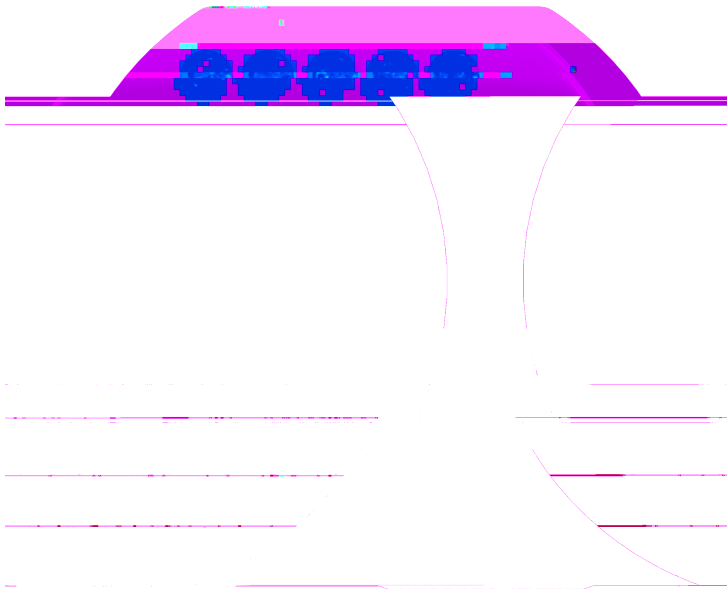




K-BUS 3

A , 3- , 6A, 1.4

A A -03/06.1



/ B L

注意事项

1、请远离强磁场、高温、潮湿等环境；

2、请勿在设备上涂抹或受到油污等；

3、请勿使用腐蚀性或具有挥发性的试剂擦拭设备；



4、请勿自行拆卸本设备。

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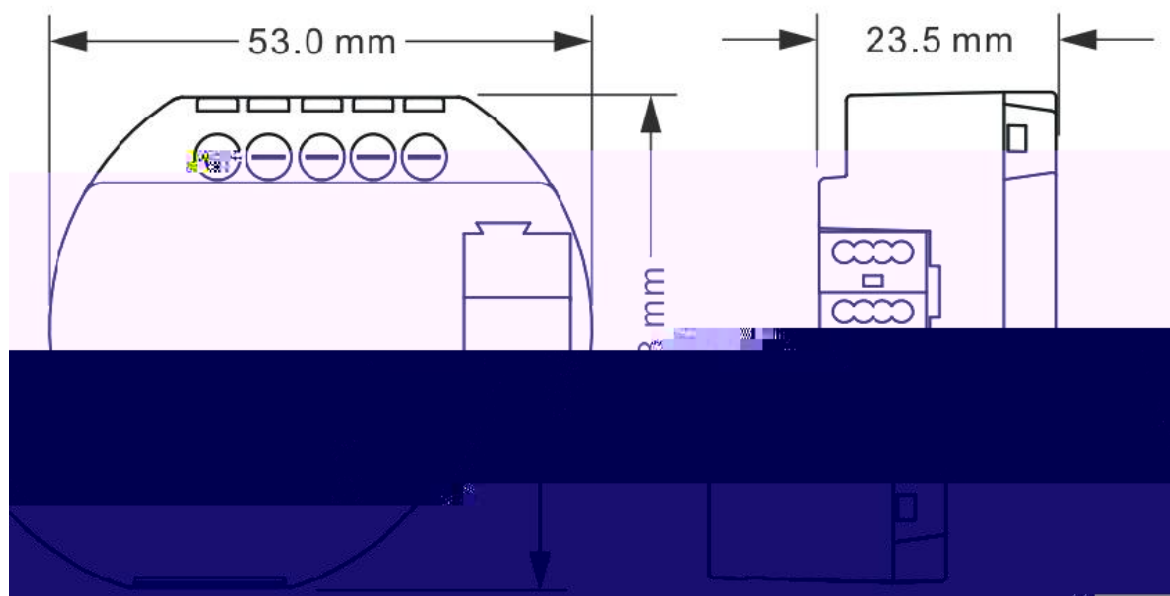
♦

♦

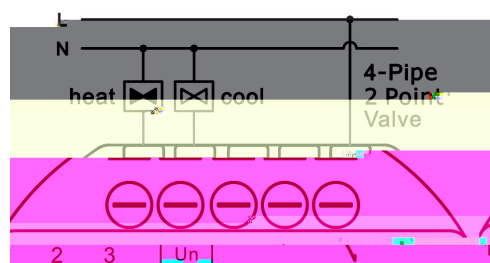
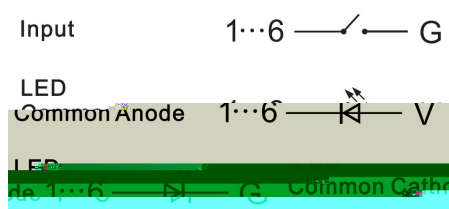
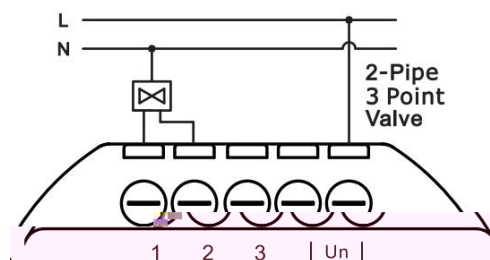
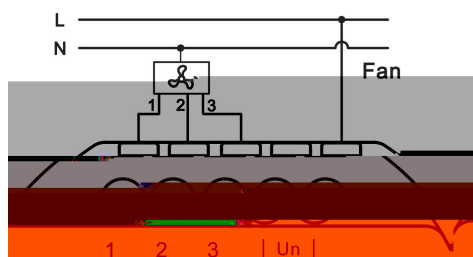
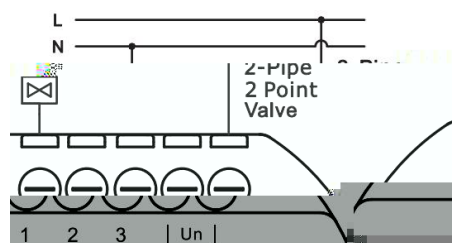
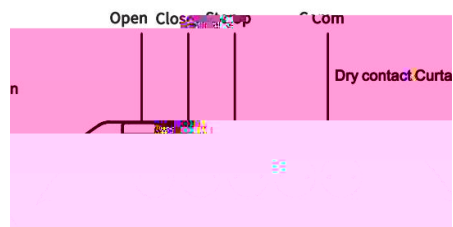
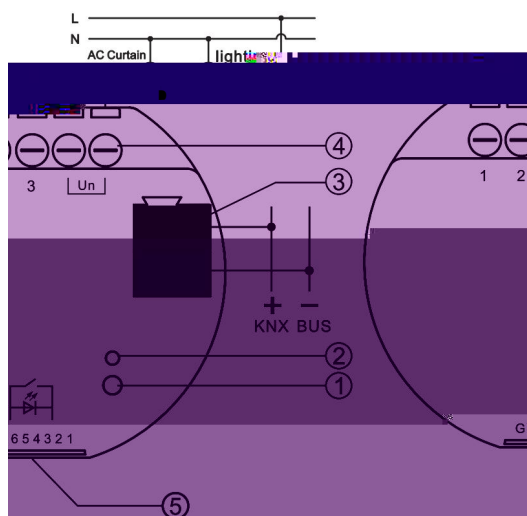
♦

D		
	O	

3.1.



3.2.



4.1.

General setting	Operation delay after power on [5..250]	5 s
General	Limit number of send telegram	☐ No ☒ Yes
	Period	100ms
	Max.number tele.within a period [1..255]	100
	Sending cycle of "In operation" telegram [1..240,0=inactive]	0 s
Outputs setting		
Channel configuration		
UI setting		
Channel configuration		

5 250

100

500

10

□ □ □ □ □



General setting

General

Outputs setting

Outputs config as

1 curtain output

Curtain output is fixed for Output 1& Output 2

If Curtain motor type is AC-motor, Output 3 as switch output

Channel configuration

General setting

General

Outputs setting

Outputs config as

1 valve control 2-pipe and 1 switch outputs

Output 3 Switch

Output 3 Switch

Heat output is fixed for Output 1

Cool output is fixed for Output 2

General setting

General

Outputs setting

Outputs config as

1 valve control 4-pipe and 1 switch outputs

Output 3 Switch

Output 3 Switch

Heat output is fixed for Output 1

Cool output is fixed for Output 2

General setting

General

Outputs setting

Outputs config as

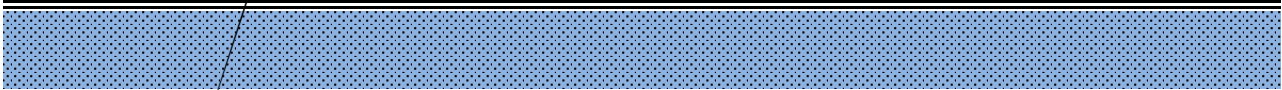
1 fan speed control output

Fan output is fixed for

1level:1; 2level:1&2; 3level: 1&2&3

If Fan speed set to 1 level, Output 2&3 as switch output <---Attention

If Fan speed set to 2 level, Output 3 as switch output <---Attention



D

3

3

1

1

1

2-

1

1

2

1

1

4-

1

1

4

1

1

1

	C	AC	/C	/2-	4-	
1	1	C	/C			1
2	2		1&2, 3	, 2	C	2
3	3		2- 3	/)	3	3



1

/

,

2

1

3

,

1

C

2

1

:1; 2

:1&2; 3

:1&2&3

1

,

2&3

2

,

3

4.3. --

4.3.1

General setting

General

Outputs setting

Work mode of the channel is

☒ Switch actuator
 ☐ Heating actuator (with power)

If bus recovery, contact is

Unchange



()

C

A

C

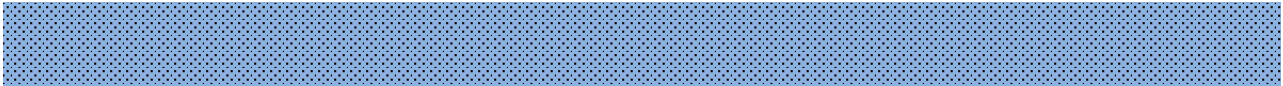
□ E □ □ □ □ □ □ □ ~~W~~ E
HB

A

A

L

L



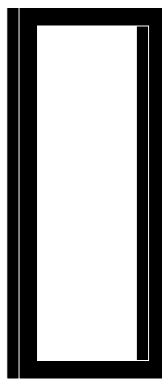
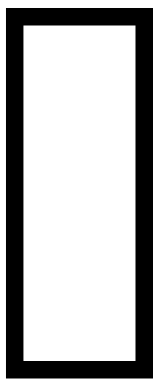
0=

RSV

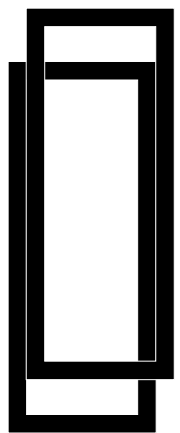
00

□

□ □



□ □ □ □



0

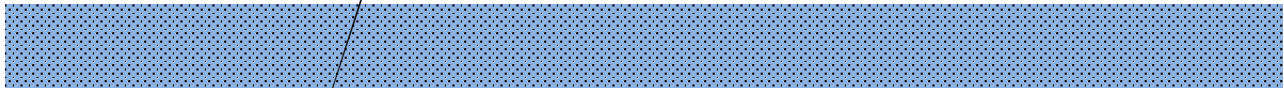
0



Enable



+	General setting	Function of "Time"	☒ Disable	☐ Enable
-	Outputs setting	Function of "Logic"	☒ Disable	☐ Enable
	Channel configuration	Function of "Scene"	☒ Disable	☒ Enable
-	Output 1 Switch	Function of "Forced"	☒ Disable	☐ Enable
	Output 1: Function	Function of "Operation hours counter"	☒ Disable	☐ Enable



4.3.2.1



Delay

D : (0...240) / (0...59)

0 240

0 59

D : (0...240) / (0...59)

0 240

0 59

4.3.2.2

+ General setting - Outputs setting Channel configuration - Output 1 Switch - Output 1 Time	Type of time function Flashing	Delay for switch on: --[0..240] min 0 Delay for switch on: --[0..59] s 0 Delay for switch off: --[0..240] min 0 Delay for switch off: --[0..59] s 0
+ Unsetting	Number of ON-impulses (1..255,0=no limited) 0 Contact position after flashing Discharge Control mode of flashing Start with "1", Stop with "0"	

Output 1 Time

0 : (0...240) / (0...59)

- (1...255 0=)

