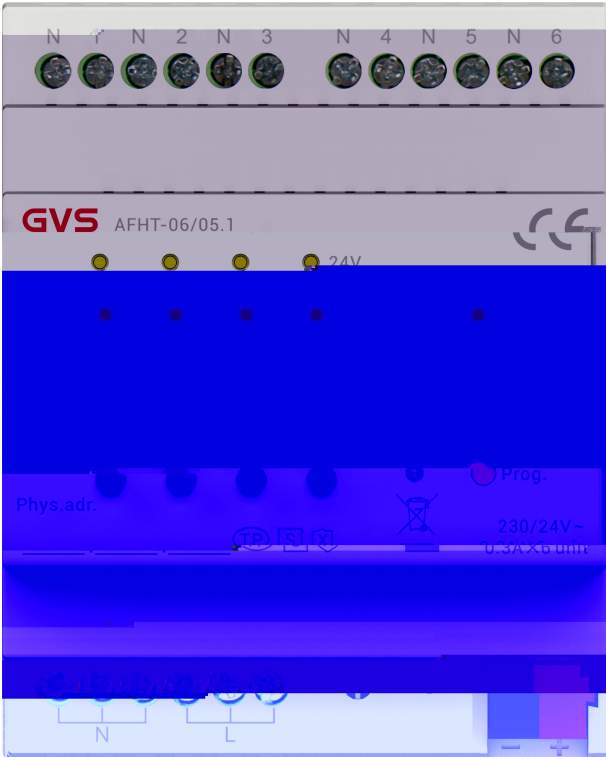


K-BUS



注意事项

1、请远离强磁场、高温、潮湿等环境。



远离强磁

远离高温

防潮

2、不要将设备摔落在地上或使之受到强力冲击；



3、不要使用湿布或具有挥发性的溶剂擦拭设备。



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230

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60 715

35

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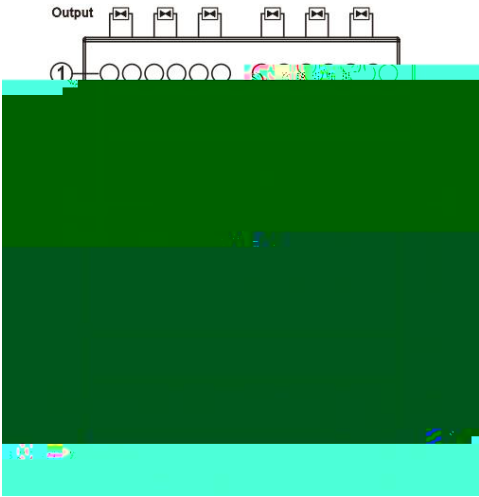
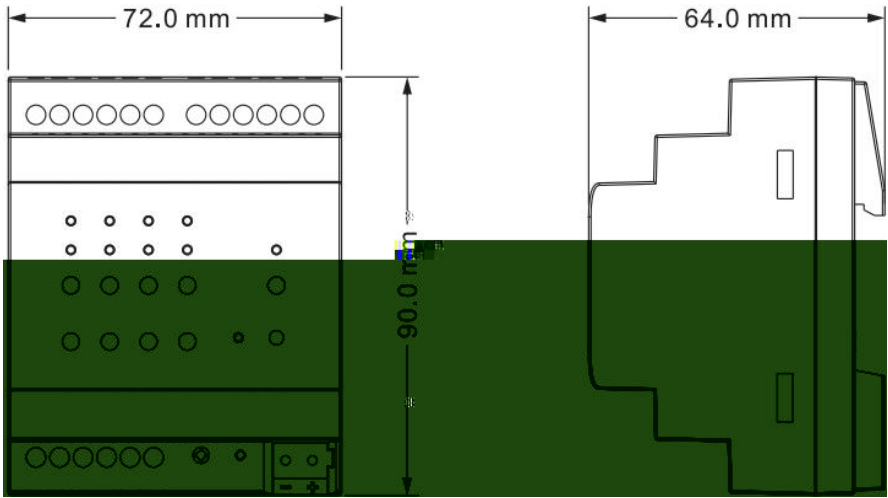
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345
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6
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5.1 (1)

5.1(1)

i KNX Data Secure is available in this device, it effectively protects user data against unauthorised access and manipulation by means of encryption and authentication for the installation.

i ETS can active or deactivate security function. Detailed specialist knowledge is required.

i The device certificate label stick called FDSK is attached beside the device, and must use for security function, make sure keep securely.



