

No.1=1, No.2=1, No.3=0

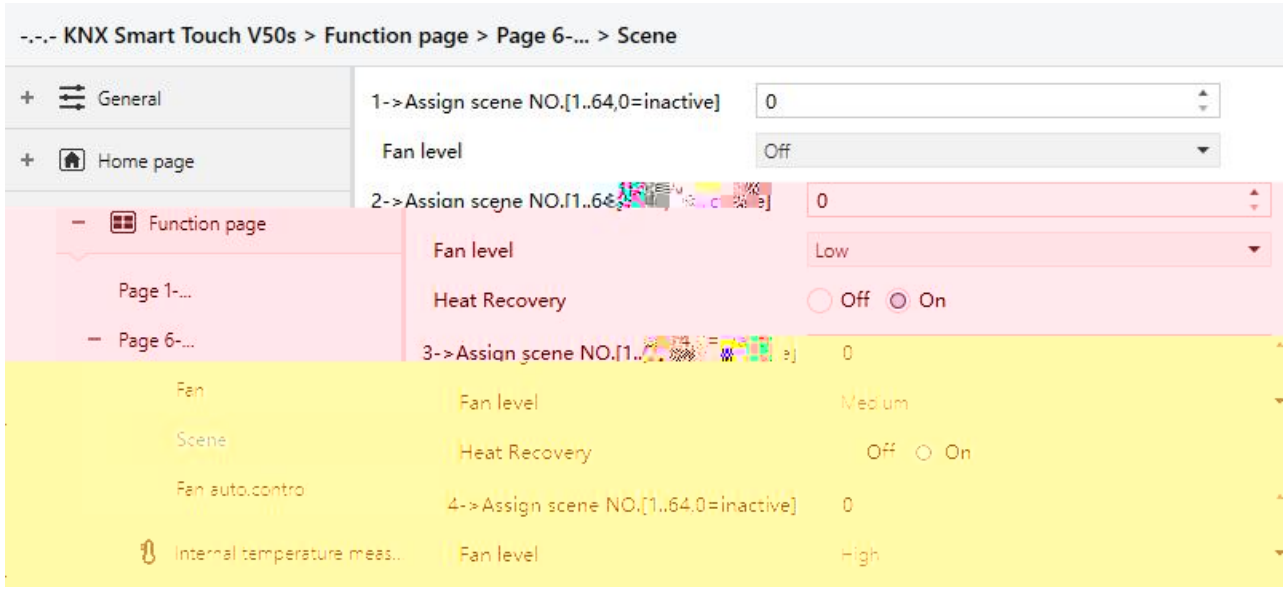
No.1=0, No.2=0, No.3=1

No.1=1, No.2=0, No.3=1

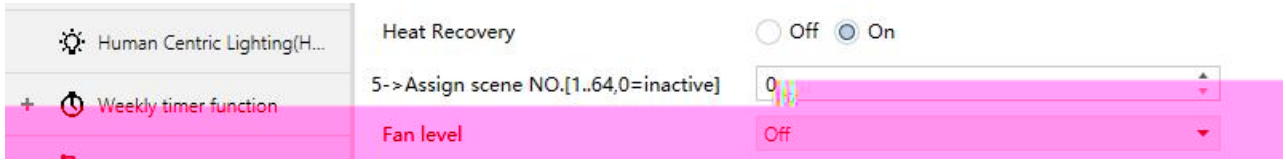
No.1=0, No.2=1, No.3=1

No.1=1, No.2=1, No.3=1

5.3.8.2. Õ “Scene”



5.3.8.2(1) “Scene” Õ



5.3.8.2(2) “Scene” Õ

□ □ Ñ k

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

Õ k 5 k **□0..64 0=**

“Fan level”

Õ x k □

Off

Low

Medium

High

Off Ñ k

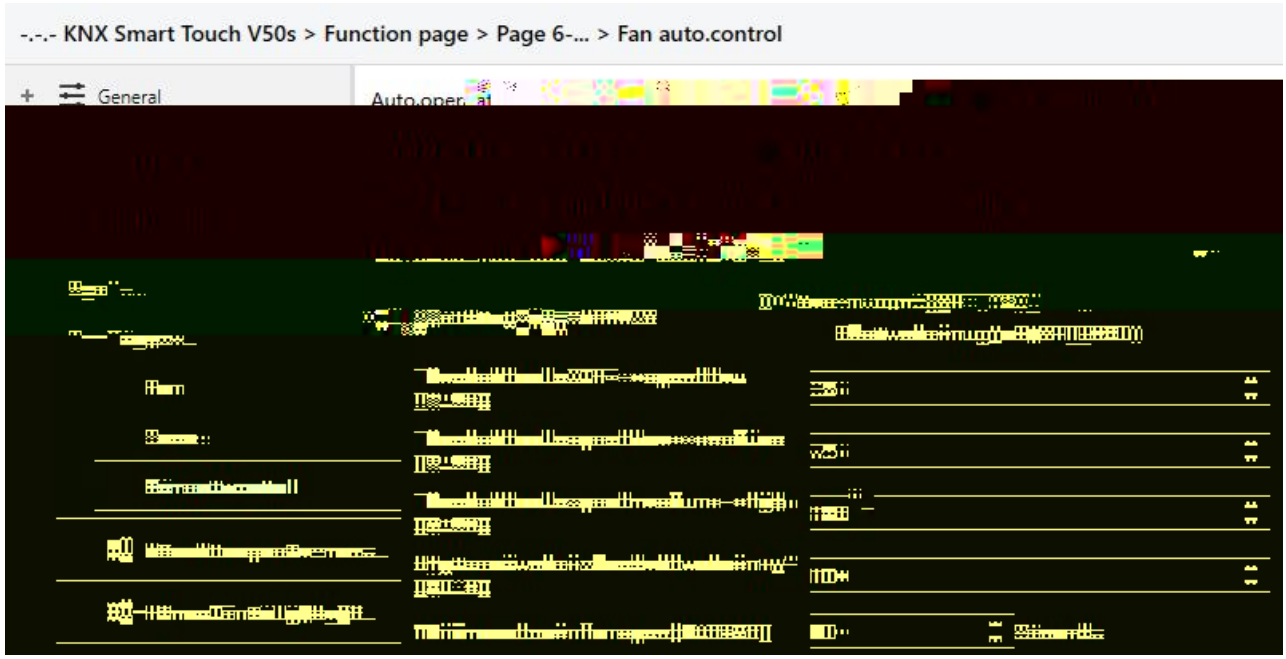
“Heat Recovery”

□ Ñ k Õ x k □

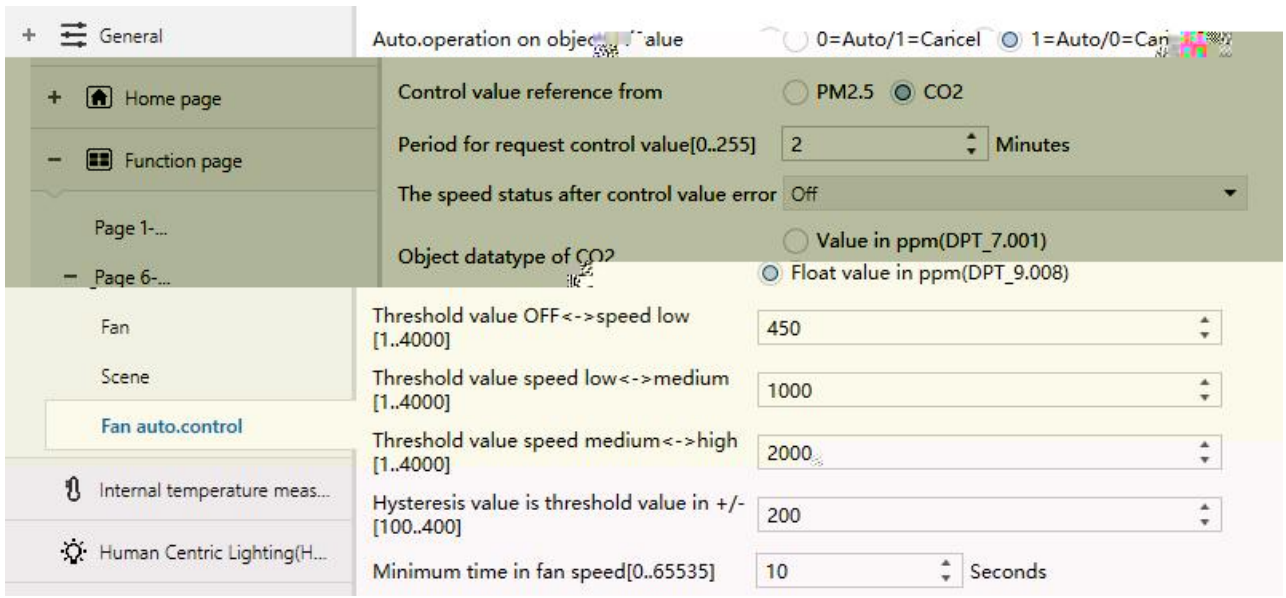
Off

On

5.3.8.3. Õ “Fan auto.control”



5.3.8.3(1) “Auto. Control_PM2.5” Õ



5.3.8.3(2) “Auto. Control_CO2” Õ

□ k

□ □ □ Ñ k

“Auto. operation on object value”

Õ k □

0=Auto/1=Cancel

1=Auto/0=Cancel

0=Auto/1=Cancel “Automatic function” “0”

“1”

1=Auto/0=Cancel “Automatic function” “1”

“0”

“Control value reference from”

PM2.5

CO2

“Period for request control value [0..255] Min”

0...255

“The speed status when the control value error”

Off

Low

Medium

High

“Object datatype of PM2.5”

PM2.5 PM2.5

Value in ug/m3(DPT_7.001)

Float value in ug/m3(DPT_9.030)

DPT_7.001

DPT_9.030

"Object datatype of CO2"

Õ CO2 k CO2 k

□

Value in ppm(DPT_7.001)

Float value in ppm(DPT_9.008)

DPT_7.001 □ k

DPT_9.008 □ k

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

□ 1...999/1...4000

Õ Û □ □ □ k

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

Õ Û □

k **□ 1...999/1...4000**

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

□ Õ Û □ □

k **□ 1...999/1...4000**

□ □ k

□ □ **→OFF <->** → **<->** → **<->□** k

□ □ □ □

OFF <-> **<->** **<->** **<->□**

k

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

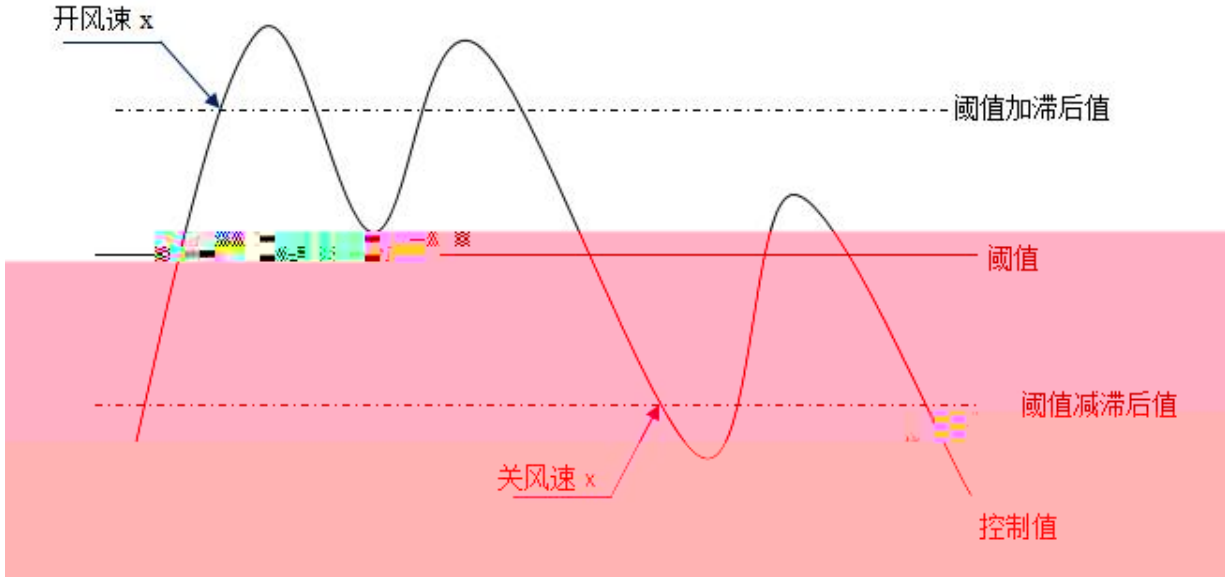
Õ □ □ □ k □

10..30/100..400

PM2.5 10 35 45□ + □ 25□

- □ 25~45 □ □ k

25 45 Û □ k □



□

□ □ □

□ □

□ æ □□ k

□1□□

PM2.5

OFF <-> 35

<-> 55

<-> □ 75

25

OFF □ □

OFF 60□ ⩾25+35□□ □ 60 55 75

□□ □ □

□ □ □ □

50<75-25 50 35 55

k

2

PM2.5

OFF <-> 20

<-> 40

<-> 70

10

OFF

OFF 30≥20+10 k

41 41 40 70

39 39 20 40 k

60<70-10 k

39 39 20 40

k

0

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

k

k

0...65535

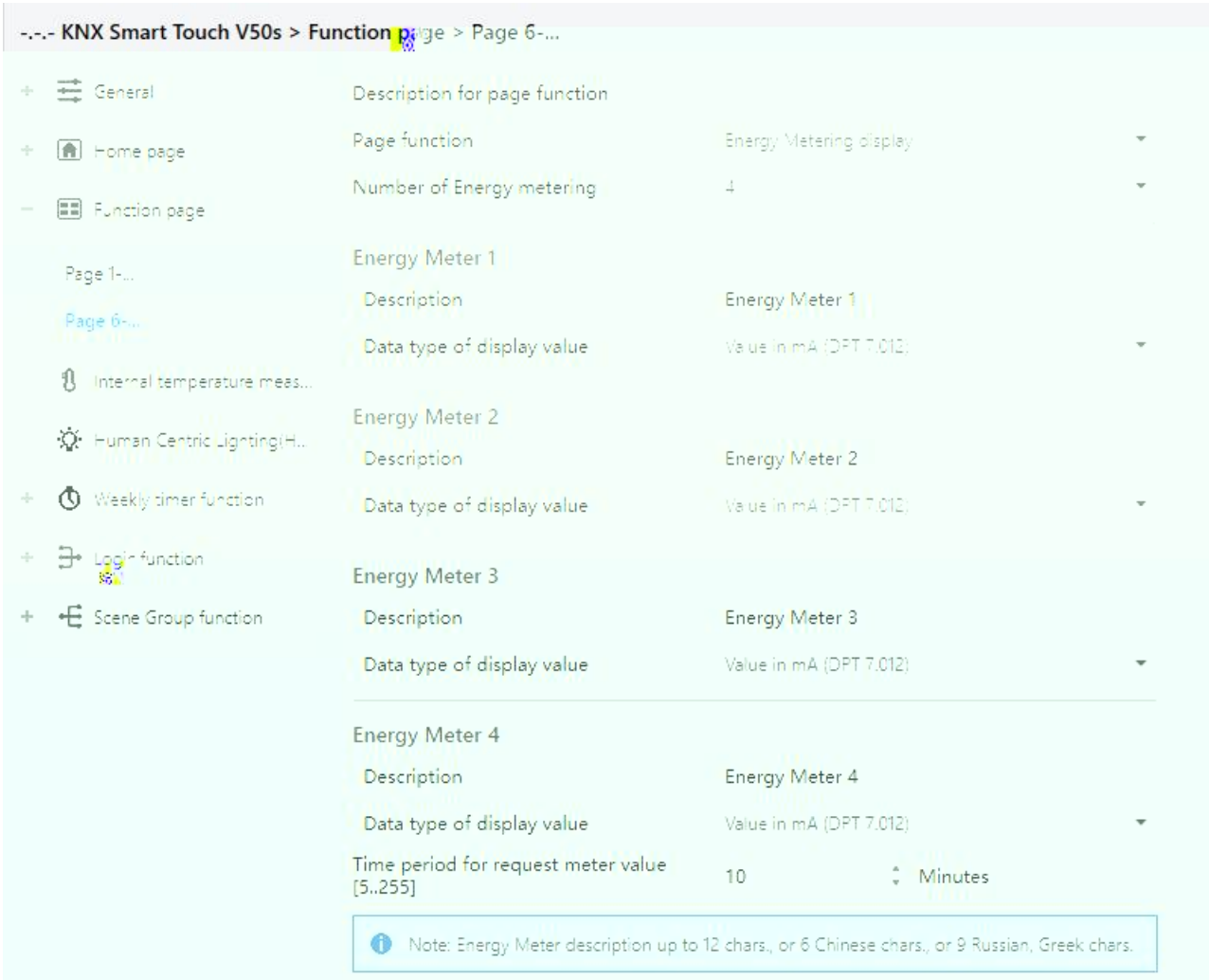
0

k

5.3.9. Õ “Energy Metering display”

