



1	.....	1
1.1	.....	1
1.2	.....	1
1.3	.....	2
2	.....	3
2.1	.....	3
2.2	.....	3
2.3	.....	3
2.4	.....	3
2.5	.....	3
2.6	.....	4
2.7	.....	4
2.8	.....	4
2.9	.....	4
2.10	.....	4
2.11	.....	4
3	.....	5
3.1	.....	5
3.2	.....	6
3.3	.....	8
3.4	.....	9
3.5	RS-232	10
3.6	.....	10
3.7	.....	11
4	.....	13
4.1	.....	13
4.2	.....	15
5	.....	20
5.1	.....	20
5.2	.....	21
	.....	23
1	.....	23
2	.....	24

1

1.1

DTU

12kV



1.2

-
-
-
-
-
-

" "

1.3

- 1000
- - 40 ~ + 70 20 30
- 0.3g 0.15g
- 1.67
- 25
- $0.1\text{W}/\text{cm}^2$ (0.5m/s)
- 25m/s
- 10mm
-

2

2.1

- AC220V
- 50Hz
- -20%~+20%
- -5%~+5%
- 10%
- 20W

50VA

2.2

- 5A 1A
- AC57.7V 220V
- AC100V
-

➤ 0 <40ms

0 <±1%

➤ ± 2.5 %

2.6

➤ 10^5

2.7

➤ DC24V

➤ 2ms

2.8

➤ IV

➤ IV

IV

➤ IV

/

➤ IV

➤ IV

➤ 5kV

➤ IV

2.9

➤ RS-232 100M

➤ DL/T 634.5101-2002 DL/T 634.5104-2009 MODBUS

➤ 1200 bps ~9600 bps 10/100Mbps

