K-BUS®

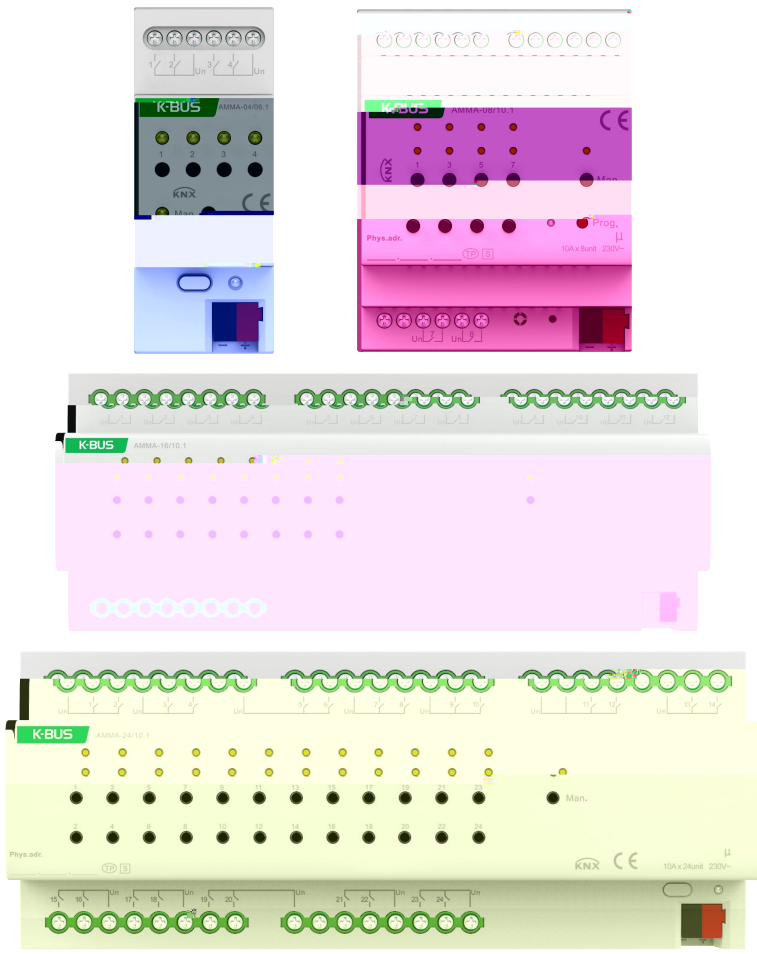
Nvmujgvodujpobm Bduvbups- 509027035.Gpme`W2/9

BNNB.15017/2

BNNB.19021/2

BNNB.27021/2

BNNB.35021/2



LOY0FJC

注意事项

1、请远离强磁场、高温、潮湿等环境；

2、不要将设备摔落在地上或使之受到强力冲击；

3、不要使用湿布或具挥发性的试剂擦拭设备；

.....2

.....6

.....9

4/2/ 9

4/3/ 21

4/3/2 BNNB.15017/2 21

4/3/3 BNNB.19021/2 23

4/3/4 BNNB.27021/2 24

4/3/5 BNNB.35021/2 25

FUT 26

5/2/ ÔHfofsbmÕ 26

5/3/ ÔDiboofmgvodujpoÕ 29

5/4/ ..Txjudi bduvbups 32

5/4/2 ÔTxjudi bduvbups; Pvuqvu YÕ 32

5/4/3 ÔPy; Ujnf Õ 37

5/4/3/2 ÔEfmbzÕ 38

5/4/3/3 ÔGmbtijoh Õ 39

5/4/3/4 ÔTubjsdbtfÕ 41

5/4/4 ÔPy; MphjdÕ 43

5/4/5 ÔPy; TdfofÕ 46

5/4/6 ÔPy; GpsdfeÕ 48

5/4/7 ÔPy; Pqfsbujpo ipvst dpvoufsÕ 4:

5/5/ ..Ifbujoh bduvbups)xjuipvu dpouspmmfs* 51

5/6/)BD* 58

5/6/2 ÔDvsubjo Y; WfofujboCmjoeÕ 58

5/6/2/2 ÔDy; EsjwfÕ 62

5/6/2/3 ÔDy; BvupÕ 65

5/6/2/4 ÔDy; TdfofÕ 68

5/6/2/5 ÔDy; TbgfuzÕ 6:
5/6/3 ÔDvsubjo Y; T i vuufsÕ 72
5/7/)ED* 72
5/8/ 73
5/8/2 ÔGbo uzqf .. Pof mfwfmÕ 73
5/8/2/2 ÔGy; Bvup/Õ 78
5/8/2/3 ÔGy; TubuvtÕ 82
5/8/3 ÔGbo uzqf .. Nvmuj.mfwfmÕ 83
5/8/3/2 ÔGy; Bvup/Õ 8:
5/8/3/3 ÔGy; TubuvtÕ 96
5/9/ 98
5/9/2 ÔWy; I fbujoh0Dppmjoh Õ ..... :2
5/9/2/2 3 tubuf.PO0PGG ..... :4
5/9/2/3 Dpoujovpvt-QXN ..... :8
5/9/2/4 4 qpjou-pqfo boe dmptf ..... ::
..... 216
6/2/ 216
6/2/2 .. Txjudi bduvbups 216
6/2/3 .. I fbujoh bduvbups)xjuipvu dpouspmmfs* 21:
6/3/)BD0ED* 221
6/4/ 225
6/5/ 228

DC/AC

k

k

4 ! 8 ! 16 24

k 1 AC

k k

k

EN 60 715 35

EIB

k

k

—— k 24

-
- 0
-
-
- 9 2czuf

- ! ! !
-
- 2cju03cju
-
-
-
-

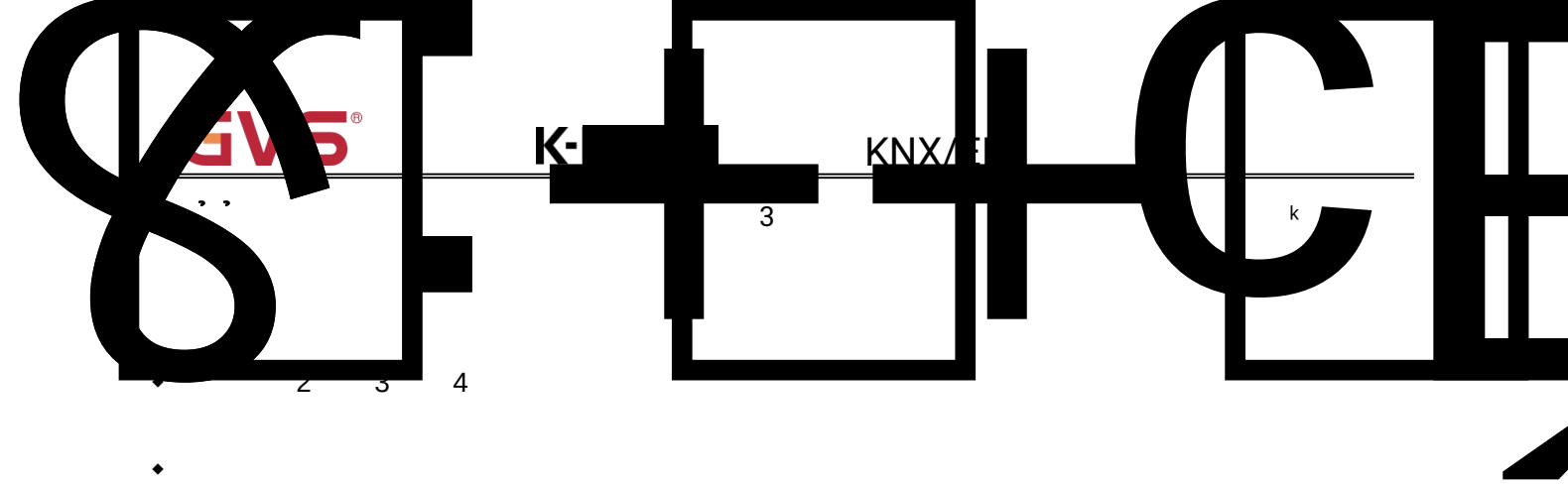
—— BD0ED ! ! ! ! 12

AC 230 V AC 370W 4/8-Fold 1000W(16/24-Fold)

6 DC k

k AC DC AC DC

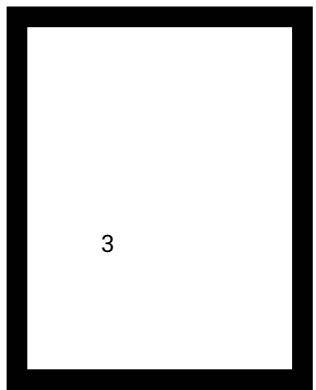
- 0
- 0
- 1、、211&
- 1、、211& Wfofujbo Cmjoe
- 9 2czuf
-
-
-
- Wfofujbo Cmjoe Tivuufs



- 2 3 4
- 0
- 2 4

3point, open and close ! PWM continuous, PWM 2

2 state-ON/OFF k



-
-
-
-
- 0
-
-

knxprod ETS (ETS4

k

! !

k

LOY 32 41W ED LOY

KNX	<12mA
KNX	<20mA
KNX	<360mW

LOY

0 1/9 n n Á

0.2-2.5mm^2 0.4N-m 4/8-Fold

0.*.5

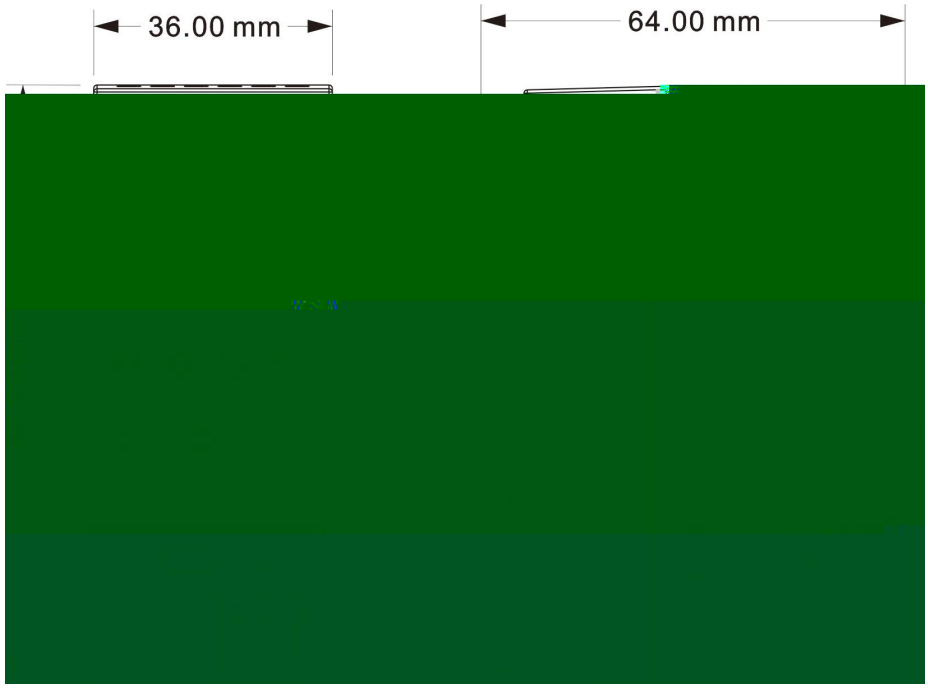
	/	36mm Ô 90mm Ô 64mm (AMMA-04/06.1) / 0.15KG 72 mm Ô 90mm Ô 64mm (AMMA-08/10.1) / 0.2KG 216 mm Ô 90mm Ô 64mm(AMMA-16/10.1) / 0.6KG 216 mm Ô 90mm Ô 64mm (AMMA-24/10.1) / 0.7KG
	24 /12 AC /6 DC /6 /12 ! 2 /6 4	
	U_n	230/277V AC 50/60Hz 30V DC
	I_n AMMA-04/06.1	6A/70uF LED 100W
	I_n AMMA-08/10.1	10A/70uF LED 100W
	I_n AMMA-16/10.1	10A/105uF LED 200W
	I_n AMMA-24/10.1	10A/105uF LED 200W
	AMMA-04/06.1 -08/10.1)	120A/10ms
	AMMA-16/10.1 -24/10.1)	300A/2ms
	AMMA-04/06.1 -08/10.1)	16A/240V AC
	AMMA-16/10.1 -24/10.1)	20A/250V AC
		> 1 x 10^6
		>5 x10^4
		100mA 5V DC

k

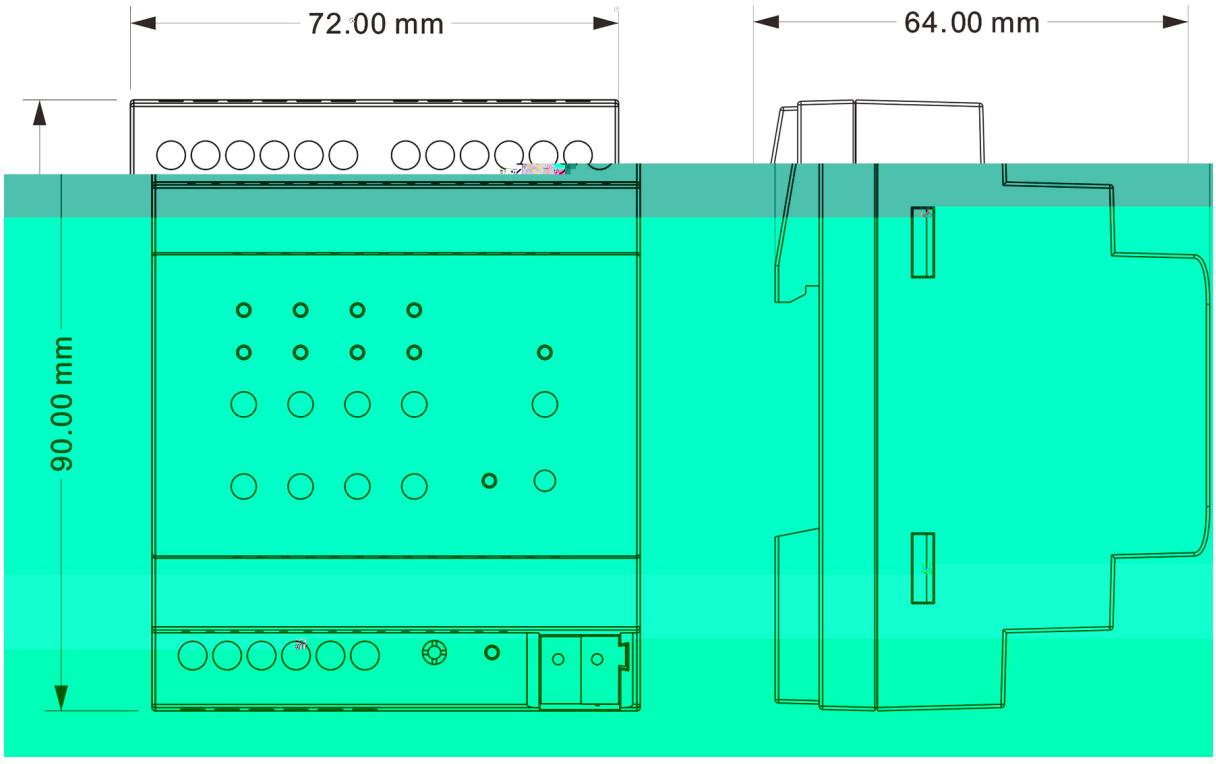
k

Multifunctional Actuator 4/8/16/24-Fold	532	1000	1000

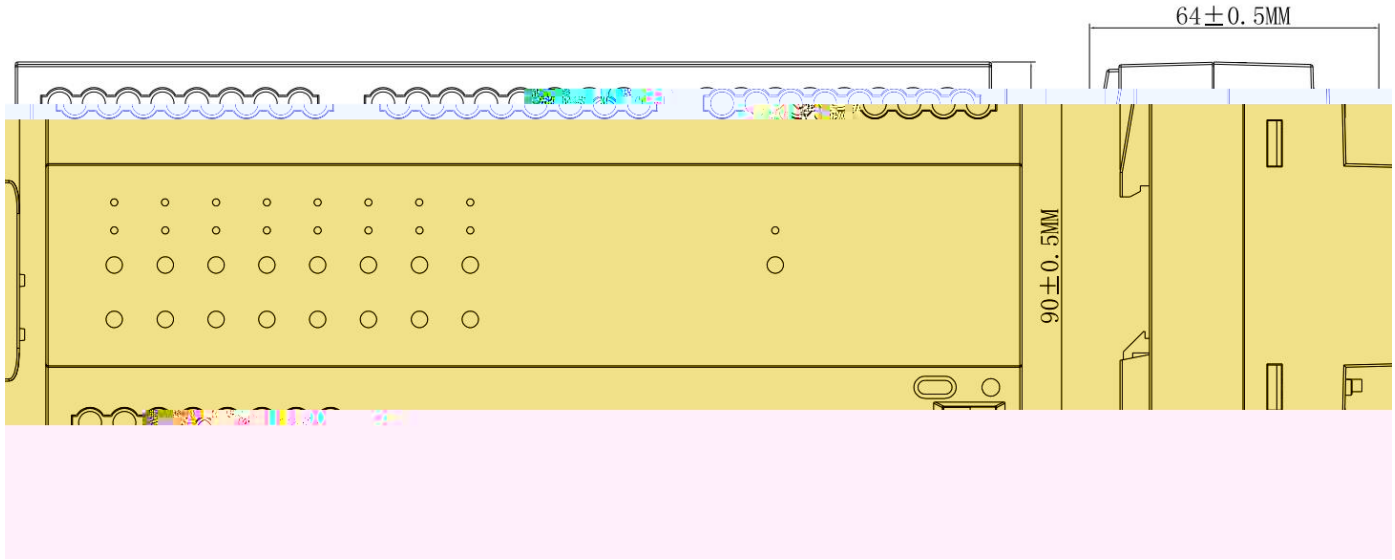
4/2/



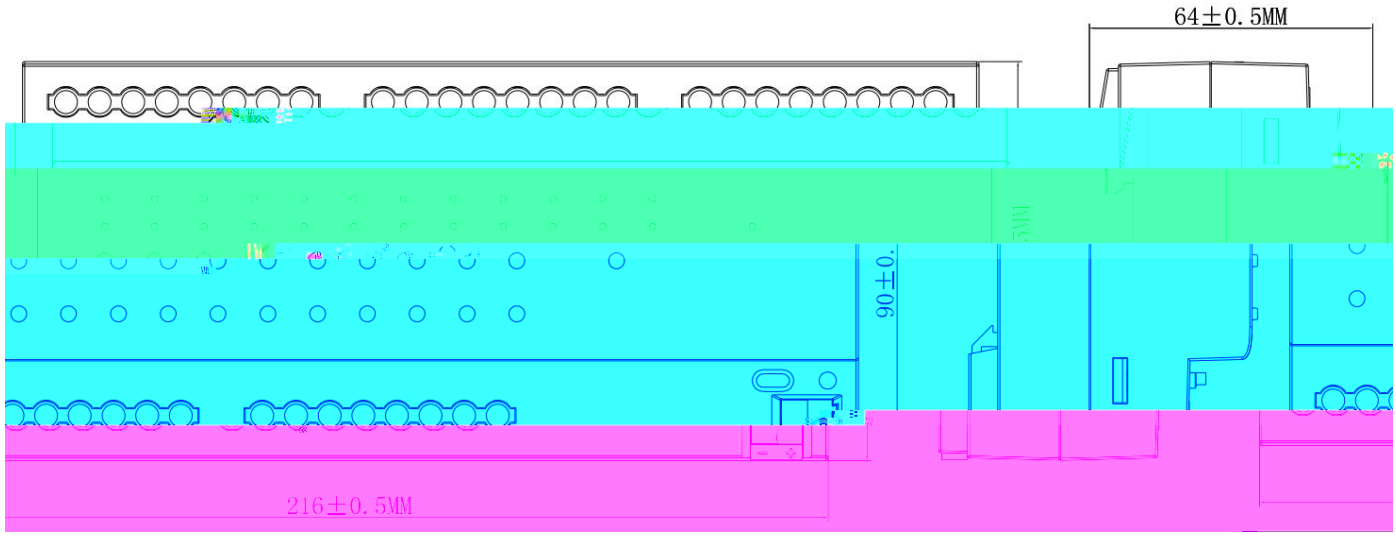
AMMA-04/06.1



AMMA-08/10.1



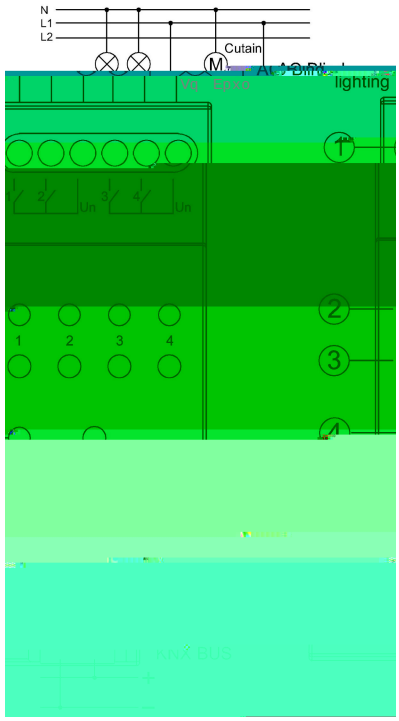
AMMA-16/10.1

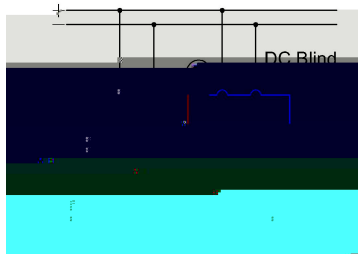


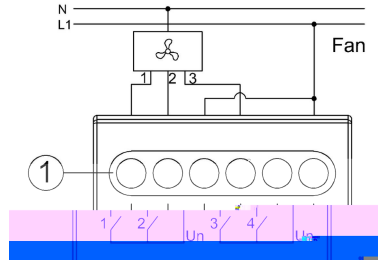
AMMA-24/10.1

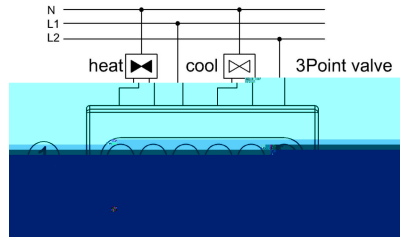
4/3/

4/3/2 BNNB.15017/2









F : k

F ʜ

1 , k

/ AC/DC (1) (2) / /

k (DC (3) (4)

k)