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✧

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5.1 (2) m

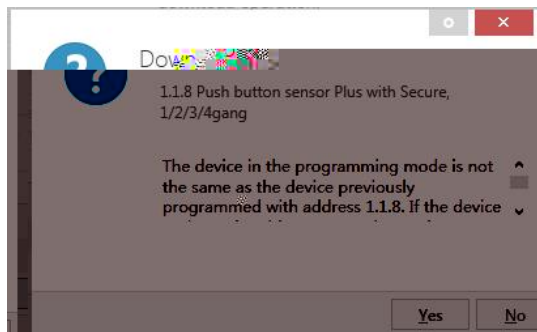
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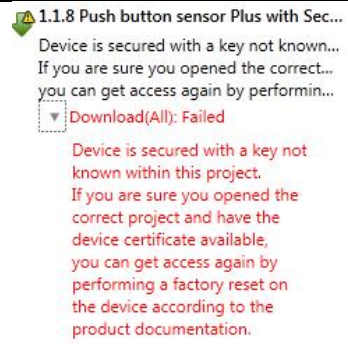
5.1(2) ' J

✧

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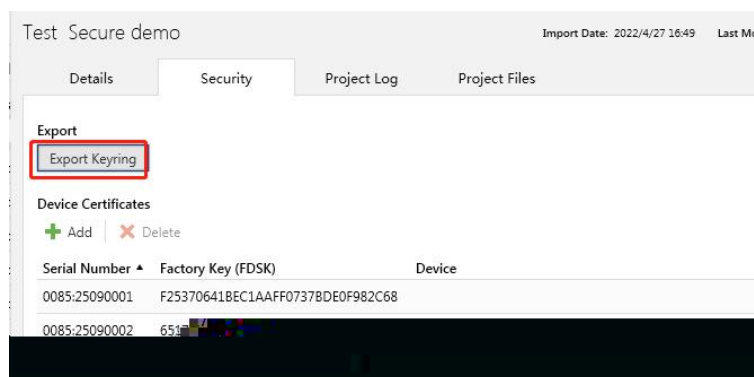


5.1(6)



5.1(7)

5.1(8)



5.1(8)

--- Heating Actuator with Triac, 6-Fold > General

KNX Secure

Send delay after voltage recovery [0..15] 5 s

General

Send cycle of "In operation" telegram [1..240,0=inactive] 0 s

Output 1-...

Thermal driving ☐ 24V AC ☒ 230V AC

Output 2-...

Report operating voltage failure status ☒

Output 3-...

Number of valve outputs 6

Output 4-...

Number of room temperature controllers 6

Output 5-...

Manual operation ☒

Output 6-...

Manual to automatic by ☐ Only long press ☒ Both long press and automatic delay time

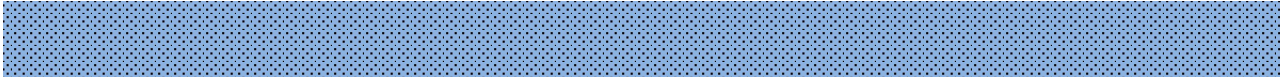
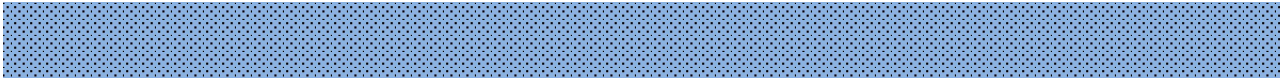
+ Controller 1-...

