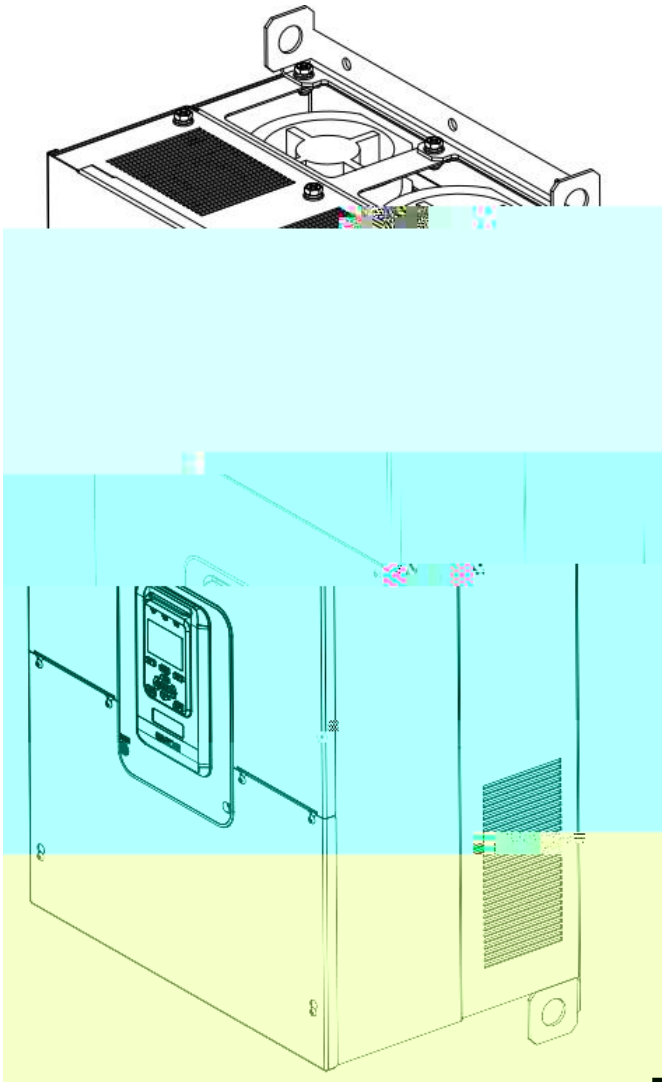
GUIDE

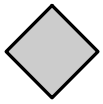


HF659

1.
    1.1
    1.2
    1.3
2.
    2.1
    2.2
    2.3
    2.4
    2.5
    2.6
    2.7
    2.8
    2.9
3.
    3.1
    3.2
    3.3
    3.4
    3.5 PGC2
    3.6PGD2
    3.7 GY01
4.
    4.1
    4.2
    4.3
    4.4
    4.5
    4.6
    4.7
    4.8
    4.9
    4.10 EMC
5.
    5.1
    5.2
    5.3
    5.4
    5.5
6.
    6.1
    6.2
7.
    7.1 P0
    7.2 P2
    7.3 P3
    7.4 P4
    7.5 P5

1.

1.1



1.2

(1)

(2)

(3)

(4)

LVD	2014/35/EU	EN 61800-5-1
EMC	2014/30/EU	EN 61800-3

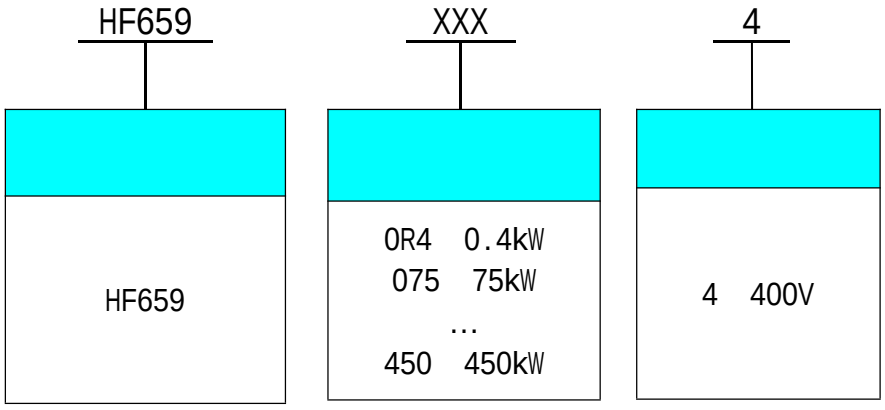
1.3

2.

2.1

1.
2.
3.
4.

2.2



2-1

HF659 2-2 250kW

2-2

HF659-250-4 HF659 250kW 400V

AC

3PH

380V-480V 50/60Hz

0-480V 0-300Hz

2.3

2-3 HF659

	[A]	[kW]	[A]	[kW]		(kg)
HF659-0R4-4	1.8	0.4	--	--	I1	3
HF659-0R7-4	3.3	0.75	1.8	0.4		
HF659-1R5-4	4.8	1.5	3.3	0.75		
HF659-2R2-4	5.7	2.2	4.8	1.5		
HF659-3R7-4	10.2	3.7	5.7	2.2	I2	3.5
HF659-5R5-4	15	5.5	10.2	3.7		
HF659-7R5-4	18	7.5	15	5.5		
HF659-011-4	24	11	18	7.5		
HF659-015-4	32	15	24	11	I3	4.5
HF659-018-4	41	18.5	32	15		
HF659-022-4	47	22	41	18.5	I4	10.5
HF659-030-4	65	30	47	22		
HF659-037-4	75	37	65	30		
HF659-045-4	94	45	75	37	I5	35
HF659-055-4	115	55	94	45		
HF659-075-4	155	75	115	55		
HF659-090-4	188	90	155	75	I6	52
HF659-110-4	215	110	188	90		
HF659-132-4	265	132	215	110	I7	108.5
HF659-160-4	330	160	265	132		
HF659-185-4	365	185	330	160		
HF659-220-4	438	220	365	185	I8	146
HF659-250-4	485	250	438	220		
HF659-280-4	545	280	485	250		
HF659-315-4	610	315	545	280		
HF659-355-4	668	355	610	315	I9	210
HF659-400-4	720	400	668	355		
HF659-450-4	820	450	720	400		