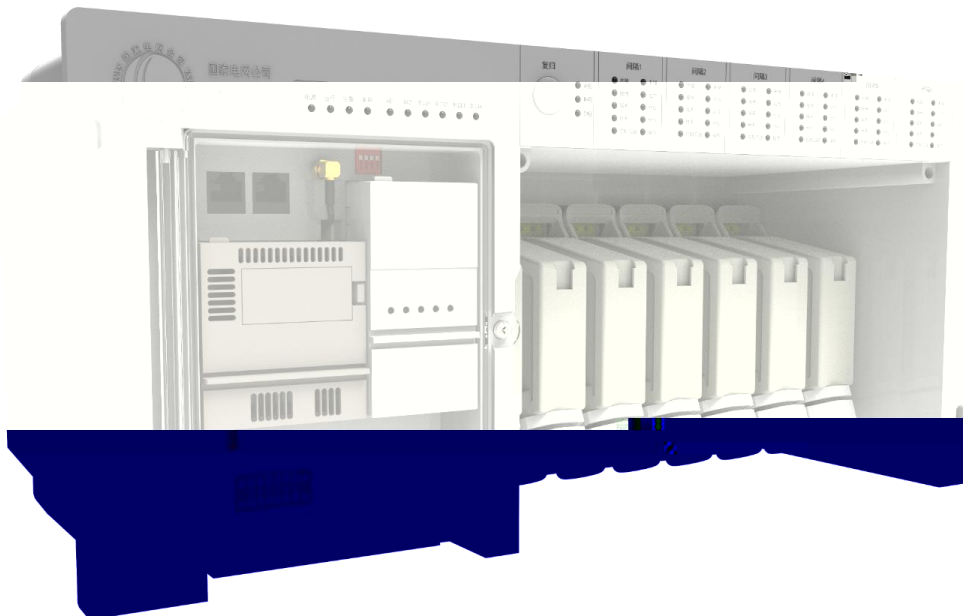
➤

3

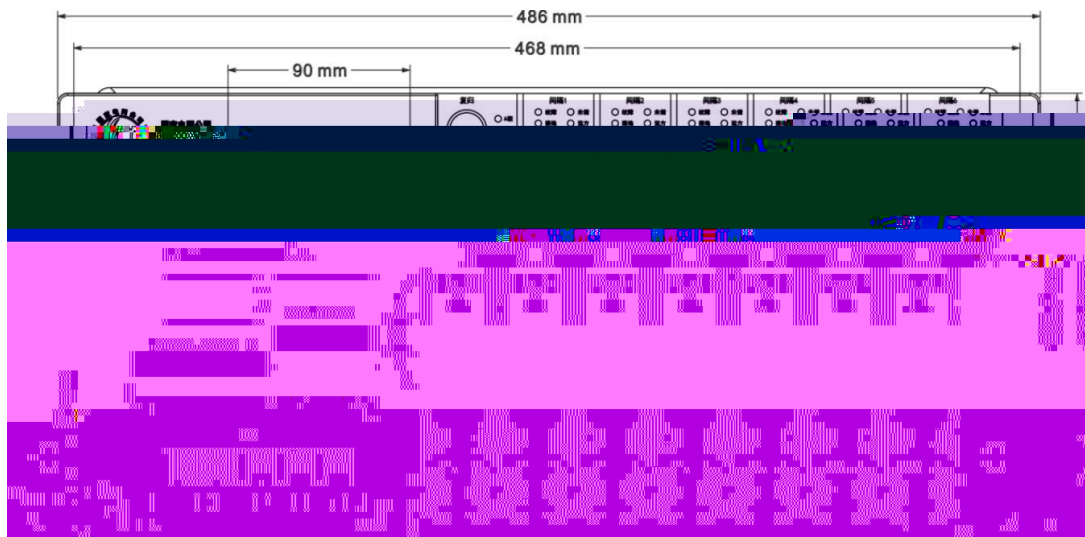
3.1

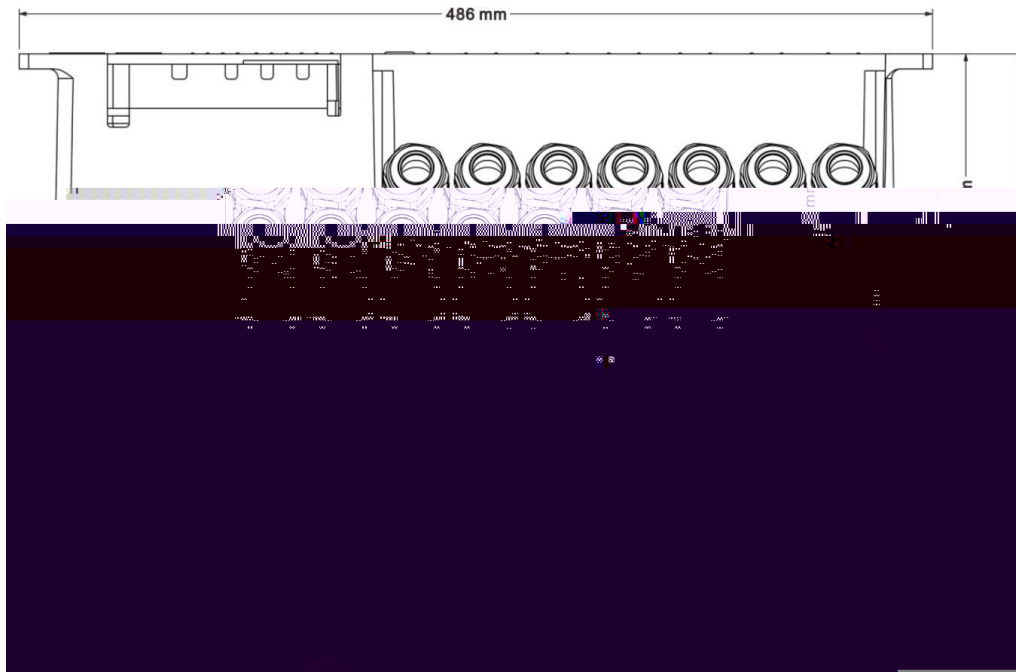
3-1

449mm/215.5mm/283mm



3-1





3-2

						1 RJ45	
2 RJ45	FA	3 RJ45					RJ45
RJ45		4 DIP		12	3.81		

3.2

3.2.1

3.2.1.1



3-3

1s

1	
2	FA
1	
2	

3

4

3.2.1.2



3-4

A

A

B

B

C

C

3.2.1.3



3-5

1

/

3.2.2

PWR

WWAN

4G

/

4Hz

4G

4G

/

2G

2G

3G

3G

2G 3G

4G

2G

3G

3.2.3

PWR

T/R

NET

/

4Hz

/

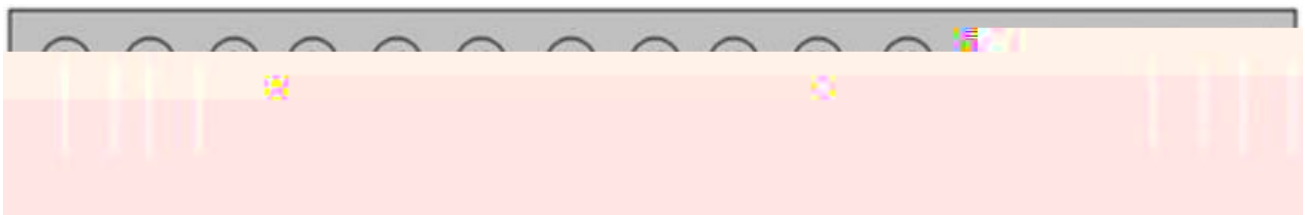
/

3.3

2×15

3-6

3-1



3-6

3-1

1	GND		
2	GND		
3	VCC4V		4V
4	VCC4V		
5	DCE_TXD		
6	DCE_RXD		
7	DCE_RTS		
8	DCE_CTS		
9	CARD_IN		
10	USB+	/	
11	USB-	/	
12	PCTRL		
13	GND		
14	/RST		

15	ON/OFF		
16	STATE0		
17	STATE1		
18	STATE2		
19	SDA	/	
20	SCL		
21	/LED_ACT		
22	/LED_LINK		
23	TD2+		
24	TD2-		
25	RD2+		
26	RD2-		
27	VCC3V3		3.3V
28	VCC3V3		
29	GND		
30	GND		

