HF680NLC

1.04

Wuhan Guide Technology Co.,Ltd.

HF680NLC

HF680NLC

1. 1
1.1 XXXX

4.15

8. 161
8.1 XXXX

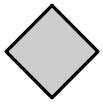
1.

1.1

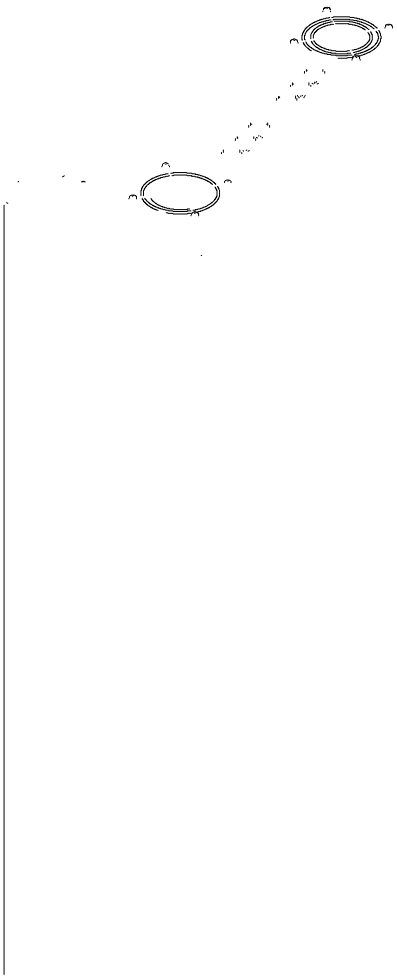








U V W



1.2

(1)

(2)

(3)

(4)

LVD	2014/35/EU	EN 61800-5-1
EM.		

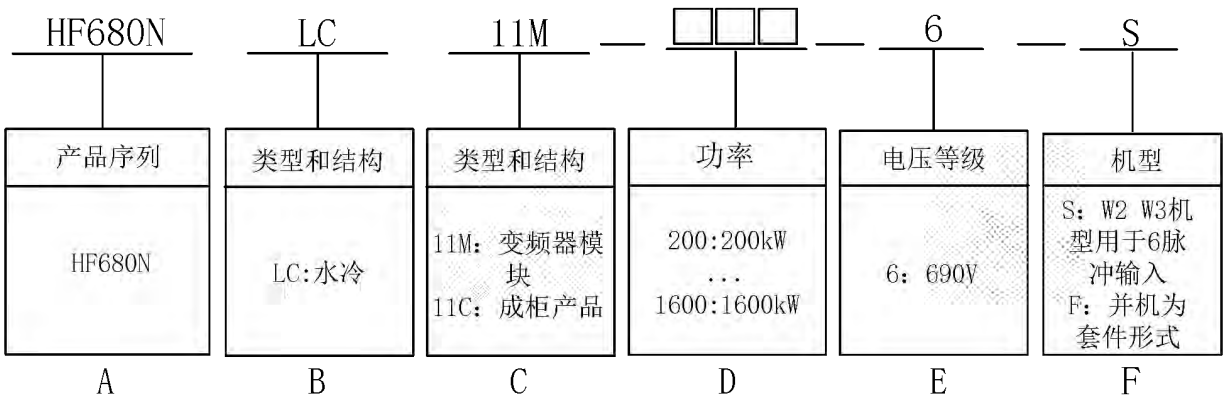
2.

2.1

a.

1.
2.
3.
4.

2.2



2-1

A	HF680N
B	LC
C	11M 11C
D	200 200kW 1600 1600kW
E	6 960V

F	S:W2 W3 6 F:

2-2

HF680NLC11M-250-6 HF680NLC 250kW

690V

AC

3PH

660V-690V 50/60Hz B

0-690V 0-300Hz B

2.3

2-3 HF680NLC

	[A]	[kW]	[A]	[kW]		
HF680NLC11M-200-6	220	200	180	160	W1	6
HF680NLC11M-250-6	290	250	220	200		
HF680NLC11M-280-6	320	280	290	250		

HF680NLC11M-315-6	355	315	320	280		
HF680NLC11M-355-6	390	355	355	315		
HF680NLC11M-400-6	420	400	390	355		
HF680NLC11M-450-6	472	450	420	400		
HF680NLC11M-500-6-S	545	500	472	450		
HF680NLC11M-560-6-S	610	560	545	500		
HF680NLC11M-630-6-S	675	630	610	560	W2	6
HF680NLC11M-710-6-S	760	710	675	630		
HF680NLC11M-800-6-S	810	800	760	710		
HF680NLC11M-500-6	545	500	472	450		
HF680NLC11M-560-6	610	560	545	500		
HF680NLC11M-630-6	675	630	610	560	W2	12
HF680NLC11M-710-6	760	710	675	630		
HF680NLC11M-800-6	810	800	760	710		
HF680NLC11M-900-6-S	910	900	810	800		
					W3	6

HF680NLC11C-1600-6	1620	1600	1520	1400		

1 150% 5 1
HF680NLC11M-1200-6 HF680NLC11M-1200-6-S 110%
5 1

2 180% 5 5
HF680NLC11M-1200-6 HF680NLC11M-1200-6-S 160%
5 5

3 HF680NLC11M-1200-6 HF680NLC11M-1200-6-S 1.5kHz

4 HF680NLC11M-500-6 HF680NLC11M-1200-6 2
2 12

5 HF680NLC11M-500-6-S HF680NLC11M-1200-6-S 2
1 6

6 HF680NLC11C-1400-6 HF680NLC11C-1600-6 2
2 12

2.4

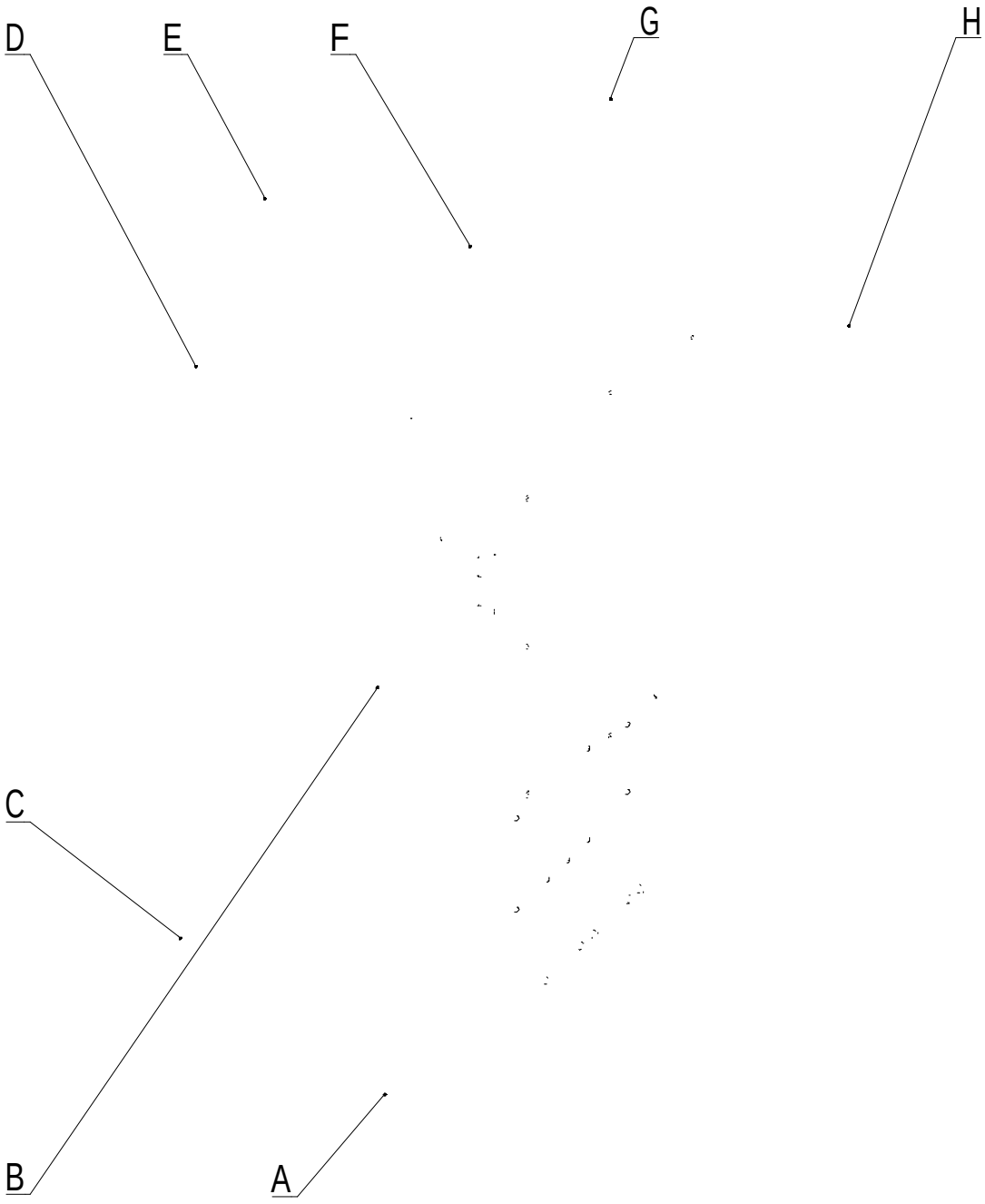
HF680NLC

HF680NLC11M-200-6 HF680NLC11M-450-6

A



HF680NLC11M-900-6 HF680NLC11M-1200-6



A- B- C- D-
E- F- 1 G- 2 H-
24 ° DIN2353-L
/ 18mm M26x1.5

		(mm)					(mm)			8.8	kg
		H1	H2	W1	D1	D2	A	B			
W1	200	858	820	240	536	520	800	150	Φ13	M12	95
	250										
	280										
	315										
	355										
	400										
	450										
W2	500kW	1058	1020	240	536	520	1000	150	Φ13	M12	132
	560kW										
	630kW										
	710kW										
	800kW										
W3	900kW	1228	1190	260	626	610	1170	150	Φ13	M12	198
	1000kW										
	1120kW										
	1200kW										

2.6

		660V 690V
		50/60Hz
		-15% +10%
		0
		0 300Hz
		1kHz 10kHz
		0.01Hz x0.1%
		(VC) (SVC) V/F
	V/F	
		PG PG

300Hz

0Hz/200%(VC SVC) 0.8Hz/150%(V/F)

<5ms(SVC) <5ms(VC)

±5%(SVC) ±3%(VC)

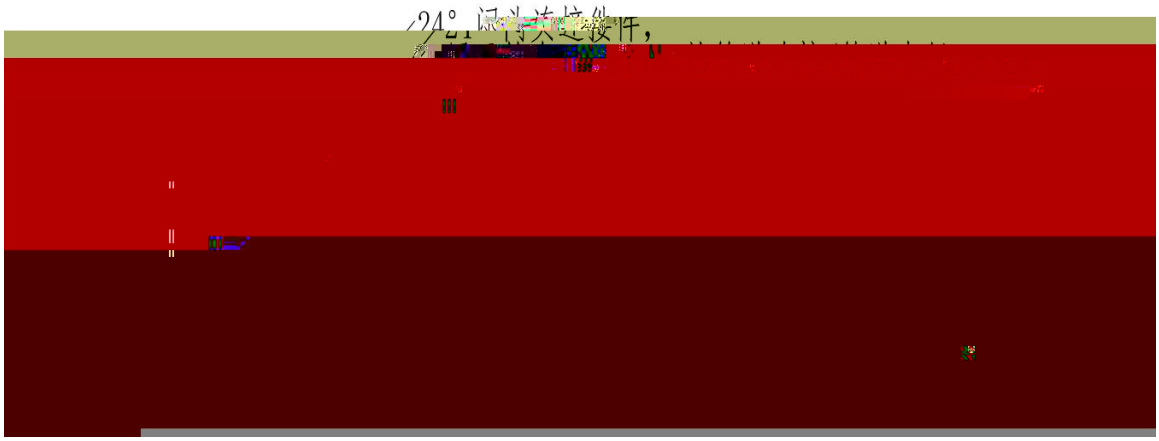
1:500(SVC) 1:1000(VC)

±0.02% (VC) ±0.2% (SVC) ±0.5% (V/F)

5 150% 1 180%

5

PID L



2.7

		c/a/T (kW)			c/a/T (kW)
HF680NLC11M-200-6		4/0.2/4.2	HF680NLC11M-560-6 HF680NLC11M-560-6-S		10.6 /0.6 /11.2
HF680NLC11M-250-6		5/0.3/5.3	HF680NLC11M-630-6 HF680NLC11M-630-6-S	W2	12 /0.6 /12.6
HF680NLC11M-280-6		5.6/0.3/ 5.9	HF680NLC11M-710-6 HF680NLC11M-710-6-S		13.5 /0.7 /14.2
HF680NLC11M-315-6	W1	6.3/0.3 /6.6	HF680NLC11M-800-6 HF680NLC11M-800-6-S		15.2 /0.8 /16
HF680NLC11M-355-6		7.1/0.4 /7.5	HF680NLC11M-900-6 HF680NLC11M-900-6-S	W3	17.1 /0.9 /18
HF680NLC11M-400-6		8/0.4 /8.4	HF680NLC11M-1000-6 HF680NLC11M-1000-6-S		19/1/20
HF680NLC11M-450-6		9/0.5 /9.5	HF680NLC11M-1120-6 HF680NLC11M-1120-6-S		21.3 /1.1 /22.4
HF680NLC11M-500-6 HF680NLC11M-500-6-S	W2	9.5/0.5 /10	HF680NLC11M-1200-6 HF680NLC11M-1200-6-S		22.8 /1.2 /24

c= a= T=

2.8

(1) 200%

(2) 50% HF680NLC

(3) HF680NLC

2.9

z

z

z

z PID

z /

z /

z

z

z

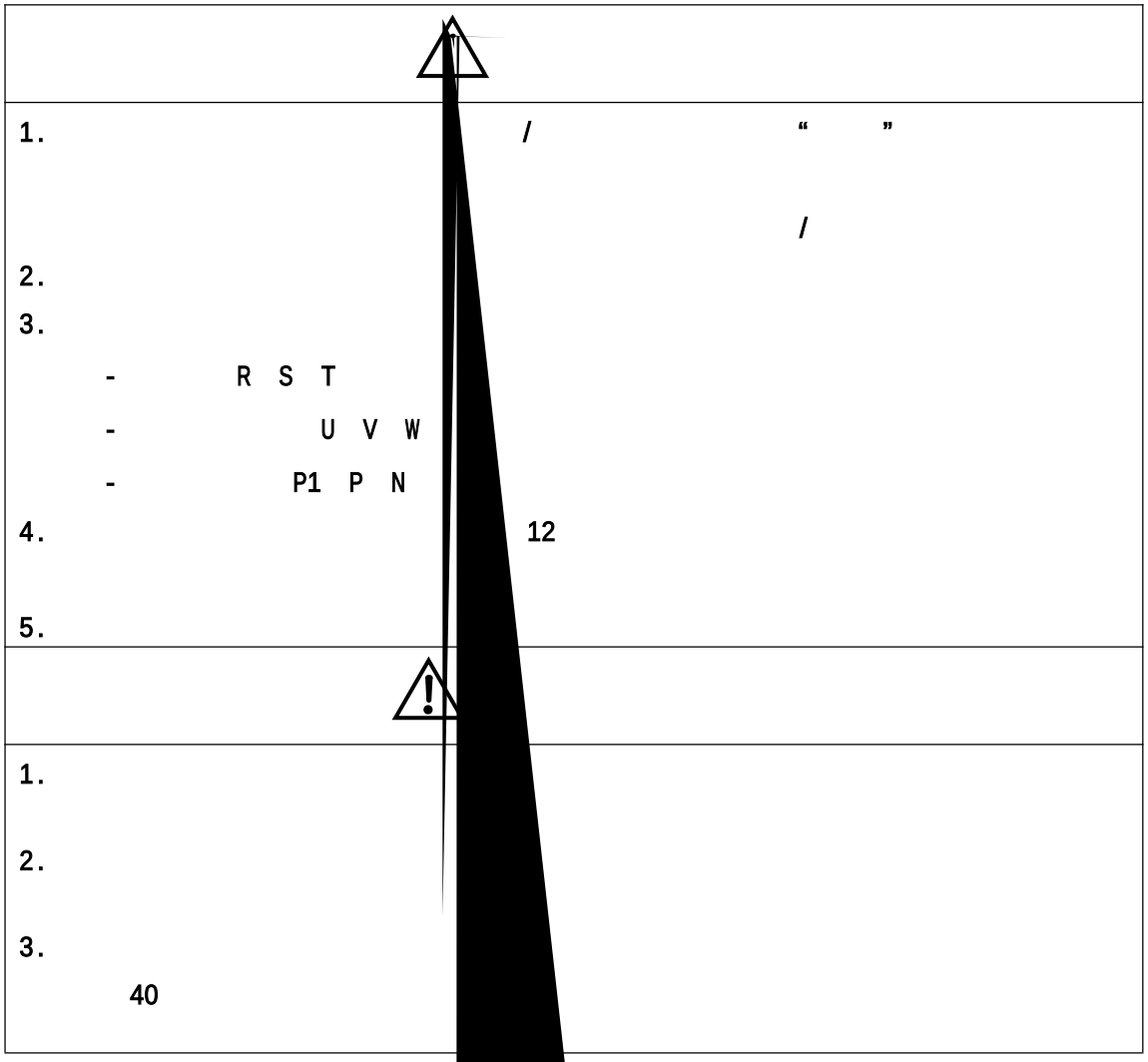
z

z / ®

2.10

DP	GDHF-ADPX1	GDHF-ADPX1 DP HF680NLC11M	Profibus
PG	GDHF-APGX1	GDHF-APGX1 PG HF680NLC11M	
PN	GDHF-APNX1	GDHF-APNX1 HF680NLC11M	Profinet
STO	GDHF630N4STO01A	GDHF630N4STO01A	STO HF680NLC11M
	GDHF-AKZY1	GDHF-AKZY1	HF680NLC11M
2	GDHF-KL2	GDHF-KL2 2	HF680NLC11M 2
4	GDHF-KL4	GDHF-KL4 4	HF680NLC11M

3.