Õ “Energy Metering display” 5.3.9 Õ □ □ □ Õ

! ! □□ k Õ 8 k



5.3.9 “Energy Metering display” Õ

“Number of Energy metering”

Õ □ □ □ □ k **□1/2/3/4/5/6/7/8**

Õ 8 k

Energy Meter x (x=1..8)

“Description”

Õ □ k □ 18 6 k

“Data type of display value”

Õ k

Value in mA(DPT 7.012) **mA**

Float value in mA(DPT 9.021) **mA**

Float value in A(DPT 14.019) **A**

Float value in mV(DPT 9.020) **mV**

Float value in V(DPT 14.027) **V**

Float value in W(DPT 14.056) **W**

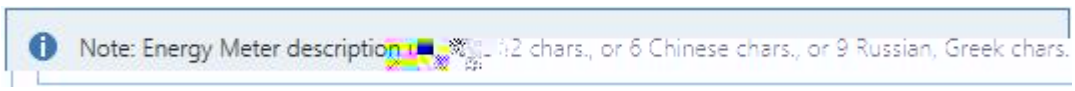
Float value in kW(DPT 9.024) **kW**

Value in Wh(DPT 13.010) **Wh**

Value in kWh(DPT 13.013) **kWh**

“Time period for request meter value[5..255]Min”

Õ Õ Û Õ k **5...255**

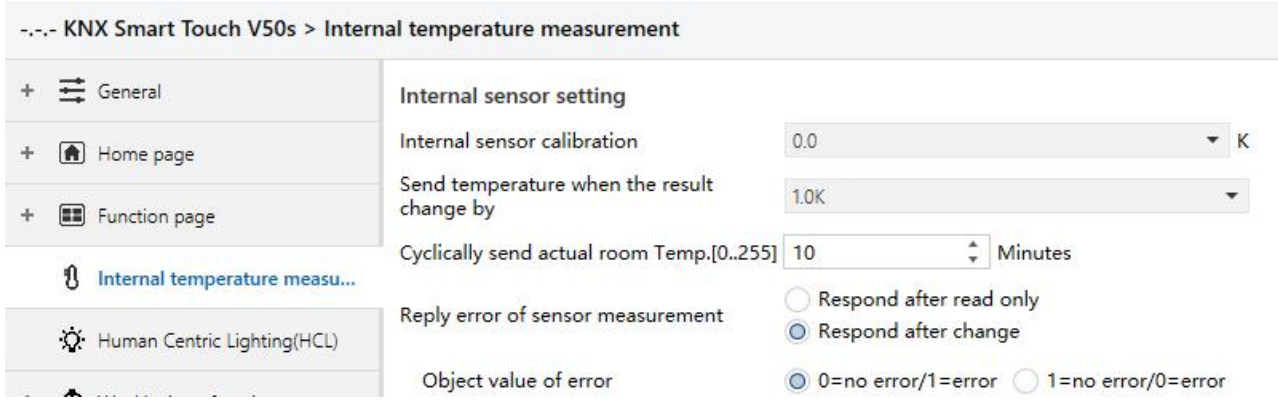


12 **6** **9** k

5.4. Õ “Internal temperature measurement”

Õ “Internal temperature measurement” 5.4 k□ □ □ Õ

k



5.4 “Internal temperature measurement” Õ

Õ Õ ! Û Õ □

Õ k

“Internal sensor calibration”

Õ □ □□

k □

-10K

...

0.0K

...

10K

□ Õ □□ **30** Õ

□ □ k

“Send temperature when the result change by”

Õ □ Û □ k □

Disable

0.5K

...

10.0K

"Cyclically send actual room Temp.[0..255]min"

Õ □ Û k □ **0...255**

□ Ô Û k

"Reply error of sensor measurement"

Õ Õ Õ Û Õ □

Respond after read only

Respond after change

Respond after read only □ Õ Õ Õ Õ

"Temp.error report" Õ Û □

Respond after change □ Õ "Temp.error report" Û

Õ k

"Object value of error"

Õ k □

0=no error/1=error

1=no error/0=error

0=no error/1=error □ Õ 0 Õ 1 □

1=no error/0=error □ k

□ □ □ **-20¸ ~60¸** Õ □

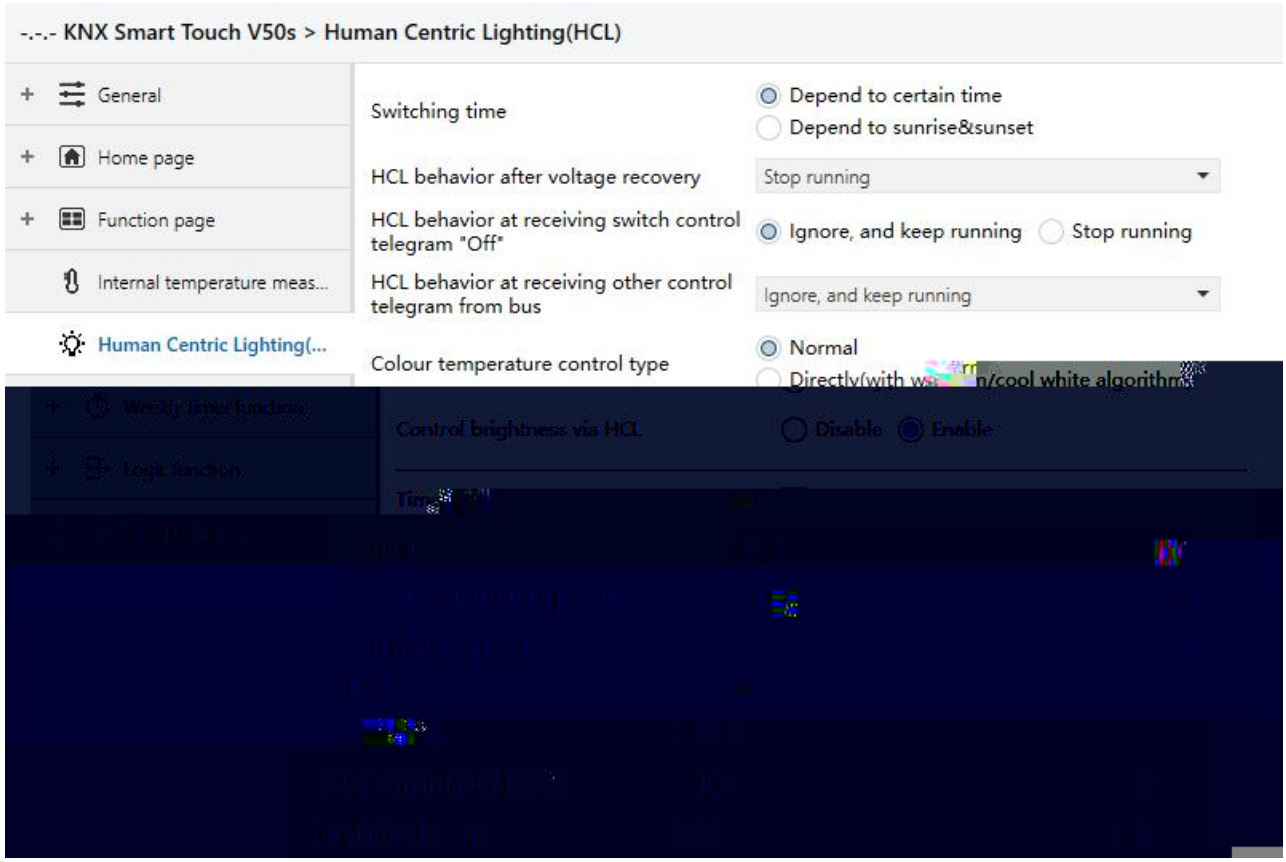
Õ k

5.5. Õ “Human Centric Lighting(HCL)”

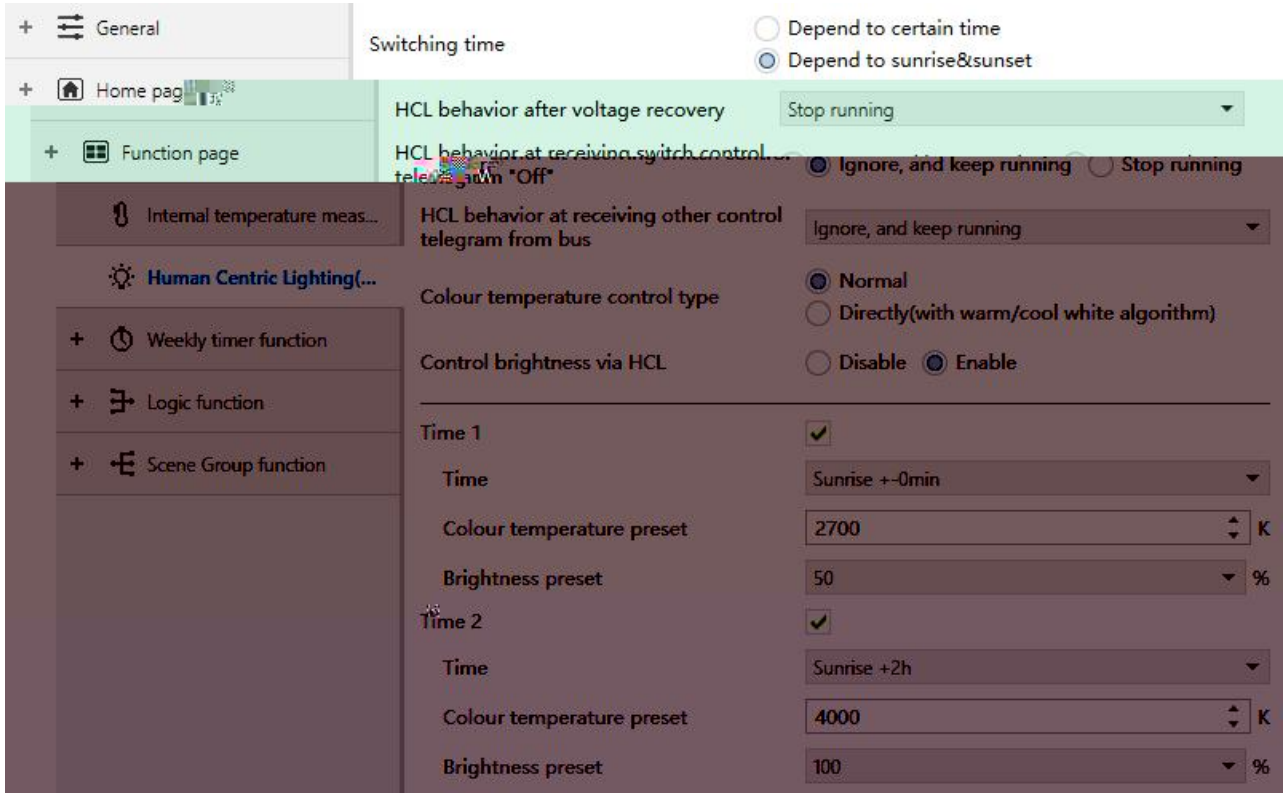
Õ “Human Centric Lighting(HCL)” 5.5(1) ! 5.5(2) Õ

Â k

V40s V50s k



5.5(1) “Human Centric Lighting(HCL)-Depend to certain time” Õ



5.5(2) "Human Centric Lighting(HCL)-Depend to sunrise&sunset" Õ

"Switching time"

Õ k □

Depend to certain time

Depend to sunrise&sunset **b**

"HCL behavior after voltage recovery"

Õ HCL Û □ k □

Start running **Û □**

Stop running **Û □**

As before voltage failure **Û □**

"HCL behavior at receiving switch control telegram "Off""

Õ HCL Û □ Off HCL Û □ k □

Ignore, and keep running

Stop running

Ignore, and keep running □ □ Û □ Switch control □

Stop running □ HCL Û □ k

"HCL behavior at receiving other control telegram from bus"

Õ HCL Û □ HCL k □

Ignore, and keep running

Ignore, but stop running

Update preset value, and keep running

Update preset value, and stop running

Ignore, and keep running □ □ HCL Û □ □

Ignore, but stop running □ HCL Û □ □

Update preset value, and keep running □ Â Â

□ HCL Û □ □

Update preset value, and stop running □ Â Â

HCL Û □ k

□ Õ Õ Õ k **HCL** Û □ □ k

Õ k

"Colour temperature control type"

Õ Â k □

Normal □

Directly(with warm/cool white algorithm) □ / □ □

Normal □ 1byte 2byte Â □

Directly(with warm/cool white algorithm) □ Õ " +Â " /

□ □ 2 1byte □ k

"Control brightness via HCL"

"Normal" Ñ k Õ □ HCL k

Õ Â Õ **10** □

Time x (x=1~10)

"Time x" (x=1~10)

Õ □ x k

□ Ñ k

" "Time"

Õ Õ k

"Depend to certain time" □

00:00
01:00
02:00
...
23:00

"Depend to sunrise&sunset" □

Sunrise -5h	**Sunset +-0min**
Sunrise -4h	**Sunset +30min**
...	**Sunset +1h**
Sunrise -1h	**...**
Sunrise -30min	**Sunset +4h**
Sunrise +-0min	**Sunset +5h**
...	

" "Colour temperature preset"

Õ Õ Â k □**2000..7000K**

" "Brightness preset"

Â "Normal" "Control brightness via HCL" □ □ "Directly(with warm/cool white algorithm)" Ñ k Õ Õ k □

0%
5%

5%

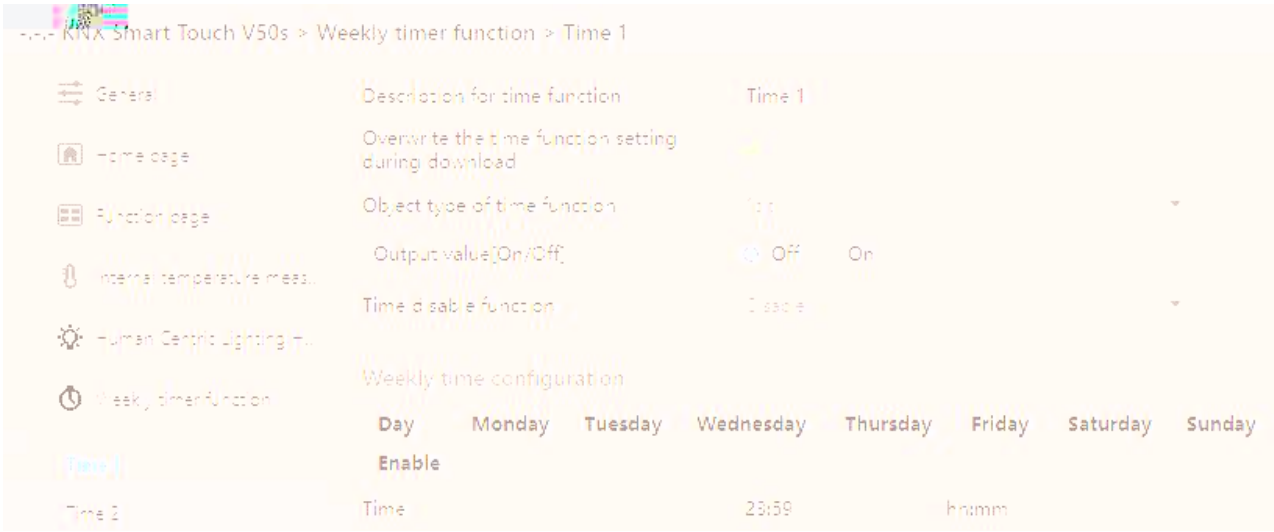
100%

5.6. Õ “Weekly tim

5.6.1. Õ "Time x"

Õ "Time x" 5.6.1 Õ Û k

Õ □ Õ Õ k



5.6.1 "Time x" Õ

"Description for time function"

Õ x □ 12 □ 6 □ k

"Overwrite the time function setting during download"

Õ Ú □ □ k

□ Ú □ k

□ Õ □ □ □ Õ □ □

Õ □ □ k

"Object type of time function"

Õ x Û k □

1bit

1byte

2byte

"Object datatype"

1byte □ 2byte k

1byte □

1byte unsigned value

1byte[scene control]

HVAC mode

2byte □

2byte unsigned value

Temperature value

“Output value/ scene No.[...]”