Delay time [10..6000] 10 s

+ Controller 2-...

Summer/Winter mode Summer=1/Winter=0

Summer/Winter mode after download Unchange



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--- Heating Actuator with Triac, 6-Fold > Output 1-...

KNX Secure

General

Output 1-...

Output 2-...

Output 3-...

Output 4-...

Output 5-...

Output 6-...

Controller 1-...

Controller 2-...

Controller 3-...

Controller 4-...

Controller 5-...

Controller 6-...

Description (max 30char.)

Controller from

Local controller 1

The output evaluates the control value from the local controller 1.

Control value for valve output (1byte)

Control value of heating

PWM cycle time [1..255]

15

Evaluate valve open/close times for PWM
 ☒

Fully open time

120

s

Fully close time

120

s

Valve position after download

Close valve

If bus recovery, valve position

☐ Unchange
 ☐ Close valve

Reply mode for valve status

☐ Respond after read only
 ☐ Respond after change

Valve purge function

☒

Duration of valve purge time [1..255]

10

min

Automatic valve purge

☒

Purge Cycle in weeks [1..12]

1

Reply mode for valve purge status

☐ Respond after read only
 ☐ Respond after change

Valve disable function

Disable

Forced operation function

0=Disable/1=Enable

Control value for forced operation [0..100]

30

%

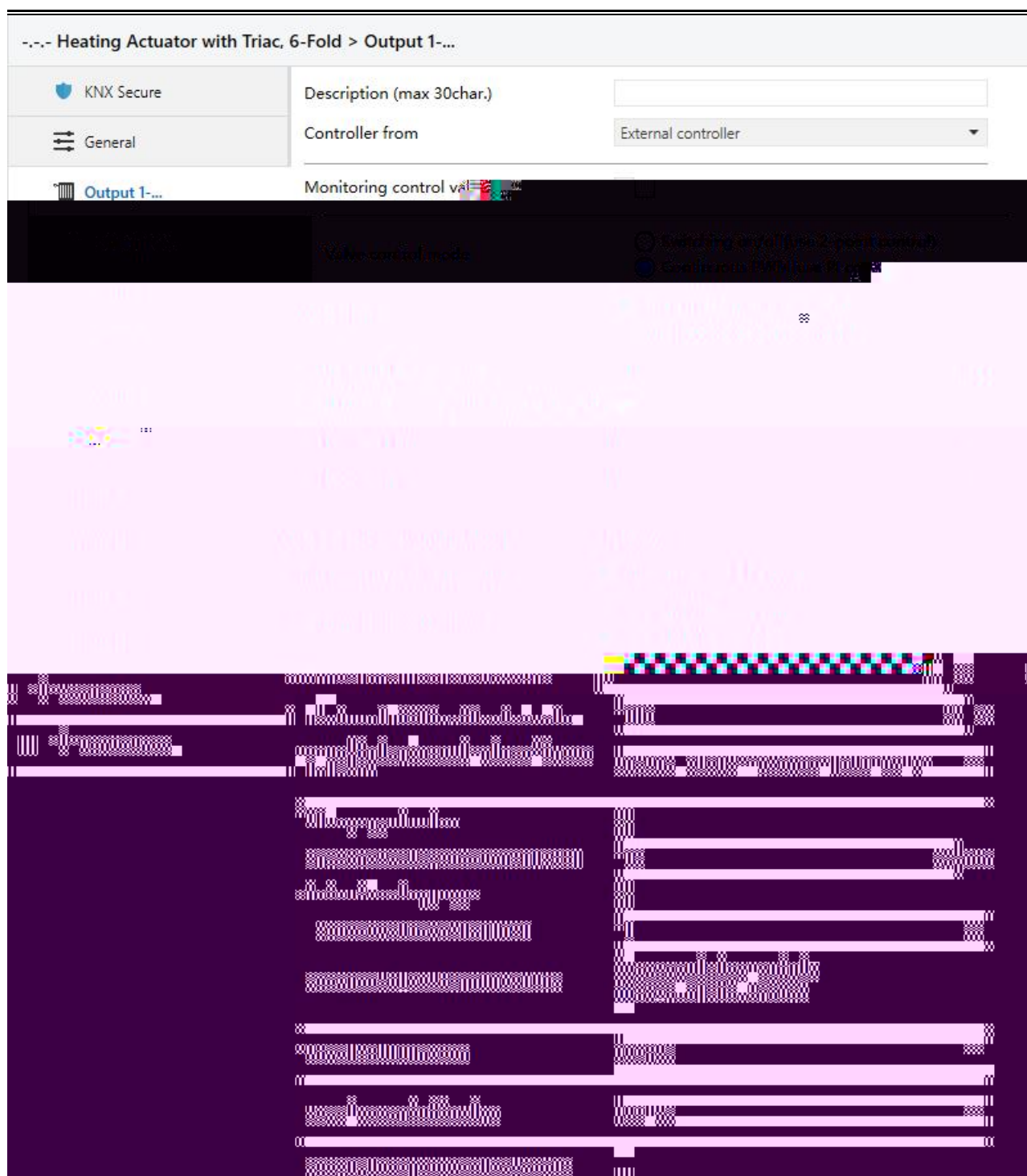
If the setting value is lower than the minimum limitation, forced operation will take minimum limitation value as reference

