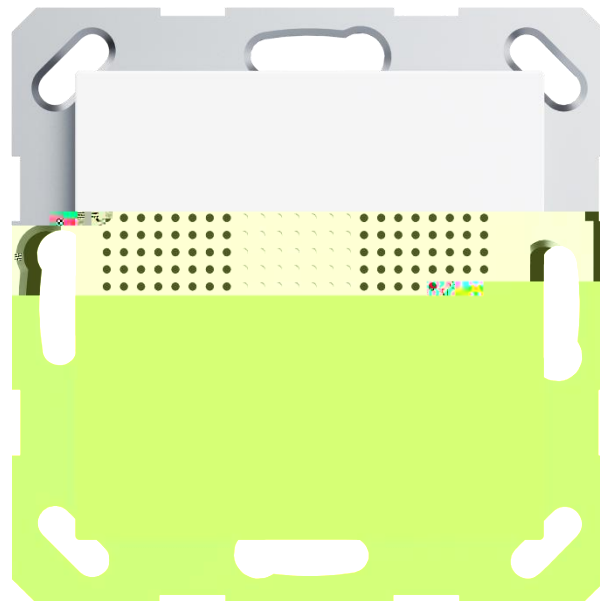


K-BUS

KNX The a L e,55 _V1.2

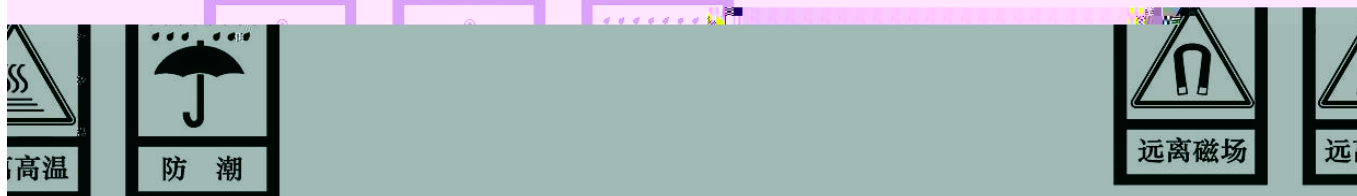
CHTL-02/00.2.00



KNX/EIB

注意事项

1、请远离强磁场、高温、潮湿等环境，



率落在地上或使之受到强力冲击；

2、不要将设备：



布或具挥发性的试剂擦拭设备；

3、不要使用湿



	-----	1
	-----	2
	-----	3
3.1.	-----	3
3.2.	-----	3
	-----	4
ETS	-----	5
5.1. KNX	-----	5
5.2.	Ge e a e g -----	9
5.3.	I e a e ea e e -----	10
5.4.	I -----	14
5.4.1.	-----	15
5.4.2.	-----	18
5.5.	R e e a e c e -----	23
5.5.1.	Se -----	31
5.5.2.	Hea g/C g c -----	38
5.5.3.	Fa a .c -----	44
	-----	50
6.1. Ge e a	-----	50
6.2. I e a e ea e e	-----	51

6.3. I52

6.4. R e e a e c e 55

KNX

!

k

55mm

k

k

KNX

80

86

.knxprod

ETS

ETS5.7

k

- /

- ! ! 2 4

- HVAC ! ! !

- 2 PI

-

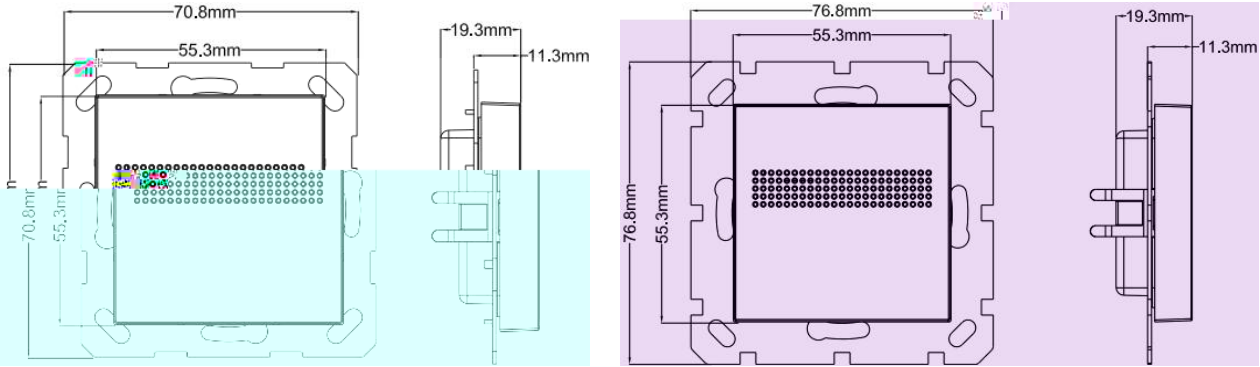
- 2 ! ! NTC

- 55mm-system

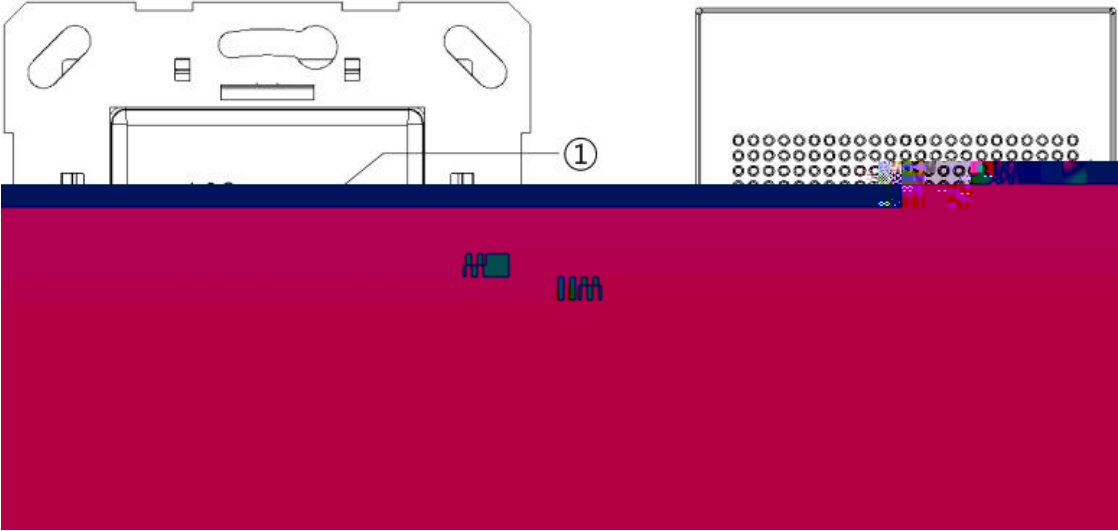
- KNX

21-30V DC, KNX	
<6mA 24V <5.5mA 30V	
<165mW	
2	10K NTC
KNX	(/)
1 3	
<5m	
LED	LED
– 5 °C ... 45 °C	
– 25 °C ... 55 °C	
– 25 °C ... 70 °C	
<93%	
70.8 x 70.8 x 19.3 mm	80
76.8 x 76.8 x 19.3 mm	86
80	86
0.05kg	

3.1.



3.2.



LED

KNX

/

KNX The a L e,55 /1.0	49	100	100	100

!

k

k

2 / k

! ! / /

k

B k

! / ! ! ! !