0...255

C

C

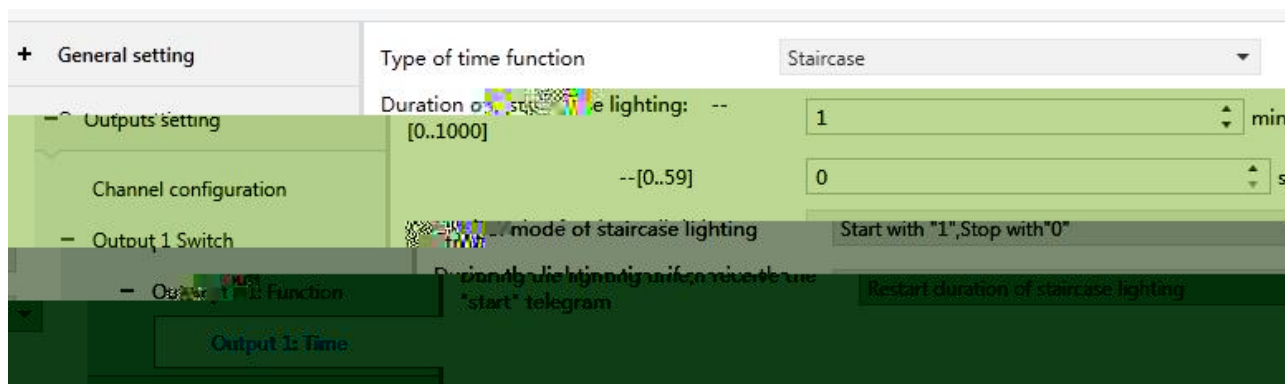
C

1 , 0

0 , 1

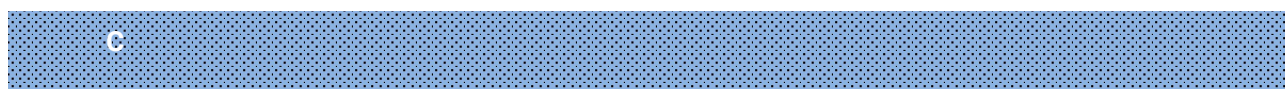
0/1 ,

4.3.2.3



0 1000

0 59



1 0

1 0

0/1 ,

1 , 0



L

□ □ □

11 08

ASVS

0X

63 BIAPOC

+ General setting

- Outputs setting

+ UI setting

Channel

Output 1 Switch

Output 1: Function

Output 1: Logic

Enable

Input 0 reverse

The input 1 of logic

Logic function type

Input 1 reverse

Result reverse

Value of input1 after bus recovery

The input 2 of logic

Logic function type

Input 2 reverse

Result reverse

Value of input2 after bus recovery

☐ Disable ☒ Enable

☐ No ☐ Yes

☐ Disable ☒ Enable

AND

☒ No ☐ Yes

☒ No ☐ Yes

0

☐ Disable ☒ Enable

AND

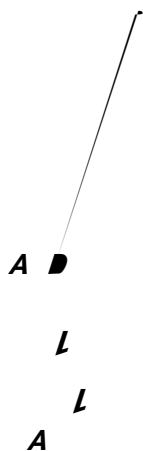
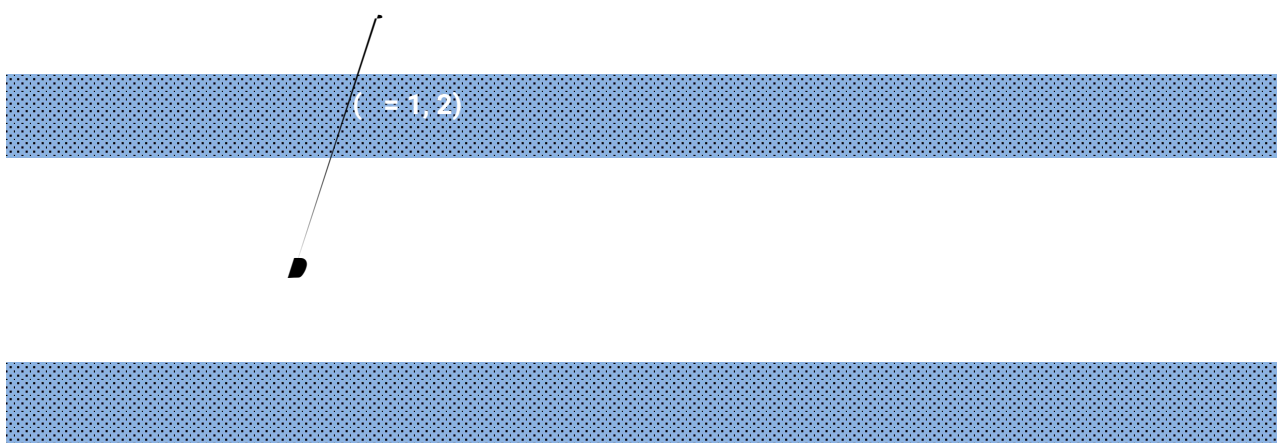
☒ No ☐ Yes

☒ No ☐ Yes

0

0

0/1/2



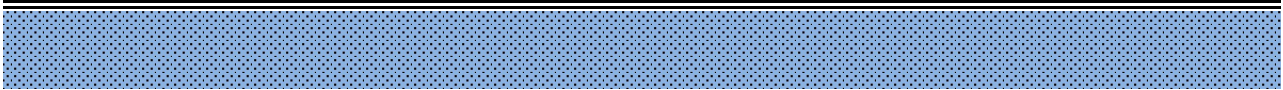
1...64,0=

1...640=

C

4.3.5 :

+ General setting	Function of "Time"	☒ Disable ☐ Enable
- Outputs setting	Function of "Logic"	☒ Disable ☐ Enable
Channel configuration	Function of "Scene"	☒ Disable ☐ Enable
- Output 1 Switch	Function of "Forced"	☐ Disable ☒ Enable
Output 1: Function	Force operation type	☒ 1Bit ☐ 2Bit
+ UI setting	Contact position if forced operation	Unchange
	Function of "Operation hours counter"	☒ Disable ☐ Enable



1

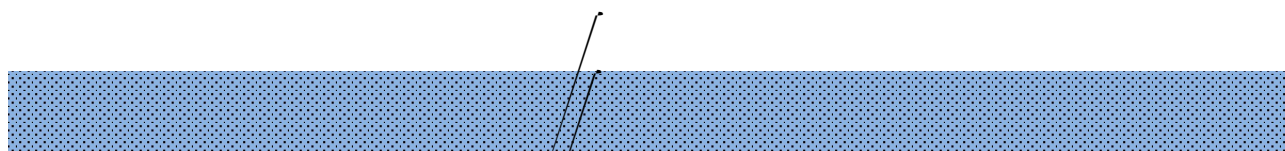
2

1bit

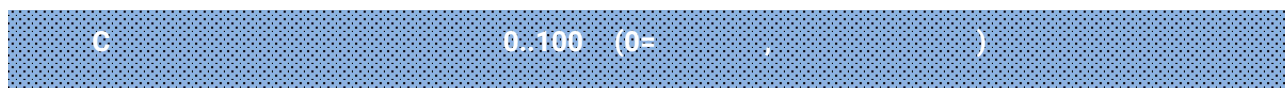
!

J^

+ General setting	Function of "Time"	☒ Disable ☐ Enable
- Outputs setting	Function of "Logic"	☒ Disable ☐ Enable
Channel configuration	Function of "Scene"	☒ Disable ☐ Enable
- Output 1 Switch	Function of "Forced"	☐ Disable ☐ Enable
Output 1: Function	Function of "Operation hours counter"	☐ Disable ☐ Enable
+ UI setting	Object datatype of "Operation hours counter"	☒ 2 byte Value in h(DPT7.007) ☐ 4 byte Value in s(DPT13.100)
Cyclically send counter value = 0 (0 = not send, only for reading)		



2 (D 7.007) &
 4 (D 13.100) &



0-100

4.4. -- ()

+ General setting	Work mode of the channel is		☐ Switch actuator ☒ Heating actuator(without controller)
- Outputs setting	Valve type		☒ Normal (de-energised close) ☐ Inverted (de-energised open)
Channel configuration	If bus failure, contact is	Unchange	
Output 1 Switch	If bus recovery, valve position	0%[Closed]	
+ UI setting	PWM cycle time for control	120s	
	Control telegram is received as	☐ 1bit (on-off control or PWM) ☒ 1byte (Continuous)	
	Reply the status for contact	Yes, 1=contact close; 0=contact open	
	Cyclic monitoring of thermostat	120s	

+ General setting		Work mode of the channel is	☐ Switch actuator ☒ Heating actuator (without controller)
- Outputs setting		Valve type	☒ Normal (de-energised closed) ☐ Inverted (de-energised open)
Channel configuration		If bus failure, contact is	Unchange
Output 1 Switch		If bus recovery, valve position	0%[Closed]
+ UI setting		PWM cycle time for continuous	120
		Control telegram is received as	☐ 1bit (on-off control or PWM) ☒ 1byte (Control telegram)
		Reply the status for continuous control	No reply
		Reply the status for contact	Yes, 1=contact close; 0=contact open
		Function for monitoring is	☐ Disable ☒ Enable
		Overriding of the manual status	120
		Valve position during fault	Unchange
		Send object "Report fault" is	☐ Disable ☒ Enable
		Function of forced operation is	☐ Disable ☒ Enable

&

(-)

(-)

,

0% C

10% 26

20% 51

...

90% 230

100%

60..65535

60..65535

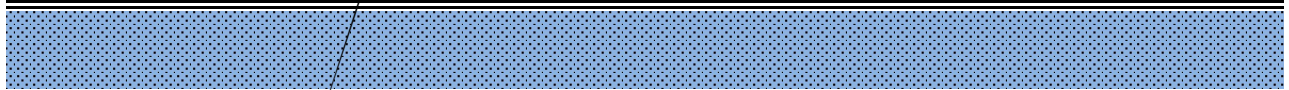
1

()

C

1 (-)

1 (C)



--

C

0..65535

0..65535

--

&

0% C

10% 26

...

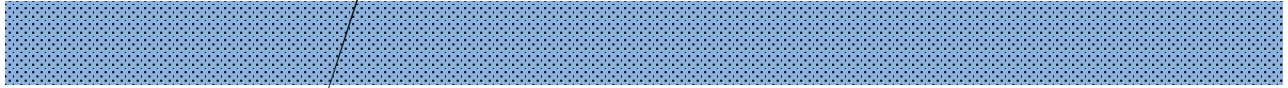
100%

--

L

GVS

K-BUS



--

&

0% C

10% 26

...

100%

4.5.

14

m

4.5.1

C

:

B

&

1

13



1..50 *100

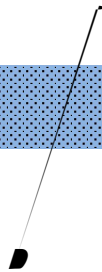
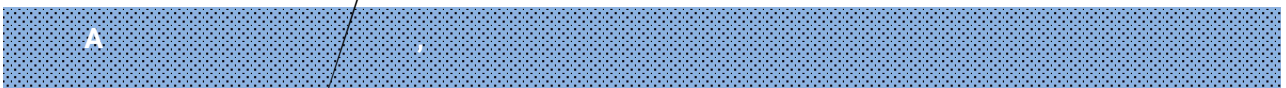
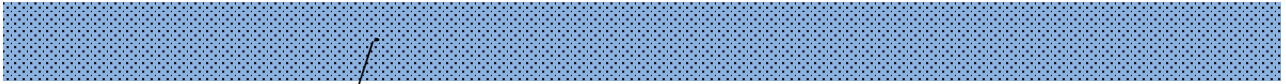
1..50



-

-

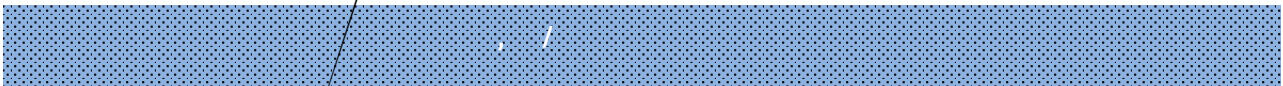






0%/10%/ /90%/100%

40%"



L

L

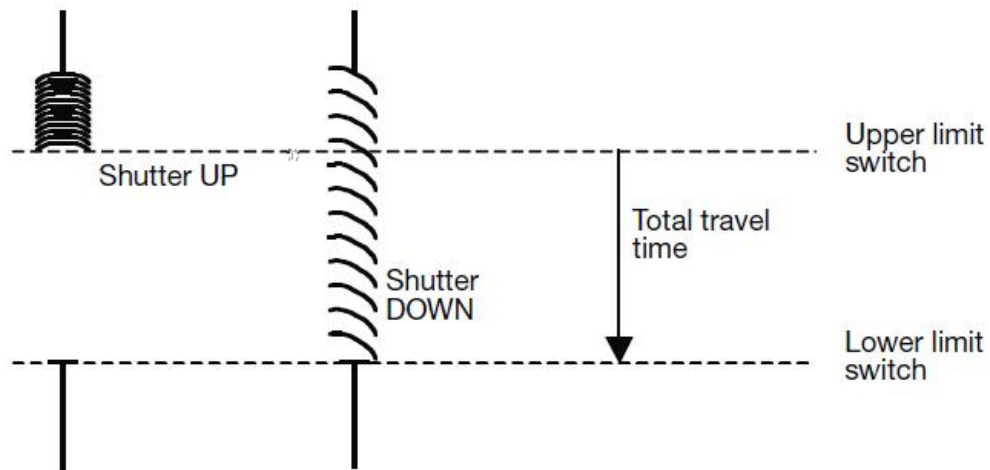
4.5.1.1

C : D

+ General setting		Total travel time [20..50000]	600	*0.1s
Outputs setting	Delay time from switch-on to moving [0..200]	0	*10ms	
Channel configuration	Duration of Slat adjustment [10...250]	20	*10ms	
Output Curtain	Total travel time of Slat 0..100% in [10..250]	100	*10ms	
Curtain: Drive	Pause on change in direction [5...255]	50	*20ms	
Curtain: Auto.	Additional travel time in upward direction [0..255]	0	*0.1s	