Õ x Û k Õ k

“Time disable function”

Õ □ □ □ □ Õ / □ k □

Disable □ □ □ □

Disable=0/Enable=1 0 1 □

Disable=1/Enable=0 1 0 □

Weekly time configuration

Õ x □ x k

“Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday”

□ x k

“Time”

x k □

□ 0..23

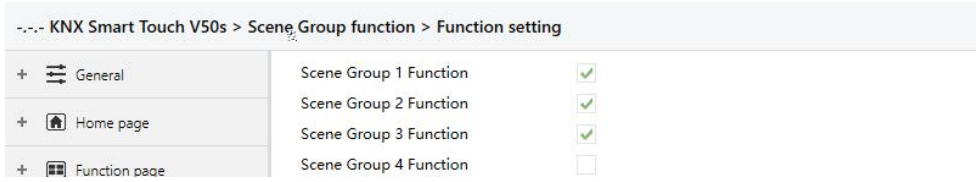
□ 0..59

□ Õ RTC ®10ppm k

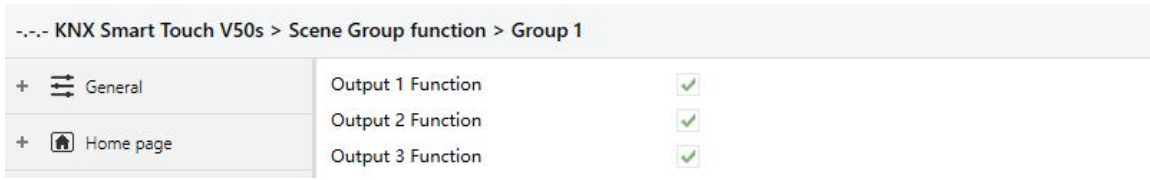
5.7. Õ “Scene Group function”

Õ “Scene Group function” □ □ 8 □ Õ

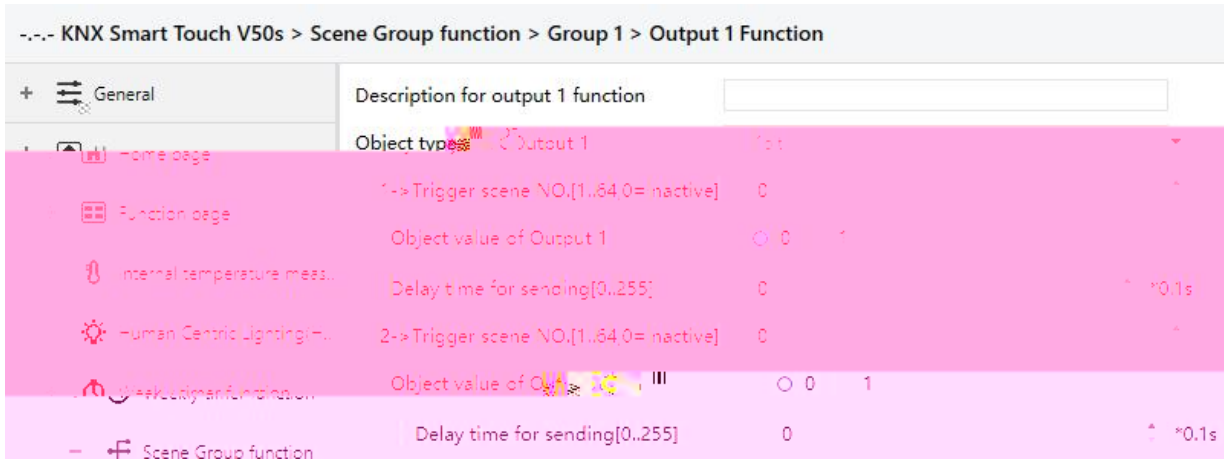
8 □ k k



5.7(1) “Scene Group function” Õ



5.7(2) “Group x” Õ



5.7(3) “Output y Function” Õ

“Scene Group x Function”(x=1~8)

Õ □ x □ Õ 8 k

“Output y Function”(y=1~8)

Õ □ x □ y Õ 8 □ □ k

8 □ 8 □ □ □ □□

□

“Description for Output y function”(y=1~8)

Õ x □ y □ k □ 30 k

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

x □ y k □

1bit

1byte

2byte

• • **"Object datatype"**

1byte □ 2byte k

1byte □

1byte unsigned value

HVAC mode

2byte □

2byte unsigned value

Temperature value

"z->Trigger scene NO.[1~64,0=inactive]" (z=1~8)

x □ y k □ 8 k

□ **0..64 0=** k

• • **"Object value of Output y"**

Õ □ □ y □

1bit □ **0..1**

1byte-1byte unsigned value □ **0..255**

1byte-HVAC mode □

Comfort mode

Standby mode

Economy mode □

Frost/heat protection

2byte-2byte unsigned value □ **0..65535**

2byte-Temperature value

-5°C

-4°C

...

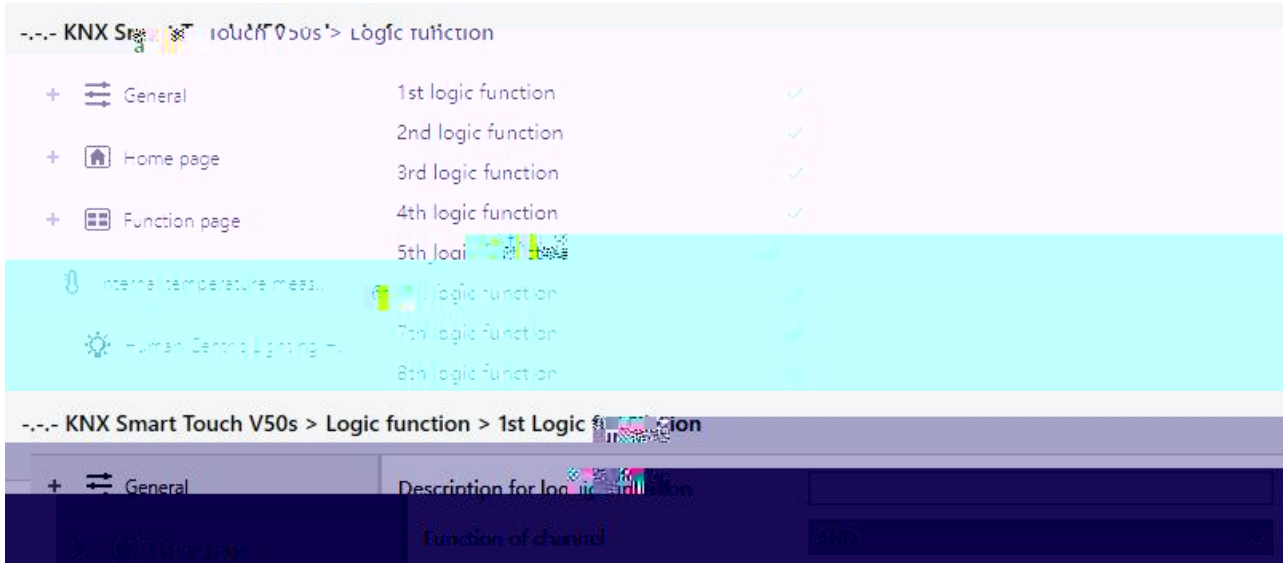
45°C

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

: **0..255**

5.8. "Logic function"

"Logic function" 5.8 8



5.8 "Logic function"

"1st/2nd/3rd... Logic function"

8

"Description for logic function"

30

"Function of channel"

AND

OR Û □

XOR Û □

Gate forwarding □ □ □ □

Threshold comparator □

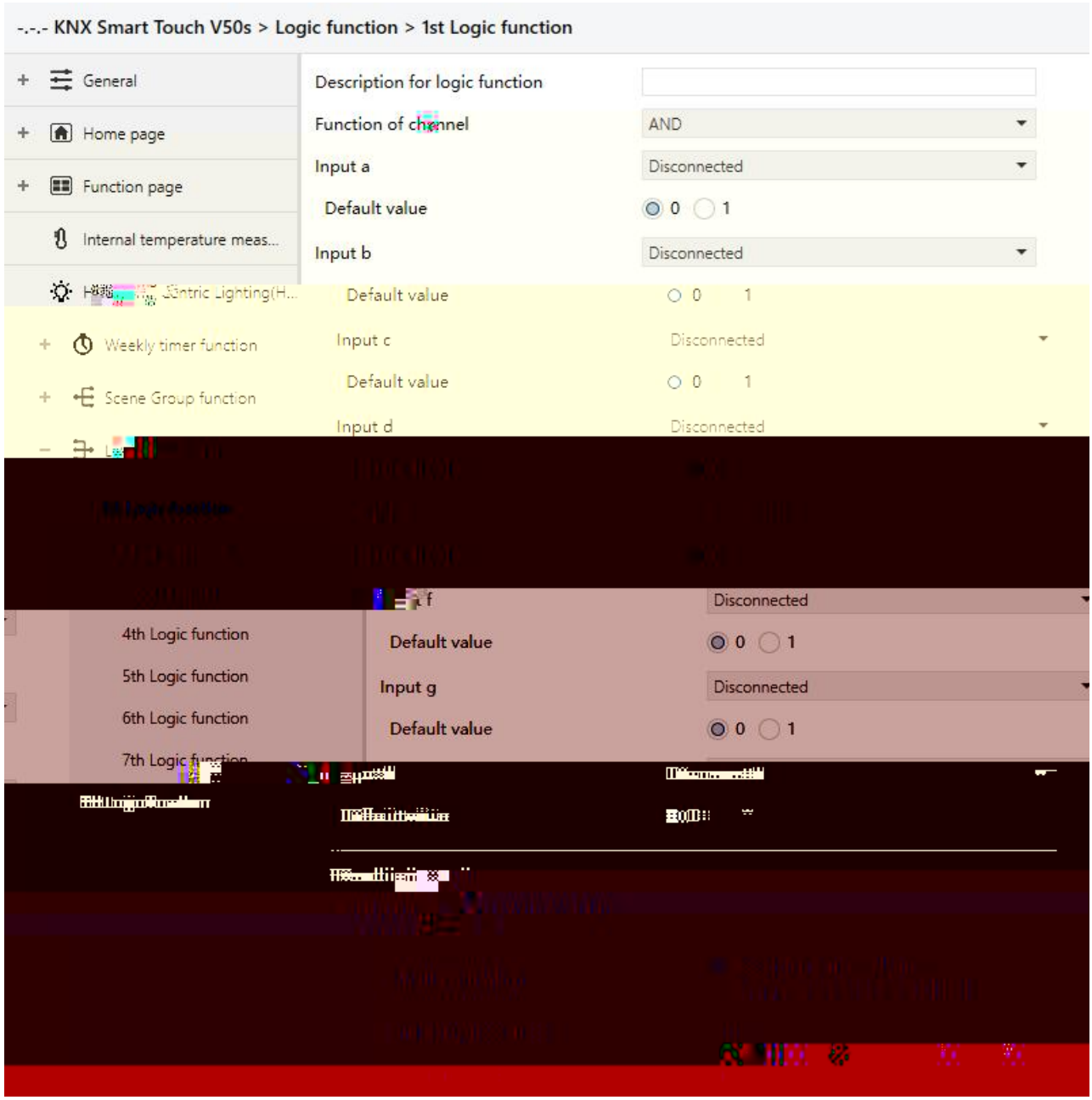
Format convert □

Delay function □

Staircase lighting

AND/OR/XOR□ □ □ □ □ □ □ □ k

5.8.1.“AND/OR/XOR” □



5.8.1 “Logic function_AND/OR/XOR” Õ

“Input a/b/c/d/e/f/g//h”

Õ □ □ □ input x Û □ Û □ □ Û □ k □

Disconnected

Normal

Inverted

Disconnected □ □ Û □ □

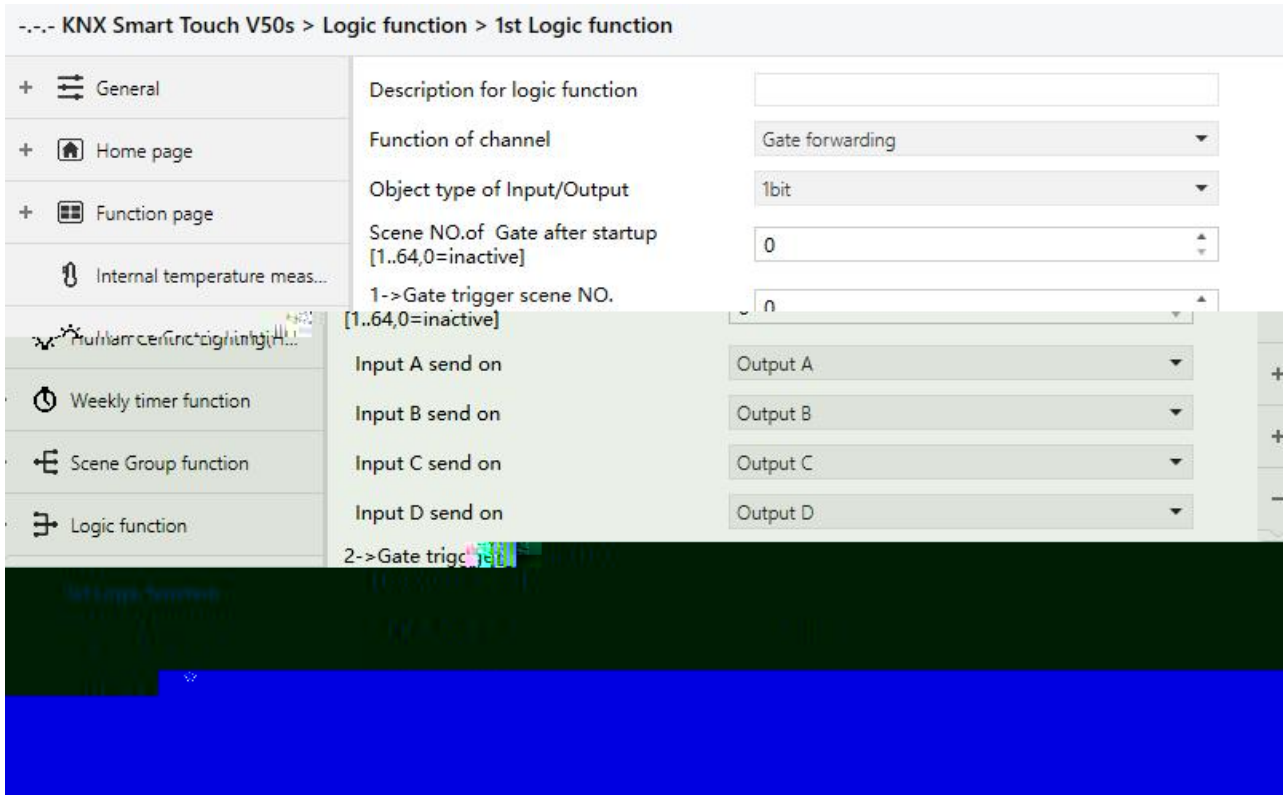
Normal □ □ Û □ □

Inverted □ □ □ □ Û □ k □ □ □ k

Õ Û □ □ Û □ □ k Base × Factor Base “None”

k

5.8.2.“Gate forwarding” □



5.8.2 “Logic function_Gate forwarding” Õ

“Object type of Input/Output”

Õ □ /□ k □

1bit
4bit
1byte

“Scene NO. of Gate after startup [1..64, 0=inactive]”