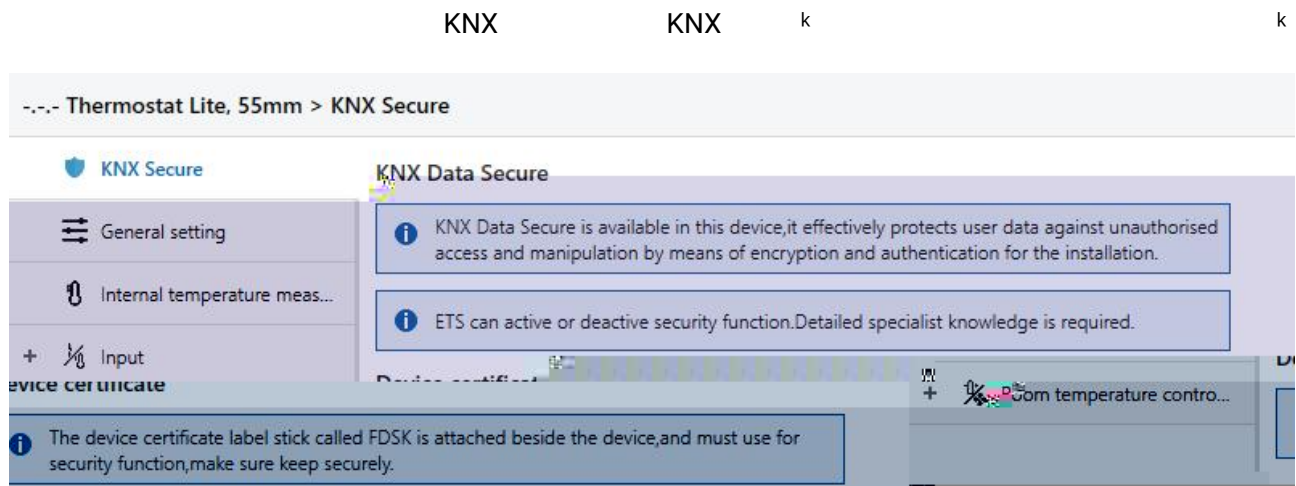
! 2 PI

-10~10°C

k

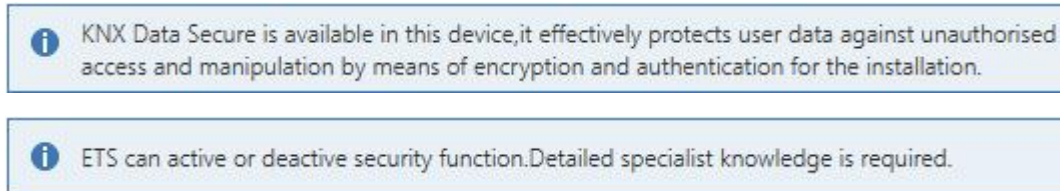
ETS

5.1.KNX



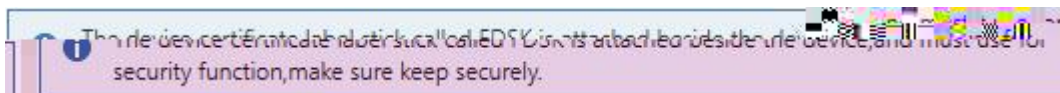
5.1 (1) "KNX Secure"

KNX KNX ETS 5.1(1)



KNX

k ETS k k



FDSK

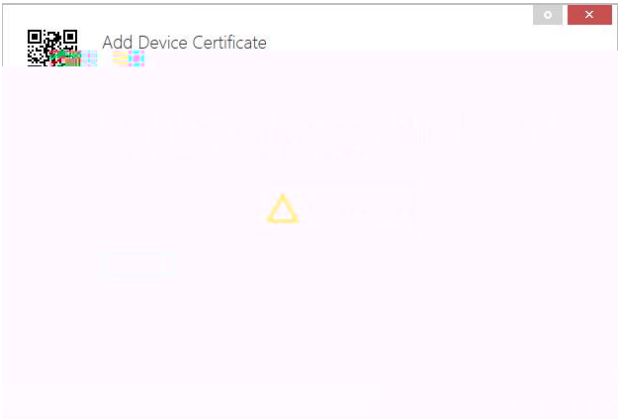
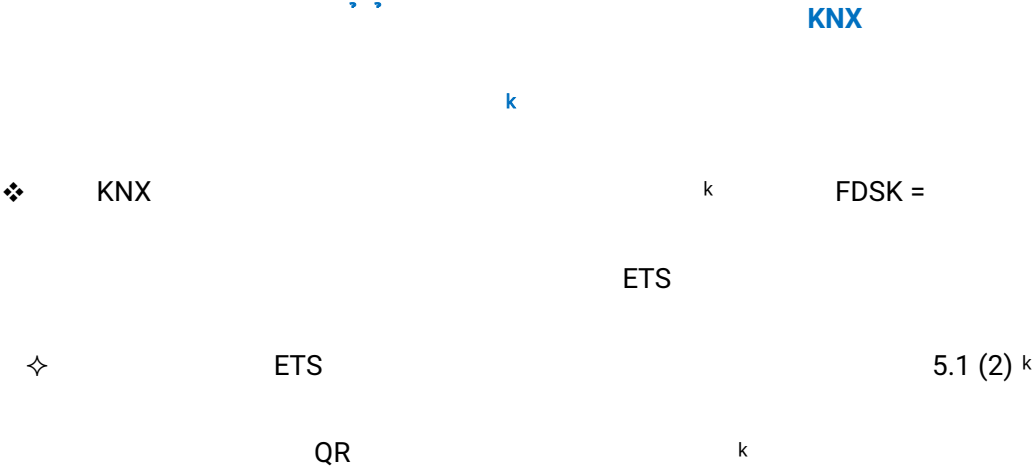
k