3.1

z

z -20 +60

z 0% 95%

z

z

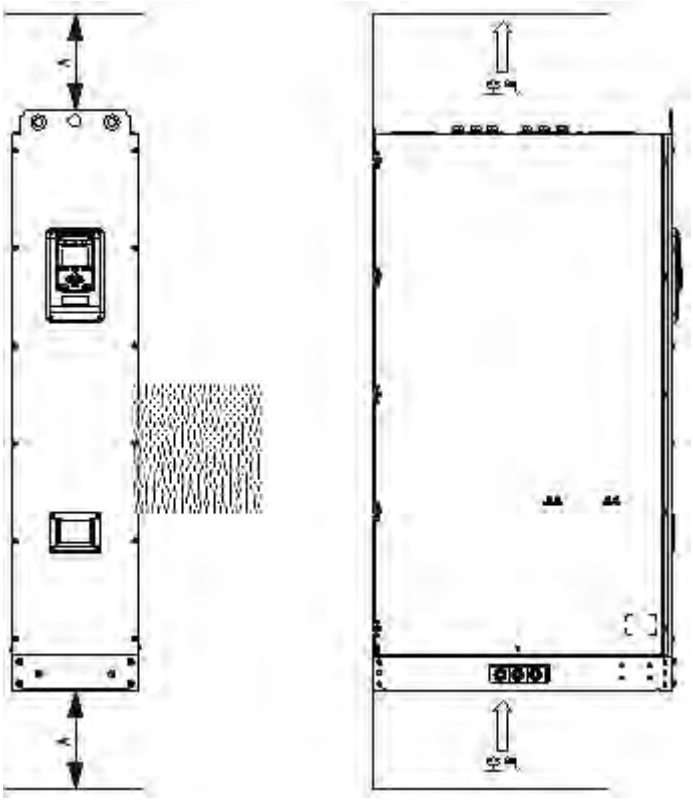
z

1 5

3.2

- z
- z -10 +50 +50 +60 1
  2%
- z 95%RH
- z
- z
- z
- z
- z
- z 1000 1000 100 1%
  3000

3.3



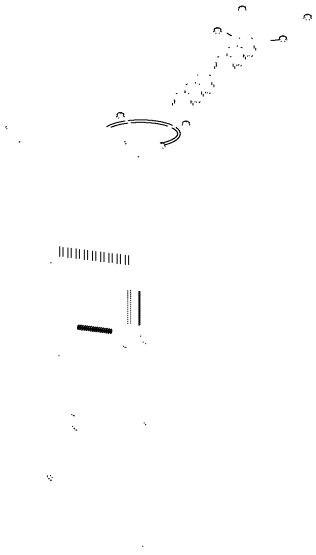
3.4

1	1	M4
2	2	

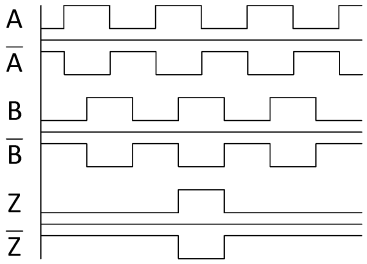


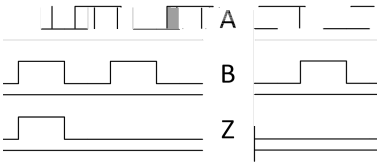
3-1

3.5 DP



1 2





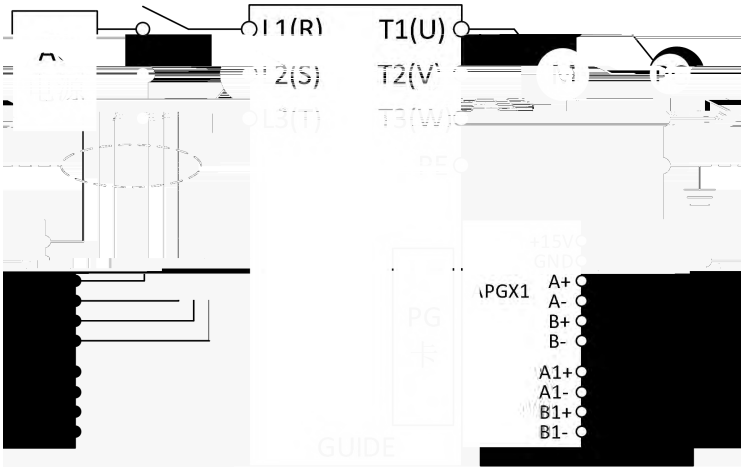
A

B

Z N 0

GDHF-APGX1

3.7.2



PG

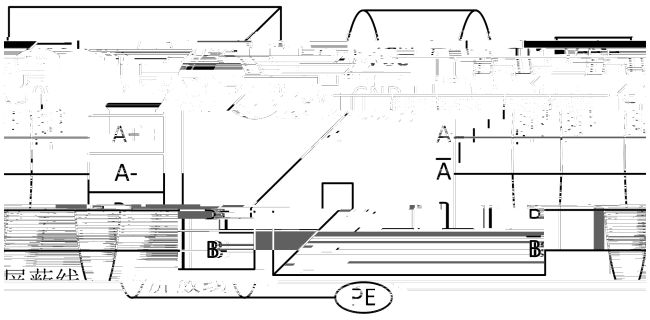
PG

PE

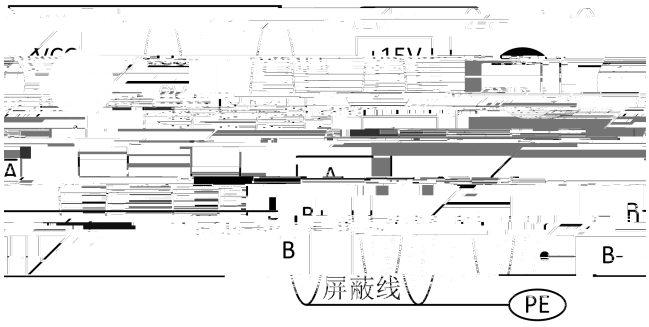
3.7.3

PG

3.7.3.1

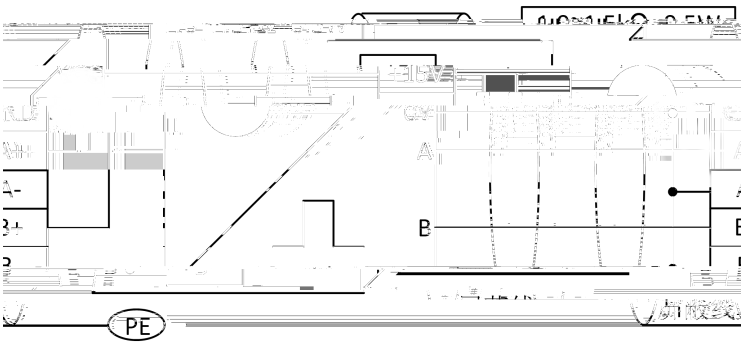


HLE45-1024L-6F



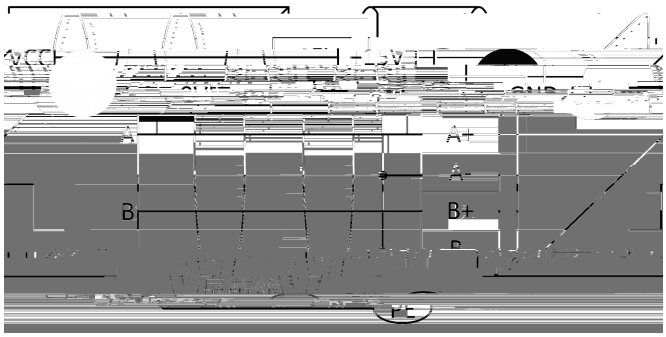
	HLE45-600L-3F.AC
	RVI78N-10CALA31N-1024
	EC120P45-P6PR-1024

3.7.3.2



	HLE45-1024L-30C.AC
	EB38A6-C4PR-1024

3.7.3.3



	HLE45-600L-3R.AC
	EB50A8-N4PR-1024

3.7.3.4

4.

4.1

1

2 12

3 U V W

4

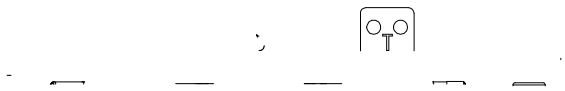
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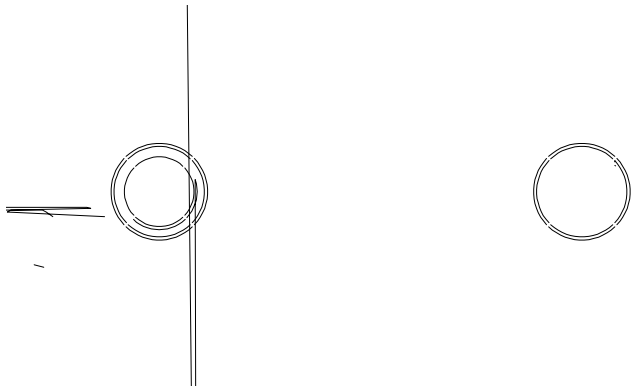
6 6

14

15 30 m

4.2

W1	
	
W2	
W3	

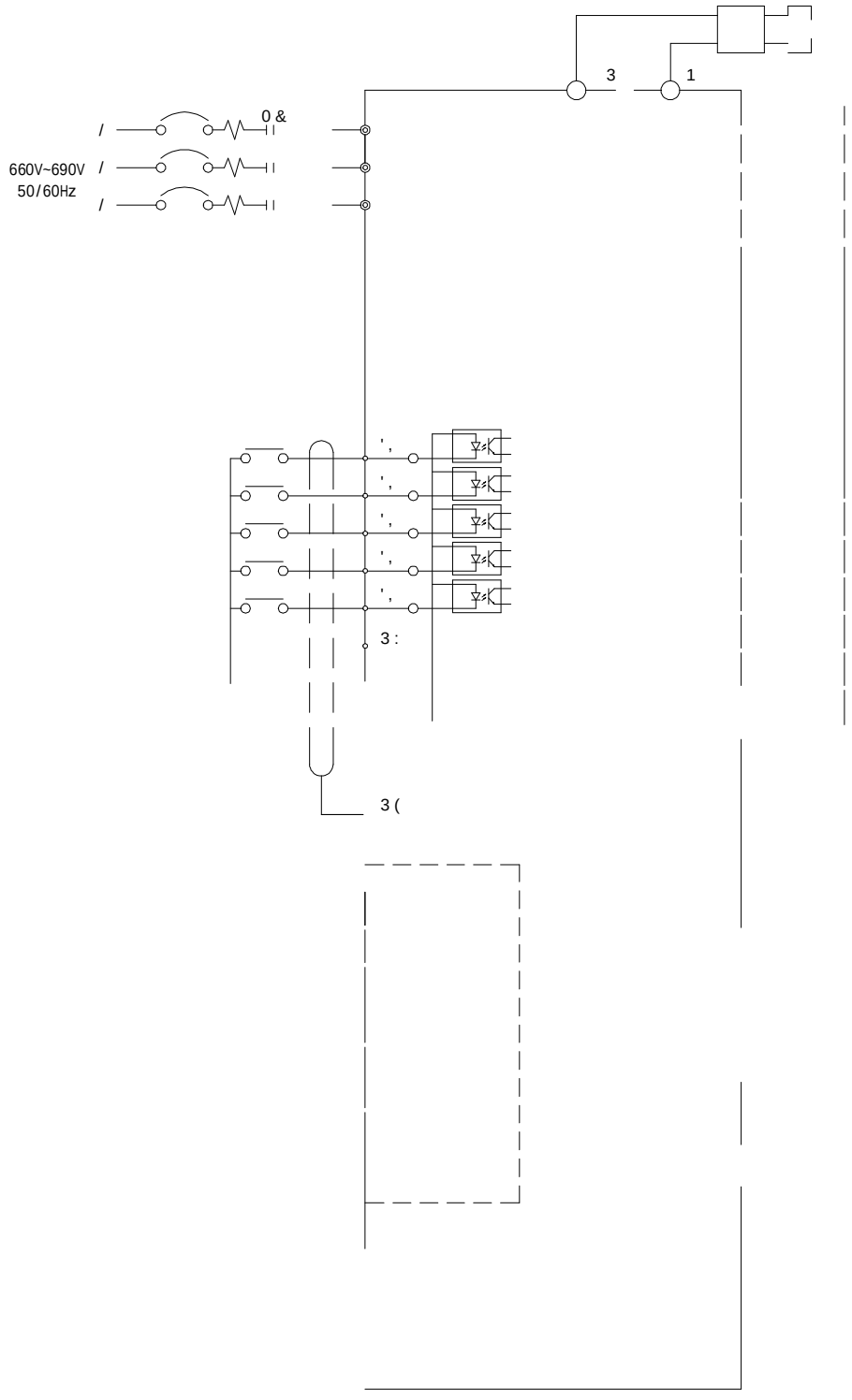
P +	
N -	
R S T	
U V W	

1

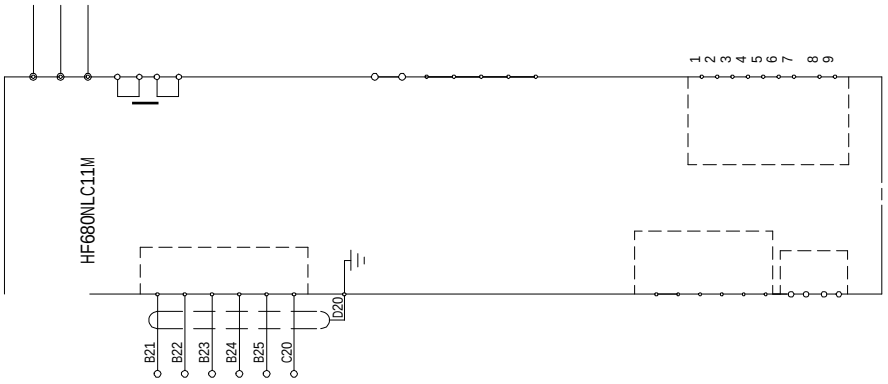
6	AI2-	2
7	AO1	1 0/4 20mA J9 I a 0 10V J9 V b
8	COM	1
9	AO2	2 0/4 20mA J10 I a 0 10V J10 V b
10	COM	2
11	DI1	1
12	DI2	2
13	DI3	3
14	DI4	4
15	COM	
16	DI5	5
17	DI6	6
18	DI7	7
19	DI8	8
20	COM	
21	+24V	24V
22	DO1	1 DC24V 50mA
23	+24V	24V
24	DO2	2 DC24V 50mA
25	+24V	24V
26	DO3	3 DC24V 50mA