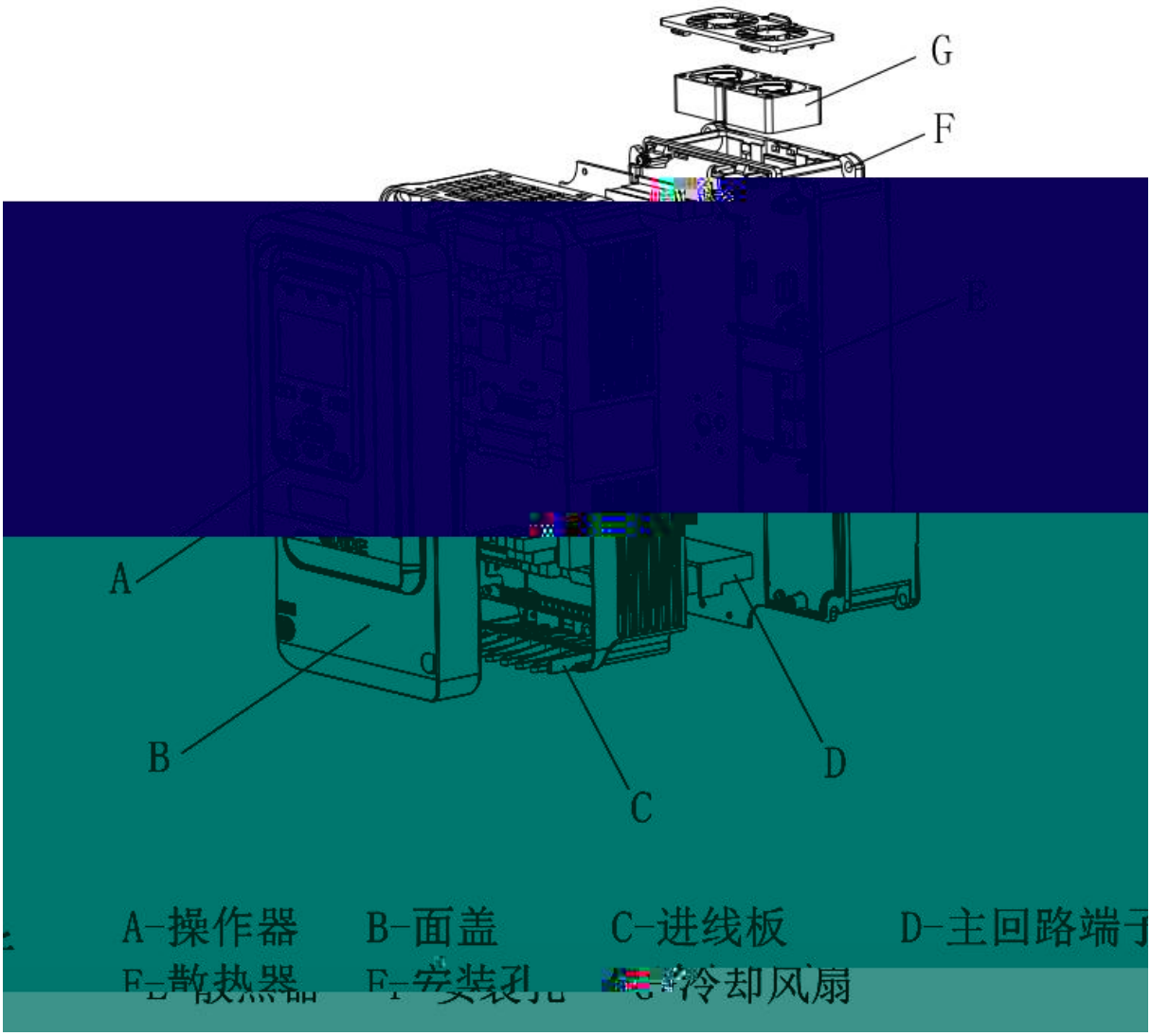
120% 5 1

150% 5 1

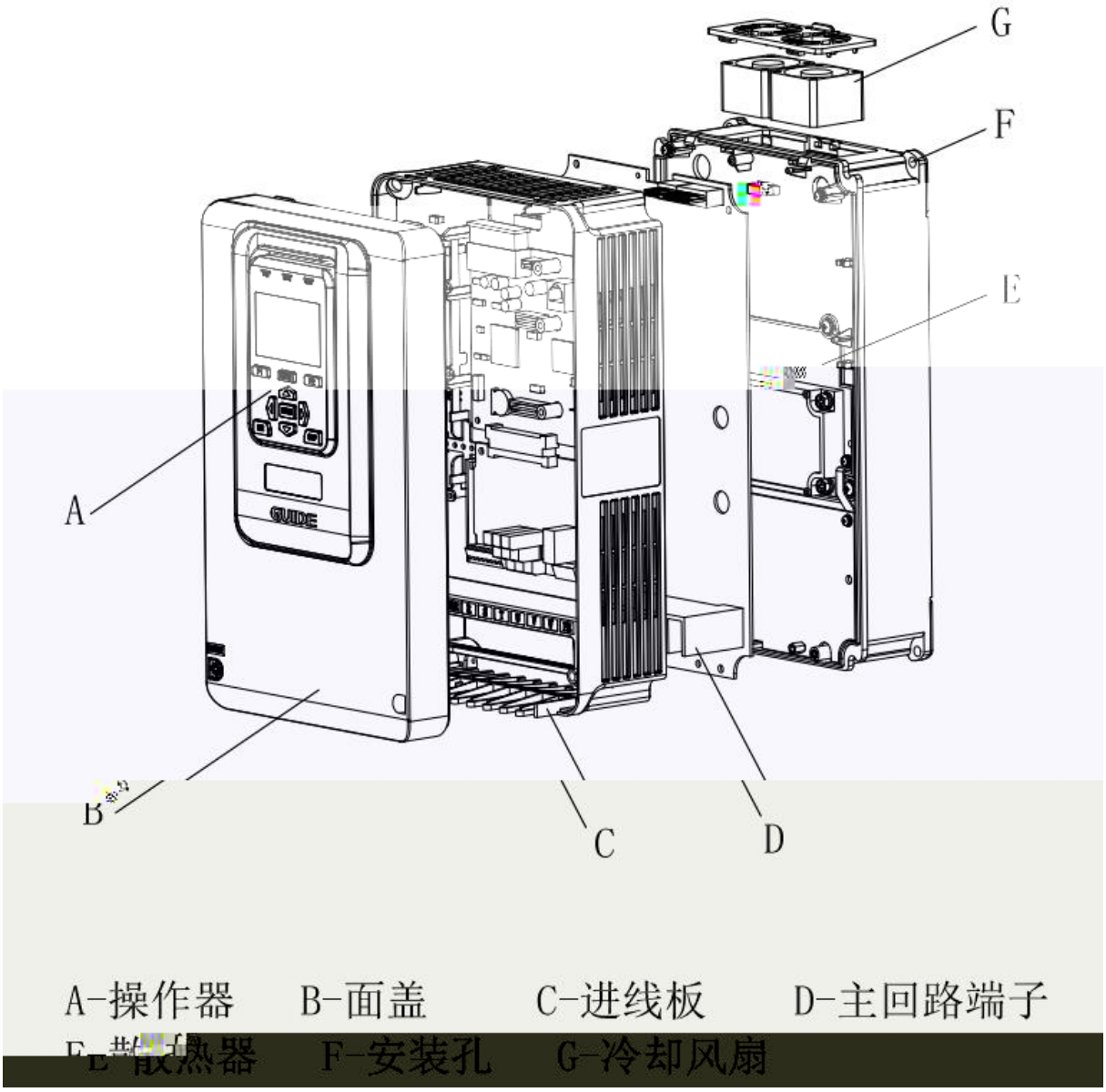
2.4

HF659

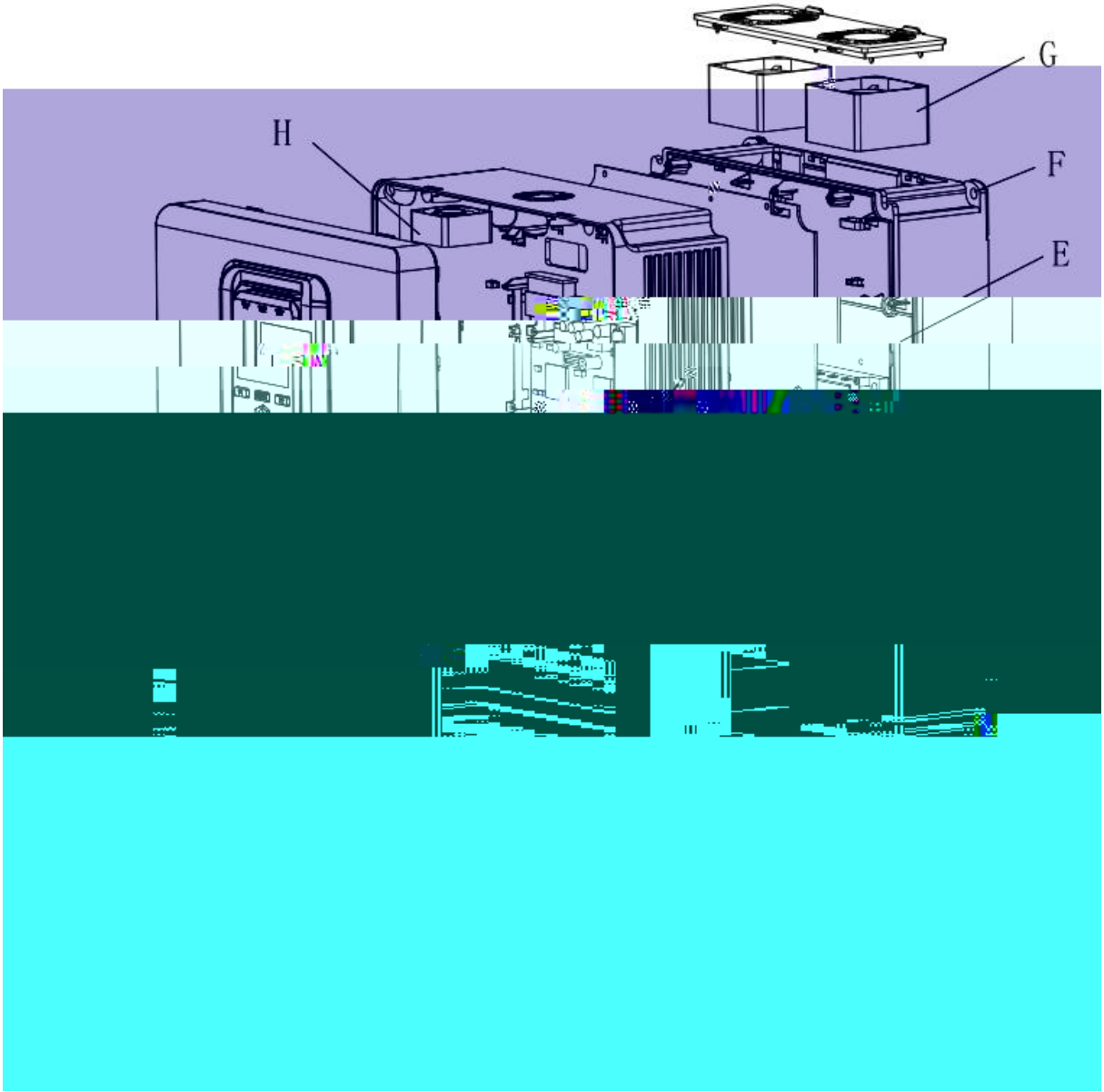
HF659-0R4-4　HF659-011-4



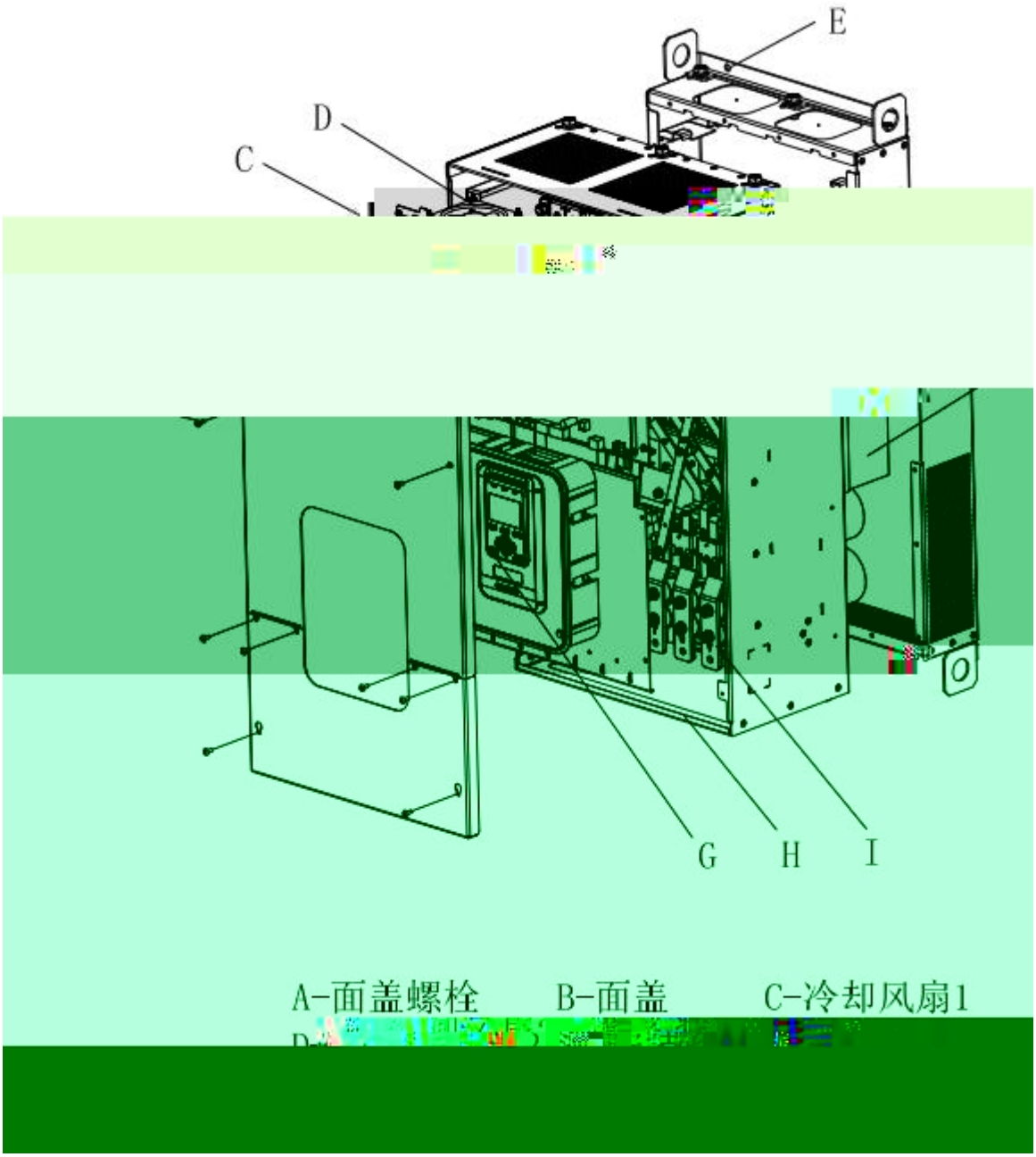
HF659-015-4　HF659-018-4



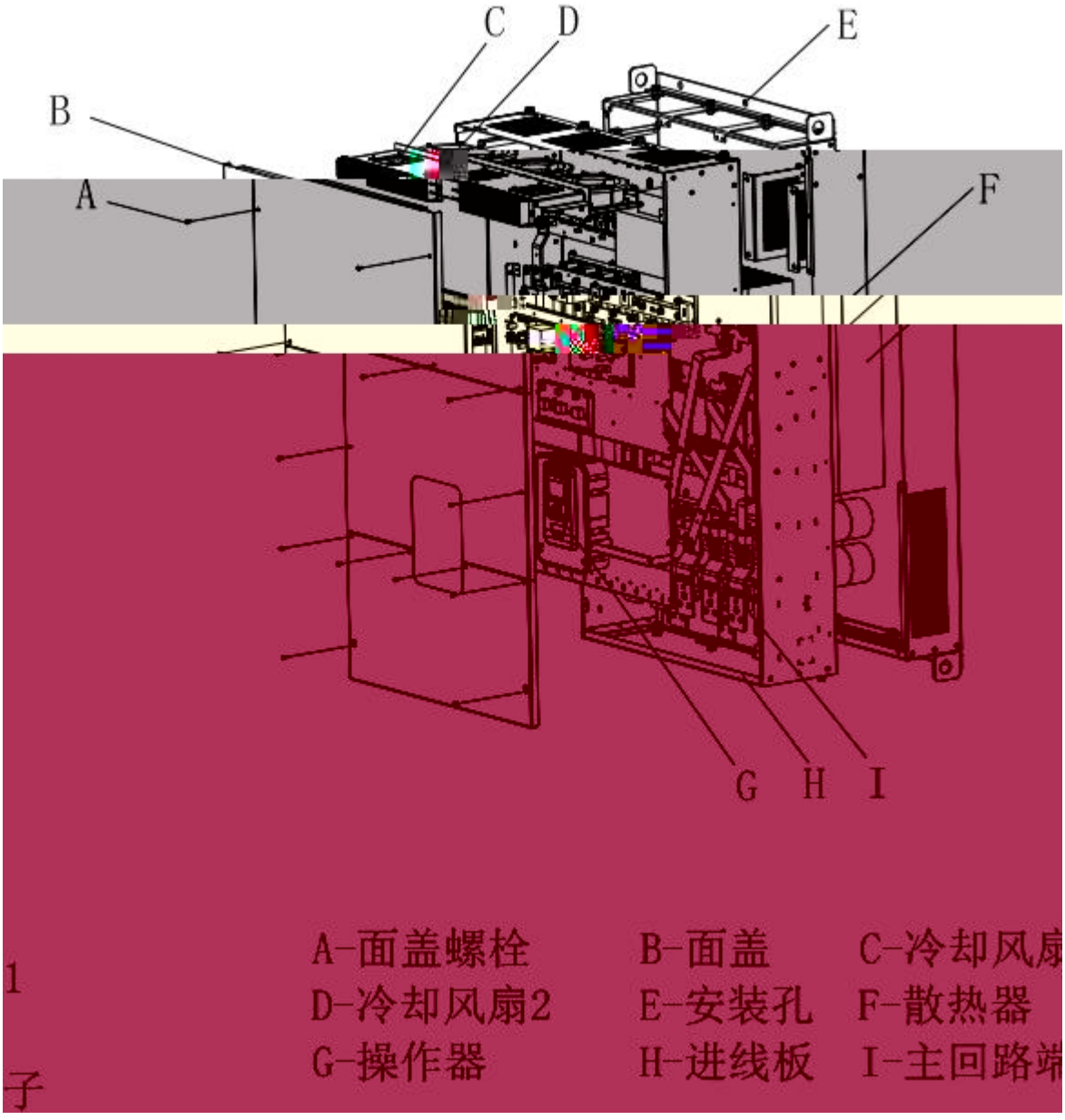
HF659-022-4 HF659-037-4



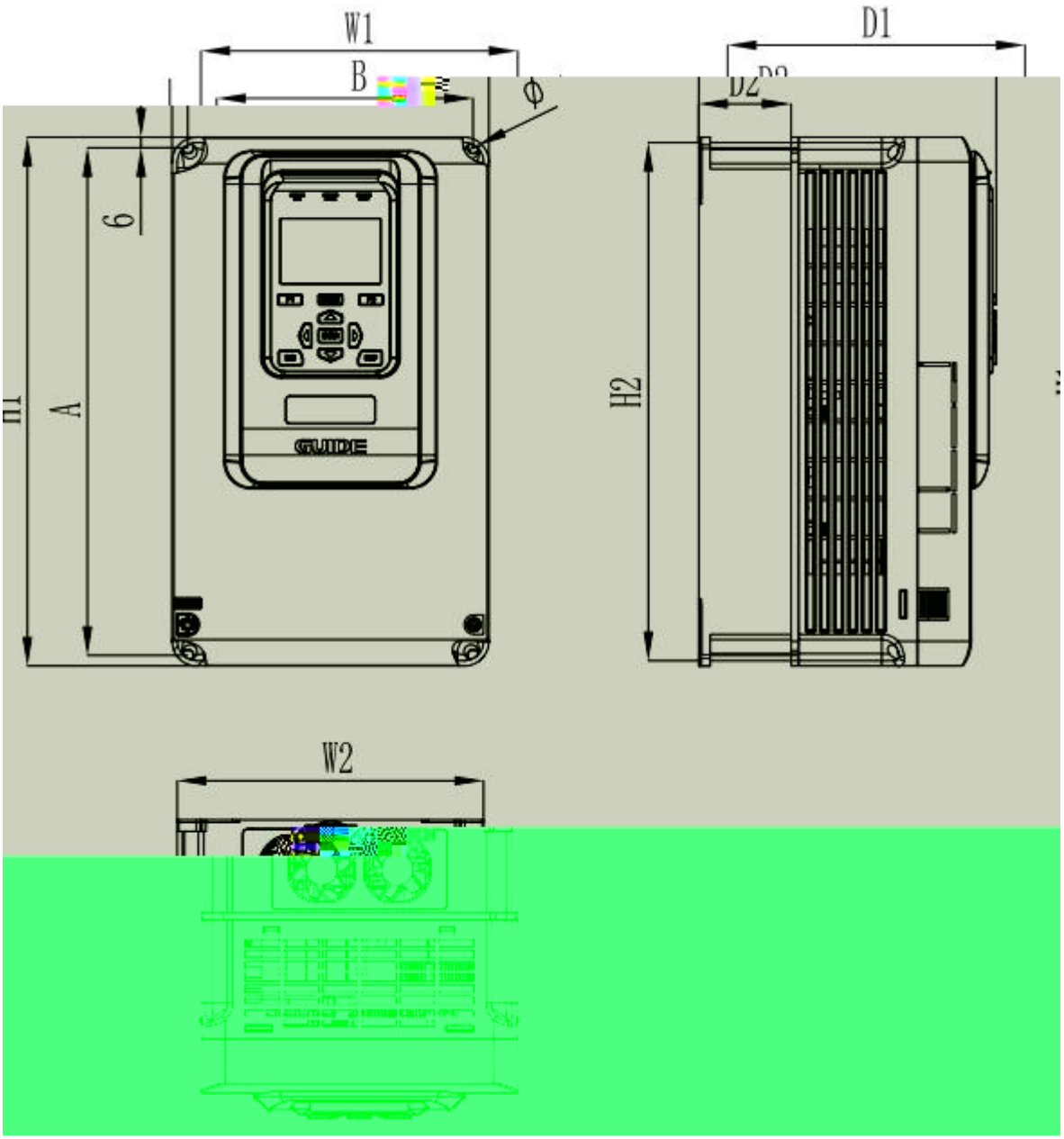
HF659-045-4　　HF659-075-4



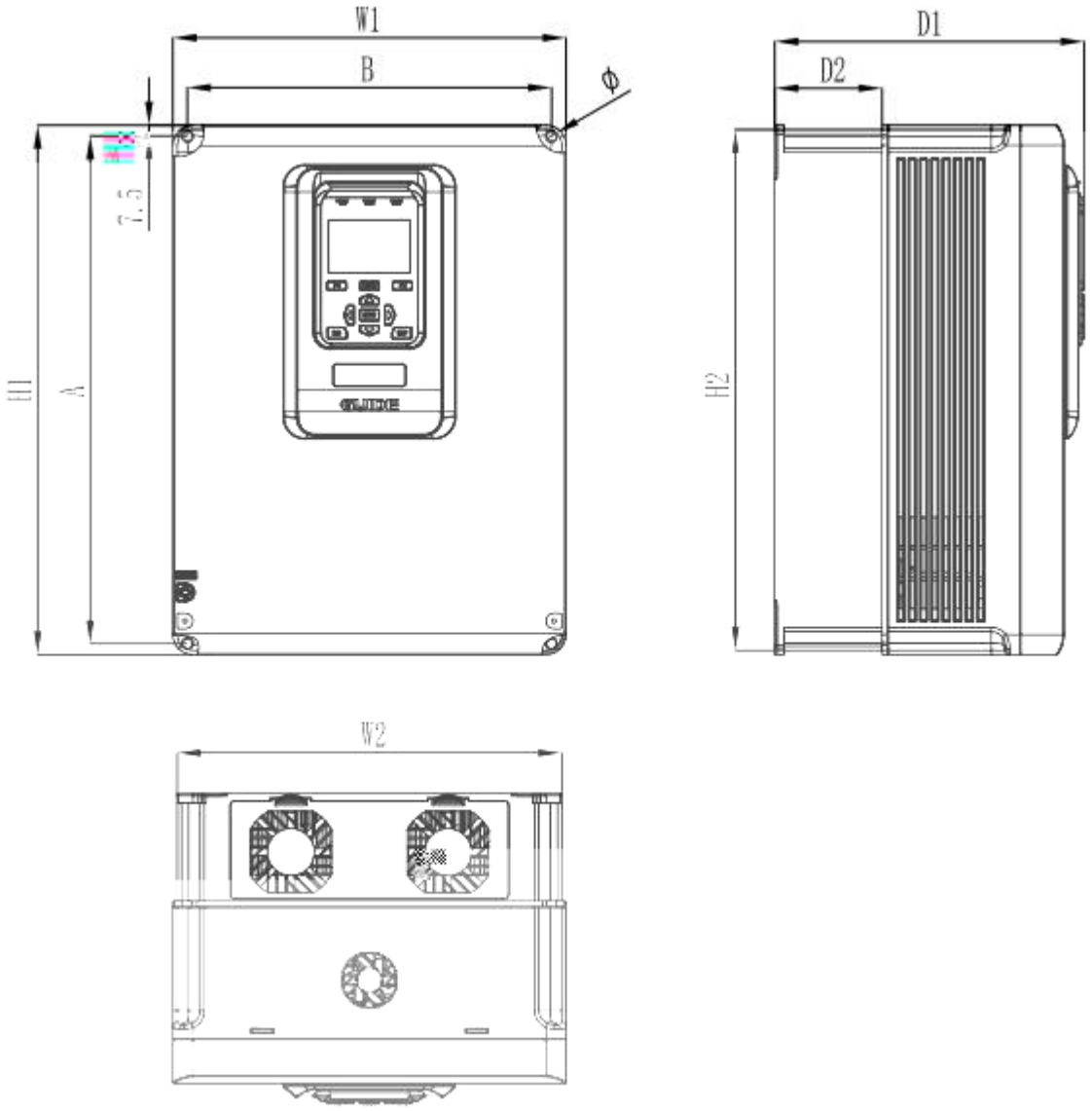
HF659-090-4　　HF659-450-4



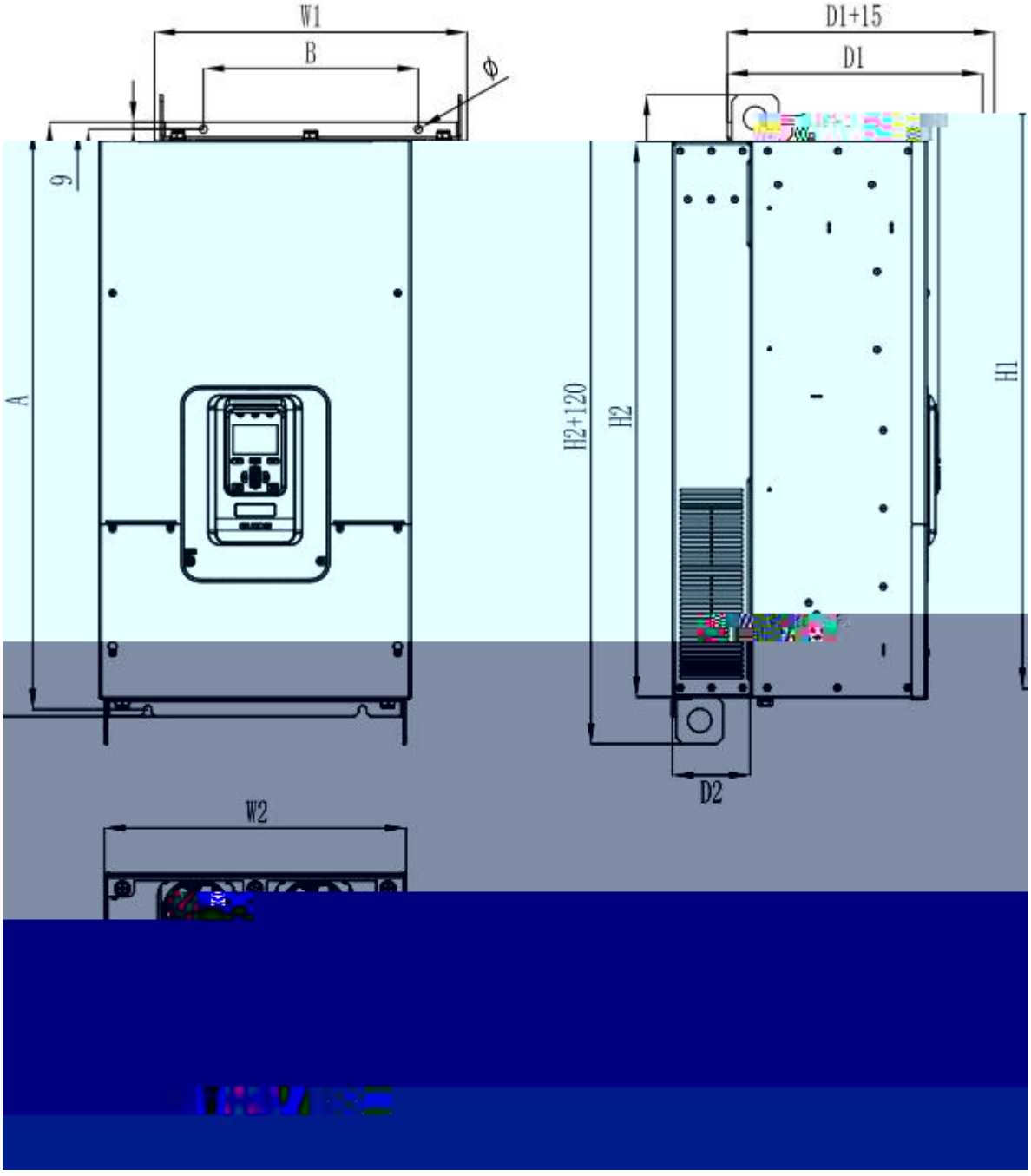
2.5



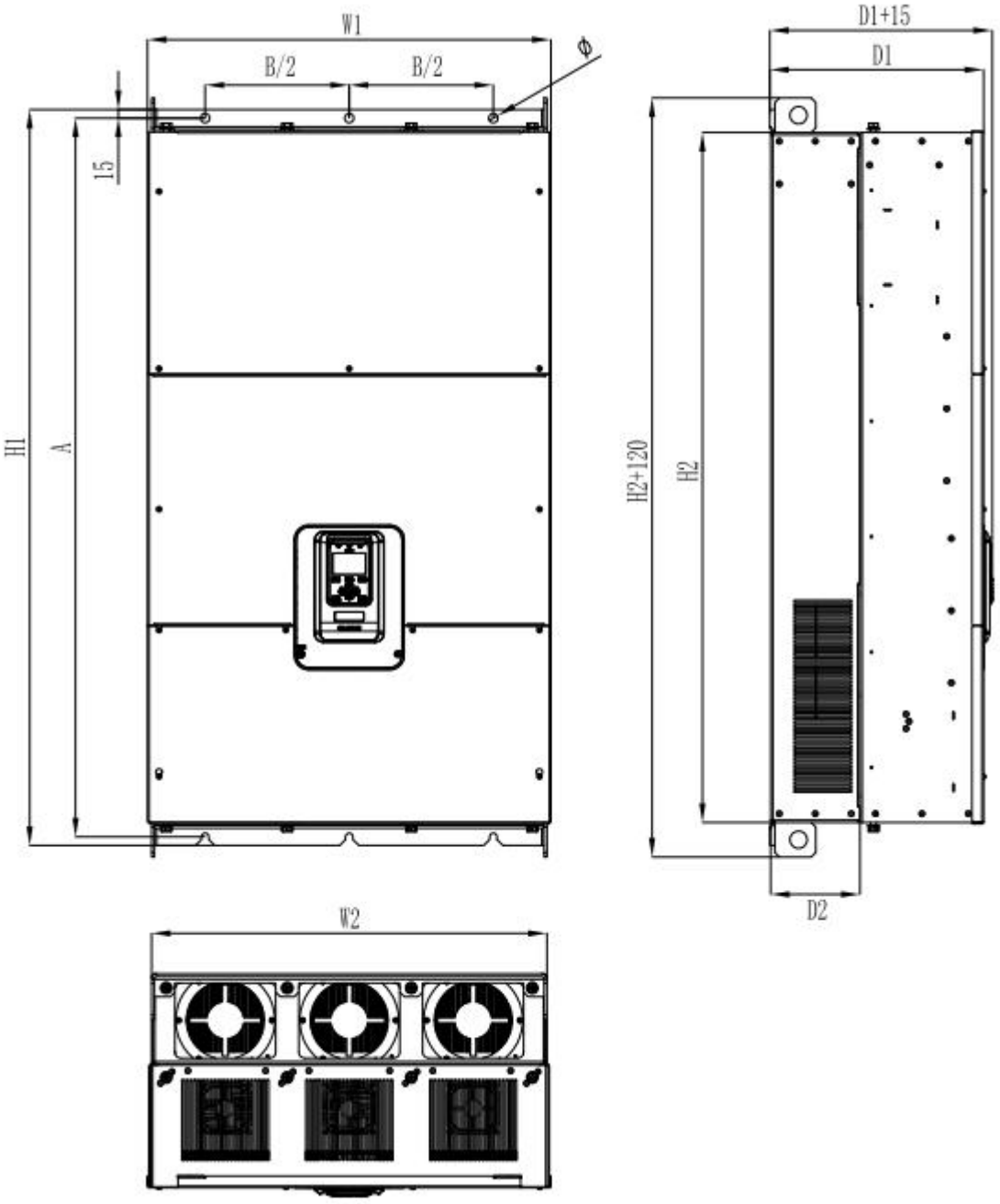
I1-I3



14