ETS

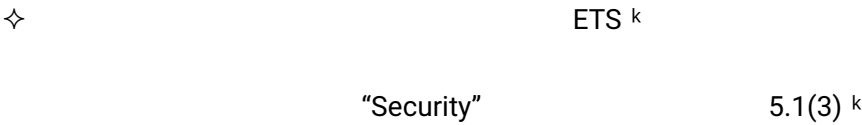


❖ KNX

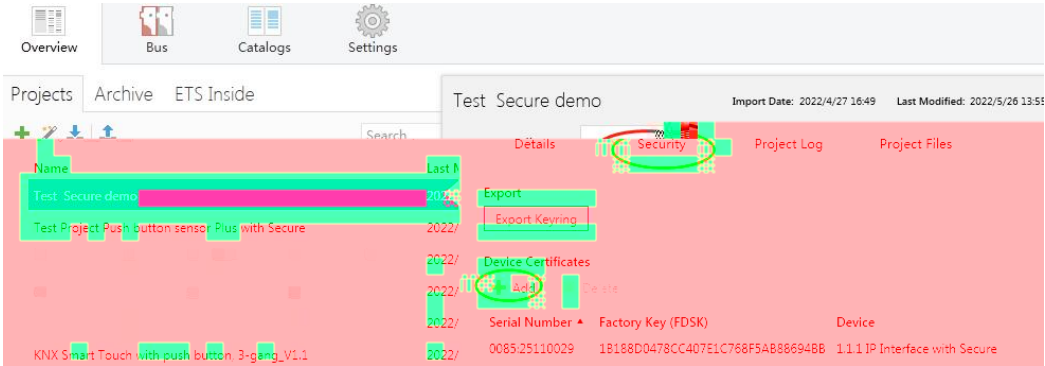
k



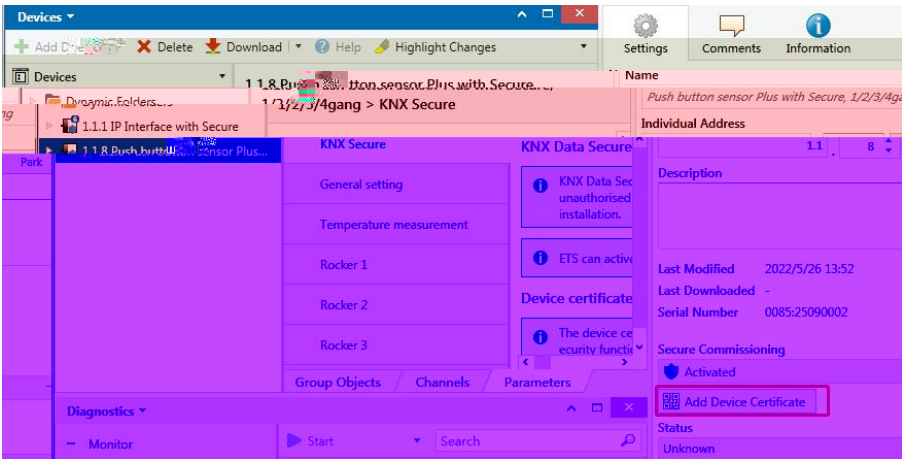
5.1(2) Add Device Certificate



“Add Device Certificate” 5.1(4) k



5.1(3) Add Device Certificate



5.1(4) Add Device Certificate

✧

FDSK^k

FDSK

KNX

k

FDSK

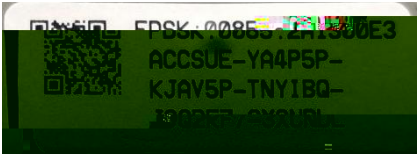
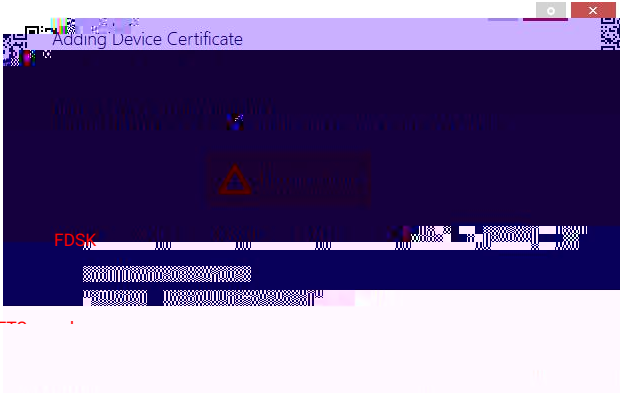
FDSK

ETS

5.1(5)^k

ETS

FDSK^k



5.1(5)

k

5.1(6)

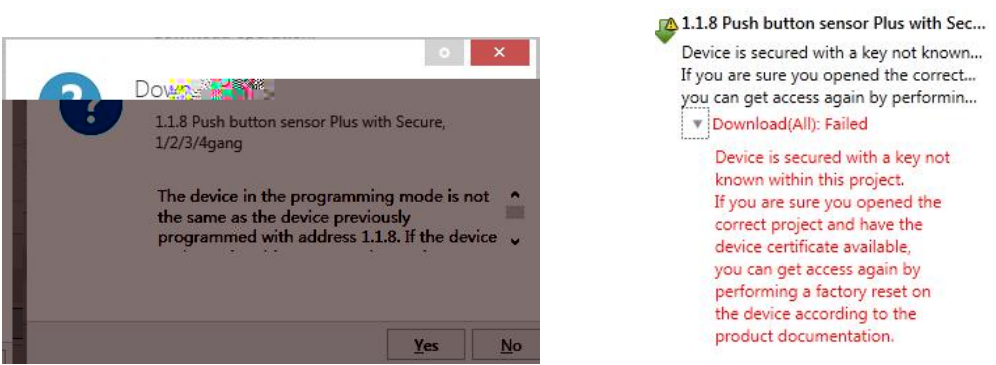
“Yes”

“Add Device Certificate”

FDSK

5.1(6)

k



5.1(6)

FDSK k

"Add Device Certificate"

k

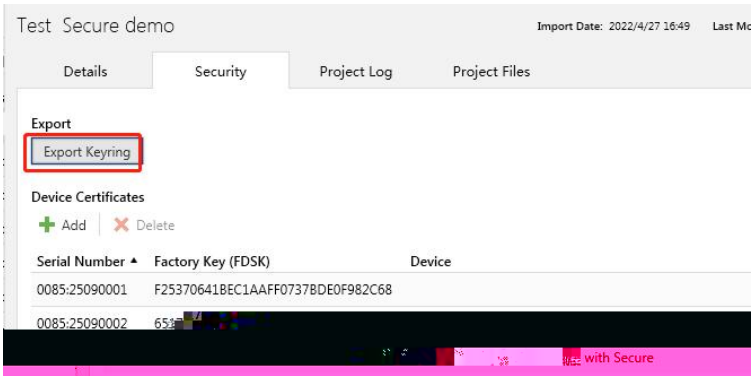


5.1(7)

ETS

5.1(8)

.knxkeys k



5.1(8)

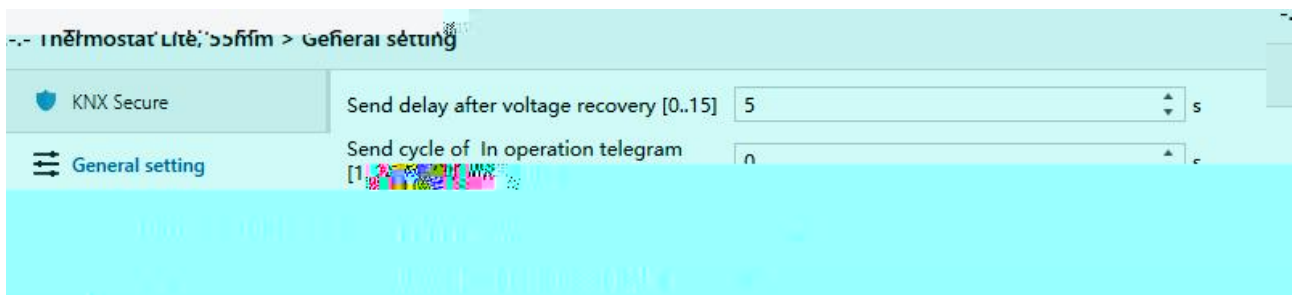
KNX

USB

ETS

k

5.2. General setting



5.2 "General setting"

Send delay after voltage recovery [0..15]

k 0..15

k

Send cycle of In operation telegram [1..240,0= ac e]

k "0" "In

operation" k "0" "In operation" "1"

k 0 240 0=

k

Send delay after voltage recovery

k

100ms k

Interface

k

Re-e-e-e

k

5.3. I e a e e a e e

Thermostat Lite, 55mm > Internal temperature measurement

KNX Secure

General setting

Internal temperature me...

Input

Room temperature contro...

Temperature sensor setting

Temperature calibration0.0K

Send temperature when the result change by1.0K

Cyclically send temperature [0...255,0=inactive]10min

Send alarm telegram for low/high temperatureNo respond

Humidity sensor setting

Humidity calibration0%

Send humidity when the result change by [0..20]5%

Cyclically send humidity [0..255,0=inactive]10min

Send alarm telegram for low/high humidityRespond after read only

Threshold value for low humidity alarm [5..20]5%

Threshold value for high humidity alarm [70..85]85%

5.3 "Internal sensor measurement"

!

k

Te e a e e e g

Te e a e e a b a

k

-5.0K

...

0.0K

...

5.0K

30

k

Se d e e a e he he e cha ge b

k Disable

k

D ab e

0.5K

1.0K

...

10.0K

C c ca e d e e a e [0..255,0= ac e]

k 0

k

0..255

k

Se d a a e e g a f /h gh e e a e

/

k

N e d

Re d af e ead

Re d af e cha ge

No respond

Respond after read only

GVS

KANBUS

KNX/BB

“ Low temperature alarm”/“ High temperature alarm”

Respond after change of “ Low temperature alarm”/“ High temperature

alarm”

k

“Respond after change” after change”

k

The head of the ea)

C c ca e d h d [0..255.0= ac e]

k 0

k

0..255

k

Se d a a e e g a f /h g h d

/

k

N e d

Re d af e ead

Re d af e cha ge

No respond

Respond after read only

“ Low humidity alarm”/“ High humidity alarm”

Respond after change

“ Low humidity alarm”/“ High humidity alarm”

k

“Respond after read only”

“Respond after change”

k

’ ’

Th e h d a e f h d a a [5..20]%

k

k

5..20

’ ’

Th e h d a e f h g h d a a [70..85]%

k

k

70..85

5.4. I

Thermostat Lite, 55mm > Input

KNX Secure

General setting

Function of input 1

Function of input 2

BI: Switch sensor

Temperature probe(NTC 10K)

5.4 "Input"

F c f (-1,2)

k

k

k

D ab e

Te e a e be(NTC 10K)

BI: S ch e

BI: Sce e c

BI: Se d S g(14b e)

B

!

!

