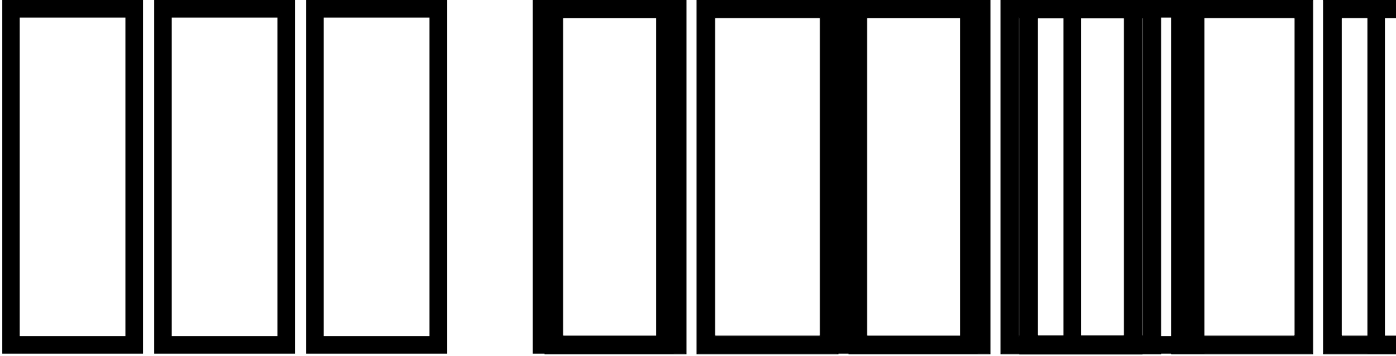


K-BUS®





WR

WR

/

KNXnet/IP

-
-
-
-
-
-

KNX

EN 60 715

35

EIB

24~30V

/

13

5

➤

➤

➤

/

/

AC

➤

➤

EIB/KNX

/

24V~230V

GVS[®]

K-BUS[®]

KNX/EIB

10

LED

5 LED

LED

LED

LED

12V

25

4

Ö 230 V AC 16A 21Ö 230 V AC 6A



8

1byte



2

230 V AC 6A



Blinds

Shutter

5

0-10V

0-10V



/



8

1byte



3

0-10V

15 16 17

0-10V

28

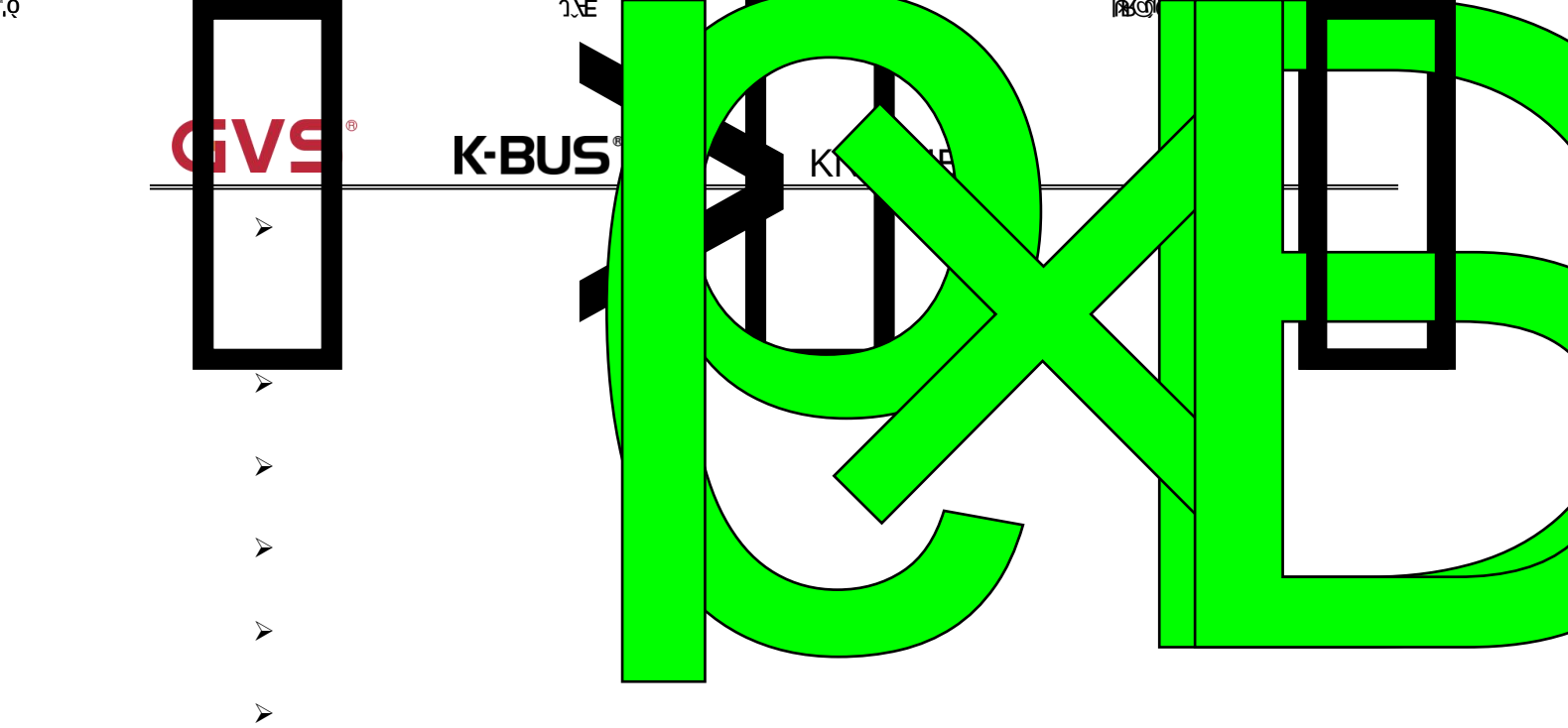


1

2

3





2

4

0-10V

□ □ □ □ □ 18□

PT1000

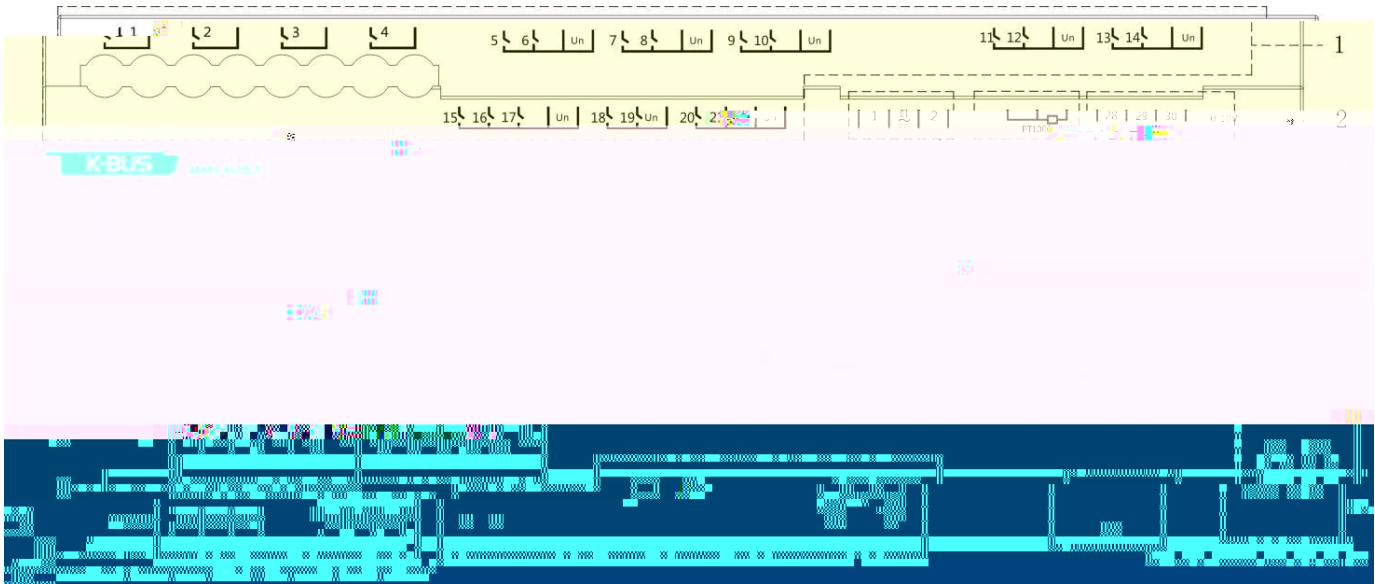
KNXnet/IP			5
KNXnet IP Router		8	
4			8
10			
4		/	
4	8		8
	knxprod		ETS (ETS4

EIB	21~30V DC	EIB
EIB	<12mA	
EIB	<360mW	
	24~30V DC	
	<200mA	
	<6W	
16A	<1.5W	
6A	<1W	
EIB/KNX		/ / / 0.8 mm Ø
16A		
	0.5-4mm ²	
	0.8N-m	
/		
16A	0.5-1.5mm ²	
	0.5N-m	
	LED	
IP 20, EN 60 947	"	

	0.7KG	
	5	
		12V DC
		0.4mA
		10m
	1 PT1000	
	1	
	2	Un 0...265V AC/DC
		0 0...3V AC/DC
		1 9...265V AC/DC
		100 m (1.5mm ²)
		In Max.2mA
	3	
		0~10V
		50mA
	5	
	LED	12V
	LED	10mA
	2	
		100W
	4	
	U _n	250/440 VAC 50/60Hz
	I _n	16A/140uF
		20A/250V AC
		>1 Ö 10 ⁵
		16A/24V DC
	21	

	U _n	240/400V AC 50/60Hz
	I _n	6A/70uF
		6A/240V AC
		> 2 x 10 ⁶
		>5 x10 ⁴
		6A/30V DC

AMRS-41/05.3	275	512	512



15 16 17

LED

5

1

18 19

LED

3 0-10V

2

PT1000

L N ,

LED

LED

KNX

1-10

IP

11-20

Client

KNXnet IP

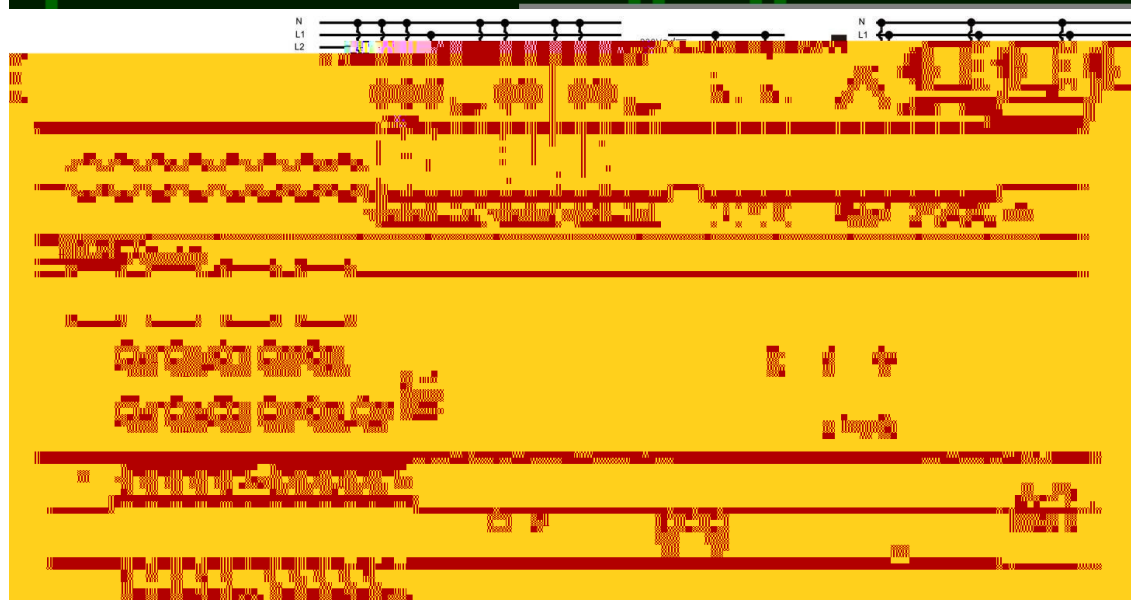
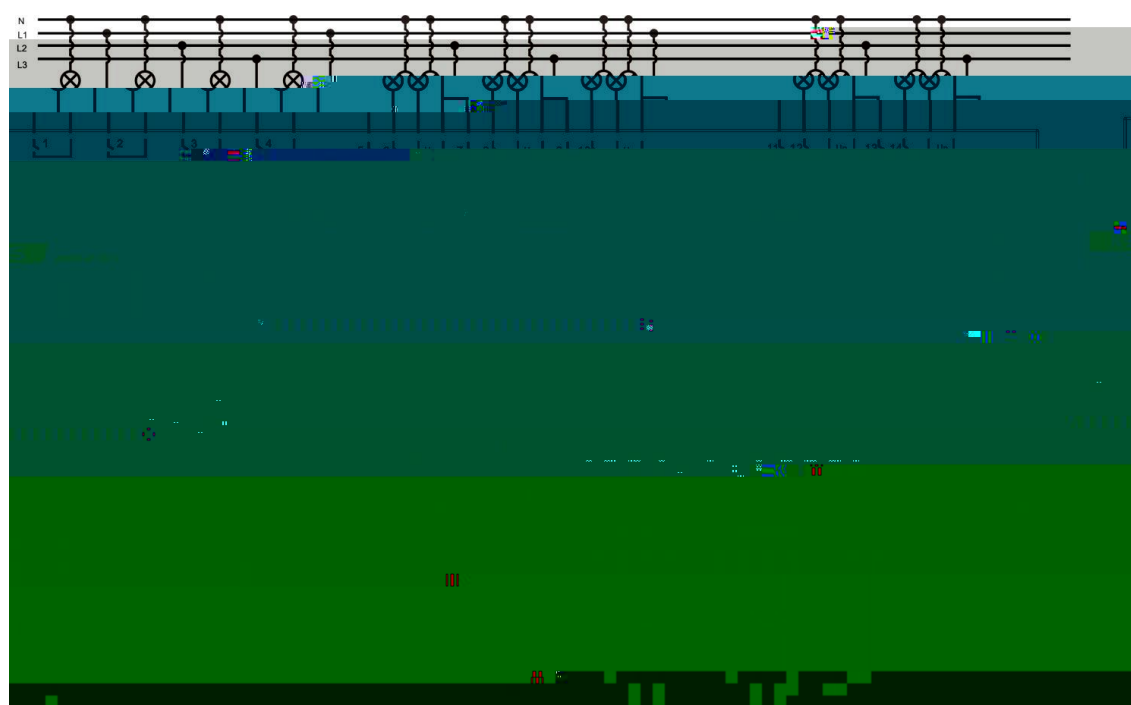
21-30