+ General setting		Total travel time [20..50000]	600	*0.1s
- Outputs setting				

20 50000 *0.1



D

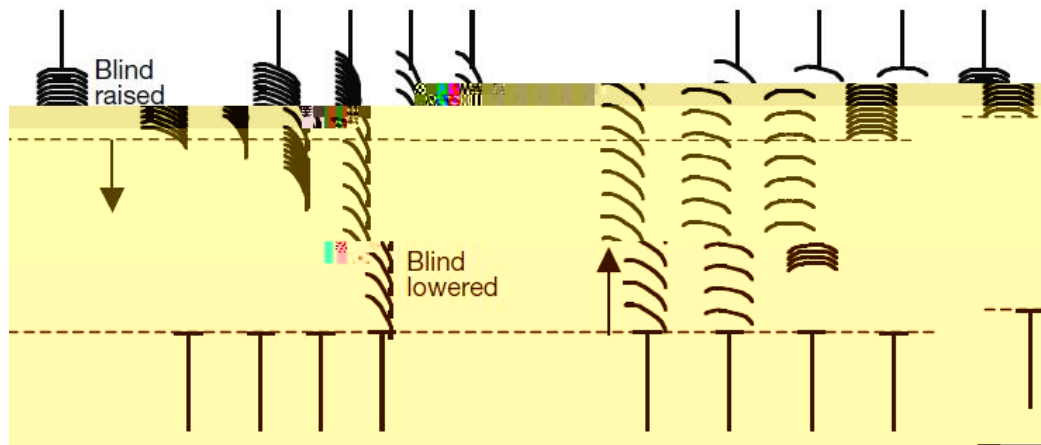
-

0..200 *10

0..200

D

10 250 *10



0 100% 10 250 *10

5 255 *20

A

0.255 *0.1

0%

0 (.)

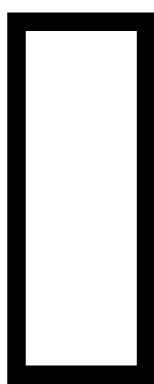
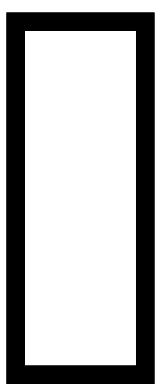
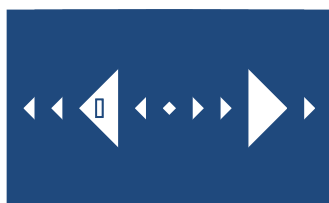
1 (.)

"0"

"1"

A .

-- . 10 6000



D

L 1

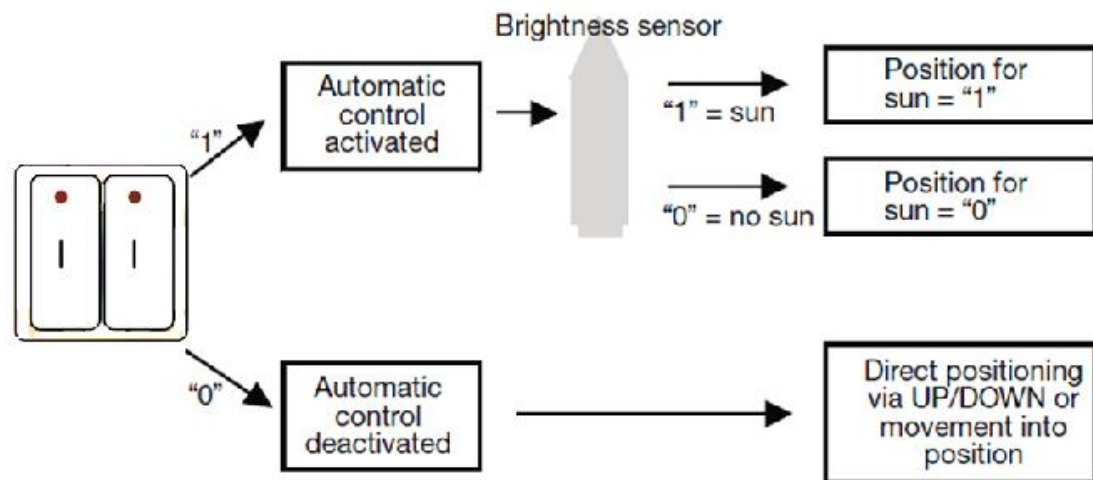
-- **D** = 1 0...65535

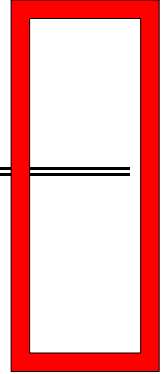
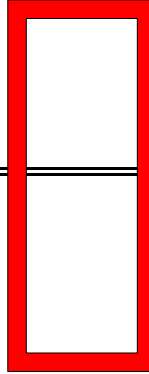
0 65535

-- **D** = 0 ()

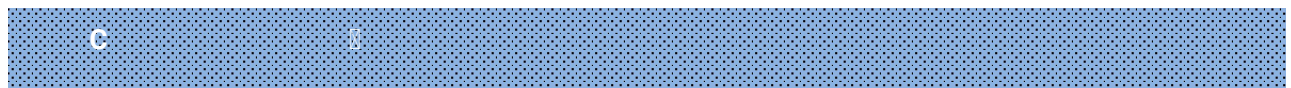
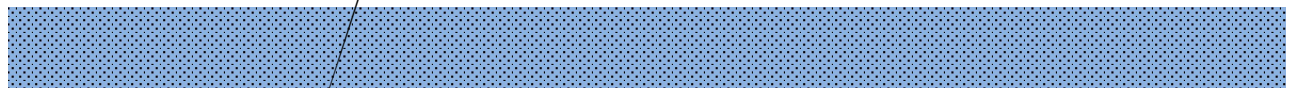
-- **D** = 0 0...65535

0 65535





Function scene		☐ Inactive ☒ Active
Overwrite scene stored values during download ☐ Disable ☒ Enable		
1> Channel is assigned to [1..64,0=no assignment]	0	
Blind position: [0..100] (0=top,100=bottom)	0	%
Slat position: [0..100] (0=open,100=close)	0	%
2> Channel is assigned to [1..64,0=no assignment]	0	
Blind position: [0..100] (0=top,100=bottom)	0	%
Slat position: [0..100] (0=open,100=close)	0	%
3> Channel is assigned to [1..64,0=no assignment]	0	

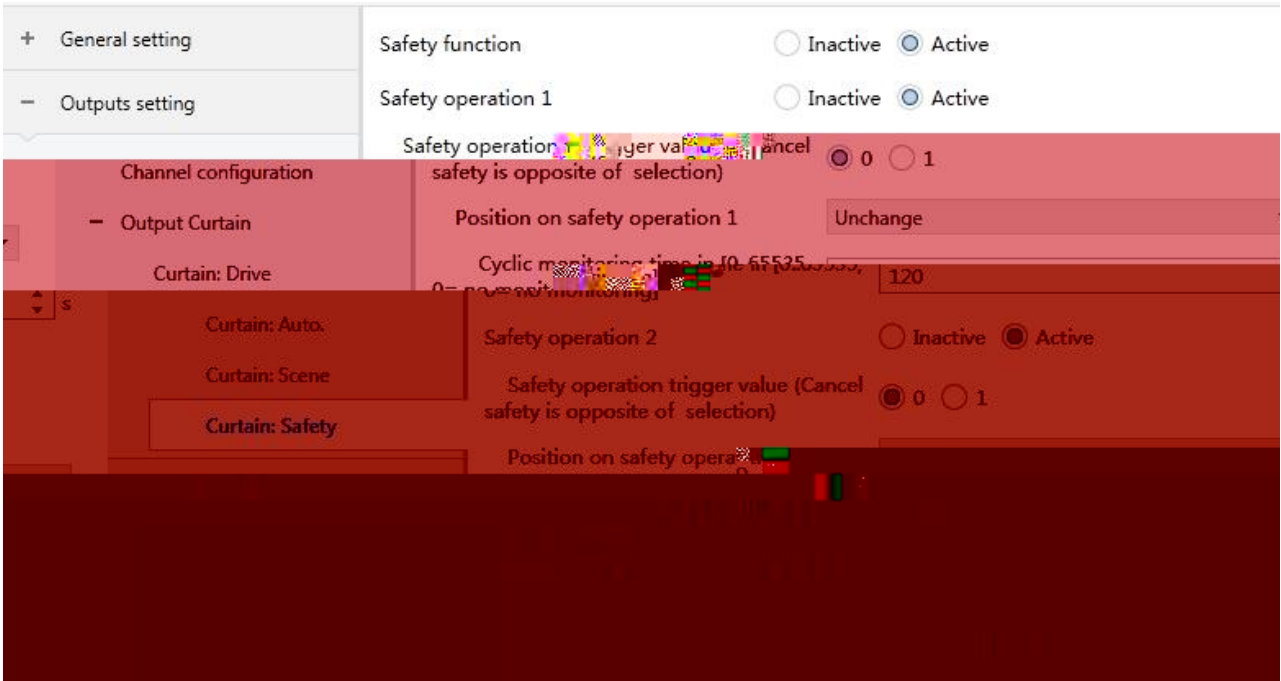


0 100% 0% , 100%=

-- : 0-100% (0%= ,100%=)

0 100% 0% , 100%=

4.5.1.4 C :



A

Inactive

Active

(C

)

0

1

0

1

1/2

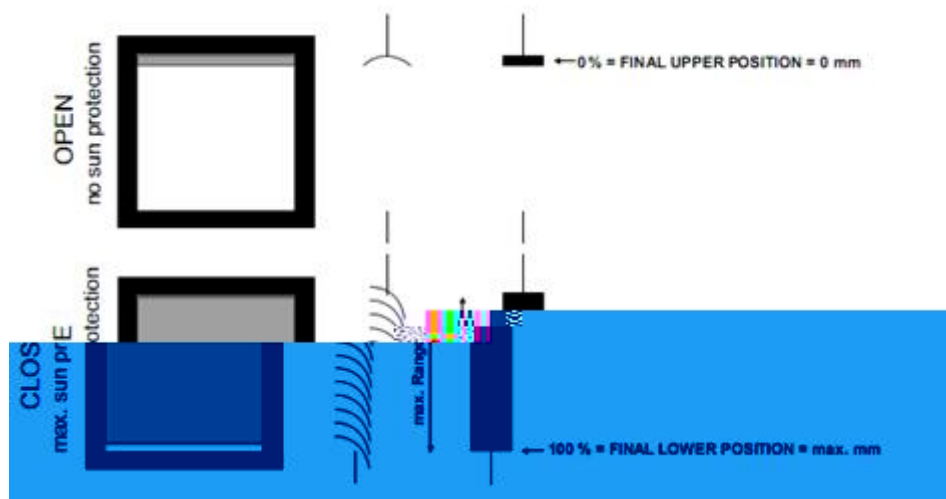
D

C

0..65535, 0=

4.5.2

C :



2

1

1

I DON'T KNOW

General setting	HVAC control mode	Heating
General	Monitoring control value	☐ Disable ☒ Enable
Outputs setting	Monitoring period of control value [10..65535]	60 s
Channel configuration	Reply mode of Obj."Control value fault"	☐ Respond after read only ☒ Respond after change
Output Valve	Control value after fault occurs [0..100]	0 %
Valve: Heating		

General setting	HVAC control mode	Cooling
General	Monitoring control value	☐ Disable ☒ Enable
Outputs setting	Monitoring period of control value [10..65535]	60 s
Channel configuration	Reply mode of Obj."Control value fault"	☐ Respond after read only ☒ Respond after change
Output Valve	Control value	

General setting	HVAC control mode	Heating and Cooling
General	HVAC System	2 pipes system
Outputs setting	Monitoring control value	☐ Disable ☒ Enable
Channel configuration	Monitoring period of control value [10..65535]	60 s
Output Valve	Reply mode of Obj."Control value fault"	☐ Respond after read only ☒ Respond after change
Valve: Heating/Cooling		
	Control value after fault occurs [0..100]	