(1) 1 (2) 2 (3) 3

k k

2 (1) / / (

/) (2) k 4 (1) (3)

(2) (4) k 3Point valve 1 3 2 4

k

ϟ ϡ 0 Nbo/

/ k

ϡ Ϣ MFE

ϣLOY

2/

k

k

3/ k

k

5/4/7 5/5 5/7 5/8/3/3 5/9/2/4

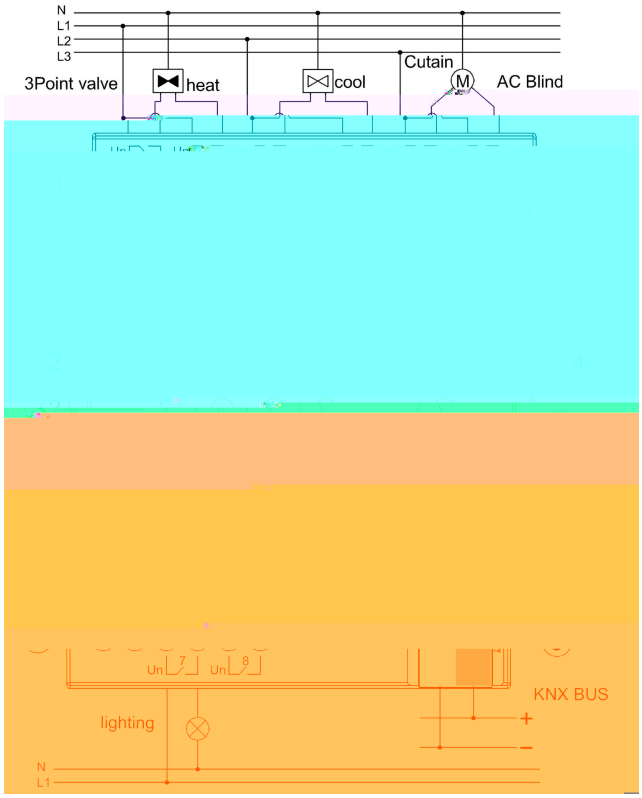
4/ BD ED

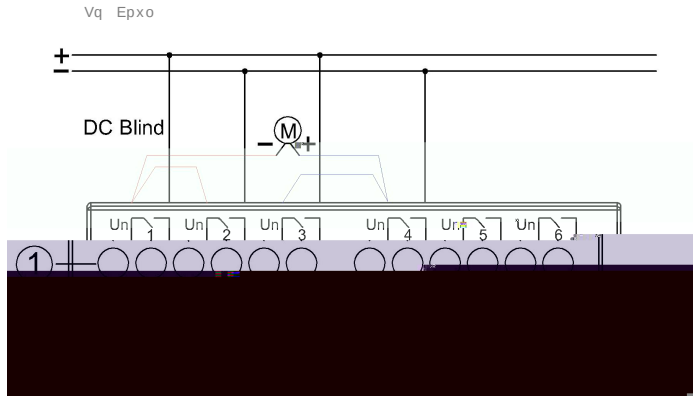
9	2030405	6
	6070809	5 k
35	2030405	607
	6070809	4050:021
	:021022023	809024025
	24025026027	22023028029
	2802902:031	26027032033
	32033034035	2:031 k

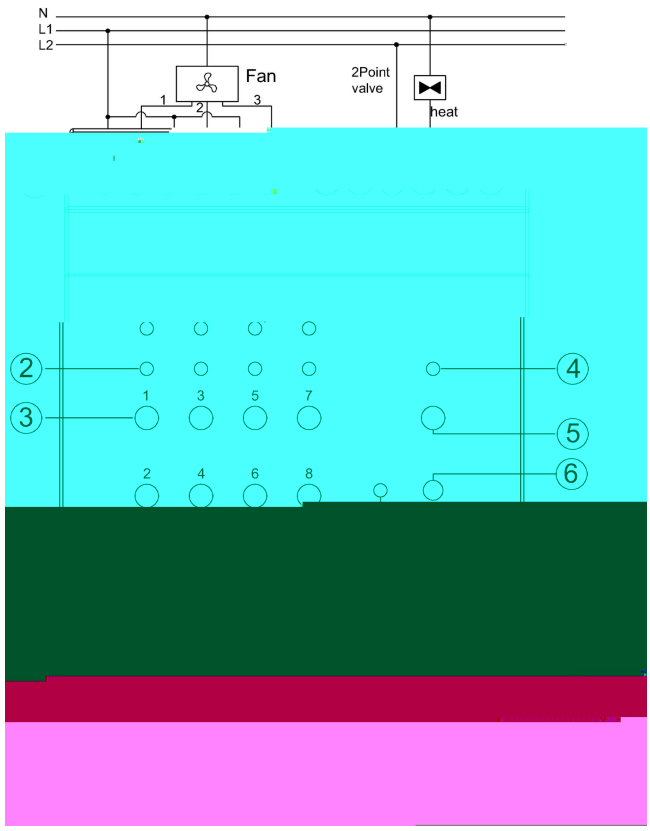
5/ 9 ! 27 35 5 k

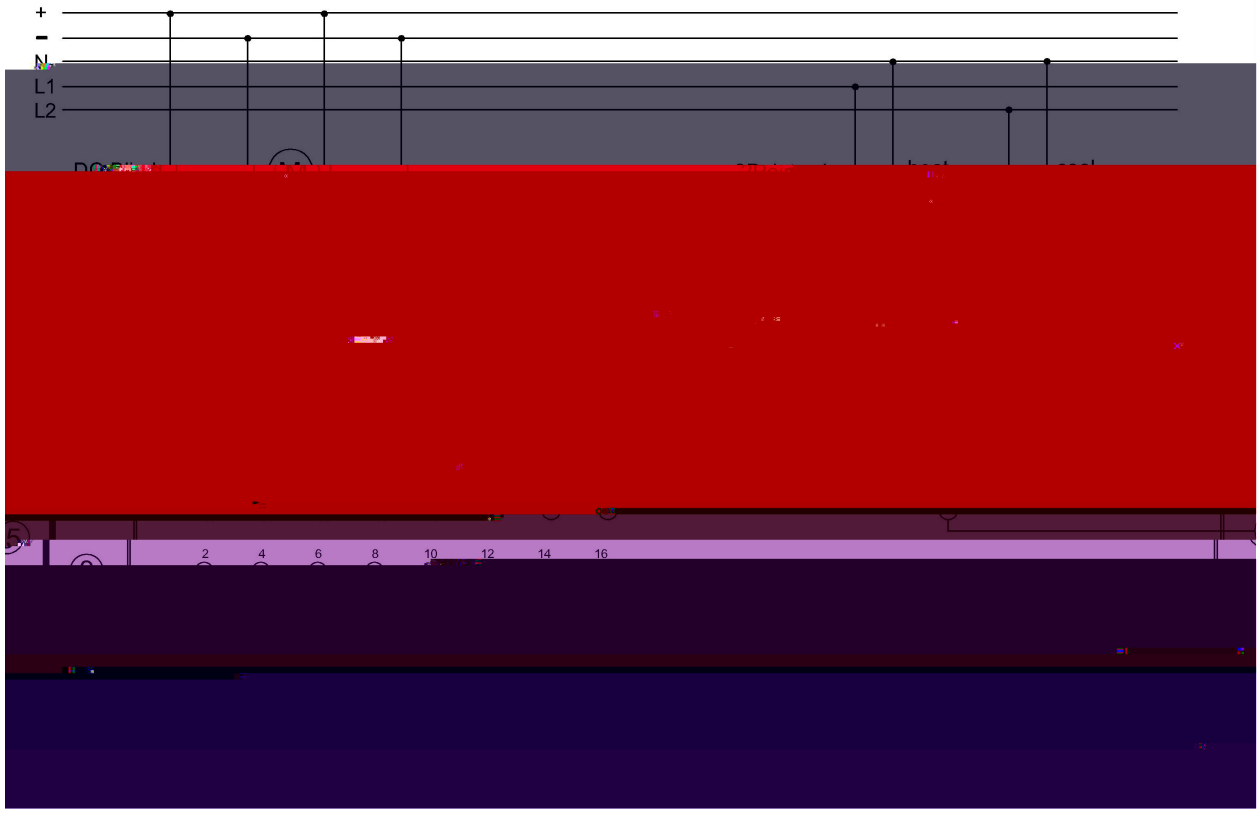
k

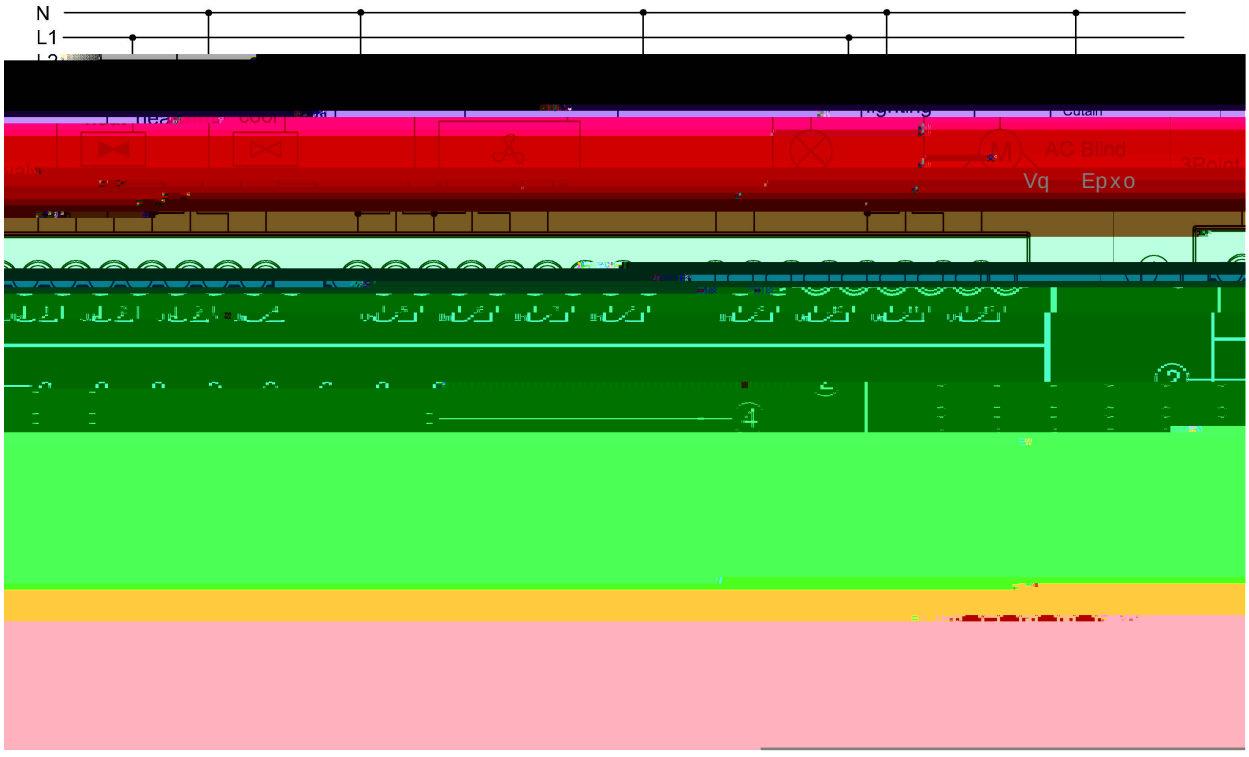
4/3/3 BNNB.19021/2



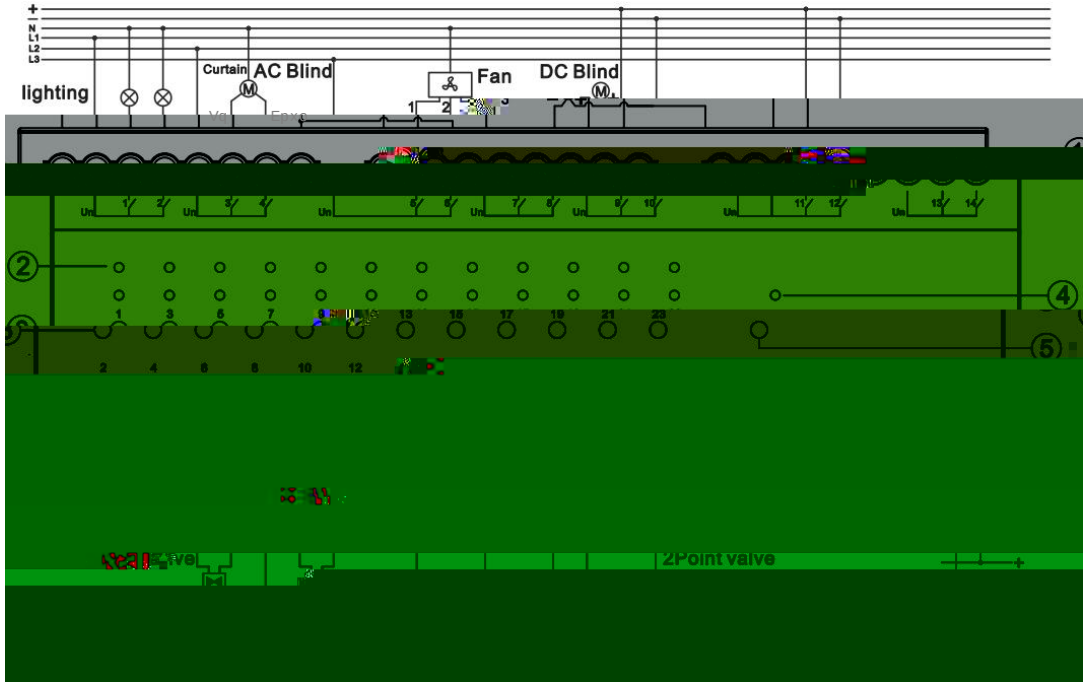





+
-
N
L1
L2
2
4
6
8
10
12
14
16


N
L1
AC Blind
Vq
Epxo

4/3/5 BNNB.35021/2

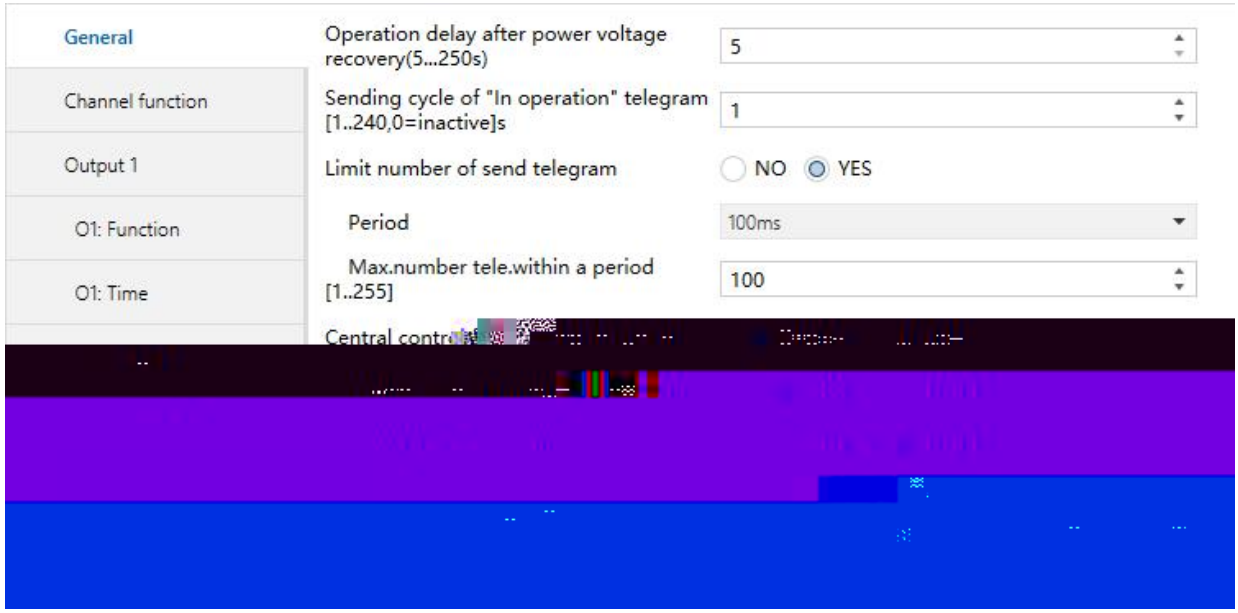


FUT

ETS k

5/2/ ÔHfofsbmÕ

“General” 4.1 k



4.1 General

0…240s 0=

k

k

Mjnjuovncfspgtfoeufmfhsbn

k

Zft

Op

“Yes” “Period” “Max. Number of tele. within a period [1…255]”

Qfsjpe

k

211nt

611nt

21njo

k

k

40

k

Nby/ovncfsufmf/ xjuijo bqfsjpe \2//366^

k *2Ø366*

k

Efmbz ujn f \21///7111^t

k 21//7111

5/3/ ÔDiboofm gvodujpoÕ

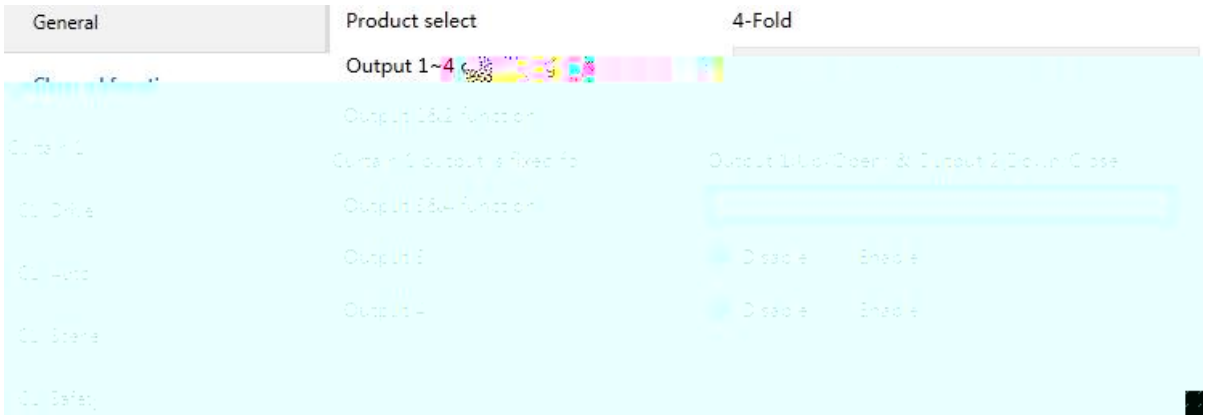
Channel function 4.2 k

4 8 16 24

4 k

k

k



4.2 Channel function

Qspevdu tfmfdu

5.Gpme

9.Gpme

27.Gpme

35.Gpme

k

Ejtbcmf

Txjudi0Dvsubjo BD0Ifbujoh0Dppmjoh03.qjqf 0 0 0 03

Dvsubjo ED

Gbo dpouspm

Wbmwf dpouspm 5.qjqf 5

1~4 k

Pvuqvu 2 5	Txjudi0Dvsubjo BD0Ifbujoh0Dppmjoh03.qjqf			Dvsubjo ED	Gbo dpouspm	Wbmwf dpouspm 5.qjqft
	Txjudi	Dvsubjo BD	Ifbujoh0Dppmjoh0 3.qjqf			
Pvuqvu 2	Pvuqvu 2	Dvsubjo 2	Wbmwf 2 Pvuqvu 2'3- jg 4qpjou- pqfo boe dmptf	Dvsubjo ED 2	Gbo 2; gbo tqffe 2	Wbmwf 2; Ifbu Pvuqvu 2'3- jg 4qpjou- pqfo boe dmptf
Pvuqvu 3	Pvuqvu 3				Gbo 2; gbo tqffe 3	
Pvuqvu 4	Pvuqvu 4	Dvsubjo 3	Wbmwf 3 Pvuqvu 4'5- jg 4qpjou- pqfo boe dmptf		Gbo 2; gbo tqffe 4	Wbmwf 2; Dppm Pvuqvu 4'5- jg 4qpjou- pqfo boe dmptf
Pvuqvu 5	Pvuqvu 5					

HVAC 2

4 k

Gbo dpouspm k

Dvsubjo 2 pvuqvu jt gjyfe gps Pvuqvu 2)V Pqfo* ' Pvuqvu 3)Epxo0Dmptf*

1 tput 1 Output 2 1 2 1

2 k

Fyufsobm ED, joqvu Pvuqvu 2 ' Pvuqvu 4

Fyufsobm ED. joqvu Pvuqvu 3 ' Pvuqvu 5

Pvuqvu Esjwfs Vo

Output 1 Output 3

1 3 Output 2 Output 4 2 4 Un k

Gbo 2 pvuqvu jt gjyfe gps 2mfwfm;2< 3mfwfm;2 ' 3< 4mfwfm;2 ' 3 ' 4

1 Output 1

2 Output 1 Output 2

3 Output

Output 3 Un k

Output 3 Output 4

Output 3 Output 4 Un k

Wbmwf 2 pvuqvu jt gjyfe gps Pvuqvu 2 Pvuqvu 2 ' 3- jg 4 qpjou- pqfo boe dmptf

HVAC

k

Output 1 Output 1

Un k

Output 1 Output 2 Output 1 Output 2 Un.