Õ Õ □ □ □ □ □ □ □ k

□1..64 0=

□ □ □ □ k

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

Õ □□□□ k □□ 8 Õ k

□1..64 0= k

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

Õ □ X (X=A/B/C/D) □□□ □ k □

Output A

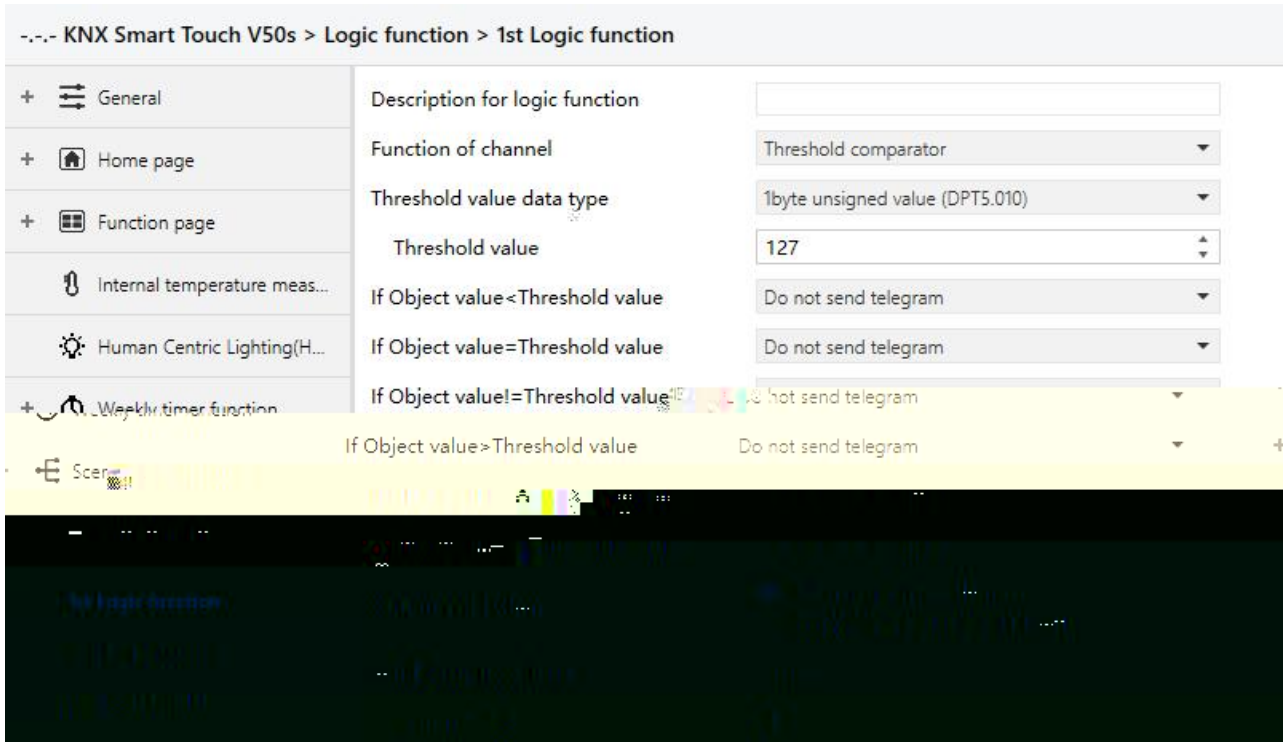
Output B

...

Output B,C,D

□ □ □ k □ □ k

5.8.3."Threshold comparator" □



5.8.3 "Logic function_Threshold comparator" Õ

"Threshold value data byte"

Õ k □

4bit value (DPT3.007) **4byte unsigned value[0..4294967295]**

1byte unsigned value (DPT5.010) **Ext. temperature value (DPT 9.001)**
2byte unsigned value (DPT7.001) **Ext. humidity value (DPT 9.007)**
2byte signed value (DPT8.x) **Illuminance value (DPT 9.004)**
2byte float value (DPT9.x) **CO2 value (DPT 9.008)**

“Threshold value”

Õ k

4bit value (DPT3.007) 0..15 /1byte unsigned value (DPT5.010) 0..255 /
2byte unsigned value (DPT7.001) 0..65535 / 2byte signed value (DPT8.x) -32768...32767 /
2byte float value (DPT9.x) -670760...670760 / 4byte unsigned value[0..4294967295] 0..4294967295 /
Ext. temperature value (DPT 9.001) -20..95℃ / Ext. humidity value (DPT 9.007) 0..100% /
Illuminance value (DPT 9.004) 0..65535lux/CO2 value(DPT 9.008) 0...4000ppm

“Hysteresis value”

“2byte float value (DPT9.x)” ! “Illuminance value (DPT 9.004)” ! “CO2 value (DPT 9.008)” Ñ k Õ k **□0..500**

“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”

□ Õ □ ! ! ! ! Õ

Û □ □ □ k “2byte float value (DPT9.x)” ! “Illuminance value (DPT 9.004)”

□ Õ m □ □ Õ k □

Do not send telegram
Send value "0"
Send value "1"

Do not send telegram □

Õ Û k **“ If Object value=Threshold value ” Õ Send value “ 0 ” “ If Object value<=Threshold value ” Õ Send value “ 1 ”** Û **“ 1 ”** k

“Output send when”

Õ Û Û Û k

Receiving a new telegram

Every change of output object

Receiving a new telegram Û k

Every change of output object Û k

Û k

“Send delay time: Base”

Base:

None

0.1s

1s

...

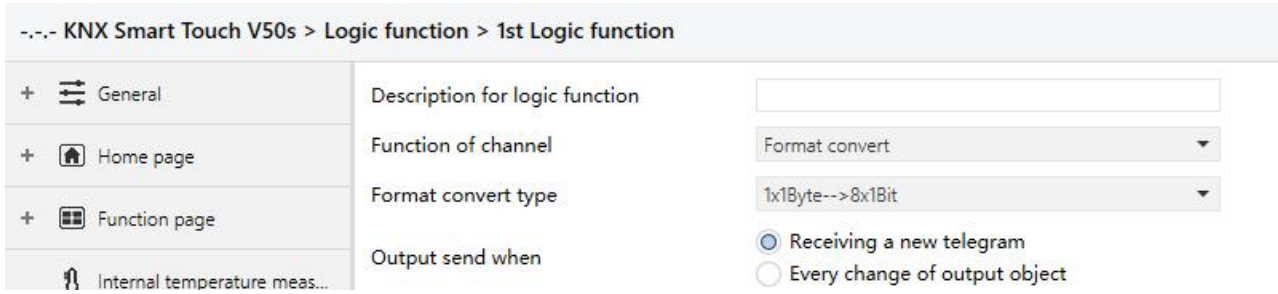
25s

Factor: 1..255

Õ Û Û Û k Base × Factor Base “None”

k

5.8.4.“Format convert” □



5.8.4 “Logic function _Format convert” Õ

“Format convert type”

Õ □ k □

2x1bit-->1x2bit

8x1bit-->1x1byte

1x1byte-->1x2byte

2x1byte-->1x2byte

2x2byte-->1x4byte

1x1byte-->8x1bit

1x2byte-->2x1byte

1x4byte-->2x2byte

1x3byte-->3x1byte

3x1byte-->1x3byte

“Output send when”

Õ Û □ □ □ k □

Receiving a new telegram

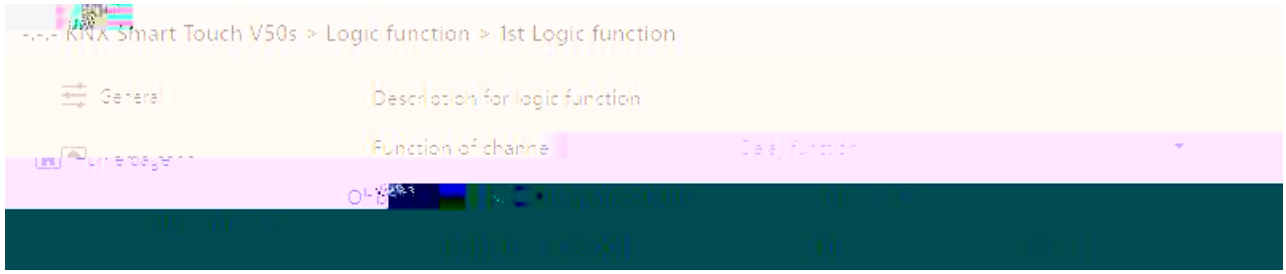
Every change of output object

Receiving a new telegram □ □ □ □ □ Û □ □

Every change of output object □ □ □ □ Û □ k

□ □ □ □ □ □ Û □ □ □ Û □ □ Û k

5.8.5.“Delay function” □



5.8.5 “Delay function” □

“Object type of Input/Output”

Õ □ /□ k □

1bit[On/Off]

1byte[0..100%]

1byte[0..255]

2byte[Float]

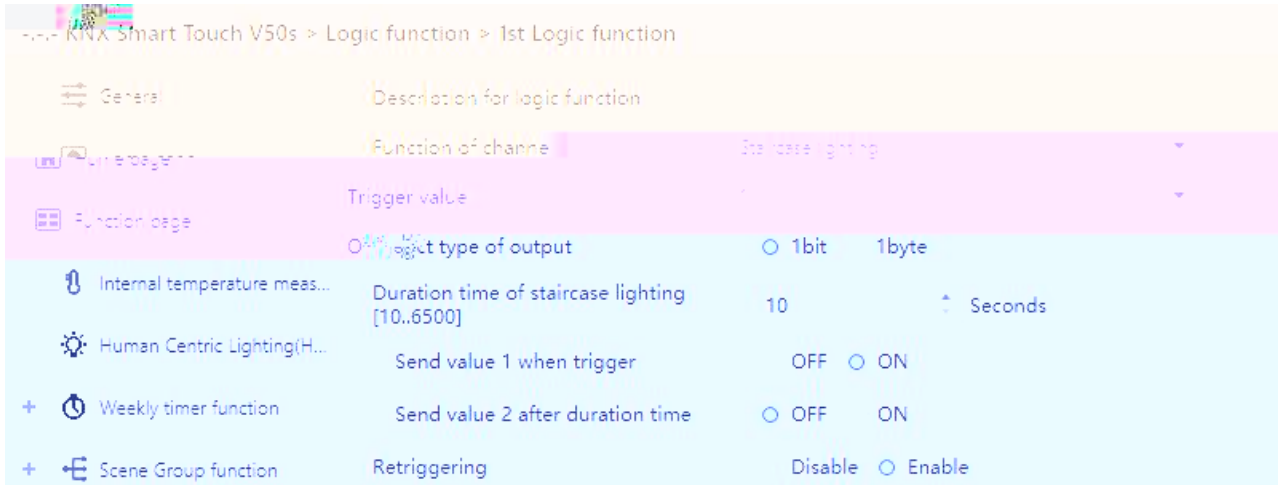
2byte[0..65535]

“Delay time [0..6500]s”

Õ □ □ □ k □**0..6500**

□ □ □ Ô k

5.8.6.“Staircase lighting” □



5.8.6 “Staircase lighting” □

“Trigger value”

Õ “Trigger value” k □

0

1

0 or 1

“Object type of output”

Õ □ k □

1bit

1byte

“Duration time of staircase lighting[10..6500]s”

Õ k □**10..6500**

“Send value 1 when trigger”

“Send value 2 after duration time”

□ Õ Û k Û 1 Û 2 k □

k

1bit □

OFF

ON

1byte □ **0..255**

"Retriggering"

Õ □ Ô k □

Disable

Enable

□ □

□ □ Õ Õ □ □ □ □ □ □ □ □ □ □ k

□ “C” □ □ □ □ □ □ “W” □ □ □ □ “R”

□ □ □ □ Õ “T” □ □ □ □ “U” □ □ □ k

6.1.“General”□ □ □

Nu	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
918	General	Screen locking			1 bit	C	-	W	-	-	enable	Low
919	General	In operation			1 bit	C	R	-	T	-	switch	Low
920	General	Date			3 bytes	C	-	W	-	-	date	Low
921	General	Time			3 bytes	C	-	W	-	-	time of day	Low
922	General	Day/Night			1 bit	C	-	W	-	-	day/night	Low
923	[illegible]	Screen backlight brightness			1 bit	[illegible]						
934	Screensaver-Items 1	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low
935	Screensaver-Items 2	Humidity value			2 bytes	C	-	W	T	U	humidity (%)	Low
936	Screensaver-Items 3	PM2.5 value			2 bytes	C	-	W	T	U	pulses	Low
937	Screensa[illegible]	[illegible]M10 value			2 bytes	C	-	W	T	U	pulses	Low

6.1 “General”□ □ □

□	□				DPT
918	**Screen locking**	**General**	**1bit**	**C,W**	**1.003 enable**
Õ □ □ □ □ □ □ □ □ k □ 0 ˚ ˚ □ 1 ˚ ˚ □ □					
919	**In operation**	**General**	**1bit**	**C,R,T**	**1.001 switch**
□ □ □ Û “1” □ Õ Û □ k					
920	**Date**	**General**	**3bytes**	**C,W**	**11.001 date**
Õ □ □ □ k					
921	**Time**	**General**	**3bytes**	**C,W**	**10.001 time of day**
Õ □ □ □ k					
922	**Day/Night**	**General**	**1bit**	**C,W** **C,T**	**1.024 day/night**

Õ □ □ Û / k

/ b □ k □

0 ˆ ˆ

1 ˆ ˆ

“Send day/night status” No C,W □ b C,T k

923	**Screen backlight brightness**	**General**	**1byte**	**C,W**	**5.001percentage(0..100%)**

Õ □ □ k □ □10~100% 10% □

10% k “Screen brightness can be changed via bus” □ Ñ k

924	**Colourful strip trigger**	**General**	**1bit**	**C,W**	**1.017 trigger**

Õ □ □ □ Â Ñ □ Â □ k

925	**Colourful strip setting**	**General**	**3byte**	**C,W**	**232.600 RGB value 3x(0..255)**

Õ □ □ “Colour setting” “Receive a 3byte value” Ñ 3byte k

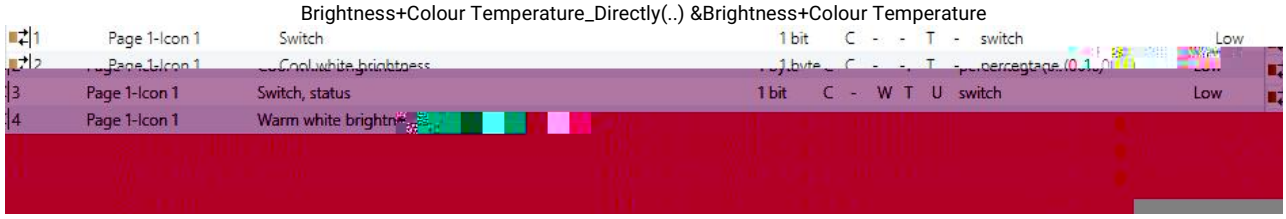
926	**Proximity sense, 1 bit value** **Proximity sense, scene NO.** **Proximity sense, 1 byte value**	**General**	**1bit** **1byte**	**C,W,**	

6.2.“Home page”□ □

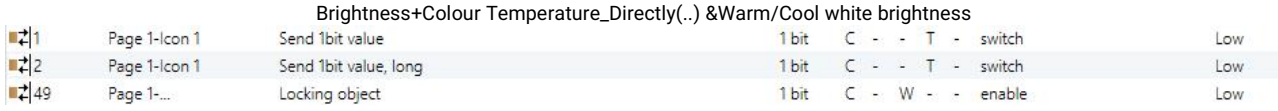
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
915	Home page	External temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low
917	Home page	External humidity value			2 bytes	C	-	W	T	U	humidity (%)	Low