/

/

k

k

-5.0K

...

0.0K

...

5.0K

Se d e e a e he he e cha ge b

k Disable

k

D ab e

0.5K

1.0K

...

10.0K

C c ca e d e e a e [0..255,0= ac e]

k 0

k

0..255

Re e f e ea e e

k

N e d

Re d af e ead

Re d af e cha ge

No respond

Respond after read only

" Temperature error report, Sensor"

Respond after change

" Temperature error report, Sensor"

k

“Respond after read only”

“Respond after change”

k

’ ’

Ob ec a e f e

k

0= e /1=e

1= e /0=e

0=no error/1=error

0

1

1=no error/0=error

k

’ ’

U e h e h d a e f e e

k

k

40 C / 45 C / 50 C / 55 C / 60 C / 70 C

’ ’

L e h e h d a e f e e

k

k

10 C / 5 C / 0 C / -5 C / -10 C / -20 C

5.4.2.

Thermostat Lite, 55mm > Input > Input 1 - Switch sensor

KNX Secure	Description (max 30char.)	
General setting	Distinction between short and long operation	☒ No ☐ Yes
Internal temperature meas...	Reaction on close the contact	ON
Input	Reaction on open the contact	OFF
Input 1 - Switch sensor	Send object value after voltage recovery (valid if reaction is not toggle)	☐ No ☐ Yes
Input 2 - Temperature probe	Number of objects	☐ 1 ☐ 2
	Disable function	Disable

5.4.2(1)

Thermostat Lite, 55mm > Input > Input 1 - Scene control

KNX Secure	Description (max 30char.)	
General setting	Distinction between short and long operation	☐ No ☒ Yes
Internal temperature meas...	Long operation after [3..25]	5 *0.1s
Input	Connected contact type	☒ Normally open ☐ Normally closed
Input 1 - Scene control	Reaction on short operation	Recall scene
Input 2 - Temperature probe	8 bit scene number	Scene No.1
Room temperature contro...	Reaction on long operation	Store scene
	8 bit scene number	Scene No.1
	Number of objects	☒ 1 ☐ 2
	Disable function	Disable

5.4.2(2)

Thermostat Lite, 55mm > Input > Input 1 - Send String

KNX Secure	Description (max 30char.)	
General setting	Distinction between short and long operation	☒ No ☐ Yes
Internal temperature meas...	Reaction on close the contact	☐ No reaction ☒ Send Value
Input	String (14byte) value	Hello, world !
Input 1 - Send String	Reaction on open the contact	☒ No reaction ☐ Send Value
Input 2 - Temperature probe	Send object value after voltage recovery	☒ No ☐ Yes
	Disable function	Disable

5.4.2(3)

De c (a 30cha .)

k

D c be ee h a d g e a

k

N

Ye

’ ’ L g e a af e [3..25]*0.1

/

k

k

3..25

’ ’ C ec ed c ac e

/

k

k

N a e

N a c ed

Bl: S ch e ,

k

’ ’ Reac h / g e a

/

k

k

N eac

OFF

ON

TOGGLE

No action k

ON k

OFF k

TOGGLE k

'' **Reac c e/ e he c ac**

/ k

k

N eac

OFF

ON

TOGGLE

'' **Se d b ec a e af e age ec e (a d f eac gg e)**

/ "TOGGLE" "No reaction"

k

N

Ye

Bl: Sce e c , k

'' **Reac h / g e a**

/ k

k

N eac

Reca ce e

S e c e e

’ ’

Reac c e/ e h e c ac

/

k

k

N eac

Reca ce e

S e c e e

’ ’

8 b ce e be

“Recall scene”

“Store scene”

k

Sce e NO.1 64

0 63

Bl: Se d S g(14b e) ,

k

’ ’

Reac h / g e a

/

k

N eac

Se d Va e

’ ’

Reac c e/ e h e c ac

/

k

N eac

Se d Va e

’ ’

S g (14b e) a e

“Send Value”

k

k

Se d b ec a e af e age ec e

/ k

N

Ye

N be f b ec

"Reaction on long/open operation"

"No reaction"

k /

1 2 k

1

2

D ab e f c

k / k

D ab e

D ab e=1/E ab e=0

D ab e=0/E ab e=1

5.5. R e e a e c e

--- Thermostat Lite, 55mm > Room temperature controller

KNX Secure

Room temperature reference: Internal sensor combine with External sensor

General setting: Combination ratio: 50% Internal to 50% External

Internal temperature measurement: Time period for request room temperature sensor [0...255]: 10 min

Input: Send temperature when the result change by: 1.0K

Room temperature controller: Daily send temperature [0...255]: 0 min

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

Heating/Cooling control: Room temperature controller

5.5.5 "Room temperature controller

R e e a e e f e e c e f

k

I e a e

E e a e

I e a e c b e h E e a e

"Internal sensor measurement"

5.3 k

' ' T e e d f e e e e a e e [0...255]

"...External sensor"

k

k

0..255

I e a e c b e h E e a e

k

' ' C b a a

k

10% I e a 90% E e a

20% I e a 80% E e a

...

90% I e a 10% E e a

"40% Internal to 60% External"

40%

60%

= ×40% +

×60%

k

k

Se d e e a e he he e cha ge b

k Disable

k

D ab e

0.5K

1.0K

...

10K

C c ca e d e e a e [0...255]

0

k

0..255

k

C a e a f e e .e [0..100]%(f 2- c , e a e '0'=0, e a e '>0'=1)

k

0..100

0

0

0

1 k

R e e a e c de

k

Hea g

C g

Hea g a d C g

Hea g a d C g k

Hea g/C g ch e

/

k

near ground

RTC / k

Heading

C g

' ' 'Æt Hea g/C g a af e age ec e

RTC / k

Heading

C g

A bef e age fa e

As before voltage failure

k

’ ’ C e a a f e d ad

RTC k

C f de

S a db de

Ec **de**

’ ’ C e a a f e a g e e c e

RTC k

C f de

S a db de

Ec **de**

F /hea **ec**

A bef e age fa e

’ ’ E e ded c f de [0..255,0= ac e]

$$k > 0$$

1bit "Extended comfort mode"

k 0..255

1

1

k

k

/ k

1 b b e c f c f e a de
 1bit k 1
 0 k
 1 b b e c f a db de
 k 1bit k
 k
 l a e e e a e (-C)
 k
 10.0
 10.5
 ...
 35.0

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

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

A a c H/C de cha ge e dead e /

U e /L e dead e

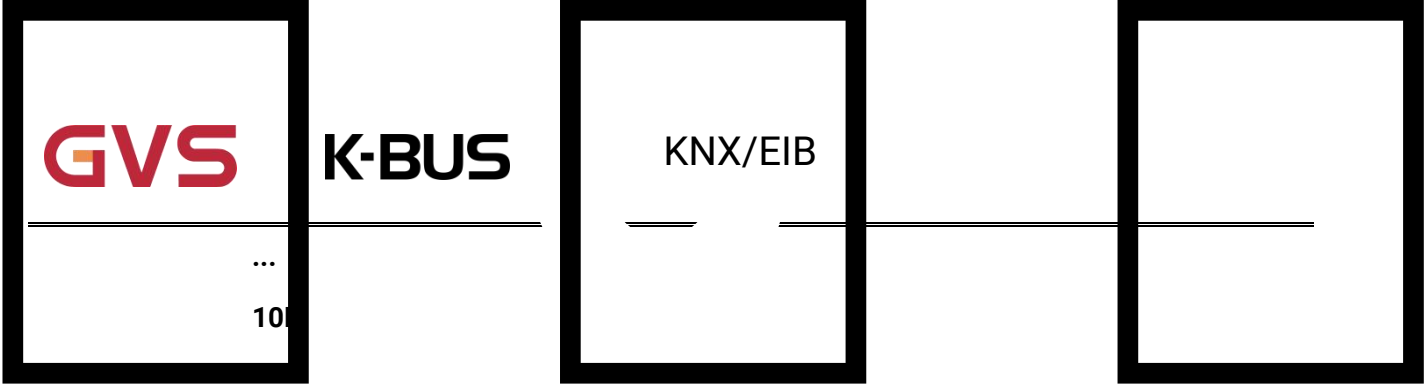
“Heating and Cooling” “Automatic changeover”

k

/ k

0.5K

1.0K



+

-

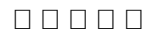
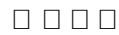
k

Fa eed a c f c

k

W d c ac f c

3V8Ñ#_>\$3 #, t3 ?g/Ep 1%ib U 9ú k



De a f d c ac [0..65535]

k

k

0..65535

C e de f e d

k

open

k

!