If the setting value is greater than the maximum limitation, forced operation will take maximum limitation value as reference

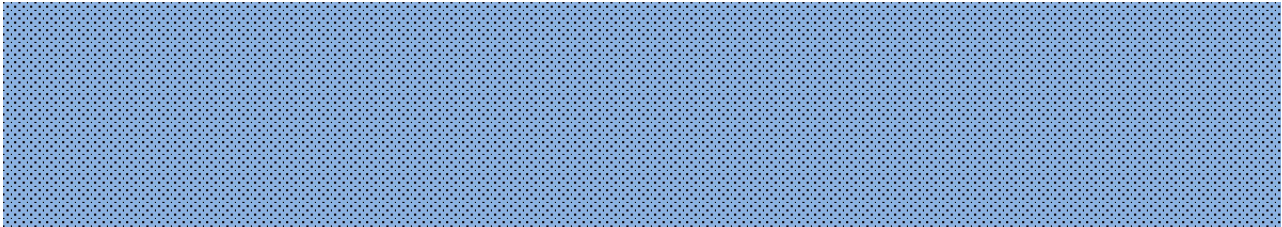
If use 2-point control, 0% means the valve is off while others means the valve is on

Report short-circuit/overload status

☐

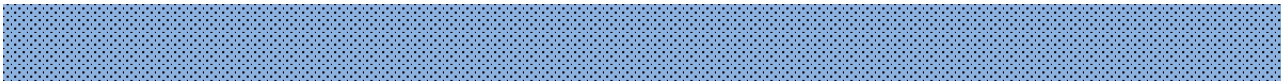


 The output evaluates the control value from the local controller 1.



$$\begin{aligned} & \dots(1 \quad) \quad \dots(1 \quad) \quad \dots(1 \quad /1 \quad) \\ & \quad \quad \quad / \quad (\quad 2- \quad) \quad \quad \quad (\quad \quad) \\ & 1 \quad \quad \quad (\quad \quad) \quad 1 \quad \quad \quad / \\ & 1 \quad /1 \end{aligned}$$

$$\begin{aligned} & / \quad \quad \quad 2 \\ & / \quad \quad \quad 4 \end{aligned}$$

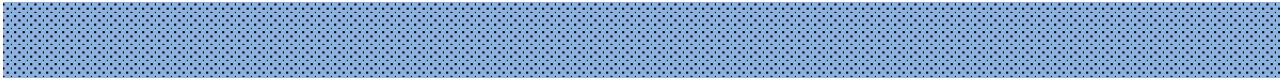
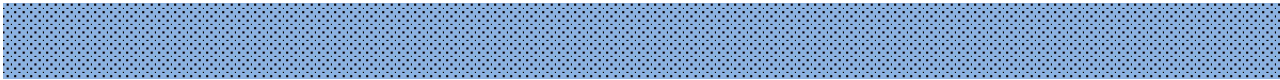