6.2 “Home page”□ □ □

Brightness+Colour Temperature_Directly(..) &Brightness+Colour Temperature

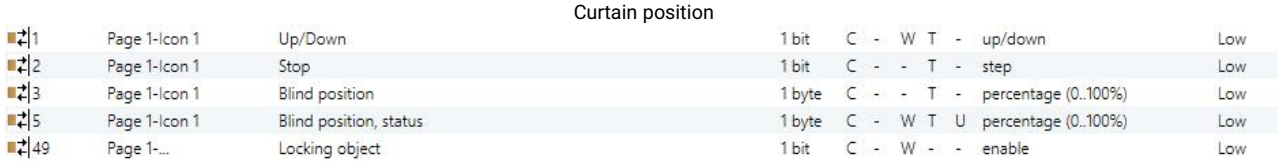


Brightness+Colour Temperature_Directly(..) &Warm/Cool white brightness

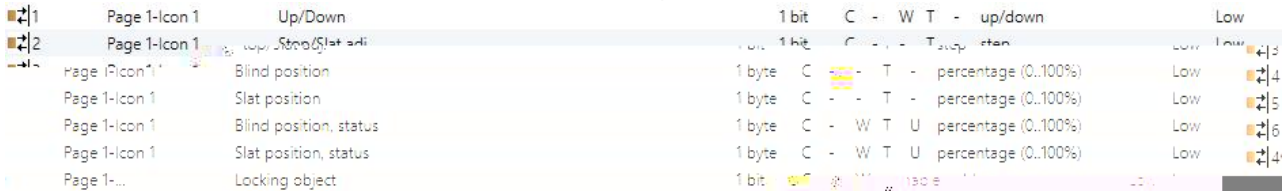


Value sender

Curtain position



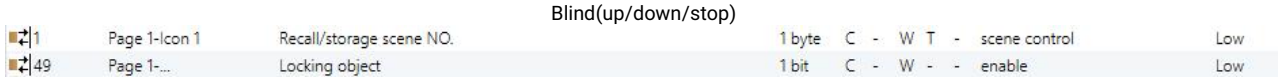
Roller blind position



Venetian blind position and slat

Curtain step/move

Blind(up/down/stop)



Scene control

Switch indicator

6.3.1 “Multifunction (Lighting/Blind/Scene/Value send)” □ □

□ □ Û □ Û Õ □ k □

Brightness+Colour Temperature Û Õ □ k

□	□	DPT
1	**Swi**	

Obj.5□ &□ / □ k					
4	**Warm white brightness**	**Page 1-{{Icon 1}}**	**2byte**	**C,T**	**5.001 percentage(0..100%)**
6	**Warm white brightness, status**	**Page 1-{{Icon 1}}**	**2byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
□ □□ Â k □0...100% Obj.4□ Û Û k Obj.6□ &□ / □ k					
1	**Send 1bit value** **Send 2bit value** **Send 4bit value** **Send 1byte unsigned value** **Send 1byte percentage value** **Send 2byte unsigned value** **Send 2byte signed value** **Send 4byte value** **Send 4byte float value**	**Page 1-{{Icon 1}}**	**1bit** **2bit** **4bit** **1byte** **2byte** **4byte**	**C,T**	**1.001 switch** **2.001 switch control** **3.007 dimming control** **5.010 counter pulses(0..255)** **5.001 percentage(0..100%)** **7.001 pulses** **8.001 pulses difference** **12.001 counter pulses** **14.x float value**
Õ□□ Û Õ □ □ Û □ k Õ k					
2	**Send 1bit value, long** **Send 2bit value, long** **Send 4bit value, long** **Send 1byte unsigned value, long** **Send 1byte percentage value, long** **Send 2byte unsigned value, long** **Send 2byte signed value, long**	**Page 1-{{Icon 1}}**	**1bit** **2bit** **4bit** **1byte** **2byte**	**C,T**	**1.001 switch** **2.001 switch control** **3.007 dimming control** **5.010 counter pulses(0..255)** **5.001 percentage(0..100%)** **7.001 pulses** **8.001 pulses difference**
Õ□□ □ Ñ Û□ □ k					
1	**Open/Close**	**Page 1-{{Icon 1}}**	**1bit**	**C,W, T**	**1.009 open/close**
2	**Stop**	**Page 1-{{Icon 1}}**	**1bit**	**C, T**	**1.007 step**
3	**Curtain position**	**Page 1-{{Icon 1}}**	**1byte**	**C, T**	**5.001 percentage**
5	**Curtain position, status**	**Page 1-{{Icon 1}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**
Curtain position□ k ! □ ! ! □ k					

Obj.1 Û / k

1 ˚

0 ˚

Obj.2 Û k

0/1 ˚

Obj.3 Û k 0...100%

Obj.5 k 0...100%

1	**Up/Down**	**Page 1-{{Icon 1}}**	**1bit**	**C,W, T**	**1.008 up/down**
2	**Stop**	**Page 1-{{Icon 1}}**	**1bit**	**C, T**	**1.007 step**
3	**Blind position**	**Page 1-{{Icon 1}}**	**1byte**	**C, T**	**5.001 percentage**
5	**Blind position, status**	**Page 1-{{Icon 1}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

Roller blind position k ! ! !

Obj.1 Õ Û / k

1 ˚

0 ˚

Obj.3 Û k 0...100%

Obj.5 k 0...100%

Obj.2 k

b

2	**Stop**	**Page 1-{{Icon 1}}**	**1bit**	**C,W,T,U**	**1.007 step**
3					

Obj.4□ Û k □0…100%

Obj.6□ □ k □0…100%

1	**Open/Close**	**Page 1-{{Icon 1}}**	**1bit**	**C,W, T**	**1.009 open/close**
2	**Stop**	**Page 1-{{Icon 1}}**	**1bit**	**C, T**	**1.007 step**

Curtain step/move□ □ □ □ k ! □ ! k

Obj.1□ Õ □ □ Û /□ k □

1 ˚ □

0 ˚

Obj.2□ Õ □ □ Û k □

0/1 ˚

1	**Up/Down**	**Page 1-{{Icon 1}}**	**1bit**	**C,W,T**	**1.008 up/down**
2	**Stop**	**Page 1-{{Icon 1}}**	**1bit**	**C, T**	**1.007 step**

Roller blind step/move□ □ □ □ k ! □ ! k

Obj.1□ Õ □ □ Û /□ k □

1 ˚ □

0 ˚

Obj.2 k

1	**Recall/storage scene No.**	**Page 1-{{Icon 1}}**	**1byte**	**C, T C,W,T**	**18.001 scene control**

Õ□ □ Û k □ 1 □ 0 k

□ □ □ k

□ □ **C,W,T**□ □ □ **C,T** k

49	**Locking object**	**Page 1-{{...}}**	**1bit**	**C,W**	**1.003 enable**

Õ□ □ □ /□ □ □ □ k □

1 ˚ □ □

0 ˚ □

□ Õ □ k

□ “Description for page function” □ □ □ “Page x-...” k

k

6.3.2.“Room temperature control”

“ Master ” Û Õ Û ! Õ ! Õ Û ! Õ ! Õ ! / ! k

“ Single ” Õ ! Õ ! Õ k Û k

“ Slave ” Û ! ! Õ ! / ! ! ! k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
247	Page 6-...	Base temperature setpoint, status			2 bytes	C	-	W	-	U	temperature (°C)	Low
248	Page 6-...	Heating/Cooling mode, status			1 bit	C	-	W	-	U	cooling/heating	Low
249	Page 6-...	Comfort mode, status			1 bit	C	-	W	-	U	enable	Low
250	Page 6-...	Standby mode, status			1 bit	C	-	W	-	U	enable	Low
251	Page 6-...	Economy mode, status			1 bit	C	-	W	-	U	enable	Low
252	Page 6-...	Frost/Heat protection mode, status			1 bit	C	-	W	-	U	enable	Low
253	Page 6-...	Fan speed low, status			1 bit	C	-	W	T	U	switch	Low
254	Page 6-...	Fan speed medium, status			1 bit	C	-	W	T	U	switch	Low
255	Page 6-...	Fan speed high, status			1 bit	C	-	W	T	U	switch	Low
256	Page 6-...	Fan speed off, status			1 bit	C	-	W	T	U	switch	Low
257	Page 6-...	Fan Automatic operation, status			1 bit	C	-	W	T	U	enable	Low
258	Page 6-...	Current setpoint adjustment			2 bytes	C	R	-	T	-	temperature (°C)	Low
259	Page 6-...	Heating/Cooling mode			1 bit	C	R	-	T	-	cooling/heating	Low
260	Page 6-...	Comfort mode			1 bit	C	R	-	T	-	enable	Low
261	Page 6-	Standby mod										

6.3.2 “Room temperature control”

273	Page 6-...	Actual temperature			bytes	C	R	-	T	-	temperature (°C)	Low
274	Page 6-...	Power on/off, status			1 bit	C	-	W	-	U	switch	Low
275	Page 6-...	Operation mode, status			1 byte	C	-	W	-	U	HVAC mode	Low
276	Page 6-...	Operation mode			1 byte	C	R	-	T	-	HVAC mode	Low
277	Page 6-...	Fan speed, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
278	Page 6-...	Fan speed			1 byte	C	R	-	T	-	percentage (0..100%)	Low
279	Page 6-...	Window contact			1 bit	C	-	W	T	U	window/door	Low
280	Page 6-...	Presence detector			1 bit	C	-	W	T	U	occupancy	Low
294	Page 6-...	Locking object			1 bit	C	-	W	-	-	enable	Low

6.3.2 “Room temperature control”

□	□				DPT
246	**External temperature sensor**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.001 temperature(℃)**
Õ □ □		Û	□	k	□-50~99.8℃
247	**Current temperature setpoint** **Base temperature setpoint**	**Page 6-{{...}}**	**2byte**	**C,W,U**	**9.001 temperature □ ℃ □**
247	**Current temperature setpoint, status**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.001 temperature □ ℃ □**

“Master” **C,W,U □**

□ □ “Current temperature setpoint” Ñ k □

Õ □ □ Õ k

“Base temperature setpoint” Ñ Õ

Õ □ Õ □ k

Õ k

“Slave” **C,W,T,U**

275	Operation mode, status	Page 6-{{...}}	1byte	C,W,T,U	20.102 HVAC mode

1bit □ □

249——

250——

251—— □

252——

"1" k

"Single" □"Slave" □ 4 k

1byte 275 Ñ □

"Master" □"Single" **C,W,U** "Operation mode" Ñ □

k

"Slave" **C,W,T,U** "Operation mode, status" Ñ

□ k

□ 1- 2- 3- □ 4- k

253	Fan speed low, status	Page 6-{{...}}	1bit	C,W,T,U	1.001 switch
254	Fan speed medium, status	Page 6-{{...}}	1bit	C,W,T,U	1.001 switch
255	Fan speed high, status	Page 6-{{...}}	1bit	C,W,T,U	1.001 switch
256	Fan speed off, status	Page 6-{{...}}	1bit	C,W,T,U	1.001 switch
277	Fan speed, status	Page 6-{{...}}	1byte	C,W,T,U	5.001 percentage(0..100%)

□ 4 1bit (253 254 255 256) 1 1byte Fan speed, status

□ k

1bit □

253——

254——

255——□

256—— Õ "1 bit object for fan speed off" □ Ñ k

"Single" □"Slave" □ 4 k

“1” k 1bit off

□ 0 □ 1bit off □ 0 k

1byte □

k 277 k

257 Fan Automatic operation, status Page 6-{{...}} 1bit C,W,T,U 1.003 enable

Õ □ Ñ

1bit

“1”

“Single” “Slave” 4

1byte 276

“Master” C,R,T “Single” C,T “Operation mode, status”

“Slave” C,T

1bit □

266——

267——

268——□

269—— Õ “1 bit object for fan speed off” □ Ñ k

“Single” □“Slave” □ 4 k

Û “1” k

1bit-off □ Û “0”□ □

□ □

1bit-off □ Û “1”□ □

□ k

1byte □

k 278 Û

k

“Master” C,R,T□ “Single” □“Slave” C,T k

270	**Fan Automatic operation**	**Page 6-{{...}}**	**1bit**	**C,T C,L n**

272	**Current base temperature setpoint, status**	**Page 6-{{...}}**	**2byte**	**C,T**	**9.001 temperature**
“Master” Õ □ □ Ñ k □ k “Slave” □ “Single” k					
273	**Actual temperature**	**Page 6-{{...}}**	**1bit**	**C,R,T**	**9.001 temperature**
“Internal sensor combine with External sensor” Õ □ □ Ñ k Û k					
274	**Power on/off**	**Page 6-{{...}}**	**1bit**	**C,W,U**	**1.001 switch**
274	**Power on/off, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
“Master” **C,W,U** “Power on/off” Ñ □ k “Slave” **C,W,T,U** “Power on/off, status” Ñ □ k “Single” k □ 1 ˚ 0 ˚					
279	**Window contact**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.019 Window/door**
Õ □ □ k □ 1 ˚ 0 ˚ “Slave” k					
280	**Presence detector**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.018 occupancy**
Õ □ □ k □ 1 ˚ 0 ˚ “Slave” k					

294	Locking object	Page 6-{{...}}	1bit	C,W	1.003 enable
Õ □ □ □ /□ □ □ □ k □ 1 ˚ □ □ 0 ˚ □ Õ □ ! □ □ □ ! □ ! Â ! □ □ k					

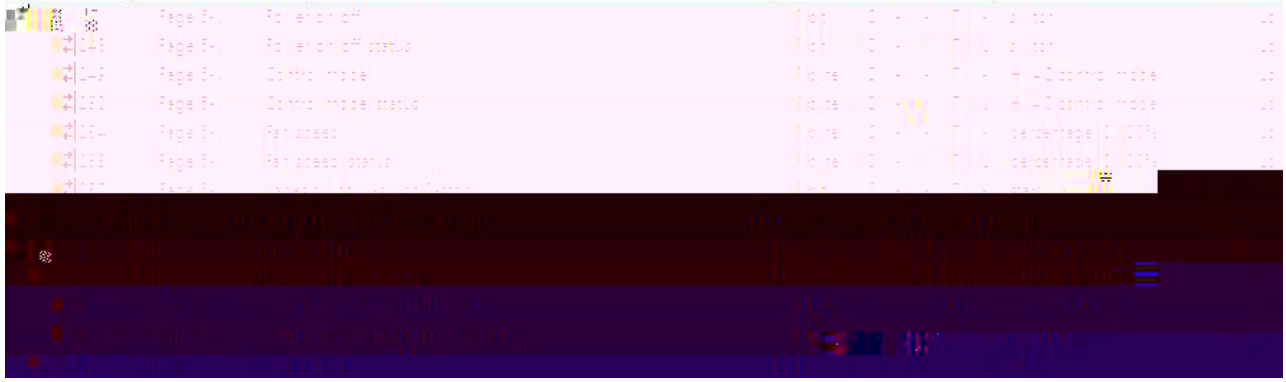
6.3.2 “Room temperature control” □ □

6.3.3.“Air conditioner” □ □

□ Û □ □ □ □ □ Û □ □

□ ! ! ! Õ ! ! □ □ □ □ k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low



6.3.3 “Air conditioner” □ □

□	□				DPT
246	**External temperature sensor**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.001 temperature(℃)**
Õ □ □		Û	□		k
247	**Power on/off**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.001 switch**
Õ □ □	Û	KNX	k		
248	**Power on/off, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
Õ □ □			□	k □ 1 ˚ 0 ˚	

249	**Control mode**	**Page 6-{{...}}**	**1byte**	**C,T**	**20.105 HAVC control mode**
Õ □ □ Û k □ 0- 1- 3- 9-Û 14- k					
250	**Control mode, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**20.105 HAVC control mode**
Õ □ □ □ k □0- 1- 3- 9-Û 14- k					
254	**Fan speed**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage** **5.100 fan stage**
Õ □ □ Û k Õ k					
255	**Fan speed, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage** **5.100 fan stage**
Õ □ □ □ k Õ k					
257	**Vanes swing (1-swing,0-stop)**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.010 start/stop**
□ □ Õ □ □ Ñ k Û k					
258	**Vanes swing (1-swing,0-stop), status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.010 start/stop**
□ □ Õ □ □ Ñ k k □ 1—— 0——					
259	**Vanes position 1..5**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.010 counter pulses(0..255)**
□ Õ □ □ Ñ k Û 1..5 k					
260	**Vanes position 1..5, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.010 counter pulses(0..255)**
□ Õ □ □ Ñ k 1..5 □ k					
261	**Current setpoint adjustment**	**Page 6-{{...}}**	**1byte** **2byte**	**C,T**	**5.010 counter pulses(0..255)** **9.001 temperature(℃)**
Õ □ □ Õ Û k □ Õ **2byte KNX □1byte KNX □ □** **17℃ 17□ □ □ k**					

262	**Current temperature setpoint, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.010 counter pulses(0..255)** **9.001 temperature(℃)**
Õ □ □ Õ □ k					