I5-I6



17-19

		(mm)						mm			8.8	Kg
		H1	H2	W1	W2	D1	D2	A	B	φ	M	
I1	0.4KW	260	254	140	134	170	52.5	248	122	4-φ6	4-M5	3
	0.75KW											
	1.5KW											
	2.2KW											
I2	3.7KW	260	254	140	134	170	52.5	248	122	4-φ6	4-M5	3.5
	5.5 KW											
	7.5 KW											
	11 KW											
I3	15 KW	300	294	180	174	170	52.5	288	162	4-φ6	4-M5	4.5
	18.5KW											
I4	22 KW	370	364	275	269	215	75	355	255	4-φ7	4-M6	10.5
	30 KW											
	37 KW											
I5	45 KW	600	565	340	326	282	110	585	225	2-φ9	4-M8	35
	55 KW											
	75 KW											
I6	90 KW	760	710	400	386	327	100	742	275	2-φ9	4-M8	52
	110 KW											
I7	132 KW	930	850	490	476	335	155	900	350	3-φ13	6-M12	108.5
	160 KW											
	185 KW											
I8	220 KW	1140	1060	500	486	355	155	1110	350	3-φ13	6-M12	146
	250 KW											
	280 KW											
	315 KW											
I9	355 KW	1275	1195	700	686	370	155	1245	500	3-φ15	6-M14	210
	400 KW											
	450 KW											

2.6

		380V 480V
		50/60Hz
		-15% +10%
		fLN±2 ±4 ≤2 fLN/s
		0
		 1
		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)
		5 120% 1 150% 1
	PID	
		DP CAN Modbus Ethernet Profinet