General setting	HVAC control mode	Heating and Cooling
General	HVAC System	4 pipes system
Outputs setting	Number of control value	2 control value
Channel configuration	Monitoring control value	☐ Disable ☒ Enable
Output Valve	Monitoring period of control value [10..65535]	60 s
	Reply mode of Obj."Control value fault"	☐ Respond after read only ☒ Respond after change

AC C

&

C

C

AC

&

10..65535

10 65535

L

. C

L
L

C

0..100 %

0 100 %

4.6.1 : /C &

General setting	
General	Valve control mode ☒ 2 state-ON/OFF ☐ Continuous,PWM Valve type ☒ Normal(de-energised closed) ☐ Inverted(de-energised open)
Outputs setting	If bus recovery, valve position ☒ Unchange ☐ Close valve If bus failure, valve position ☒ Unchange ☐ Close valve
Channel configuration	Reply mode for valve status ☐ Respond after read only ☒ Respond after change
Output Valve	
Valve: Heating	
Valve:  ing	Valve purge function ☒ Disable ☐ Enable "Disable Heating" object function ☒ Disable ☐ Enable
UI setting	

General setting		Valve control mode		☒ 2 state-ON/OFF ☐ Continuous,PWM
General		Valve type		☒ Normal(de-energised closed) ☐ Inverted(de-energised open)
setting	If bus recovery, valve position	☐ Unchange ☐ Close valve	Output	
el configuration	If bus failure, valve position	☐ Unchange ☐ Close valve	Chanr	
Valve	Reply mode for valve status	☐ Respond after read only ☐ Respond after change	Output	
ve: Heating				Val
ve: Cooling	Valve purge function	☐ Disable ☐ Enable	Va	
g	"Disable Cooling" object function	☐ Disable ☐ Enable	+ UI setti	



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+ General setting - Outputs setting Channel configuration - Output Valve Valve: Heating/Cooling Output 2 Switch + UI setting	Valve control mode 2 state-ON/OFF
	Valve type ☒ Normal(de-energised closed) ☐ Inverted(de-energised open)
	If bus recovery, valve position ☒ Unchange ☐ Close valve
	If bus failure, valve position ☒ Unchange ☐ Close valve
	Reply mode for valve status ☐ Respond after read only ☒ Respond after change
	Valve purge function ☐ Disable ☒ Enable
	Duration of valve purge time [1..255] 10 min
	Automatic valve purge ☐ Disable ☒ Enable
	Purge Cycle in weeks 1
	Reply mode for valve purge status (1bit) ☐ Respond after read only ☒ Respond after change
	"Disable Heating/Cooling" object function ☐ Disable ☒ Enable
	Trigger object value ☒ 0=Disable/1=Enable ☐ 1=Disable/0=Enable

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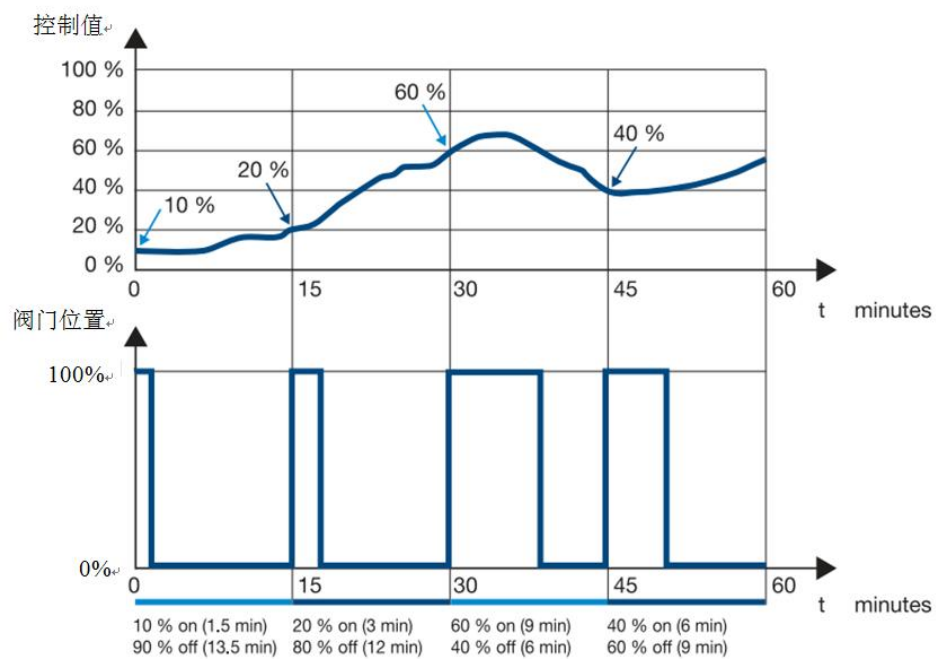
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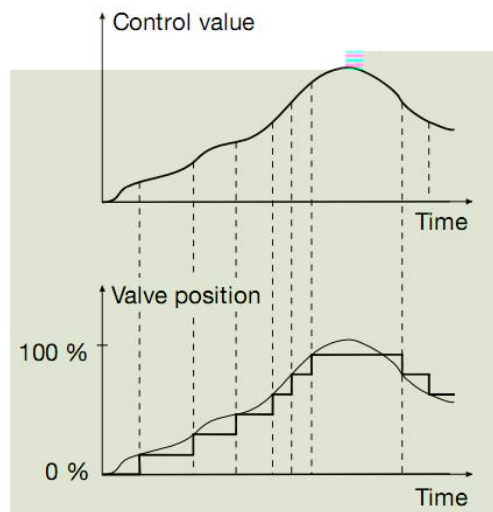
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+ General setting	Valve control mode	Continuous,PWM
- Outputs setting	Valve type	☒ Normal(de-energised closed) ☐ Inverted(de-energised open)
Channel configuration	PWM cycle time [10..6000]	120 s
- Output Valve	If bus recovery, valve position	☒ Unchange ☐ Close valve
Valve: Heating/Cooling	If bus failure, valve position	☐ Unchange ☐ Close valve
Output 2 Switch	Reply mode for valve status	☐ Respond after read only ☒ Respond after change
+ UI setting	Valve purge function	☐ Disable ☒ Enable
	"Disable Heating/Cooling" object function	☒ Disable ☐ Enable



+ General setting	Valve control mode	3 point, open and close
- Outputs setting	Observe reversing time	
Channel configuration	If bus failure, valve position	Unchange
- Output Valve	If bus recovery, valve position	☒ Unchange ☐ Close valve
Valve: Heating/Cooling	Valve control time 0%->100% [50..6000]	100 s
UI setting	Automatic adjust valve position	☐ No ☒ Yes
	Number of valve control up to adjust [1..65535]	200
Correct Valve characteristic curve		☐ No ☒ Yes
Min. controller value for closed valve [0..100]	0	%
Max. controller value for fully opened valve [0..100]	100	%
Lower valve position for opening [0..100]	0	%
Upper valve position for opening [0..100]	100	%
Reply mode for valve status	☐ Respond after read only ☒ Respond after change	
Object type of valve status	☐ 1Bit ☒ 1Byte	
Valve purge function	☒ Disable ☐ Enable	
"Disable Heating/Cooling" object function	☒ Disable ☐ Enable	



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0% → 100% 50 6000

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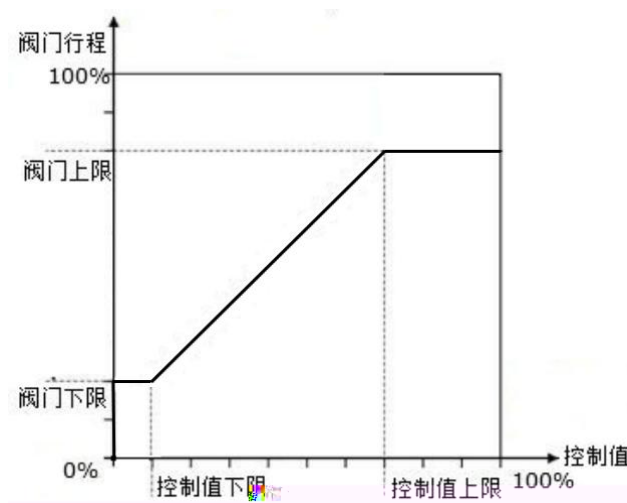
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1 65535

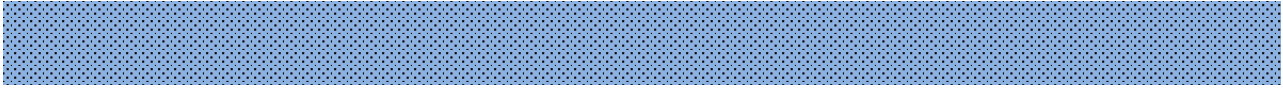
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 0...100 %
 0...100 %



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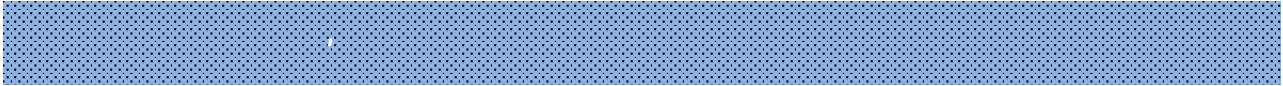
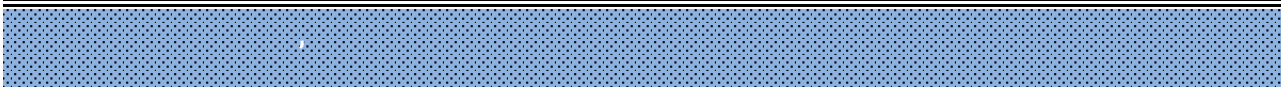
4.7.1

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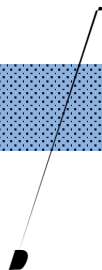
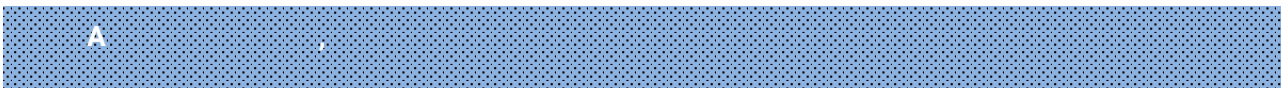
+ General setting - Outputs setting Channel configuration - Output Fan Fan: Status Output 2 Switch Output 3 Switch + UI setting	Fan type ☒ One level ☐ Multi-level When bus failure,Fan speed is Unchange When bus recovery, fan speed is Unchange After downloading fan speed is OFF Forced operation function ☐ Disable ☒ Enable Forced operation on object value ☐ 0=Force/1=Cancel ☒ 1=Force/0=Cancel Behaviour on Forced operation Unchange Auto. operation function ☒ Disable ☐ Enable Time mode for function ON Switch Delay 10 *0.1s Time mode for function OFF Switch Delay 10 *0.1s
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A



0= /1=C

1= /0=C

B

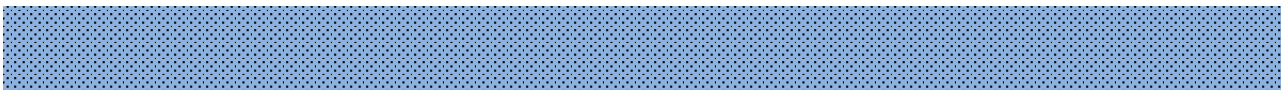
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1..65535 *0.1

1 65535

1..65535

1 65535



1..65535

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+ General setting	Auto.operation on object value	☐ 0=Auto/1=Cancel ☒ 1=Auto/0=Cancel
- Outputs setting	State of Auto.operation after startup	☐ Disable ☒ Enable
Channel configuration	Automatically enable auto.operation	☐ No ☒ Yes
- Output Fan	Enable auto.operation after in [10..6000]	100 min
Fan: Auto.	Threshold value OFF<->ON[1..100]	30 %
Fan: Status	Hysteresis threshold value in +/-[0..50]	10 %
Output 2 Switch	Number of control value	☒ 1 ☐ 2
Output 3 Switch	Monitoring control value	☐ Disable ☒ Enable
+ UI setting	Monitoring period of control value [10..65535]	120
	Reply mode of Obj."Control value fault"	☐ Respond after read only ☒ Respond after change
	Control value after fault occurs [0..100]	0 %

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0=A /1=C

1=A /0=C

A .