6.3.3 “Air conditioner”□ □

6.3.4.“Audio control”□ □

□ Û □ □ □ □ □□

□ Û □ □ □ ! □□ ! □□ ! ! ! ! □ □

□ □ □□ □ Û □ □ □ □

□□ Û□ k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
247	Page 6-...	Play=1/Pause=0			1 bit	C	-	-	T	-	start/stop	Low
252	Page 6-...	Volume+=1/Volume-=0			1 bit	C	-	-	T	-	step	Low
253	Page 6-...	Power on/off, status			1 bit	C	-	W	T	U	switch	Low
254	Page 6-...	Play=1/Pause=0, status			1 bit	C	-	W	T	U	start/stop	Low
255	Page 6-...	Volume, status			1 byte	C	-	W	T	U	percentage (0...100%)	Low
256	Page 6-...	Mute			1 bit	C	-	-	T	-	enable	Low
	Page 6-...	Mute, status			1 bit	C	-	W	T	U	enable	Low
260	Page 6-...	Artist name			14 bytes	C	-	W	T	U	Character String (ISO 8859-1)	Low
261	Page 6-...	Play			1 bit	C	-	-	T	-	enable	Low
262	Page 6-...	Pause			1 bit	C	-	-	T	-	enable	Low
263	Page 6-...	Play, status			1 bit	C	-	W	T	U	enable	Low
264	Page 6-...	Pause, status			1 bit	C	-	W	T	U	enable	Low
265	Page 6-...	Next track			1 bit	C	-	-	T	-	enable	Low

6.3.4 “Audio control”□ □

□	□				DPT
246	**Power on/off**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.001 switch**
□ □ Õ□ □ Ñ k Û □ / KNX k □ 1—— 0——					

247	Play=1/Pause=0	Page 6-{{...}}	1bit	C,T	1.010 start/stop
/ 1 Õ □ □ Ñ k / □ □ k □ 1−− □ 0−− □					
248	Next track=1/Previous track=0	Page 6-{{...}}	1bit	C,T	1.007 step
□/ □ 1 Õ □ □ Ñ k □ □/ □ k □ 1−− □ 0−− □					
249	Absolute volume	Page 6-{{...}}	1bit	C,T	5.001 percentage 5.004 percentage
1byte Õ □ □ □ □ □ k □0..100 / 0..255					
250	Play mode	Page 6-{{...}}	1byte	C,T	5.010 counter pluses(0..255)
Õ □ □ Û □ Õ k					
251	Play mode, status	Page 6-{{...}}	1byte	C,W,T,U	5.010 counter pluses(0..255)
Õ □ □ □ □ □ k					
252	Volume+=1/Volume-=0	Page 6-{{...}}	1bit	C,T	1.007 step
1bit Õ □ □ □ □ □ k □ 1−− □ □ 0−− □ □					
253	Power on/off, status	Page 6-{{...}}	1bit	C,W,T,U	1.001 switch
□ □ Õ □ □ Ñ k □ □ k					
254	Play=1/Pause=0, status	Page 6-{{...}}	1bit	C,W,T,U	1.010 start/stop
Õ □ □ □ □ / □ k					

255	**Volume, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage** **5.004 percentage**
1byte Õ □ □ □ □ □ □ k □ 0..100 / 0..255 k					
256	**Mute**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.003 enable**
□ □ □ Õ □ □ Ñ k □ □ □ □ k □ 1 ˚ □ □ 0 ˚ □ □					
257	**Mute, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.003 enable**
□ □ □ Õ □ □ Ñ k □ □ □ □ k					
258	**Track name**	**Page 6-{{...}}**	**14byte**	**C,W,T,U**	**16.001 character string (ISO 8859-1)**
Õ □ □ □ k					
259	**Album name**	**Page 6-{{...}}**	**14byte**	**C,W,T,U**	**16.001 character string (ISO 8859-1)**
Õ □ □ □ □ k					
260	**Artist name**	**Page 6-{{...}}**	**14byte**	**C,W,T,U**	**16.001 character string (ISO 8859-1)**
Õ □ □ □ k					
261	**Play**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.003 enable**
/ 2 Õ □ □ Ñ k □ □ k 1 0 k					
262	**Pause**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.003 enable**
/ 2 Õ □ □ Ñ k Õ □ □ □ □ k 1 0 k					
263	**Play, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.003 enable**
/ 2 Õ □ □ Ñ k □ □ □ k 1 0 k					
264	**Pause, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.003 enable**

/ 2 Õ □ □ Ñ k □ □ □ k 1 0 k					
265	**Next track**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.003 enable**
□ / □ 2 Õ □ □ Ñ k □ □ k 1 □ 0 k					
266	**Previous track**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.003 enable**
□ / □ 2 Õ □ □ Ñ k □ □ k 1 □ 0 k					

6.3.4 “Audio control” □ □

6.3.5.“Colour and colour temperature control” □ □

□ Û □ □ Û Õ □ k □ **RGBCW** □

Brightness+Colour Temperature Û Õ □ k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	Red dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
247	Page 6-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
248	Page 6-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
8	Page 6-...	Switch			1 bit	C	-	-	T	-	switch	Low
259	Page 6-...	Switch, status			1 bit	C	-	W	T	-	switch	Low
294	Page 6-...	Locking object			1 bit	C	-	W	-	-	enable	Low

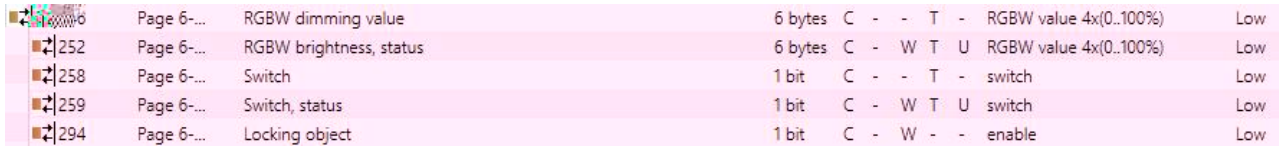
RGB_3x1byte

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	RGB dimming value			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low
252	Page 6-...	RGB brightness, status			3 bytes	C	-	W	T	U	RGB value 3x(0..255)	Low
258	Page 6-...	Switch			1 bit	C	-	-	T	-	switch	Low
259	Page 6-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
294	Page 6-...	Locking object			1 bit	C	-	W	-	-	enable	Low

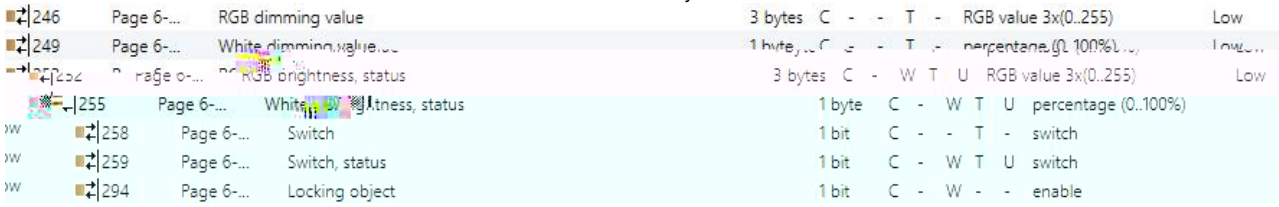
RGB_1x3byte

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	Red dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
247	Page 6-...	Green dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
248	Page 6-...	Blue dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
249	Page 6-...	White dimming value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
252	Page 6-...	Red brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
253	Page 6-...	Green brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
254	Page 6-...	Blue brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
255	Page 6-...	White brightness, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
258	Page 6-...	Switch			1 bit	C	-	-	T	-	switch	Low
259	Page 6-...	Switch, status			1 bit	C	-	W	T	U	switch	Low
294	Page 6-...	Locking object			1 bit	C	-	W	-	-	enable	Low

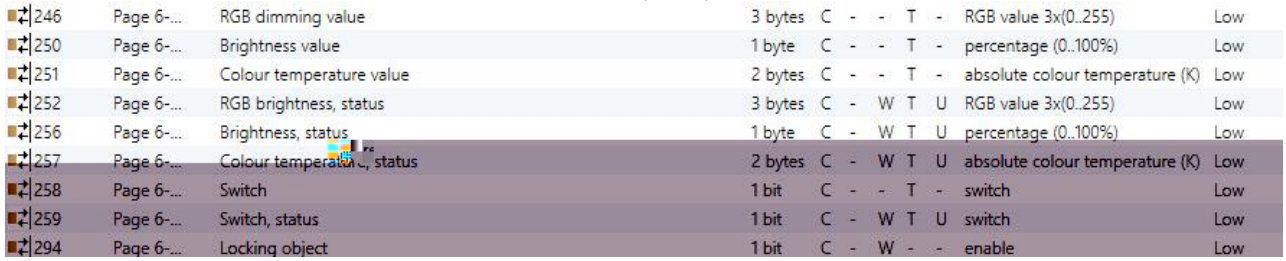
RGBW_4x1byte



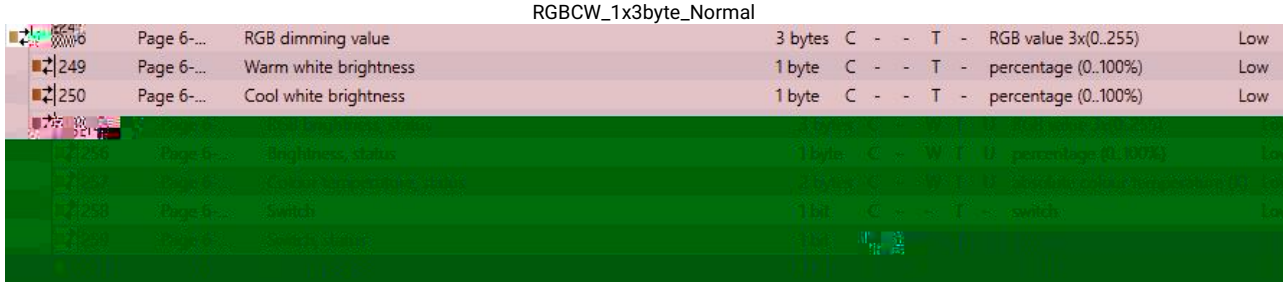
RGBW_1x6byte



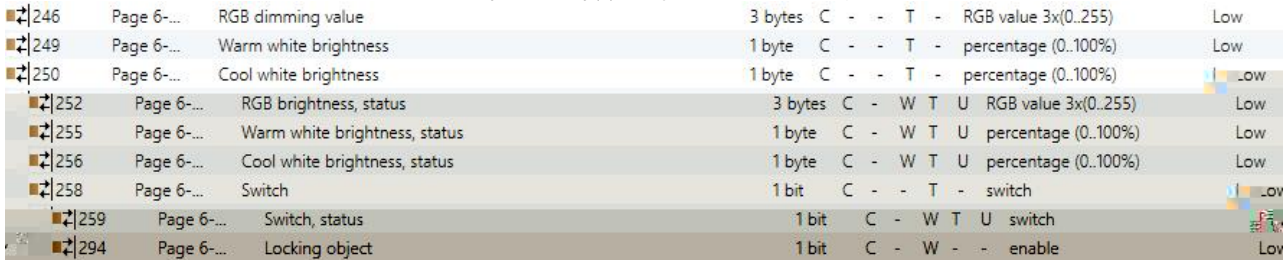
RGBW_3byte+1byte



RGBCW_1x3byte_Normal



RGBCW_1x3byte_Directly(..) &Brightness+Colour Temperature



RGBCW_1x3byte_Directly(..) &Warm/Cool white brightness

6.3.5 “Colour and colour temperature control” □ □

□	□				DPT
246	**RGB dimming value**	**Page 6-{{...}}**	**3byte**	**C,T**	**232.600 RGB value 3x(0..255)**
252	**RGB brightness, status**	**Page 6-{{...}}**	**3byte**	**C,W,T,U**	**232.600 RGB value 3x(0..255)**

□ □ □ RGB 1x3byte □ RGBW 3byte+1byte Ñ

Â Â k

Obj.246 □ Û RGB Â k

Obj.252 □ RGB Â k

247	**Green dimming value**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
253	**Green dimming value, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

□ □□ RGB 3x1byte RGBW 4x1byte Ñ

Â Â k □0...100%

Obj.247□ Û G(Â)□□ k

Obj.253□ G(Â)□□ k

248	**Blue dimming value**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
254	**Blue dimming value, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

□ □□ RGB 3x1byte RGBW 4x1byte Ñ

Â Â k □0...100%

Obj.248□ Û B(Â)□□ k

Obj.254□ B(Â)□□ k

249	**White dimming value**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
255	**White dimming value, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

□ □□ RGBW 4x1byte □ 3byte+1byte Ñ Â

k

□0...100%

Obj.249□ Û W(Â)□□ k

Obj.255□ W(Â)□□ k

249	**Warm white brightness**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
255	**Warm white brightness, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

□ □□ Â k □0...100%

Obj.249□ Û Û k

Obj.255□ &□ / □ k

250	**Brightness**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
256	**Brightness, status**	**Page 6-{{...}}**	**1byte**	**C,W,T,U**	**5.001 percentage(0..100%)**

□ □□ Â / Â k □0...100%

Obj.260

6.3.6.“Air Quality display”□ □

□ Û Õ □ k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-Items 1	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	
246	Page 6-Items 1	Humidity value			2 bytes	C	-	W	T	U	humidity (%)	Low
246	Page 6-Items 1	PM2.5 value			2 bytes	C	-	W	T	U	pulses	Low
246	Page 6-Items 1	PM10 value			2 bytes	C	-	W	T	U	pulses	Low
246	Page 6-Items 1	CO2 value			2 bytes	C	-	W	T	U	parts/million (ppm)	Low
246	Page 6-Items 1	VOC value			2 bytes	C	-	W	T	U	pulses	Low
246	Page 6-Items 1	AQI value			2 bytes	C	-	W	T	U	pulses	Low
246	Page 6-Items 1	Brightness value			2 bytes	C	-	W	T	U	lux (Lux)	Low
246	Page 6-Items 1	Rain state			1 bit	C	-	W	T	U	switch	Low
247	Page 6-Items 2	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low
248	Page 6-Items 3	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low
249	Page 6-Items 4	Temperature value			2 bytes	C	-	W	T	U	temperature (°C)	Low

6.3.6 “Air Quality display”□ □

□	□				DPT
246	**Temperature**	**Page 6-{{Items 1}}**	**2Byte**	**C,W,T,U**	**9.001 temperature(℃)**
Õ □ □		Û	□ k		□-40~99℃ □ “Description” □ □ □ “Page x-Items y” k k
246	**Humidity**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**9.007 humidity□%□**
Õ □ □		Û	□ k		□0~100%
246	**PM2.5**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.001 pulse** **9.030 concentration(ug/m3)**
Õ □ □		PM2.5 □			ug/m^3 k □0~999ug/m^3 Õ k
246	**PM10**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.001 pulse** **9.030 concentration(ug/m3)**
Õ □ □		PM10 □			ug/m^3 k □0~999ug/m^3 Õ k
246	**CO2**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.001 pulse** **9.008 parts/million(ppm)**
Õ □ □		CO2 □			ppm k □0~4000ppm
246	**VOC**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.001 pulse**

9.030 concentration(ug/m3)
9.008 parts/million(ppm)

Õ □ □ VOC □ mg/m³ ppm k

□0~9.99mg/m³ 0~4000ppm Õ k

Õ 7.001 pulses 7.001 pulses □ □

5000 □ug/m³□ 5.00mg/m³

246	**AQI**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.001 pulses**

Õ □ □ AQI □ k □0~500

246	**Brightness**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**7.013 brightness(lux)** **9.004 lux(Lux)**

Õ □ □ □ lux k

□0~50000lux, k

246	**Wind speed**	**Page 6-{{Items 1}}**	**2byte**	**C,W,T,U**	**9.005 speed** **9.028 wind speed**

Õ □ □ □ m/s km/h k

□0~50m/s □ 0~183km/h k

246	**Rain state**	**Page 6-{{Items 1}}**	**1bit**	**C,W,T,U**	**1.001 switch**

Õ □ □ □ □ □ □ □ □

6.3.7.“Floor heating”□ □

“ Master ” □ Û Õ □ Û !