/

k

k

Ec

de

F

/hea

ec

k

k

M.../Ma...e...e...e a...e [5..37] C

k

k

k

5 C

6 C

...

37 C

“Setpoint”

k

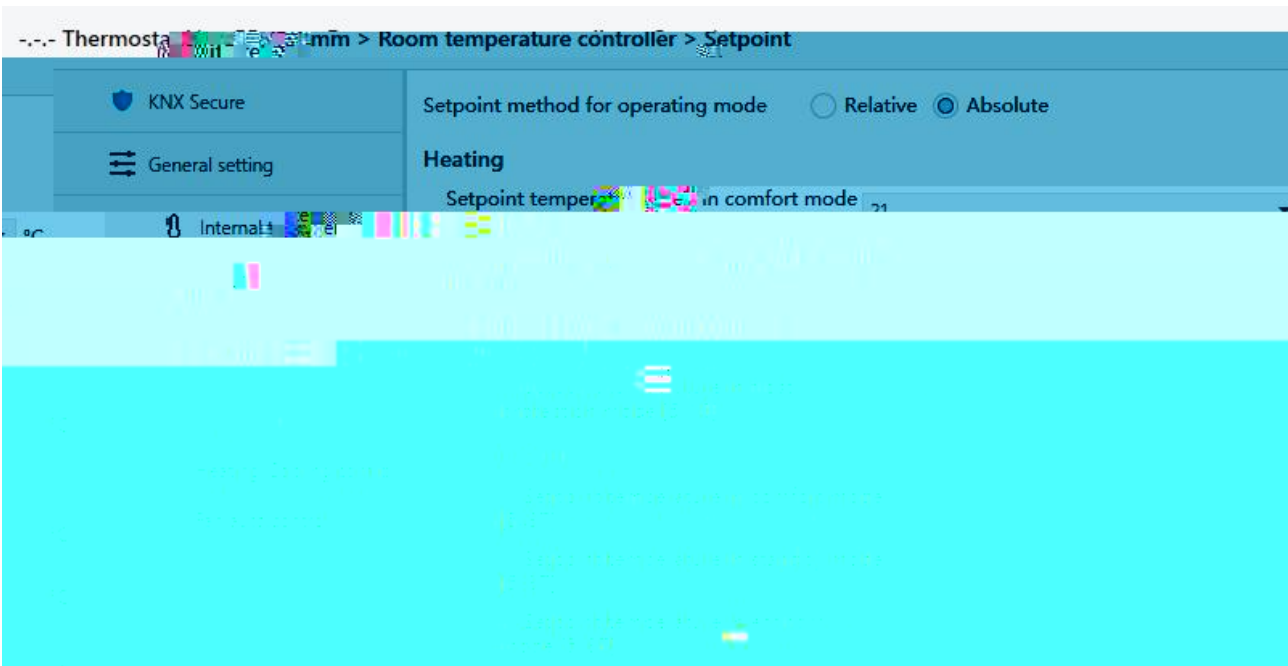
ETS

k

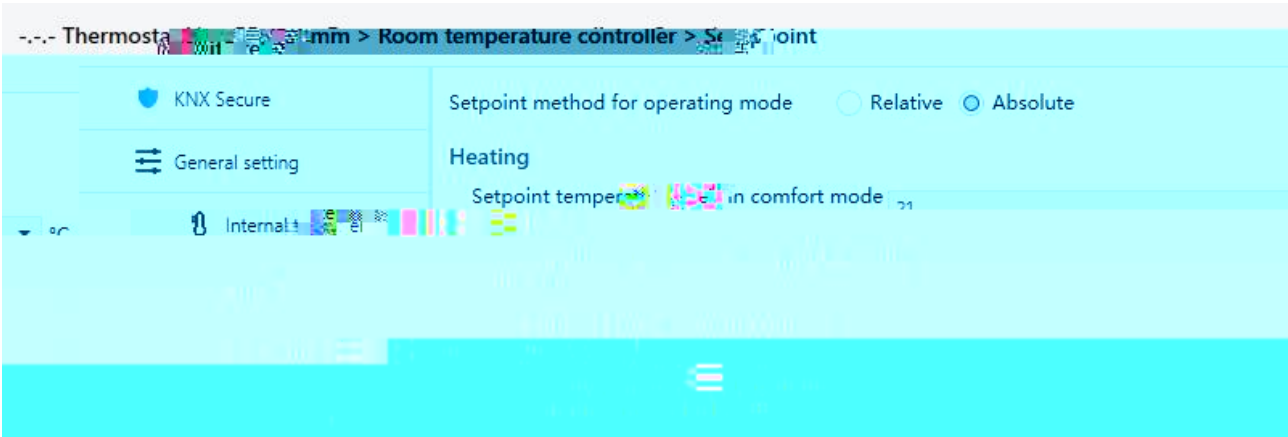
5.5.1.

Se





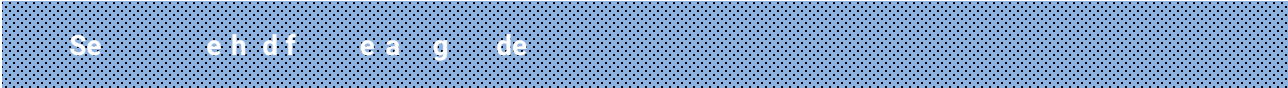
(1)



(2)

5.5.2.1.1 "Setpoint"

k



k

Relative
Absolute

Relative
Absolute

k

k

k

Base setpoint (-C)

k

10.0

10.5

...

35.0

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

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

“Base setpoint adjustment”

k

= +/-

k !

k

Add setpoint offset

1bit

k

Disable

Enable

1bit “Setpoint offset” /

2byte “Float offset

value” k

1bit “Setpoint offset reset”

2byte “Float offset value”

k

k

k

” ” **S e f e f f e**

/ 1- 0- k

k

0.5K

1K

= + +

/

k **1b Se f f e 2b e F a f f e a e**

k

” ” **M . e f f e [-10..0]K**

k **-10..0**

” ” **Ma . e f f e [0..10]K**

k **0..10**

0 ETS k

A a c H/C de cha ge e dead e (f c f de)

U e /L e dead e

“Heating and Cooling” “Automatic changeover” k

k

0.5K

1.0K

...

10K

+

-

k

Red ced hea g a db de [0...10]K

I c ea ed c g a db de [0...10]K

k

0K

1K

...

10K

Heating

Cooling

k

Red ced hea g ec de [0...10]K

I c ea ed c g ec de [0...10]K

k

0K

1K

...

10K

Heating

Cooling

k

Se e e a e f ec de [5...10]-C

k

5 C

6 C

...

10 C

k

Se e e a e hea ec de [30...37]-C

k

30 C

31 C

...

37 C

k

k

Se e e a e c f de [5...37]-C

Se e e a e a db de [5...37]-C

Se e e a e ec de [5...37]-C

!

k

5 C

6 C

...

37 C

Se e e a e f ec de [5...10]-C

k

5 C

6 C

...

10 C

Se e e a e hea ec de [30...37]-C

k

30 C

31 C

...