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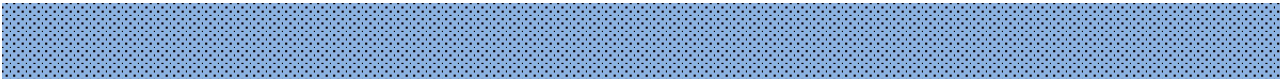
0%

0%



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()



(-)

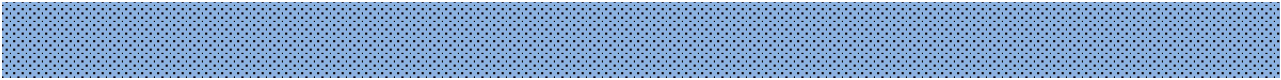
(-)

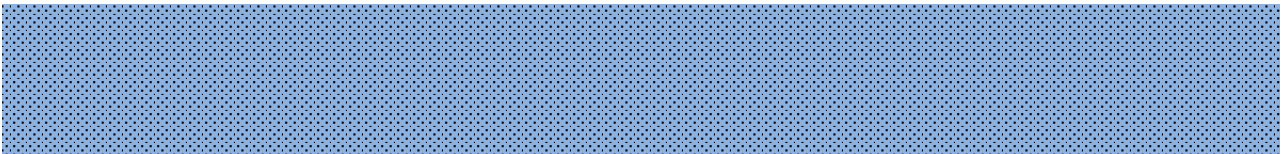


()

20% 15 3 12 60%

6





()



()

0% 0%

0%

0%

0%







/

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1

0%

0%

 If the setting value is lower than the minimum limitation, forced operation will take minimum limitation value as reference

 If the setting value is greater than the maximum limitation, forced operation will take maximum limitation value as reference

 If use 2-point control, 0% means the valve is off while others means the valve is on



Heating Actuator with integrated 5 Controller 1-... > General setting

KNX Secure

General

Room temperature reference from

External sensor 1
☐ External sensor 1+2 combination

Output 1-... Combination ratio for external sensor 1 to sensor 2 50% to 50%

Output 2-... Period for request external sensor [0..255] 10 min

Output 3-... Send temperature change by 1.0K

Output 4-... Continuously send temperature [0..255] 0 min

Output 5-... Control value after temp. error (at summer) [0..100] (if 2-point control, set value '0'=0, set value '>0'=1) 0

Output 6-... Control value after temp. error (at winter) [0..100] (if 2-point control, set value '0'=0, set value '>0'=1) 0

Controller 1-...

General settings

Room temperature control mode Heating and Cooling

Setpoint

Heating control

Cooling control

Heating/Cooling switchover ☐ Via object ☐ Automatic changeover

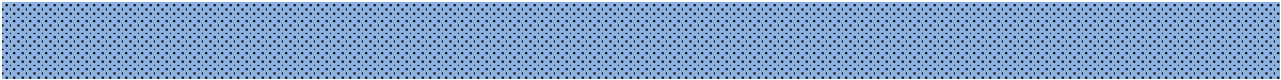
Heating/Cooling status after power download ☒ Heating ☐ Cooling