□ □ ! Õ k

“ Single ” □ Û Õ □ Û □

□ k

“ Slave ” □ Û □ □ □ ! ! Õ k

6.3.7 “Floor heating”□ □

□	□				DPT
246	**External temperature sensor**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.001 temperature(℃)**
Õ □ □ □ Ñ Û □ k □-50~99.8℃					
247/250	**Power on/off, status**	**Page 6-{{...}}**	**1bit**	**C,R,T/ C,W,T,U**	**1.001 switch**
247/250	**Power on/off**	**Page 6-{{...}}**	**1bit**	**C,T/ C,W,U**	**1.001 switch**
“Master” “Power on/off” C,W,U □ “Power on/off, status” C,R,T Û □ “Slave” “Power on/off” C,T Û KNX □ “Power on/off, status” C,W,T,U □ □ “Single” k □ ! k □ 1 ˆ					

248	**Heating on/off**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.001 switch**
248	**Heating control value**	**Page 6-{{...}}**	**1byte**	**C,T**	**5.001 percentage(0..100%)**

□ □ □ Û æ □ k

Û □ Heating on/off - 2-point control □ □ on/off

Û □ Heating PWM - PI control □ □ on/off

Û □ Heating continuous control - PI control □ □ 0…100%

“Slave” □ k

249	**Current temperature setpoint**	**Page 6-{{...}}**	**2byte**	**C,W,U**	**9.001 temperature(℃)**
249	**Current temperature setpoint, status**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.001 temperature(℃)**

“Master” **C,W,U** “Current temperature setpoint” Ñ Õ k

“Slave” **C,W,T,U** “Current temperature setpoint, status” Ñ □ Õ k

“Single” k

251	**Scene**	**Page 6-{{...}}**	**1byte**	**C,W**	**18.001 scene control**

□ □ Õ □ □ Ñ k □ / k

“Slave” k

258	**Current setpoint adjustment, status**	**Page 6-{{...}}**	**2byte**	**C,R,T**	**9.001 temperature**
258	**Current setpoint adjustment**	**Page 6-{{...}}**	**2byte**	**C,T**	**9.001 temperature**

“Master” **C,R,T** “Current setpoint adjustment, status” Ñ □ Õ k

“Slave” **C,T** “Current setpoint adjustment” Ñ Û Õ k

“Single” k

273	**Actual temperature**	**Page 6-{{...}}**	**2byte**	**C,R,T**	**9.001 temperature**

□ Õ □ □ Ñ k Û k

6.3.7 “Floor heating” □ □

6.3.8.“Ventilation System”□ □

□ □ □ □ Û Õ □ k □ □ □ □ Û PM2.5 CO2

Õ □ k

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
246	Page 6-...	Power on/off			1 bit	C	-	-	T	-	switch	Low
247	Page 6-...	Power on/off, status			1 bit	C	-	W	T	U	switch	Low
248	Page 6-...	En./Dis. Heat recovery			1 bit	C	-	W	-	-	enable	Low
249	Page 6-...	Heat recovery			1 bit	C	-	-	T	-	switch	Low
250	Page 6-...	Filter timer reset			1 bit	C	-	W	-	-	reset	Low
251	Page 6-...	Filter timer counter			2 bytes	C	-	W	T	U	time (h)	Low
252	Page 6-...	Filter alarm			1 bit	C	-	-	T	-	alarm	Low
253	Page 6-...	Fan Speed No.1 1Bit			1 bit	C	-	W	T	U	switch	Low
254	Page 6-...	Fan Speed No.2 1Bit			1 bit	C	-	W	T	U	switch	Low
255	Page 6-...	Fan Speed No.3 1Bit			1 bit	C	-	W	T	U	switch	Low
256	Page 6-...	Automatic function			1 bit	C	-	W	T	U	enable	Low
257	Page 6-...	CO2 value			2 bytes	C	-	W	T	U	parts/million (ppm)	Low
258	Page 6-...	PM2.5 value			2 bytes	C	-	W	T	U	pulses	Low
259	Page 6-...	Scene			1 byte	C	-	W	-	-	scene control	Low
260	Page 6-...	Fan speed			1 byte	C	-	-	T	-	percentage (0..100%)	Low
261	Page 6-...	Fan speed, status			1 byte	C	-	W	T	U	percentage (0..100%)	Low
262	Page 6-...	Heat recovery, status			1 bit	C	-	W	T	U	switch	Low
294	Page 6-...	Locking object			1 bit	C	-	W	-	-	enable	Low

6.3.8 “Ventilation system”□ □

□	□				DPT
246	**Power on/off**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.001 switch**
Õ □ □ Û KNX k □ 1—— 0——					
247	**Power on/off, status**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
Õ □ □ □ k					
248	**En./Dis. Heat Recovery**	**Page 6-{{...}}**	**1bit**	**C,W**	**1.003 enable**
Õ □ □ / □ □ k / □ □ □ k □ □ k					
249	**Heat Recovery**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
Õ □ □ Û / □ k □ 1—— 0——					
250	**Filter time reset**	**Page 6-{{...}}**	**1bit**	**C,W**	**1.015 reset**
Õ □ □ □ □ □ □ □ □ Ô k □					

1——□

251	**Filter time counter**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**7.007 time(h)**

Õ□□ Ô □ □ Ô Û □ □ k

□ □ k

252	**Filter alarm**	**Page 6-{{...}}**	**1bit**	**C,T**	**1.005 alarm**

□ □ Õ Õ□□ □ □ k □

1——□

253	**Fan Speed No.1 1Bit**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
254	**Fan Speed No.2 1Bit**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**
255	**Fan Speed No.3 1Bit**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.001 switch**

□ □□ “1bit” Ñ

k □ □ □□ k

256	**Automatic function**	**Page 6-{{...}}**	**1bit**	**C,W,T,U**	**1.003 enable**

Õ□□ □ □ k

Õ □ □ k ! !

k

□/ □ □□ k

257	**CO2**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.008 parts/million(ppm)** **7.001 pulses**

Õ□□ CO2 □ ppm k □

0~4000ppm

CO2 Õ □ CO2

k

Õ k

258	**PM2.5**	**Page 6-{{...}}**	**2byte**	**C,W,T,U**	**9.030 concentration(ug/m³)** **7.001 pulses**

Õ□□ PM2.5 □ ug/m³ k □

0~999ug/m³

PM2.5 Õ □ PM2.5

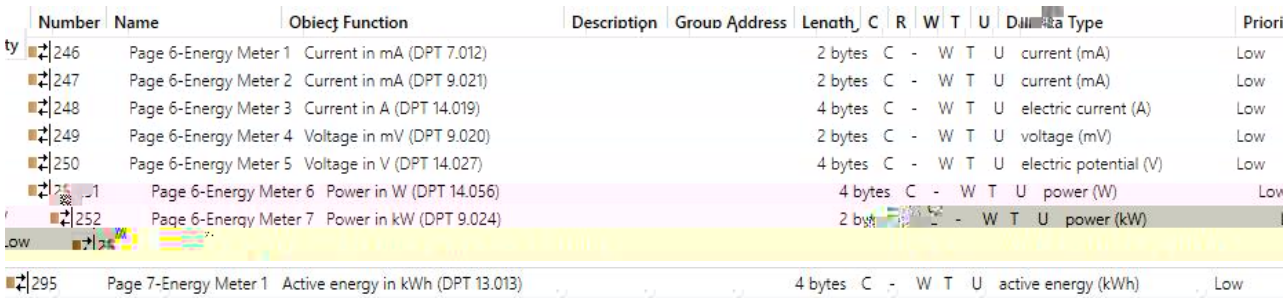
k

Õ k

259	Scene	Page 6-{{...}}	1byte	C,W	18.001 scene control
□ □ Õ □ □ Ñ k □ / k					
260	Fan speed	Page 6-{{...}}	1byte	C,T	5.010 percentage(0..100%)
Õ □ □ “1byte” Ñ Û k k					
261	Fan speed, status	Page 6-{{...}}	1byte	C,W,T,U	5.010 percentage(0..100%)
Õ □ □ “1byte” Ñ □ k k					
262	Heat recovery, status	Page 6-{{...}}	1byte	C,W,T,U	1.001 switch
Õ □ □ □ k					

6.3.8 “Ventilation System”□ □

6.3.9.“Energy Metering display”□ □



6.3.9 “Energy Metering display”□ □

□	□				DPT
246	Current in mA(DPT 7.012)	Page 6-{{Energy Meter 1}}	2byte	C,W,T,U	7.012 current (mA)
Õ □ □ k □0~65535mA □ 1mA k □ “Description” □ □ □ “Page x-Energy Meter y” k k					
246	Current in mA(DPT 9.021)	Page 6-{{Energy Meter 1}}	2byte	C,W,T,U	9.021 current (mA)
Õ □ □ k □-670760~670760mA □ 0.1mA k					

246	**Current in A(DPT 14.019)**	**Pa**

6.4.“Internal temperature measurement”□ □

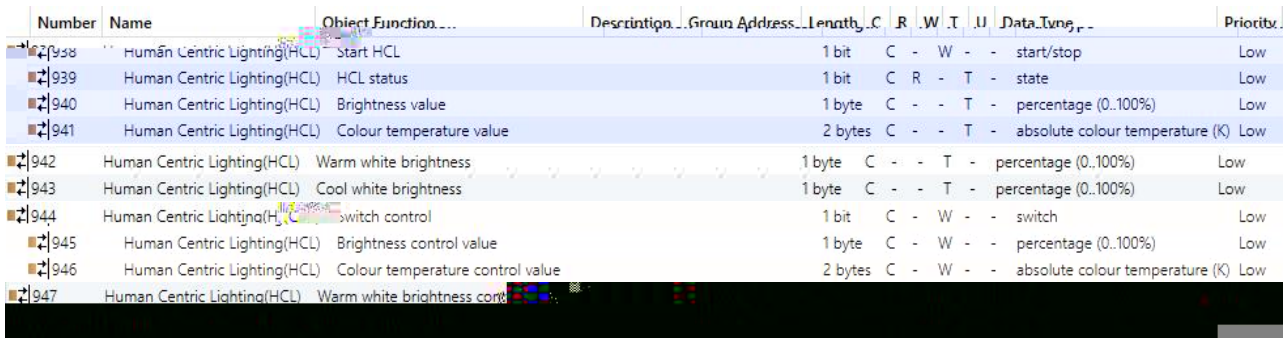
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
912	Internal sensor	Actual temperature			2 bytes	C	R	-	T	-	temperature (°C)	Low
913	Internal sensor	Temp.correction(-10..10)K			2 bytes	C	-	W	-	-	temperature difference (K)	Low
	al sensor	Temp.error report			1 bit	C	R	-	T	-	alarm	Low

6.4 “Internal temperature measurement”□ □

□	□				DPT
912	**Actual temperature**	**Internal sensor**	**2Bytes**	**C,R,T**	**9.001 temperature (℃)**
Õ □ □ Û Õ □ k □-50~99.8℃					
913	**Temp.correction(-10...10)K**	**Internal sensor**	**2Bytes**	**C,W**	**9.002 temperature difference**
Õ □ □ □ Õ □ k					
914	**Temp.error report**	**Internal sensor**	**1bit**	**C,R,T**	**1.005 alarm**
Õ □ □ Û Õ k					

6.4 “Internal temperature measurement”□ □

6.5.“Human Centric Lighting(HCL)”□ □



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
938	Human Centric Lighting(HCL)	Start HCL			1 bit	C	-	W	-	-	start/stop	Low
939	Human Centric Lighting(HCL)	HCL status			1 bit	C	R	-	T	-	state	Low
940	Human Centric Lighting(HCL)	Brightness value			1 byte	C	-	-	T	-	percentage (0..100%)	Low
941	Human Centric Lighting(HCL)	Colour temperature value			2 bytes	C	-	-	T	-	absolute colour temperature (K)	Low
942	Human Centric Lighting(HCL)	Warm white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
943	Human Centric Lighting(HCL)	Cool white brightness			1 byte	C	-	-	T	-	percentage (0..100%)	Low
944	Human Centric Lighting(H	switch control			1 bit	C	-	W	-	-	switch	Low
945	Human Centric Lighting(HCL)	Brightness control value			1 byte	C	-	W	-	-	percentage (0..100%)	Low
946	Human Centric Lighting(HCL)	Colour temperature control value			2 bytes	C	-	W	-	-	absolute colour temperature (K)	Low
947	Human Centric Lighting(HCL)	Warm white brightness con										

6.5 “Human Centric Lighting(HCL)”□ □

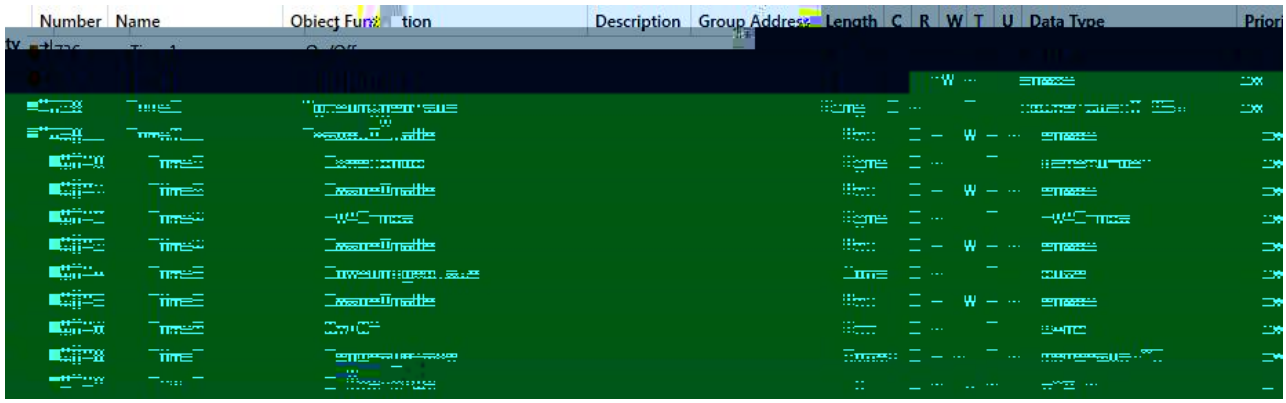
□	□				DPT
938	**Start HCL**	**Human Centric Lighting(HCL)**	**1bit**	**C,W**	**1.010 start/stop**
Õ □ □ □HCL□ Õ k □					
1——					
0——					

939	**HCL status**	**Human Centric Lighting(HCL)**	**1bit**	**C,R,T**	**1.011 state**
Õ □ □ Û HCL k					
940	**Brightness value**	**Human Centric Lighting(HCL)**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
945	**Brightness control value**	**Human Centric Lighting(HCL)**	**1byte**	**C,W**	**5.001 percentage(0..100%)**
□ HCL □ □ □ k □0…100% Obj.940 □ Û Û k Obj.945 □ k					
941	**Colour temperature value**	**Human Centric Lighting(HCL)**	**2byte**	**C,T**	**7.600 absolute colour temperature**
946	**Colour temperature control value**	**Human Centric Lighting(HCL)**	**2byte**	**C,W**	**7.600 absolute colour temperature**
□ □ □ □ Â k □2000...7000 K Obj.941 □ □ HCL Û Â k Obj.946 □ Â k					
942	**Warm white brightness**	**Human Centric Lighting(HCL)**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
947	**Warm white brightness control value**	**Human Centric Lighting(HCL)**	**1byte**	**C,W**	**5.001 percentage(0..100%)**
□ □ □ Â k □0…100% Obj.942 □ Û Û k Obj.947 □ k					
943	**Cool white brightness**	**Human Centric Lighting(HCL)**	**1byte**	**C,T**	**5.001 percentage(0..100%)**
948	**Cool white brightness control value**	**Human Centric Lighting(HCL)**	**1byte**	**C,W**	**5.001 percentage(0..100%)**
□ □ □ Â k □0…100% Obj.943 □ Û Û k Obj.948 □ k					
944	**Switch control**	**Human Centric Lighting(HCL)**	**1bit**	**C,W**	**1.001 switch**