37 C

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

Hea g a d C g

,

ETS

k

k

1.

k

2.

k

k

3.

k

/

ETS

k

ETS

k

5.5.2. Heating/Cooling control

Thermostat Lite, 55mm > Room temperature controller > Heating/Cooling control

KNX Secure	Type of heating/cooling control	Switching on/off(use 2-point control)
General setting	Invert control value	☒ No ☐ Yes
Internal temperature meas...	Heating	
Input	Lower Hysteresis [0..200]	10 *0.1K
Room temperature contro...	Upper Hysteresis [0..200]	10 *0.1K

"Switching on/off(use 2-point control)"

KNX Secure	Type of heating/cooling control	Switching on/off(use 2-point control)
General setting	Invert control value	☒ No ☐ Yes
Internal temperature meas...	PWM cycle time [1..255]	15 min
Input	Heating speed	Hot water heating(5K/150min)
Room temperature contro...	Cooling speed	Cooling ceiling (5K/240min)
	Cyclically send control value [0..255]	10 min

"Switching PWM(use PI control)"

KNX Secure	Type of heating/cooling control	Continuous control(use PI control)
General setting	Invert control value	☒ No ☐ Yes
Internal temperature meas...	Heating speed	Hot water heating(5K/150min)
Input	Cooling speed	Cooling ceiling (5K/240min)
Room temperature contro...	Send control value on change by [0..100,0=inactive]	4 %
	Cyclically send control value [0..255]	10 min

"Continuous control(use PI control)"

5.5.2.1.2(1) "Heating/Cooling control"

2 4 k

Temperature

/

k

Switching on/off(use 2-point control)

Switching PWM(use PI control)

Continuous control(use PI control)

l e c a e

k

N

Ye

Yes

k

(2 c)

‘ ‘ L e H e e [0...200]*0.1K

‘ ‘ U e H e e [0...200]*0.1K

RTC

k

0..200

T > +

T < - k

1K 2K 22°C T 24°C

T 21°C T 21~24°C k

T < -

T > + k

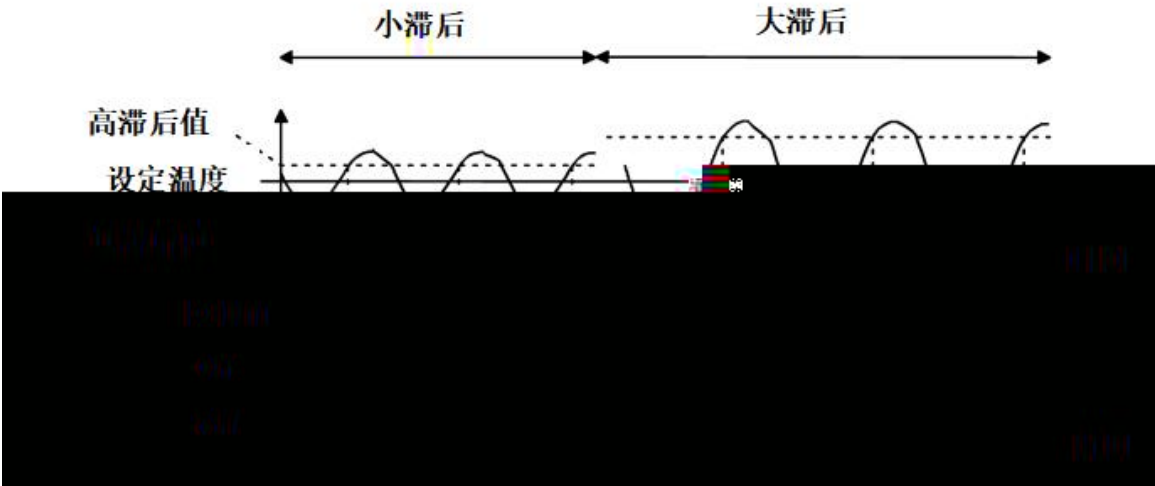
1K 2K 26°C T 25°C

T 28°C T 28~25°C k

1.

2.

k



5.5.2(2)

()

PI (PI c)

Hea g eed

’ ’

C g eed

PI

k

k

H a e hea g (5K/150)

U de f hea g (5K/240)

E ec ca hea g (4K/100)

S (4K/90)

Fa c (4K/90)

U e def ed

C g ce g (5K/240)

S (4K/90)

Fa c (4K/90)

U e def ed

’ ’ P a a ge [10..100]*0.1K (P a e)

’ ’ Re e e [0..255] (l a e)

“User defined” k PI PI k

10..100 (P a e)

0..255 (l a e)

’ ’ PWM c ce e [1..255]

“Switching PWM(use PI control)”

10min, 80%

8min 2min /

k

1..255

“Switching PWM (use PI control)” “Continuous control (use PI control)” PI

“Continuous control” PI (1byte)