Heating/Cooling status after voltage recovery As before voltage

Window contact input function

Bus presence detector function

Scene function



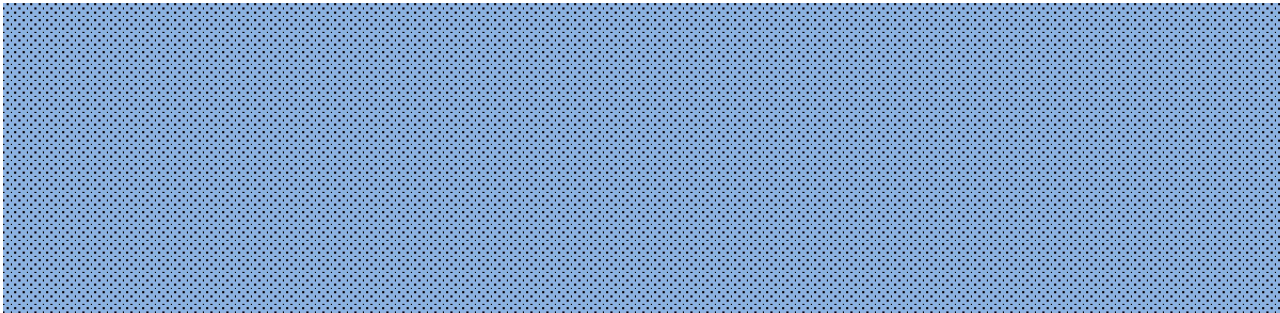
2



40%	60%		40%	60%
1	40%	+	2	60%



0



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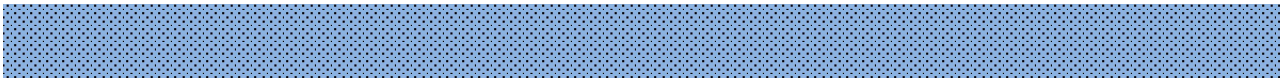
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✘ The setpoint is less than minimum,so minimum will regard as setpoint in fact

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

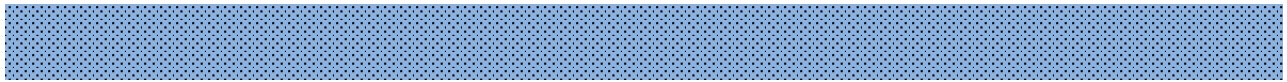
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--- Heating Actuator with Triac, 6-Fold > Controller 1-... > Setpoint

KNX Secure

Setpoint method for operation: ☒ Relative ☐ Absolute

Base setpoint temperature: 20.0 °C

Additional setpoint offset for adjustment: ☐ Disable ☒ Enable

Step of setpoint offset: ☒ 0.5K ☐ 1K

Min. setpoint offset [-10..0]: -5

Max. setpoint offset [0..10]: 5

Heating

Reduced heating in standby mode [0..10]: 2

Reduced heating in economy mode [0..10]: 4

Setpoint temperature in frost protection mode [5..10]: 7

Cooling

Increased cooling in standby mode [0..10]: 2

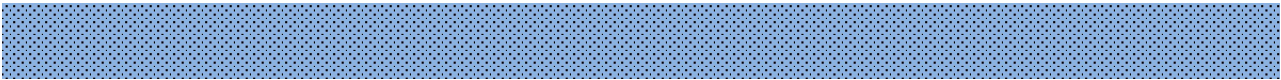
Increased cooling in economy mode [0..10]: 4

Setpoint temperature in heat protection mode [30..37]: 35

Min. setpoint temperature [5..37]: 15

Max. setpoint temperature [5..37]: 32

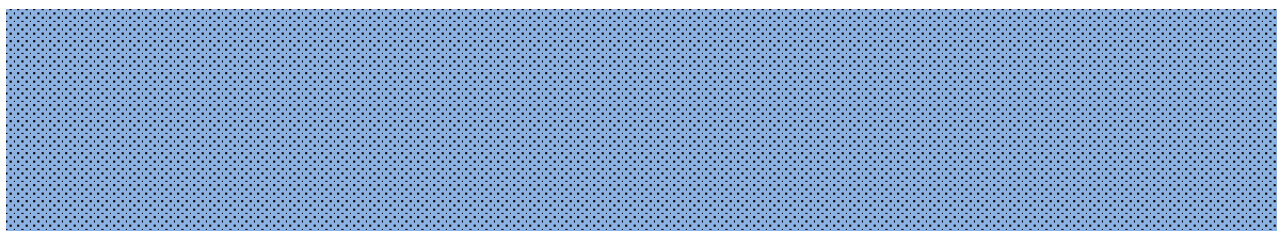
5.4.2(1)