4.4

6



4.5



4.6

W2
6



12



4.7

	A	/ mm² CEFR 40%	A (AC-3)
HF680NLC11M-200-6	264	95	240
HF680NLC11M-250-6	348	120	320
HF680NLC11M-280-6	384	150	350
HF680NLC11M-315-6	426	2*70	390
HF680NLC11M-355-6	468	2*95	430
HF680NLC11M-400-6	504	2*95	460
HF680NLC11M-450-6	566	2*95	520
HF680NLC11M-500-6	654	2*120	600
HF680NLC11M-560-6	732	2*150	670
HF680NLC11M-630-6	810	4*70	750
HF680NLC11M-710-6	912	4*70	840
HF680NLC11M-800-6	972	4*95	890
HF680NLC11M-900-6	1092	4*95	1000
HF680NLC11M-1000-6	1230	4*120	1130
HF680NLC11M-1120-6	1356	4*150	1250
HF680NLC11M-1200-6	1536	4*150	1410
HF680NLC11M-500-6-S	2*330	2*120	2*320
HF680NLC11M-560-6-S	2*370	2*150	2*350
HF680NLC11M-630-6-S	2*410	4*70	2*390

HF680NLC11M-710-6-S	2*460	4*70	2*430
HF680NLC11M-800-6-S	2*590	4*95	2*460
HF680NLC11M-900-6-S	2*550	4*95	2*520
HF680NLC11M-1000-6-S	2*620	4*120	2*600
HF680NLC11M-1120-6-S	2*680	4*150	2*670
HF680NLC11M-1200-6-S	2*770	4*150	2*710
HF680NLC11C-1400-6	1824	8*70	1680
HF680NLC11C-1600-6	1944	8*95	1790

4.8

(KW)

(A) (uH)

HF680NLC11M-200-6

EMC الحماية Ê Â خم

EMC

EMC

هج

4

3 1

PLC

20cm

20cm

90

c

EMC

d

100m

e

4.9.1 TN TT IT

T

I

T

N

4.9.1 .1

380V~480V -15%~+10% 50/60Hz ±5%

OVCIII PD2

4.9.1 .2

3000m 1000m 1000m

100m 1% 1000m 3000m

4.9.1 .3 TN

PE

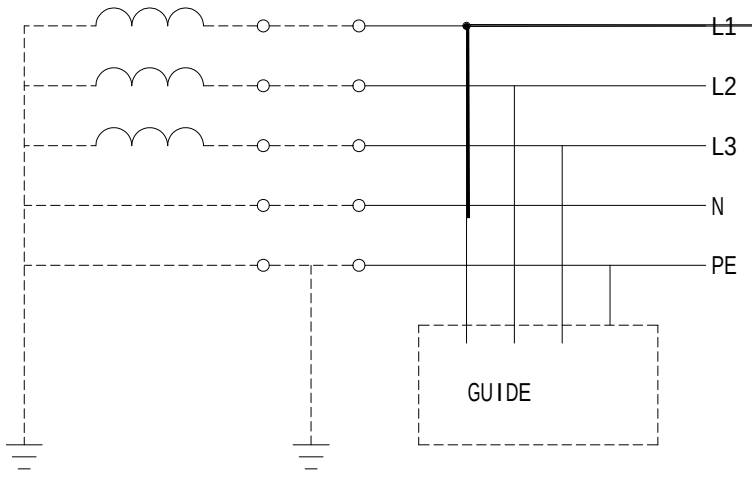
TN

TN N

PE TN-S TN-C TN-C-S

TN-S N PE

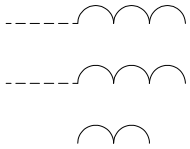
EMI TN-S



TN-C-S N PE PEN

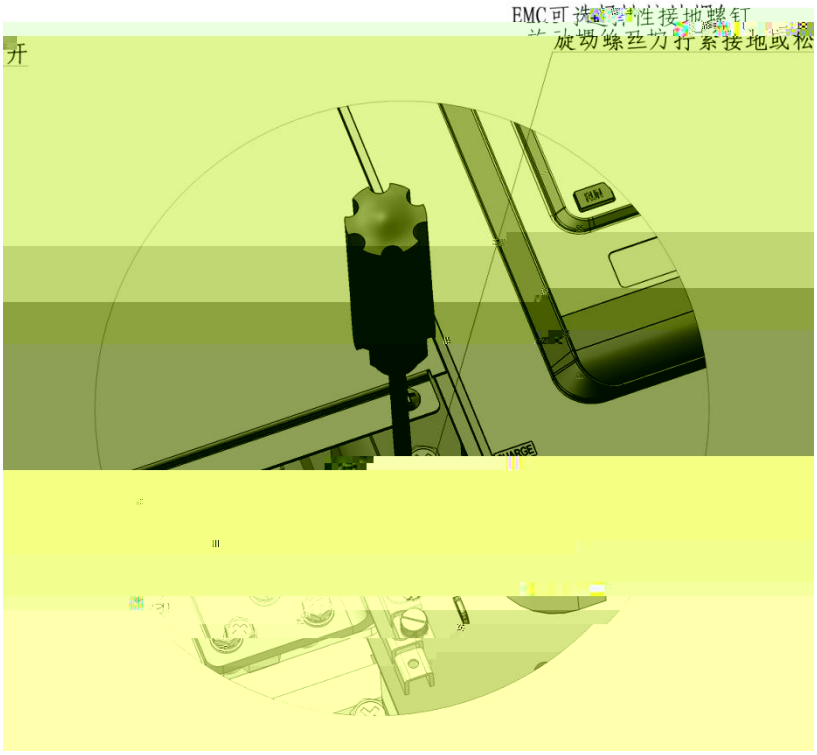
N PE

EMI TN-C-S









EMC/VDR

: EMC EMC

4.10

IEC

z EN60204-1 IEC60364-5-52

z PVC ;

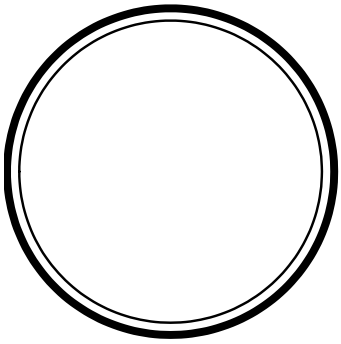
z 40 70 40 ° ;

z ;

EMC

PE PE

90%



C1 1000V

C2 1000 V

C3 1000 V

C4 1000 V 400 A

4.12

- C3

1 TN TT

2

3 10m

4 EMC

- C2

1

2 TN TT

3

4 10m

5 EMC

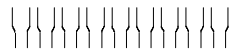
4.13

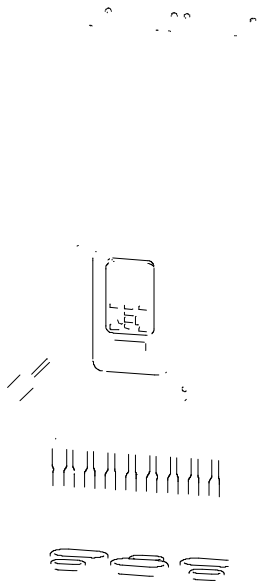
1

30cm

2 RST UVW

IO



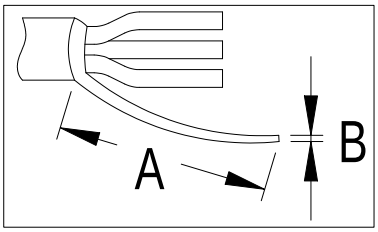


SVC 100m

2/3

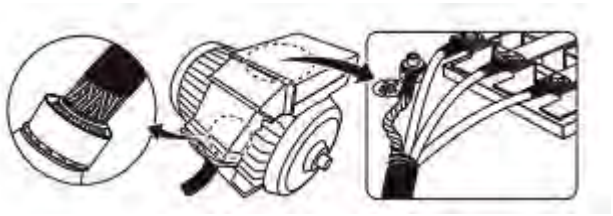
360 ° PE

1/5



4-45

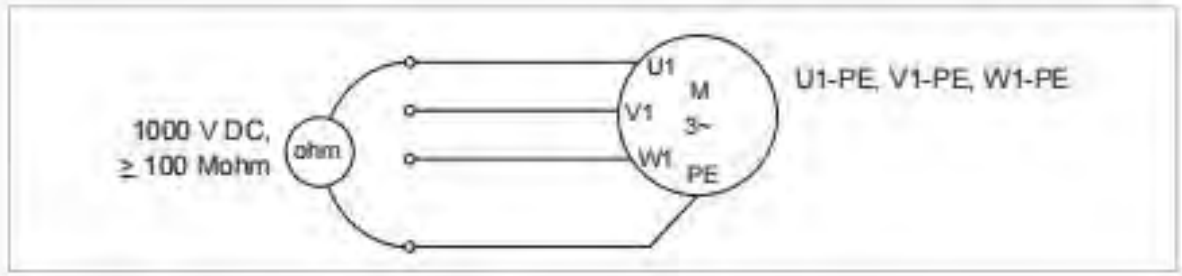
360



1 1.9

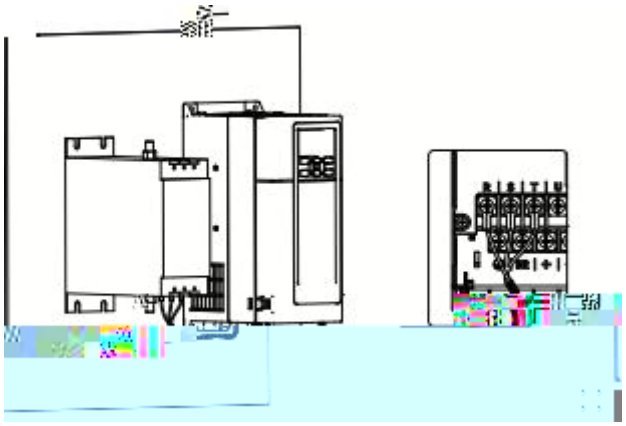
2

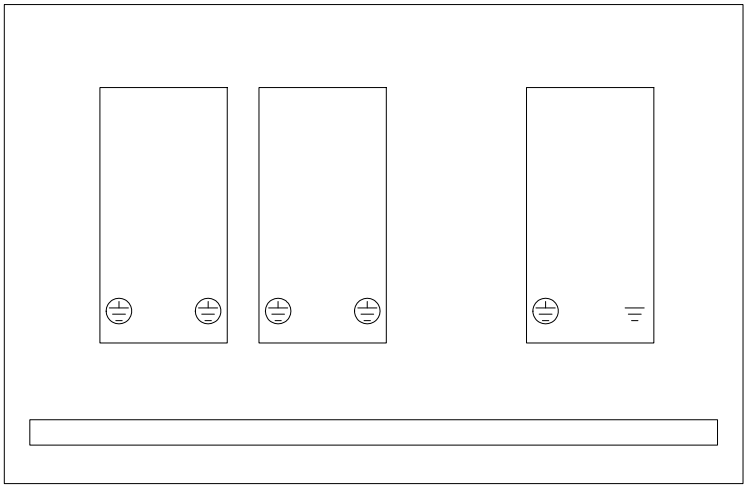
3 1000 V



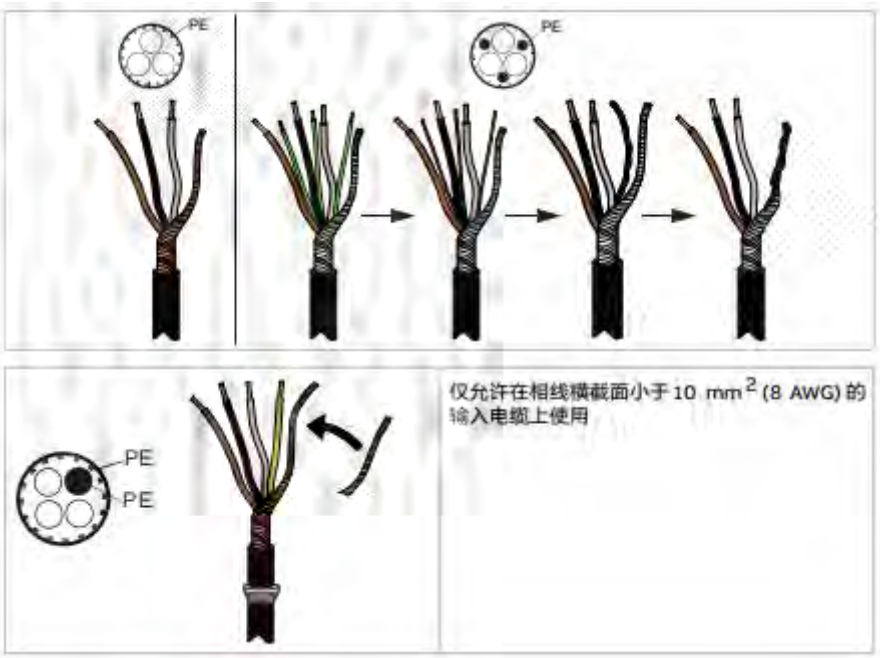
EMC

30cm





PE



10 mm 2 (8 AWG)

4.14 IO

4.14.1 DI

(NPN) (PNP)

(NPN) DI

(PNP) DI

(NPN)

24V PW +24V

24V PW +24V

24V PW DI

0V

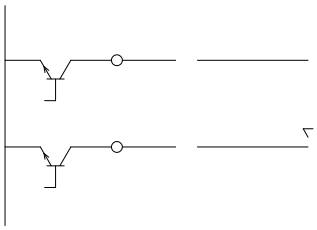
4.14.2

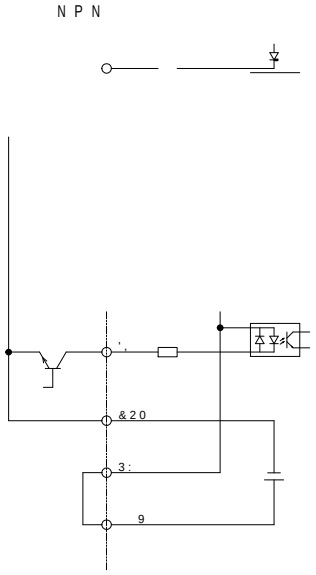
24V OP +24V

24V OP +24V

24V OP DI

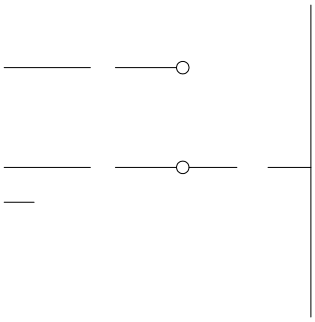
0V




N P N
&20
3:
9

DO DO

50mA

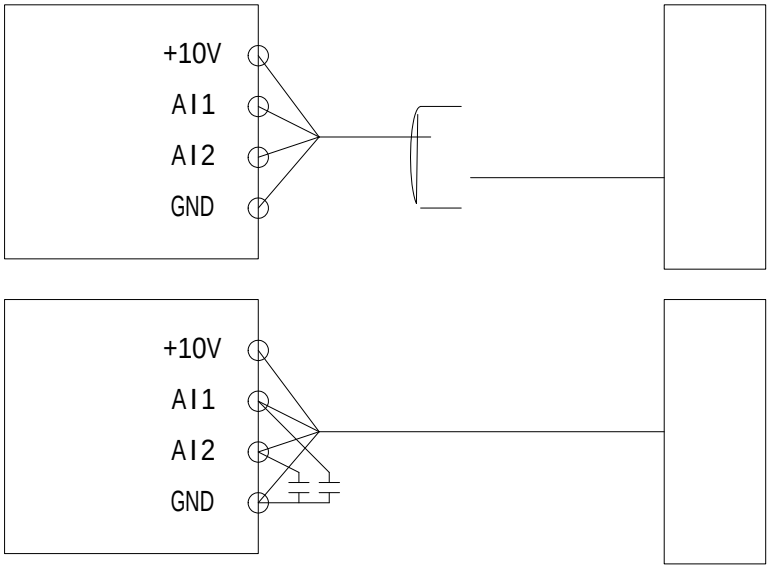


	VO	CO	VO AO 0~10V CO:AO 4~20mA
COM*			CO:AO 4~20mA

1mA 0.5V 20mA 10V

4.15.4

<20m


+10V
AI1
AI2
GND
+10V
AI1
AI2
GND

4.16.