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10..6000

10..6000

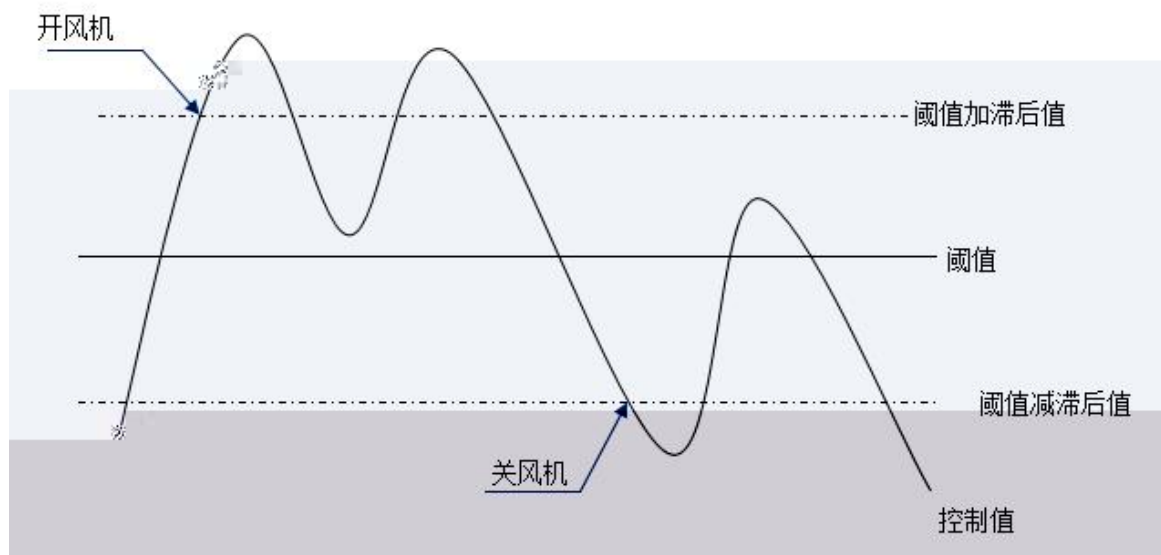
<-> 1 100 %

1 100

+/- 0 50 %

0

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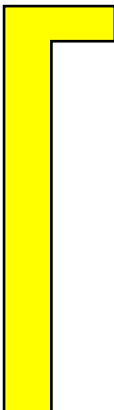
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C

0..100 %

0 100 %

4.7.1.2

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+ General setting - Outputs setting Channel configuration - Output Fan Fan: Auto. Fan: Status	Reply mode of Obj. "Status Fan ON/OFF"(1bit) ☐ Respond after read only ☒ Respond after change Reply mode of Obj. "Status Automatic"(1bit) ☐ Respond after read only ☒ Respond after change
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+ General setting	Fan type	☐ One level ☒ Multi-level
- Outputs setting	Fan speeds on 2 limit	☐ No ☒ Yes
Fan operation mode		
After downloading, fan speed is OFF		
+ UI setting	Object value for fan speed	
	Object value for Fan speed 1	33 %
	Object value for Fan speed 2	67 %
	Object value for Fan speed 3	100 %
	Forced operation function	☐ Disable ☒ Enable
	Forced operation on object value	☐ 0=Force/1=Cancel ☒ 1=Force/0=Cancel
	Limitation on forced operation	Unchange
	Auto. operation function	☒ Disable ☐ Enable
	Obj. "Switch speed x " 1bit function	☒ Disable ☐ Enable
	Delay time for function OFF [0..65535]	0 *0.1s
	Starting characteristic of fan	Disable ☐ Enable
	Switch on over fan speed	1
	Minimum time in [0..65535]	10 s

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50 5000

50 5000

1

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1/2/3

1..100%



0= /1=C

1= /0=C

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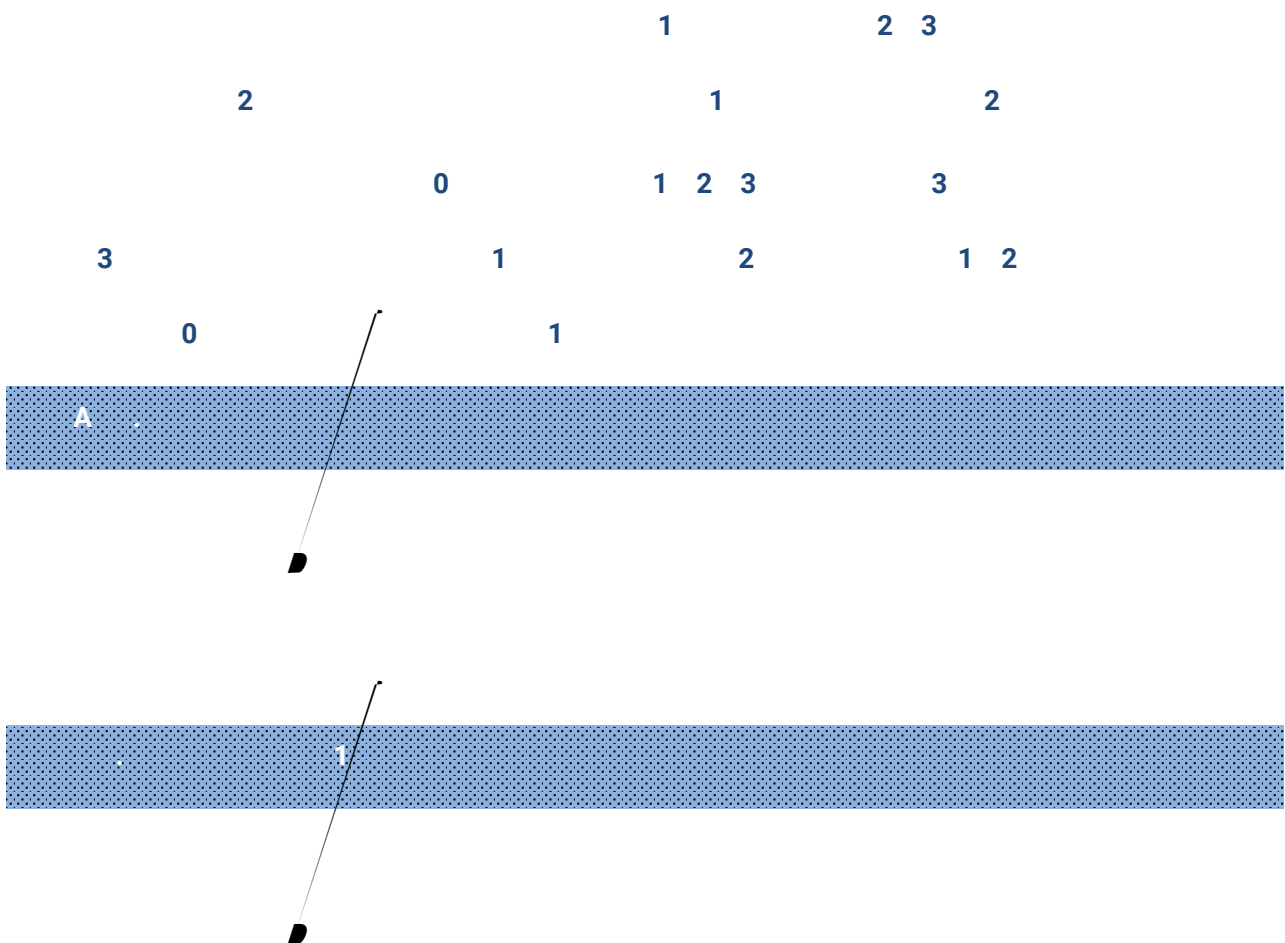
2, 1

2, 1,

3

3, 2

3, 2, 1



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0...65535 *0.1

0 65535

0

D

3

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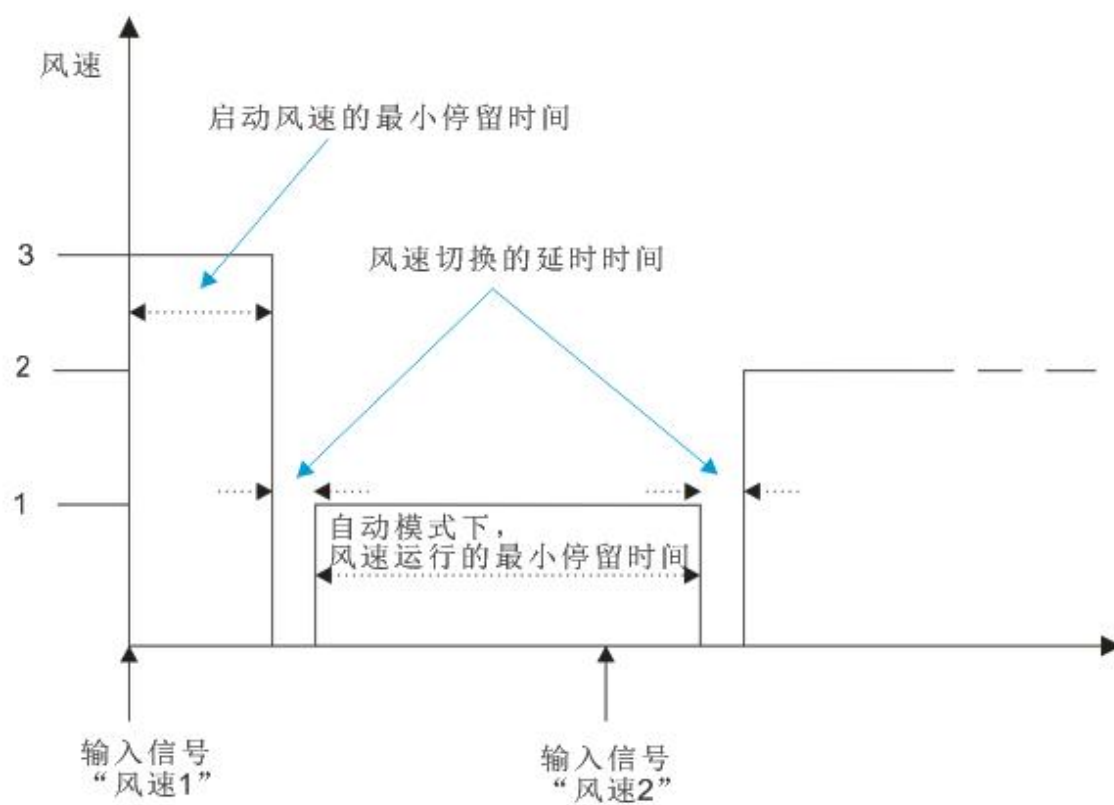


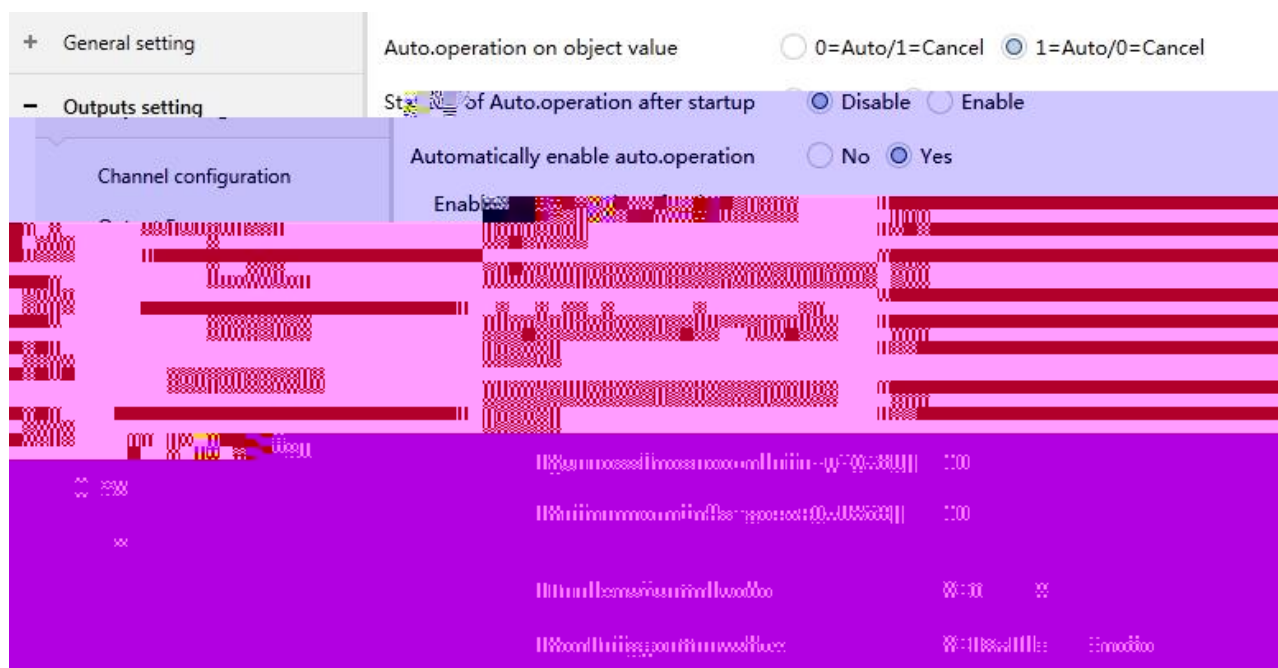
1/2/3



1. 65535

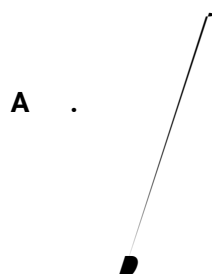
1 65535





0=A /1=C

1=A /0=C



A

10..6000

10..6000

<--> 1 1 100 %

1 100%

1<--> 2 1 100 %

1 100

2<--> 3 1 100 %

1 100

<--> 1

1 <--> 2

2 <--> 3

<--> 1

1 <-->

2

1 <-->

2

2 <-->

3

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K-BUS

+/- 0 50 %

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1/2/3 1..100 %

1..100%

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+ General setting

+ Outputs setting

- UI setting

Channel configuration

Universal interface setting

Function of Channel 1

Function of Channel 2

Function of Channel 3

Function of Channel 4

Function of Channel 5

Function of Channel 6

Common setting channel set as output LED

Output LED voltage

The connect type for the LED

LED object need send read request after power on

Brightness of LED

Debounce time

Disable

Disable

Disable

Disable

Disable

Disable

5V(Max. 1mA)