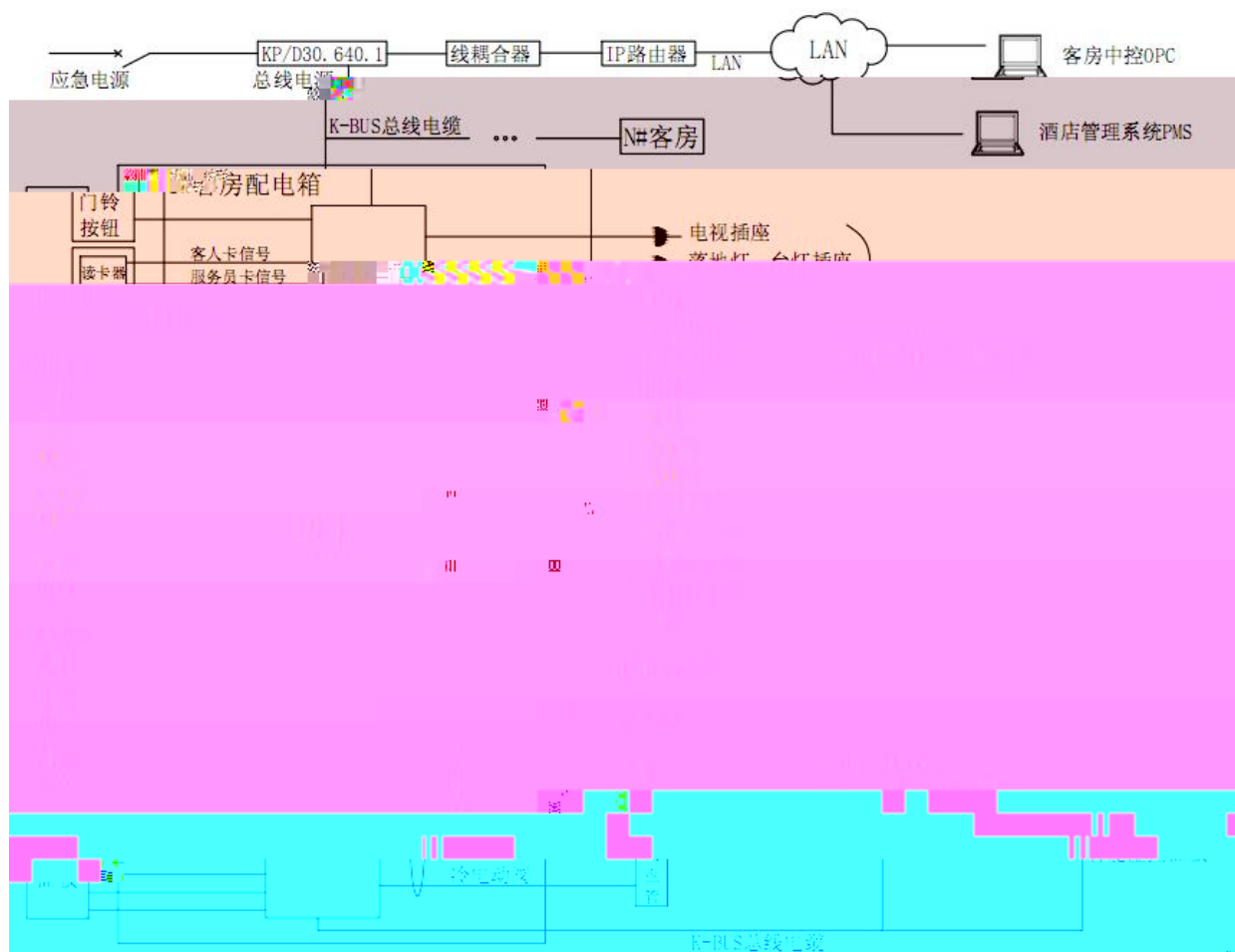
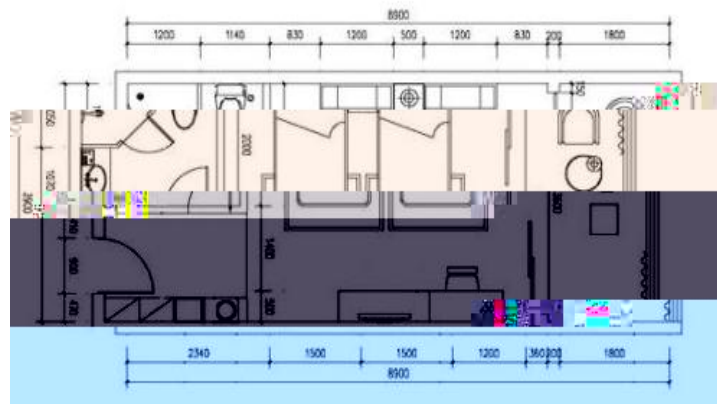
LED

EIB/KNX

5

1





1)

2)

3)

4)

5)

6)

OPC

ETS

LED IP

Input & LED & IP General

Output setting

Temperature

Logic & Time & Scenario

Opération delay after power voltage recovery[1..250]s

5

Send cycle of "In operation" telegram (1..240s,0=inactive)

0

* mark that the function is invalid temporarily

IP function enable

NO

YES

Input Channel for UI enable

Is input 1 enable

No

Yes

Is input 2 enable

No

Yes

Is input 3 enable

No

Yes

Is input 4 enable

No

Yes

Is input 5 enable

No

Yes

Input Channel for BI enable

Is input 1 enable

No

Yes

Is input 2 enable

No

Yes

LED drive enable is

No

Yes

2s

0 in operation
0 in operation 1
0 ..240s 0=

IP IP IP IP
IP KNXnet/IP 5
KnxNet IP Router 8

X X 1..5
5 A

X X 1..2

LED

LED

5

Input & LED & IP General	Output Channel enable	
Output setting	Is Output 1 Enable	☒ No ☐ Yes
Temperature	Is Output 2 Enable	☒ No ☐ Yes
Logic & Time & Scene Group	Is Output 3 Enable	☒ No ☐ Yes
	Is Output 4 Enable	☐ No ☒ Yes
	Is Output 5 Enable	☐ No ☒ Yes
HVAC General	Is Output 25 Enable	☒ No ☐ Yes
Setpoint	Curtain Output Channel enable	
Fan	Is Curtain 1 enable	☒ No ☐ Yes
Fan: Status	Output Channel is fixed for (if Yes)	Curtain 1: Output 22 & Output 23
HVAC-Scene	Is Curtain 2 enable	☒ No ☐ Yes
	Output Channel is fixed for (if Yes)	Curtain 2: Output 24 & Output 25
	Dimming Output Channel enable	
	Is Dimming (TRIAC) Output 26 enable	☒ No ☐ Yes
	Is Dimming (TRIAC) Output 27 enable	☒ No ☐ Yes
	Is Dimming (0-10V) Output 28 enable	☒ No ☐ Yes
	Is Dimming (0-10V) Output 29 enable	☒ No ☐ Yes
	Is Dimming (0-10V) Output 30 enable	☒ No ☐ Yes
	Is HVAC	



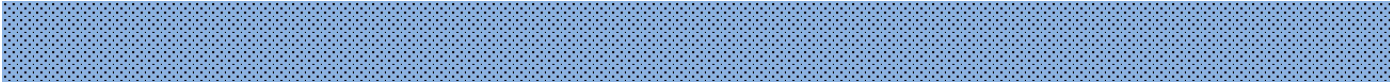
X X 1..2

1 22 23 2 24 25



X X 26 27

0-10V X X 28 29 30



HVAC

0-10V 1..20

0-10V 28

GVS

K-EIS®

KNX/EIB

2

16

3

15

16

17

3/MI-9 10 01/16

□ □ □

(•)×

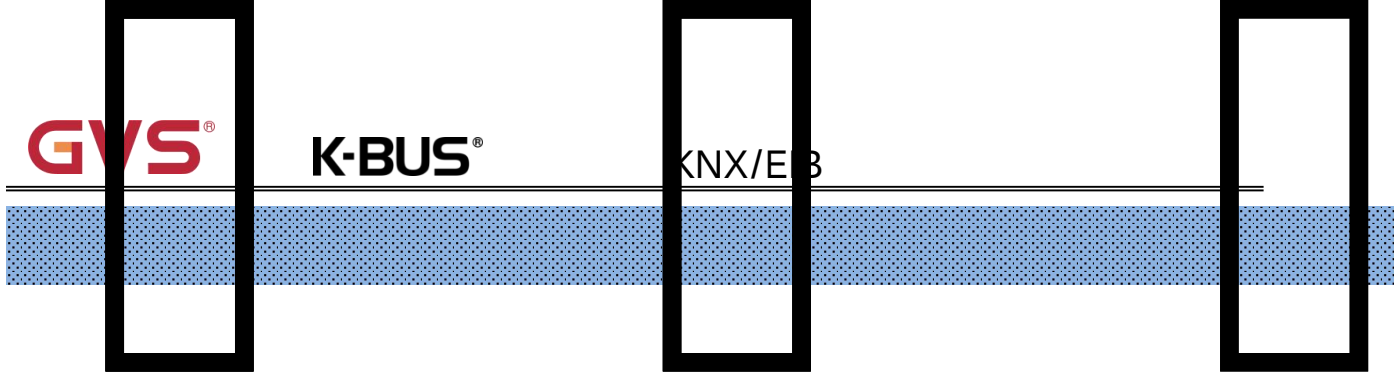
Temperature

5.3

Input & LED & IP General	Temperature measure by	☒ Local sensor ☐ External sensor
Output General	Temp. calibration for local sensor[-50..50] *0.1°C	0
Temperature	Send Temp. when the result change by [1..20]*0.5°C	4
Logic & Time & Scene Group	Cyclically send actual Temp.[0..255]*min	10
	Reply error of local sensor measurement	No respond
	Object value of error	☒ 0=no error/1=error ☐ 1=no error/0=error

“Actual temperature output ”

0



“Local sensor

error output ”

“Local sensor error

output ”

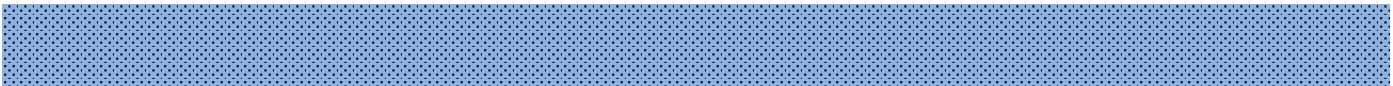


0 no error/1=error

“Local sensor error output ”

0

1



5.1

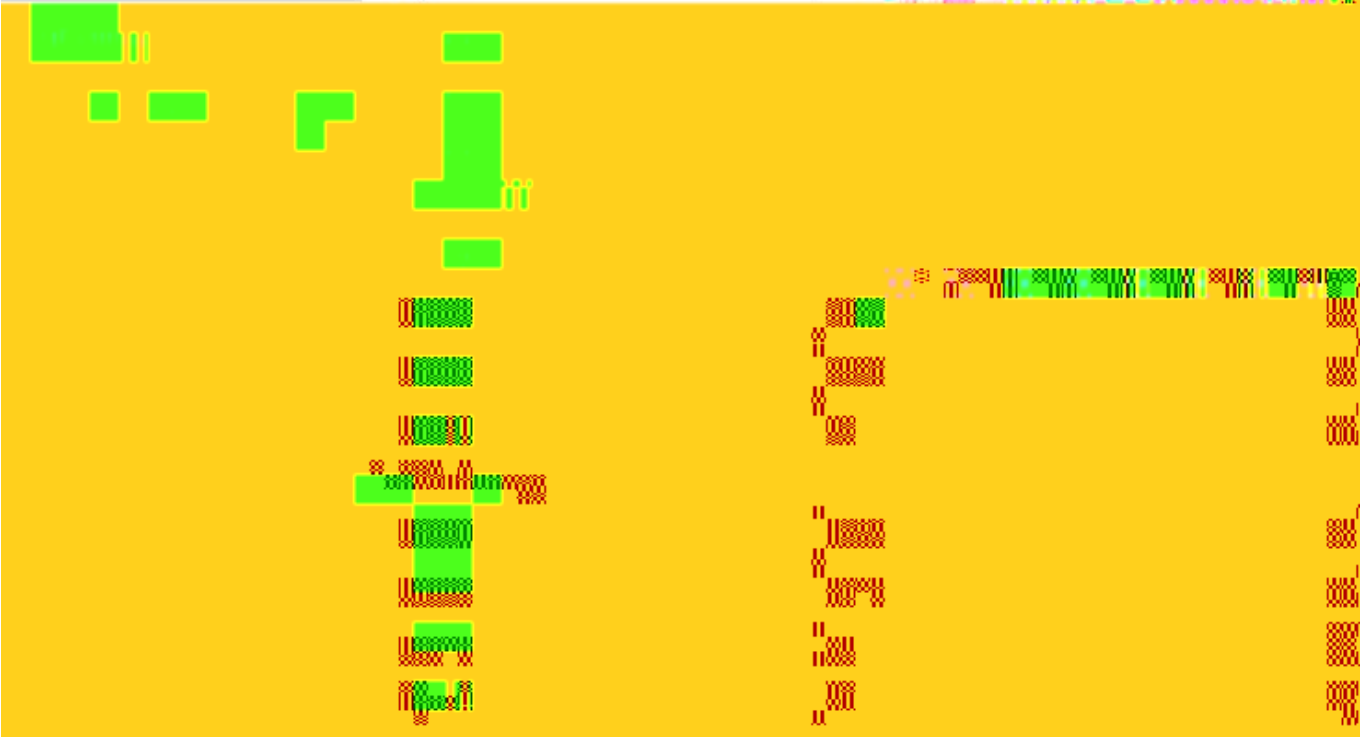
IP

IP

- Input & LED & IP General
- Output General
- Temperature

Device name (max. 30 char.)
[Byte1].[Byte2].[Byte3].[Byte4]
KNX IP Interface

IP Address
Byte1
192





Byte x 0 255

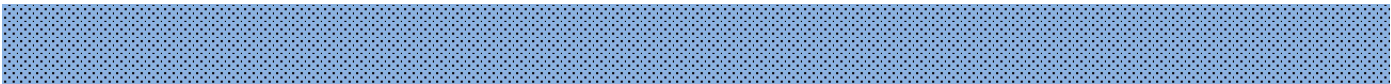
255.255.255.0



IP

Byte x 0 255

192.168.1.1



IP

KNXnet/IP

224.0.23.12

KNX

IANA

KNX IP

IP

IP

Yes

: IP-->KNX KNX-->IP

IP<-->KNX



5

2

5.1

5.5

Switch sensor

5.55.6

5.5/5.6/

Input & LED & IP General	Function of the channel	Switch Sensor
Output General	Distinction between long and short operation	☒ No ☐ Yes
Temperature	Cyclic send Tele."Tele.switch"	NO
UI input 1	Reaction on closing the contact	TOGGLE
Logic & Time & Scene Group	Reaction on opening the contact	no action
	Delay time [2..50000]*0.1s	100
	Send object value after voltage recovery	☒ No ☐ Yes
	Disable input via 1bit communication object	Disable=0/Enable=1
	Debounce time	50ms