5/4/ ..Txjudi bduvbups

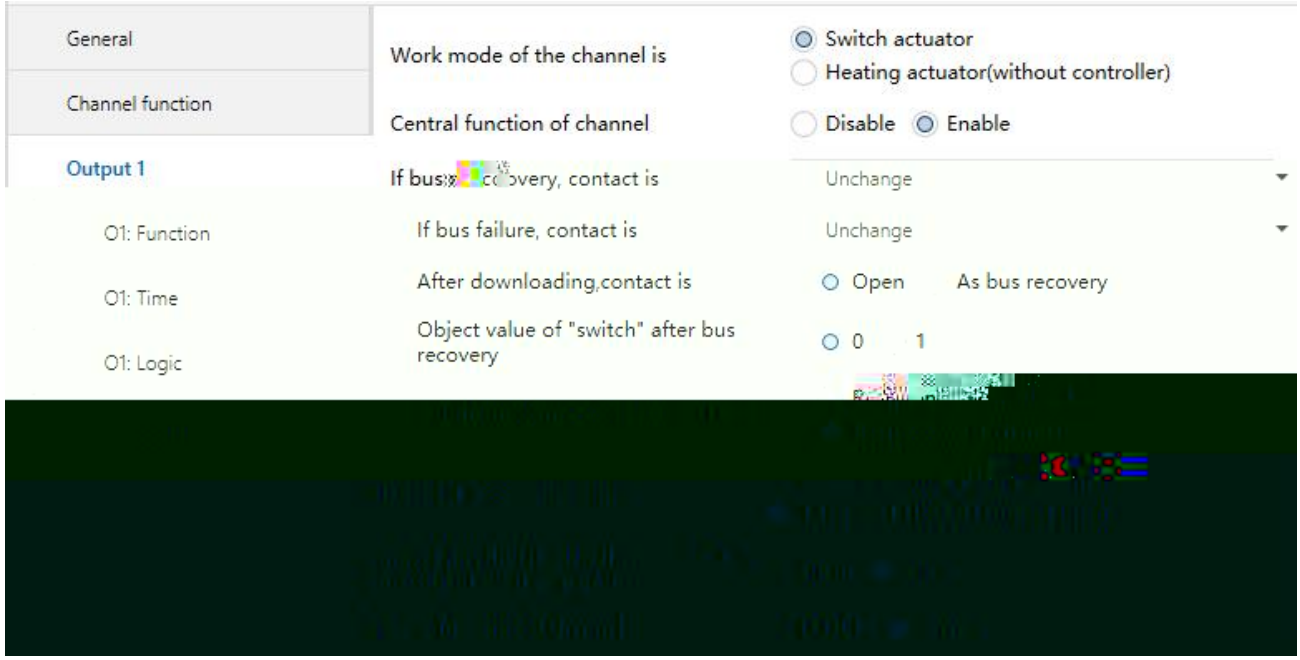
24

k

5/4/2 ÔTxjudi bduvbups; Pvuqvu YÕ

ÔSwitch actuator: Output X” 4.3 k

k



4.3 Output X: Switch actuator

Xpsl npef pg uif diboofm jt

k

Txjudi bduvbups

*I fbujoh bduvbups)xjuipvu dpouspmmfs**

Switch Actuator k "Switch actuator"

k

Heating actuator without controller 4.4

k

Dfousbm gvodujpo pg diboofm

k

Ejtbcmf

Fobcmf

Central control for all switch k

jg cvt sfdpwfsz- dpoubdu jt

k

Vodibohf

Pqfo

Dmptf

Bt cfgpsf bt cvt gbjm

“Unchange”

“Open”

“Close”

“As before as bus fail” k

jg cvt gbjmvsf- dpoubdu jt

k

Vodibohf

Pqfo

Dmptf

“Unchange”

“Open”

“Close” k

Bgufs epxompbejoh- dpoubdu jt

k

Pqfo

Bt cvt sfdpwfsz

“Open” k

“As bus recovery” “If bus recovery, contact is”

k

Pckfdu Wbnvf pg txjudi bgufs cvt sfdpwfsz

“input 0” “Switch”

“0” “1” k :

1

2

Tfu uif sfqrz npef pg txjudi tubuvt

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

“Respond after read only”

“switch status”

“Respond after change” “switch status”

k

Pckfdu wbnvf pg txjudi tubuvt ;

1>dpoubdu dmptf< 2>dpoubdu pqfo

2>dpoubdu dmptf< 1>dpoubdu pqfo

“0=contact close ; 1=contact open” “switch status” “0”

“1”

“1=contact close; 0=contact open” k

txjudi tubuvt

k

Dpoubdu qptjujpo jg uif wbnvf jt 2) 1 jt pqqptjuf pg 2 jg dibohfe*

“switch” k “input

0” “switch” “input 0”

k

Pqfo

Dmptf

“Open” 1 0

“Close” 1 0

k

joqvu 1 t xjudi joqvu 1 k

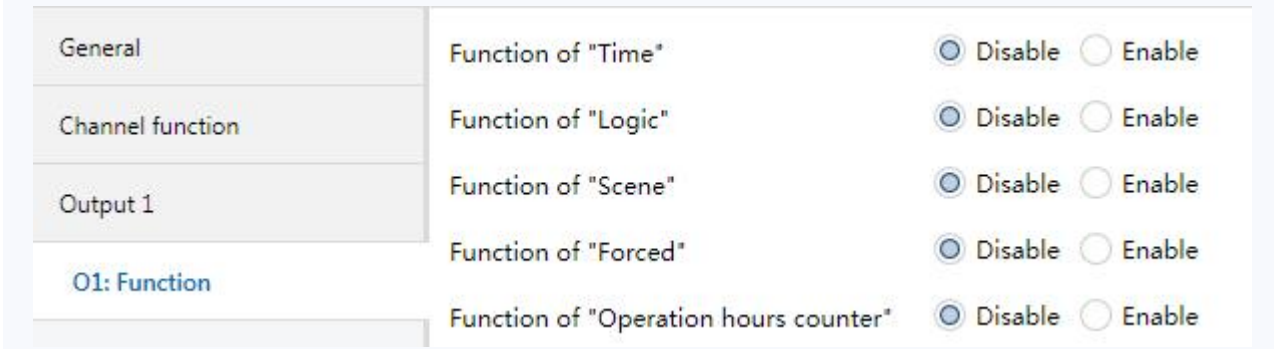
Tqfdjbm gvodujpo pg diboofm

“*Enable*” “Ox:Function”

, 4.4 k

Ejtbcmf

Fobcmf

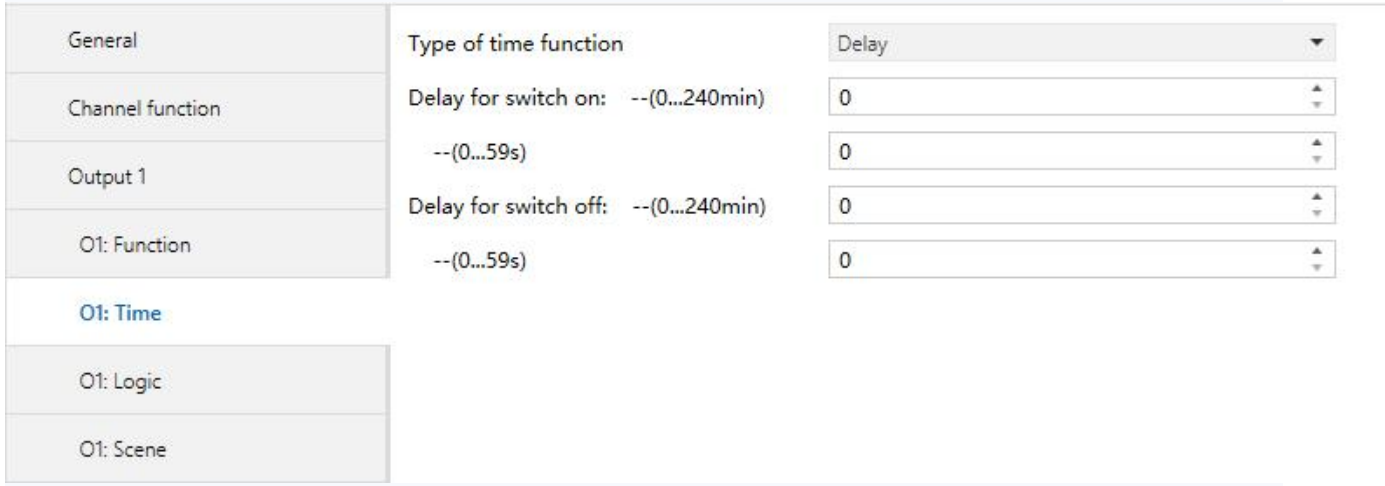


4.4 Ox Function

5/4/3 ÔPy; Ujn fÕ

4.4“Ox: Function” “Function of “time”” “Enable” 4.5 “Enable time function”

k k



4.5 Ox:Time-Delay

Uzqf pg ujn f gvodujpo

k

Efmbz

Gmbt ijoh

Tubjsdbt f

5/4/3/2 ÔEfmbzÕ

"Delay" 4.5 k "Delay function"

k

Efmbz gps txjuditpo;)1///351 njo*0)1///6: t*

k

1 351

1 6:

k

Efmbz gps txjuditpgg;)1///351 njo*0)1///6: t*

k

1 351

1 6:

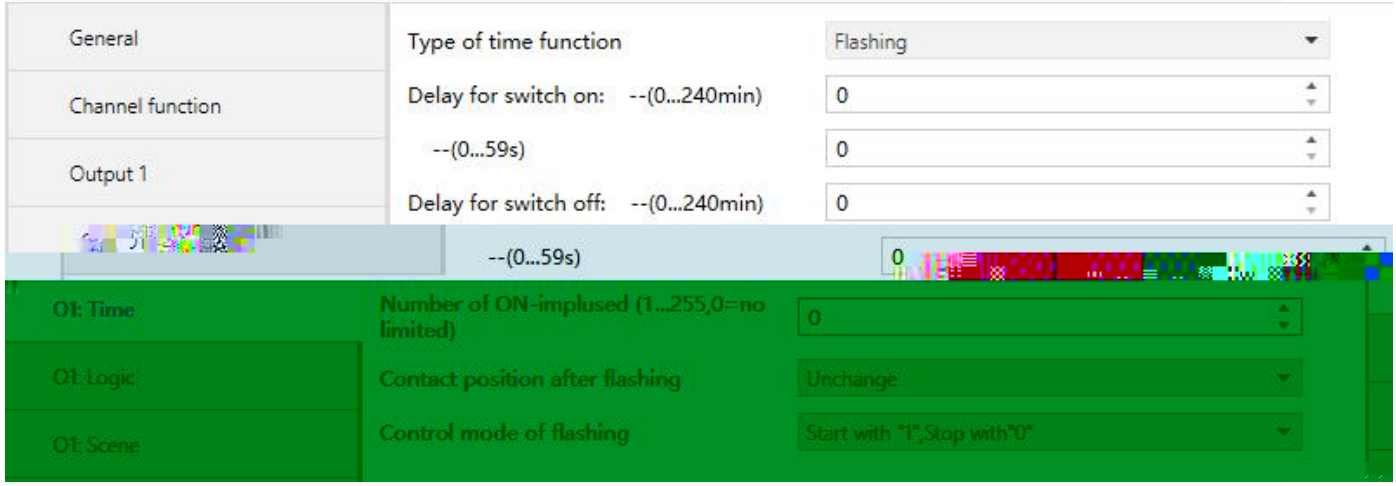
k

k

5/4/3/3 ÔGmbt i joh Õ

“Type of time function” “Flashing” 4.6 k

k



4.6 Ox:Time-Flashing

Flashing “Flashing function” “Delay for switch on” “Delay for switch off” k

k

Efbz gps txjudi po;)1///351 njo* -)1///6 : t*

k

1///351 njovuft

1///6 : tfdpoet

k

k k

Efbz gps txjudi pgg;)1///351Njo* -)1///6 : t*

k

1///351 njovuft

1///6 : tfdpoet

k

k k

Ov n c fs pg PO.j n qv m t fe)2///366 1>op mj n ju fe*

1…255 0 k / k

1///366

Dpoubdu qpt jujpo bgu fs gmbt i joh

k

Vod i bohf

Pqfo

Dmpt f

Dpouspm n pef pg gmbt i joh

k

Tubsu xjui 2 - Tupq xjui 1

Tubsu xjui 1 - Tupq xjui 2

Tubsu xjui 102 - dbo opu c f tupq

"Start with '1' Stop with '0'" "1" "0"

k

"Start with '0' Stop with '1'" "0" "1"

k

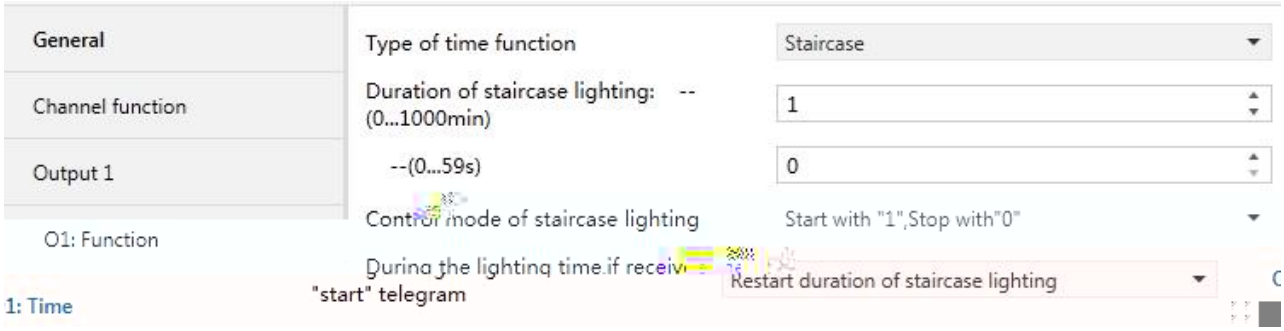
"Start with '0/1' can not be stop" "0" "1" k

k

5/4/3/4 ÔTubjsdbtfÕ

“Type of time function” “Staircase” 4.7

k



4.7 Ox:Time-Staircase

“Staircase function”

k

Evsbujpo pg tubjsdbtf mjhiujoh..)1///2111 njo* ..)1///6: t*

k

1、 2111

1、 6:

Dpouspm npef pg tubjsdbtf mjhiujoh

, k

Tubsu xjui 2 Tupq xjui 1

Tubsu xjui 2 op sfbdujpo xjui 1

Tubsu xjui 102 - dbo opu cf tupq

Tubsu xjui 2 - PGG xjui 1

“Start with ‘1’ , Stop with ‘0’” “1” “0”

“Start with ‘1’, no reaction with ‘0’” “1” “0”

“Start with ‘0/1’, can not be stop” “0” “1”

“Start with ‘1’, OFF with ‘0’”, “1” “0” k

Evsjohuif mjhiujohujnf-jgsfdfjwfuif tubsu ufmfhsbn

Sftubsu evsbujpo pg tubjsdbtf mjhiujoh

Fyufoe evsbujpo ujnf

Jhopsf uif tubsu ufmfhsbn

“Restart duration of staircase lighting” “Staircase function” k

“Extend duration time”, “Staircase function”

k

60 20 40+60=100

100 k

k

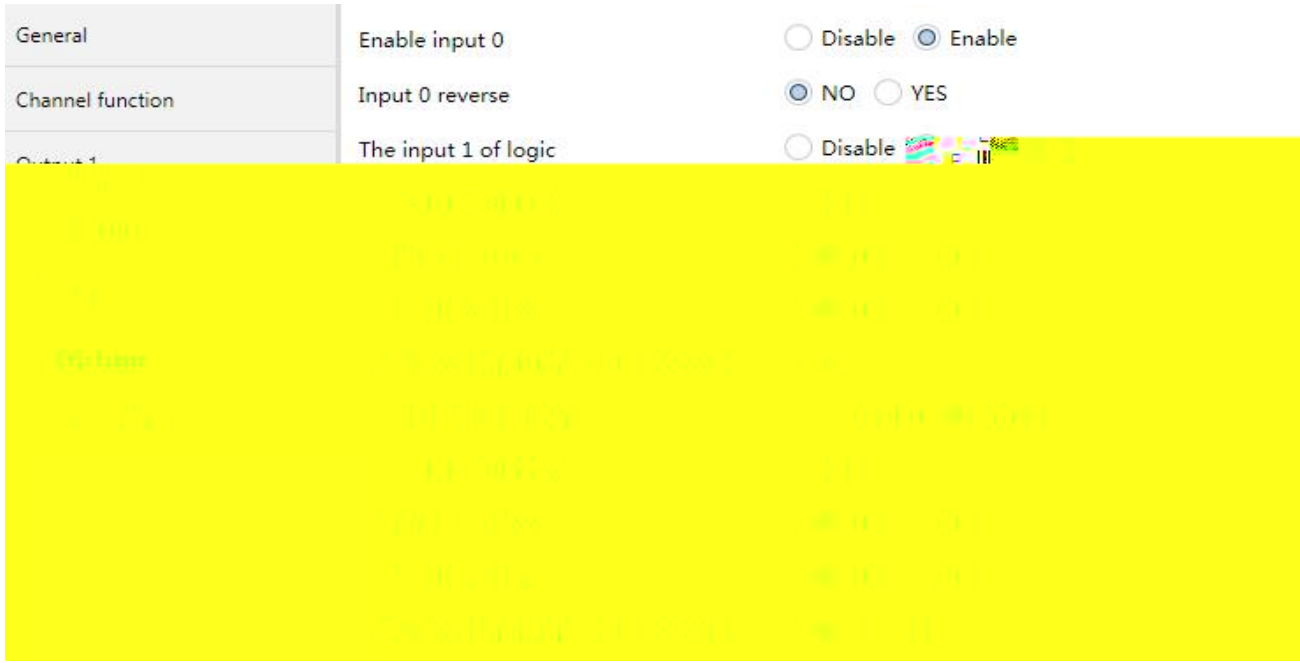
“Ignore the ‘start’ telegram” , “Staircase function”

k

5/4/4 ÔPy; Mphjdõ

4.4 “Ox: Function” “Function of “logic” ” “Enable”

4.8 k



4.8 Ox Logic

2

“Switch” k

“1” “0” k “Logic 1”

“Switch” “Logic 2” k

k

Fobc□f joqvu 1

“input 0” k “input 0” “Switch” k

Ejtbc□f

Fobc□f

“Input 0”

	Input0(Switch)	Input1	Result of Input 0/1	Input2	Output	
AND	0 0 1 1	0 1 0 1	0 0 0 1	0 1 0 1	0 0 0 1	1 1 k
OR	0 0 1 1	0 1 0 1	0 1 1 1	0 1 0 1	0 1 1 1	1 1 k
XOR	0 0 1 1	0 1 0 1	0 1 1 0	0 1 0 1	0 0 1 1	1.
GATE	0 0 1 1	Closed Open Closed Open	0 1	Closed Open Closed Open	0 1	open 1 k

1 ! “Input 1” “Switch” “Input 2”
k

2 ! k

3 ! k

4 ! (GATE) k Input1 Input0
Input2 k

Sftvnusfwfstf

“yes” “no” k

Op

Zft

Pwfsxsjuf tdfof tupsfe wbmvft evsjoh epxompbe

k

Ejtbcmf

Fobcmf

Disable k

k

Enable k

k

dibooft jt bttjhofe up)2///75 .1> op bttjhonfou*

64 k 8 k

Tdfof 2/// Tdfof 75 1>op bttjhonfou

2 75 1 74 k

k

ÔTuboebse pvuqvu wbmvf jtÕ

k

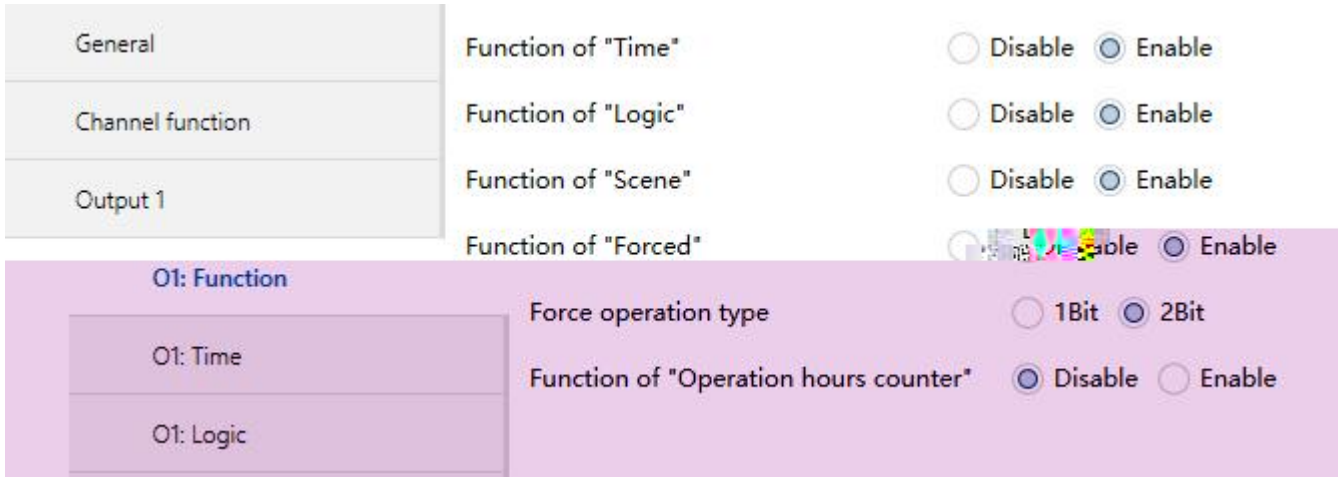
Pqfo

Dmptf

5/4/6 ÔPy; Gpsdfeõ

4.4 “Ox: Function” “Function of “Forced” ” “Enable”

4.10 k



4.10 Ox Forced

“Forced output”

k

Gpsdf pqfsbujpo uzqf

k

2cjv

3cjv

“*1bit*”, “Forced output” “1” “0” k

“*2bit*”, “Forced output”

ÔGpsdfe pvuqvu YÕ	
00b 0 01b 1	
10b 2	OFF
11b 3	ON

k

Delay/Flashing/Staircase force force

k

Dpoubdu qpujpo jg qsdfe pqfsbujpo

“1bit” k

Vodibohf

Pqfo

Dmptf

Unchange

Open

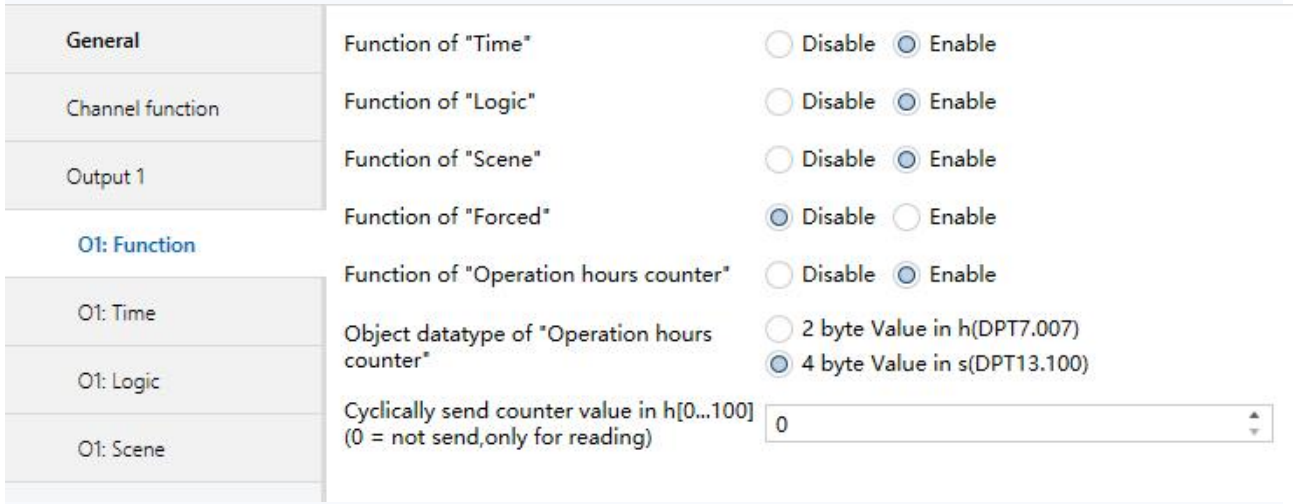
Close k

k ,

k

5/4/7 ÔPy; Pqfsbujpo ipvst dpvoufsÕ

4.4 “Ox: Function” “Function of “Operation hours counter” ” “Enable” 4.11 k k



4.11 Ox Operation hours counter

ÔPckfdu ebubuzqf pg.Ô Pqfsbujpo ipvst dpvoufsÕ

k

*3 czuf Wbmvf jo i)EQU 8/118**

*5 czuf Wbmvf jo t)EQU 24/211**

2 byte Value in h (DPT 7.007) 2 byte 4 byte Value in s (DPT 13.100)

4 byte k

Dzdqjdbmz tfoe dpvoufs wbmvf jo i\1//211^)1>opu tfoe. poz gps sfbejoh*

k 1.211

0 1-100 1 100 k

Object of switch and operation hours counter 2byte

4byte s k

)Txjudi bduvbups*

2 ! gpsdf pqfsbujpo

3 !