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Note: The



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

--- Heating Actuator with Triac, 6-Fold > Controller 1-... > Heating/Cooling control

KNX Secure General Output 1-... Output 2-... Output 3-... Output 4-... Output 5-... Output 6-...	Type of heating/cooling control Switching on/off(use 2-point control) Invert control value ☒ No ☐ Yes Heating Lower Hysteresis [0..200] 10 *0.1K Upper Hysteresis [0..200] 10 *0.1K Cooling Lower Hysteresis [0..200] 10 *0.1K Upper Hysteresis [0..200] 10 *0.1K Cyclically send control value [0..255] 10 min
---	---

/ (2-)

KNX Secure General Output 1-... Output 2-... Output 3-... Output 4-... Output 5-... Output 6-...	Type of heating/cooling control Switching PWM(use PI control) Invert control value ☒ No ☐ Yes PWM cycle time [1..255] 15 min Heating speed Hot water heating(5K/150min) Cooling speed Cooling ceiling (5K/240min) Cyclically send control value [0..255] 10 min Minimum limitation of control value ~ 0 % Maximum limitation of control value 100 % Control value lower than the minimum limitation 0%=0%, otherwise=Minimum limitation value
---	--

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21 24

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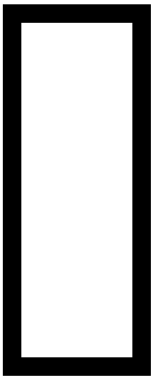
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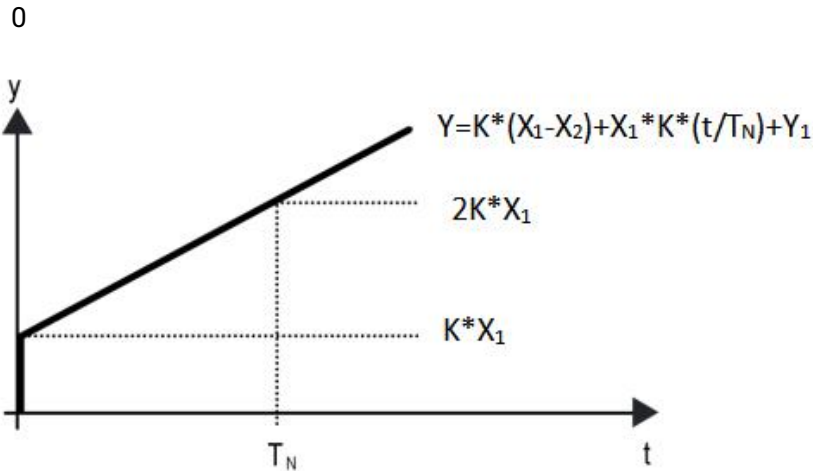
0%

0%

	5	150		15
	5	240		15-20
	4	100		10-15
	4	0		10-15

	5	240		15-20
	4	0		10-15

/



5.4.3(3)