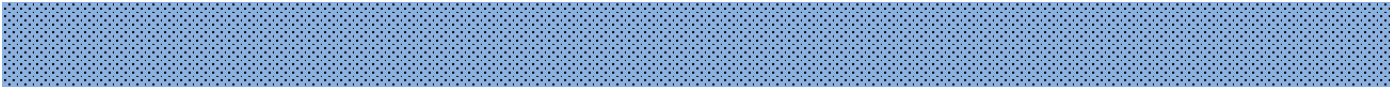
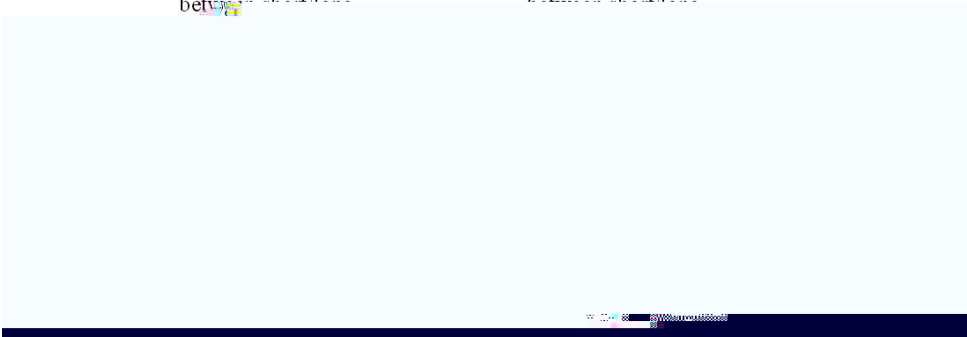
switch sensor

No Function

/yes

Without distinction
between short/long

With distinction
between short/long



/

Switch

If switch off

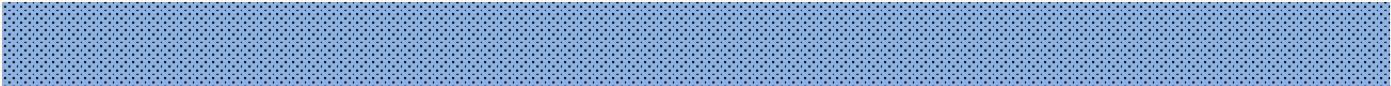
If switch on

Always

switch operation

0

1

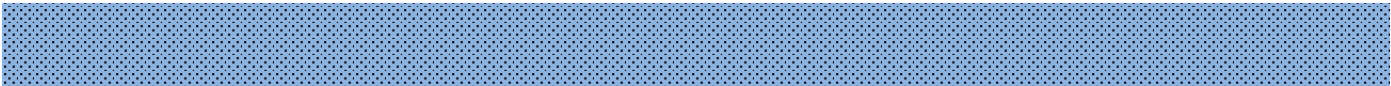


/

Switch

On , Off

2..50000

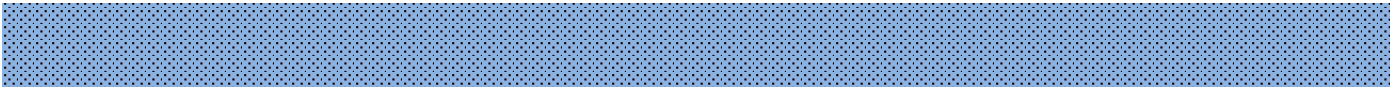


2..50000

Switch /

Yes , Switch

No action Stop cyclic send



/ x

Disable=0/enable=1	Enable communication	0	x
1	x		



Input & LED & IP General

Function of the channel

Switch Sensor

Outputs General

Discriminator between line and

Output 1

Output 2

Output 3

Output 4

Output 5

Output 6

Output 7

Output 8

Output 9

Output 10

Output 11

Output 12

Output 13

Output 14

Output 15

Output 16

Output 17

Output 18

Output 19

Output 20

Output 21

Output 22

Output 23

Output 24

Output 25

Output 26

Output 27

Output 28

Output 29

Output 30

Output 31

Output 32

Output 33

Output 34

Output 35

Output 36

Output 37

Output 38

Output 39

Output 40

Output 41

Output 42

Output 43

Output 44

Output 45

Output 46

Output 47

Output 48

Output 49

Output 50

Output 51

Output 52

Output 53

Output 54

Output 55

Output 56

Output 57

Output 58

Output 59

Output 60

Output 61

Output 62

Output 63

Output 64

Output 65

Output 66

Output 67

Output 68

Output 69

Output 70

Output 71

Output 72

Output 73

Output 74

Output 75

Output 76

Output 77

Output 78

Output 79

Output 80

Output 81

Output 82

Output 83

Output 84

Output 85

Output 86

Output 87

Output 88

Output 89

Output 90

Output 91

Output 92

Output 93

Output 94

Output 95

Output 96

Output 97

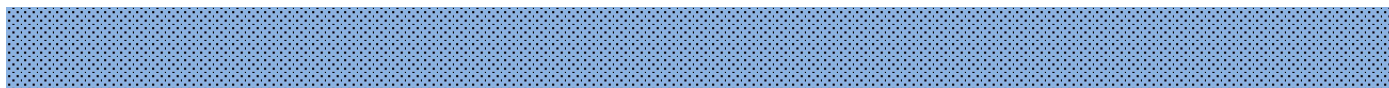
Output 98

Output 99

Output 100



Normally open



/

/

Delay mode

2..50000



/

2..50000

Switch/Dimming

5.7

Switch/Dimming

Input & LED & IP General

Output General

Temperature

IP setting

Function of the channel

Connect contact type

Dimming functionality

Reaction on short operation

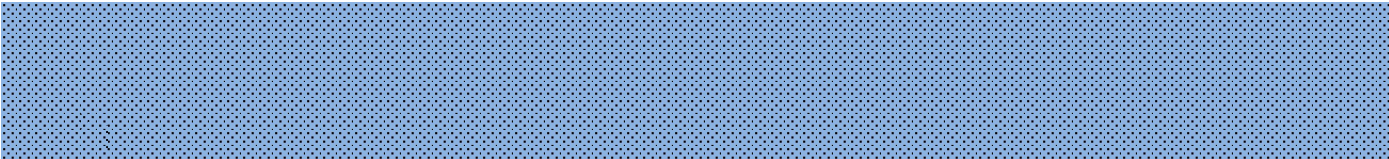
Reaction on long operation

Switch/Dimming

☐ normally closed ☒ normally open

☒ Dimming and switching ☐ Only dimming

TOGGLE



Only dimming

/

Dimming functionality

Dimming and Switching

Switch

Dimming functionality

Dimming and Switching ,

Dim BRIGHTER / DARKER

/

Dimming functionality

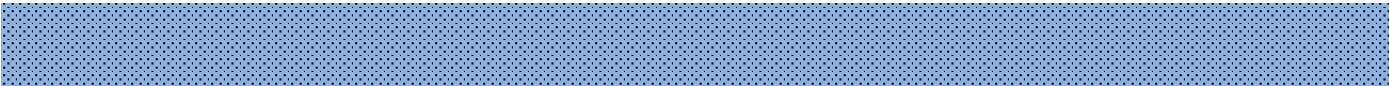
Dimming and Switching ,

2..50000

Dimming functionality

Only dimming , /

Reaction on long operation



Start-stop dimming

Steps dimming



Dimming mode Steps dimming ,



Dimming mode Steps dimming ,

2..50000

Value/Forced output

5.8

Value/Forced output

Input & LED & IP General

Function of the channel

Value/Forced output

Distinction between long and short operation

No

Yes

Send object value after voltage recovery

No

Yes

Reaction on short operation or closing the contact

1 byte value [0..255]

Output value[0.255]

127

Input & LED & IP General

Function of the channel

Value/Forced output

Distinction between long and short operation

No

Yes

Connect contact type

normally closed

normally open

Long operation after [2..50000]*0.1s

5

Reaction on short operation or closing the contact

1 byte value [0..255]

/

yes

/

/

2..50000

/

5.8_1

-long/open(short/close)

yes ,

-long/open(short/close)

/

/

/

5.8

Shutter control

5.9

Shutter control

Input & LED & IP General	Function of the channel	Shutter Control
Output General	Connect contact type	☐ normally closed ☒ normally open
Temperature	Operation functionality type	1-push-button,short=stepping,long=moving
IP setting	Short:Lamella, Long:Move UP/DOWN	Note about fuctionality
UI input 1	Long operation after [2..50000]*0.1s	5
Logic & Time & Scene Group	Disable input via 1bit communication object	Disable=0/Enable=1
	Debounce time	50ms

	 > > / > > / >.....
	“ ” “ ” “0” “1”
	/
	“ / ” “ / ”
	“ ” “ ”
	 > > / >..... > > / >..... /
	“ / ” “ / ”
	“ ” “ ”
	“ / ” “ / ”

2..50000

1-push-button, short=moving, long=stepping 2-push-button, stepping

Stop/lamella adj

2..50000

2-push-button, standard

2-push-button, standard

2-push-button, moving[shutter]

2-switch-operation, moving[shutter]

2-push-button, stepping

/

LED

LED

5

LED

LED

LED

Input & LED & IP General

Output General

Temperature

IP setting

LED Setting

Output 1

Output 2

Output 3

Output 4

1st LED Control By

The object value='0', LED is

The object value='1', LED is

2nd LED Control By

The threshold value is

The object value <='threshold value', LED is

The object value >'threshold value', LED is

3rd LED Control By

The object value 0..100% correspond OFF..Level 9

4th LED Control By

LED flashing trigger value

Flashing Frequency

5th LED Control By

The object value='0', LED is

The object value='1', LED is

1Bit

OFF

Level 5

1Byte two Level

128

OFF

Level 5

1Byte percent

1Bit trigger flashing

0=Flashing,1=OFF

0=OFF,1=Flashing

300ms

Level 5

1Bit

OFF

Level 5

LED

LED

1bit

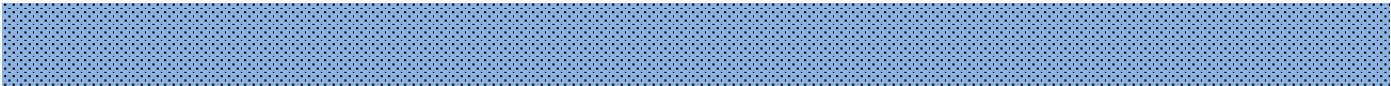
LED

1

0

LED

LED



LED

1Byte two level

LED

0...255



LED

25

5.2

5.11

Input & LED & IP C- general

Output General

Temperature

IP setting

It power voltage recovery, contact is

Output type

Status report

Scene function is

open

☐ Normal 1=close, 0=open

Inverted 1=open, 0=close

☐ After change and after read

After read only

Disable ☐ Enable

Output 1

1> Scene No.(1..64,0=no allocation)

0

Logic & Time & Scene Group

--Standard output value is

☒ OFF ☐ ON

2> Scene No.(1..64,0=no allocation)

0

--Standard output value is

☒ OFF ☐ ON

Switch

1

0

Switch status

Switch status

8

1... 64 0=no allocation



2

5.2

5.12

Shutter Blinds

Shutter

Blinds

Shutter

5.12

Input & LED & IP General

Output General

Temperature

Curtain 1

Logic & Time & Scene Group

Work mode

Motor type

Position on power voltage recovery

Total move time[1..6000]*1s

Louvre adjust number[1..10]

Duration of louvre adjust[10..100]*10ms

Inverted Time[1..50]*0.1s

Scene function is

Reference move function is

Enable Force operation(2bit)

Status report

After reach Max. or Min. position via Move UP/DOWN, the curtain is

☒ Shutter

☐ Blinds

☒ AC-motor

☐ Dry Contact

No reaction

20

5

30

10

☒ Disable

☐ Enable

Disable

☒ No

☐ Yes

After change and after read

After read only

☒ New position

☐ Go on move

Shutter

Blinds Shutter

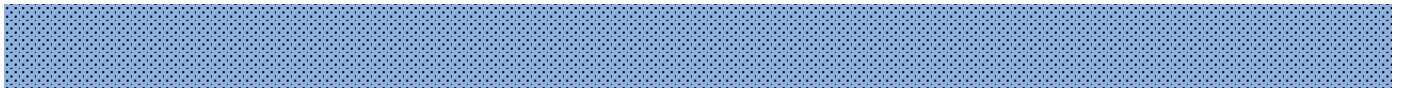
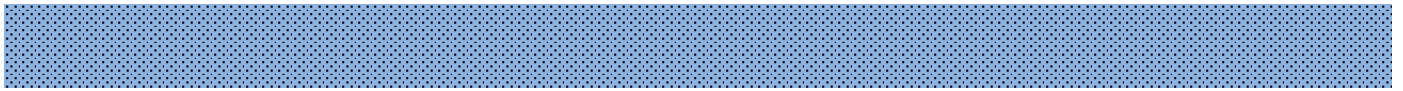
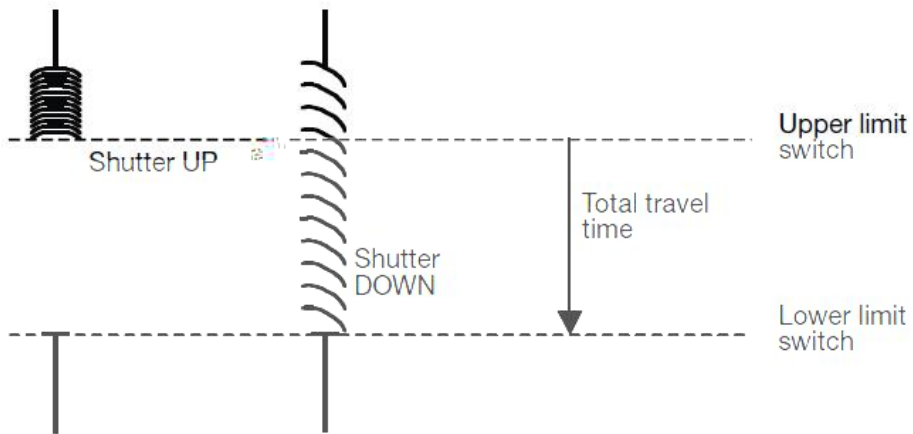
Shutter