- /
-
-
-

2.3

4.16.1

1

50cm

2

5mm~7mm

3

4

4.16.2

4.16.2.1

50cm

RST UVW IO

IO

IO AI AO DI DO

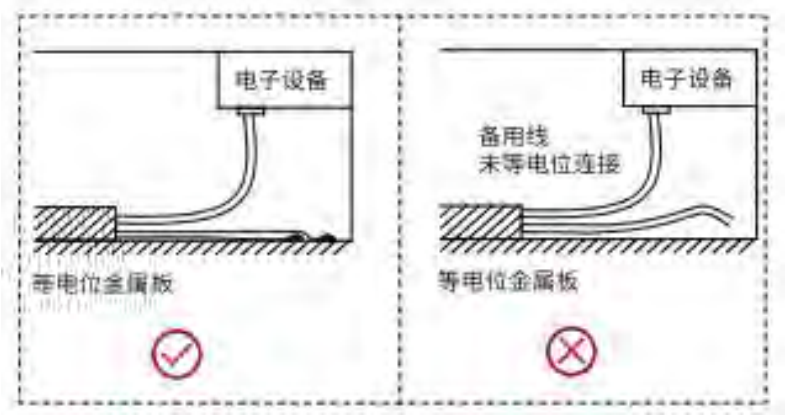
IO RST UVW

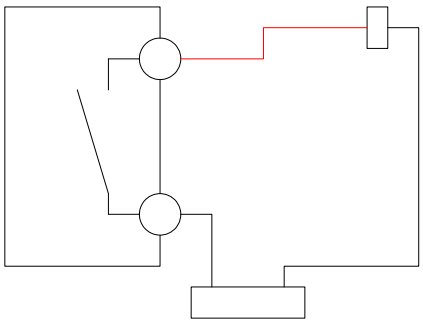
20cm IO

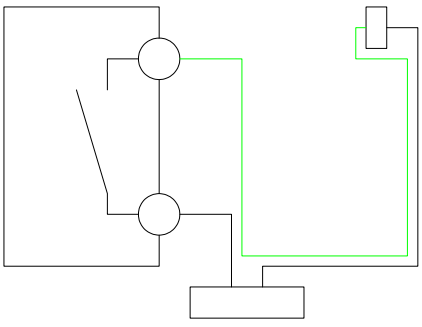
20cm

4.16.2.2

50cm


电子设备
等电位金属板
电子设备
备用线
未等电位连接
等电位金属板



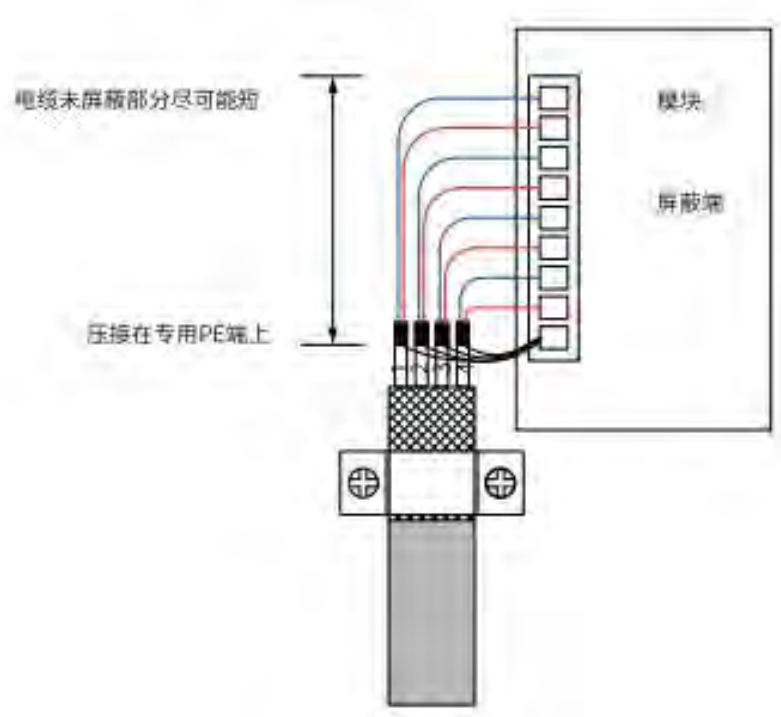


EMC

PE

PE

PE



5.

5.1

HF680NLC11M

F1 LOCAL/REMOTE F2 RUN STOP /RESET

5.2

▼

▲

ENTER /¤/¥

RUN STOP

LOCAL/REMOTE /

5.3

∃

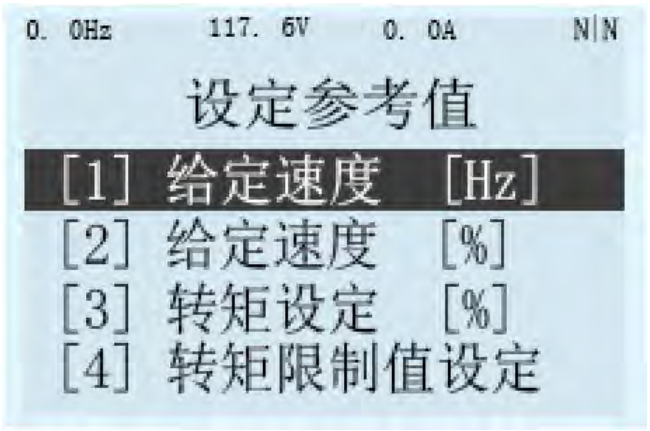
“ ” đ î “ لطم

8	OLD COM	

5.4.2

Parameter Setting

5.4.3



Reference Set

Reference Set

	Torque limiter	[%]	%
	1	[%]	1
	2	[%]	2

5.4.4

Function Setting

1	MotoTuning I	
2	MotoTuning II	
3	MotoTuning III	
4	DC-Link Tuning (AFE)	AFE
5	Shortcut Paras Setting	

6	Parameter Initialization
7	Delete Fault Records
8	System Restart
9	Backup Parameter
10	Recover Parameter
11	Compare Parameter
12	

▼ ▲ “Enter”

5.4.5

Fault Record

5.4.6

Access Permissions

/

V/F P16.11=0 V/F

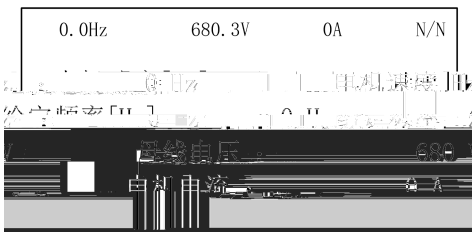
P16.11=2 P16.11=1

6.2

6.2.1

1
AC660~690V 50/60Hz
2 U,V,W
3
4 PG PG
5

6.2.2



≤

6.2.3

5.4 “ ”

6.2.4

7.7

P8.0		[0] [1] [2]DP [3]MODBUS [4]	1
P8.3		[0] [1]	1
P8.6		0 300s	0
P8.7			0
P8.10		[0]I/O [1] 1 [2] 2 [3] [4]DP [5]MODBUS [6]	3
P8.14		0.1 10.0	1
P8.15	1		100
P8.16	1	P8.15	3
P8.17	2		200
P8.18	2	P8.15 P8.17	4
P8.33		0.1 10.0	1
P8.34	1		100
P8.35	1	P8.34	3
P8.36	2		200
P8.37	2	P8.34 P8.36	4

P16.0		380V
P16.2		
P16.3		
P16.4		
P16.5		
P16.6		
P16.7		120×P16.5 / P16.6
P16.9		120×P16.5 / P16.7
P16.11		[0]V/F [1] [2]

6.2.5

1

P16.11 [1] [2]

[0] V/F

2

V/F

P20.74

P20.74 P20.78 P20.79 P20.84

“

” “ ”

3

P20.79 P20.84

P20.85~P20.97

“

” “ ”

4

50%

P20.98 P20.98

6.2.6

HF680NLC

	7.5% 50% 50%
	1/5
	P16
	V/ F

6.2.7

1

2 LOCAL/REMOTE LOCAL LOCAL

3 RUN RUN

5Hz

4

5 4 50Hz

6 STOP

6.2.8

1

2

3

4

5

6 STOP

1

2

1

2

7.

7.1 P2

	[0]				
P2.0	[1]	0	2	0	8.1
	[2]				
	[0]				
P2.1		0	1	0	
	[1]DP				
P2.2	[0] p				

3		
4	.NC	
5		</RST
6	1 0	8.2
7	2 1	
8	3 2	
9	4 3	
10		
11		
12		
13	.NC	
14		
15	.NC	
16		
17	0	1 0 00 1 01 2 10 3 11 4
18	1	
19		
20		AFE
21		
22	FUNC 22	
23	FUNC 23	
24		
25	FUNC 25	
26		
27	FUNC 27	
28		
29	FUNC 29	

7.3 P4

P4.0	1		0 64	0	
P4.1	2		0 64	0	
P4.2	3		0 64	0	
P4.3	4		0 64	0	
P4.4	5		0 64	0	
P4.16	1		0 500	0	
P4.17	2		0 500	0	
P4.18	3		0 500	0	
P4.19	4		0 500	0	

0		
1		8.3
2		ON
3		8.3
4		
5		
6	1	[6] [9]
7	2	
8	3	
9	4	
10	FUNC 10	
11		
12		
13		
14		
15		
16	FUNC 16	
17	0	1

18 1 2

19 2 3

20 3 4

21 FUNC 21

22

23

24 31 FUNC 24 FUNC 31

32 AFE

33

7.5 P6

P6.0	AO1		7-1	0 14	2	
P6.1		1		0 1000	0	8.5
P6.2	AO1		AO1	-300.0 300.0 [%]	0.0 [%]	8.5
P6.3	AO1		AO1	-300.0 300.0 [%]	100.0 [%]	8.5
P6.4	AO1	[mA V]	AO1	0.0 100.0 [%]	0.0 [%]	8.5
P6.5	AO1	[mA V]	AO1	0.0 100.0 [%]	100.0 [%]	8.5
P6.6	AO1					

P7.30	4		4	0.00 3.00 [s]	2.00 [s]

P7.64		[0] [1]	0 1	0	8.6
P7.65			-25 100 [V]	0 [V]	8.6
P7.66			-25 100 [V]	0 [V]	8.6
P7.69		[0] [1]	0 1	0	8.6
P7.70			-25 100 [V]	0 [V]	8.6
P7.73		[0] [1]	0 1	0	
P7.74			400 750 [V]	550 [V]	
P7.75			0.0 1000.0 [%]	100.0 [%]	
P7.76			0.00 300.00 [s]	1.00 [s]	
P7.77			0.0 200.0 [%]	15.0 [%]	
P7.94		[0] [1]	0 1	1	
P7.95		AFE	0.0 3000.0 [s]	15.0 [s]	
P7.96			0.00 300.00 [s]	0.00 [s]	

7.7 1 P8

	[0]				
	[1]				
P8.0	[2]DP		0 4	0	
	[3]MODBUS				
	[4]				
P8.1					
P8.2					
P8.3	[0]		0 1	0	8.7
	[1]				
P8.6			0.00 300.00 [s]	0.00 [s]	8.7
P8.7			0.00 300.00 [s]	0.00 [s]	8.7
	[0]I/O				
	[1]	1			
	[2]	2			
P8.10	[3]		0 6	0	
	[4]DP				
	[5]MODBUS				
	[6]				
P8.11					

P8.18	2	P8.15 P8.17	0.0 300.0 [s]	4.00 [s]	8.7
P8.19	3		0.0 300.0 [%]	240.0 [%]	8.7
P8.20	3	P8.17 P8.19	0.0 300.0 [s]	7.00 [s]	8.7
P8.21	4		0.0 300.0 [%]	300.0 [%]	8.7
P8.22	4	P8.19 P8.21	0.0 300.0 [s]	10.00 [s]	8.7
P8.23	5		0.0 300.0 [%]	300.0 [%]	8.7
P8.24	5	P8.21 P8.23	0.0 300.0 [s]	10.00 [s]	8.7
P8.25	6		0.0 300.0 [%]	300.0 [%]	8.7
P8.26	6	P8.23 P8.25	0.0 300.0 [s]	10.00 [s]	8.7
P8.27	7		0.0 300.0 [%]	300.0 [%]	8.7
P8.28	7	P8.25 P8.27	0.0 300.0 [s]	10.00 [s]	8.7
P8.29	8		0.0 300.0 [%]	300.0 [%]	8.7
P8.30	8	P8.27 P8.29	0.0 300.0 [s]	10.00 [s]	8.7
P8.32		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P8.33			0.1 10.0	1.0	8.7
P8.34	1		0.0 300.0 [%]	100.0 [%]	8.7
P8.35	1	P8.34	0.0 300.0 [s]	3.00 [s]	8.7
P8.36	2		0.0 300.0 [%]	200.0 [%]	8.7

P8.34 P8.34
P8.37 2

7.8 2 P9

P9.0		[0] [1] [2]DP [3]MODBUS [4]	0 4	0	
P9.1					
P9.2					
P9.3		[0] [1]	0 1	0	8.7
P9.6			0.00 300.00 [s]	0.00 [s]	8.7
P9.7			0.00 300.00 [s]	0.00 [s]	8.7
P9.10		[0]I/O [1] 1 [2] 2 [3] [4]DP [5]MODBUS [6]	0 6	0	
P9.11					
P9.13		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P9.14			0.1 10.0	1.0	8.7
P9.15	1		0.0 300.0 [%]	100.0 [%]	8.7
P9.16	1	P9.15	0.0 300.0 [s]	3.00 [s]	8.7
P9.17	2		0.0 300.0 [%]	200.0 [%]	8.7

P9.18	2	P9.15 P9.17	0.0 300.0 [s]	4.00 [s]	8.7
P9.19	3		0.0 300.0 [%]	240.0 [%]	8.7
P9.20	3	P9.17 P9.19	0.0 300.0 [s]	7.00 [s]	8.7
P9.21	4		0.0 300.0 [%]	300.0 [%]	8.7
P9.22	4	P9.19 P9.21	0.0 300.0 [s]	10.00 [s]	8.7
P9.23	5		0.0 300.0 [%]	300.0 [%]	8.7
P9.24	5	P9.21 P9.23	0.0 300.0 [s]	10.00 [s]	8.7
P9.25	6		0.0 300.0 [%]	300.0 [%]	8.7
P9.26	6	P9.23 P9.25	0.0 300.0 [s]	10.00 [s]	8.7
P9.27	7		0.0 300.0 [%]	300.0 [%]	8.7
P9.28	7	P9.25 P9.27	0.0 300.0 [s]	10.00 [s]	8.7
P9.29	8		0.0 300.0 [%]	300.0 [%]	8.7
P9.30	8	P9.27 P9.29	0.0 300.0 [s]	10.00 [s]	8.7
P9.32		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P9.33			0.1 10.0	1.0	8.7
P9.34	1		0.0 300.0 [%]	100.0 [%]	8.7
P9.35	1	P9.34	0.0 300.0 [s]	3.00 [s]	8.7
P9.36	2		0.0 300.0 [%]	200.0 [%]	8.7

P9.37	2	P9.34 P9.36	0.0 300.0 [s]	4.00 [s]	8.7
P9.38	3		0.0 300.0 [%]	240.0 [%]	8.7
P9.39	3	P9.36 P9.38	0.0 300.0 [s]	7.00 [s]	8.7
P9.40	4		0.0 300.0 [%]	300.0 [%]	8.7
P9.41	4	P9.38 P9.40	0.0 300.0 [s]	10.00 [s]	8.7
P9.42	5		0.0 300.0 [%]	300.0 [%]	8.7
P9.43	5	P9.40 P9.42	0.0 300.0 [s]	10.00 [s]	8.7
P9.44	6		0.0 300.0 [%]	300.0 [%]	8.7
P9.45	6	P9.42 P9.44	0.0 300.0 [s]	10.00 [s]	8.7
P9.46	7		0.0 300.0 [%]	300.0 [%]	8.7
P9.47	7	P9.44 P9.46	0.0 300.0 [s]	10.00 [s]	8.7
P9.48	8		0.0 300.0 [%]	300.0 [%]	8.7
P9.49	8	P9.46 P9.48	0.0 300.0 [s]	10.00 [s]	8.7
P9.54			0.0 300.0 [%]	0.0 [%]	
P9.55		[0] [1]	0 1	0	
P9.56			0.00 300.00 [s]	3.00 [s]	
P9.57		[0] [1]	0 1	1	
P9.58			0.00 300.00 [s]	1.50 [s]	