3.4

2x11

3-7

3-2



3-7

3-2

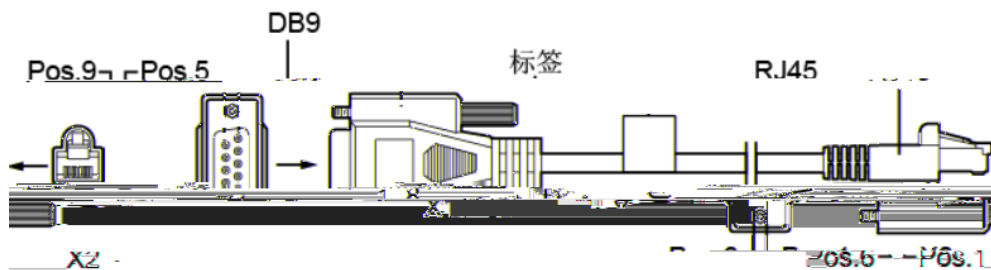
1	SDA	/	12C SDA /
2	SCL		12C SCL
3	GND		

12	DCE_CTS		
13	DCE_TXD		
14	DCE_RXD		
15	/RST		
16	CARD_IN		
17	TD+		
18	TD-		
19	RD+		
20	RD-		
21	GND		
22	GND		

3.5

RS-232

3-8



3-8

3-3

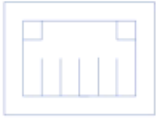
3-3

X1(RJ45)			X2(DB9)
3	TXD	→	2
4	GND	—	5
5	GND	—	5
6	RXD	←	3
1	TXD		RXD
2	RXD		TXD


3.6

3-4

1	P		RJ45
2	Q		
3	NC		
4	NC		

5	NC		
6	NC		
7	S		
8	COM		

3-5

1	2	3	4		
OFF	OFF	OFF	OFF		
ON	OFF	OFF	OFF	1	
OFF	ON	OFF	OFF	2	
ON	ON	OFF	OFF	3	
OFF	OFF	ON	OFF	4	
ON	OFF	ON	OFF	5	
OFF	ON	ON	OFF	6	

3.7

3-6

7	/	C +	21	BY	
8	/	C -	22	BY	
9	/	+	23	+	
10	/	-	24	-	
11	Ua	A /	25	BY	
12	Ub	B /	26	BY	
13	BY		27		
14	BY				

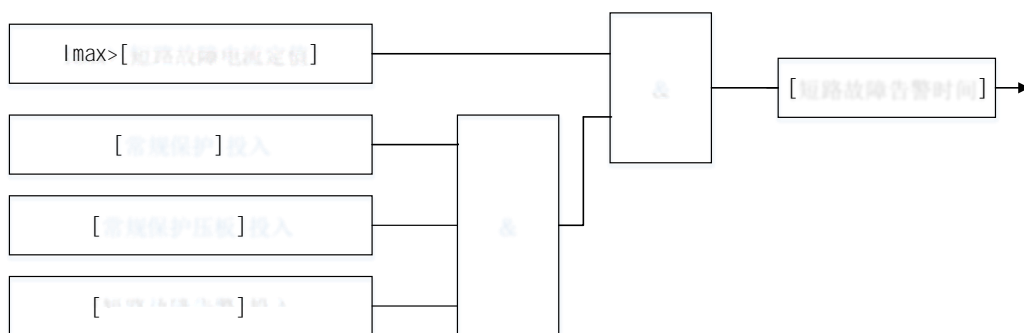
4

4.1

“ ” “ ” “ ” “ ”

4.1.1

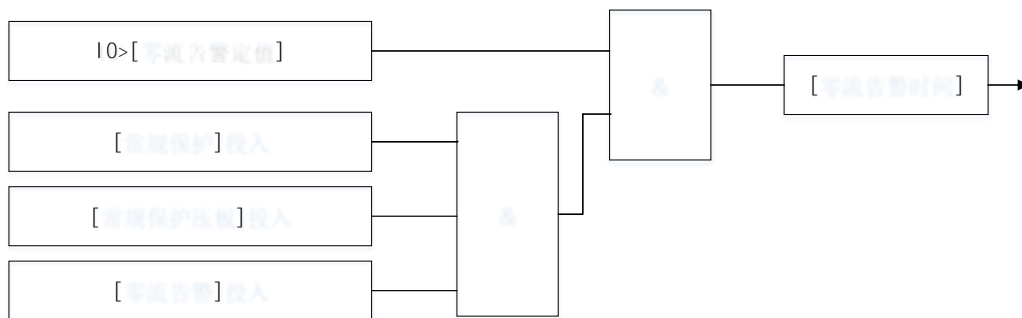
[] I_{max} [] []



4-1

4.1.2

[] [] []

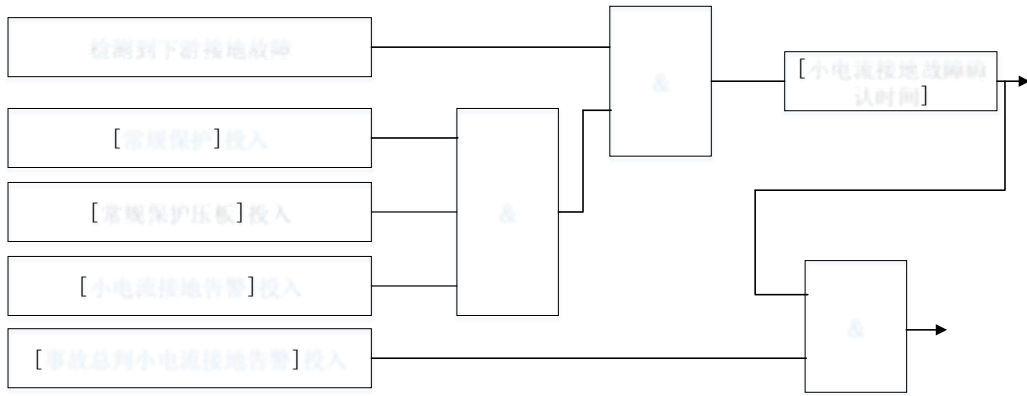


4-2

4.1.3

[] []