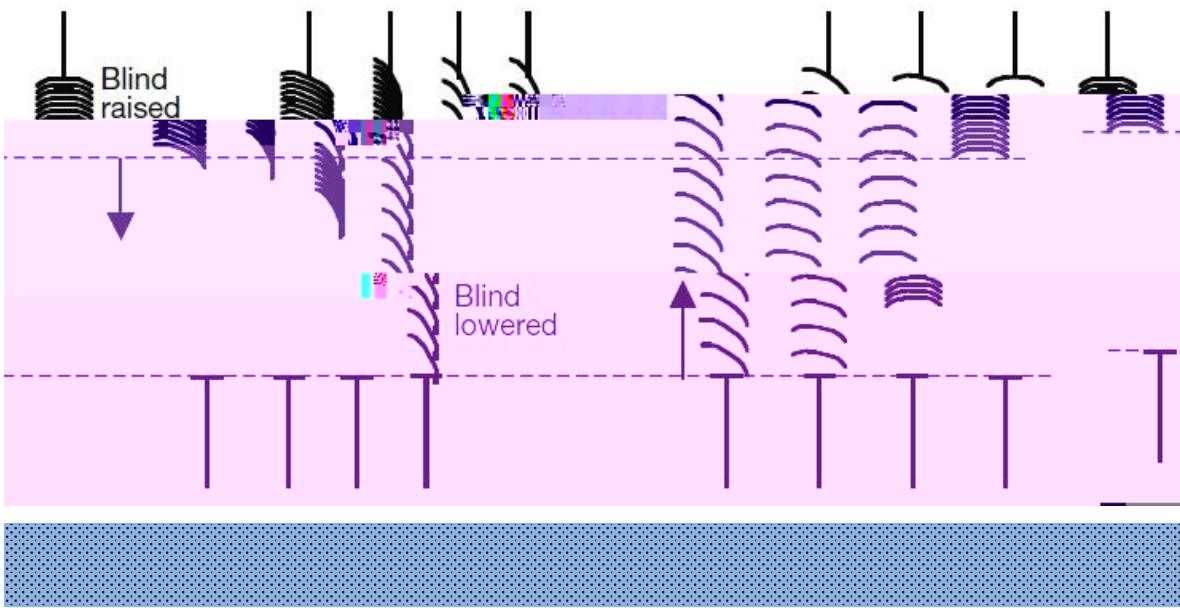
AC-motor ,

ry contact

%{

RØ





8 ,

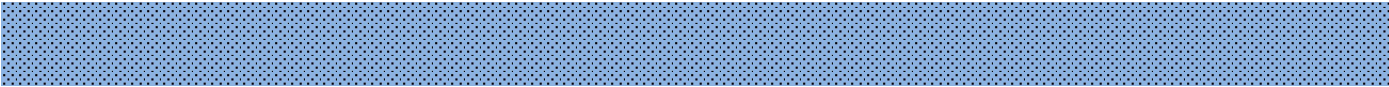
5.8.1.2

Reference movement 0

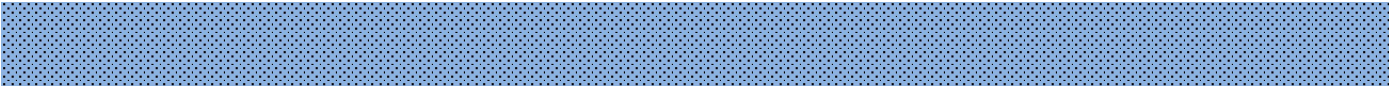
1

Reference movement 0 '1' (

0) 1'



2



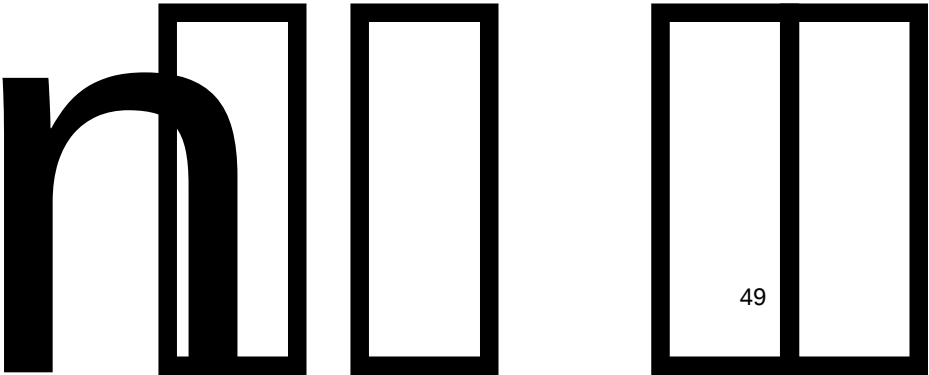
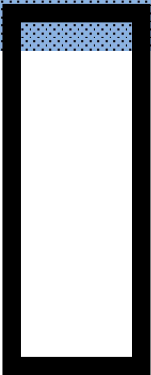
Force Operation

0

1

2

3



255

Scene 5.14

8 ,

Input & LED & IP General

1> Scene No. # 11111111 = "no allocation" 0

Output General

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Temperature

Position: Louvre 0..100%(0% =open,100%=close) 0

Setting

2> Scene No.(1..64,0=no allocation) 0

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Position: Louvre 0..100%(0% =open,100%=close) 0

tain 1

3> Scene No.(1..64,0=no allocation) 0

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Position: Louvre 0..100%(0% =open,100%=close) 0

1:Driver setting

3> Scene No.(1..64,0=no allocation) 0

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Position: Louvre 0..100%(0% =open,100%=close) 0

1:Scene

3> Scene No.(1..64,0=no allocation) 0

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Position: Louvre 0..100%(0% =open,100%=close) 0

ic & Time & Scene Group

3> Scene No.(1..64,0=no allocation) 0

Position: Shutter 0..100%(0% =top,100%=bottom) 0

Position: Louvre 0..100%(0% =open,100%=close) 0

64

8 Scene 1... Scene 64 0=no allocation

0 100% 0% top, 100%=bottom

0 100% 0% opened, 100%=closed

Blinds

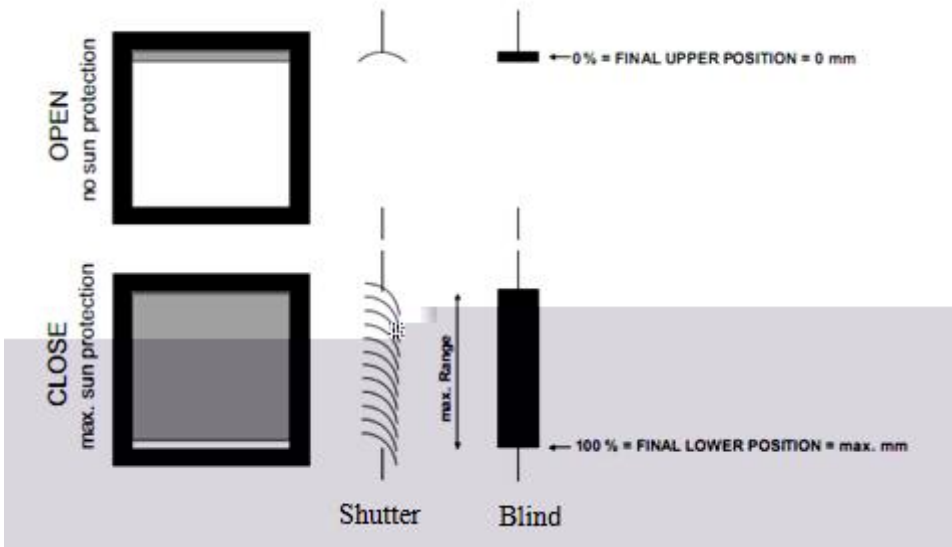
Shutter

Blinds

Blind

Shutter

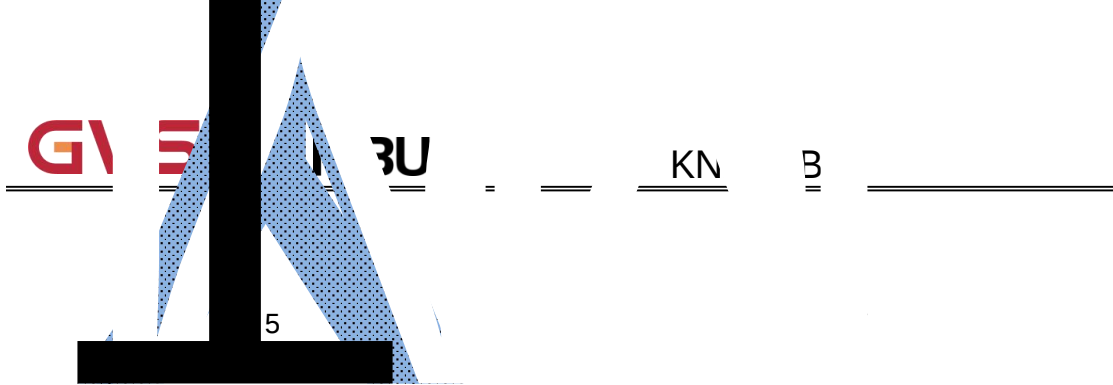
Blind



Blinds

Shutter

()



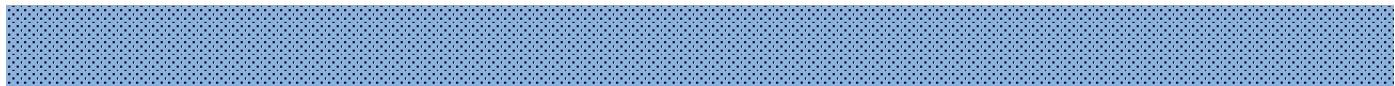
0-10V

5.2

5.2

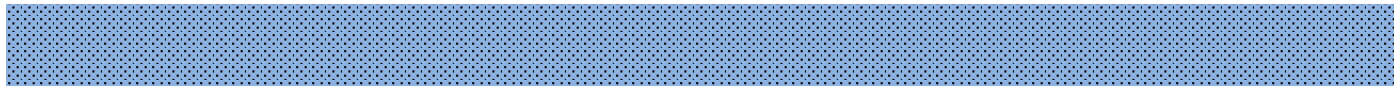
15

Duration time of dimming[0..15]*1.25s		Input & LED & IP General
After power recover switch on with	☒ Preset brightness value ☐ As before bus voltage fail	Output General
Power recover preset brightness value [0..100]%	0	Temperature
Status report	☒ After change and after read ☐ After read only	Dimming (TRIAC) Output 26
Lower threshold of Dimmer[0..100]%	0	Logic & Time & Scene Group
Scene function is	Disable ☒ Enable	
1> Scene No.(1..64,0=no allocation)	0	
Brightness value[0..100]%	0	
2> Scene No.(1..64,0=no allocation)	0	
Brightness value[0..100]%	0	



Brightness Switch Relative dimming 3 J (2@m&Q

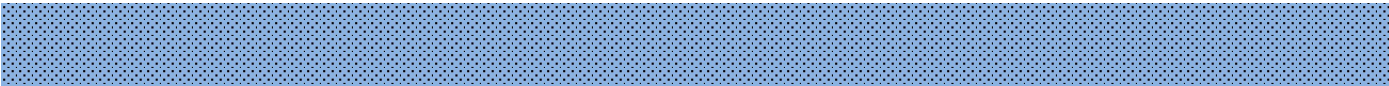
: 1.25st3 t3072|05 7<Ékl 3



EKJ 3 6
_f

FZ

0% 100%



/

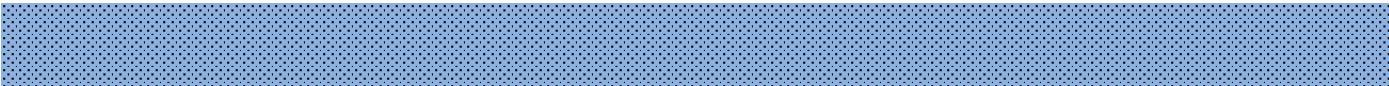
Switch status / "Brightness status"

/

Switch status / "Brightness status"



0~100%



8

64

1... 64 0=no allocation

0% 100%

“HVAC General”

5.16

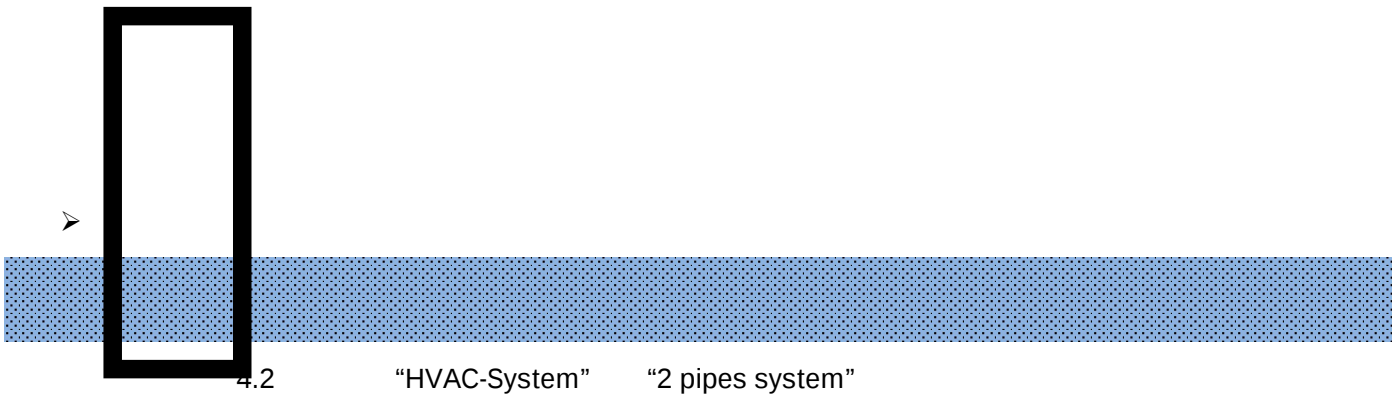
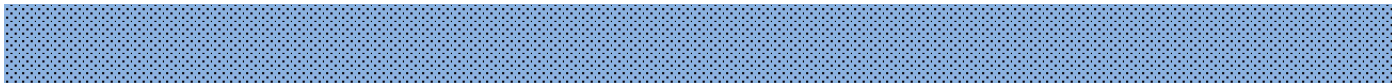
Local

(Bus)

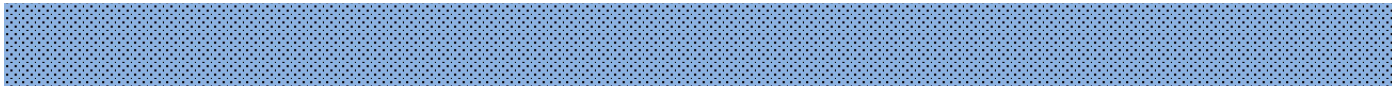
Input & LED & IP General	HVAC Control mode	Heating and Cooling
Output General	HVAC-System	☒ 2-pipes system ☐ 4-pipes system
Temperature	If 2-pipes system is used, then use Heat valve drive	<--Attention
Logic & Time & Scene Group	Controller define	☒ Local ☐ Bus
HVAC General	Heat/Cool switch by	☐ Local ☒ Bus
Setpoint	Number of Heat/Cool switch object	☒ 1 object ☐ 2 objects
Fan	Insensitive zone between heating and cooling	1°C
Fan Status	Min. changeover time between heat and cooling	2.55 min
HVAC Scene	2-point control method setting	
	Lower Hysteresis[0..200]*0.1°C(for heat)	10
	Upper Hysteresis[0..200]*0.1°C(for cool)	10
	PI control method setting	
	Heat speed	Normal(12000/900)
	Cool speed	Normal(12000/900)
	Report operation status function for HVAC	☒ Disable ☐ Enable

K-BUS[®]