HCL Û □ OFF HCL Û □ Õ □ □ OFF k 0 1 k

6.5 “Human Centric Lighting(HCL)” □ □

6.6.“Weekly timer function” □ □

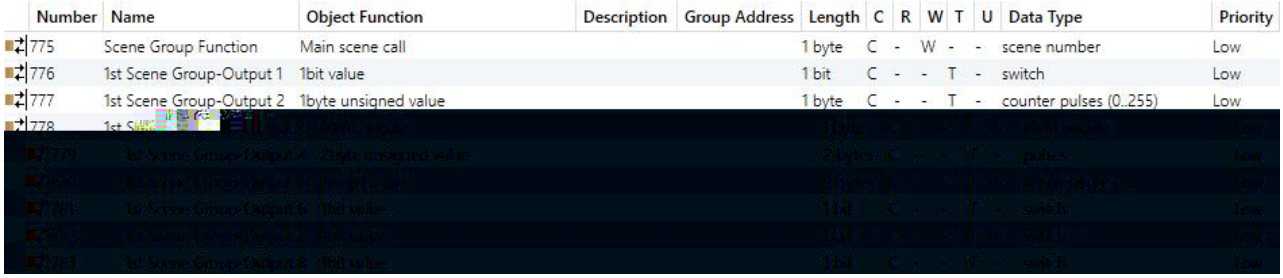


6.6 “Weekly timer function” □ □

□	□				DPT
736	**On/Off** **1byte unsigned value** **HVAC mode** **Scene control** **2byte unsigned value** **Temperature value**	**{{Time 1}}**	**1bit** **1byte** **2byte**	**C,T**	**1.001 switch** **5.010 counter pulses(0..255)** **20.102 HVAC mode** **17.001 scene number** **7.001 pulses** **9.001 temperature**
Õ □ □ Û □ Õ ! Õ Õ k Û Õ k Õ 16 k □ “Description for time function” □ □ □ “Time x” k k					
737	**Disable/Enable**	**{{Time 1}}**	**1bit**	**C,W**	**1.003 enable**
Õ □ □ / □ □ k / □ □ □ k Õ k					

6.6“Weekly timer function” □ □

6.7.“Scene Group function”□ □



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
775	Scene Group Function	Main scene call			1 byte	C	-	W	-	-	scene number	Low
776	1st Scene Group-Output 1	1bit value			1 bit	C	-	-	T	-	switch	Low
777	1st Scene Group-Output 2	1byte unsigned value			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

6.7“Scene Group function”□ □

□	□				DPT
775	**Main scene recall**	**Scene Group**	**1byte**	**C,W**	**17.001 scene number**
□ □ □			□ Û		k □0..63
776/.../ 783	**1bit value** **1byte unsigned value** **HVAC mode** **2byte unsigned value** **Temperature**	**1st Scene Group-{{Output x}}**	**1bit** **1byte** **2byte**	**C,T**	**1.001 switch** **5.010 counter pulses** **20.102 HVAC mode** **7.001 pulses** **9.001 temperature**
□ □ Û □ k Õ □ Õ Û k Õ 8 8 □ k □ “Description for Output x function” □ □ □ “1st Scene Group-Output x” k					

6.7 “Scene Group function”□ □

6.8.“Logic function”□ □

6.8.1.“AND/OR/XOR” □ □

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input a			1 bit	C	-	W	T	U	boolean	Low
841	1st Logic	Input b			1 bit	C	-	W	T	U	boolean	Low
842	1st Logic	Input c			1 bit	C	-	W	T	U	boolean	Low
843	1st Logic	Input d			1 bit	C	-	W	T	U	boolean	Low
844	1st Logic	Input e			1 bit	C	-	W	T	U	boolean	Low
845	1st Logic	Input f			1 bit	C	-	W	T	U	boolean	Low
846	1st Logic	Input g			1 bit	C	-	W	T	U	boolean	Low
847	1st Logic	Input h			1 bit	C	-	W	T	U	boolean	Low
848	1st Logic	Logic result			1 bit	C	-	-	T	-	boolean	Low

6.8.1 “Logic function_AND/OR/XOR”□ □

□	□				DPT
840/.../847	**Input x**	**{{1st Logic}}**	**1bit**	**C,W,T,U**	**1.002 boolean**
Õ □ □ □ □ □ Input x k □ “Description for logic function” □ □ □ “1st Logic” k k					
848	**Logic result**	**{{1st Logic}}**	**1bit**	**C,T**	**1.002 boolean**
Õ □ □ Û □ □ Û □ □ k					

6.8.1 “Logic function_AND/OR/XOR”□ □

6.8.2.“Gate forwarding” □□

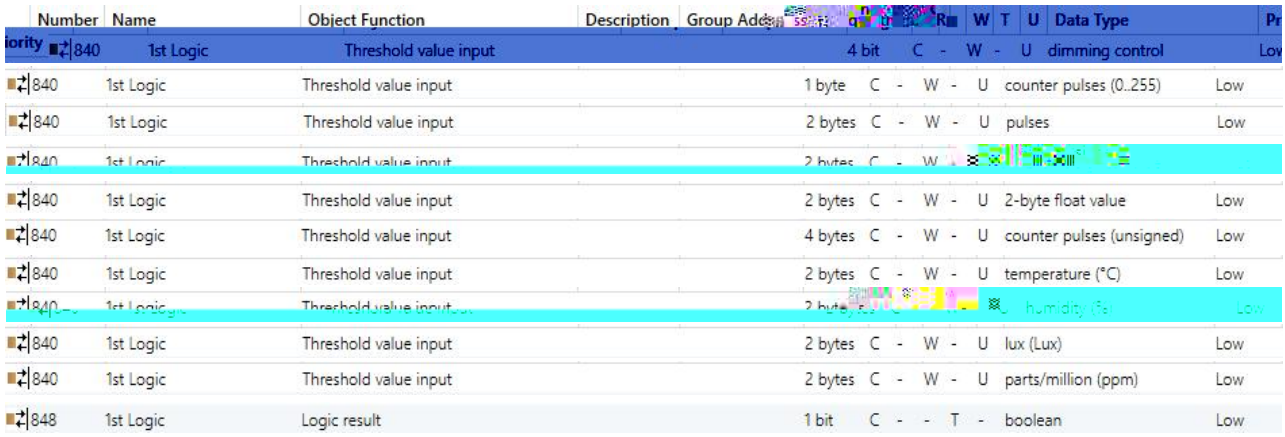
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Gate value select			1 byte	C	-	W	-	-	scene number	Low
841	1st Logic	Input A			1 bit	C	-	W	-	-	switch	Low
842	1st Logic	Input B			1 bit	C	-	W	-	-	switch	Low
843	1st Logic	Input C			1 bit	C	-	W	-	-	switch	Low
844	1st Logic	Input D			1 bit	C	-	W	-	-	switch	Low
845	1st Logic	Output A			1 bit	C	-	-	T	-	switch	Low
846	1st Logic	Output B			1 bit	C	-	-	T	-	switch	Low
847	1st Logic	Output C			1 bit	C	-	-	T	-	switch	Low
848	1st Logic	Output D			1 bit	C	-	-	T	-	switch	Low

6.8.2 “Logic function_Gate forwarding”□□

□	□				DPT
840	**Gate value select**	**{{1st Logic}}**	**1byte**	**C,W**	**17.001 scene number**
Õ□□ □□□□ k					
841/.../844	**Input x**	**{{1st Logic}}**	**1bit 4bit 1byte**	**C,W**	**1.001 switch 3.007 dimming control 5.010 counter pulses(0..255)**
Õ□□ □□□□ Input x k					
845/.../848	**Output x**	**{{1st Logic}}**	**1bit 4bit 1byte**	**C,T**	**1.001 switch 3.007 dimming control 5.010 counter pulses(0..255)**
Õ□□ □ □□□□ k□ □□ □ □ □ Õ k					

6.8.2 “Logic function_Gate forwarding”□□

6.8.3.“Threshold comparator” □ □



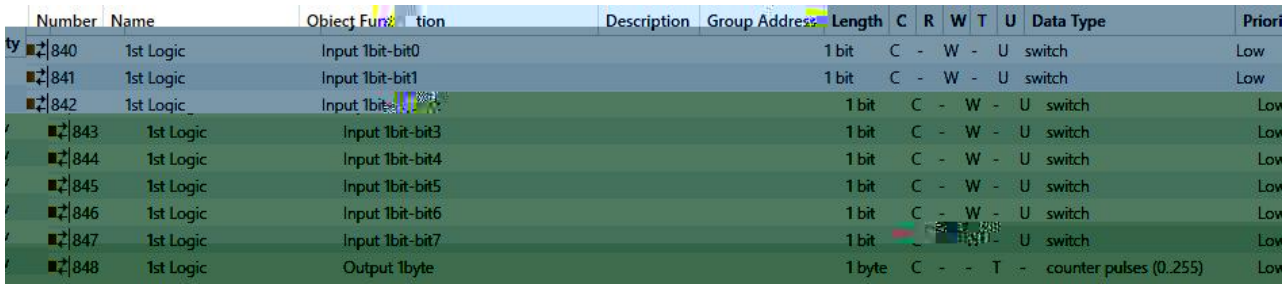
Number	Name	Object Function	Description	Group Ad		W	T	U	Data Type	Pr
iority 840	1st Logic	Threshold value input			4 bit	C -	W -	U	dimming control	Lov
840	1st Logic	Threshold value input			1 byte	C -	W -	U	counter pulses (0..255)	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -	U	pulses	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -			
840	1st Logic	Threshold value input			2 bytes	C -	W -	U	2-byte float value	Low
840	1st Logic	Threshold value input			4 bytes	C -	W -	U	counter pulses (unsigned)	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -	U	temperature (°C)	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -		humidity (%	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -	U	lux (Lux)	Low
840	1st Logic	Threshold value input			2 bytes	C -	W -	U	parts/million (ppm)	Low
848	1st Logic	Logic result			1 bit	C -	-	T -	boolean	Low

6.8.3“Logic function_Threshold comparator”□ □

□	□				DPT
840	**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 8.x signed value 9.x float value 9.001 temperature 9.007 humidity 9.004 lux 9.008 parts/million(ppm)**
Õ □ □ □ k					
848	**Logic result**	**{{1st Logic}}**	**1bit**	**C,T**	**1.002 boolean**
Õ □ □ Û □ □ Û □ □ k □ □ Õ □ Û k					

6.8.3“Logic function_Threshold comparator”□ □

“2x1bit --> 1x2bit” □ □ 2 1bit □ 2bit Input bit1=1, bit0=0--> Output 2bit=2



Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input 1bit-bit0			1 bit	C	-	W	-	U	switch	Low
841	1st Logic	Input 1bit-bit1			1 bit	C	-	W	-	U	switch	Low
842	1st Logic	Input 1bit-bit2			1 bit	C	-	W	-	U	switch	Low
843	1st Logic	Input 1bit-bit3			1 bit	C	-	W	-	U	switch	Low
844	1st Logic	Input 1bit-bit4			1 bit	C	-	W	-	U	switch	Low
845	1st Logic	Input 1bit-bit5			1 bit	C	-	W	-	U	switch	Low
846	1st Logic	Input 1bit-bit6			1 bit	C	-	W	-	U	switch	Low
847	1st Logic	Input 1bit-bit7			1 bit	C	-	W	-	U	switch	Low
848	1st Logic	Output 1byte			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

“8x1bit --> 1x1byte” □ :j 8 "+ 1bit □ 1byte Inp

Number	Name	Object Function	Description	Group Ad	R	W	T	U	Data Type	Pr
840	1st Logic	Input 2byte				W	-	U	pulses	Lov
847	1st Logic	Output 1byte-low				-	T	-	counter pulses (0..255)	Lov
848	1st Lo	put 1byte-high				-	T	-	counter pulses (0..255)	Low

"1x2byte --> 2x1byte" □ □ 1 2byte □ 2 1byte Input 2byte = 55500 ($D8 CC) --> Output 1byte-low = 204 ($CC), Output 1byte-high =216 ($D8)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input 4byte			4 bytes	C	-	W	-	U	counter pulses (unsigned)	Low
847	1st Logic	Output 2byte-low			2 bytes	C	-	-	T	-	pulses	Low
848	1st Logic	Output 2byte-high			2 bytes	C	-	-	T	-	pulses	Low

"1x4byte --> 2x2byte" □ □ 1 4byte □ 2 2byte Input 4byte = 78009500 ($04 A6 54 9C) --> Output 2byte-low = 21660 ($54 9C), Output 2byte-high =1190 ($04 A6)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input 3byte			3 bytes	C	-	W	-	U	RGB value 3x(0..255)	Low
846	1st Logic	Output 1byte-low			1 byte	C	-	-	T	-	counter pulses (0..255)	Low
847	1st Logic	Output 1byte-middle			1 byte	C	-	-	T	-	counter pulses (0..25	

"1x3byte --> 3x1byte" □ □ 1 3byte □ 3 1byte Input 3byte = $78 64 C8--> Output 1byte-low = 200 ($C8) , Output 1byte-middle = 100 ($64) , Output 1byte-high =120 ($78)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input 1byte-low			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
841	1st Logic	Input 1byte-middle			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
842	1st Logic	Input 1byte-high			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
848	1st Logic	Output 3byte			3 bytes	C	-	-	T	-	RGB value 3x(0..255)	Low

"3x1byte --> 1x3byte" □ □ 3 1byte □ 1 3byte Input 1byte-low = 150 ($96), Input 1byte-middle = 100 ($64), Input 1byte-high = 50 ($32)--> Output 3byte = $32 64 96

6.8.4 "Format convert" □ □

□	□				DPT
840	**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**
Õ □ □ □ □ □ □ k					
848	**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**
Õ □ □ □ □ k					

6.8.4 "Logic function_Format convert" □ □

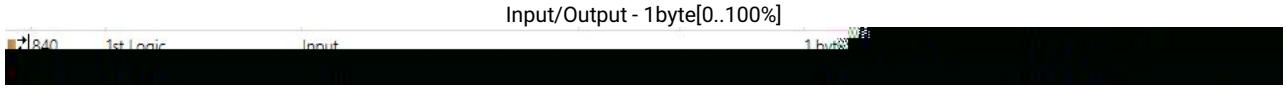
6.8.5.“Delay function” □ □

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
840	1st Logic	Input			1 bit	C	-	W	-	-	switch	Low
848	1st Logic	Output			1 bit	C	-	-	T	-	switch	Low

Input/Output - 1bit[On/Off]

840	1st Logic	Input			1 byte	C	-	W	-	-	percentage (0..100%)	Low
848	1st Logic	Output			1 byte	C	-	-	T	-	percentage (0..100%)	Low

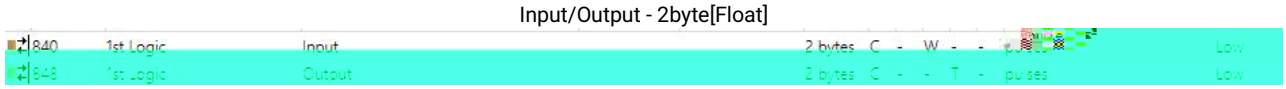
Input/Output - 1byte[0..100%]



Input/Output - 1byte[0..255]

840	1st Logic	Input			2 bytes	C	-	W	-	-	temperature (°C)	Low
848	1st Logic	Output			2 bytes	C	-	-	T	-	temperature (°C)	Low

Input/Output - 2byte[Float]



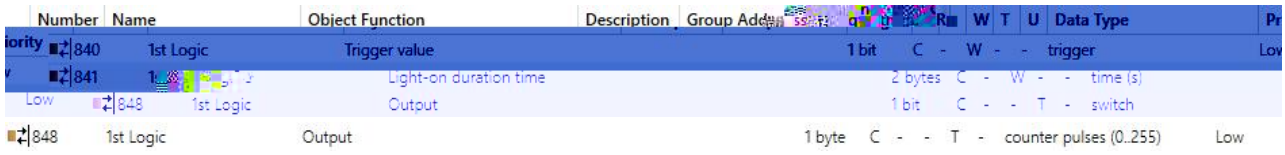
Input/Output - 2byte[0..65535]

6.8.5 “Delay function” □ □

□	□				DPT
840	**Input**	**{{1st Logic}}**	**1bit** **1byte** **2byte**	**C,W**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
Õ □ □ □ □ k					
848	**Output**	**{{1st Logic}}**	**1bit** **1byte** **2byte**	**C,T**	**1.001 switch** **5.001 percentage** **5.010 counter pulses** **9.001 temperature** **7.001 pulses**
Õ □ □ Û □ □ □ k					

6.8.5 “Delay function” □ □

6.8.6.“Staircase lighting” □ □



6.8.6 “Staircase lighting” □ □

□	□				DPT
840	**Trigger value**	**{{1st Logic}}**	**1bit**	**C,W**	**1.017 trigger**
Õ □ □			k		
841	**Light-on duration time**	**{{1st Logic}}**	**2byte**	**C,W**	**7.005 time(s)**
Õ □ □					k
848	**Output**	**{{1st Logic}}**	**1bit** **1byte**	**C,T**	**1.001 switch** **5.010 counter pulses**
Õ □ □	□	1	□	2 k	Õ k

6.8.6 “Staircase lighting” □ □