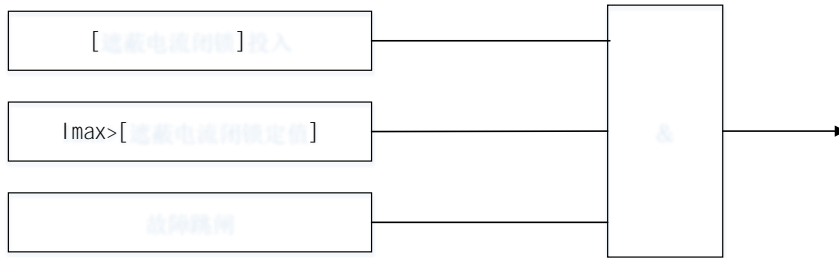
[] 0 1



4-3

4.1.4

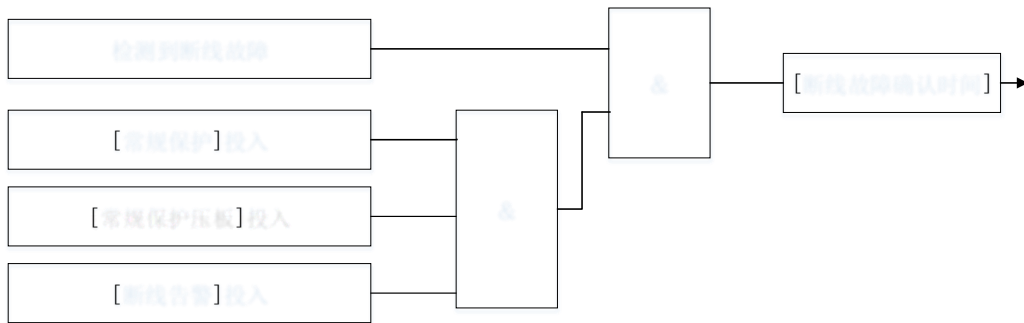
[] I_{max} []



4-4

4.1.5

[]



4-5

4.1.6

4-1

1		0 1	

2		0.04In 10In	A
3		0 30	s
4		0 1	
5		0.02In 10In	A
6		0 30	s
7		0 1	
8		0.0In 10In	A
9		0 1	
10		0 30	s
11		0 1	
12		0 1	
13		0 30	s

4.2

" " " "

4.2.1 I

$$Id2 > Kxb \cdot Id$$

Id2

Id

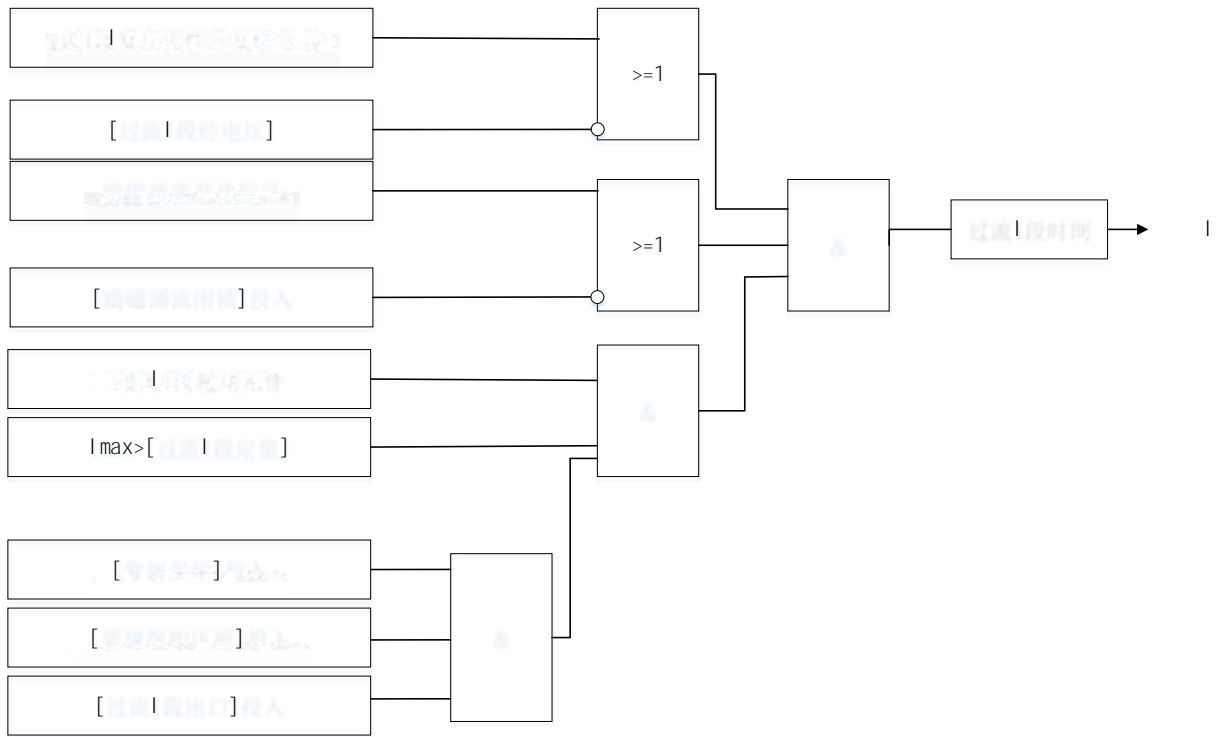
Kxb

[I]

I

Imax [I]