KNX/EIB

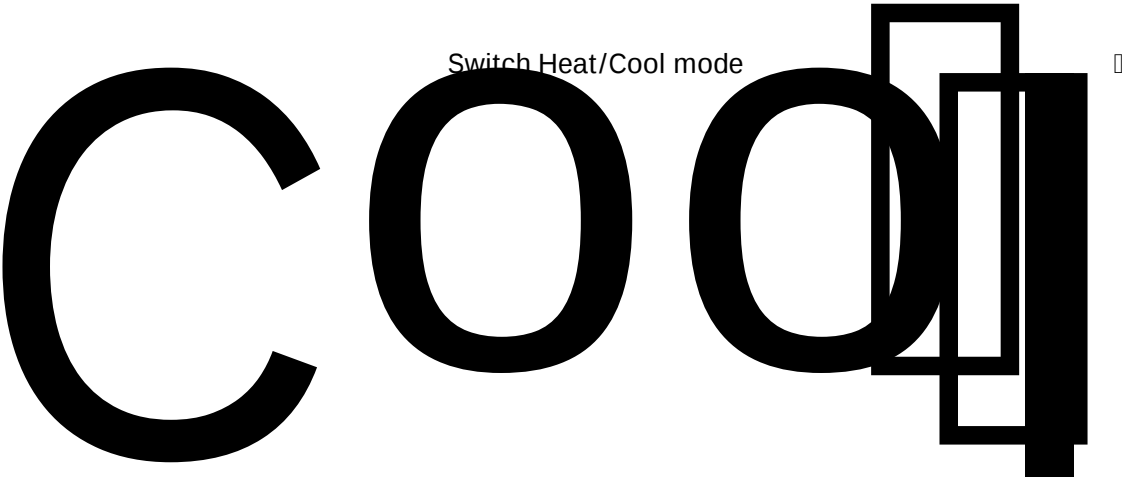


Heating/Cooling mode



/

Switch Heat/Cool mode

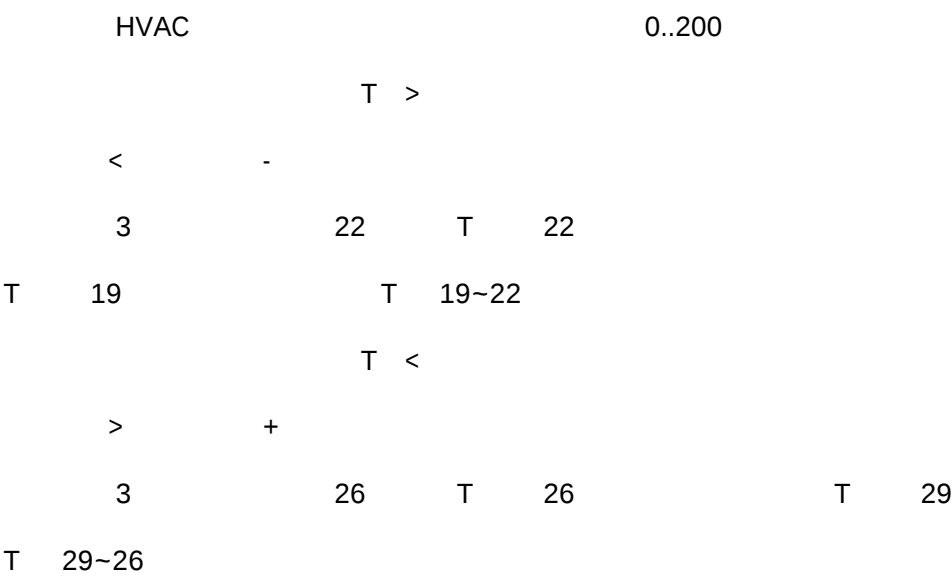


“HVAC Control mode ” “Heating and cooling”

0.5...6.0[°C]

5.10.2.1

0...255[min.]



PI

Heat /Cool speed User defined PI PI

HVAC

Status of operation

7	6	5	4	3	2	1	0
	0 Limit 4	0 Limit 3	0 Limit 2	0 Limit 1	0	00	
	1 Limit 4	1 Limit 3	1 Limit 2	1 Limit 1	1	01	
						10	
						11	

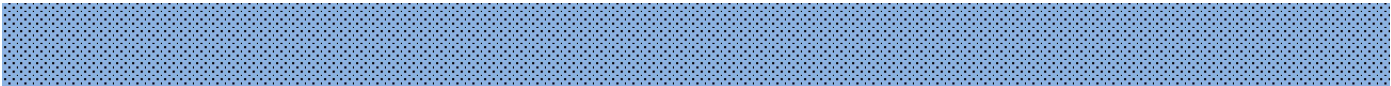


“HVAC-System” “4 pipes system”

254

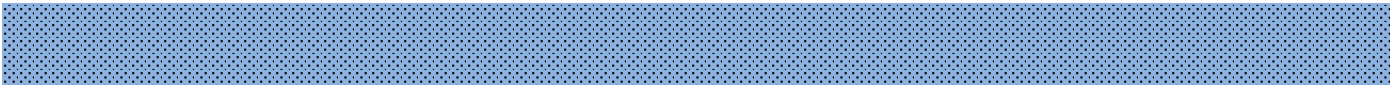
“Switch Heat/Cool mode” 250

254 258



1bit

1Byte



yes

10...65535s

“Control value fault”

“Control value fault”

0...100 %

1.

0

2.

"Setpoint"	5.17	.
5.16	Controller define"	"Local"
	Heating	Cooling
		5.16
		HVAC

Control mode

Input & LED & IP General

Output General

Temperature

Logic & Time & Scene Group

HVAC General

Setpoint

Fan

Fan Status

HVAC-Scene

setpoint temperature(°C)

When power recovery,controller status

Extended comfort mode
[1..255,0=inactive]*m

Operating mode switchover

Operating mode status

Heating

Reduced Heat in standby mode[0..10]°C

Reduced Heat in night mode[0..10]°C

Actual Temp. threshold in front
protection mode[2..10]°C

Limit value for setpoint Heat[5..40]°C

Cooling

Increased Cool in standby mode[0..10]°C

Increased Cool in night mode[0..10]°C

Actual Temp. threshold in heat
protection mode[5..40]°C

Limit value for setpoint Cool[5..60]°C

20.0°C

Comfort mode

30

1Bit

1Byte

1Bit

1Byte

2

4

7

35

2

4

40

15

15 30[]



0...1-255 [min.]

0

1-255



1bit

4

1bit

ON

Off

Comfort mode

Night mode

standby mode

Frost/heat protection mode

0

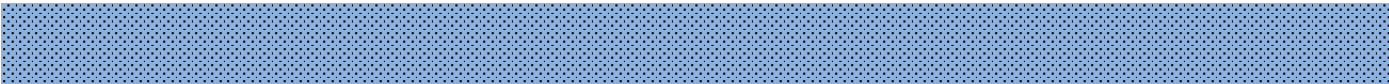
1byte

1

2

3

4



1bit

4

1bit

Comfort mode

Night mode

standby mode

Frost/heat protection mode

1

0

1byte

1

2

3

4

0...10 []

0...10 []

2...10 []

5

5

5

5...40 []

30

30

30



Setpoint

2-pipe system	=	+	
4-pipe system	=	+	+
	=	-	+
	=	+	+
	=	-	+
	=	+	+
	=		
	=		

0-10V

Fan type -- One level5.181

Input & LED & IP General

Output General

Temperature

Logic & Time & Scene Group

HVAC General

Setpoint

Fan

Fan type is

When power failure,Fan speed is

When power recovery, fan speed is

After downloading,fan speed is

"Forced operation" function

Forced operation on object value is

Behaviour on Forced operation is

Auto. operation function(only for HVAC)

Time mode for function ON

Switch delay

Delay time[1..65535]*0.1s

Time mode for function OFF

Switch delay

Delay time[1..65535]*0.1s

☒ one level

☐ Multi level

Unchange

Unchange

OFF

☐ Disable

☒ Enable

☐ 0=Force/1=Cancel

☒ 1=Force/0=Cancel

Unchange

☒ Disable

☐ Enable

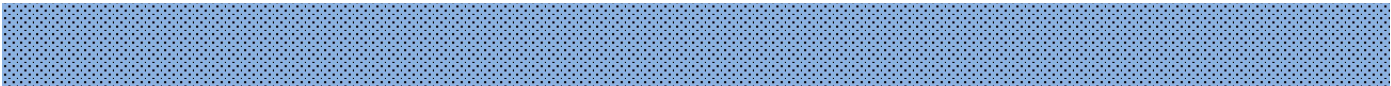
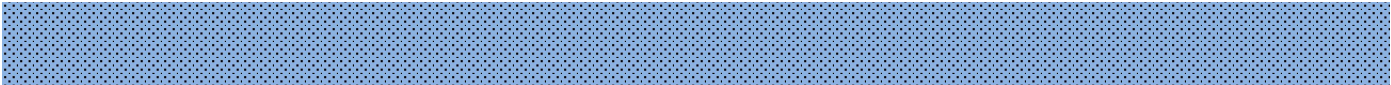
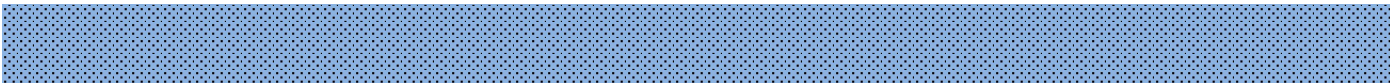
Switch delay

10

Switch delay

10

1323



“Enable”,1bit

“Forced operation”

“Forced operation”

“0”

“1”

“Fan Forced operation”

“1”

“0”

5.19

ON

“Delay time *0.1s [1...65535]”

“Fan speed”

“1”

“Minimum time*1s [1...65535]”

1...65535

1...65535

OFF

“Delay time *0.1s [1...65535]”

“Minimum time*1s [1...65535]”

1...65535

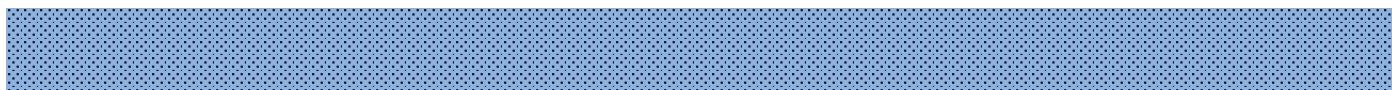
1...65535

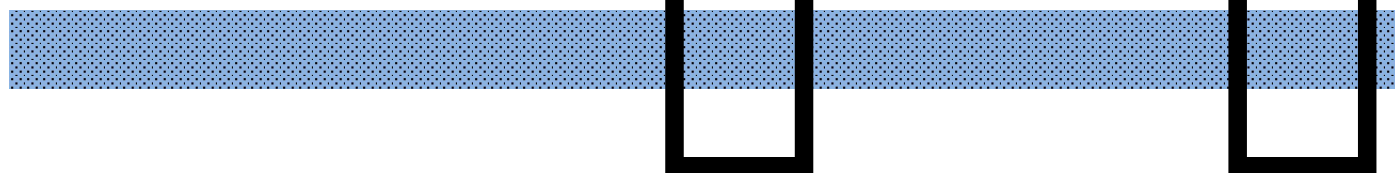
5.18 “Auto. operation function” “Enable”

5.19



Control value □ □ □ □ 1 255





Fan Limitation x (x=1,2,3,4)

limit3

limit4

Limit 1

/

Limit 1

Limit 2> Limit 3> Limit 4 Limit 4

Fan Limitation x (x=1,2,3,4) 1 0

1 4

X

X

X

OFF

ON

Fan status5.20

Input & LED & IP General

▼

Output General

▼

Temperature

Reply mode of Obj."Status Fan"

1bit function

Respond after change

Reply mode of Obj."Status Automatic"