4 ! k

5/5/ . . I fbujoh bduvbups) xju i pvu dpouspmmfs*

Work mode of the channel is Heating actuator (without controller)

4.12 k k

k

˚ 1bit 1byte k 1bit

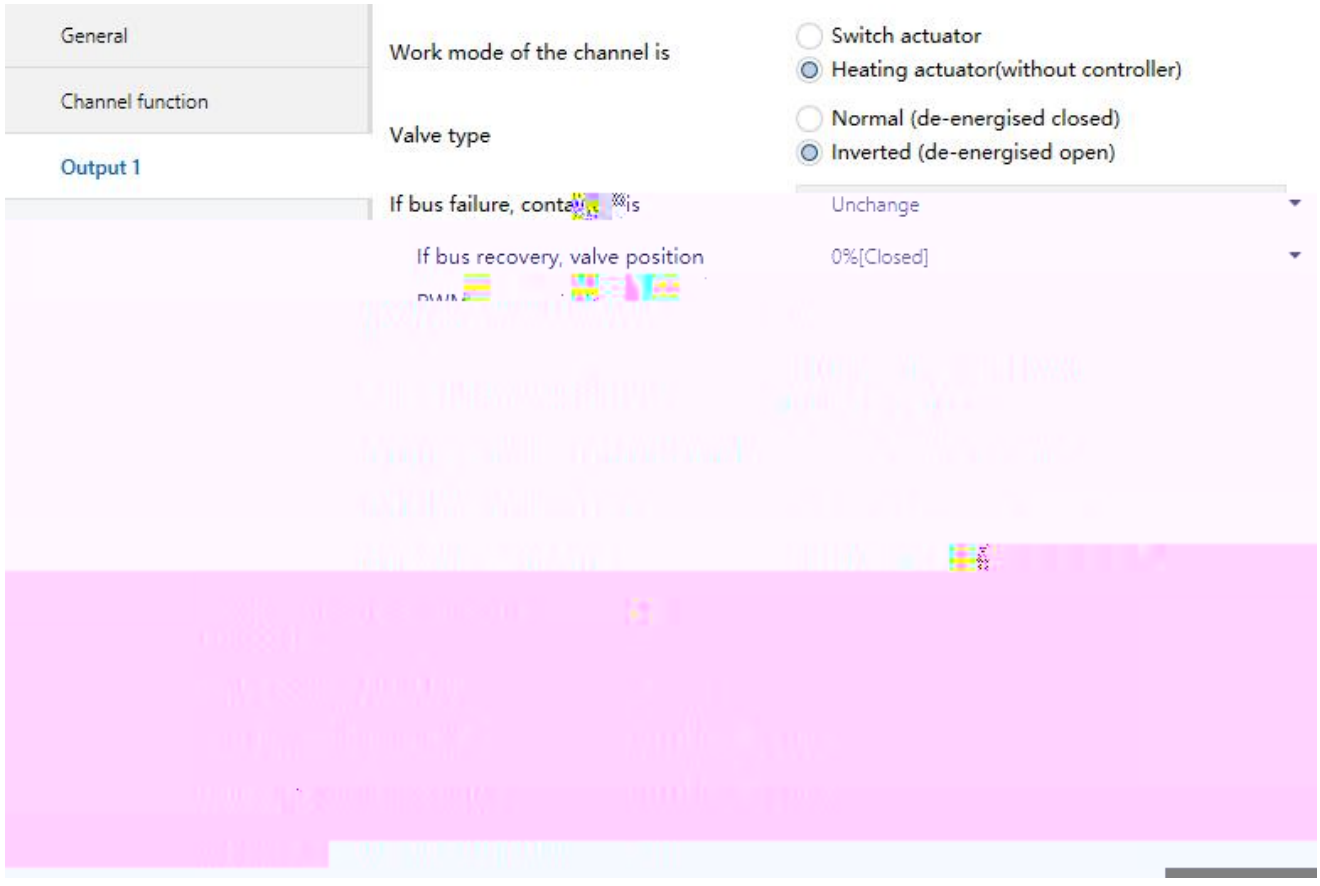
On-off control value 1byte Control value

(Continuous) k

0%/OFF 100%/ON k 0~100%

x% k

4.12 Output X: Heating actuator(without controller)_1bit on-off control or PWM



4.13 Output X: Heating actuator(without controller)_1byte(Continuous)

Wbmwf uzqf

k

Opsnbm)ef.fofshjtfe dmptfe

Jowfsufe)ef.fofshjtfe pqfo

Normal(de-energised closed) Inverted(de-energised open)

k

Jg cvt gbjmvsf-dpoubdujt

k

Vodibohf

Pqfo

Dmptf

“Unchange”

“Open”

“Close” k

k

Jg cvt sfdpwfsz-wbmwf qptjujpo

k

*1&lDmptfe^*

*21&l37^*

*31&l62^*

///

*:1&l341^*

*211&lPqfo^*

20% PWM 100s 1 40s 20s, 80s k

QXN dzdnf ujn f gps dpoujovpvt\71//76646't

(PWM) k 71//76646

k

2cju)QXN* !

k

Dpouspmf fhsbn jt sfdfjwfe bt

k

*2cju)po.pgg dpouspmps QXN**

*2czuf)Dpoujovpvt**

“1bit” k

PWM k

PWM k

“1byte” 0 ~255 0% .. 100% k “

Continuous-action control ” k 0 100% 0%...100%

k

k

.. Sfqmz uif tubuvt gps dpoujovpvt dpouspm

1byte Continuous k

1bit 1Byte k

Op sfqmz

*Zft-1&>1 puifsxjtf Ô2Õ)2 cju**

*Zft-1&>2 puifsxjtf Ô1Õ)2 cju**

*Zft- dpoujovpvt dpouspmwbmvf)2 czuf**

Sfqmz uif tubuvt gps dpoubdu

k

Op sfqmz

Zft-1>dpoubdu dmptf< 2>dpoubdu pqfo

Zft-2>dpoubdu dmptf< 1>dpoubdu pqfo

“No reply”

“0=contact close ; 1=contact open” “status of contact” “0”

“1”

“1=contact close; 0=contact open” k

tubuvt pg dpoubdu

k

Gvodujpo gps npojupsjoh jt

k

Ejtbcmf

Fobcmf

Function for monitoring is Enable k

.. Dzdmjd npojupsjoh pguifsnptubu\1//76646^t

k

k k

k k k 1//76646

k

k

.. Wbmwf qptjujpo evsjoh gbvmu

PWM k

*1&lDmptfe^*

*21&l37^*

///

*211&lPqfo^*

Vodibohf

20% PWM 100s 1 40s 20s, 80s

Unchange k

.. Tfoe pckfdu Sfqpsu gbvmuÕjt

k

k

k

Ejtbcmf

Fobcmf

Enable Report fault Report fault 1

0 k

Gvodujpo pg gpsdfe pqfsbujpo jt

k

Ejtbcmf

Fobcmf

.. Wbmwf qptjujpo evsjoh gpsdfe pqfsbujpo

PWM k

*1&lDmptfe^*

*21&l37^*

///

*211&lPqfo^*

Vodibohf

Unchange k

k 40%

60% 60% k

monitor

k k

I fbujoh bduvbups

2 ! !

k

k k

3 ! k

k

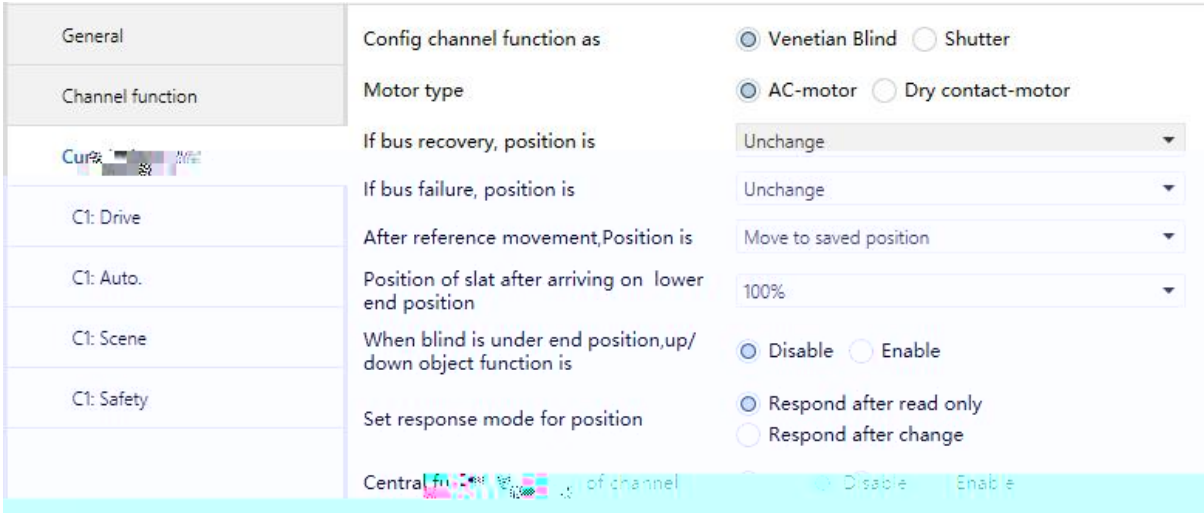
5/6/)BD*

AC 12

k

5/6/2 ÔDvsubjo Y; Wfofujbo CmjoeÕ

“Curtain X” 4.14 k



4.14 Curtain X

k

Wfofujbo Cmjoe

Tivuufs

“Venetian Blind” k

“Shutter” “Venetian Blind” k

AC-motor k

Dry contact-motor k

Esjwf qvmtf ujnf\2//61^+211nt

Dry contact-motor k

2//61

k

Ûg cvt sfdpwfsz- qptjujpo jtÛ

k

Vodibohf

Vq

Epxo

Tupq

“Unchange”

“Up”

“Down”

“Stop” k

k

61& k

k

k

Ûg cvt gbjmvsf qptjujpo jtÛ

k

Vodibohf

Vq

Epxo

Tupq

“Unchange”

“Up”

“Down”

“Stop” k

k

tupq tupq k

Ý p ^ ò ɔ

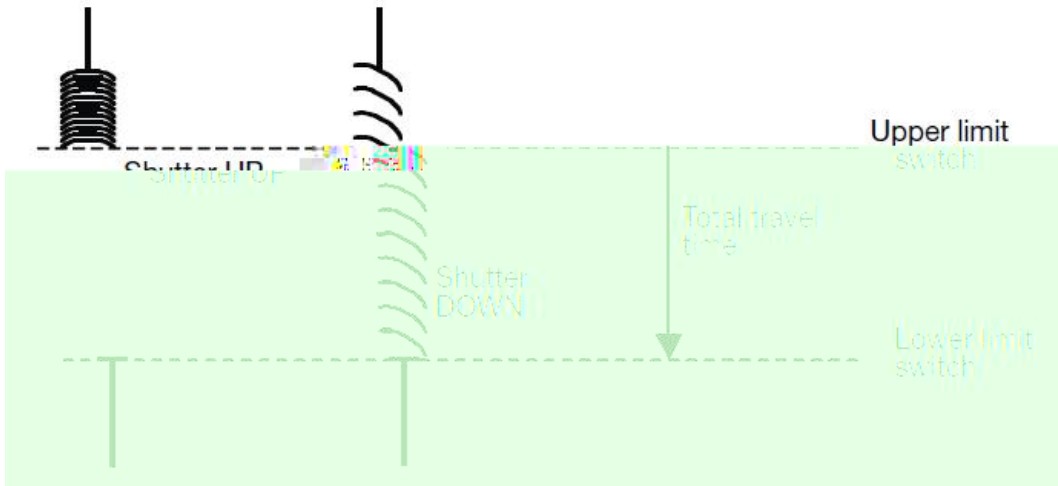
5/6/2/2 ÔDy; EsjwfÕ

“Cx: Drive” 4.15

k

k

k



!

k

ÔEfmbz ujn f gspn t xjudi .po up n pwjoh \1//311^+21 n tÔ

/

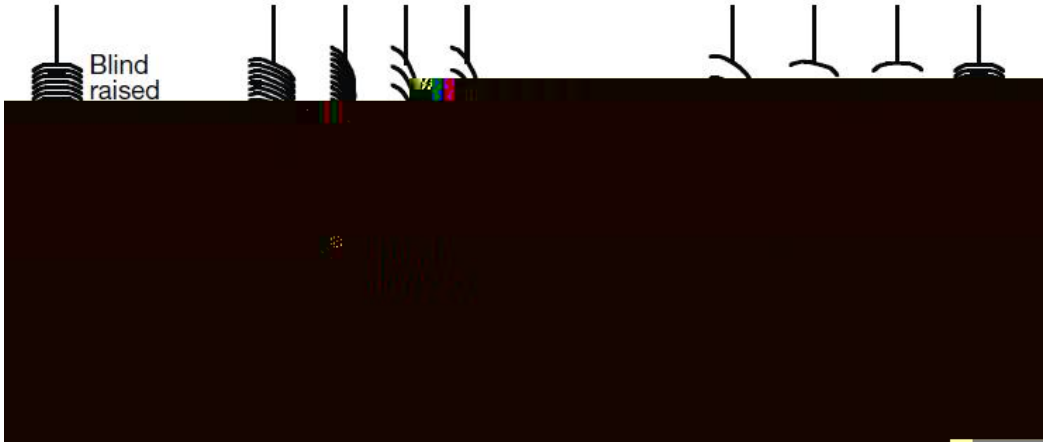
k 1//311

k

ÔEvsbujpo pg tmbu bekvtun fout \21Ø361^+21 n tÔ

k

k k



ÔUpubm usbwfm ujn f pg Tmbu 1Ø211& jo \21Ø361^+21 n tÔ

k “

” ! “ ” k

“Slat adj./Stop”

/ k

k

ÔQbvt f po d i bohf jo ejsfdujpo \6Ø366^+31 n tÔ

k

k

k

ÔBeejujpobm usbwfm ujn f jo vqxbse ejsfdujpo \1//366^+1/2tÔ

k

k 0%

k

1& k

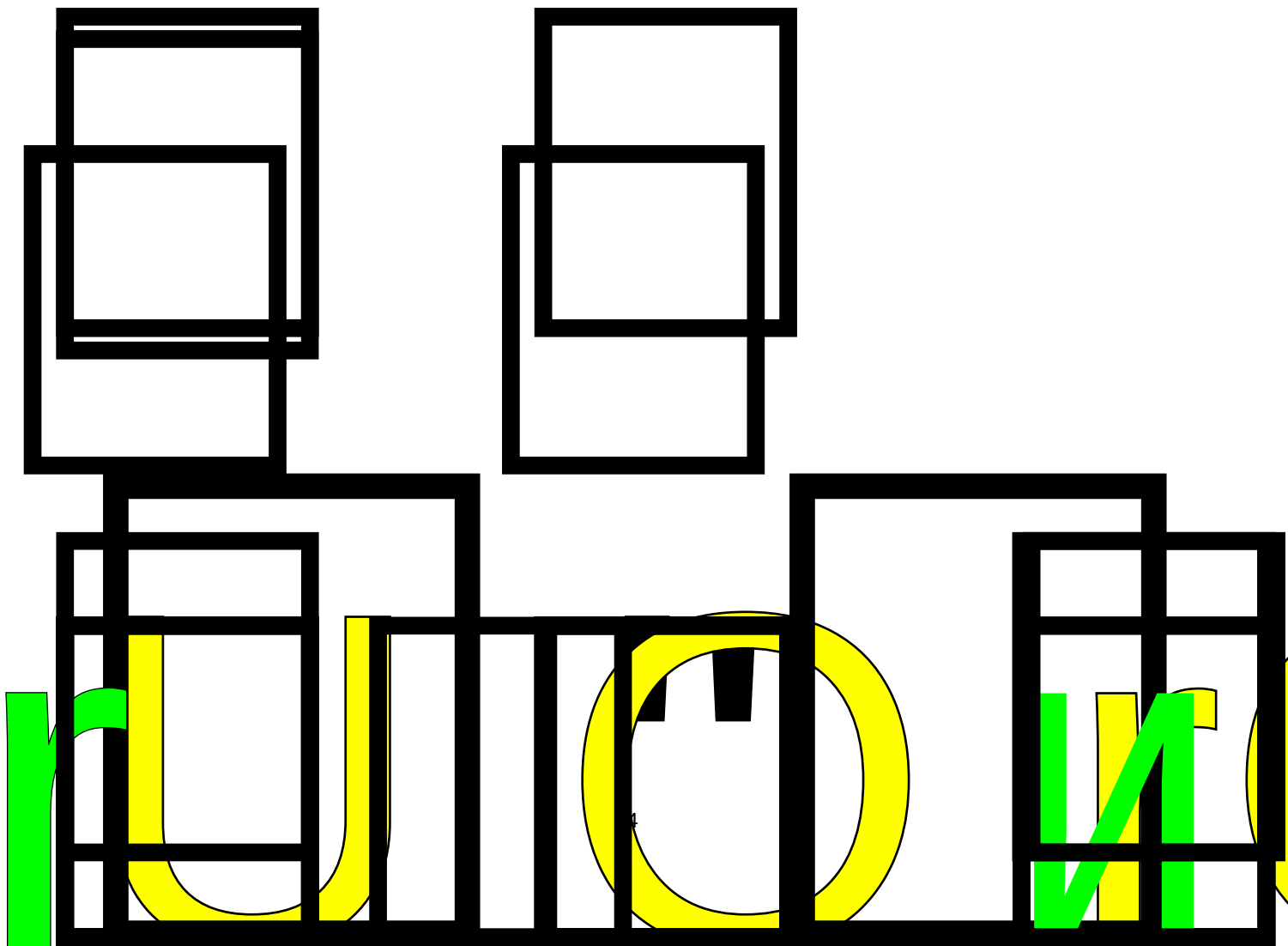
5/6/2/3 ôDy; Bvup/õ

“Cx: Auto.” 4.16

k

k

/ □□□□□□□□



Fobcmf bvup/ dpouspm 2

Fobcmf bvup/ Dpouspm bgufs\21、 7111 njo^

k

Pckfdu wbmvf pg Fobcmf bvup/ dpouspm bgufs cvt wpmubhf sfdpwfsz

“Enable auto. control” k

*1)Ejtbcmf bvup/ dpouspm**

*2)Fobcmf bvup/ dpouspm**

“0” “Enable auto. control” 0

“1” “Enable auto. control” 1 k

Bvup n bujdbmmz fobcmf gps bvup/ dpouspm

“Enable auto. control” k

Op

Zft

“yes” k

.. Fobcmf bvup/ dpouspm bgufs \21、 7111 njo^

k

“ Enable auto. control”

k

!