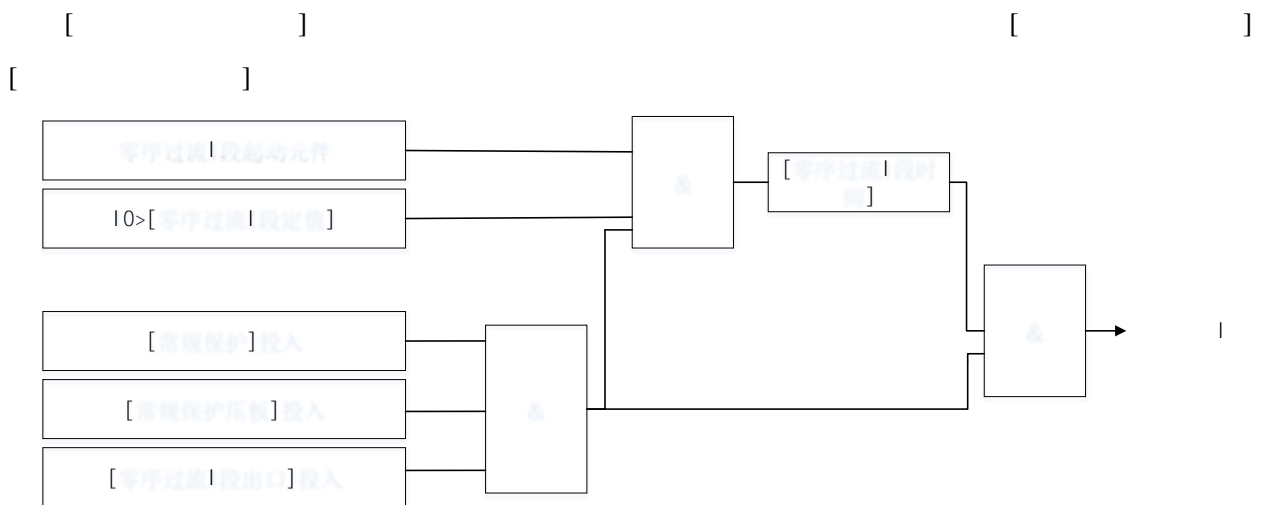
[I]