		 PID

/

8 2 -10 +10V 0mA/4mA 20mA

5 3 2 2
0 +10V 0mA/4mA 20mA

LCD

1000 1000
100 1%
3000
-10 +40 40
1 1% 50
-10
? ¾

		≤ 80db

2.7

180%

40% HF659

2.8

	[kW]	[kW]		[kW]	[kW]
HF659-0R4-4	0.4	0.048	HF659-055-4	55	1.313
HF659-0R7-4	0.7	0.059	HF659-075-4	75	1.486
HF659-1R5-4	1.5	0.079	HF659-090-4	90	1.956
HF659-2R2-4	2.2	0.092	HF659-110-4	110	2.422
HF659-3R7-4	3.7	0.102	HF659-132-4	132	3.1

HF659-5R5-4	5.5	0.151	HF659-160-4	160	3.663
HF659-7R5-4	7.5	0.218	HF659-185-4	185	4.495
HF659-011-4	11	0.277	HF659-220-4	220	4.91
HF659-015-4	15	0.328	HF659-250-4	250	5.88
HF659-018-4	18.5	0.5	HF659-280-4	280	7.044
HF659-022-4	22	0.645	HF659-315-4	315	7.708
HF659-030-4	30	0.722	HF659-355-4	355	8.003
HF659-037-4	37	0.906	HF659-400-4	400	8.718
HF659-045-4	45	1.128	HF659-450-4	450	9.1

2.9

	GDHF-DP03	GDHF-DP03 Profibus HF659
PG	GDHF-PGC2	GDHF-PGC2 PG HF659 15V
PG	GDHF-PGD2	GDHF-PGD2 PG HF659 15V
	GDHF-MB02	GDHF-MB02 MODBUS HF659
	GDHF-GY02	GDHF-GY02 HF659
PN	GDHF-PN02	PROFINET TCP/IP IT GDHF-PN02 PROFINET HF650

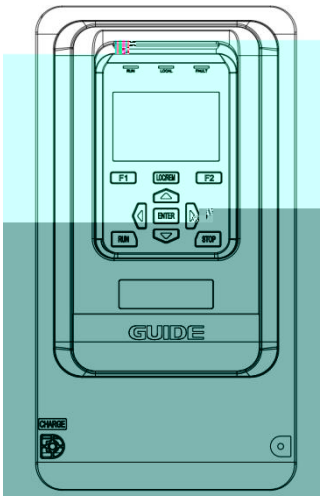
	GDHF-K6C1	GDHF-K6C1 LCD HF659-L
	GDBU-4045B	
	GDBU-4220B	