12V(Max. 10mA)

Common Anode

Common Cathode

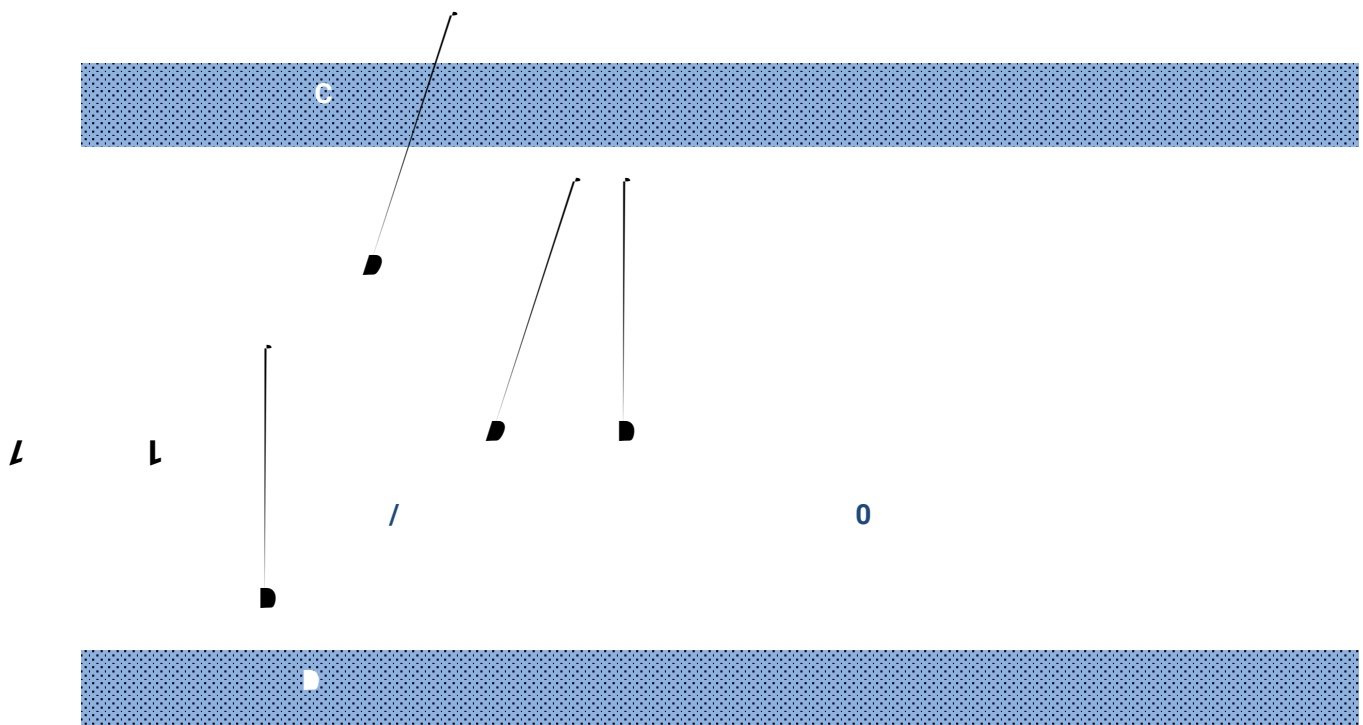
No

Yes

Level 3

50

ms



5 (.1 A) &
12 (.1 A) &



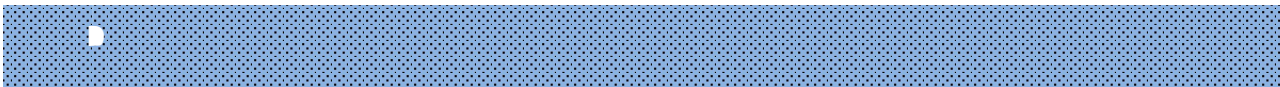
C -A
C -C



A 0



1
2
3



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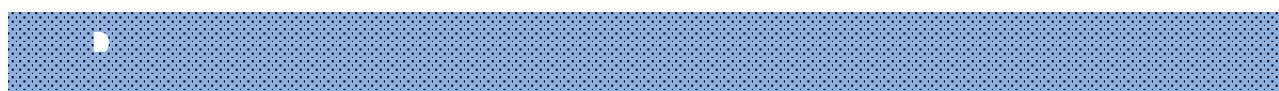
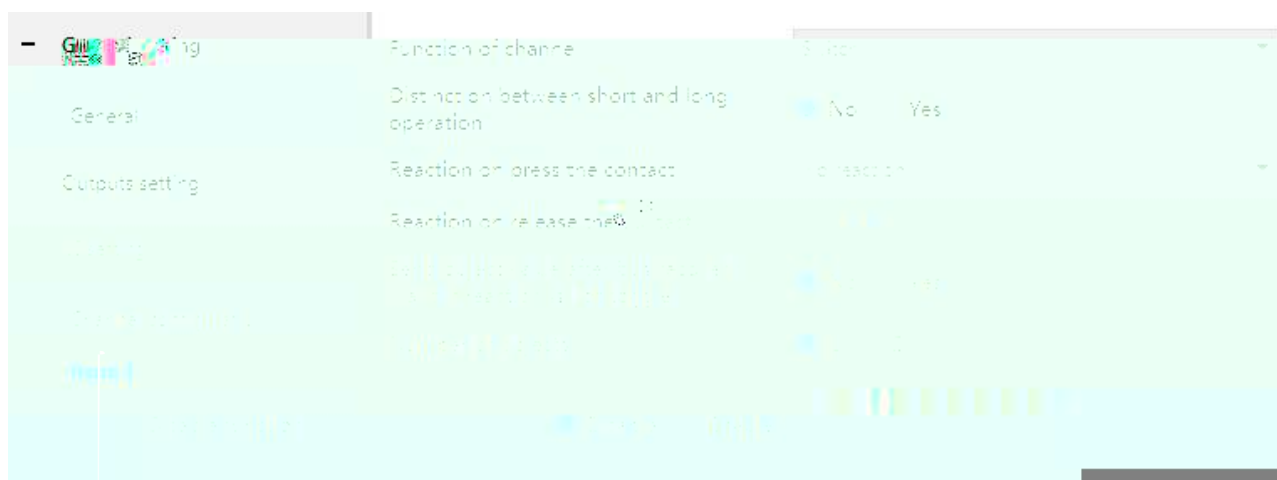
70

100

150

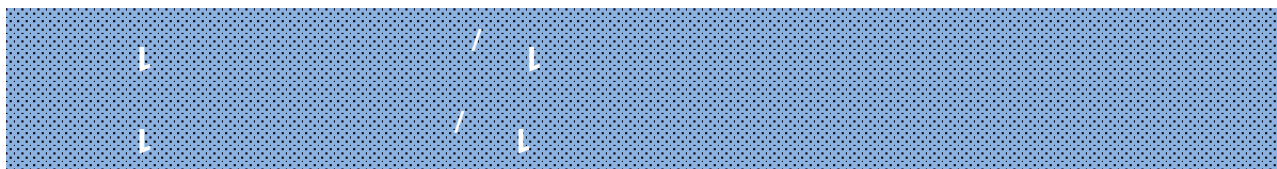
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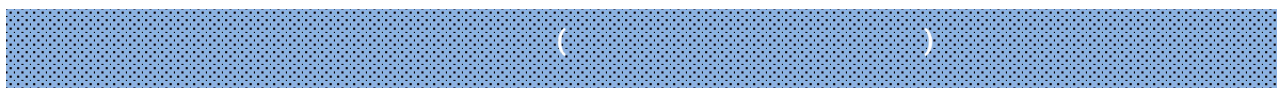


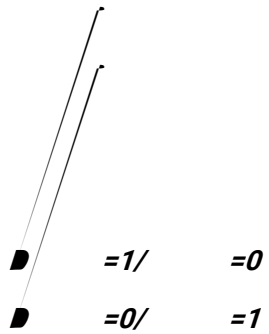
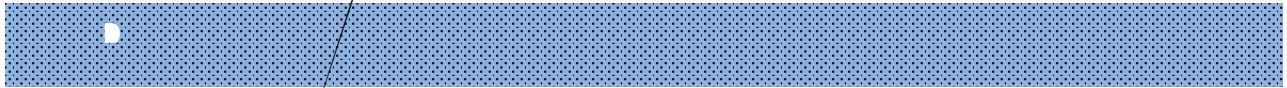
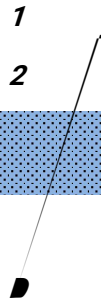
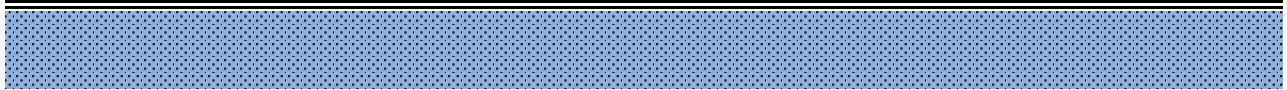
3..25 *0.1

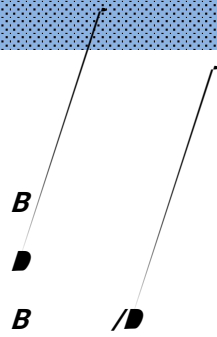
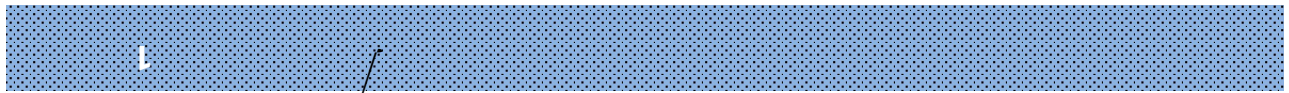
3..25



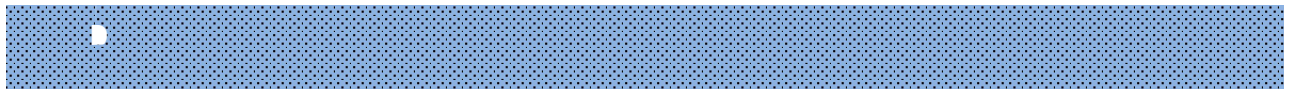
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100%

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0..25 *0.1 (0=

0..25, 0=

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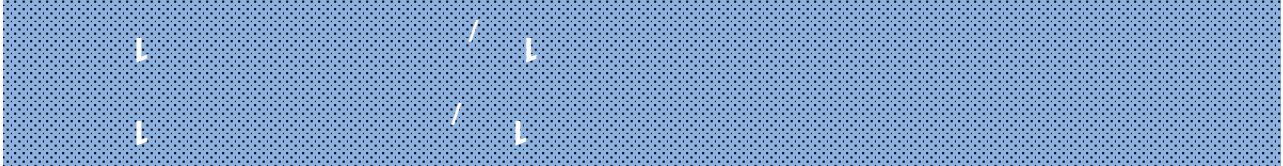
&

+ General setting		Function off	Value output
Outputs setting	Distinction between short and long operation	☐ No ☒ Yes	
0.1s	Long operation after [3..25]	5	
Channel configuration	Connected contact type	☒ Normally open ☐ Normally closed	
Reaction on short operation	Reaction on short operation	Continue [0..4]	
Output value [0..1]	Output value [0..1]	0	
Reaction on long operation	Reaction on long operation	Continue [0..8]	
Output value [0..8]	Output value [0..8]	0	
Disable function		☐ Disable ☒ Enable	