4-6 I

4.2.2

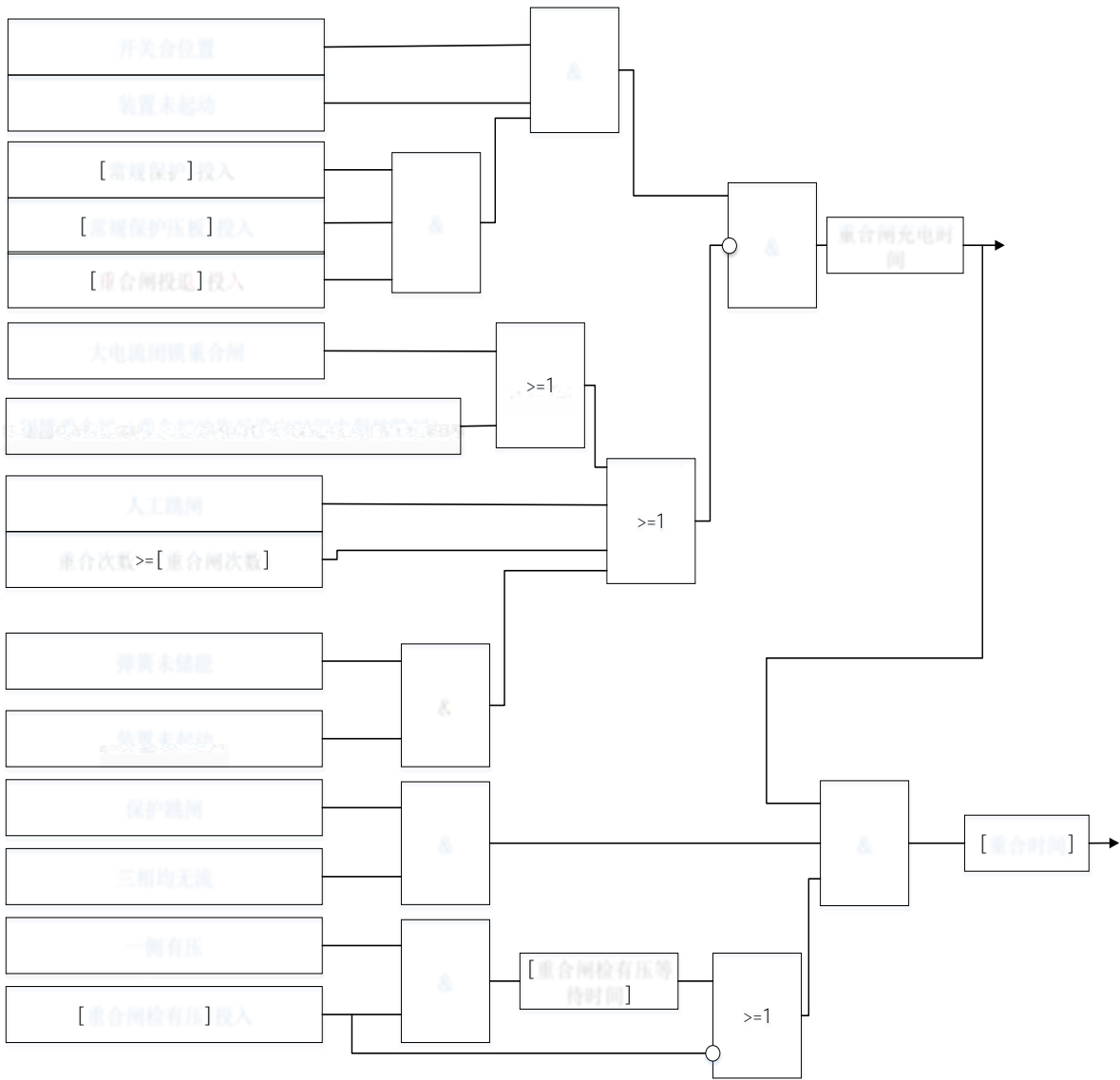
I



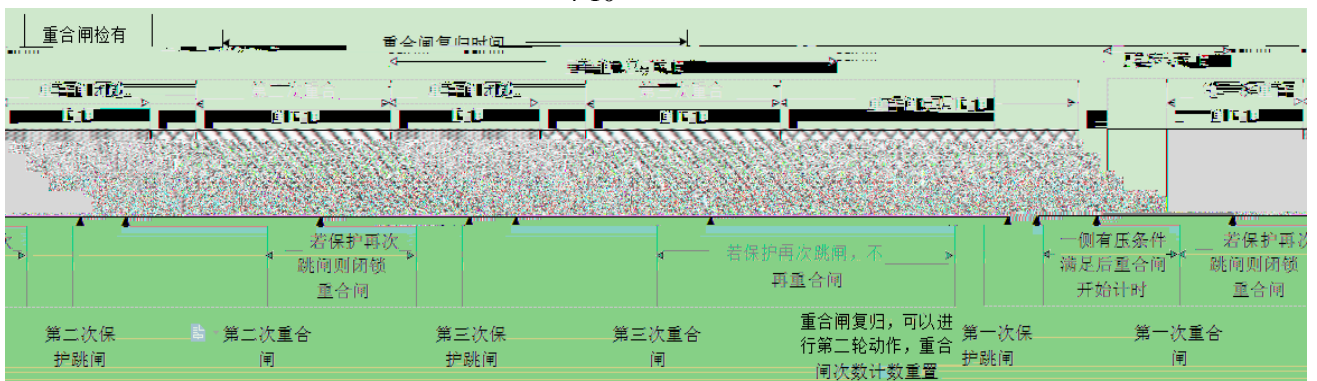
4-7

4.2.3

[] []



4-10



4-11

[]

3

[]

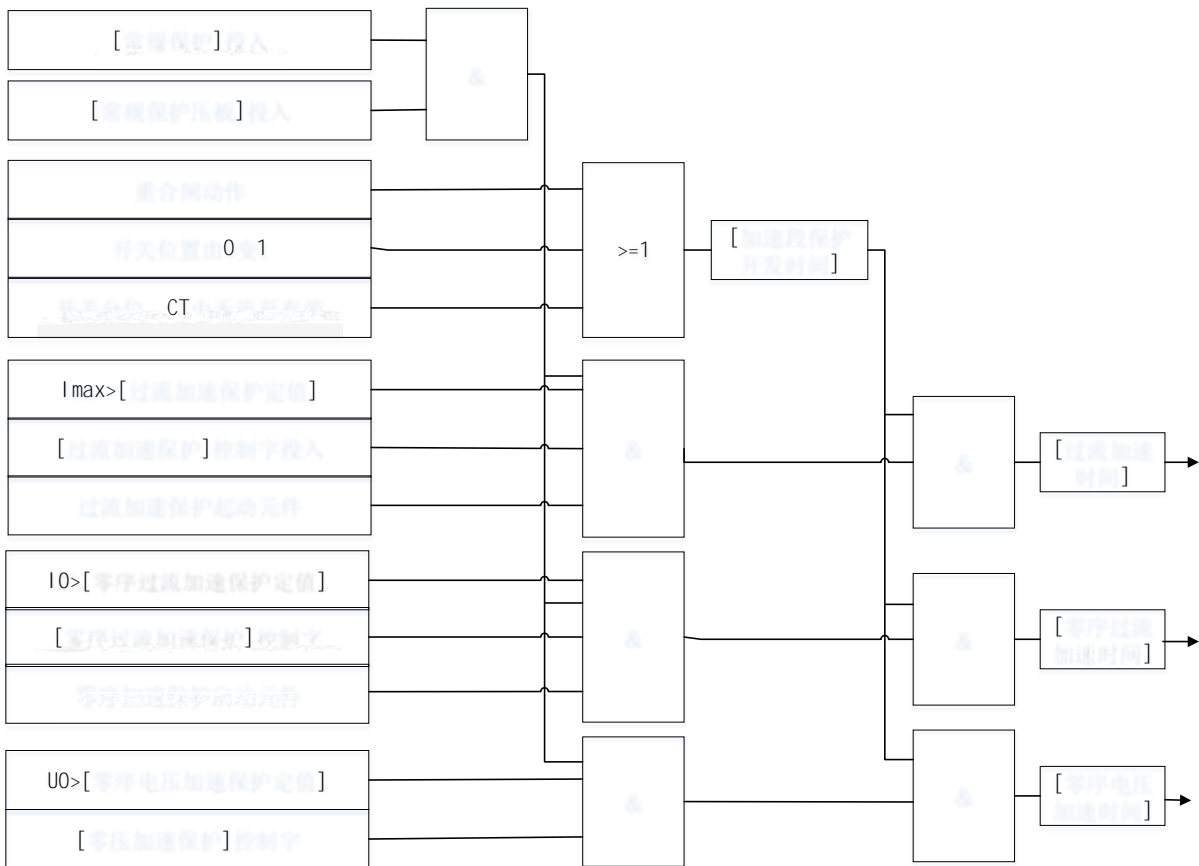
[]

[] []

[] []

4.2.6

[]



4-12

4.2.7

4-2

1		0 1	
2		0.04In 10In	A

3		0 30	s
4		0.1 0.35	
5		0 1	
6		0 1	
7		0.04In 10In	A
8		0 30	s
9		0 1	
10		0.04In 10In	A
11		0 30	s
12		0 1	
13		0.04In 10In	A
14		0 30	s
15		0 1	
16		0.04In 10In	A
17		0 30	s
18		0 1	
19		0 30	s
20		0 1	
21		0 30	s
22		0 1	
23		1 2 3	
24		0 120	s
25		0 120	s
26		0 120	s
27		0 360	s
28		0 60	s
29		0 1	
30		0.04In 10In	A
31		0 1	
32		0 60	s
33		0 1	
34		0.04In 10In	A
35		0 1	
36		0 60	s
37		0.04In 10In	A
38		0 1	
39		0.04In 10In	A
40		0 1	
41		0 100	V