HF659 45KW-185KW

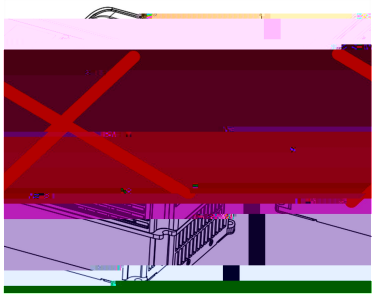
220KW

3.2

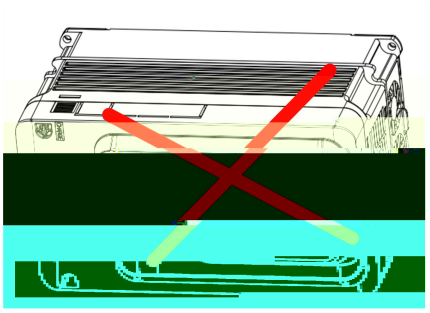
3.2.1



OK



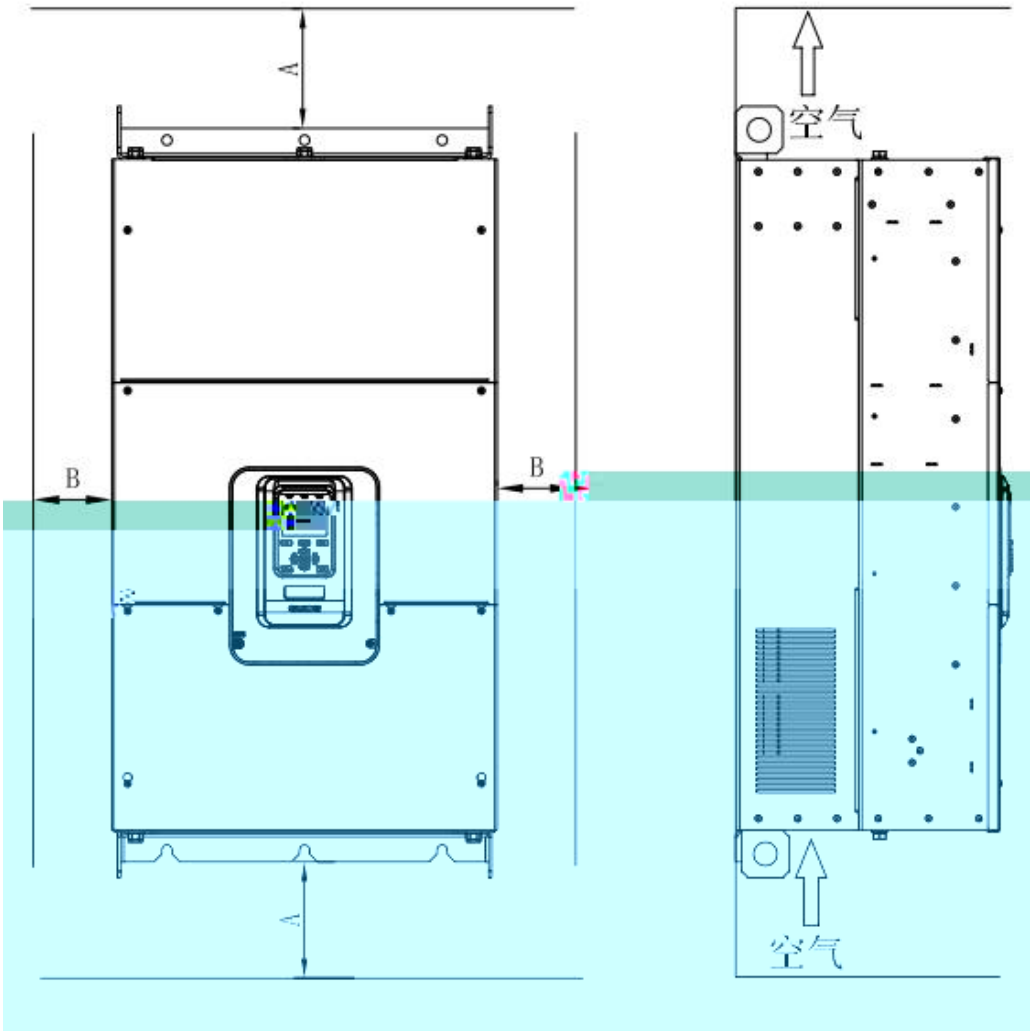
NG



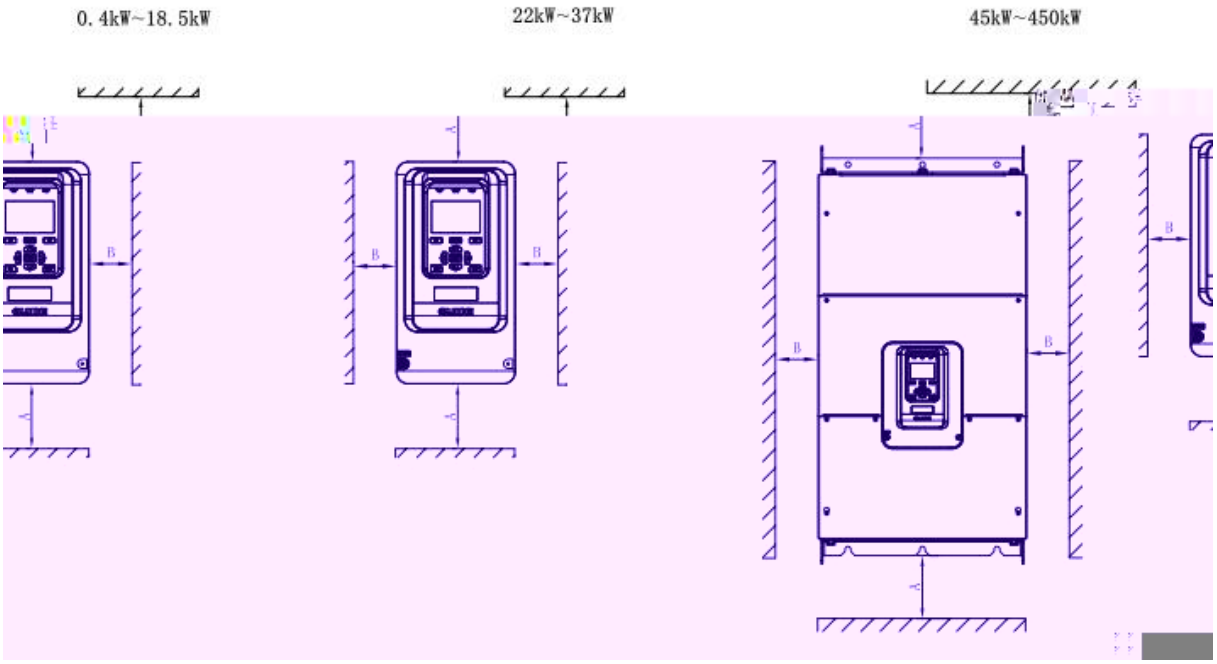
NG

3.2.2

1

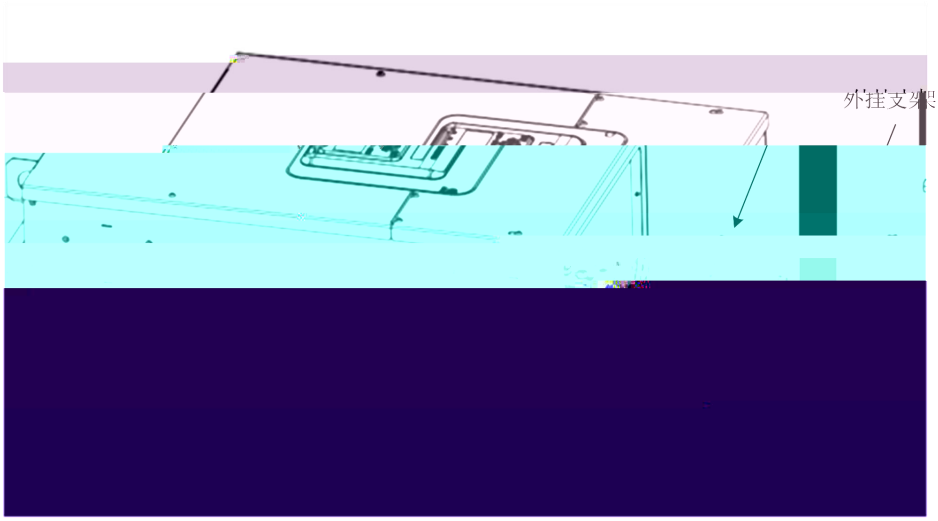


3-1

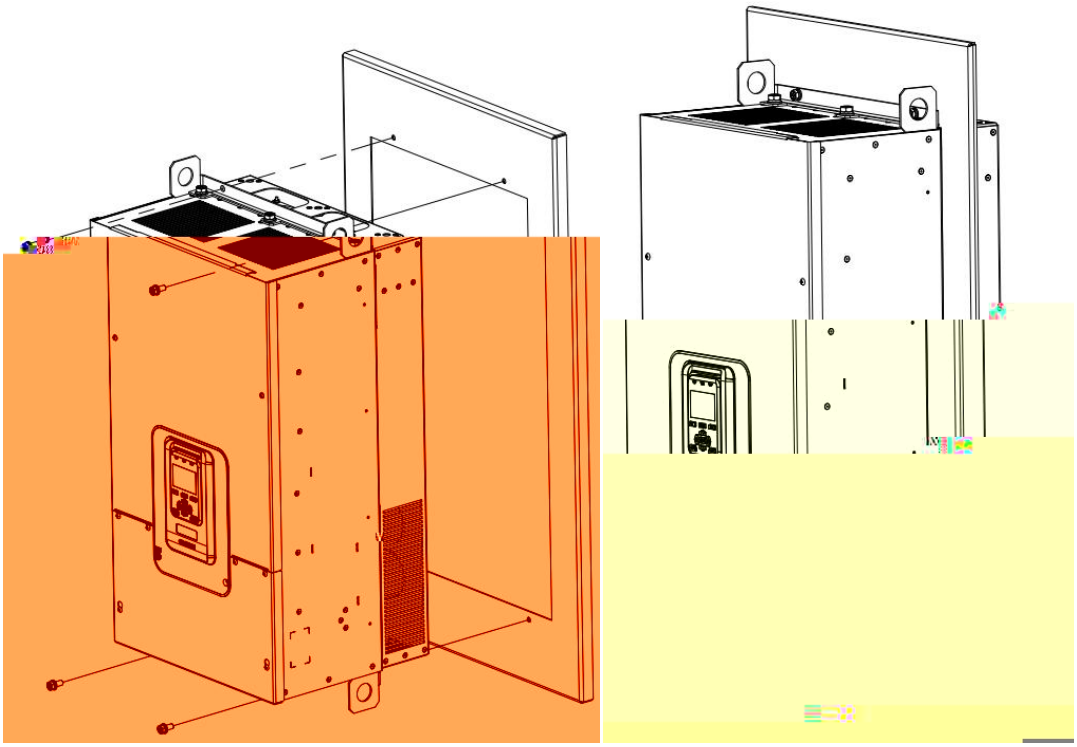


0.4kW~18.5kW	A ≥ 100mm	B ≥ 40mm
22kW~37kW	A ≥ 200mm	B ≥ 50mm
45kW~450kW	A ≥ 300mm	B ≥ 50mm