7.9 3 P10

P10.0		[0] [1] [2]DP [3]MODBUS [4]	0 4	0	
P10.1					
P10.2					
P10.3		[0] [1]	0 1	0	8.7
P10.6			0.00 300.00 [s]	0.00 [s]	8.7
P10.7			0.00 300.00 [s]	0.00 [s]	8.7
P10.10		[0]I/O [1] 1 [2] 2 [3] [4]DP [5]MODBUS [6]	0 6	0	
P10.11					
P10.13		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P10.14			0.1 10.0	1.0	8.7
P10.15	1		0.0 300.0 [%]	100.0 [%]	8.7
P10.16	1	P10.15	0.0 300.0 [s]	3.00 [s]	8.7
P10.17	2		0.0 300.0 [%]	200.0 [%]	8.7

P10.18	2	P10.15 P10.17	0.0 300.0 [s]	4.00 [s]	8.7
P10.19	3		0.0 300.0 [%]	240.0 [%]	8.7
P10.20	3	P10.17 P10.19	0.0 300.0 [s]	7.00 [s]	8.7
P10.21	4		0.0 300.0 [%]	300.0 [%]	8.7
P10.22	4	P10.19 P10.21	0.0 300.0 [s]	10.00 [s]	8.7
P10.23	5		0.0 300.0 [%]	300.0 [%]	8.7
P10.24	5	P10.21 P10.23	0.0 300.0 [s]	10.00 [s]	8.7
P10.25	6		0.0 300.0 [%]	300.0 [%]	8.7
P10.26	6	P10.23 P10.25	0.0 300.0 [s]	10.00 [s]	8.7
P10.27	7		0.0 300.0 [%]	300.0 [%]	8.7
P10.28	7	P10.25 P10.27	0.0 300.0 [s]	10.00 [s]	8.7
P10.29	8		0.0 300.0 [%]	300.0 [%]	8.7
P10.30	8	P10.27 P10.29	0.0 300.0 [s]	10.00 [s]	8.7
P10.32		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P10.33			0.1 10.0	1.0	8.7
P10.34	1		0.0 300.0 [%]	100.0 [%]	8.7
P10.35	1	P10.34	0.0 300.0 [s]	3.00 [s]	8.7
P10.36	2		0.0 300.0 [%]	200.0 [%]	8.7

P10.37	2	P10.34	P10.36	0.0 [s]	300.0 [s]	4.00	8.7
P10.38	3			0.0 [%]	300.0 [%]	240.0	8.7
P10.39	3	P10.36	P10.38	0.0 [s]	300.0 [s]	7.00	8.7
P10.40	4			0.0 [%]	300.0 [%]	300.0	8.7
P10.41	4	P10.38	P10.40	0.0 [s]	300.0 [s]	10.00	8.7
P10.42	5			0.0 [%]	300.0 [%]	300.0	8.7
P10.43	5	P10.40	P10.42	0.0 [s]	300.0 [s]	10.00	8.7
P10.44							

7.10 4 P11

	[0]			
	[1]			
P11.0	[2]DP	0	4	0
	[3]MODBUS			
	[4]			

P11.1

P11.18	2	P11.15 P11.17	0.0 300.0 [s]	4.00 [s]	8.7
P11.19	3		0.0 300.0 [%]	240.0 [%]	8.7
P11.20	3	P11.17 P11.19	0.0 300.0 [s]	7.00 [s]	8.7
P11.21	4		0.0 300.0 [%]	300.0 [%]	8.7
P11.22	4	P11.19 P11.21	0.0 300.0 [s]	10.00 [s]	8.7
P11.23	5		0.0 300.0 [%]	300.0 [%]	8.7
P11.24	5	P11.21 P11.23	0.0 300.0 [s]	10.00 [s]	8.7
P11.25	6		0.0 300.0 [%]	300.0 [%]	8.7
P11.26	6	P11.23 P11.25	0.0 300.0 [s]	10.00 [s]	8.7
P11.27	7		0.0 300.0 [%]	300.0 [%]	8.7
P11.28	7	P11.25 P11.27	0.0 300.0 [s]	10.00 [s]	8.7
P11.29	8		0.0 300.0 [%]	300.0 [%]	8.7
P11.30	8	P11.27 P11.29	0.0 300.0 [s]	10.00 [s]	8.7
P11.32		[0] [1]PROFIBUS [2]MODBUS [3]	0 3	0	8.7
P11.33			0.1 10.0	1.0	8.7
P11.34	1		0.0 300.0 [%]	100.0 [%]	8.7
P11.35	1	P11.34	0.0 300.0 [s]	3.00 [s]	8.7
P11.36	2		0.0 300.0 [%]	200.0 [%]	8.7

P11.37	2	P11.34	P11.36	0.0 [s]	300.0 [s]	4.00	8.7
P11.38	3			0.0 [%]	300.0 [%]	240.0	8.7
P11.39	3	P11.36	P11.38	0.0 [s]	300.0 [s]	7.00	8.7
P11.40	4			0.0 [%]	300.0 [%]	300.0	8.7
P11.41	4	P11.38	P11.40	0.0 [s]	300.0 [s]	10.00	8.7
P11.42	5			0.0 [%]	300.0 [%]	300.0	8.7
P11.43	5	P11.40	P11.42	0.0 [s]	300.0 [s]	10.00	8.7
P11.44	6			0.0 [%]	300.0 [%]	300.0	8.7

7.11 1 P12

P12.0	[0] [1]	0	1	1	8.8
P12.1	[0][%] [1][Hz] [2][rpm]	0	2	1	

P12.27	0.00 2.00 [s]	0.00 [s]	8.8
P12.28	0.00 2.00 [s]	0.07 [s]	8.8
P12.29	0.00 2.00 [s]	0.07 [s]	8.8
P12.32	0.0 20.0 [%]	0.0	

P13.11	10		0.0 3000.0	50.0	
P13.12	11		0.0 3000.0	50.0	
P13.13	12		0.0 3000.0	50.0	
P13.14	13		0.0 3000.0	50.0	
P13.15	14		0.0 3000.0	50.0	
P13.16	15		0.0 3000.0	50.0	
P13.17	16		0.0 3000.0	50.0	
P13.22			0.0 20.0 [%]	2.0 [%]	8.8
P13.23			0.0 20.0 [%]	0.0 [%]	8.8
P13.24			0.0 200.0 [%]	30.0 [%]	8.8
P13.25			0.0 200.0 [%]	20.0 [%]	8.8
P13.26			0.00 2.00 [s]	0.00 [s]	8.8
P13.27			0.00 2.00 [s]	0.00 [s]	8.8
P13.28			0.00 2.00 [s]	0.07 [s]	8.8
P13.29			0.00 2.00 [s]	0.07 [s]	8.8
P13.32			0.0 20.0 [%]	0.0 [%]	8.8
P13.33			0.0 20.0 [%]	0.0 [%]	8.8
P13.34			0.00 2.00 [s]	0.00 [s]	8.8
P13.35			0.00 2.00 [s]	0.00 [s]	8.8
P13.36			0.00 2.00 [s]	0.50 [s]	8.8
P13.37			0.00 2.00 [s]	0.50 [s]	8.8

7.13 3 P14

P14.0		[0] [1]	0 1	1		8.8
P14.1		[0][%] [1][Hz] [2][rpm]	> 0 2	1		
P14.2	1		0.0 3000.0	10.0		
P14.3	2		0.0 3000.0	20.0		
P14.4	3		0.0 3000.0	35.0		
P14.5	4		0.0 3000.0	50.0		
P14.6	5		0.0 3000.0	50.0		
P14.7	6		0.0 3000.0	50.0		
P14.8	7		0.0 3000.0	50.0		
P14.9	8		0.0 3000.0	50.0		
P14.10	9		0.0 3000.0	50.0		
P14.11	10		0.0 3000.0	50.0		
P14.12	11		0.0 3000.0	50.0		
P14.13	12		0.0 3000.0	50.0		
P14.14	13		0.0 3000.0	50.0		
P14.15	14		0.0 3000.0	50.0		
P14.16	15		0.0 3000.0	50.0		
P14.17	16		0.0 3000.0	50.0		
P14.22			0.0 20.0 [%]	2.0 [%]		8.8
P14.23			0.0 20.0 [%]	0.0 [%]		8.8
P14.24			0.0 200.0 [%]	30.0 [%]	m1	8.8

P14.27			0.00 2.00 [s]	0.00 [s]	8.8
P14.28			0.00 2.00 [s]	0.07 [s]	8.8
P14.29			0.00 2.00 [s]	0.07 [s]	8.8
P14.32			0.0 20.0 [%]	0.0 [%]	8.8
P14.33			0.0 20.0 [%]	0.0 [%]	8.8
P14.34			0.00 2.00 [s]	0.00 [s]	8.8
P14.35			0.00 2.00 [s]	0.00 [s]	8.8
P14.36			0.00 2.00 [s]	0.50 [s]	8.8
P14.37			0.00 2.00 [s]	0.50 [s]	8.8

7.14 4 P15

P15.0		[0] [1]	0 1	1	8.8
P15.1		[0][%] [1][Hz] [2][rpm]	0 2	1	
P15.2	1		0.0 3000.0	10.0	
P15.3	2		0.0 3000.0	20.0	
P15.4	3		0.0 3000.0	35.0	
P15.5	4		0.0 3000.0	50.0	
P15.6	5		0.0 3000.0	50.0	
P15.7	6		0.0 3000.0	50.0	
P15.8	7		0.0 3000.0	50.0	
P15.9	8		0.0 3000.0	50.0	
P15.10	9		0.0 3000.0	50.0	

P15.11	10		0.0 3000.0	50.0	
P15.12	11		0.0 3000.0	50.0	
P15.13	12		0.0 3000.0	50.0	
P15.14	13		0.0 3000.0	50.0	
P15.15	14		0.0 3000.0	50.0	
P15.16	15		0.0 3000.0	50.0	
P15.17	16		0.0 3000.0	50.0	
P15.22			0.0 20.0 [%]	2.0 [%]	8.8
P15.23			0.0 20.0 [%]	0.0 [%]	8.8
P15.24			0.0 200.0 [%]	30.0 [%]	8.8
P15.25			0.0 200.0 [%]	20.0 [%]	8.8
P15.26			0.00 2.00 [s]	0.00 [s]	8.8
P15.27			0.00 2.00 [s]	0.00 [s]	8.8
P15.28			0.00 2.00 [s]	0.07 [s]	8.8
P15.29			0.00 2.00 [s]	0.07 [s]	8.8
P15.32			0.0 20.0 [%]	0.0 [%]	8.8
P15.33			0.0 20.0 [%]	0.0 [%]	8.8
P15.34			0.00 2.00 [s]	0.00 [s]	8.8
P15.35			0.00 2.00 [s]	0.00 [s]	8.8
P15.36			0.00 2.00 [s]	0.50 [s]	8.8
P15.37			0.00 2.00 [s]	0.50 [s]	8.8

7.15 1 V/F P16

P16.0			560 760 [V]	690 [V]	
P16.2			0.0 3000.0 [kW]	 [kW]	
P16.3			0 700 [V]	690 [V]	
P16.4			0.0 3000.0 [A]	 [A]	
P16.5			0.0 300.0 [Hz]	50.0 [Hz]	
P16.6			0 6000 [rpm]	1465 [rpm]	
P16.7			2 12 [pole]	4 [pole]	8.9
P16.9			0 7200 [rpm]	1500 [rpm]	8.9
P16.11		[0]V/F [1] [2] [3] [4]	0 4	0	
P16.12			1.00 10.00 [kHz]	3.00 [kHz]	8.9
P16.14	V/F	[0] V/F [1] V/F [2]	0 3	0	8.9
P16.15		[0] [1]	0 1	0	8.9
P16.16			2 500 [ms]	500 [ms]	
P16.17	V/F	[0] [1]	0 1	0	
P16.18			10 1000 [ms]	200 [ms]	
P16.19		[0] [1]	0 1	0	

P16.22			0.00 100.00 [s]	0.00 [s]	8.9
P16.23		V/F	0.00 300.00 [Hz]	0.00 [Hz]	
P16.24		V/F	0.00 300.00 [Hz]	50.00 [Hz]	
P16.25			0.0 120.0 [%]	100.0 [%]	
P16.26	V/F	V/F	0.00 10.00 [%]	0.75 [%]	8.9
P16.27			0.0 200.0 [%]	100.0 [%]	8.9
P16.30			0.0 100.0 [%]	0.0 [%]	8.9
P16.33	V/F	V/F	0 6	2	8.9
P16.34	V/F 1		0.0 300.0 [Hz]	5.0 [Hz]	
P16.35	V/F 1		0.0 125.0 [%]	11.5 [%]	
P16.36	V/F 2		0.0 300.0 [Hz]	50.0 [Hz]	
P16.37	V/F 2		0.0 125.0 [%]	100.0 [%]	
P16.38	V/F 3		0.0 300.0 [Hz]	50.0 [Hz]	
P16.39	V/F 3		0.0 125.0 [%]	100.0 [%]	
P16.40	V/F 4		0.0 300.0 [Hz]	50.0 [Hz]	
P16.41	V/F 4		0.0 125.0 [%]	100.0 [%]	
P16.42	V/F 5		0.0 300.0 [Hz]	50.0 [Hz]	
P16.43	V/F 5		0.0 125.0 [%]	100.0 [%]	
P16.44	V/F 6		0.0 300.0 [Hz]	50.0 [Hz]	
P16.45	V/F 6		0.0 125.0 [%]	100.0 [%]	
P16.46	V/F @		0 300	0	
P16.47	@		0 300	0	

P16.48		[0] [1]PID 1 [2]PID 2 [3]	0 3	0	
P16.49	@		0 300	0	
P16.50			0.00 300.00 [s]	0.00 [s]	8.9
P16.51			0.0 150.0 [%]	70.0 [%]	8.9
P16.52			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P16.54			0.00 300.00 [s]	0.00 [s]	8.9
P16.55			0.0 150.0 [%]	75.0 [%]	8.9
P16.56			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P16.59			0.0 1000.0 [%]	100.0 [%]	
P16.60			0.0 1000.0 [%]	100.0 [%]	
P16.61			0.0 1000.0 [%]	100.0 [%]	
P16.62			0.0 1000.0 [%]	100.0 [%]	
P16.64	V/F	V/F	0.0 1000.0 [%]	100.0 [%]	8.9
P16.66		V/F	0.0 1000.0 [%]	100.0 [%]	
P16.67			0.0 1000.0 [%]	100.0 [%]	
P16.68			0.0 1000.0 [%]	100.0 [%]	
P16.69			0.0 1000.0 [%]	100.0 [%]	
P16.70			0.0 1000.0 [%]	100.0 [%]	

7.16 2 V/F P17

P17.0			560 760 [V]	690 [V]	
P17.2			0.0 3000.0 [kW]	 [kW]	
P17.3			0 700 [V]	690 [V]	
P17.4			0.0 3000.0 [A]	 [A]	
P17.5			0.0 300.0 [Hz]	50.0 [Hz]	
P17.6			0 6000 [rpm]	1465 [rpm]	
P17.7			2 12 [pole]	4 [pole]	8.9
P17.9			0 7200 [rpm]	1500 [rpm]	8.9
P17.11		[0]V/F [1] [2] [3] [4]	0 4	0	
P17.12			1.00 10.00 [kHz]	3.00 [kHz]	8.9
P17.14	V/F	[0] V/F [1] V/F [2]	0 3	0	8.9
P17.15		[0] [1]	0 1	0	8.9
P17.16			2 500 [ms]	500 [ms]	
P17.17	V/F	[0] [1]	0 1	0	
P17.18			10 1000 [ms]	200 [ms]	
P17.19		[0] [1]	0 1	0	

P17.22

P17.48		[0] [1]PID 1 [2]PID 2 [3]	0 3	0	
P17.49	@		0 300	0	
P17.50			0.00 300.00 [s]	0.00 [s]	8.9
P17.51			0.0 150.0 [%]	70.0 [%]	8.9
P17.52			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P17.54			0.00 300.00 [s]	0.00 [s]	8.9
P17.55			0.0 150.0 [%]	75.0 [%]	8.9
P17.56			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P17.59			0.0 1000.0 [%]	100.0 [%]	
P17.60			0.0 1000.0 [%]	100.0 [%]	
P17.61			0.0 1000.0 [%]	100.0 [%]	
P17.62			0.0 1000.0 [%]	100.0 [%]	
P17.64	V/F	V/F	0.0 1000.0 [%]	100.0 [%]	8.9
P17.66		V/F	0.0 1000.0 [%]	100.0 [%]	
P17.67			0.0 1000.0 [%]	100.0 [%]	
P17.68			0.0 1000.0 [%]	100.0 [%]	
P17.69			0.0 1000.0 [%]	100.0 [%]	
P17.70			0.0 1000.0 [%]	100.0 [%]	