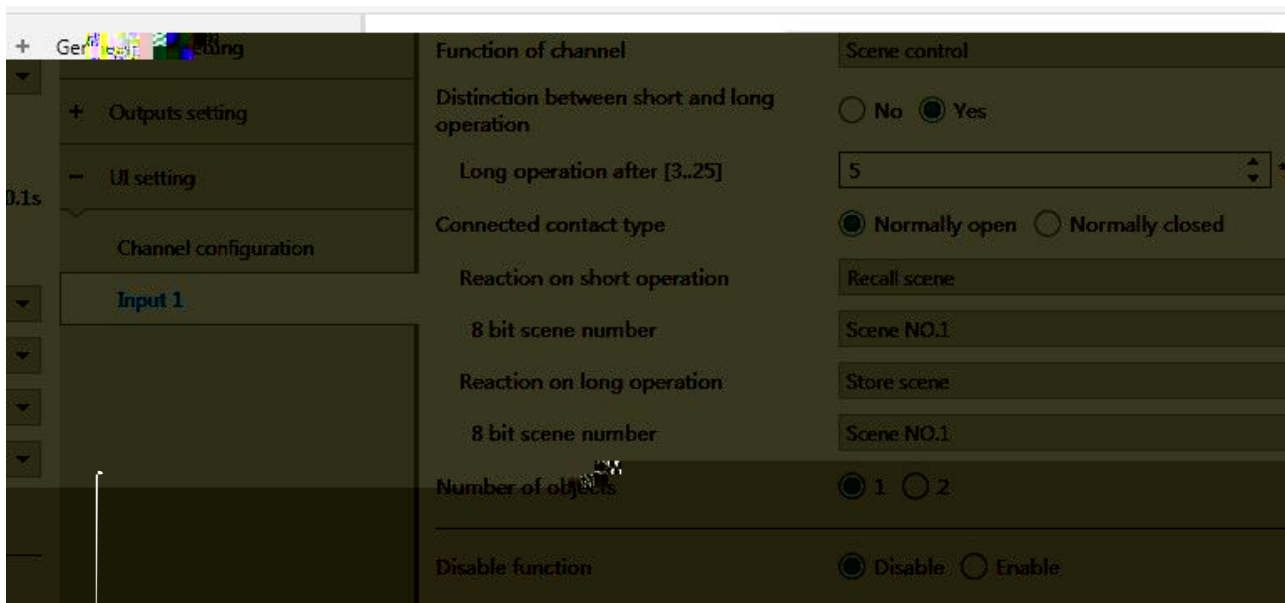
3..25 *0.1

3..25



1 0..1

2 0..65535



3..25 *0.1

3..25

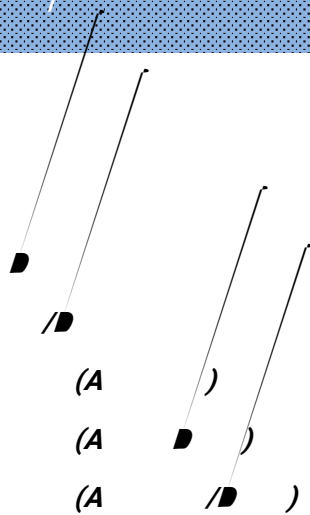
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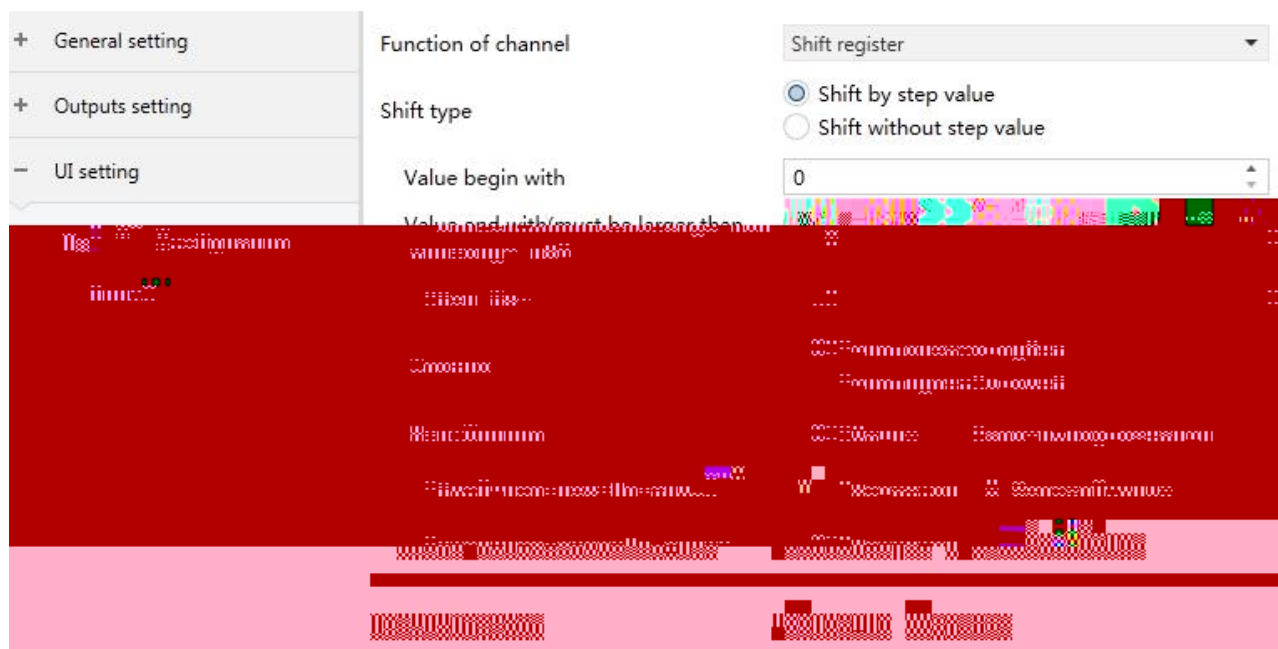
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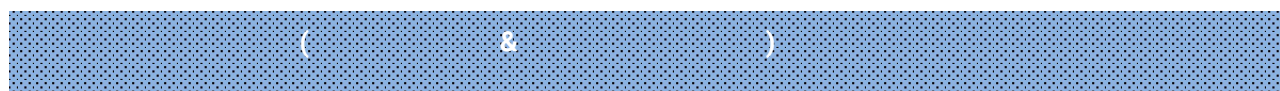
. 0..25 *0.1 (0=

Stop...

0..25 0



0...240



1...255

0...240

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1/.../10

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K-BUS

3.25 ±0.1

3..25

C

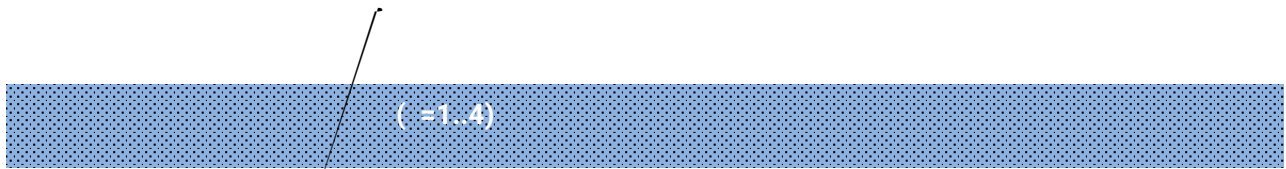
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+ General setting		Function of channel	Multiple operation
+ Outputs setting		Distinction between short and long operation	☐ No reaction ☒ Send Value
- 111 offsetting		Long delay after [3..25]	5
Channel configuration		Connected contact type	☒ Normally open ☐ Normally closed
Input 1		Object type for object1	1Bit_On/Off
		Function of short operation	TOGGLE
		Function of long operation	TOGGLE
		Object type for object2	1Bit_Up/Down
		Function of short operation	Up/Down
		Function of long operation	Up/Down
		Object type for object3	1Byte_Range
		Function of short operation	☐ No reaction ☒ Send Value
		Value 1 (Scene NO.)	Scene NO.1
		Function of long operation	☐ No reaction ☒ Send Value
		Value 2 (Scene NO.)	Scene NO.2
		Object type for object4	1Byte_Percentage
		Function of short operation	☐ No reaction ☒ Send Value
		Value 1 (Percentage)	30
		Function of long operation	☐ No reaction ☒ Send Value
		Value 2 (Percentage)	100
		Disable function	☒ Disable ☐ Enable

3..25 *0.1

3..25

C



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1B /

1B

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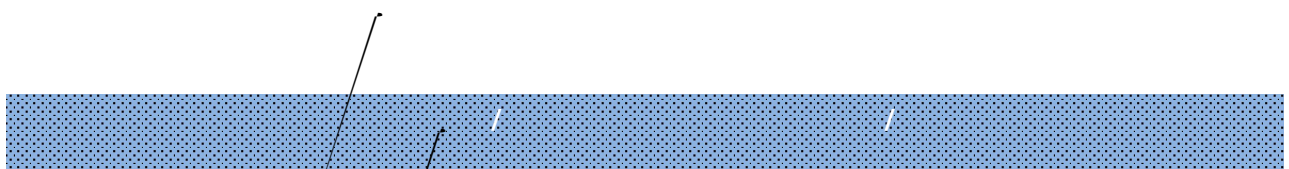
+ General setting	Function of channel	Delay mode
+ Outputs setting	Distinction between short and long operation	☒ No ☐ Yes
- UI setting	Object type for press the contact	1Bit_On/Off
Channel configuration	Send mode	No action when press,delay then send value1
Input 1	Delay time [0..6500]	10 s
	Value 1	☒ 0 ☐ 1
	Value 2	☐ 0 ☒ 1
	Disable function	☒ Disable ☐ Enable

+ General setting	Function of channel	Delay mode
+ Outputs setting	Distinction between short and long operation	☐ No ☒ Yes
UI setting	Long operation after [3..25]	5 *0.1s
Channel configuration	Connected contact type	☒ Normally open ☐ Normally closed
Input 1	Object type for short operation	1Bit_On/Off
	Send mode	No action when press,delay then send value1
	Delay time [0..6500]	10 s
	Value 1	☒ 0 ☐ 1
	Value 2	☐ 0 ☒ 1
	Object type for long operation	4Bit_Dimming
	Send mode	No action when press,delay then send value1
	Delay time [0..6500]	10 s
	Value 1	1
	Value 2	0
	Disable function	☒ Disable ☐ Enable

3..25 *0.1

3..25

C



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1B /
4B **D**
1B

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	,	2	2
1	,	2	1
2	,	1	2
D			

0..6500

0..6500

4.10.



+ General setting

Status LED indication
Control by external object

+ Outputs setting

- UI setting

Channel configuration

LED 1

External object,
1bit
1byte

When object value="0", LED is
OFF
On

When object value="1", LED is
OFF
On

+ General setting

Status LED indication
Control by external object

+ Outputs setting

- UI setting

Channel configuration

LED 1

External object datatype
1bit
1byte

Threshold value is
50

If object value < threshold value, LED is
OFF
On

If object value > threshold value, LED is
OFF
On

+ General setting

Status LED indication
Always on

+ Outputs setting

- UI setting

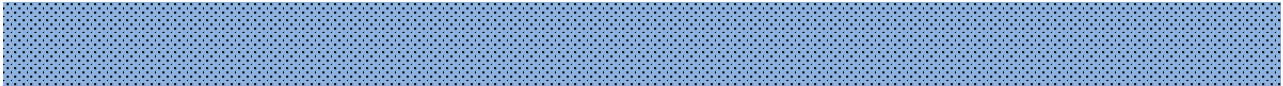
Channel configuration

LED 1



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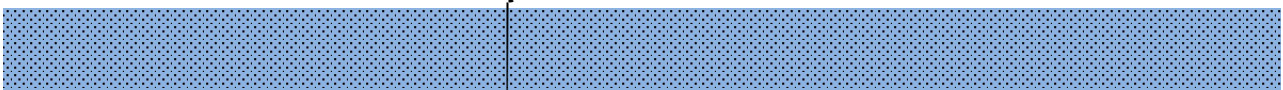