! k

0Tvo qspufdujpo:0

.. Qptjujpo jg tvo> 2)tvo jt tijojoh*

“Sun operation” “1”

k

Op sfbdujpo

Vq

Epxo

Tupq

Sfdfjwf 2 czuf wbmvf

“No reaction” “Sun operation” “1”

k

“Receive 1 byte value” “Sun operation” “1” “Sun: blind/shutter position 0..100%” “Sun: slat adj. 0..100%”

“130”(51%)

k

.. Efmbz ujn f po tvo> 2 \1///76646t^

“Sun operation” “1”

k *1Ø76646 t*

.. Qptjujpo jg tvo> 1)tvo opu t ijojoh*

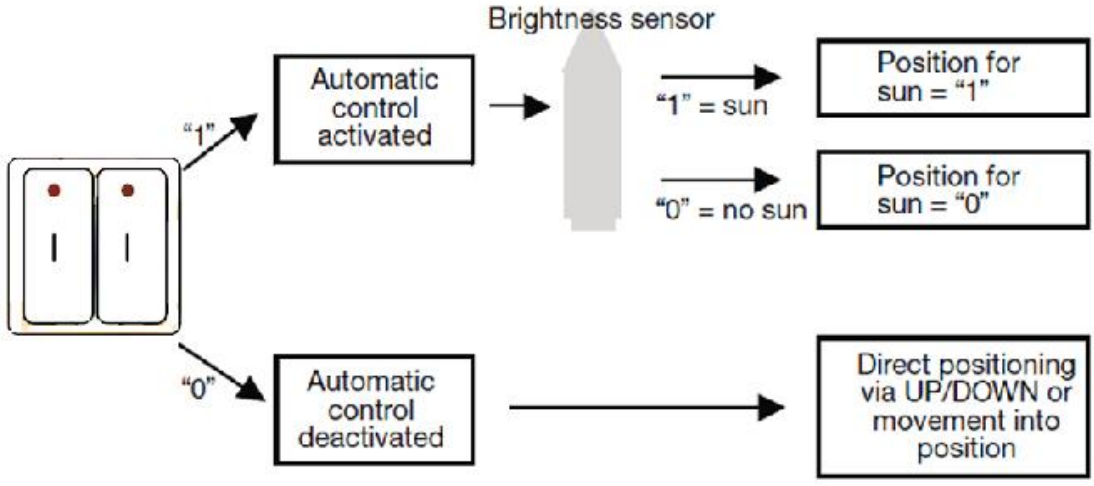
“Sun operation” “0”

k

.. Efmbz ujn f po tvo> 1 \1///76646t^

“Sun operation” “0”

k *1Ø76646 t*



k

/ k

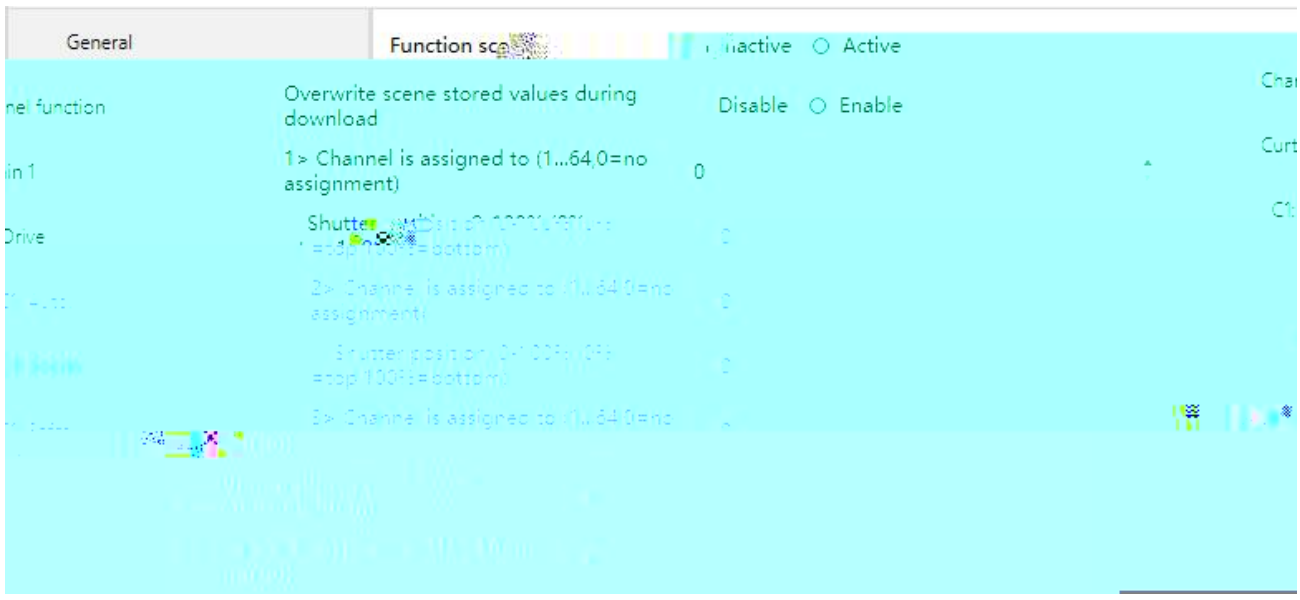
k

k

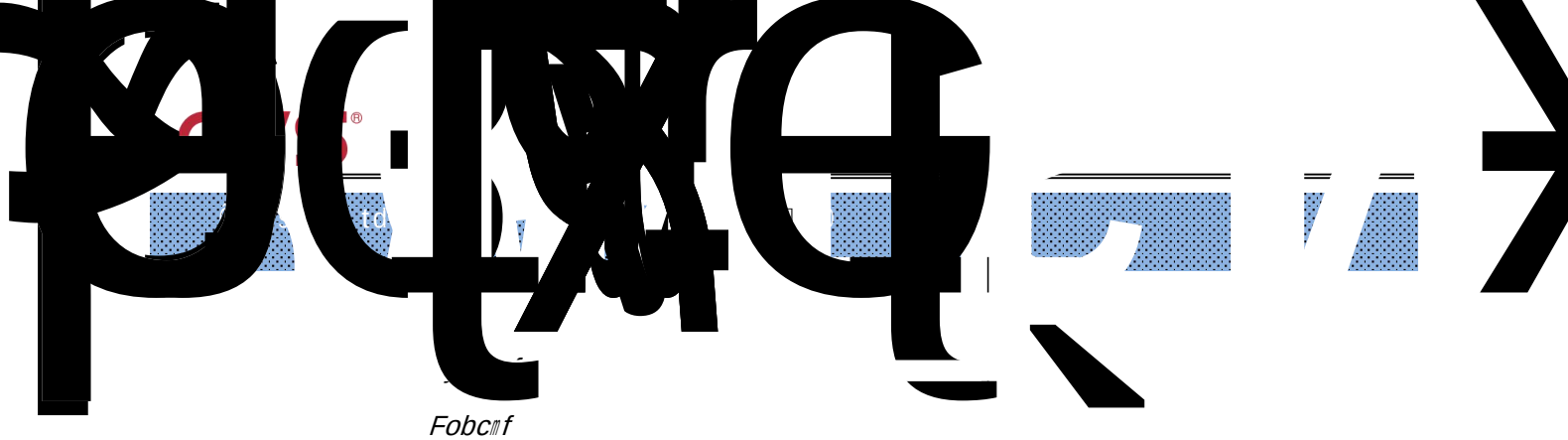
5/6/2/4 ôDy; Tdfofõ

“Cx: Scene” 4.17 k 8 ,

k



4.17 Cx Scene



Fobcmf

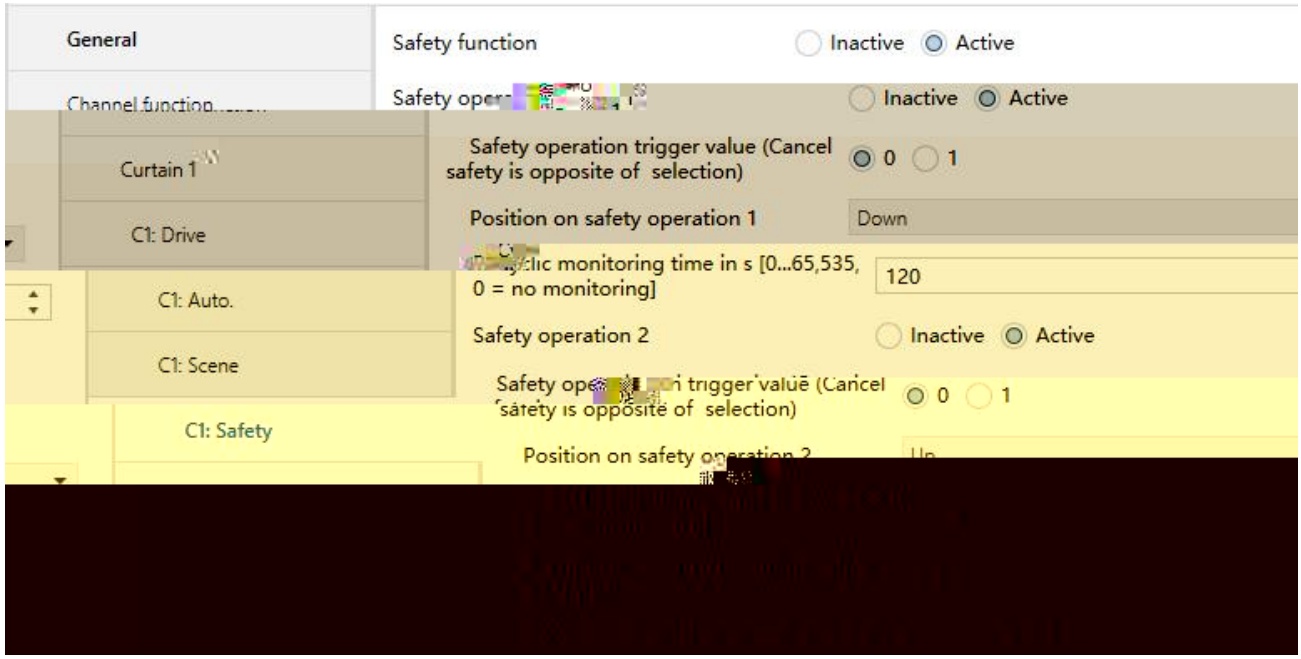
Disable k

k

Enable k □ □

5/6/2/5 ÔDy; TbgfuzÕ

“Cx: Safety” 4.18 k



4.18 Cx Safety

k

k

ÔTbgfuz pqfsbujpo 203Õ

k

Jobdujwf

Bdujwf

“*Inactive*”

“*Active*”,

“Safety operation 1/2” k

ÔTbgfuz pqfsbujpo usjhhfs wbmvf)Dbodfm tbgfuz jt pqqptjuf pg tfmfdujpoÕ

k

1

2

“*0* ” “Safety operation 1/2” “0”

1

“1 ” ty opera n 2” “1”

0 k

ÔQptjujpo po tbgfuz pqfsbujpo 203

□ □ □ □ □ □ □ □ □ □ □

k

Vodifboh f

Vq

Epxo

Tupq

ÔDzdmjd n pojupsjoh ujn f jo t\1//76646- 1>op n pojupsjoh^ Ô

/ k

“0” k

“Safety operation1/2” /

/ k

ÔQptjujpo xjui dbodfmjoh pg ui f rg

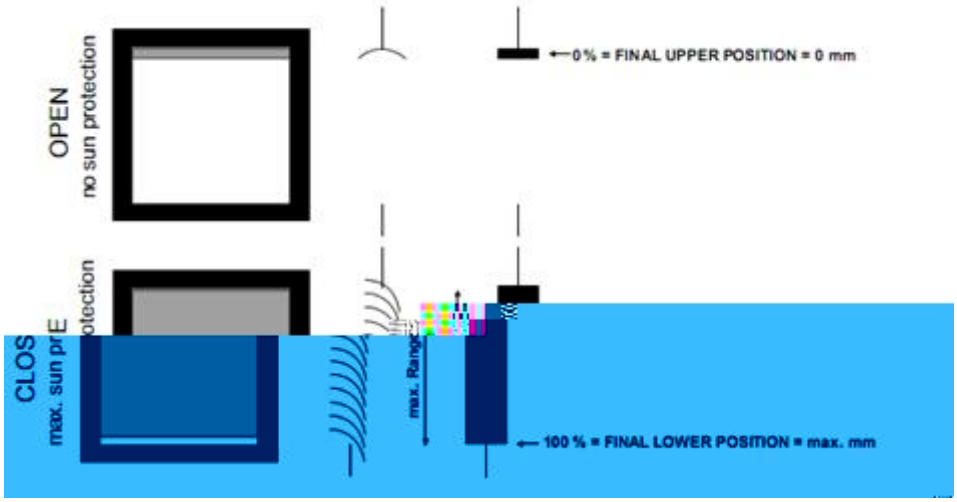
5/6/3 ÔDvsubjo Y; T i vuu f sÕ

“Shutter” “Venetian Blind”

k “Shutter” k “Shutter”

k

“Shutter” “Venetian Blind”



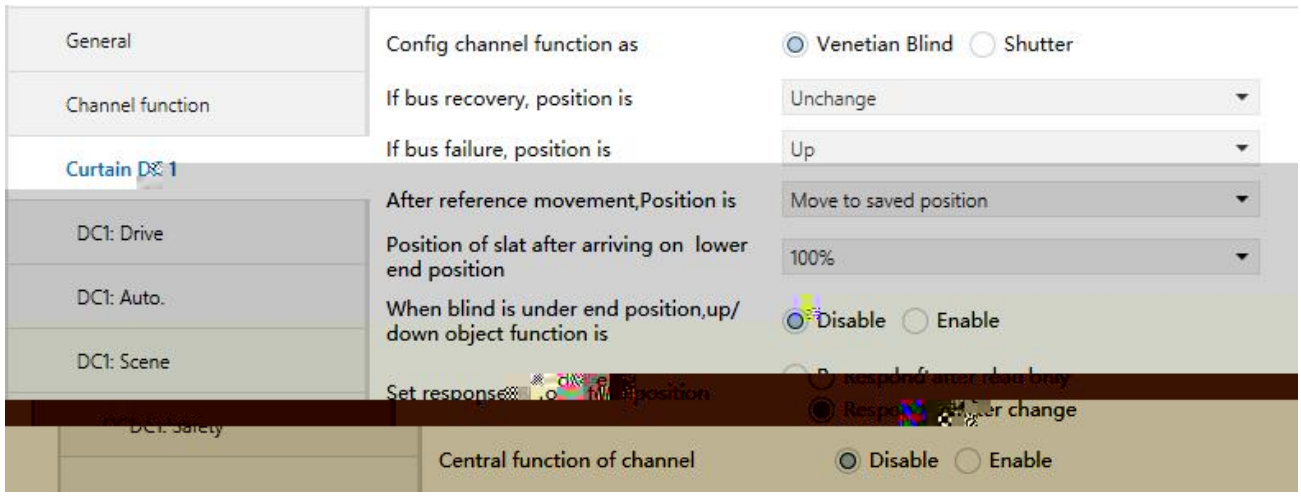
Venetian Blind Shutter

“Shutter” “Venetian Blind” ( ) k

5/7/)ED*

DC 6 AC

Motor type k 4.19 k



4.19 Curtain DC X

DC AC k

tbgfuz 3 tbgfuz 2

2 !

3 ! !

4 !

4 ! ! !

k

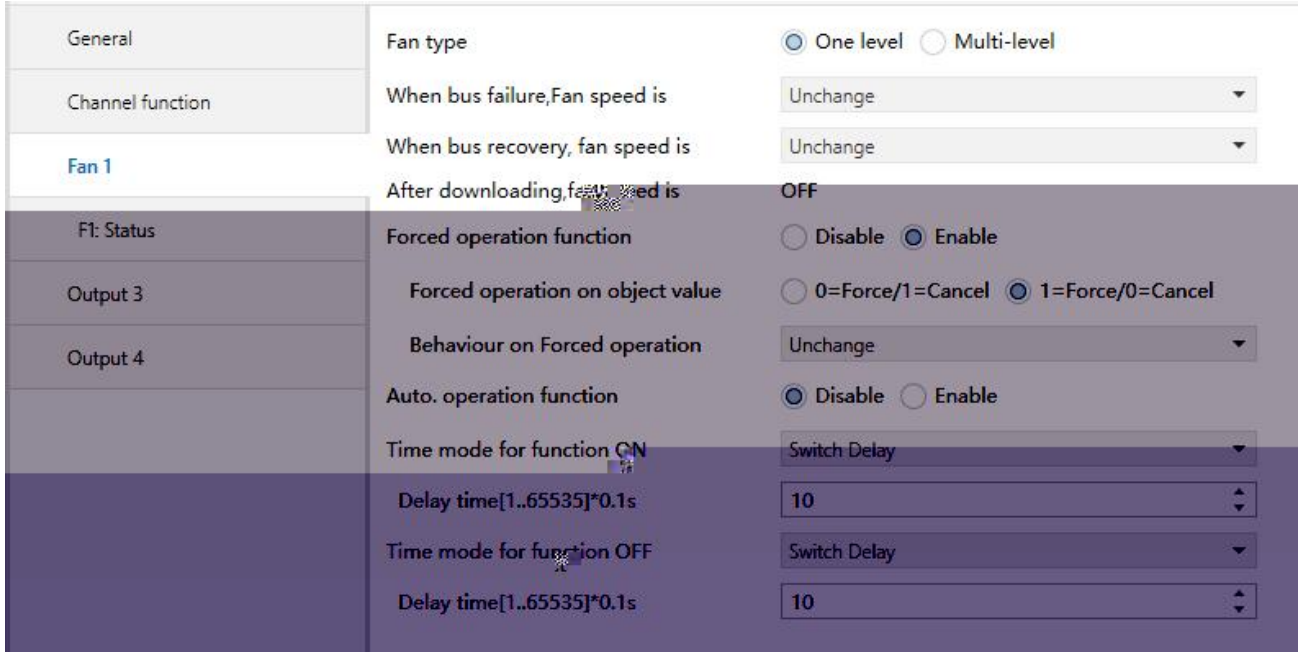
5/8/

6

k

5/8/2 ÔGbo uzqf .. Pof mfwfmÕ

Fan type -- One level 4.20 1 k



4.20 Fan type -- One level

Gbo uzqf

k

Pof mfwfm

Nvmuj.mfwfm

One level 1

Multi-level 3 2 3 k

Xifo cvt gbjmvsf-Gbo tqffe jt

k

Vodibohf

PGG

PO

Xifo cvt sfdpwfsz-Gbo tqffe jt

k

Vodibohf

PGG

PO

Bt cfgpsf bt cvt gbjm

Unchange:

OFF

ON

As before as bus fail k

k

Bgufs epxo pbejoh gbo tqffe jt

k

ÔGpsdfe pqfsbujpo gvodujpoÕ

k

Ejtbcmf

Fobcmf

“Enable”,1bit “Forced operation”

k

ÐÐ Gpsdfe pqfsbujpo po pckfdu wbmvf

k

1>Gpsdf02>Dbodfm

2>Gpsdf01>Dbodfm

0=Force/1=Cancel “Forced operation” “0” “1”

1=Force/0=Cancel “Forced operation” “1” “0”

k

ÐÐ ÔCfibwjpvs po Gpsdfe pqfsbujpo Õ

k

Vodibohf

PGG

PO

Unchange

OFF

ON k

k

ÔBvup/ pqfsbujpo gvodujpo Õ

k

Ejtbcmf

Fobcmf

Enable 4.21 k !

k

ÔUjnf npef gps gvodujpo POÕ

k

Opof

Txjudi efmbz

Njojnvn ujnf

None

Switch delay ON “Delay time [1..65535]*0.1s” k “Fan speed” “1”

PO k

Minimum time

“Minimum time[1..65535]s” k

k

ÐÐ ÔEfmbz ujn f \2//76646^+1/2tÕ

k 2Ø76646

ÐÐ ÔNojnvn ujn f \2//76646^tÕ

k 2Ø76646

ÔUjn f npef gps gvodujpo PGGÕ

k

Opof

Txjudi efmbz

Njojnvn ujnf

None

Switch delay OFF “Delay time [1..65535]*0.1s”

Minimum time

“Minimum time[1..65535]s ” k

k OFF

k

ÐÐ ÔEfmbz ujn f \2//76646^+1/2tÕ

k 1…65535

ÐÐ ÔNojnvn ujn f \2//76646^tÕ

k 1…65535

5/8/2/2 ÔGy; Bvup/Õ

4.20 Auto. operation function Enable 4.21

1 k

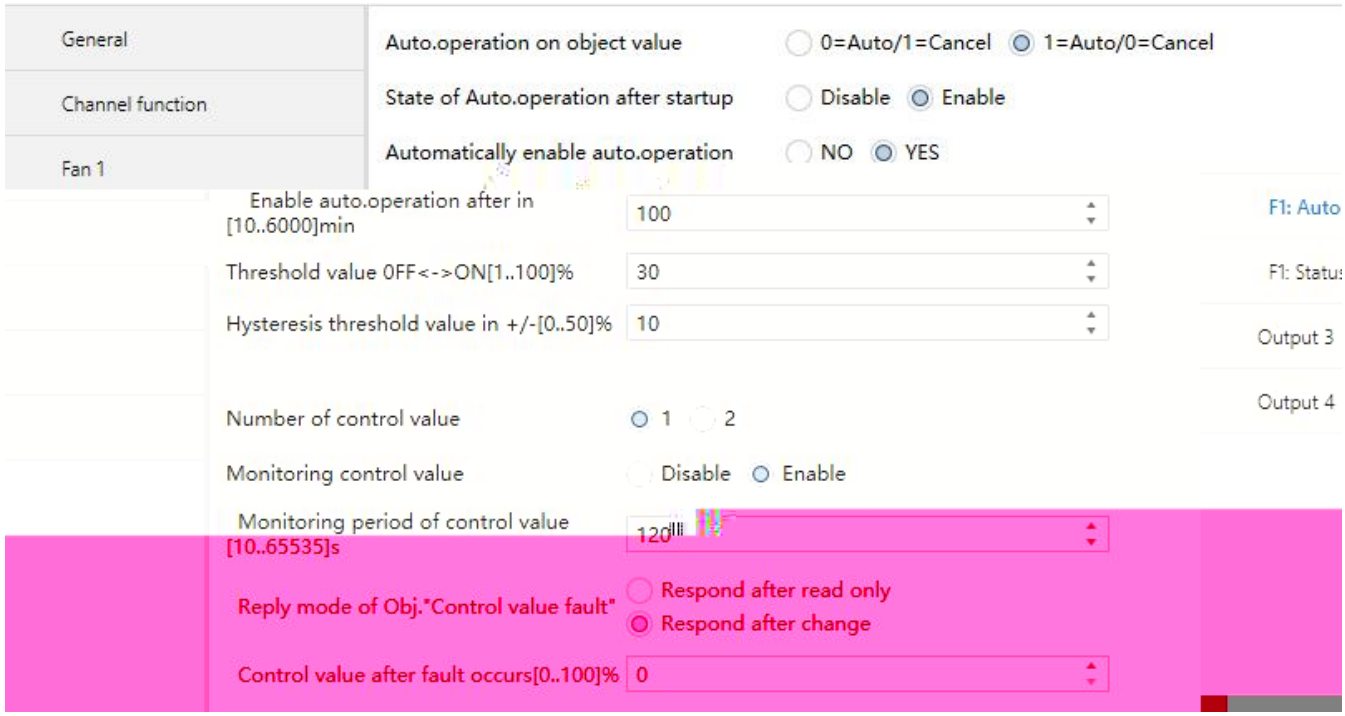
k

k

Automatic function

, Automatic

function , Status Automatic k



4.21 Fx: Auto.

ÔBvup/ Pqfsbujpo po pcjfduwbmvfÔ

k

1>Bvup02>Dbodfm

2>Bvup01>Dbodfm

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

k

ÔTubuf pg Bvup/ pqfsbujpo bgufs tubsuvqÕ

k

Ejtbcmf

Fobcmf

Disable

Enable k

ÔBvup n bujdbmmz fobcmf bvup/ pqfsbujpoÕ

k

Op

Zft

Yes: k

k

ÐÐ ÔFobcmf bvup/pqfsbujpo bgufs jo\21//7111^n joÕ

k 21//7111

ÔUisftipme wbmvf PGG=.?PO \2Ø211^&Ô

Control

value k 2、211

k

ÔIztufsftjt uisftipme wbmvf jo ,0. \1Ø61^&Ô

k 1、

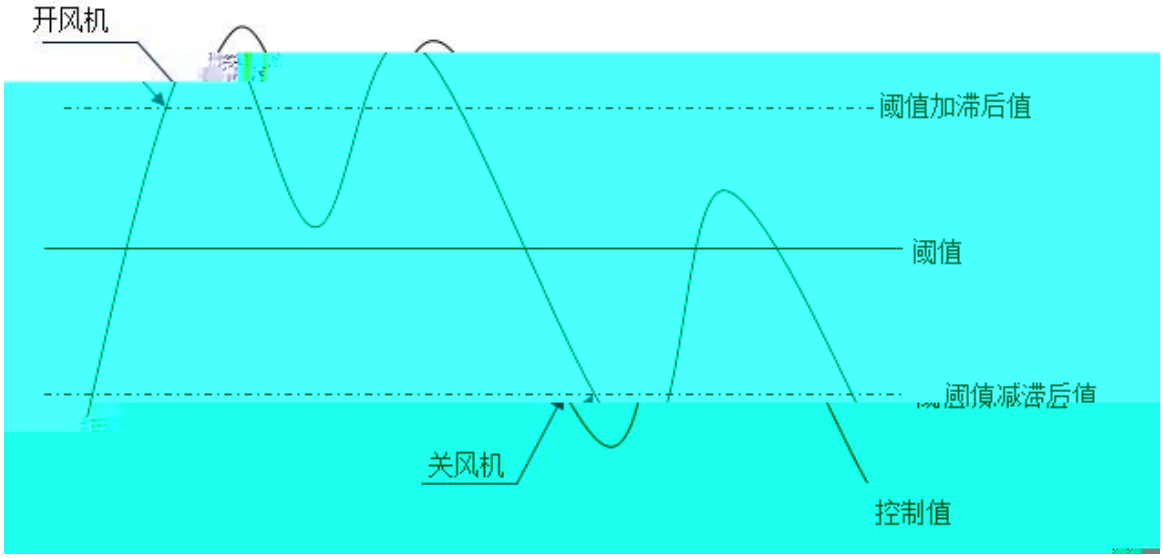
61

0

10 50 60 + 40 -

40~60 k

40 60 k



ÔOv n c f s pg dpouspm wbmvfÔ

k

2 2

3 3

1 k

2 k k

ĐĐ ÔTfmfdu czÕ

2 k

Mbuftu wbmvf

Dpouspm wbmvf xjui txjudijoh pckfdu

Latest value

Control value with switching object Switching control value1/2

0 1 1 2 k

2 3 k k

Txjudijoh dpouspm wbmvf 203 k

k 2 3

k

Npojupsjoh dpouspm wbmvf

k

Op

Zft

yes k

ÐÐ Npojupsjoh qfsjpe pg dpouspm wbmvf\21//76646^t

k 21Ø76646t

ÐÐ ÔSfqmz npef pg Pck/ ÔDpouspm wbmvf gbvmuÕÕ

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

“Control value fault”