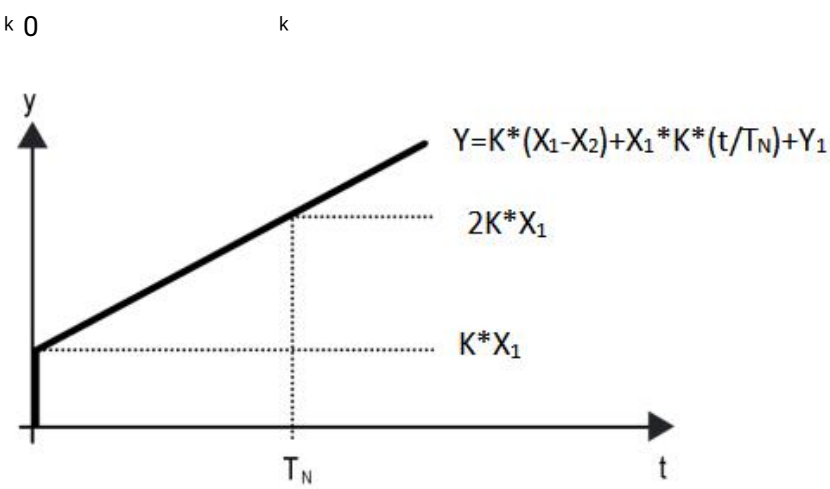
“Switching PWM” PI “on/off” k

• •

Se d c

a e

cha ge



5.5.2(3) PI

Y

Y1

X1 = ,

X2 = ,

T_N

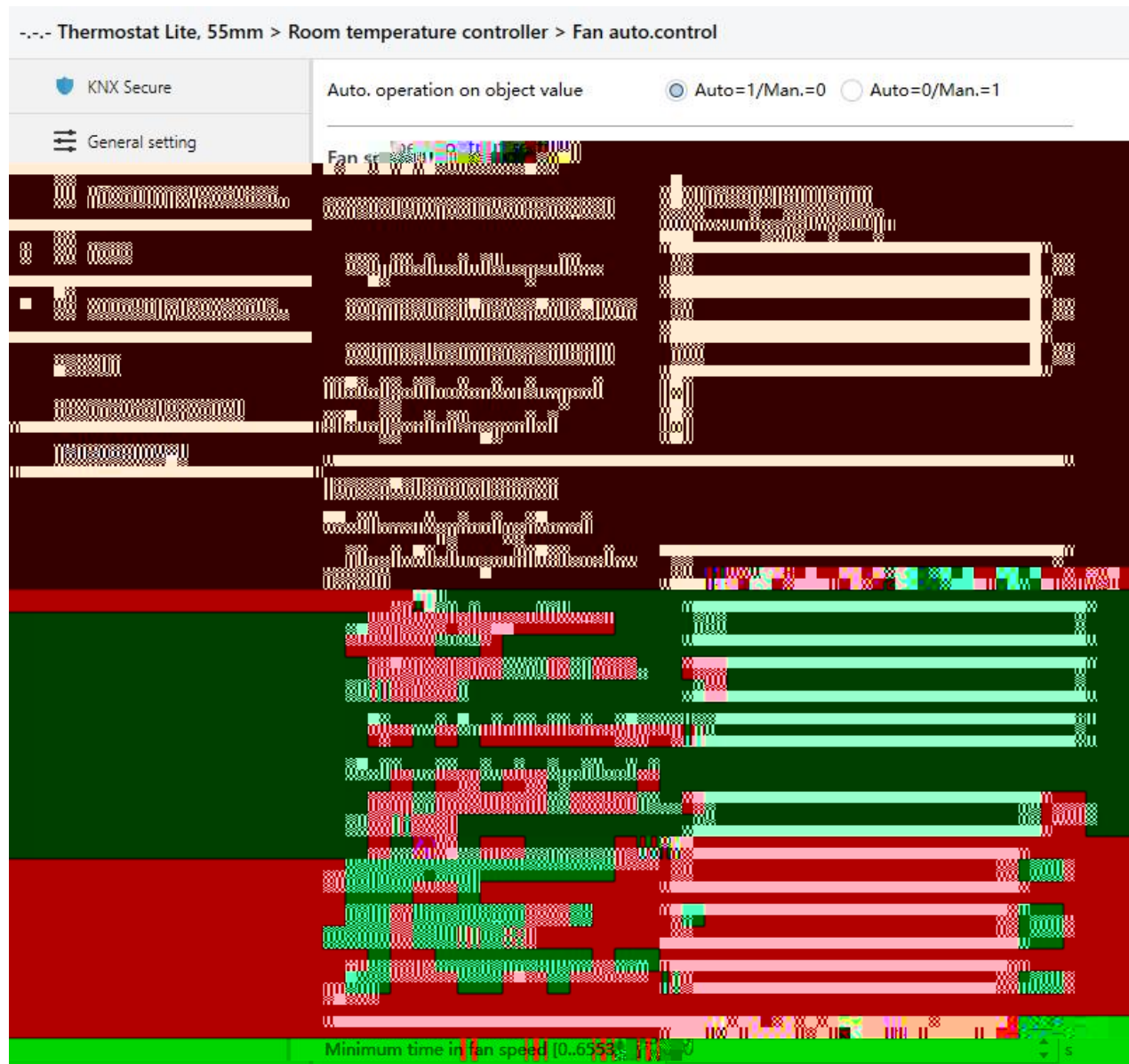
K

PI $Y=K*(X_1-X_2) +X_1*K*t/T_N+Y_1$

PI $Y=K X_1-X_2 +Y_2$

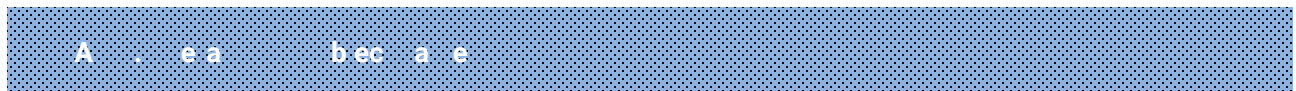
K:	
K:	
T _N :	
T _N :	

5.5.3. Fa a .c



5.3.2.3 "Fan"

k



k

A =1/Man . =0

A =0/Man . =1

Auto=1/Man.=0	"Fan automatic operation"	"0"	"1"
---------------	---------------------------	-----	-----

Auto=0/Man.=1	"Fan automatic operation"	"1"	"0"
---------------	---------------------------	-----	-----

k

k

Fa eed e g

Ob ec da a e f 1b e fa eed

1byte k

Fa age (DPT 5.100)

Pe ce age (DPT 5.001)

0 a e f fa eed / ed /h gh

k 0 k

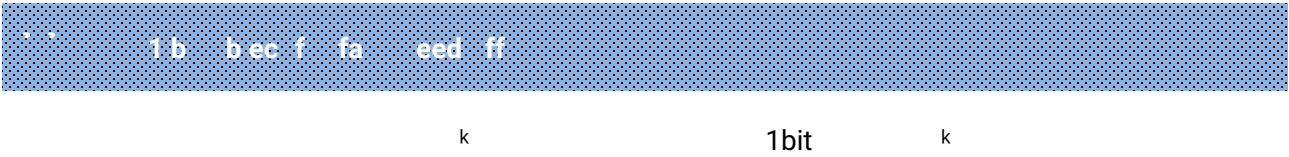
1..255 /1..100

1b e < < ETS

Output value for Fan speed low	33	%
Output value for Fan speed medium	32	%
Output value for Fan speed high	100	%

1 b b ec f c f fa eed

1bit k 1bit k



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

150

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

50

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

200

OFF <-> <-> <-> <->

k

H e e h e h d a e +/-[0..50]

k 0..50

0

10 50 60 + 40 -

40~60 k 40 (

)60 k

C d e g f g 2- c

2-point k

-

- k

Te e a e d f f e e ce eed OFF<-> [1..200] *0.1K

k 1..200

k

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

k

k 1..200

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

k

k 1..200

k

• OFF <-->

•

<-->

•

<-->

k

ETS

Temperature difference speed OFF<->
>low [1..200]

low

↑

200

low [1..200]

Temperature difference speed OFF<->
>low [1..200]

Heating difference [0..50]*0.1K

k

0..50

0

0.5°C

1°C

1.5°C

+

0.5°C

-

0.5°C~1.5°C

k

0.5°C

(

)1.5°C

k

M e fa eed [0..65535]

k

k

k 0..65535

0

k

k

k

C

W

R

T

U

k

6.1. Ge e a

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	...
1	General	In operation			1 bit	C	R	-	T	-	switch	Low

6.1 "General"

					DPT
1	I e a	Ge e a	1b	C,R,T	1.001 ch
"1" k k					

6.1 "General"

6.2. Internal sensor measurement

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
5	Internal sensor	Temperature value			2 bytes	C	R	-	T	-	temperature (°C)	Low
6	Internal sensor	Low temperature alarm			1 bit	C	R	-	T	-	alarm	Low
7	Internal sensor	High temperature alarm			1 bit	C	R	-	T	-	alarm	Low
8	Internal sensor	Humidity value			2 bytes	C	R	-	T	-	humidity (%)	Low
9	Internal sensor	Low humidity alarm			1 bit	C	R	-	T	-	alarm	Low
10	Internal sensor	High humidity alarm			1 bit	C	R	-	T	-	alarm	Low

6.2 "Internal sensor measurement"

						DPT
5	Temperature value	Internal sensor	2 bytes	C,R,T	9.001	temperature (°C)
k -50~99.8°C						
6	Low temperature alarm	Internal sensor	1b	C,R,T	1.005	alarm
k						
7	High temperature alarm	Internal sensor	1b	C,R,T	1.005	alarm
k						
8	Humidity value	Internal sensor	2 bytes	C,R,T	9.007	humidity (%)
k 0~100%						
9	Low humidity alarm	Internal sensor	1b	C,R,T	1.005	alarm
k						
10	High humidity alarm	Internal sensor	1b	C,R,T	1.005	alarm
k						

6.2 "Internal sensor measurement"

6.3. I

Number	Name	Object Function	Description	Group Address
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Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	Input 1 - Switch sensor	Switch			1 bit	C	R	W	T	U	switch	Low
11	Input 1 - Switch sensor	Close, Switch			1 bit	C	R	W	T	U	switch	Low
12	Input 1 - Switch sensor	Open, Switch			1 bit	C	R	W	T	U	switch	Low
11	Input 1 - Switch sensor	Short, Switch			1 bit	C	R	W	T	U	switch	Low
12	Input 1 - Switch sensor	Long, Switch			1 bit	C	R	W	T	U	switch	Low
13	Input 1 - Switch sensor	Disable			1 bit	C	-	W	-	-	enable	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	Input 1 - Scene control	Scene			1 byte	C	-	-	T	-	scene control	Low
11	Input 1 - Scene control	Close, Scene			1 byte	C	-	-	T	-	scene control	Low
12	Input 1 - Scene control	Open, Scene			1 byte	C	-	-	T	-	scene control	Low
11	Input 1 - Scene control	Short, Scene			1 byte	C	-	-	T	-	scene control	Low
12	Input 1 - Scene control	Long, Scene			1 byte	C	-	-	T	-	scene control	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
11	Input 1 - Send String	String			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	Low
11	Input 1 - Send String	Close, String			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	Low
12	Input 1 - Send String	Open, String			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	Low
11	Input 1 - Send String	Short, String			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	Low
12	Input 1 - Send String	Long, String			14 bytes	C	-	-	T	-	Character String (ISO 8859-1)	Low
13	Input 1 - Send String	Disable			1 bit	C	-	W	-	-	enable	Low

6.3 "Input"

DPT

11	Ac a e e a e, Se	I	1 - Te e a e be	2b e	C,R,T	9.001 e e a e
----	------------------	---	-----------------	------	-------	---------------

k -50~99.8°C

"Description (max 30char.)"