7.17 3 V/F P18

P18.0			560 760 [V]	690 [V]	
P18.2			0.0 3000.0 [kW]	 [kW]	
P18.3			0 700 [V]	690 [V]	
P18.4			0.0 3000.0 [A]	 [A]	
P18.5			0.0 300.0 [Hz]	50.0 [Hz]	
P18.6			0 6000 [rpm]	1465 [rpm]	
P18.7			2 12 [pole]	4 [pole]	8.9
P18.9			0 7200 [rpm]	1500 [rpm]	8.9
P18.11		[0]V/F [1] [2] [3] [4]	0 4	0	
P18.12			1.00 10.00 [kHz]	3.00 [kHz]	8.9
P18.14	V/F	[0] V/F [1] V/F [2]	0 3	0	8.9
P18.15		[0] [1]	0 1	0	8.9
P18.16			2 500 [ms]	500 [ms]	
P18.17	V/F	[0] [1]	0 1	0	
P18.18			10 1000 [ms]	200 [ms]	
P18.19		[0] [1]	0 1	0	

P18.22			0.00 100.00 [s]	0.00 [s]	8.9
P18.23		V/F	0.00 300.00 [Hz]	0.00 [Hz]	
P18.24		V/F	0.00 300.00 [Hz]	50.00 [Hz]	
P18.25			0.0 120.0 [%]	100.0 [%]	
P18.26	V/F	V/F	0.00 10.00 [%]	0.75 [%]	8.9
P18.27			0.0 200.0 [%]	100.0 [%]	8.9
P18.30			0.0 100.0 [%]	0.0 [%]	8.9
P18.33	V/F	V/F	0 6	2	8.9
P18.34	V/F 1		0.0 300.0 [Hz]	5.0 [Hz]	
P18.35	V/F 1		0.0 125.0 [%]	11.5 [%]	
P18.36	V/F 2		0.0 300.0 [Hz]	50.0 [Hz]	
P18.37	V/F 2		0.0 125.0 [%]	100.0 [%]	
P18.38	V/F 3		0.0 300.0 [Hz]	50.0 [Hz]	
P18.39	V/F 3		0.0 125.0 [%]	100.0 [%]	
P18.40	V/F 4		0.0 300.0 [Hz]	50.0 [Hz]	
P18.41	V/F 4		0.0 125.0 [%]	100.0 [%]	
P18.42	V/F 5		0.0 300.0 [Hz]	50.0 [Hz]	
P18.43	V/F 5		0.0 125.0 [%]	100.0 [%]	
P18.44	V/F 6		0.0 300.0 [Hz]	50.0 [Hz]	
P18.45	V/F 6		0.0 125.0 [%]	100.0 [%]	
P18.46	V/F @		0 300	0	
P18.47	@		0 300	0	

P18.48		[0] [1]PID 1 [2]PID 2 [3]	0 3	0	
P18.49	@		0 300	0	
P18.50			0.00 300.00 [s]	0.00 [s]	8.9
P18.51			0.0 150.0 [%]	70.0 [%]	8.9
P18.52			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P18.54			0.00 300.00 [s]	0.00 [s]	8.9
P18.55			0.0 150.0 [%]	75.0 [%]	8.9
P18.56			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P18.59			0.0 1000.0 [%]	100.0 [%]	
P18.60			0.0 1000.0 [%]	100.0 [%]	
P18.61			0.0 1000.0 [%]	100.0 [%]	
P18.62			0.0 1000.0 [%]	100.0 [%]	
P18.64	V/F	V/F	0.0 1000.0 [%]	100.0 [%]	8.9
P18.66		V/F	0.0 1000.0 [%]	100.0 [%]	

P18.67 [V] شهر

7.18 4 V/F P19

P19.22			0.00 100.00 [s]	0.00 [s]	8.9
P19.23		V/F	0.00 300.00 [Hz]	0.00 [Hz]	
P19.24		V/F	0.00 300.00 [Hz]	50.00 [Hz]	
P19.25			0.0 120.0 [%]	100.0 [%]	
P19.26	V/F	V/F	0.00 10.00 [%]	0.75 [%]	8.9
P19.27			0.0 200.0 [%]	100.0 [%]	8.9
P19.30			0.0 100.0 [%]	0.0 [%]	8.9
P19.33	V/F	V/F	0 6	2	8.9
P19.34	V/F 1		0.0 300.0 [Hz]	5.0 [Hz]	
P19.35	V/F 1		0.0 125.0 [%]	11.5 [%]	
P19.36	V/F 2		0.0 300.0 [Hz]	50.0 [Hz]	
P19.37	V/F 2		0.0 125.0 [%]	100.0 [%]	
P19.38	V/F 3		0.0 300.0 [Hz]	50.0 [Hz]	
P19.39	V/F 3		0.0 125.0 [%]	100.0 [%]	
P19.40	V/F 4		0.0 300.0 [Hz]	50.0 [Hz]	
P19.41	V/F 4		0.0 125.0 [%]	100.0 [%]	
P19.42	V/F 5		0.0 300.0 [Hz]	50.0 [Hz]	
P19.43	V/F 5		0.0 125.0 [%]	100.0 [%]	
P19.44	V/F 6		0.0 300.0 [Hz]	50.0 [Hz]	
P19.45	V/F 6		0.0 125.0 [%]	100.0 [%]	
P19.46	V/F @		0 300	0	
P19.47	@		0 300	0	

P19.48	[0] [1]PID 1 [2]PID 2 [3]	0	3

7.19 1 P20

P20.0		[0] [1]		0 1	0	8.10
P20.1		[0] [1] 1 [2] 2 [3] [4] P20.3 [5]DP [6]MODBUS [7]		0 7	0	8.10
P20.2				0 7	0	
P20.3				-300.0 300.0 [%]	0.0 [%]	8.10
P20.4	@			0 300	0	
P20.5				0 1000 [ms]	0 [ms]	
P20.6		я				

P20.13			20.0 500.0 [ms]	100.0 [ms]	8.10
P20.14		1	0 60000	1024	
P20.15		[0] [1]	0 1	0	8.10
P20.16			0.0 300.0 [%]	100.0 [%]	
P20.17			0.0 300.0 [%]	100.0 [%]	
P20.18			0.0 300.0 [%]	0.0 [%]	
P20.19			0.0 300.0 [%]	0.0 [%]	
P20.20		[0] [1]	0 1	0	
P20.21		[0] [1]	0 1	0	
P20.22			0.0 300.0 [%]	160.0 [%]	
P20.23			0.0 200.0 [%]	20.0 [%]	
P20.24			0.0 300.0 [%]	100.0 [%]	
P20.25			0.0 200.0 [%]	100.0 [%]	
P20.26			0.0 1000.0 [%]	0.0 [%]	8.10
P20.27			0.00 15.00 [%]	2.00 [%]	8.10
P20.28		[0] P20.16 P20.17 [1] [2] [3]DP	0 3	0	
P20.30		[0] P20.31 P20.32 [1] 1 [2] 2 [3]	0 3	0	

P20.31			0.0 100.0 [%]	5.0 [%]	
P20.32			0.0 100.0 [%]	5.0 [%]	
P20.34		[0] [1]	0 1	0	8.10
P20.35			0.0 100.0 [s]	0.0 [s]	
P20.36			50.0 150.0 [%]	110.0 [%]	
P20.37			0.0 150.0 [%]	100.0 [%]	8.10
P20.38			0.0 100.0 [%]	25.0 [%]	8.10
P20.39			0.0 120.0 [%]	100.0 [%]	8.10
P20.40			0.0 150.0 [%]	100.0 [%]	8.10
P20.41			0.0 150.0 [%]	135.0 [%]	
P20.42		[0] [1]	0 1	1	
P20.43			25 1000 [ms]	75 [ms]	
P20.44			25 1000 [ms]	250 [ms]	
P20.45			0.0 100.0 [%]	22.0 [%]	
P20.46			0.0 100.0 [%]	18.0 [%]	
P20.47			0.0 200.0 [%]	92.0 [%]	
P20.48			0.0 200.0 [%]	87.0 [%]	
P20.49			0.0 150.0 [%]	100.0 [%]	
P20.51			0.0 1000.0 [%]	100.0 [%]	
P20.52			0.0 1000.0 [%]	100.0 [%]	

P20.53	Kp	0.0	1000.0 [%]	100.0 [%]
P20.54	Ki	0.0	1000.0 [%]	100.0 [%]
P20.55		0.0	1000.0 [%]	- #@H@ÏÐÑÒÓÔÕÖ×Ø€u——Y @ Q€

[№]

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P20.77	2	2	90.0 110.0 [%]	100.0 [%]	
P20.78			0.00 650.00 [mOhm]	0.00 [mOhm]	
P20.79			0.00 65.50 [mH]	0.000 [mH]	
P20.80	1	1	0.800 1.350	1.140	
P20.81	2	2	0.800 1.350	0.940	
P20.82	3	3	0.800 1.350	1.080	
P20.83	4	4	0.800 1.350	0.950	
P20.84			0.00 655.00 [mH]	0.00 [mH]	
P20.85	85%	85%	40.0 150.0 [%]	108.0 [%]	
P20.86	87.5%	87.5%	40.0 150.0 [%]	106.5 [%]	
P20.87	90%	90%	40.0 150.0 [%]	105.0 [%]	
P20.88	92.5%	92.5%	40.0 150.0 [%]	103.5 [%]	
P20.89	95%	95%	40.0 150.0 [%]	102.0 [%]	
P20.90	102. 5%	102.5%	40.0 150.0 [%]	99.0 [%]	
P20.91	105%	105%	40.0 150.0 [%]	96.5 [%]	
P20.92	110%	110%	40.0 150.0 [%]	93.0 [%]	
P20.93	115%	115%	40.0 150.0 [%]	88.5 [%]	
P20.94	120%	120%	40.0 150.0 [%]	83.0 [%]	
P20.95	125%	125%	40.0 150.0 [%]	77.0 [%]	
P20.96	130%	130%	40.0 150.0 [%]	70.5 [%]	
P20.97	135%	135%	40.0 150.0 [%]	63.5 [%]	
P20.98		( )	0.01 300.00 [s]	0.75 [s]	
P20.99			0.00 10.00 [%]	0.00 [%]	

P21.0	[0] [1] [0] [1] 1 [2] 2 [3] [4] [5]DP [6]MODBUS [7]	0	1	0	8.10
P21.1		0	7	0	8.10
P21.2					
P21.3					

P21.14		1	0 60000	1024	
P21.15		[0] [1]	0 1	0	8.10
P21.16			0.0 300.0 [%]	100.0 [%]	
P21.17			0.0 300.0 [%]	100.0 [%]	
P21.18			0.0 300.0 [%]	0.0 [%]	
P21.19			0.0 300.0 [%]	0.0 [%]	
P21.20		[0] [1]	0 1	0	
P21.21		[0] [1]	0 1	0	
P21.22			0.0 300.0 [%]	160.0 [%]	
P21.23			0.0 200.0 [%]	20.0 [%]	
P21.24			0.0 300.0 [%]	100.0 [%]	
P21.25			0.0 200.0 [%]	100.0 [%]	
P21.26			0.0 1000.0 [%]	0.0 [%]	8.10
P21.27			0.00 15.00 [%]	2.00 [%]	8.10
P21.28		[0] P21.16 P21.17 [1] [2] [3]DP	0 3	0	
P21.30		[0] P21.31 P21.32 [1] 1 [2] 2 [3]	0 3	0	
P21.31			0.0 100.0 [%]	5.0 [%]	

P21.54	Ki		0.0 1000.0 [%]	100.0 [%]	
P21.55			0.0 1000.0 [%]	100.0 [%]	8.10
P21.56			0.0 1000.0 [%]	100.0 [%]	8.10
P21.57		[0] [1]	0 1	0	8.10
P21.58			0.0 125.0 [%]		

P21.78			0.00 650.00 [mOhm]	0.00 [mOhm]	
P21.79			0.00 65.50 [mH]	0.000 [mH]	
P21.80	1	1	0.800 1.350	1.140	
P21.81	2	2	0.800 1.350	0.940	
P21.82	3	3	0.800 1.350	1.080	
P21.83	4	4	0.800 1.350	0.950	
P21.84			0.00 655.00 [mH]	0.00 [mH]	
P21.85	85%	85%	40.0 150.0 [%]	108.0 [%]	
P21.86	87.5%	87.5%	40.0 150.0 [%]	106.5 [%]	
P21.87	90%	90%	40.0 150.0 [%]	105.0 [%]	
P21.88	92.5%	92.5%	40.0 150.0 [%]	103.5 [%]	
P21.89	95%	95%	40.0 150.0 [%]	102.0 [%]	
P21.90	102.5%	102.5%	40.0 150.0 [%]	99.0 [%]	
P21.91	105%	105%	40.0 150.0 [%]	96.5 [%]	
P21.92	110%	110%	40.0 150.0 [%]	93.0 [%]	
P21.93	115%	115%	40.0 150.0 [%]	88.5 [%]	
P21.94	120%	120%	40.0 150.0 [%]	83.0 [%]	
P21.95	125%	125%	40.0 150.0 [%]	77.0 [%]	
P21.96	130%	130%	40.0 150.0 [%]	70.5 [%]	
P21.97	135%	135%	40.0 150.0 [%]	63.5 [%]	
P21.98		( )	0.01 300.00 [s]	0.75 [s]	
P21.99			0.00 10.00 [%]	0.00 [%]	

7.21 3 P22

P22.0

P22.13			20.0 500.0 [ms]	100.0 [ms]	8.10
P22.14		1	0 60000	1024	
P22.15		[0] [1]	0 1	0	8.10
P22.16			0.0 300.0 [%]	100.0 [%]	
P22.17			0.0 300.0 [%]	100.0 [%]	
P22.18			0.0 300.0 [%]	0.0 [%]	
P22.19			0.0 300.0 [%]	0.0 [%]	
P22.20		[0] [1]	0 1	0	
P22.21		[0] [1]	0 1	0	
P22.22			0.0 300.0 [%]	160.0 [%]	
P22.23			0.0 200.0 [%]	20.0 [%]	
P22.24			0.0 300.0 [%]	100.0 [%]	
P22.25			0.0 200.0 [%]	100.0 [%]	
P22.26			0.0 1000.0 [%]	0.0 [%]	8.10
P22.27			0.00 15.00 [%]	2.00 [%]	8.10
P22.28		[0] P22.16 P22.17 [1] [2] [3]DP	0 3	0	
P22.30		[0] P22.31 P22.32 [1] 1 [2] 2 [3]	0 3	0	

P22.31		0.0 [%]	100.0 [%]	5.0 [%]
P22.32		0.0 [%]	100.00.([%]	5.0 [%]
P22.34	[0] [1]	0	1	0

P22.53	Kp				0.0 1000.0 [%]	100.0 [%]	
P22.54	Ki				0.0 1000.0 [%]	100.0 [%]	
P22.55					0.0 1000.0 [%]	100.0 [%]	8.10
P22.56					0.0 1000.0 [%]	100.0 [%]	8.10
P22.57		[0] [1]			0 1	0	8.10
P22.58					0.0 125.0 [%]	100.0 [%]	8.10
P22.59					1.0 25.0 [%]	2.5 [%]	8.10
P22.60	DROOP		0	DROOP	0.0 100.0 [%]	0.0 [%]	8.10
P22.61	DROOP		DROOP		30 2000 [ms]	50 [ms]	8.10
P22.62					0.0 1000.0 [%]	100.0 [%]	8.10
P22.63					0.0 1000.0 [%]	100.0 [%]	8.10
P22.66		1		1	0.0 1000.0 [%]	100.0 [%]	
P22.67		2		2	0.0 1000.0 [%]	100.0 [%]	
P22.69					0.00 2.00 [%]	1.00 [%]	
P22.70					0.00 2.00 [%]	1.00 [%]	
P22.71		[0] [1]			0 1	0	
P22.72		[0] [1]			0 1	1	
P22.73		[0] × 1 [1] × 10			0 1	0	
P22.74					0.00 650.00		