Respond after change “Control value fault” k

ÐÐ ÔDpouspm wbmvf bgufs gbvmu pddvst \1//211^&Õ

k 1Ø211 &

5/8/2/3 ÔGy; TubuvtÕ

Fx: Status 4.22 k

4.22 Fx: Status

ÔSfqmz npef pg Pck/ÔTubuvt Gbo PO0PGGÔ)2cju*Ô

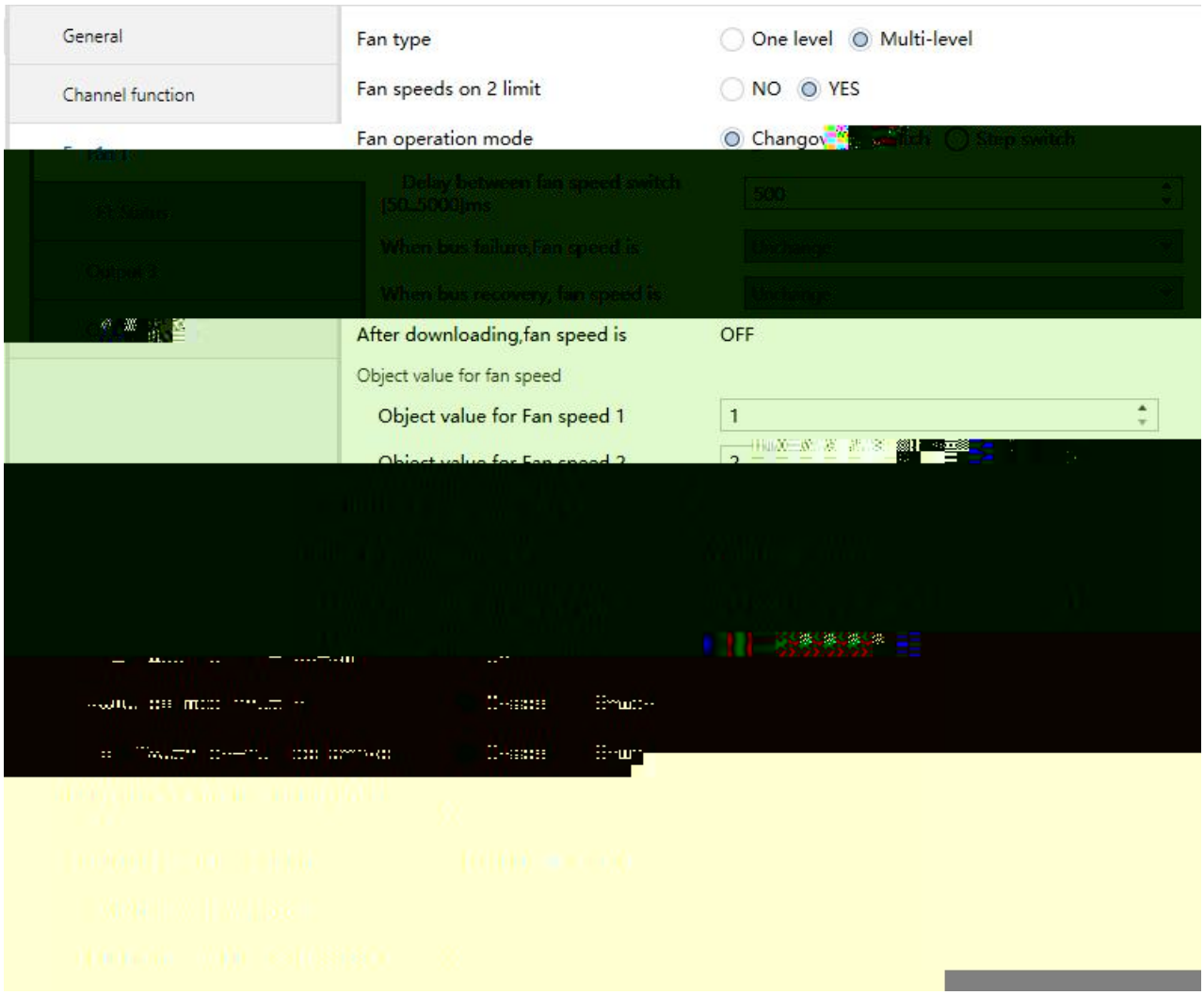
k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only □