1bit function

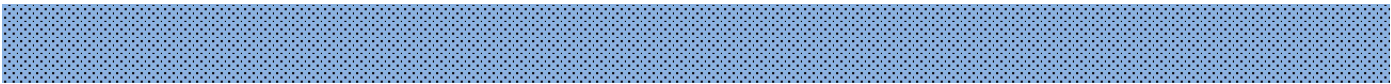
Respond after change



Status Fan ON/OFF

Status Fan ON/OFF

Status Fan ON/OFF



Status Automatic	1	0
------------------	---	---

Status Automatic

Status Automatic

Status Automatic



Multi level

2

3

2

3

3



3

3

CH O, P, Q

2

2

CH O, P

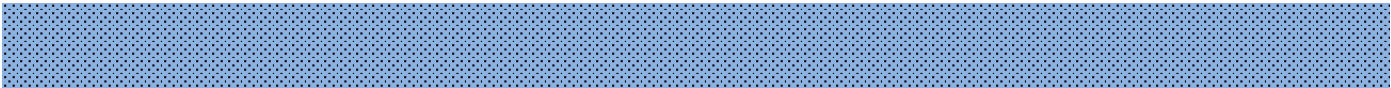
changeover switch

50 5000



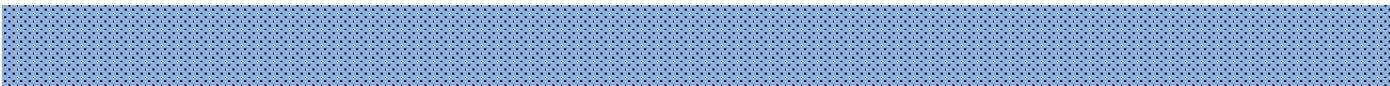
1 2 3

1	1
1-255	
2	2
1-255	
3	3
1-255	



1bit Forced Operation

	Forced Operation	0
1		
	Forced Operation	1
0		



1

1

2

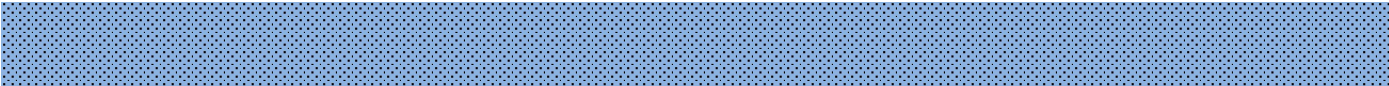
1 2

1 2

3

3 2

1 2 3



5.22



1bit

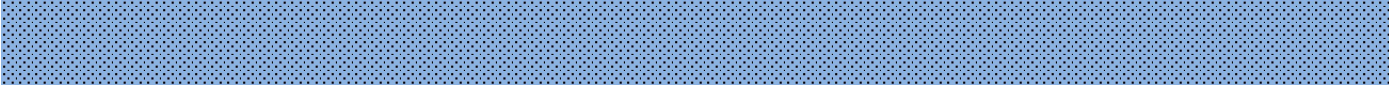
1byte

3 1bit

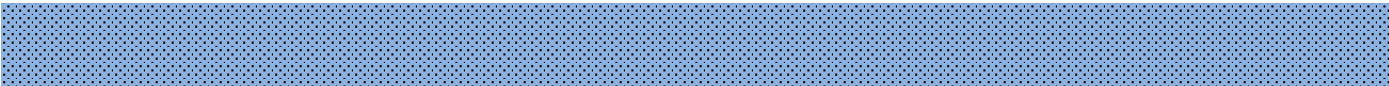


1bit	Fan speed 1	Fan speed 2	Fan speed 3
1			0

ON/OFF

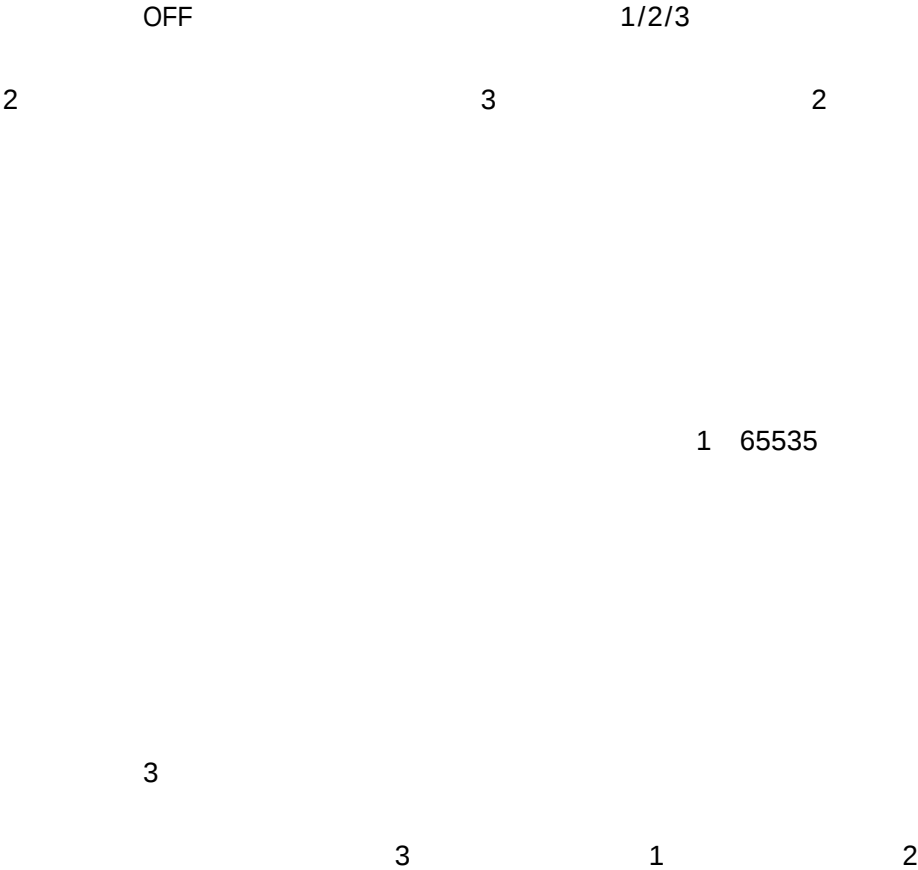


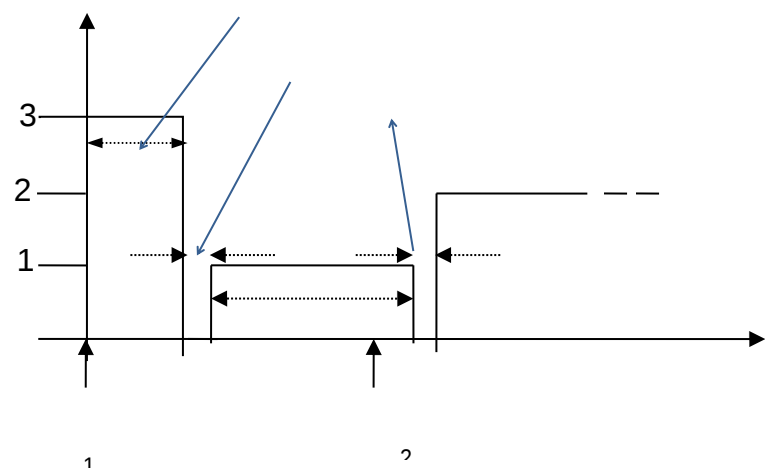
1bit	Fan speed Up/Down	1	0
	3		
			1
	3		



speed1	OFF
--------	-----







1

3

1

1

2

2

5.21

Auto. operation function

Enable

5.22

PI

4

Input & LED & IP General	Auto.operation on object value	☐ 0=Auto/1=Cancel ☒ 1=Auto/0=Cancel
Output General	State of Auto.operation after startup	☒ Disable auto.operation ☐ Enable auto.operation
Temperature	Automatically enable auto.operation	☐ No ☒ Yes
Logic & Time & Scene Group	Enable auto.operation after [10..6000] min	100
HVAC General	Threshold value OFF<->speed 1 [1..255] (For 2 point, it's Tem.difference*0.1°C)	80
Setpoint	Threshold value speed 1<->speed 2 [1..255] (For 2 point, it's Tem.difference*0.1°C)	150
Fan	Threshold value speed 2<->speed 3 [1..255] (For 2 point, it's Tem.difference*0.1°C)	200
Fan: Auto. operation		
Fan: Status	Hysteresis value is threshold value in +/- [0..50] (For 2 point, it is unused)	5
HVAC-Scene	Minimum time in fan speed [0..65535]*s	10
	Limitation function	☐ Disable ☒ Enable
	Fan with limitation 1	Unchange
	Fan with limitation 2	1, OFF
	Fan with limitation 3	2, 1
	Fan with limitation 4	3, 2, 1

Fan Automatic ON/OFF

0

Fan Automatic ON/OFF

1

0



10..6000



1

1 255

1

22

1 255

33

1 255

00

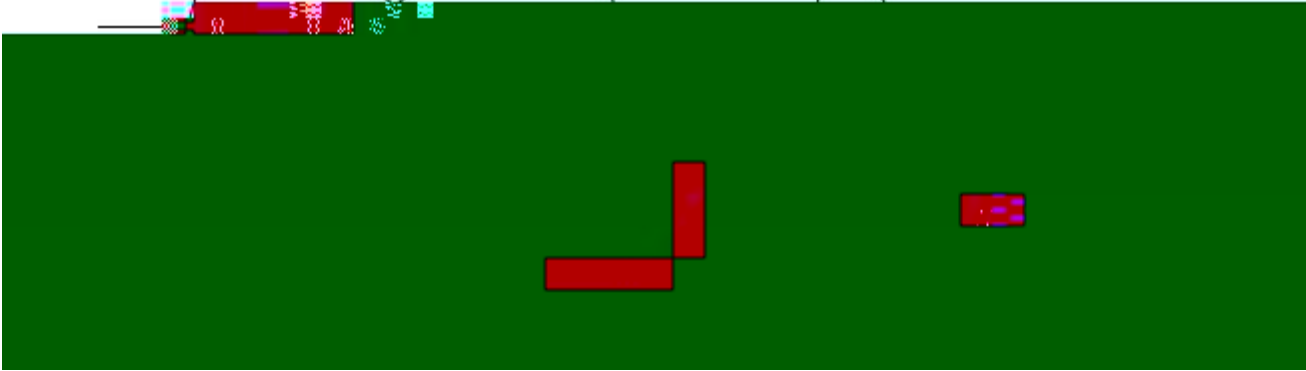
10 5060 + 40 -

40~60

40 ()60

开风速 x

阈值加滞后值



0 65535

0

Fan Limitation x (x=1,2,3,4)

HVAC

limit1 / limit2 limit3 limit4

Limit 1 / Limit 1 Limit 2> Limit 3> Limit

4 Limit 4

Fan Limitation x (x=1,2,3,4) 1 0

1 4

Disable

Unchanged

1 1

1, off 1

2 2

2, 1 1 2

2, 1, off 1 2

3

3

3, 2

3 2

3, 2, 1

1 2 3

off

Fan status5.23

Input & LED & IP General

Output General

Temperature

Logic & Time & Scene Group

HVAC General

Setpoint

Fan

Reply mode of Obj."Status Fan ON/OFF"
1bit function

Reply mode of Obj."Status Fan Automatic"
1bit function

Reply mode of Obj."Status fan speed x"
1bit function

Reply mode of Obj."Status fan speed "
1byte function

Object value for Status Fan speed 1
[1..255]

Object value for Status Fan speed 2
[1..255]

Object value for Status Fan speed 3
[1..255]

Respond after change

Respond after change

Respond after change

Respond after change

84

168

255

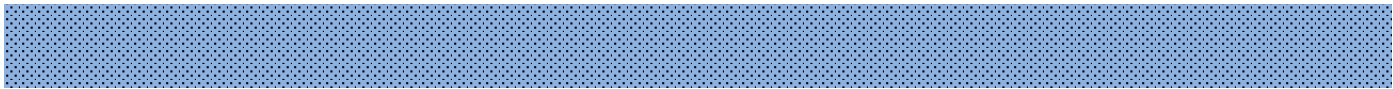
Fan: Auto. operation

Status Fan ON/OFF

Status Fan

ON/OFF

Status Fan ON/OFF



Status Automatic

1

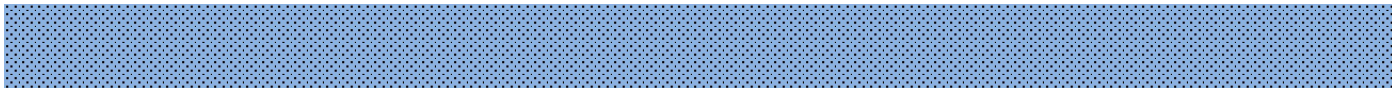
0

Status

Automatic

Status Automatic

Status Automatic



1bit

Status Fan speed 1

Status Fan speed 2

Status

Fan speed 3

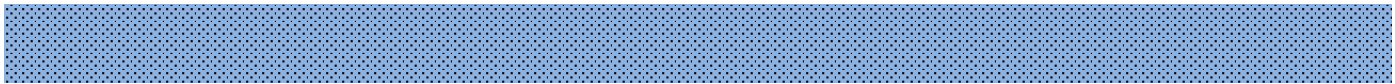
Status

Automatic

Status

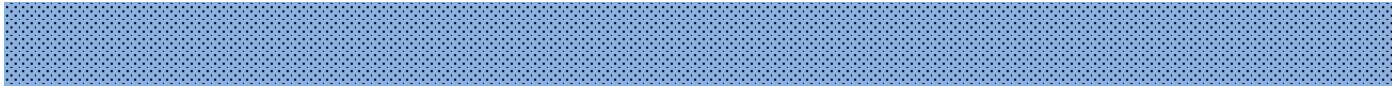
Automatic

Status Automatic



1bit Status Fan speed 1 Status Fan speed 2 Status

Fan speed 3



Status fan speed 1byte



1..255

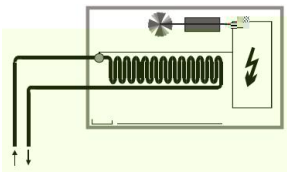
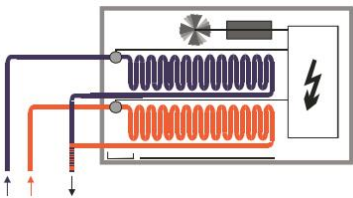
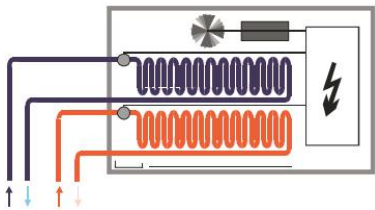
0

2 3 4

/

/

/



"Heat valve (Relay)" "Cool valve (Relay)"

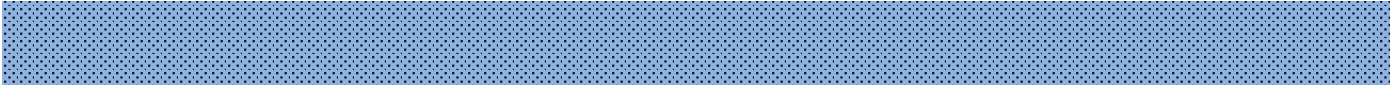
5.24 5.25

/

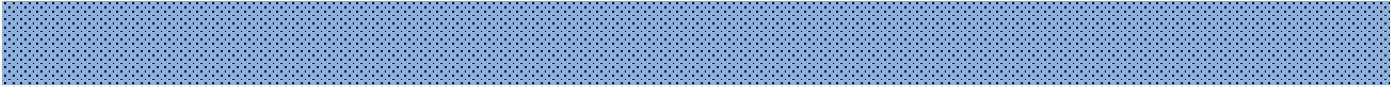
/

Input & LED & IP General	Valve control mode	☐ 2 state-ON/OFF ☒ Continous,PWM
Output General	Valve type	☐ Normally opened ☒ Normally closed
Temperature	Controller use PI control method	<--Attention
Logic & Time & Scene Group	When power failure, valve position	Unchange
	PWM cycle time[60..3000]s	120
HVAC General	Valve purge function	☐ Disable ☒ Enable
	Duration of valve purge time[1..255] *min	10
Heat valve (Relay)	Automatic valve purge	☐ Disable ☒ Enable
	Purge Cycle in weeks[1..12]	5
	Reply mode of Obj.*status of valve purge* 1bit function	Respond after change
	"Disable Heat" object function	☐ Disable ☒ Enable
	Trigger object value	☒ 0=Disable/1=Enable ☐ 1=Disable/0=Enable
	Reply mode of Obj.*status of valve position* 1bit function	Respond after change

Input & LED & IP General	Valve control mode	☐ 2 state-ON/OFF ☒ Continous,PWM
Output General	Valve type	☐ Normally opened ☒ Normally closed
Temperature	Controller use PI control method	<--Attention
Logic & Time & Scene Group	When power failure, valve position	Unchange
	PWM cycle time[60..3000]s	120
HVAC General	Valve purge function	☐ Disable ☒ Enable
Setpoint	Duration of valve purge time[1..255] *min	10
Heat valve (Relay)	Automatic valve purge	☐ Disable ☒ Enable
Cool valve (Relay)	Purge Cycle in weeks[1..12]	5
Fan	Reply mode of Obj.*status of valve purge* 1bit function	Respond after change
Fan: Status	"Disable Cool" object function	☐ Disable ☒ Enable
	Trigger object value	☒ 0=Disable/1=Enable ☐ 1=Disable/0=Enable
HVAC-Scene	Reply mode of Obj.*status of valve position* 1bit function	Respond after change



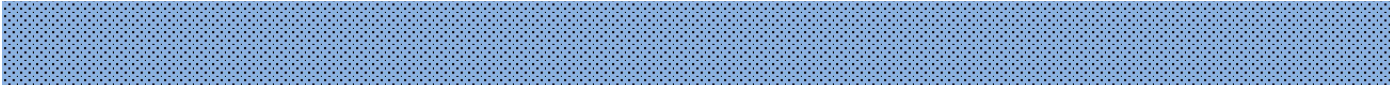
PWM



2 state-ON/OFF

Continuous, PWM

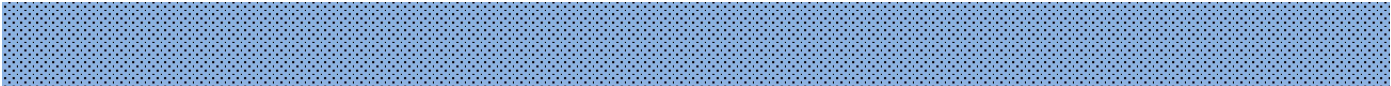
PI



Continuous, PWM

PWM

60...3000s



1bit

“Trigger valve purge”

1...255min

/

1...12

“Status of

valve purge”

vÚ

“Status of valve purge”