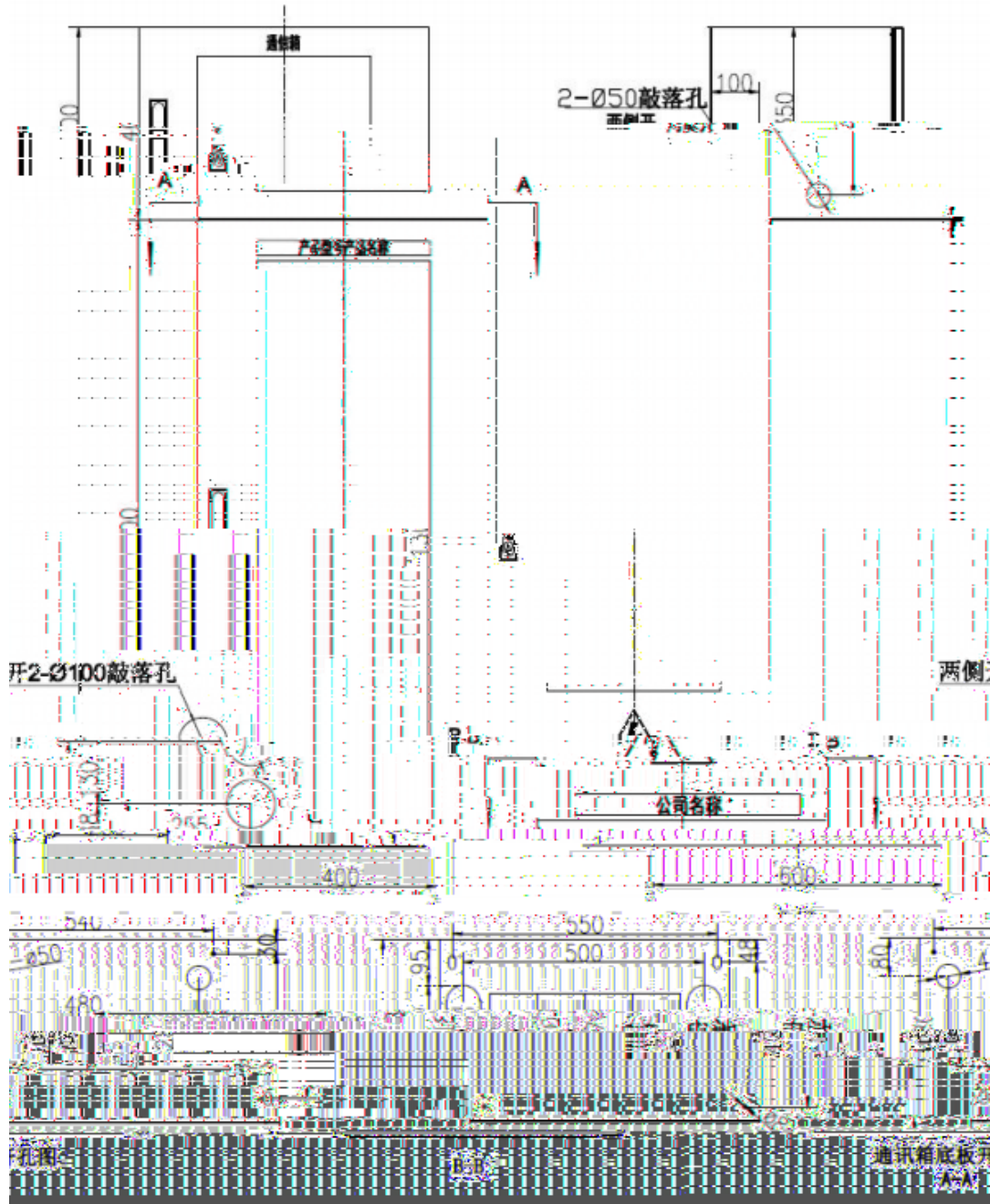
5

5.1

1700mm*600mm*400mm

1300mm*600mm*400mm

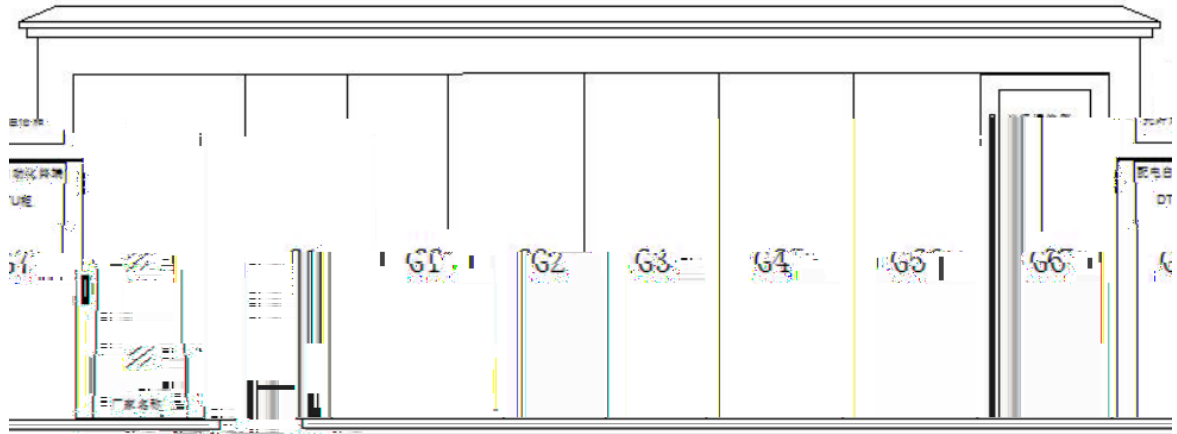
5-1



5-1

5.2

5-2



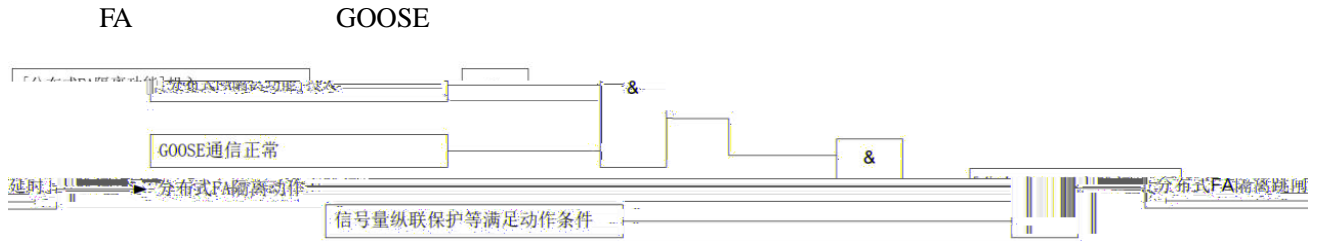
5-2

1

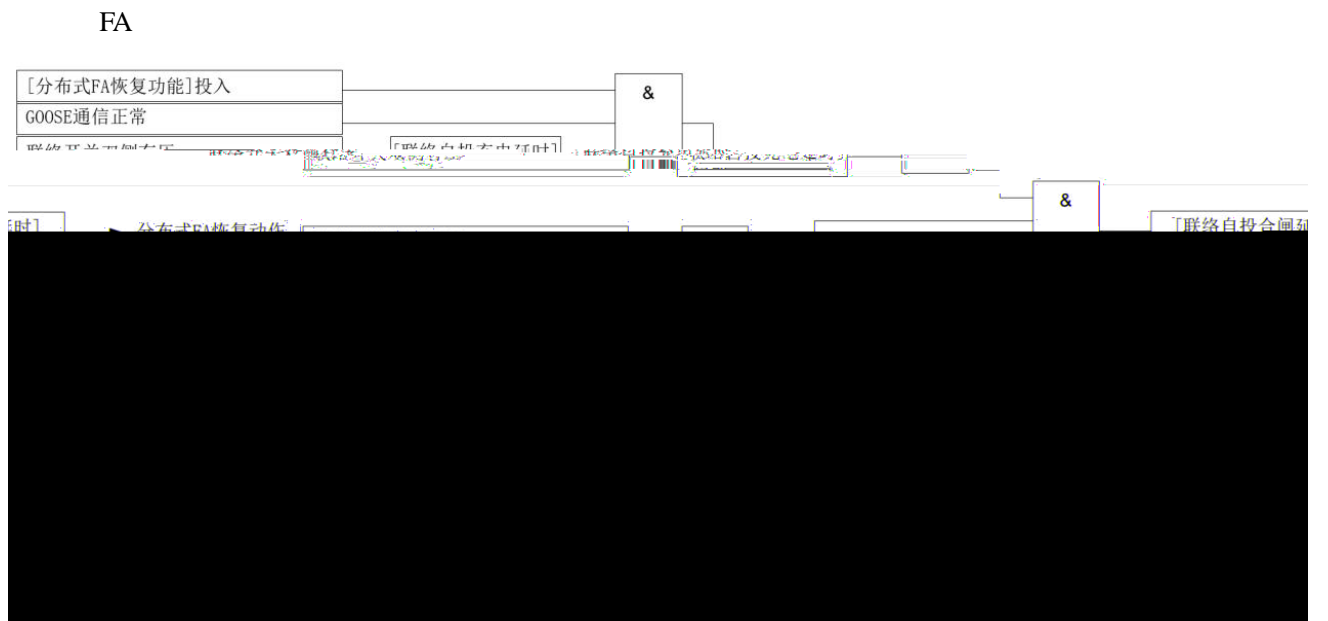