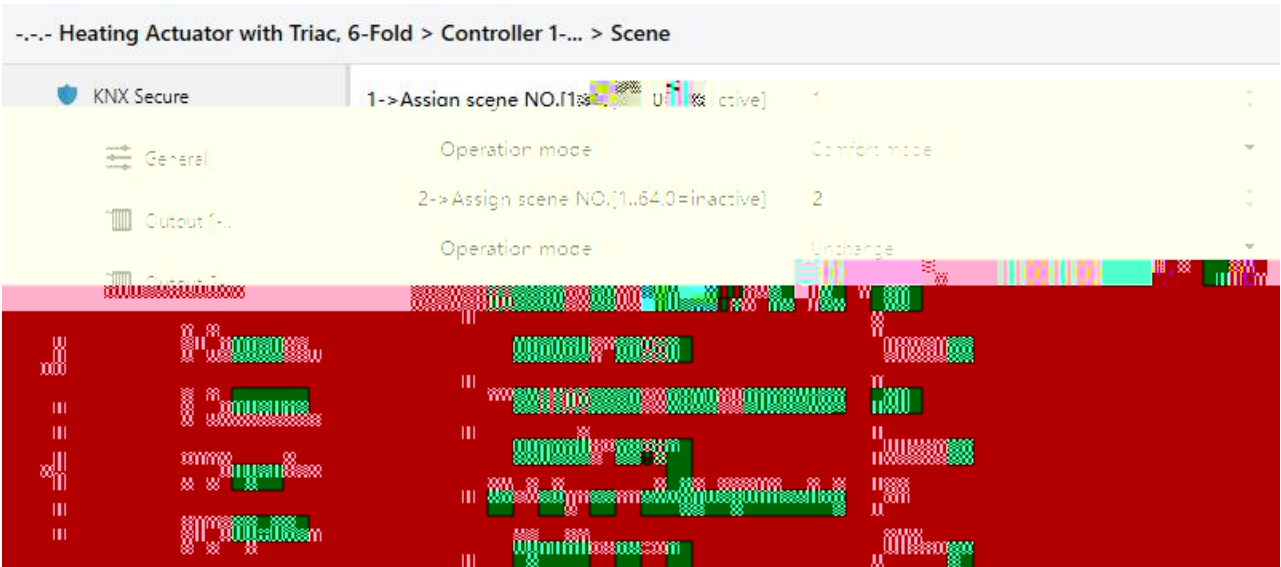
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$*(1 - 2 + 1 * \frac{ }{ } + 1$

$1 - 2 + 2$



5.4.4



✘ 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

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
↕	1	General	In operation			1 bit	C	R	-	T	-	switch	Low
↕	2	General	Summer/Winter mode			1 bit	C	-	W	T	U	switch	Low
↕	3	General	Status of operating voltage failure			1 bit	C	R	-	T	-	alarm	Low

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1					
0					
24	2.5	48	2.5		
48					
230	48		48		

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Number	Name	Object Function	Description	Group Address	Length	Unit	R	W	T	UD	Data Type	IP
0	Control	Control value		10	2	0.001	0	1	0	0	16-bit signed integer	10
1	Control	Trigger value change		11	2	0.001	0	1	0	0	16-bit signed integer	10
2	Control	Trigger open door		12	2	0.001	0	1	0	0	16-bit signed integer	10
3	Control	Control		13	2	0.001	0	1	0	0	16-bit signed integer	10
4	Control	Control of door position		14	2	0.001	0	1	0	0	16-bit signed integer	10
5	Control	Control value fault		15	2	0.001	0	1	0	0	16-bit signed integer	10
6	Control	Status of door change		16	2	0.001	0	1	0	0	16-bit signed integer	10
7	Control	Status of door position change		17	2	0.001	0	1	0	0	16-bit signed integer	10

6.2

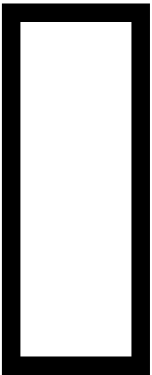
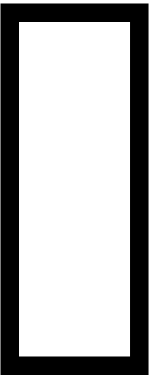
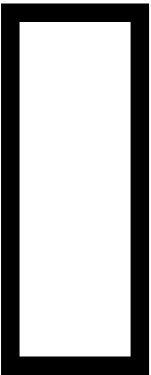
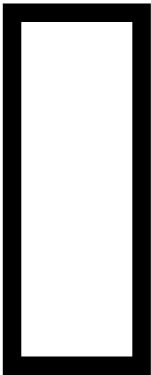
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4D 5X1G



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