4.23 k



4.23 Fan type - Multi-level

2 3 2 3

2 k

1

k

ÔGbo tqffet po 3 tjnjuÕ

Multi-level 2 3 k

Op

Zft

No

Yes 2 3 k 3

k

3 4 k

ÛGbo pqfsbujpo npefÛ

k

Dibohfpwfs txjudi

Tufq txjudi

Changeover switch k

k

Step switch k 3 3

Output 1&2&3 2 2 Output 1&2 k

k

ÐÐ ÛEfmbz cfuxffo gbo tqffe txjudi \61Ø6111' nsÛ

changeover switch

k 61、6111

k

k

ÛXifo cvt gbjmvsf Cbo tqffe jtÛ

k

Vodibohf

PGG

2

3

4

OFF

1 2 3 1 2 3 k

3 4 k

ÔX i fo cvt sfdpwfsz-gbo tqffe jtÔ

k

Vodibohf

PGG

2

3

4

Bt cfgpsf bt cvt gbjm

OFF

1 2 3 1 2 3

As before as bus fail k

k 3 4 k

ÔBgufs epxompbejoh-gbo tqffe jtÔ

k

Pckfdu wbmvf gps gbo tqffe

Pckfdu wbmvf gps Gbo tqffe 20304

Fan speed--1byte k 2//366

0 k

Gpsdfe pqfsbujpo gvodujpo

k

Ejtbcmf

Fobcmf

Enable ,1bit Forced Operation

k

* Gpsdfe pqfsbujpo po pl ⌂

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 k

2 3 ! 4

3 2 3 k

1 2 ! 3 ! 4 4

4 2 3 2 ! 3

1 2 k

ÔBvup/ pqfsbujpo gvodujpoÕ

k

Ejtbcmf

Fobcmf

Enable 4.24 k

ÔPck/ÎTxjudi tqffe yÕ 2cju gvodujpoÕ

Ejtbcmf

Fobcmf

Enable 1bit Fan speed 1 , Fan speed 2 Fan speed 3 k

1 0 k

k

k

ÐÐ ûTxjudi po pwfs gbo tqffeû

OFF k 20304

2 3 2 k

k

ÐÐ ûNjojnvn ujnf jo txjudi\2//76646'tû

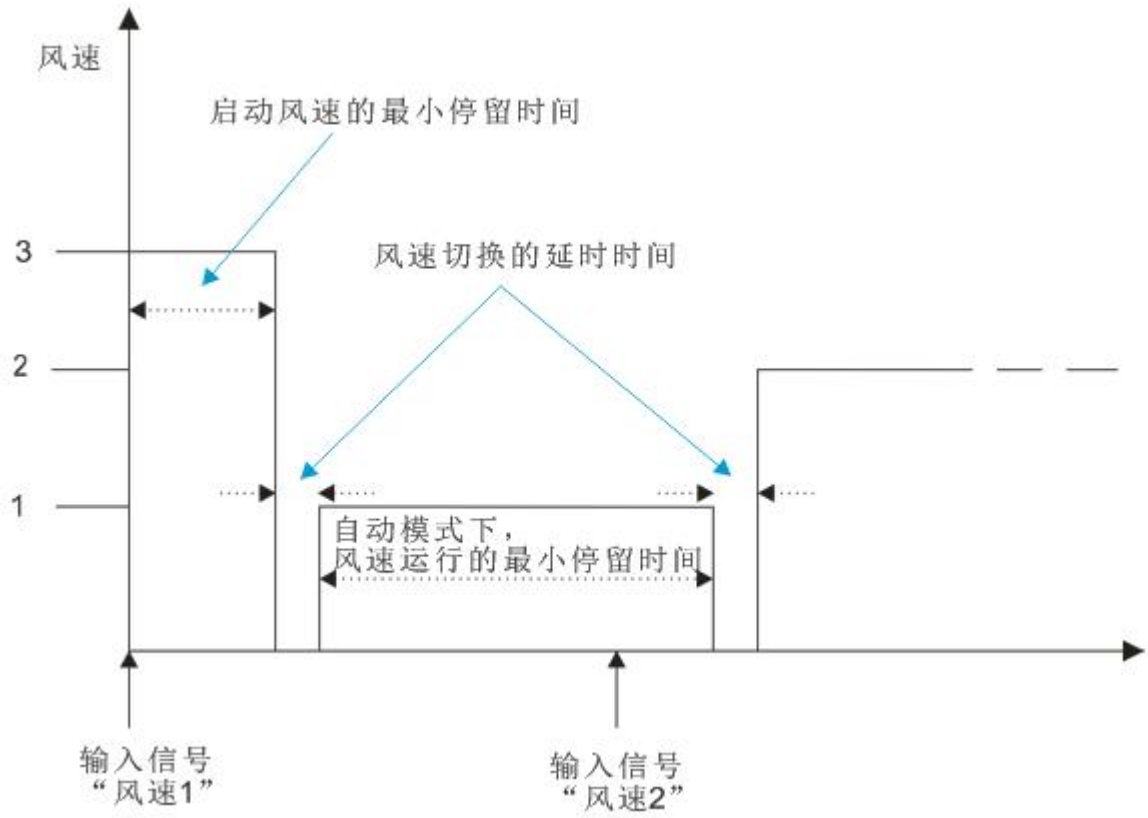
k 2、76646

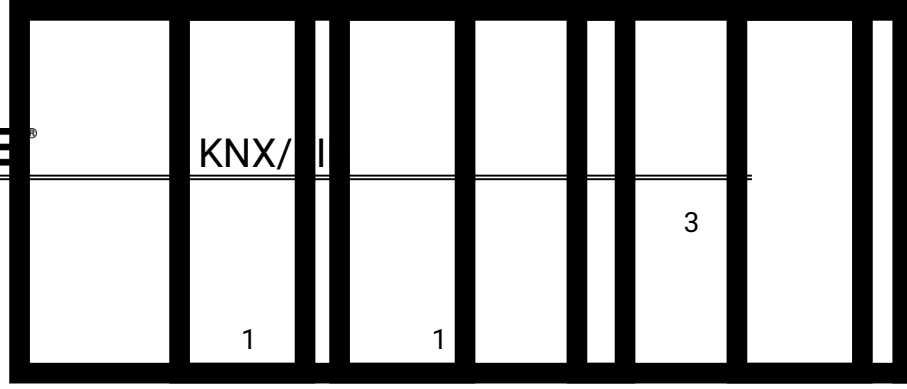
k

k

3

3 1 2





3

1 1

2

2 k

5/8/3/2 ÔGy; Bvup/Õ

4.23 Auto. operation function Enable 4.24 k

k

ÔBvup/ pqfsbujpo po pcкfdu wbnvf Ô

k

1>Bvup02>Dbodfm

2>Bvup01>Dbodfm

0=Auto/1=Cancel Fan Automatic ON/OFF 0

1

1=Auto/0=Cancel Fan Automatic ON/OFF 1

0 k

ÔTubuf pg Bvup/ pqfsbujpo bgufs tubsuvqÕ

k

Ejtbcmf

Fobcmf

Disable

Enable k

ÔBvup n bujdbnz fobcmf bvup/ pqfsbujpoÔ

k

Op

Zft

Yes: k

k

ÔFobcmf bvup/ Pqfsbujpo bgufs \21//7111^n joÕ

k 21//7111

ÔUisftipme wbnvf PGG=_?tqffe 2\2Ø211'&Õ

1 2、211&

1

k

k k

ÔUisftipmewbwf tqffe 2=.?tqffe 3\2Ø211'&Ô

2 2 k

2、366

ÔUisftipmewbwf tqffe 3=.?tqffe 4\2Ø211'&Ô

3 3 k

2、366

PGG =.? 2

2 =.? 3 3 =.? 4 k PGG =.? 2

2 =.? 3 2 =.? 3 3 =.? 4 k

ÐÐ ÔfztufsftjtuisftipmewbwfjoÔ ,0.\1Ø61'&Ô

k

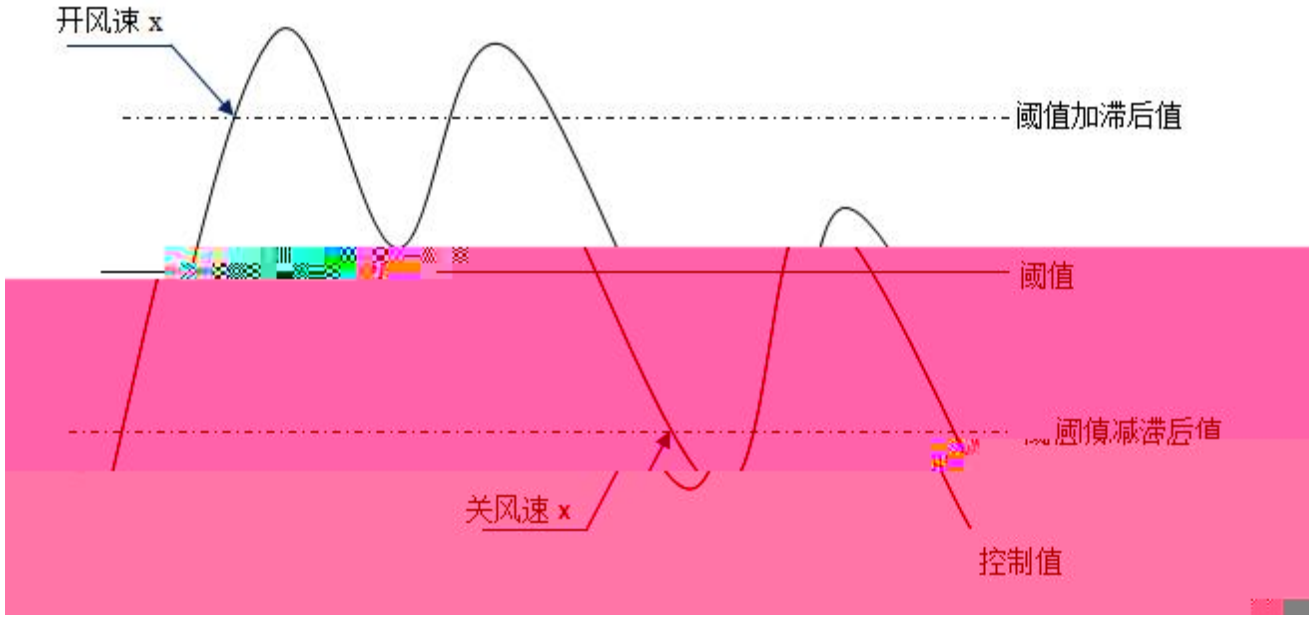
1、61

0

10 50 60 + 40 -

40~60 k

40 ( )60 k



1

2

1

OFF <-> 1 10%

1 <-> 2 20%

2 <-> 3 30%

15%

OFF

OFF 25% 10%+15% 2 25% 20% 30%

1

3

3 14% <30%-15% 1 14% 10% 20%

2 k

2

OFF <-> 1 10%

1 <-> 2 40%

2 <-> 3 70%

5%

OFF

OFF 15% 10%+5% k

41% 2 41% 40% 70%

1

39% 1 39% 10% 40% k

3

3 64% <70%-5% k

39% 1 39% 10% 40%

2 k

3 0 k

ÐÐ ÔNjojnvn ujn f jo gbo tqf fe \1Ø76646·tÔ

k

k 1 76646

0 k

k

pgg k

2 4 2 3 4

k

k

1 k

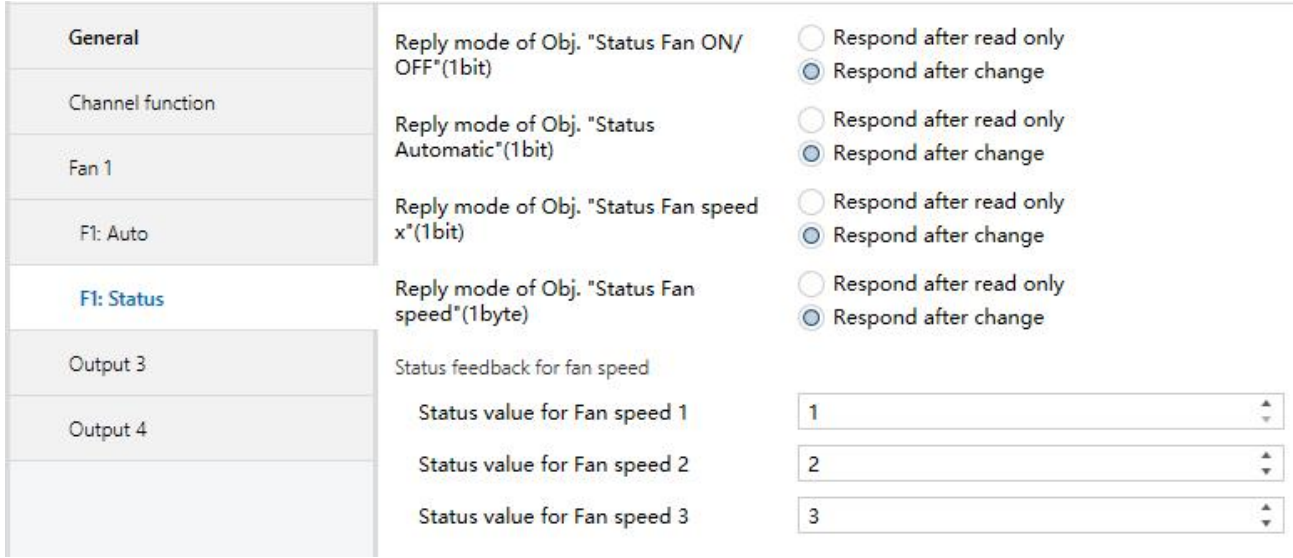
ÔOv n c f s pg dpouspm wbmv f Ô

5/8/2/2 ÕOv n c f s pg dpouspm wbmv f Õ

k

5/8/3/3 ÔGy; Tubuvtõ

Fx: Status 4.26 k



4.26 Fx: Status

ÔSfqmz npef pg Pcx/0Tubuvt Gbo PO0PG60)2cjuª0

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

Status Fan ON/OFF

Respond after change Status Fan ON/OFF k

ÔSfqmz npef pg Pcx/0Tubuvt Bvupnbujdô)2cjuªô

k

Status Automatic 1 0 k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

Status Automatic

Respond after change Status

Automatic k

ÔSfqmz npef pg Pcl/ÔTubuvt gbo tqffe yÔ)2cµrÔ

k 1bit Status Fan speed 1 ! Status Fan speed 2

Status Fan speed 3 k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

Respond after change

k

ÔSfqmz npef pg Pcl/ÔTubuvt gbo tqffe Ô)2czµf^Ô

Status Fan speed 1byte

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

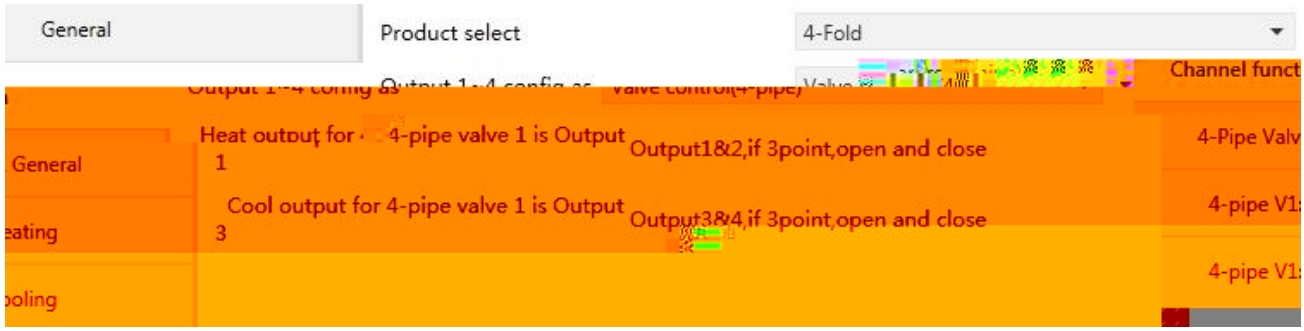
Respond after change

k

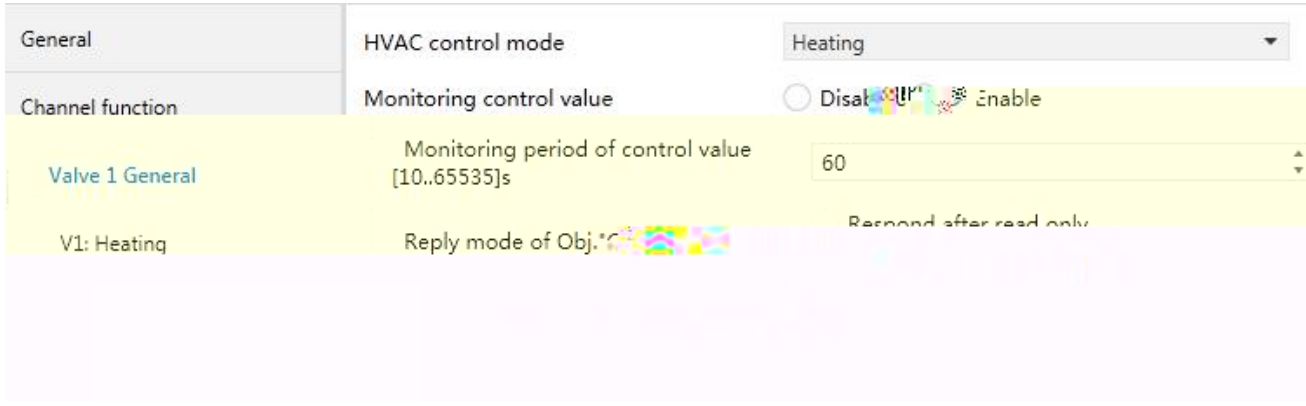
Tubuvt gffecbdl gps gbo tqffe

ÔTubuvt wbmvf gps Gbo tqffe 20304 \2//366^Ô

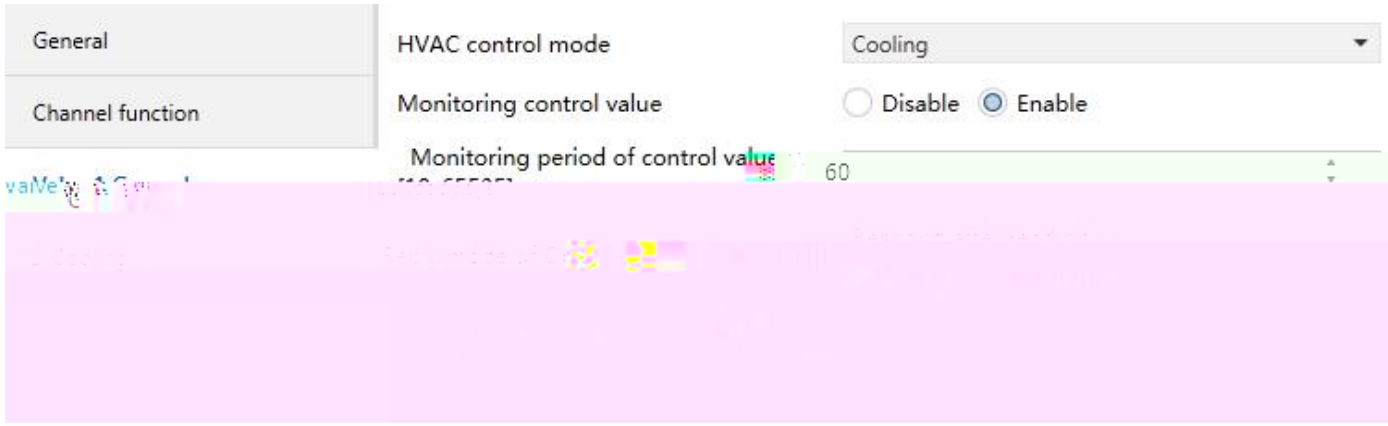
k 2//366 0 k



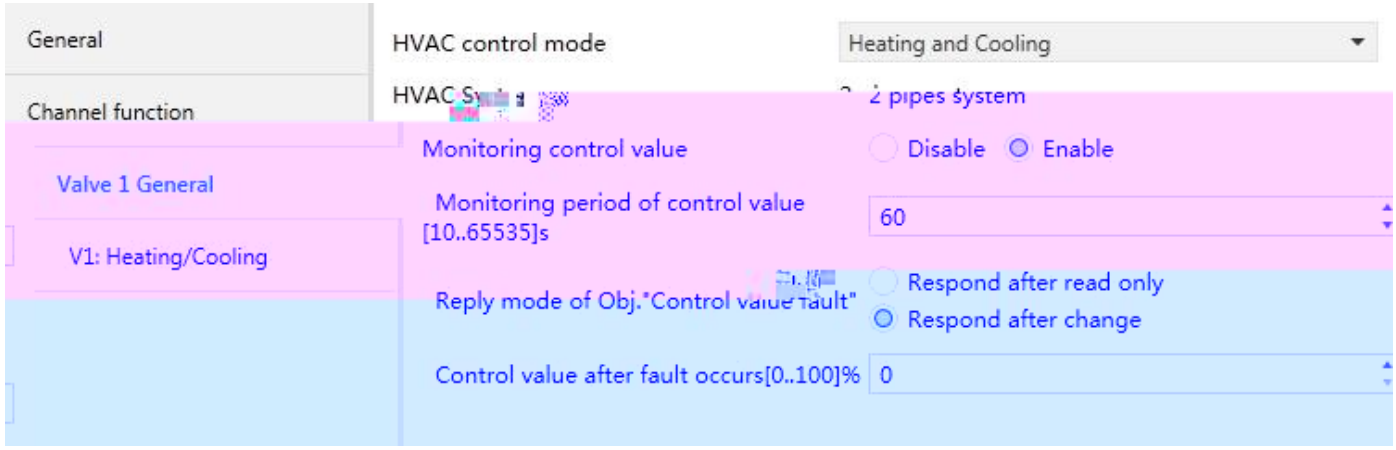
4.26 Channel function--valve type



4.27 1 Valve X General--Heating



4.27 2 Valve X General--Cooling



Npojupsjoh dpouspmwbmvf

k

Ejtbcmf

Fobcmf

Enable: k

- Npojupsjoh qfsjpe pg dpouspmwbmvf\21//76646^t

k 21Ø76646t

- ÔSfqmz npef pg Pck/ ÔDpouspmwbmvf gbvmuÕÕ

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only

"Control value fault"

Respond after change "Control value fault" k

ÐÐ ÔDpouspmwbmvf bgufs gbvmu pddvst \1//211^&Ô

k 1Ø211 &

>0% 0% k

3 5

2 3 4 k

/

k k

k

k

/

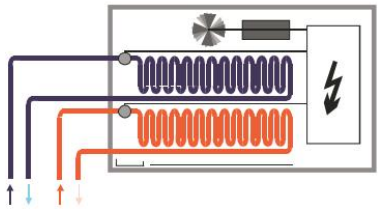
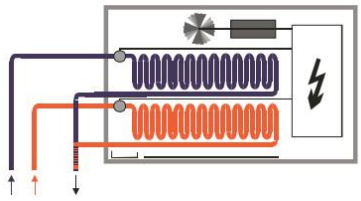
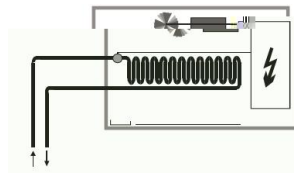
k

k

k

/

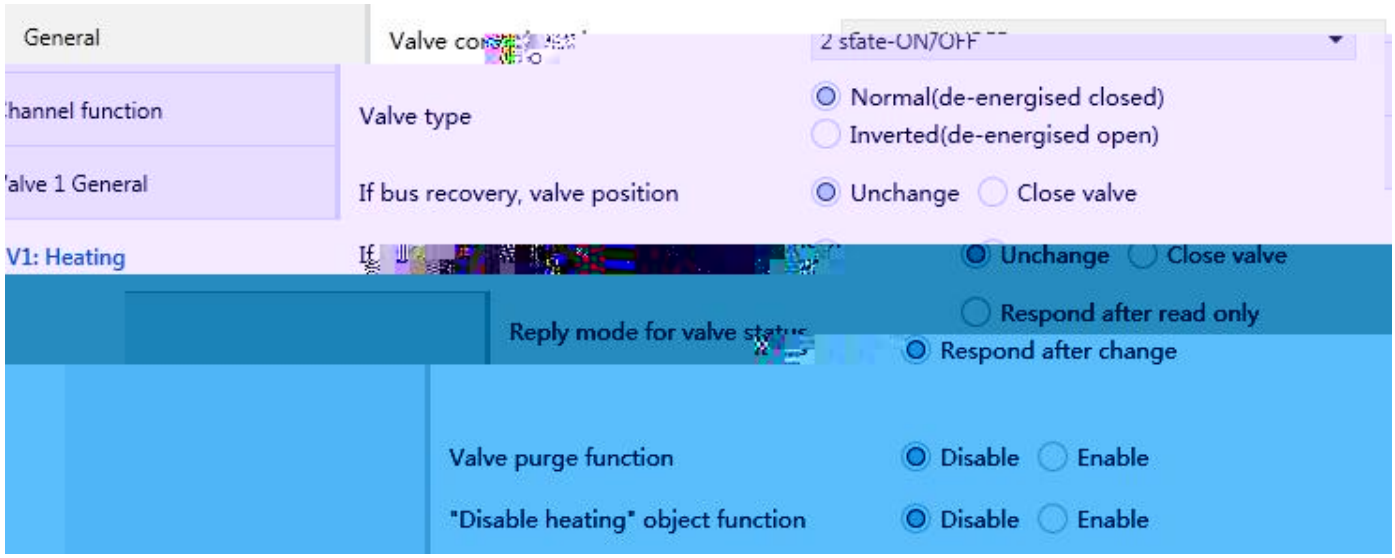
k

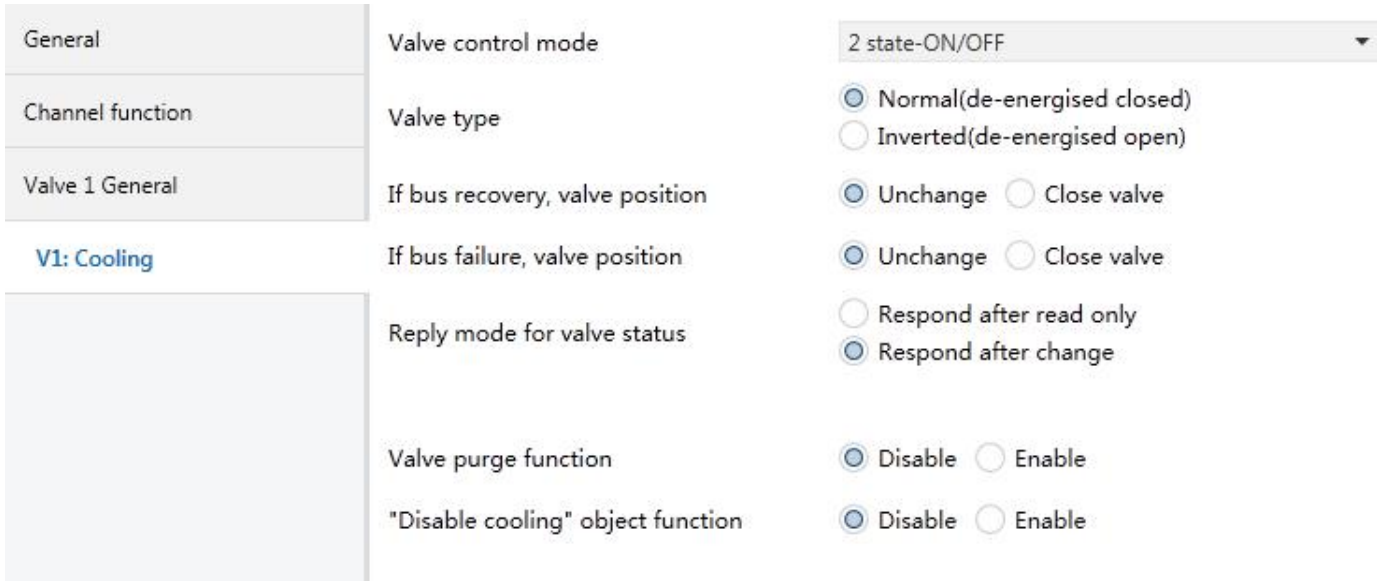
5/9/2 ÔWy; I fbujohÔDppmjohÕ

“Vx:Heating ” “Vx: Cooling” 4.29 4.30

k (2 4)



4.29 “Vx: Heating”



4.30 “Vx: Cooling”

Wbmwf dpouspm npef0

k

3 tubuf.PO0PGG

Dpoujovpvt-QXN

4 qpjou-pqfo boe dmptf

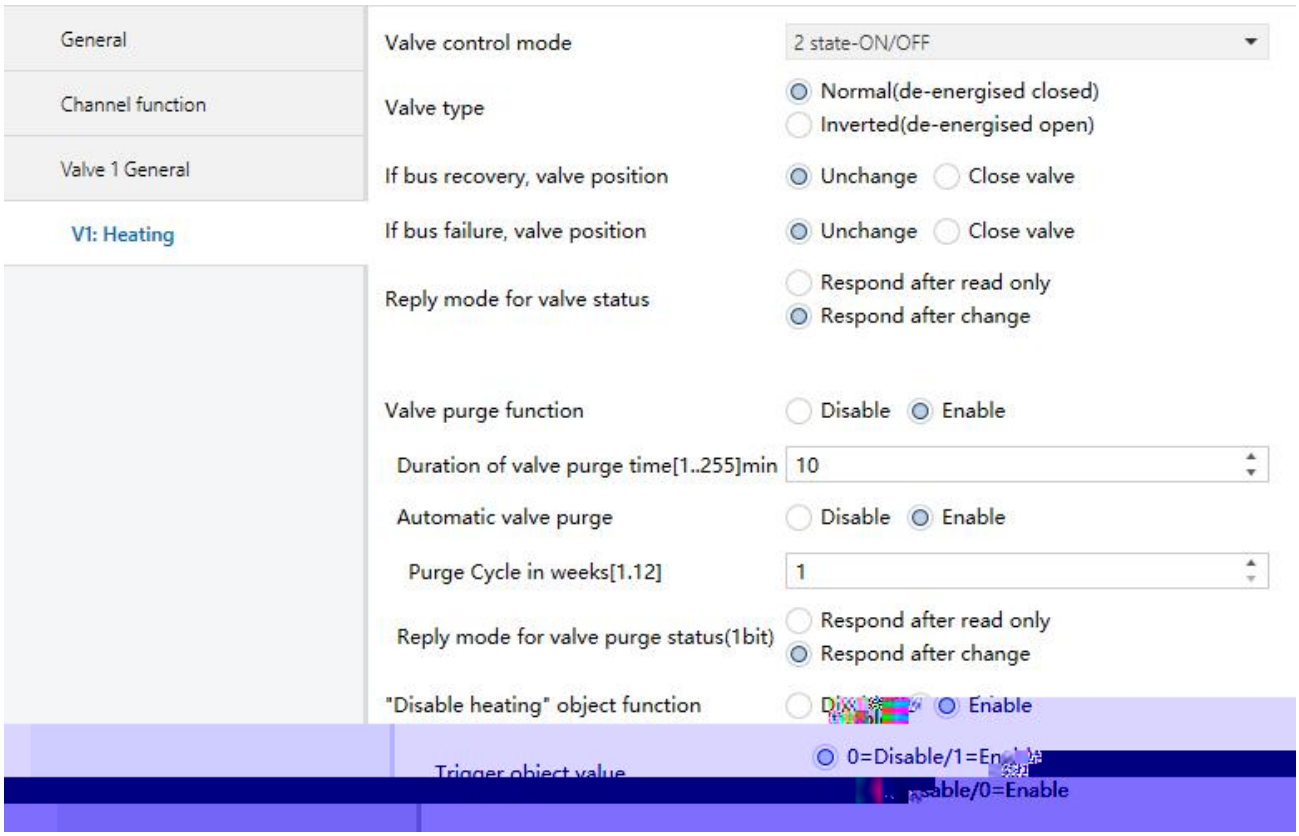
2 state-ON/OFF

Continuous, PWM PWM

3 point, open and close: k

k

4.31 k



4.31 “2 state-ON/OFF”

Wbmwf uzqf

k

*Opsnbm)ef.fofshjtfe dmptfe**

*Jowfsufe)ef.fofshjtfe pqfo**

Normal(de-energised closed) Inverted(de-energised open)

k

Jg cvt sfdpwfsz-wbmwf qptjujpo

k

Vodibohf

Dmptf wbmwf

Unchange

Close valve k

Ig cvt gbjwvsf-wbmwf qptjujpo

k

Vodibohf

Dmptf wbmwf

Unchange

Close valve k

k

Sfqmz npef gps wbmwf tubuvt)2cju*

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only "Valve status,Heat/Cool" k

Respond after change "Valve status, Heat/Cool" k

Wbmwf qvshf gvodujpo

Ejtbcmf

Fobcmf

Enable 1bit Trigger valve purge, Heat/Cool

k

* Evsbujpo pg wbmwf qvshf ujn f\2///366'n jo

k 2、366 n jo

/ k

k

Bvup n bujd wbmwf qvshf

k

Ejtbcmf

Fobcmf

Enable k

Qvshf Dzdmf jo x f f l t\2///23^

k

k

2、23

k

k

Sfqmz n pef gps wbmwf qvshf tubuvt)2cju*

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only "Valve purge status, Heat/Cool"

Respond after change "Valve purge status, Heat/Cool" k

#Ejtbcmf ifbujoh0dppmjoh# pckfdu gvodujpo

Ejtbcmf

Fobcmf

Enable 1bit "Disable, Heat/Cool" /

k

Usjhhfs pckfdu wbmvf

/ k

1>Ejtbcmf02>Fobcmf

2>Ejtbcmf01>Fobcmf

0=Disable/1=Enable Disable, Heat/Cool 0 /

1

1=Disable/0=Enable Disable, Heat/Cool 1 /

0 k

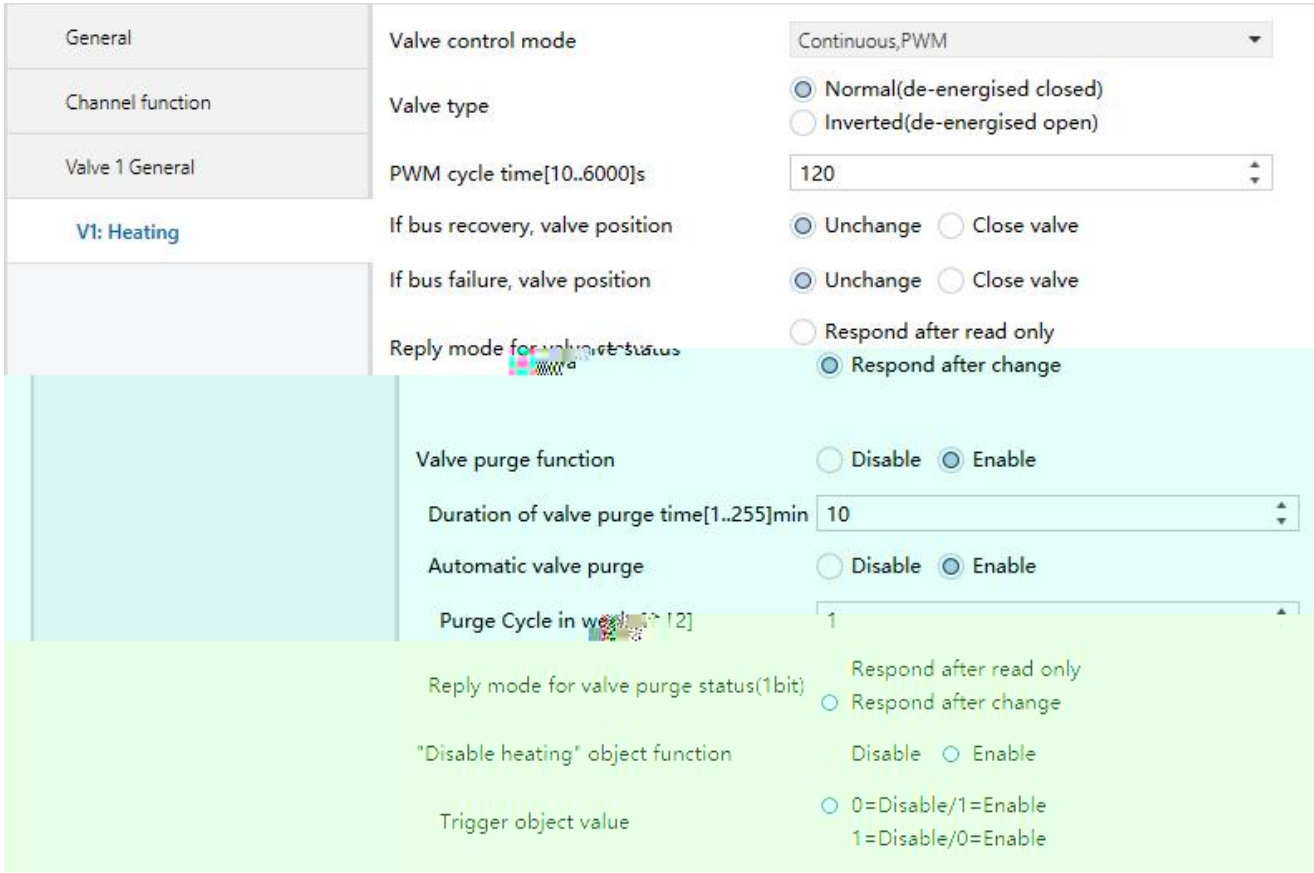
k

k

k

5/9/2/3 Dpoujovpvt-QXN

4.32 k



4.32 “Continuous, PWM”