	FA	GOOSE							
			N	N					
1.1									
a)									
b)									
c)									
d)									
e)									
f)									
g)									
h)									
i)									
j)							FA	FA	FA
k)	FA							FA	

2

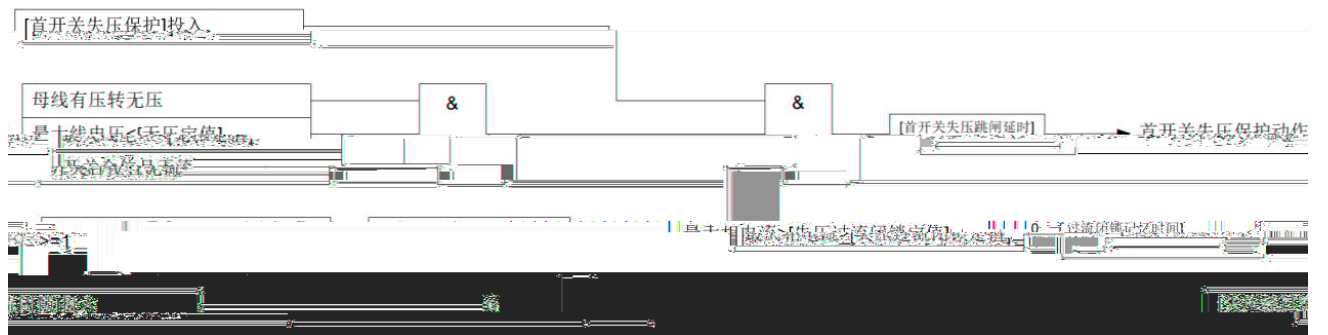
a) FA



b) FA



c)



d)