P22.77	2	2

P23.0	[0] [1] [0] [1] 1 [2] 2 [3] [4] [5]DP [6]MODBUS [7]	P23.3	0	1	0	8.10
P23.1			0	7	0	8.10
P23.2						

P23.13			20.0 500.0 [ms]	100.0 [ms]	8.10
P23.14		1	0 60000	1024	
P23.15		[0] [1]	0 1	0	8.10
P23.16			0.0 300.0 [%]	100.0 [%]	
P23.17			0.0 300.0 [%]	100.0 [%]	
P23.18			0.0 300.0 [%]	0.0 [%]	
P23.19			0.0 300.0 [%]	0.0 [%]	
P23.20		[0] [1]	0 1	0	
P23.21		[0] [1]	0 1	0	
P23.22			0.0 300.0 [%]	160.0 [%]	
P23.23			0.0 200.0 [%]	20.0 [%]	
P23.24			0.0 300.0 [%]	100.0 [%]	
P23.25			0.0 200.0 [%]	100.0 [%]	
P23.26			0.0 1000.0 [%]	0.0 [%]	8.10
P23.27			0.00 15.00 [%]	2.00 [%]	8.10
P23.28		[0] P23.16 P23.17 [1] [2] [3]DP	0 3	0	
P23.30		[0] P23.31 P23.32 [1] 1 [2] 2 [3]	0 3	0	

P23.31			0.0 100.0 [%]	5.0 [%]	
P23.32			0.0 100.0 [%]	5.0 [%]	
P23.34		[0] [1]	0 1	0	8.10
P23.35			0.0 100.0 [s]	0.0 [s]	
P23.36			50.0 150.0 [%]	110.0 [%]	
P23.37			0.0 150.0 [%]	100.0 [%]	8.10
P23.38			0.0 100.0 [%]	25.0 [%]	8.10
P23.39			0.0 120.0 [%]	100.0 [%]	8.10
P23.40			0.0 150.0 [%]	100.0 [%]	8.10
P23.41			0.0 150.0 [%]	135.0 [%]	
P23.42		[0] [1]	0 1	1	
P23.43			25 1000 [ms]	75 [ms]	
P23.44			25 1000 [ms]	250 [ms]	
P23.45			0.0 100.0 [%]	22.0 [%]	
P23.46			0.0 100.0 [%]	18.0 [%]	
P23.47			0.0 200.0 [%]	92.0 [%]	
P23.48			0.0 200.0 [%]	87.0 [%]	
P23.49			0.0 150.0 [%]	100.0 [%]	
P23.51			0.0 1000.0 [%]	100.0 [%]	
P23.52			0.0 1000.0 [%]	100.0 [%]	

P23.53		Kp			0.0 [%]	1000.0 [%]	100.0 [%]	
P23.54		Ki			0.0 [%]	1000.0 [%]	100.0 [%]	
P23.55					0.0 [%]	1000.0 [%]	100.0 [%]	8.10
P23.56					0.0 [%]	1000.0 [%]	100.0 [%]	8.10
P23.57			[0] [1]		0	1	0	8.10
P23.58					0.0 [%]	125.0 [%]	100.0 [%]	8.10
P23.59					1.0 [%]	25.0 [%]	2.5 [%]	8.10
P23.60	DROOP		0	DROOP	0.0 [%]	100.0 [%]	0.0 [%]	8.10
P23.61	DROOP		DROOP		30 [ms]	2000	50	100 [%,n,8

v 2.3660

P23.77	2	2	90.0 110.0 [%]	100.0 [%]	
P23.78			0.00 650.00 [mOhm]	0.00 [mOhm]	
P23.79			0.00 65.50 [mH]	0.000 [mH]	
P23.80	1	1	0.800 1.350	1.140	
P23.81	2	2	0.800 1.350	0.940	
P23.82	3	3	0.800 1.350	1.080	
P23.83	4	4	0.800 1.350	0.950	
P23.84			0.00 655.00 [mH]	0.00 [mH]	
P23.85	85%	85%	40.0 150.0 [%]	108.0 [%]	
P23.86	87.5%	87.5%	40.0 150.0 [%]	106.5 [%]	
P23.87	90%	90%	40.0 150.0 [%]	105.0 [%]	
P23.88	92.5%	92.5%	40.0 150.0 [%]	103.5 [%]	
P23.89	95%	95%	40.0 150.0 [%]	102.0 [%]	
P23.90	102.5%	102.5%	40.0 150.0 [%]	99.0 [%]	
P23.91	105%	105%	40.0 150.0 [%]	96.5 [%]	
P23.92	110%	110%	40.0 150.0 [%]	93.0 [%]	
P23.93	115%	115%	40.0 150.0 [%]	88.5 [%]	
P23.94	120%	120%	40.0 150.0 [%]	83.0 [%]	
P23.95	125%	125%	40.0 150.0 [%]	77.0 [%]	
P23.96	130%	130%	40.0 150.0 [%]	70.5 [%]	
P23.97	135%	135%	40.0 150.0 [%]	63.5 [%]	
P23.98		( )	0.01 300.00 [s]	0.75 [s]	
P23.99			0.00 10.00 [%]	0.00 [%]	

7.23 P33

P33.0	Profibus	[0] [1]	0 1	0	
P33.1		PLC	1 255	1	
P33.2		[0]PPO 1 [1]PPO 2 [2]PPO 5 [3]GUIDE	0 3	2	
P33.3			0 16	14	
P33.4			0 16	14	
P33.5		[0] [1] [2] [3]	0 3	0	
P33.6			0 1000 [ms]	50 [ms]	
P33.7		[0] [1]	0 1	0	
P33.8			0.0 10.0 [s]	3.0 [s]	
P33.13	[W0]	7-2	0 37	0	
P33.14	[W0]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.15	[W1]	7-2	0 37	0	
P33.16	[W1]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.17	[W2]	7-2	0 37	0	

ш

P33.18

P33.31	[W9]	7-2	0 37	0	
P33.32	[W9]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.33	[W10]	7-2	0 37	0	
P33.34	[W10]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.35	[W11]	7-2	0 37	0	
P33.36	[W11]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.37	[W12]	7-2	0 37	0	
P33.38	[W12]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.39	[W13]	7-2	0 37	0	
P33.40	[W13]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.41	[W14]	7-2	0 37	0	
P33.42	[W14]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.43	[W15]	7-2	0 37	0	

P33.54	[W4]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.55	[W5]	7-3	0 48	19	
P33.56	[W5]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	2	
P33.57	[W6]	7-3	0 48	26	
P33.58	[W6]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	6	
P33.59	[W7]	7-3	0 48	30	
P33.60	[W7]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	1	
P33.61	[W8]	7-3	0 48	14	

P33.62	[W8]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.63	[W9]	7-3	0 48	13	
P33.64	[W9]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.65	[W10]	7-3	0 48	40	
P33.66	[W10]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	6	
P33.67	[W11]	7-3	0 48	0	
P33.68	[W11]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.69	[W12]	7-3	0 48	0	

P33.70	[W12]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.71	[W13]	7-3	0 48	0	
P33.72	[W13]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.73	[W14]	7-3	0 48	0	
P33.74	[W14]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	
P33.75	[W15]	7-3	0 48	0	
P33.76	[W15]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0 7	0	

7-2

0	
1	0
2	1
3	2
4	3
5	4
6	[32]
7	[32]
8	32_MSW
9	32_LSW
10	
11	
12	0 @32bit
13	1 @32bit
14	2 @32bit
15	3 @32bit
16	4 @32bit
17	5 @32bit
18	[Hz]
19	[rpm]
20	[%]
21	[%]
22	[%]
23	[Hz]
24	
25	
26	1[%]
27	2[%]
28	
29	
30 37	SET_W12 19

7-3

0	
1	0
2	1
3	2
4	3
5	4
6	5
7	0 @32bit
8	1 @32bit
9	2 @32bit
10	3 @32bit
11	4 @32bit
12	5 @32bit
13	[32]
14	[32]
15	32bit_MSW
16	32bit_LSW
17	
18	
19	
20	[rpm]
21	[rpm]
22	
23	
24	
25	
26	
27	A
28	B

29	C
30	
31	
32	
33	1
34	2
35	
36	
37	
38	
39	
40	
41 48	AW22 29

8.

8.1

800kW 1600kW 800kW

P2.0

8.2

P12.0 [0] [1]

A. [0]

[1] [2] ---1

[6] 1 0 ---2

[7] 2 1 ---3

[8] 3 2 ---4

[9] 4 3 ---5

B. [1]

4 16 (8421)

(FORWARD) (REVERSE) P12.2(1)

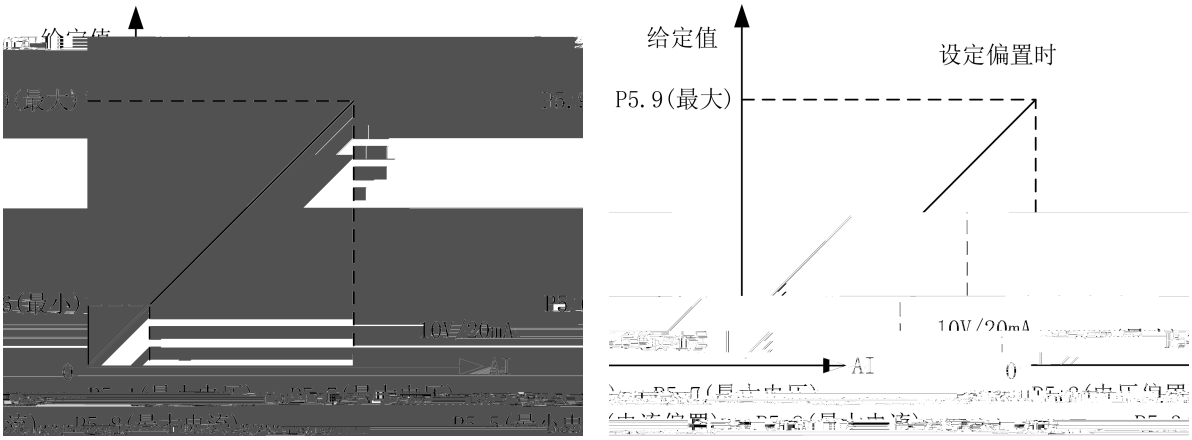
8.3

/

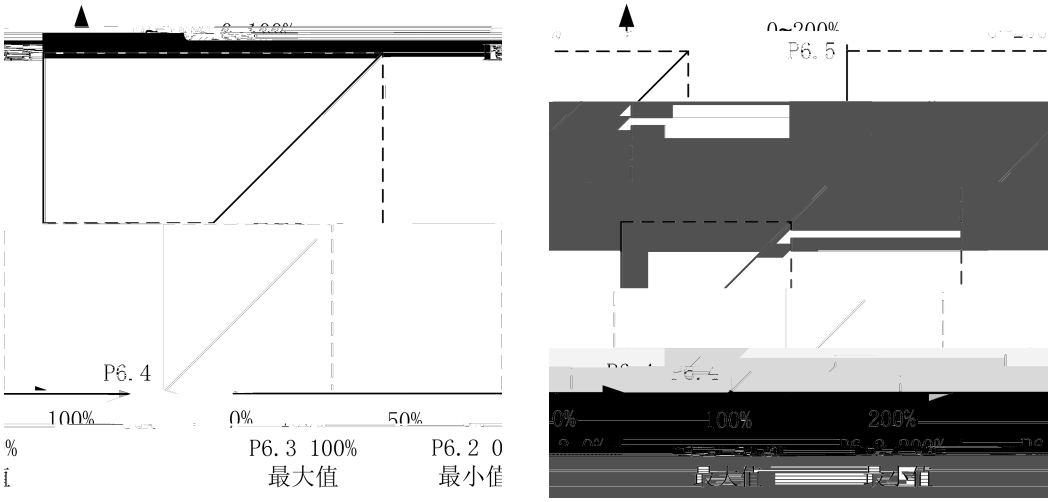
[1] [3] [3]

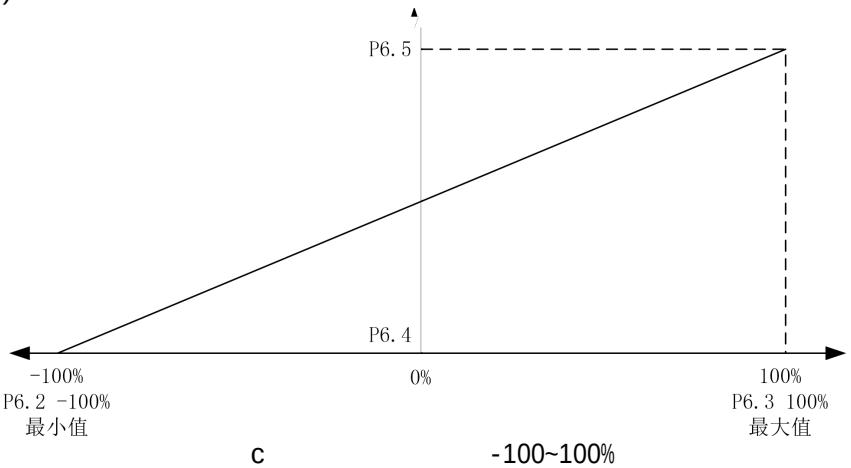
[1] [3]

8.4


给定值
设定偏置时
P5.9(最大)
10V/20mA
AI
0

8.5


P6.5
P6.4
100%
0%
50%
P6.3 100%
最大值
P6.2 0
最小值
(a)
0~100%
b
0~200%


P6.5
P6.4
-100%
P6.2 -100%
最小值
0%
100%
P6.3 100%
最大值
c
-100~100%

8.6

1

P7.0 P7.1 P7.2 P7.3

2

P7.4 P7.5 P7.6 P7.7

7

P7.23 P16.11=1 P7.23

P7.23

P7.24 P7.26 P17.11=1 P18.11=1 P19.11=1

8

P7.31 P7.32 P16.11=2

P7.31 100% P7.32

P7.31 P7.32

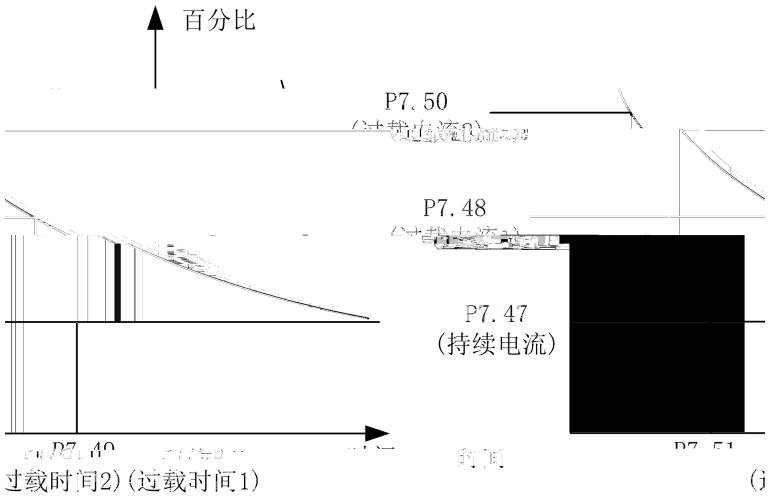
9

P7.33

P7.33

10

P7.48 P7.50



1. 1200kW 1200kW
2. 141% 10

11

P7.64 P7.65 P7.66 HF680NLC

30kW P7.64 1

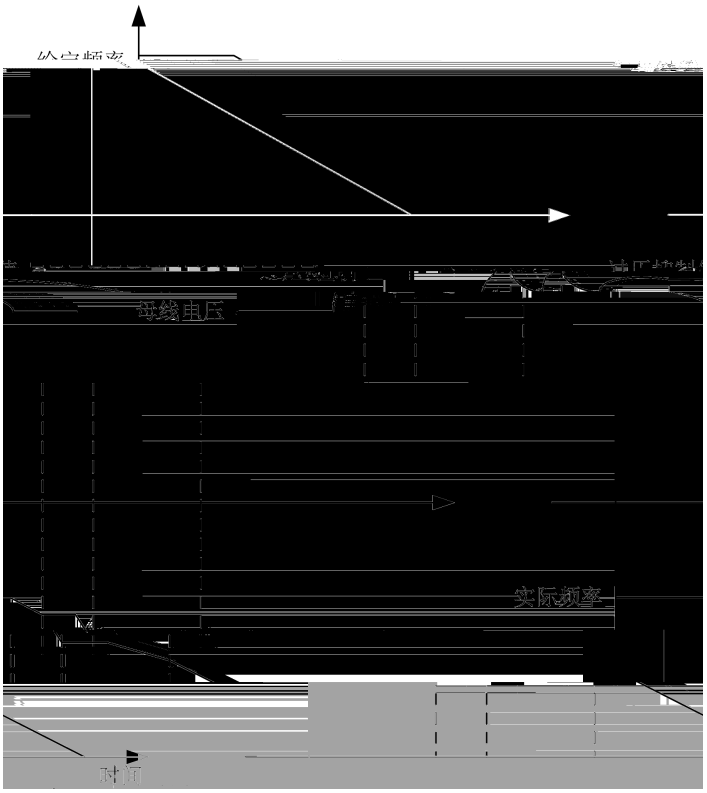
P7.65

U 2 UP16.0 2P7.66

= u√ u3 3

12 ` .70 0

u√ u3 3



8.7

1

1.1 1

" ₦

1.2 2

P17.11	Basic Control Function	0: V/F 1: 2: 3: 4:	0 V/F
P17.57	Flying Start CL	0-100%	75%
P17.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P17.71	Flying Start IsFlt	0-500.0ms	0.0ms
P17.72	Flying Start FeType	0: 1 1: 2	0: 1
P17.73	Flying Start FeAdjE	0: 1:	1:

1. DI 21
2. P8.06 [ ] = 5.0
3.P17.11 0 V/F
4. P17.58
2 3
5. P17.71

6.P17.72 0 P17.73 1

1.3 3

P18.11	Basic Control Function	0: V/F 1: 2: 3: 4:	0 V/F
P18.57	Flying Start CL	0-100%	75%
P18.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P18.71	Flying Start IsFlt	0-500.0ms	0.0ms
P18.72	Flying Start FeType	0: 1 1: 2	0: 1
P18.73	Flying Start FeAdjE	0: 1:	1:

1. DI 21
2.

1.4 4

P19.11	Basic Control Function	0: V/F 1: 2: 3: 4:	0 V/F
P19.57	Flying Start CL	0-100%	75%
P19.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P19.71	Flying Start IsFlt	0-500.0ms	0.0ms
P19.72	Flying Start FeType	0: 1 1: 2	0: 1
P19.73	Flying Start FeAdjE	0: 1:	1:

Zõ5

1. DI 21

2. P8.06 [ ] = 5.0

3.P19.11 0 V/F

4. P19.58

2 3

5. P19.71

6.P19.72 0 P19.73 1

2

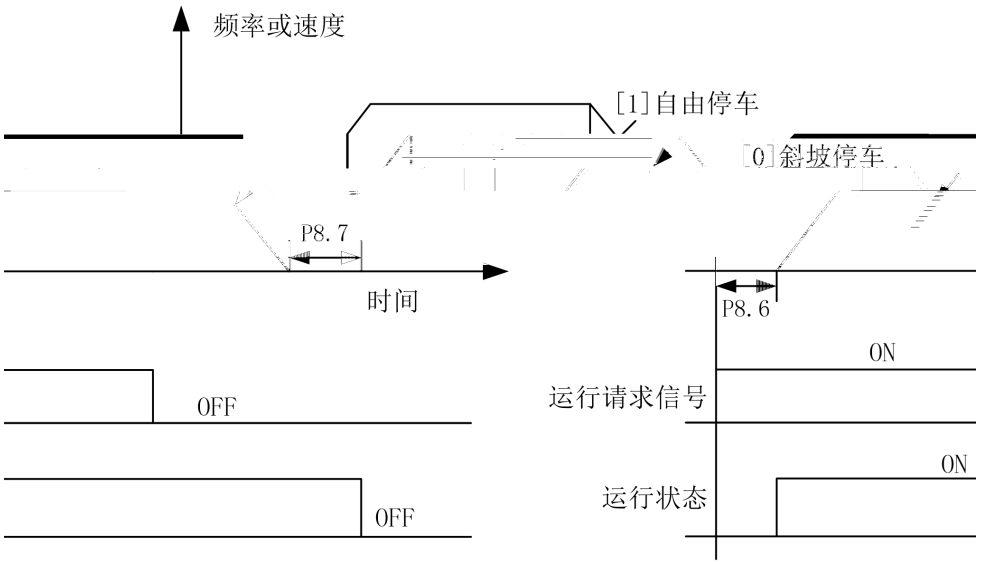
P8.3

[0]

[1]

P8.6 P8.6

P8.7



3

P8.14

P8.14 P8.33

P8.33

P8.15 < P8.17 < P8.19 < P8.21 < P8.23 < P8.25 < P8.27

P8.15	P8.17	P8.19	P8.21	P8.23	P8.25	P8.27
10%	20%	30%	50%	60%	80%	100%

P8.34 < P8.36 < P8.38 < P8.40 < P8.42 < P8.44 < P8.46

P8.34	P8.36	P8.38	P8.40	P8.42	P8.44	P8.46
10%	20%	30%	50%	60%	80%	100%

4

PROFIBUS MODBUS

P8.13 P8.32

P8.32 ห า D

8.9 V/F

1

P16.0 P16.9

P16.7 120 × P16.5/P16.6 P16.9

120 × P16.5/P16.7

P16.2 P16.4

2

P16.12

1kHz			
5kHz			
10kHz			

3 V/F

P16.14 V/F P16.11=0

[0] V/F

[1] V/F P16.33 P16.45 V/F

[2]

P16.34 P16.45 V/F V/F

V1 V2 V3 F1 F2 F3

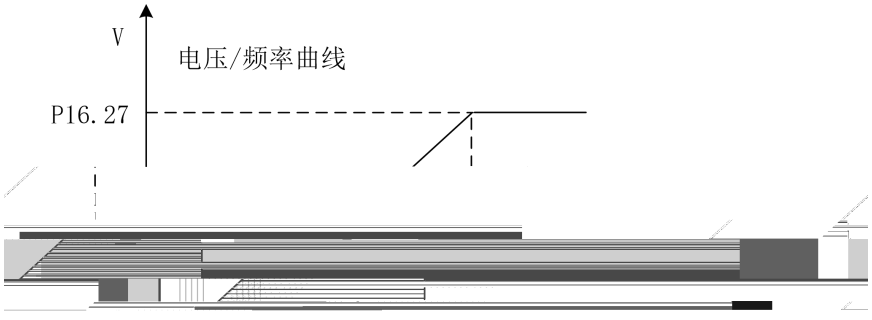
4

P16.15 V/F

V/F

5

P16.14=[0] V/F V/F P16.26 P16.26 P16.27



P16.14=[2] V/F P16.30 P16.30 P16.27

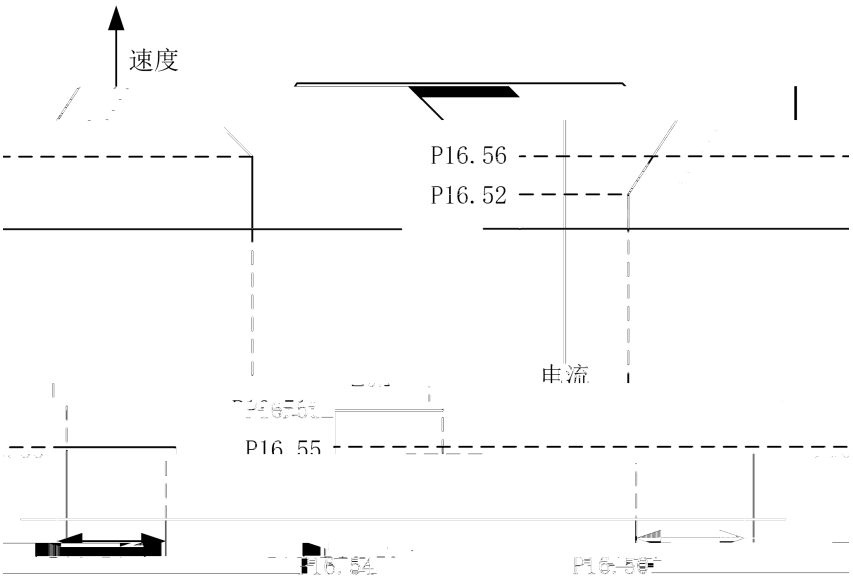
6

P16.50 P16.56

V/F

P16.50 P16.51 P16.52

P16.54 P16.55 P16.56



7

P16.64

8.10

1

P20.0

P20.0=0 P20.1=0 P20.2=0

P20.0=0 P20.1≠0 P20.2≠0

P20.0=1 P20.1≠0 P20.2≠0 1

0

¬ è bN ø ≠ m w P20.0 ø

Ď w Pts ø ö

5

GDHF-PGD1 PG

GDHF-PGD1 PG

DI “[10] ” DP “CW0.9 ”

P20.26 P20.27 0

2%

P20.34 [0] 1

0 P20.26 P20.27 0

P20.26 50% 100% P20.27 3% 5%

P20.34 [1] 2

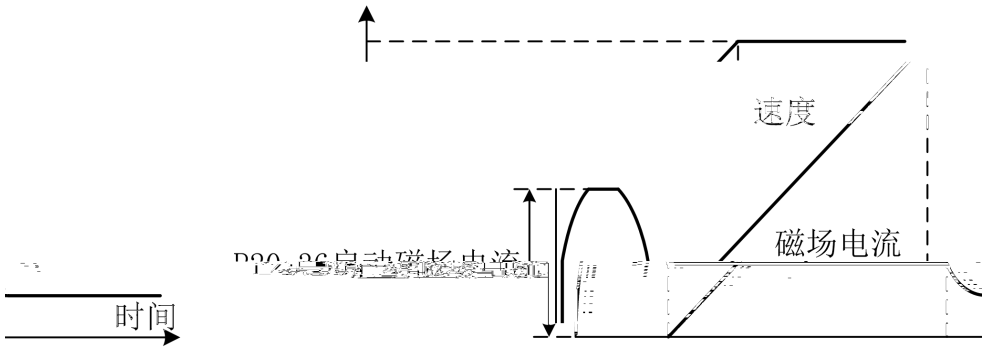
200 P20.26 P20.27 0

HF680NLC P20.34 [1]

HF680NLC P20.34 [0]

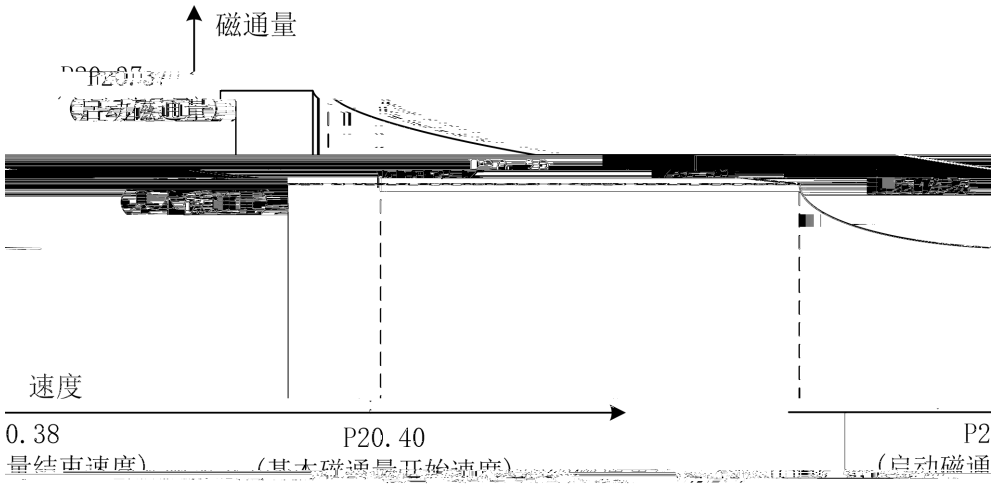
6

P20.36



7

P20.37 P20.40



8

P20.57 P20.58 P20.59 P20.57 1

P20.58

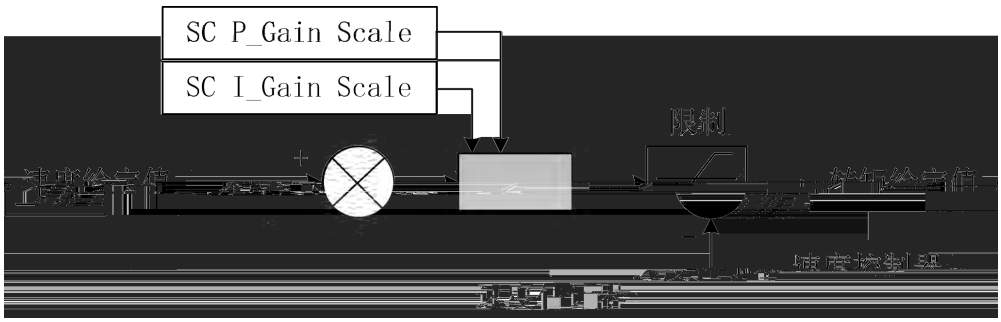
P20.59

9

P20.55 ,

P20.56 ,

%



10 DROOP

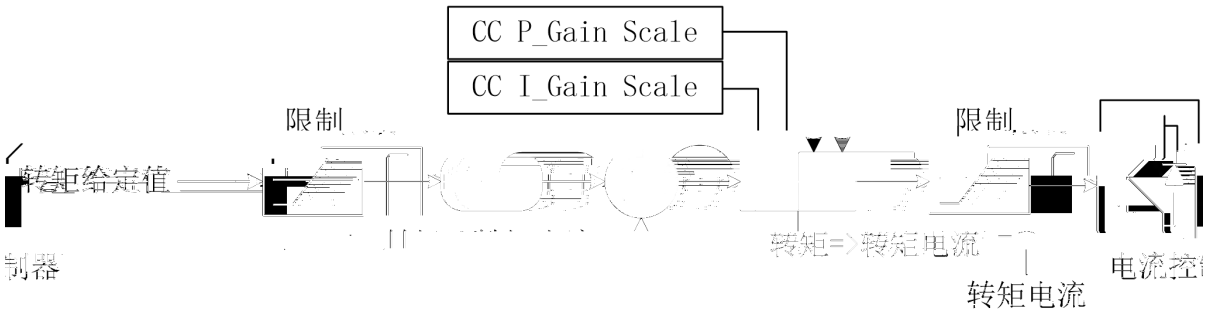
DROOP DROOP

P20.60 0

DROOP P20.61 DROOP

11

P20.62 P20.63 %



9.

9.1

W01	SYS_NOT_RDY	(Ready)	
W02	NO_DRV_ENABLE	[ ]	P3
W03	LOCAL_EM	[ ]	P3
W04	REMOTE_EM	[ ]	P3
W06	OT	P7.14( )	
W09	DP P/B ALARM	DP	DP
W10	MODBUS MODBUS ALARM	Modbus	Modbus
W15	PARAMETER ERROR		
W18	Temp_Sensing Fail		
W20	SLV_NOT_RDY		
W21	1 SLV1_CAN_ERR	1	1

9.2

		P7.48(1) P7.49(1)
[E111]	OL	P7.48 P7.49 P7.8
[E112]	ZC	
[E113]	MIP	
[E114]	MOP	
[E115]	OS	P7.19 P7.19
[E116]	SLVC Fail	P7.23
[E117]	MOTOR STALL	Ó 2 .2 O

[E127]	IGBT7 OT7	
[E128]	IGBT8 OT8	
[E137]	FAN STALL	
[E138]	TEMP_SENSING FAIL	
[E152]	U IGBT PDP [UB]	IGBT IGBT
[E154]	V IGBT PDP[VB]	IGBT IGBT
[E155]	W IGBT PDP [WT]	IGBT IGBT
[E156]	Hardware OC	
[E157]	PDP [DB]	
[E160]	SLAVE FAULT	
[E161]	SLV_NOT_RDY	
[E162]	1 CAN SLV1_CAN_ERR	1
[E167]	CAN CAN_ERR	
[E170]	MOTOR TUNING FAIL	P7.33
[E180]	DP P/B ERROR	
[E181]	DP P/B_EM	CW0.4
[E200]	LOCAL_EM	[ ] P3

[E201]	REMOTE_EM	[ ] P3
[E202]	Modbus MODBUS EMERGENCY	Modbus CW0.4
[E203]	DRIVE DISABLED	DP
[E210]	Panel Error	
[E220]	CRC MEMORY CRC ERR	
[E221]	PARAMETER ERROR	

9.3

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10.



1.

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1. CMOS

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3.

10.1

10.2

	1. 2.	1. > 40 < 95% 2.
	1. 2. 3.	1. 2. 3. 4. 5. 6.
	1. 2. 3.	1. 2. 3.
	1. 2.	1. 2.
	1. 2.	1. 2.

10.3

1

2 2

PCB

2

5

HF680NLC

1.04

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3

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