Ëð

Q` •

“*

8α \

'ó

BE, E
bit

“Disable, heat/Cool”

/&:

]

/

И! Ъ

еО Ъ

∇ q l' ∇



“Status of

valve position”

“Status of valve position”

Continuous, PWM

	relay opened“Status of valve position”“0” relay closed“1” 0V“Status of valve position”“0”10V “1”
	relay closed“Status of valve position”“0” relay opened“1” 0V~10V10V“Status of valve position”“1” 10V“0”

“Heat valve (0-10V)”

“Cool valve (0-10V)”

5.26

5.27

/

0-10V

/

5.12.1

Input & LED & IP General

Output General

Temperature

Logic & Time & Scene Group

HVAC General

Setpoint

Valve control mode

Valve type

Controller use PI control method

Valve adjustment

Min. controller output for closed valve [0..100]%

Max. controller output for fully opened valve[0..100]%

Lower limit of active valve opening range [0..100]%

Upper limit of active valve opening range [0..100]%

Valve purge function

"Disable Heat" object function

Reply mode of Obj."status of valve position" 1bit function

2 state-10V/0V

☐ Continuous control

☒ Normally opened

☐ Normally closed

<--Attention

☐ Disable

☒ Enable

0

100

0

100

☒ Disable

☐ Enable

☒ Disable

☐ Enable

Respond after change

Input & LED & IP General

Output General

Temperature

Logic & Time & Scene Group

HVAC General

Setpoint

Min. controller output for closed valve [0..100]%

Max. controller output for fully opened valve [0..100]%

Lower limit of active valve opening range [0..100]%

Upper limit of active valve opening range [0..100]%

Valve purge function

"Disable Cool" object function

Reply mode of Obj."status of valve position" 1bit function

0

100

☒ Disable

☐ Enable

☒ Disable

☐ Enable

Respond after change

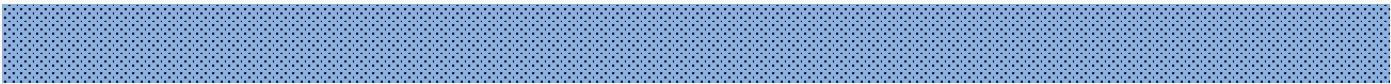
Heat valve (0-10V)

Cool valve (0-10V)

Fan

Fan: Auto. operation

Fan: Status

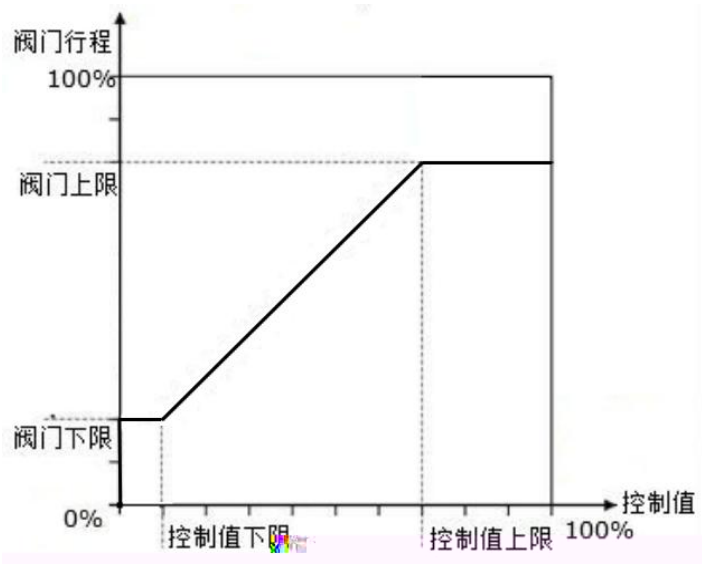


“Valve adjustment” “Enable”

0...100 [%]

10% 20% 70%

80%



Scene

5.28

5.29

HVAC

HVAC

8

Input & LED & IP General	Scene function	☐ Disable ☒ Enable
Output General	1> Assignment scene No. (1..64,0=inactive)	0
Temperature	HVAC Mode	Standby
Logic & Time & Scene Group	Fan Speed(For one level,all 1/2/3 mean on)	Unchange
HVAC General	2> Assignment scene No. (1..64,0=inactive)	0
Setpoint	HVAC Mode	Comfort
Heat valve (0-10V)	Fan Speed(For one level,all 1/2/3 mean on)	Unchange
Cool valve (0-10V)	3> Assignment scene No. (1..64,0=inactive)	0
Fan	HVAC Mode	Night
Fan: Auto. operation	Fan Speed(For one level,all 1/2/3 mean on)	Unchange
Fan: Status	4> Assignment scene No. (1..64,0=inactive)	0
HVAC-Scene	HVAC Mode	Comfort
	Fan Speed(For one level,all 1/2/3 mean on)	Unchange

Input & LED & IP General	Scene function	Disable Enable
Output General	1>Assignment scene No. (1..64,0=inactive)	0
Temperature	Control Value(For 1bit,value>0 means on)	0
Logic & Time & Scene Group	Fan Speed(For one level,all 1/2/3 mean on)	Unchange
HVAC General	Heat/Cool(only used for 4-pipes of bus controller)	Unchange
Heat valve (0-10V)	2>Assignment scene No. (1..64,0=inactive)	0
Cool valve (0-10V)	Control Value(For 1bit,value>0 means on)	0
Fan	Fan Speed	

64

1-64 is active, 0 is no assignment.

HVAC

0...255

0

HVAC

Heating and Cooling

/

HVAC

				5.11.1.1
				5.11.2.1
				PI 5.11.1.1
				PI 5.11.2.1
				0 1 Control value
				Control value 5.11.1.1
				0 1 3 Control value
				Control value 5.11.2.1

Logic X

5.315.32

X

8

Input & LED & IP General

Output General

Temperature

Logic & Time & Control Group

Function of Logic 1

Input 1

Input 2

Input 3

Threshold value

Input 3 is '1',when the Input value is

Input 4

Input 5

Input 6

Input 7

Input 8

Result is inverted

Read Input after power voltage recovery

Output send when

Send Delay[0..30000]*0.1s

AND

1Bit

1Bit Inverted

1Byte

127

>=Threshold value

Disconnect

Disconnect

Disconnect

Disconnect

Disconnect

☒ No ☐ Yes

☒ No ☐ Yes

☒ Receiving a input ☐ Change of Result

0

Input & LED & IP General

Output General

Function of Logic 1

Format convert type

Converter

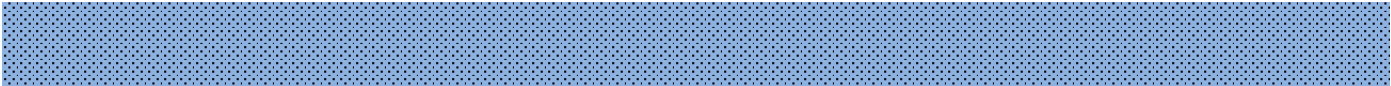
8x1Bit-->1x1Byte

X

AND/OR/XOR

AND/OR/XOR

5.31



Input x

0..255

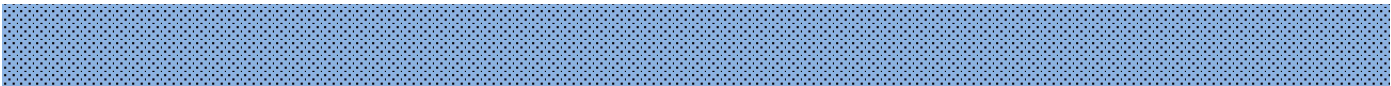
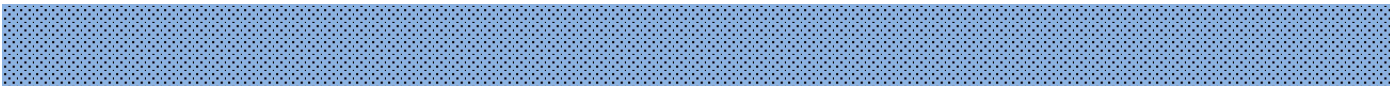
1

0

>= Threshold value:

1

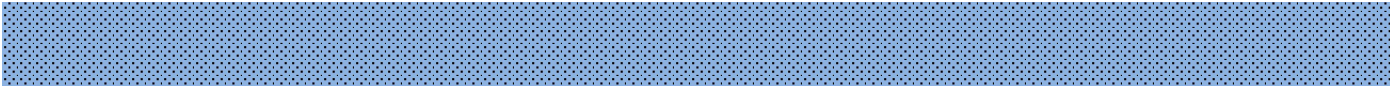
0



0..30000

0

Converter 5.32



Time X 5.33 X

Input & LED & IP General	Object type for trigger value	☒ 1Bit ☐ 1Byte
Output General	The trigger mode	Trigger with '1'
Temperature	Object type for output value	☒ 1Bit ☐ 1Byte
Logic & Time & Scene Group	Output mode	Flashing
Time 1	Value 1	0
	Value 2	0
	Value 1 Duration[0..6000]*1s	60
	Value 2 Duration[0..6000]*1s	60



1Bit

Object type for trigger value 1Byte

0..255

Object type for trigger value 1Byte

"

Scene Group X

5.34

8

8

Input & LED & IP General	Datatype of Scene Output 1	18Bit
Output General	Transmit delay[0..36000]*0.1s	0
Temperature	Datatype of Scene Output 2	18Bit
Logic & Time & Scene Group	Transmit delay[0..36000]*0.1s	0
Scenes Group 1	Datatype of Scene Output 3	18Bit
G1: Scene 1	Transmit delay[0..36000]*0.1s	0
G1: Scene 2	Datatype of Scene Output 4	18Bit
	Transmit delay[0..36000]*0.1s	0

Input & LED & IP General	Name of the scene (max.50 characters)	G1: Scene 1
Output General	Extension of Scene No.[1..64, 0: Disable]	1
Temperature	Scene Output 1 (0..1)	☒ 0 ☐ 1
Logic & Time & Scene Group	Scene Output 2 (0..255)	0
Scenes Group 1	Scene Output 3 (0..100%)	0
	Scene Output 4 (0..1)	☒ 0 ☐ 1
	Scene Output 5 (0..1)	☐ 0 ☒ 1
	Scene Output 6 (0..1)	☐ 0 ☒ 1
	Scene Output 7 (0..1)	☐ 0 ☒ 1
	Scene Output 8 (0..1)	☐ 0 ☒ 1

x

x

: 0..36000.

0

50

0..64 0=

x

1bit 0..1/1byte 0..255/ 1byte 0..100%

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
271	Temperature	Actual temperature output			2 bytes	C	R	-	T	-	temperature (°C)	Low
272	Temperature	Local sensor error output			1 bit	C	R	-	T	-	alarm	Low
274	Temperature	Temp correction (-128..127) * 0.1			1 byte	C	-	W	-	-	counter/pulses (-128..127)	Low
275	General	In operation			1 bit	C	R	-	T	-	switch	Low
273	Temperature	External sensor			2 bytes	C	-	W	T	U	temperature (°C)	Low

PT1000					
PT1000					
PT1000					
1					

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	1	UI input 1	Switch			1 bit	C	-	W	T	-	switch	Low
2	2	UI input 1	Switch-long			1 bit	C	-	W	T	-	switch	Low
3	3	UI input 1	Enable communication			1 bit	C	-	W	-	-	enable	Low

"Switch Sensor"					
ON	OFF	TOGGLE	"1"	"0"	
"Distinction between long and short operation" "yes"					
			ON	OFF	TOGGLE
"0"					"1"
/					
(	"Disable communication"				)

Priority	Number	Name	Object Function	Description	Group Address	Length	Control	Value	Unit	Data Type	Priority
	1	UI input 1	Switch			1 bit	C	-	W T	- switch	Low
	2	UI input 1	Dimming			4 bit	C	-	W T	- dimming control	Low
	3	UI input 1	Enable communication			1 bit	C	-	W	- - enable	Low

"Dimming functionality" "Dimming and switching" ON OFF TOGGLE "1" "0"					
/ "Dimming and switching" "only dimming"					

6.4

6.5

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	UI input 1	Shutter UP/DOWN			1 bit	C	-	-	-	-	switch	Low

/			"1"			"0"						
/			"1"			/	"0"			/		

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
22	LED 1	Status			1 bit	C	-	W	-	-	switch	Low
23	LED 2	Status			1 bit	C	-	W	-	-	switch	Low
24	LED 3	Status			1 bit	C	-	W	-	-	switch	Low
25	LED 4	Status			1 bit	C	-	W	-	-	switch	Low
26	LED 5	Status			1 bit	C	-	W	-	-	switch	Low

22	LED X	Status	1bit/1byte	C,W	1.001 DPT_Switch 5.001 DPT_percentage 0..100% 5.010 DPT_counter pulses 0..255
1bit/1byte			LED		

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data	Priority
27	Output 1	Switch			1 bit	C	-	W	-	-	switch	Low
28	Output 1	Switch status			1 bit	C	R	-	T	-	switch	Low
29	Output 1	Scene			1 byte	C	-	W	-	-	scene control	Low

“1”			“0”																												
“After read only”																															
“After change and after read”																															
8bit																															
8bit																															
8bit	(	)	FXNNNNNN																												
	F:	“0”	“1”																												
	X	0																													
	NNNNNN	0...63																													
<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>...</td></tr><tr><td></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>...</td></tr><tr><td></td><td>64</td></tr></table>								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																														
1~64	0~63	1	“Scene”	0																											

Num	Est	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
001	001	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
002	002	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
003	003	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
004	004	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
005	005	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
006	006	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
007	007	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
008	008	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
009	009	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id
010	010	Product Function	Description	Group	Id	Length	Color	R	T	Id	Color	Id

“0”

/

“1”

/

'0'_____

'1'—

“0” “1”

Shutter

“0”

“1”

Blind

'0'— /

'1'— /

/

“Shutter”

“Louvre position[0..100%]”