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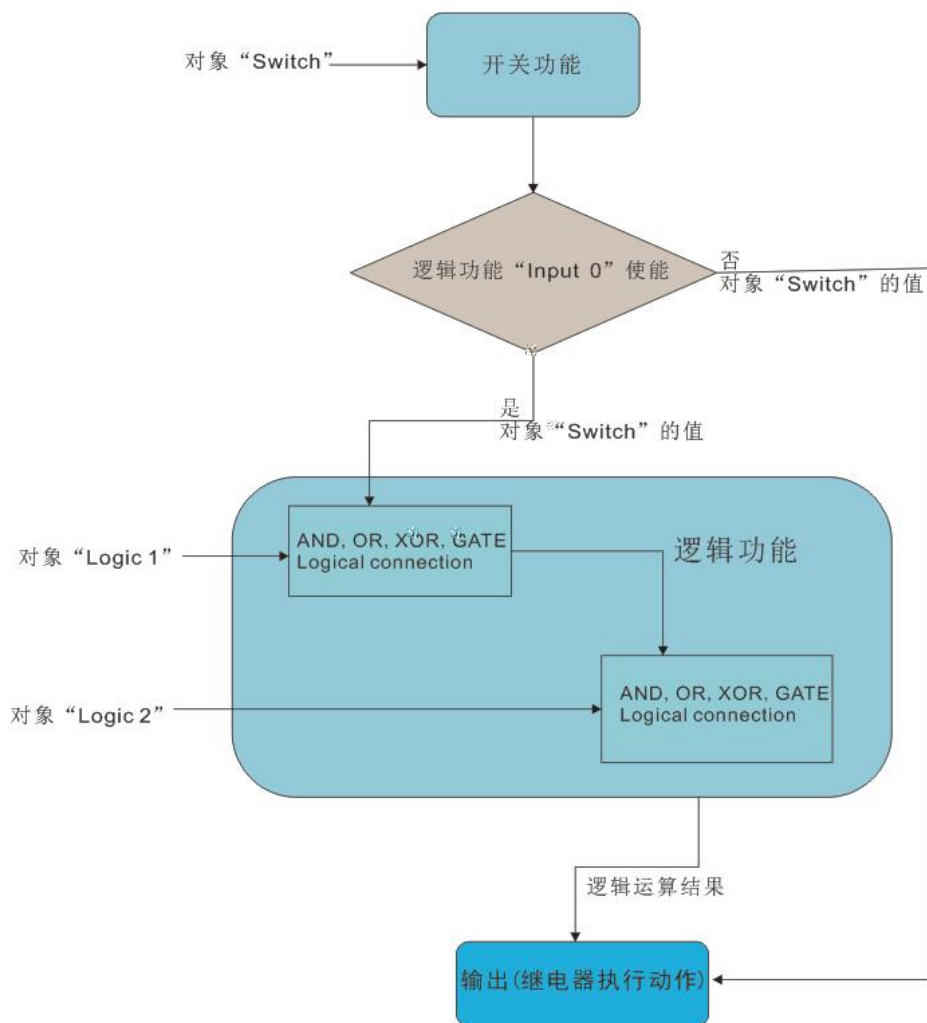
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Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
2	Output 1 Switch	Switch			1 bit	C	-	W	-	-	switch	Low
3	Output 1 Switch	Switch status			1 bit	C	R	-	T	-	switch	Low
4	Output 1 Switch	Enable time function			1 bit	C	-	W	-	-	enable	Low
5	Output 1 Switch	Delay function			1 bit	C	-	W	-	-	switch	Low
6	Output 1 Switch	Operation hours counter			4 bytes	C	R	W	T	U	time lag (s)	Low
7	Output 1 Switch	Scene			1 byte	C	-	W	-	-	scene control	Low
8	Output 1 Switch	Forced output			2 bit	C	-	W	-	-	enable	Low
5	Output 1 Switch	Flashing function			1 bit	C	-	W	-	-	switch	Low
5	Output 1 Switch	Staircase function			1 bit	C	-	W	-	-	switch	Low
6	Output 1 Switch	Operation hours counter			2 bytes	C	R	W	T	U	time (h)	Low
8	Output 1 Switch	Forced output			1 bit	C	-	W	-	-	enable	Low

1			1	C,	1.001 D
2			1	C,	1.001 D



3

1

C, , ,

1.001 D

4

1

C,

1.003 D

5

D

1

C,

1.001 D

[illegible]

9		1	1	C,	1.002	B
10		2	1	C,	1.002	B

5.1.2

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(

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Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
2	Output 1 Switch	On-off control value			1 bit	C	-	W	-	-	switch	Low
3	Output 1 Switch	Status of contact			1 bit	C	R	-	T	-	switch	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
3	Output 1 Switch	Status of contact			1 bit	C	R	-	T	-	switch	Low
5	Output 1 Switch	Control value(Continuous)			1 byte	C	-	W	-	-	percentage (0..100%)	Low
4	Output 1 Switch	Status of continuous, 1bit			1 bit	C	R	-	T	-	switch	Low

2		-	1	C,	1.001 D
3			1	C, , L	1.001 D
5		C ()	1	C,	5.001 D
4		, 1	1	C, , L	1.001 D
6		, 1	1	C, , L	5.001 D

5.2.

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
2	Output Curtain	Move UP/DOWN			1 bit	C	-	W	-	-	up/down	Low
3	Output Curtain	Slat adj/stop			1 bit	C	-	W	-	-	step	Low
4	Output Curtain	Reference movement			1 bit	C	-	W	-	-	up/down	Low
5	Output Curtain	Move to position 0..100%			1 byte	C	-	W	-	-	percentage (0..100%)	Low
6	Output Curtain	Slat position 0..100%			1 byte	C	-	W	-	-	percentage (0..100%)	Low
7	Output Curtain	Scene			1 byte	C	-	W	-	-	scene control	Low
8	Output Curtain	Position status 0..100%			1 byte	C	R	-	T	-	percentage (0..100%)	Low
9	Output Curtain	Set status 0..100%			1 byte	C	R	-	T	-	percentage (0..100%)	Low
10	Output Curtain	Sunblind On			1 bit	C	-	W	-	-	switch	Low
11	Output Curtain	Enable auto control			1 bit	C	-	W	-	-	enable	Low
12	Output Curtain	Sunblind position 0..100%			1 byte	C	-	W	-	-	percentage (0..100%)	Low
13	Output Curtain	Sunblind adj. 0..100%			1 byte	C	-	W	-	-	percentage (0..100%)	Low
14	Output Curtain	Safety operation 1			1 bit	C	-	W	-	-	alarm	Low
15	Output Curtain	Safety operation 2			1 bit	C	-	W	-	-	alarm	Low
16	Output Curtain	Status of operation			1 byte	C	R	-	T	-		Low

2 C /D 1 C, 1.008 D D

3 C ./ 1 C, 1.007 D

3 C 1 C, 1.007 D

4 C , 1 C, 1.008 D D

		0 100%			
6	C	0 100%	1	C,	5.001 D
7	C		1	C,	18.001 D C
8	C	0..100%	1	C, , L	5.001 D

9	C	0..100%	1	C, , ,	5.001 D
10	C		1	C,	1.001 D
11	C	.	1	C,	1.003 D
12	C	: / 0 100%	1	C,	5.001 D
13	C	: . 0 100%	1	C,	5.001 D



K-BUS

14/1 5	C	1/2	1	C,	1.005 D A
16	C		1	C, , ,	D

5.3.

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In 0%										

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
30	Output Fan	Fan speed 1			1 byte	C	-	W	-	-	percentage (0..100%)	Low
31	Output Fan	Fan speed 2			1 bit	C	-	W	-	-	switch	Low
32	Output Fan	Fan speed 3			1 bit	C	-	W	-	-	switch	Low
33	Output Fan	Status Fan (Clock)			1 bit	C	-	W	-	-	switch	Low
34	Output Fan	Status Fan speed			1 byte	C	R	-	T	-	percentage (0..100%)	Low
35	Output Fan	Status Fan speed 1			1 bit	C	R	-	T	-	switch	Low
36	Output Fan	Status Fan speed 2			1 bit	C	R	-	T	-	switch	Low
37	Output Fan	Status Fan speed 3			1 bit	C	R	-	T	-	switch	Low
38	Output Fan	Automatic function			1 bit	C	-	W	-	-	enable	Low
39	Output Fan	Status Automatic			1 bit	C	R	-	T	-	enable	Low
40	Output Fan	Forced operation			1 bit	C	-	W	-	-	enable	Low
41	Output Fan	Control value 1			1 byte	C	-	W	-	-	percentage (0..100%)	Low
42	Output Fan	Control value 2			1 byte	C	-	W	-	-	percentage (0..100%)	Low
43	Output Fan	Switching control value 1/2			1 bit	C	-	W	-	-	switch	Low
44	Output Fan	Control value fault			1 bit	C	R	-	T	-	alarm	Low

29			1	C,	1.001	
			1		5.001	
30		1	1	C,	1.001	

31		2	1B	C,	1.001 ■
32		3	1B	C,	1.001 ■
33		/	1	C, , ,	1.001 ■
34			1	C, , ,	5.010 ■ C
35		1	1	C, , ,	1.001 ■
36		2	1	C, , ,	1.001 ■
37		3	1	C, , ,	1.001 ■
38		A	1	C,	1.003 ■

39		A	1	C, , I	1.003 D
40			1	C,	1.003 D
41		C C 1	1	C,	5.001 D
42		C 2	1	C,	5.001 D
43		1/2	1	C,	1.001 D
44		C	1	C, , I	1.005 D A

5.4.

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
45	Output Valve	Heat/Cool mode status			1 bit	C	R	-	T	-	cooling/heating	Low
46	Output Valve	Control value fault			1 bit	C	R	-	T	-	alarm	Low
47	Output Valve											
48	Output Valve											
49	Output Valve											
50	Output Valve											
51	Output Valve											
52	Output Valve											
53	Output Valve											
54	Output Valve											
55	Output Valve											
56	Output Valve											
57	Output Valve											
58	Output Valve											
59	Output Valve											
60	Output Valve											
61	Output Valve											
62	Output Valve											
63	Output Valve											
64	Output Valve											
65	Output Valve											
66	Output Valve											
67	Output Valve											
68	Output Valve											
69	Output Valve											
70	Output Valve											
71	Output Valve											
72	Output Valve											
73	Output Valve											
74	Output Valve											
75	Output Valve											
76	Output Valve											
77	Output Valve											
78	Output Valve											
79	Output Valve											
80	Output Valve											
81	Output Valve											
82	Output Valve											
83	Output Valve											
84	Output Valve											
85	Output Valve											
86	Output Valve											
87	Output Valve											
88	Output Valve											
89	Output Valve											
90	Output Valve											
91	Output Valve											
92	Output Valve											
93	Output Valve											
94	Output Valve											
95	Output Valve											
96	Output Valve											
97	Output Valve											
98	Output Valve											
99	Output Valve											
100	Output Valve											

45		/C	1	C, , ,	1.100 D	/C
46		C	1	C, , ,	1.005 D	A
47/52		D , /C	1	C,	1.003 D	
48/53		C , /C	1	C,	5.001 D	

5.5.

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Switch			1 bit	C	-	W	T	U	switch	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Short, Switch			1 bit	C	-	W	T	U	switch	Low
58	Input 1	Long, Switch			1 bit	C	-	W	T	U	switch	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Short, Switch			1 bit	C	-	W	T	U	switch	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Press, Scene			1 byte	C	-	-	T	-	scene control	Low
58	Input 1	Release, Scene			1 byte	C	-	-	T	-	scene control	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Press, Scene			1 byte	C	-	-	T	-	scene control	Low
58	Input 1	Release, Scene			1 byte	C	-	-	T	-	scene control	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Press, Scene			1 byte	C	-	-	T	-	scene control	Low
58	Input 1	Release, Scene			1 byte	C	-	-	T	-	scene control	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Press, Scene			1 byte	C	-	-	T	-	scene control	Low
58	Input 1	Release, Scene			1 byte	C	-	-	T	-	scene control	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number *	Name	Object Function	Description
1	General	In operation	
57	Input 1	Object1-On/Off	
58	Input 1	Object2-Up/Down	
59	Input 1	Object3-SceneControl	
60	Input 1	Object4-Percentage	
61	Input 1	Disable	

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Object1-On/Off			1 bit	C	-	W	T	-	switch	Low
58	Input 1	Object2-Up/Down			1 bit	C	-	W	T	-	up/down	Low
59	Input 1	Object3-SceneControl			1 byte	C	-	-	T	-	scene control	Low
60	Input 1	Object4-Percentage			1 byte	C	-	-	T	-	percentage (0..100%)	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Short, Delay mode			1 bit	C	-	-	T	-	switch	Low
58	Input 1	Long, Delay mode			1 bit	C	-	-	T	-	switch	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

Number *	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General	In operation			1 bit	C	-	-	T	-	switch	Low
57	Input 1	Short, Delay mode			1 bit	C	-	-	T	-	switch	Low
58	Input 1	Long, Delay mode			1 bit	C	-	-	T	-	switch	Low
61	Input 1	Disable			1 bit	C	-	W	-	-	enable	Low

57			1	C, , ,	1.001 D
57	,		1	C, , ,	1.001 D
57	,		1	C, , ,	1.001 D
58	↓ ,		1	C, , ,	1.001 D
58	,		1	C, , ,	1.001 D
58	, D		4	C, ,	3.007 D D

57	, 1 /2 /4 /1 /2		1	C,	1.001	
			2		2.001	
57	, 1 /2 /4 /1 /2		4	C,	3.007	
			1		5.010	
58	└ , 1 /2 /4 /1 /2		2	C,	7.001	
58	, 1 /2 /4 /1 /2			C,		
57			1	C,	18.001	C
57	,		1	C,	18.001	C
57	,		1	C,	18.001	C
58	└ ,		1	C,	18.001	C
58	,		1	C,	18.001	C

57	/D , B		1	C, ,	1.008 D /
58	/A , B		1	C, ,	1.007 D
57	L		1	C,	5.010 D
57/	- /		1	C, ,	1.001 D
58/	- /D		1	C, ,	1.008 D /

59/	- C		1	C,	18.001	D	C
60/	-		1	C,	5.001	D	
	-		1	C,	5.010	D	
57	, D		1	C,	1.001	D	
57	, D		4	C,	3.007	D	D
58	, D		1	C,	5.010	D	
61	D		1	C,	1.003	D	

5.6.

Number ^	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
 1	General	In operation			1 bit	C	-	-	T	-	switch	Low
 87	LED 1	Status			1 bit	C	-	W	T	U	switch	Low
 28100	LED 2	Status			1 byte	C	-	W	T	U	counter pulses (0..255)	Low

87		D	1 1	C, , ,	1.001 D 5.010 D