"Input x - ..." k

k

12	Te e a e e e , I	1 - Te e a e be	1b	C,R,T	1.005 a a
	Se				

k

11	S ch	I	1 - S ch e	1b	C,R,W,T,U	1.001 ch
11	C e/Sh , S ch	I	1 - S ch e	1b	C,R,W,T,U	1.001 ch
12	O e /L g, S ch	I	1 - S ch e	1b	C,R,W,T,U	1.001 ch

k

/

1

2

k

1 “Switch” k2 “Close/Open” “Short/Long”k 0[⌘] 1[⌘]					
11	Sce e	l1 - Sce e c	1b e	C,T	18.001ce e c
11	C e/Sh ,Sce e	l1 - Sce e c	1b e	C,T	18.001ce e c
12	O e /L g,Sce e	l1 - Sce e c	1b e	C,T	18.001ce e c
8bitk/1 2k 1 “Scene” k2 “Close/Open” “Short/Long”k8bitk 8bit() FXNNNNNN F‘0’‘1’ X 0 NNNNNN0...63k					

<table><tr><td></td><td></td></tr><tr><td>0</td><td>1</td></tr><tr><td>1</td><td>2</td></tr><tr><td>2</td><td>3</td></tr><tr><td>...</td><td>...</td></tr><tr><td>63</td><td>64</td></tr><tr><td>128</td><td>1</td></tr><tr><td>129</td><td>2</td></tr><tr><td>130</td><td>3</td></tr><tr><td>...</td><td>...</td></tr><tr><td>191</td><td>64</td></tr></table> 1~640 k0~63 k1								0	1	1	2	2	3	...	...	63	64	128	1	129	2	130	3	...	...	191	64
0	1																										
1	2																										
2	3																										
...	...																										
63	64																										
128	1																										
129	2																										
130	3																										
...	...																										
191	64																										
11	S g	l 1 - Se d S g	14b e	C,T	16.001 cha ac e g (ISO 8859-1)																						
11	C e/Sh , S g	l 1 - Se d S g	14b e	C,T	16.001 cha ac e g (ISO 8859-1)																						
12	O e /L g, S g	l 1 - Se d S g	14b e	C,T	16.001 cha ac e g (ISO 8859-1)																						
k / 1 2 k 1 “String” k 2 “Close/Open” “Short/Long” k																											
13	D ab e	l 1 - ...	1b	C,W	1.003 e ab e																						
/ ! k																											

6.3 “Input”

6.4. Room temperature controller

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
17	Room temperature controller	Power on/off			1 bit	C	R	W	-	-	switch	Low
18	Room temperature controller	External temperature sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low
19	Room temperature controller	Base setpoint adjustment			2 bytes	C	-	W	-	-	temperature (°C)	Low
20	Room temperature controller	Setpoint offset			1 bit	C	-	W	-	-	step	Low
21	Room temperature controller	Float offset value			2 bytes	C	-	W	-	-	temperature difference (K)	Low
22	Room temperature controller	Setpoint offset reset			1 bit	C	-	W	-	-	reset	Low
23	Room temperature controller	Heating/Cooling mode			1 bit	C	-	W	-	-	cooling/heating	Low
24	Room temperature controller	Operation mode			1 byte	C	-	W	-	-	HVAC mode	Low
25	Room temperature controller	Comfort mode			1 bit	C	-	W	-	-	enable	Low
26	Room temperature controller	Economy mode			1 bit	C	-	W	-	-	enable	Low
27	Room temperature controller	Frost/Heat protection mode			1 bit	C	-	W	-	-	enable	Low
28	Room temperature controller	Standby mode			1 bit	C	-	W	-	-	enable	Low
29	Room temperature controller	Extended comfort mode			1 bit	C	-	W	-	-	acknowledge	Low
30	Room temperature controller	Window contact			1 bit	C	-	W	-	U	window/door	Low

6.4 "Room temperature controller"

					DPT
17	Power on/off	Room temperature controller	1b	C,W,R	1.001 ch
k 1--- 0---					
18	External temperature sensor	Room temperature controller	2b	C,W,T, U	9.001 e e a e
k -50~99.8°C					
19	Base setpoint adjustment	Room temperature controller	2b	C,W	9.001 e e a e

"Current setpoint adjustment" $\frac{K}{K}$					
"Base setpoint adjustment" $\frac{K}{K}$					
20	Seff e	R e e a e c e	1b	C,W	1.007 e
$\frac{K}{K}$					
21	F a ff e a e	R e e a e c e	2b e	C,W	9.002 e e a e d ffe e ce
$\frac{K}{K}$ 2byte $\frac{K}{K}$					
22	Seff e e e	R e e a e c e	1b	C,W	1.015 e e
$\frac{K}{K}$ 1 $\frac{K}{K}$					
23	Hea g/C g de	R e e a e c e	1b	C,W	1.100 c g/hea g
$\frac{K}{K}$					
24	O e a de	R e e a e c e	1b e	C,W	20.102 HVAC de
25	C f de	R e e a e c e	1b	C,W	1.003 e ab e
26	Ec de	R e e a e c e	1b	C,W	1.003 e ab e
27	F /Hea ec de	R e e a e c e	1b	C,W	1.003 e ab e

28	S a d b d e	R e e a e c e	1b	C,W	1.003 e a b e
1byte 24 1- 2- 3- 4- k 1bit 25 ´ 26 ´ 27 ´ 28 ´ "1" k 1bit ! 0 k 1bit "1" 0 k					
29	E e d e d c f d e	R e e a e c e	1b	C,W	1.016 a c e d g e
k 1 ´ 0 ´ 1 1 k k / k					
30	F a a a c e a	R e e a e c e	1b	C,W	1.003 e a b e
k 1 ´ 0 ´					
31	W d c a c	R e e a e c e	1b	C,W,U	1.019 W d /d
k 1 ´ 0 ´					

32	P e e ce de ec	R e e a ec e	1b	C,W,U	1.018 cc a c
k $\dot{V}_{\text{p}}$ $\dot{V}_{\text{p}}$					
33	Ac a e e a e, a	R e e a ec e	2b e	C,R,T	9.001 e e a e
k k					
34	Ba e e e a e e , a	R e e a ec e	2b e	C,R,T	9.001 e e a e
k k = 19 +					
35	Se ff e, a	R e e a ec e	2b e	C,R,T	9.002 e e a e d ffe e ce
k k					
36	C e e e a e e , a	R e e a ec e	2b e	C,R,T	9.001 e e a e
k					
37	Hea g/C g de, a	R e e a ec e	1b	C,R,T	1.100 c g/hea g
k					
38	O e a de, a	R e e a ec e	1b e	C,R,T	20.102 HVAC de
39	C f de, a	R e e a ec e	1b	C,R,T	1.003 e ab e
40	Ec de, a	R e e a ec e	1b	C,R,T	1.003 e ab e
41	F /Hea ec de, a	R e e a ec e	1b	C,R,T	1.003 e ab e

42	S a d b d e, a	R e e a e c e	1b	C,R,T	1.003 e a b e
1byte 38 1- 2- 3- 4- k 1bit 39 40 41					
42 "1" k 1bit 0 k 1bit 1 k k					
43	Hea g/C g c a e Hea g c a e	R e e a e c e	1b 1b e	C,R,T	1.001 S ch 5.001 e c e a g e
44	C g c a e	R e e a e c e	1b 1b e	C,R,T	1.001 S ch 5.001 e c e a g e
k k					
45	Fa eed	R e e a e c e	1b e	C,T	5.001 e c e a g e 5.100 fa a g e
46	Fa eed	R e e a e c e	1b	C,T	1.001 ch
47	Fa eed ed	R e e a e c e	1b	C,T	1.001 ch
48	Fa eed h gh	R e e a e c e	1b	C,T	1.001 ch
49	Fa eed ff	R e e a e c e	1b	C,T	1.001 ch
k 1bit 46 47					