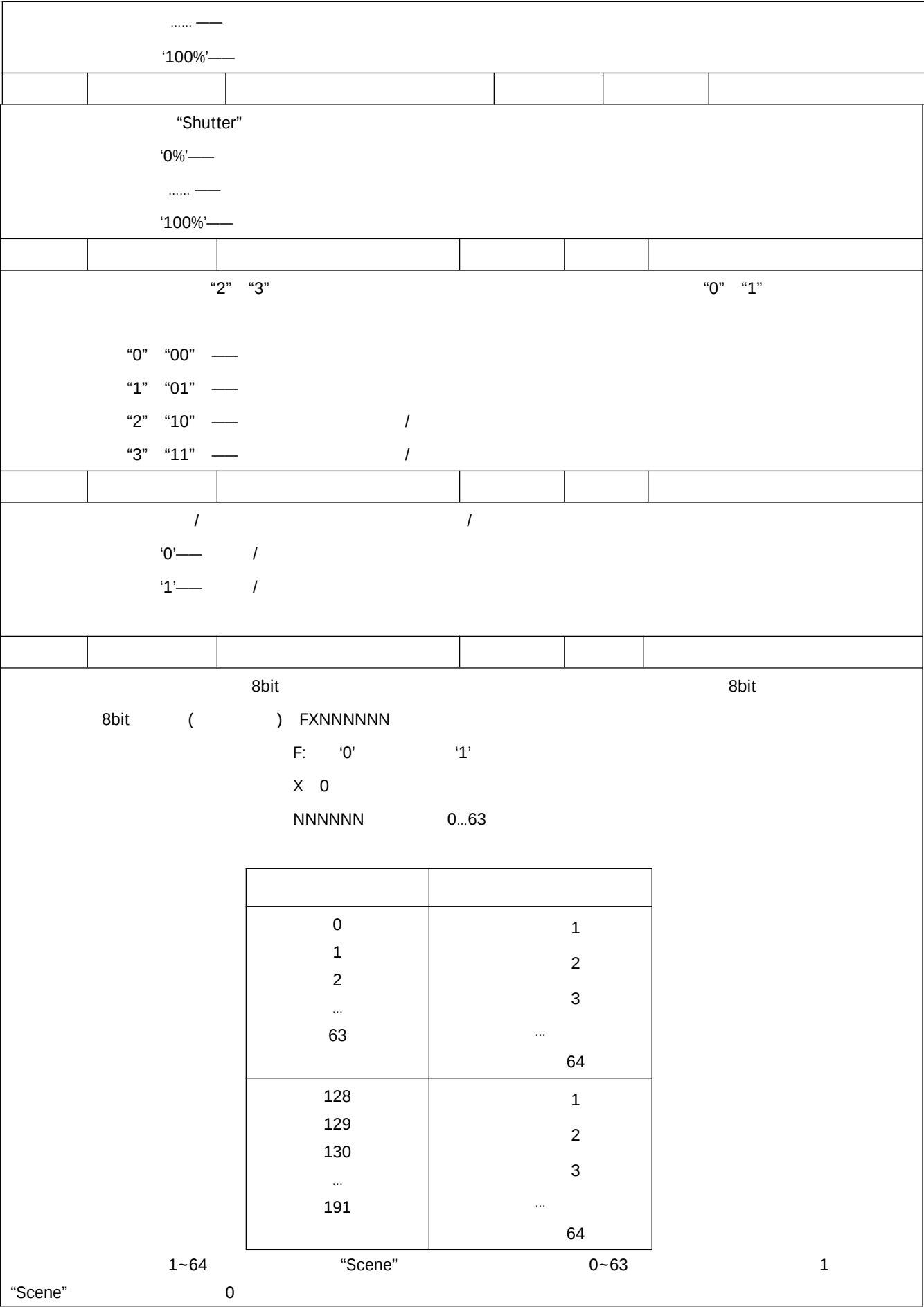
'0%'—

.....

'100%'——

“Shutter”

11111



“1” “0”					
0 “1”					
0 “0”					
1~7 1					
7 0 9~15					
9 15 8					
	/	255	128	64	32
	/	255	128	64	32
0					
“0”					
8bit					
8bit () FXNNNNNN					
F: “0” “1”					
X					

NNNNNN		0...63	
1~64	"Scene"	0~63	1
"Scene"	0	1	
	0	1	
	1	2	
	2	3	
	...		
	63	...	
		64	
	128	1	
	129	2	
	130	3	
	...		
	191	...	
		64	

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
250	HVAC	Switch Heat/Cool mode			1 bit	C	-	W	-	-	cooling/heating	Low
251	HVAC mode	Comfort mode			1 bit	C	-	W	-	-	enable	Low
252	HVAC mode	Night mode			1 bit	C	-	W	-	-	enable	Low
253	HVAC mode	Frost/heat protection mode			1 bit	C	-	W	-	-	enable	Low
254	HVAC mode	Standby mode			1 bit	C	-	W	-	-	enable	Low
262	HVAC Status	Comfort mode			1 bit	C	R	-	T	-	enable	Low
263	HVAC Status	Night mode			1 bit	C	R	-	T	-	enable	Low
264	HVAC Status	Frost/heat protection mode			1 bit	C	R	-	T	-	enable	Low
265	HVAC Status	Standby mode			1 bit	C	R	-	T	-	enable	Low
266	HVAC Status	Heating/cooling mode			1 bit	C	R	-	T	-	cooling/heating	Low
267	HVAC Status	Status of operation			1 byte	C	R	-	T	-		Low
268	Input setpoint	Base setpoint			2 bytes	C	-	W	-	-	temperature (°C)	Low
269	Input setpoint	Setpoint adjustment			2 bytes	C	-	W	-	-	temperature (°C)	Low
270	Output setpoint	Instantaneous setpoint			2 bytes	C	R	-	T	-	temperature (°C)	Low
250	HVAC	Heat mode enable			1 bit	C	-	W	-	-	enable	Low
251	HVAC mode	HVAC mode			1 byte	C	-	W	-	-	HVAC mode	Low
258	HVAC	Cooling mode enable			1 bit	C	-	W	-	-	enable	Low
262	HVAC Status	HVAC mode			1 byte	C	R	-	T	-	HVAC mode	Low
247	HVAC	Scene			1 byte	C	-	W	-	-	scene number	Low



HVAC					
1~64		0~63		1	0
/				0	1
/				1	0
4 1bit (251,252,253,254) 1 1byte (HVAC mode)					
1bit	251	252	253	254	
	1	0		4 1bit	
(Frost/heat protection mode)>		(Comfort mode)=		(Night mode)=	(Standby mode) 251
252	253				
1byte		no:0:			
		1:			
		2:			
		3:			
		4:			
		5-255:			

HVAC

251,252,253,254

/

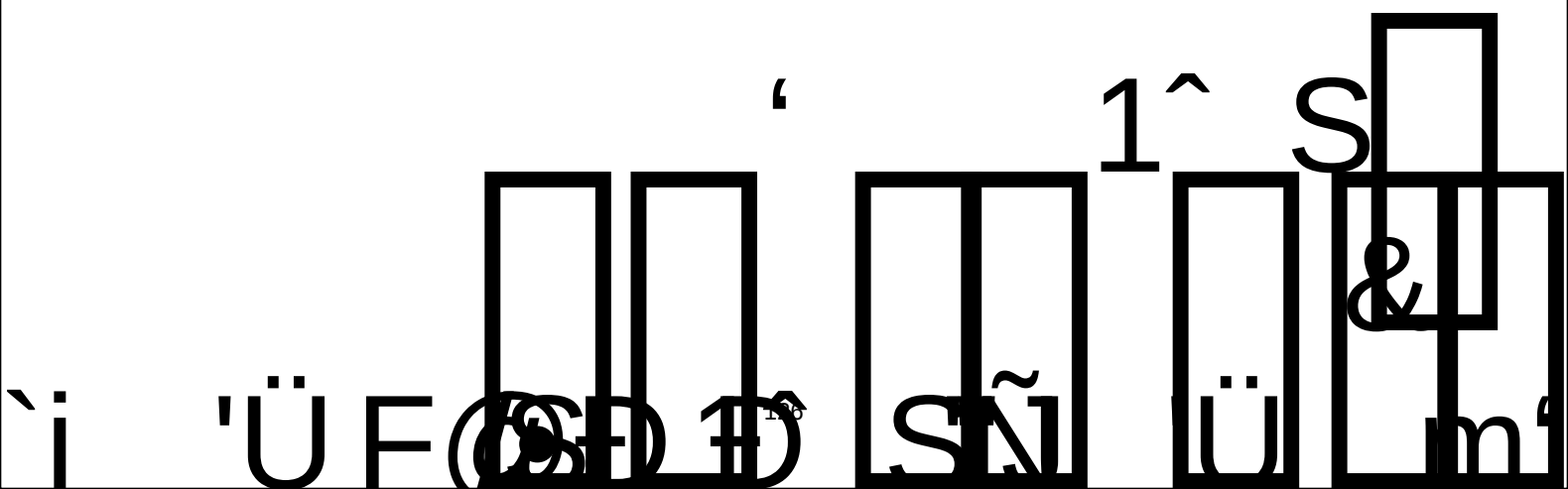
“0”

“1”

HVAC

DPT_StatusHVAC: B6N2

□ □ □ □ □



		(254)		250 (Switch	
Heat/ Cool mode					
1bit		1byte			
"0"——					
"1"——					

1

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
231	1Level-Fan	Fan speed			1 bit	C	-	W	-	-	switch	Low
235	1Level-Fan	Status Fan ON/OFF			1 bit	C	R	-	T	-	switch	Low
240	1Level-Fan	Automatic function			1 bit	C	-	W	-	-	enable	Low
241	1Level-Fan	Status Automatic			1 bit	C	R	-	T	-	enable	Low
242	1Level-Fan	Fan Limitation 1			1 bit	C	-	W	-	-	enable	Low
243	1Level-Fan	Fan Limitation 2			1 bit	C	-	W	-	-	enable	Low
244	1Level-Fan	Fan Limitation 3			1 bit	C	-	W	-	-	enable	Low
245	1Level-Fan	Fan Limitation 4			1 bit	C	-	W	-	-	enable	Low
246	1Level-Fan	Forced operation			1 bit	C	-	W	-	-	enable	Low

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
230	Multi-Fan	Fan speed			1 byte	C	-	W	-	-	counter pulses (0..255)	Low



1bit "0"—— "1"—— 1byte 1 — 1 — 1 2 — 2 3 — 3					
11~3ON 1~3OFF "0"—— "1"——1					
231					
231					
"0"—— "1"——					
"0"—— "1"——					

Object value for Status Fan speed 1/2/3 [1..255]

"0"

1

"0" — 1

"1" — 1

237

237

"0 Auto/1=Cancel"

"0" —

"1" —

"1 Auto/0=Cancel"

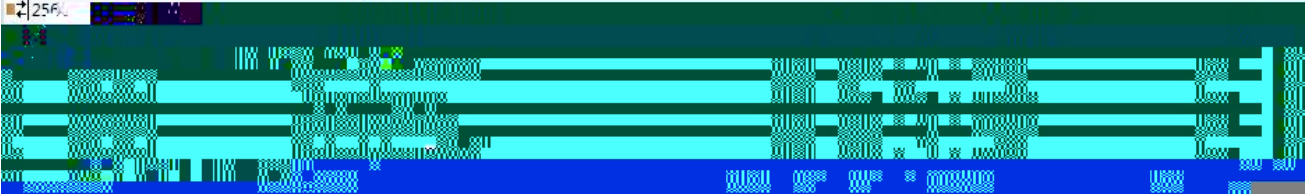
"0" —

"1" —

230 Fan speed

231 —

“1” 1 “0” 1 1 “Fan with limitation 1” “0”—— 1 “1”—— 1 1					
242					
242					
242					
“Behaviour on Forced operation is” / “Limitation on forced operation” 1-4 “0 Force/1=Cancel” “0”—— “1”—— “1 Force/0=Cancel” “1”—— “0”——					

Number	Name ▾	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
255	Valve Heat	Trigger valve purge			1 bit	C	-	W	-	-	enable	Low
256												

0%					
248					
0					
1					
0					
1					
"0"——					
"1"——					

	Number	Name	Object Function	Description	Group	Address	Length	C	R	W	T	U	Data Type	Priority
	150	Logic 1	Input 1				1 bit	C	-	W	T	U	boolean	Low
	151	Logic 1	Input 2				1 bit	C	-	W	T	U	boolean	Low
	152	Logic 1	Input 3				1 byte	C	-	W	T	U	counter pulses (0..255)	Low
	153	Logic 1	Input 4				1 bit	C	-	W	T	U	boolean	Low
	154	Logic 1	Input 5				1 bit	C	-	W	T	U	boolean	Low
	155	Logic 1	Input 6				1 bit	C	-	W	T	U	boolean	Low
	156	Logic 1	Input 7				1 bit	C	-	W	T	U	boolean	Low
	157	Logic 1	Input 8				1 bit	C	-	W	T	U	boolean	Low
	158	Logic 1	Logic Result				1 bit	C	-	-	T	-	boolean	Low

Input x					

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
150	Logic 1	Input 1bit-bit0			1 bit	C	-	W	-	U	boolean	Low
151	Logic 1	Input 1bit-bit1			1 bit	C	-	W	-	U	boolean	Low

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
152	Logic 1	Input 1bit-bit2			1 bit	C	-	W	-	U	boolean	Low
153	Logic 1	Input 1bit-bit3			1 bit	C	-	W	-	U	boolean	Low
154	Logic 1	Input 1bit-bit4			1 bit	C	-	W	-	U	boolean	Low
155	Logic 1	Input 1bit-bit5			1 bit	C	-	W	-	U	boolean	Low
156	Logic 1	Input 1bit-bit6			1 bit	C	-	W	-	U	boolean	Low
157	Logic 1	Input 1bit-bit7			1 bit	C	-	W	-	U	boolean	Low

8x1bit --> 1x1byte : 8 1bit 1byte Input bit2=1, bit1=1, bit0=1, 0--> Output

1byte=7

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

1x1byte --> 1x2byte 1byte 2byte Input 1byte=125--> Output 2byte=125,

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

2x1byte --> 1x2byte 2 1byte 2byte Input 1byte-low = 255 (\$FF), Input 1byte-high
= 100 (\$64) --> Output 2byte = 25855 (\$64 FF)

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

2x2byte --> 1x4byte 2 2byte 4byte Input 2byte-low = 65530 (\$FF FA), Input
2byte-high = 32768 (\$80 00)--> Output 2byte = 2147549178 (\$80 00 FF FA)

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
150	Logic 1	Input 1byte			1 byte	C	-	W	-	U	counter pulses (0..255)	Low
151	Logic 1	Output 1bit-bit0			1 bit	C	-	-	T	-	boolean	Low
152	Logic 1	Output 1bit-bit1			1 bit	C	-	-	T	-	boolean	Low
153	Logic 1	Output 1bit-bit2			1 bit	C	-	-	T	-	boolean	Low
154	Logic 1	Output 1bit-bit3			1 bit	C	-	-	T	-	boolean	Low
155	Logic 1	Output 1bit-bit4			1 bit	C	-	-	T	-	boolean	Low
156	Logic 1	Output 1bit-bit5			1 bit	C	-	-	T	-	boolean	Low
157	Logic 1	Output 1bit-bit6			1 bit	C	-	-	T	-	boolean	Low
158	Logic 1	Output 1bit-bit7			1 bit	C	-	-	T	-	boolean	Low

1x1byte --> 8x1bit 1 1byte 8 1bit Input 1byte=200 --> Output bit0=0, bit1=0, bit2=0,

bit3=1, bit4=0, bit5=0, bit6=1, bit7=1

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

1x2byte --> 2x1byte

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
	186	Time 1	Trigger value			1 byte	C	-	W	-	-	counter pulses (0..255)	Low
	187	Time 1	Output value			1 byte	C	-	-	T	-	counter pulses (0..255)	Low

--	--	--	--	--	--	--	--	--	--	--	--	--	--

186

Time X

Trigger value

/

22-25

3

15&16&17 2

15&16

1

15

3

15&16&17

... -- 1 -- 2 -- 3 -- -- ...

15&16&17

0-10V 28

28

... -- 1 -- 2 -- 3 -- -- ...

18

0-10V 29

19

0-10V 30

/

/

26-30