k

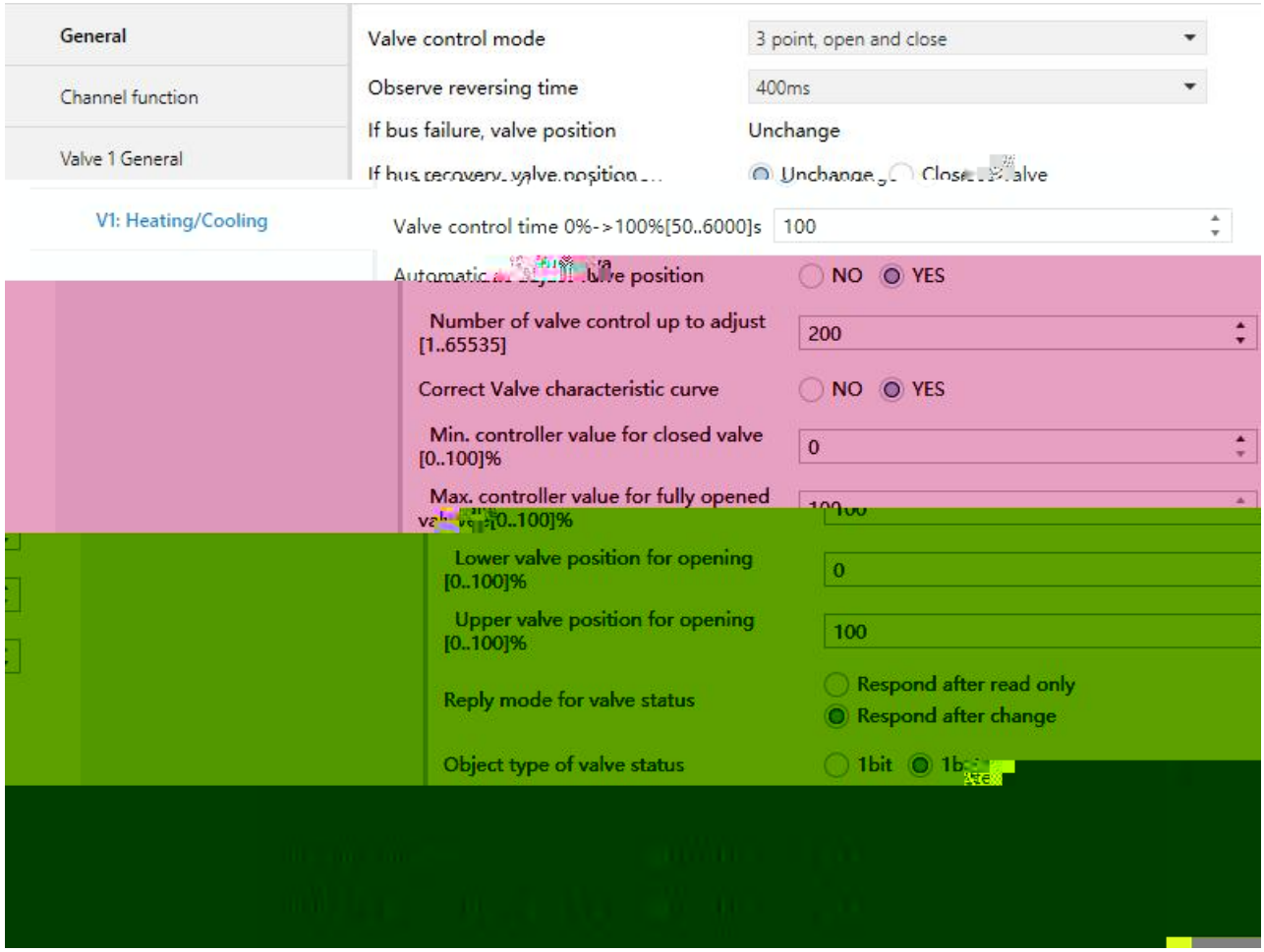
PWM

20% PWM 15min 3min 12min 60%

9min 6min

k

4.33 k

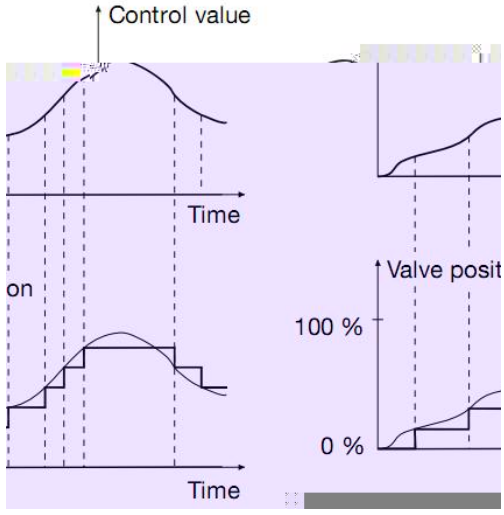


4.33 “3 point, open and close”

!

k

20% 20% k



0Pctfswf sfwfstjoh ujnf0

k

211nt0311nt0 02t02/3t02/6t

k

0g cvt gbjwsf- wbmwf qptjujpo0

k

0g cvt sfdpwfsz- wbmwf qptjujpo0

k

Vodibohf

Dmptf wbmwf

Unchange k

Close valve k

1& 1&

k

k

ÔWbmwf dpouspmujnf 1& 211& \61Ø7111^tÔ

k 61、7111t

180s 20% 60% 20%、60%

72s k

k

ÔBvupnbujd bekvtuwbmwf qptjujpoÔ

k

Zft

Op

Yes k

k

Ovncfs pg wbmwf dpouspm vqup bekvtu\2、76646^

0%

k 2、76646

100 100 101

0%

k 100 50% 101 60%

101 40% 0%

40% k 5% + Ô

5% Ô5% 1min 1min 1min k

k

k

k

k

ÔDpssfdu Wbmwf dibsbdufsjtujd dvswfÔ

k

Zft

Op

Yes k

- Njo/ dpouspmmfs wbmvf gps dmptfe wbmwf\1//211^&
- Nby/ dpouspmmfs wbmvf gps gvmmz pqfofe wbmwf\1///211^&
- Mpxfs wbmwf qptjujpo gps pqfojoh\1///211^&
- Vqqfs wbmwf qptjujpo gps pqfojoh\1///211^&

k

1///211 \&^

Min. controller value for closed valve

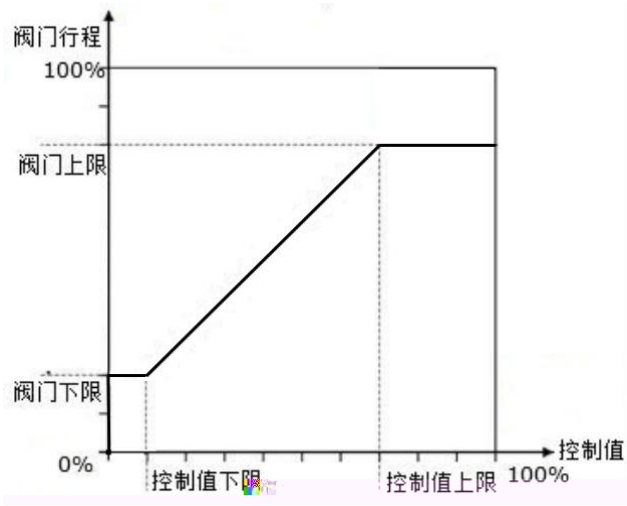
Max. controller value for fully opened valve

Lower valve position for opening

Upper valve position for opening k

10% 20%

70% 80%



Sfqpsu gps wbmwf tubuvt)2cju*

k

Sftqpoe bgufs sfbe pomz

Sftqpoe bgufs dibohf

Respond after read only Valve status, Heat/Cool k

Respond after change Valve status, Heat/Cool k

ÔPckfdu uzqf pg wbmwf tubuvt Ô

k

2cju

2czuf

1bit 1bit Valve status, Heat/Cool k

1byte 1byte Valve status, Heat/Cool k

Pckfdu wbmvf xjui wbmwf qptjujpo ?1

1

2

1 0 Valve status, Heat/Cool 1 0 0 k

4qpjou-pqfo boe dmptf

Dpouspm wbmvf- Dppm0 l fbu

2 !

k k

3 !

k

4 !

4qpjou-pqfo boe dmptf k

5 ! k

1&

k !

k

k

6 ! 0 k

k

k

7 !

k

k

2 !

k

3 !

k

4 ! ! !

2 k

4 !

k

k

k

D

X

S

U

V k

6/2/

6/2/2 ..Txjudi bduvbups

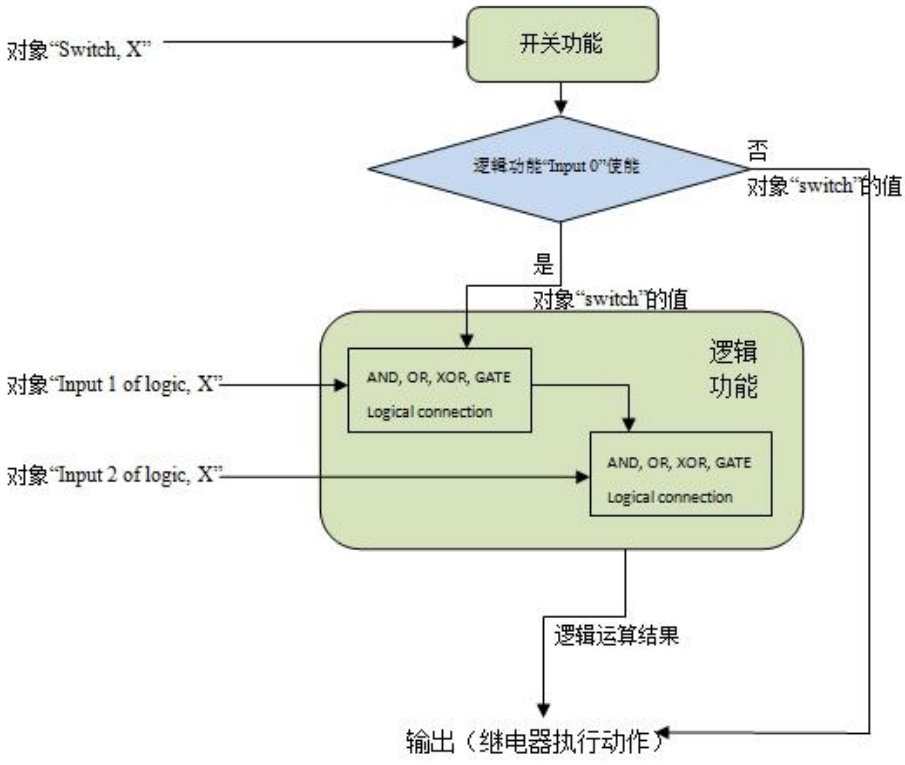
Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
1	General											
Low	2	Output 1	Switch									
Low	3	Output 1	Switch status									
Low	4	Output 1	Enable time function									
Low	5	Output 1	Delay function									
Low	6	Output 1	Operation hours counter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

5.1 --Switch actuator

					DPT
329	Hfofsbm	Jo pqfsbujpo	2cju	D-U	2/112 EQU`Txjudi
“1”					k
2	Hfofsbm	Dfousbm dpouspm gps bmm txjudi	2cju	D-X	2/112 EQU`Txjudi
0 —— off 1 —— on					k
3	Pvuqvu Y	Txjudi	2cju	D-X	2/112 EQU`Txjudi

k

“Input 0” “Switch ,X” k



4	Pvuqvu Y	Txjudi tubuvt	2cju	D-S-U	2/112 EQU`Txjudi

4.3“Output X” “Object value of switch status: ” k

“Respond after read only”

“Respond after change” k

6/2/3 .. I fbujoh bduvbups) xju i pvu dpouspmfs*

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
2	Output 1	On-off control value			1 bit	C	-	W	-	-	switch	Low
3	Output 1	Status of contact			1 bit	C	R	-	T	-	switch	Low
7	Output 1	Report fault			1 bit	C	R	-	T	-	alarm	Low
8	Output 1	Forced output			1 bit	C	-	W	-	-	enable	Low

1bit(on-off control or PWM)

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

1byte(Continuous)

5.2 --Heating actuator(without controller)

					DPT
3	Pvuqvu Y	Po.pgg dpouspm wbmvf	2cju	D-X	2/112 EQU`Txjudi
"Control telegram is received as" "1bit(on-off control or PWM)" 1bit "0" "1" k					
4	Pvuqvu Y	Tubuvt pg dpoubdu	2cju	D-S-U	2/112 EQU`Txjudi
"Reply the status for contact" "Yes, 1= contact close ; 0=contact open" "Yes,0= contact close ; 1=contact open" k k					
6	Pvuqvu Y	Dpouspm wbmvf)dpoujovpvt*	2czuf	D-X	6/112 EQU`Tdbmjoh
"Control telegram is received as" "1byte(Continuous)" 1Byte k 0...100% "0%" "100%" k					
5	Pvuqvu Y	Tubuvt pg dpoujovpvt-2 cju	2cju	D-S-U	2/112 EQU`Txjudi
"Reply the status for continuous control" "Yes 0%=0, otherwise "1"(1bit)" "Yes 0%=1, otherwise "0"(1bit)" k k "Yes, 0% =0, otherwise"1"(1 bit)" "0" "1" "Yes, 0% =1, otherwise"0"(1 bit)" "1" "0" k					
7	Pvuqvu Y	Tubuvt pg dpoujovpvt-2 czuf	2czuf	D-S-U	6/112 EQU`Tdbmjoh
"Reply the status for continuous control" "Yes continues control value 1byte " k (PWM) k					
8	Pvuqvu Y	Sfqpsu gbvmu	2cju	D-S-U	2/116 EQU`Bmbsn
"Send object "Report fault" is" "Enable" k "1" "0" k					
9	Pvuqvu Y	Gpsdfe pvuqvu	2cju	D-X	2/114 EQU`Fobcmf
k "1" "0" k k k					

5.2 --Heating actuator(without controller)

6/3/)BD0ED*

AC DC AC k

Numb	Name	Object Function	Des	Group	Length	C	R	W	T	U	Data Type	Priority
2	Curtain 1	Move UP/DOWN			1 bit	C	-	W	-	-	up/down	Low
3	Curtain 1	Slat adj/stop			1 bit	C	-	W	-	-	step	Low
4	Curtain 1	Reference movement			1 bit	C	-	W	-	-	up/down	Low
5	Curtain 1	Move to position 0..100%			1 byte	C	-	W	-	-	percentage (0..100%)	Low
531	General	Central control for Up/Down			1 bit	C	-	W	-	-	up/down	Low
532	General	Central control for Slat/Stop			1 bit	C	-	W	-	-	step	Low

5.3 AC

DPT

642 Hfofsbm DHf □ □□□

‘0’–– /

‘1’–– /

k

5 Dvsubjo Y Sfgfsfodf npwfn fou 2cju D-X 2/119 EQU`VqEpxo

“After reference movement, Position is” “disable” /

/ k k

‘0’–– /

‘

8bit k 8bit k

8bit ( ) FXNNNNNN

F: ‘0’ ‘1’

X 0

NNNNNN 0…63 k

1~64 “Scene” 0~63 k 1

“Scene” 0 k

0 1 2 … 63	1 2 3 … 64
128 129 130 … 191	1 2 3 … 64

9 Dvsubjo Y Qptjujpo tubuvt 1//211& 2/zuff DvS-U 6/112 EQU`Tdbjdh

□ / / k

‘0%’ ——

…… ——

‘100%’—— □

: Dasbjo Y Tmbu tubuvt 1//211&

22	Dvsubjo Y	Fobcmf bvup/ dpouspm	2cju	D-X	2/114 EQU`Fobcmf

“0” “1” k

“0”——

“1”——

23	Dvsubjo Y	Tvo;cmjoe0t i vuufs qptjujpo 1Ø211&	2czu f	D-X	6/112 EQU`Tdbmjoh

/ k “Venetian Blind”

“Sun:slat adj. 0...100%”

k

“0%”——

..... ——

“100%”——

24	Dvsubjo Y	Tvo; tmbu bek/ 1Ø211&	2czuf	D-X	6/112 EQU`Tdbmjoh

“Venetian Blind”

k

“0%”——

..... ——

“100%”——

25026	Dvsubjo Y	Tbgfuz pqfsbujpo203	2cju	D-X	2/116 EQU`Bmbsn

0 1 “1”

“1” k

k

2 1 k

27	Dvsubjo Y	Tubuvt pg pqfsbujpo	2czu f	D-S-U	Op EQU

/ k k

8bit

“0”——

“1”——

“2”——

“3”—— 1

“4”—— 2

5.3 AC

6/4/

Numb	Name	Object Function	Des	Group	Length	C	R	W	T	U	Data Type	Priority
219	Fan 1	Fan speed			1 bit	C	-	W	-	-	switch	Low
223	Fan 1	Status Fan ON/OFF			1 bit	C	R	-	T	-	switch	Low
228	Fan 1	Automatic function			1 bit	C	-	W	-	-	enable	Low
229	Fan 1	Status Automatic			1 bit	C	R	-	T	-	enable	Low
230	Fan 1	Forced operation			1 bit	C	-	W	-	-	enable	Low
231	Fan 1	Control value 1			1 byte	C	-	W	-	-	percentage (0..100%)	Low
232	Fan 1	Control value 2			1 byte	C	-	W	-	-	percentage (0..100%)	Low
233	Fan 1	Switching control value 1/2			1 bit	C	-	W	-	-	switch	Low
234	Fan 1	Control value fault			1 bit	C	R	-	T	-	alarm	Low

5.4_1 _One level

Numb	Name	Object Function	Des	Group	Length	C	R	W	T	U	Data Type	Priority
219	Fan 1	Fan speed			1 byte	C	-	W	-	-	percentage (0..100%)	Low
220	Fan 1	Fan speed 1			1 bit	C	-	W	-	-	switch	Low
221	Fan 1	Fan speed 2			1 bit	C	-	W	-	-	switch	Low
222	Fan 1	Fan speed 3			1 bit	C	-	W	-	-	switch	Low
223	Fan 1	Status Fan ON/OFF			1 bit	C	R	-	T	-	switch	Low
224	Fan 1	Status Fan speed			1 byte	C	R	-	T	-	co[illegible]ses (0..255)	Low
225	Fan 1	Status Fan speed 1			1 bit	C	R	-	T	-	switch	Low

5.4_2 _Multi-level

					EQU
32:	Gbo Y	Gbo tqffe	2cju 2czuf	D-X	2/112 EQU`Txjudi 6/112 EQU`Tdbmjoh

, 1bit k

"0"——

"1"——

1byte

k 1...255 0 k

2///366 1///211& 366)%GG*..211& 239

)%91*..61& 62)%44*..31& k

331	Gbo Y	Gbo tqffe 2	2cju	D-X	2/112 EQU`Txjudi
k 1 1~3 ON k 1~3 OFF k “0”—— “1”—— 1					
332	Gbo Y	Gbo tqffe 3	2Cju	D-X	2/112 EQU`Txjudi
220					
333	Gbo Y	Gbo tqffe 4	2Cju	D-X	2/112 EQU`Txjudi
220					
334	Gbo Y	Tubuvt Gbo PO0PGG	2cju	D-S-U	2/112 EQU`Txjudi
k k “0”—— “1”——					
335	Gbo Y	Tubuvt Gbo tqffe	2czuf	D-S-U	6/121 EQU`Dpvoufs qvmtft
k k Status value for Fan speed 1/2/3 [1..255] “0” k					
336	Gbo Y	Tubuvt Gbo tqffe 2	2cju	D-S-U	2/112 EQU`Txjudi
k 1 k “0”—— 1 “1”—— 1					
337	Gbo Y	Tubuvt Gbo tqffe 3	2cju	D-S-U	2/112 EQU`Txjudi
225					
338	Gbo Y	Tubuvt Gbo tqffe 4	2cju	D-S-U	2/112 EQU`Txjudi
225					

339	Gbo	p n bujd qv	ciu	D	EQU`	cmf

k k k

k k

“0 Auto/1=Cancel”

“0”——

“1”——

“1 Auto/0=Cancel

“0”——

“1”——

219 Fan X--Fan speed

220-222 Fan X-- Fan speed x (x=1,2,3,)

33:	Gbo Y	Tubuvt Bvup n bujd	2cju	D-S-U	2/114 EQU`Fobcmf

k

“0”——

“1”——

341	Gbo Y	Gpsdfe Pqfsbujpo	2cju	D-X	2/114 EQU`Fobcmf

k “Limitation on forced operation” k

“0 Force/1=Cancel”

“0”——

“1”——

“1 Force/0=Cancel”

“1”——

“0”——

342	Gbo Y	Dpouspmwbmvf0Dpouspmwbmvf2	2czuf	D-X	6/112 EQU`

344	Gbo Y	Txjudijoh dpouspm wbmvf 203	2cju	D-X	2/112 EQU`Txjudi
		2 k “0”——Control value 1 (1) “1”——Control value 2 (2)			
345	Gbo Y	Dpouspm wbmvf gbvmu	2cju	D-S-U	2/116 EQU`Bmbsn
		k k “0”—— “1”——			

5.4

6/5/

4 k

Numb	Name	Object Function	Des	Group	Length	C	R	W	T	U	Data Type	Priority
315	4-pipe Valve 1	Heat/Cool mode status			1 bit	C	R	-	T	-	cooling/heating	Low
316	4-pipe Valve 1	Control value fault			1 bit	C	R	-	T	-	alarm	Low
317	4-pipe Valve 1	Disable,Heat			1 bit	C	-	W	-	-	enable	Low
318	4-pipe Valve 1	Control value, Heat			1 byte	C	-	W	-	-	percentage (0..100%)	Low
319	4-pipe Valve 1	Valve status, Heat			1 bit	C	R	-	T	-	switch	Low
320	4-pipe Valve 1	Trigger valve purge, Heat			1 bit	C	-	W	-	-	enable	Low
321	4-pipe Valve 1	Valve purge status, Heat			1 bit	C	R	-	T	-	enable	
322	4-pipe Valve 1	Disable,Cool			1 bit	C	-	W	-	-	enable	
323	4-pipe Valve 1	Control value, Cool			1 bit	C	-	W	-	-	switch	
324	4-pipe Valve 1	Valve status, Cool			1 bit	C	R	-	T	-	switch	
325	4-pipe Valve 1	Trigger valve purge, Cool			1 bit	C	-	W	-	-	enable	
326	4-pipe Valve 1	Valve purge status, Cool			1 bit	C	R	-	T	-	enable	

5.5

					DPT
426	5.qjqf Wbmwf Y	I fbu0Dppm npef tubuvt	2cju	D-S-U	2/211 EQU`I fbu0Dppm
/ k “0”—— “1”——					
427	5.qjqf Wbmwf Y	Dpouspm wbmvf gbvmu	2cju	D-S-U	2/116 EQU`Bmbsn
k k “0”—— “1”——					
4280433	5.qjqf Wbmwf Y	Ejtbcmf- I fbu0Dppm	2cju	D-X	2/114 EQU`Fobcmf
/ k 0% k					
4290434	5.qjqf Wbmwf Y	Dpouspm wbmvf- I fbu0Dppm	2czuf02cju	D-X	6/112 EQU`Tdbmjoh 2/112 EQU`Txjudi
k 2 (318) k 1bit 1byte k					
42:0435	5.qjqf Wbmwf Y	Wbmwf tubuvt- I fbu0Dppm	2czuf02cju	D-S-U	6/112 EQU`Tdbmjoh 2/112 EQU`Txjudi
k					
4310436	5.qjqf Wbmwf Y	Usjhhfs wbmwf qvshf- I fbu0Dppm	2cju	D-X	2/114 EQU`Fobcmf
k 0 ˆ ˆ 1 ˆ ˆ					
4320437	5.qjqf Wbmwf Y	Wbmwf qvshf tubuvt- I fbu0Dppm	2cju	D-S-U	2/114 EQU`Fobcmf
k k 0 ˆ ˆ 1 ˆ ˆ					

5.5