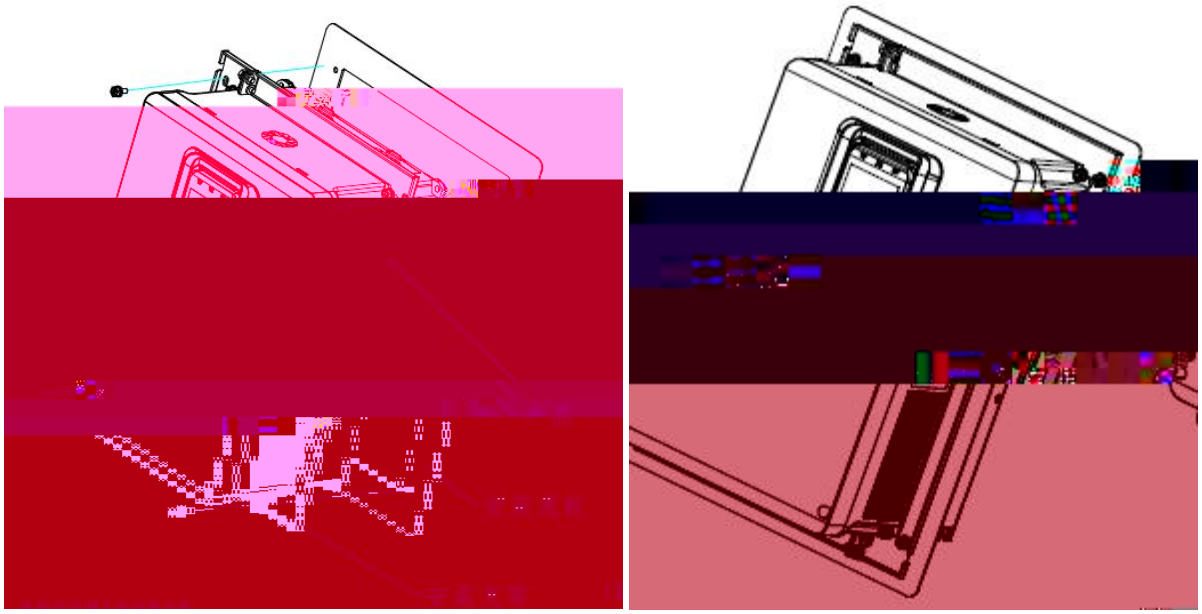
2



3-2

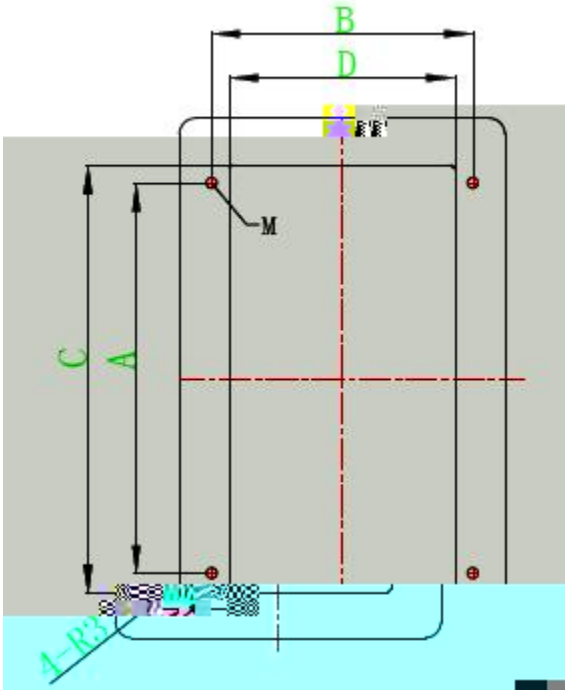


3-3

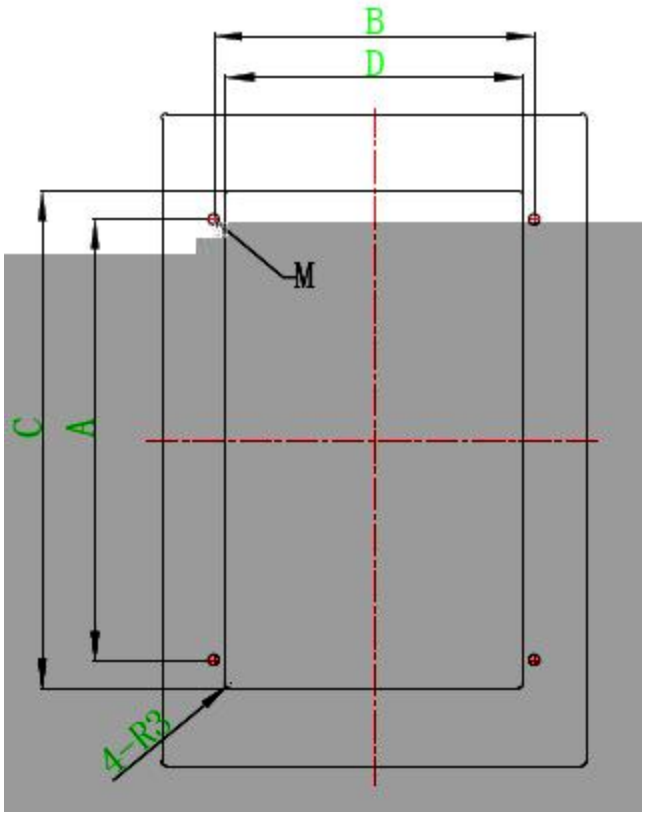


3-4

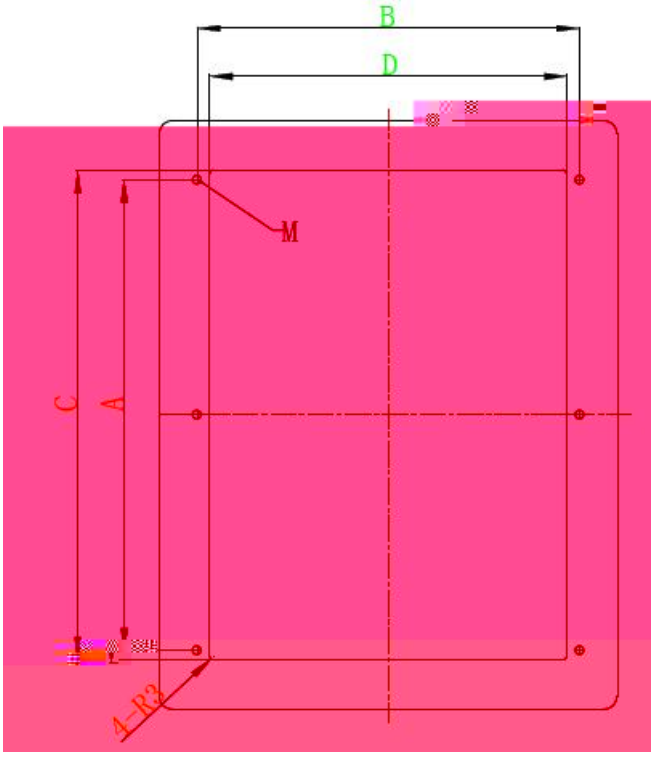
3



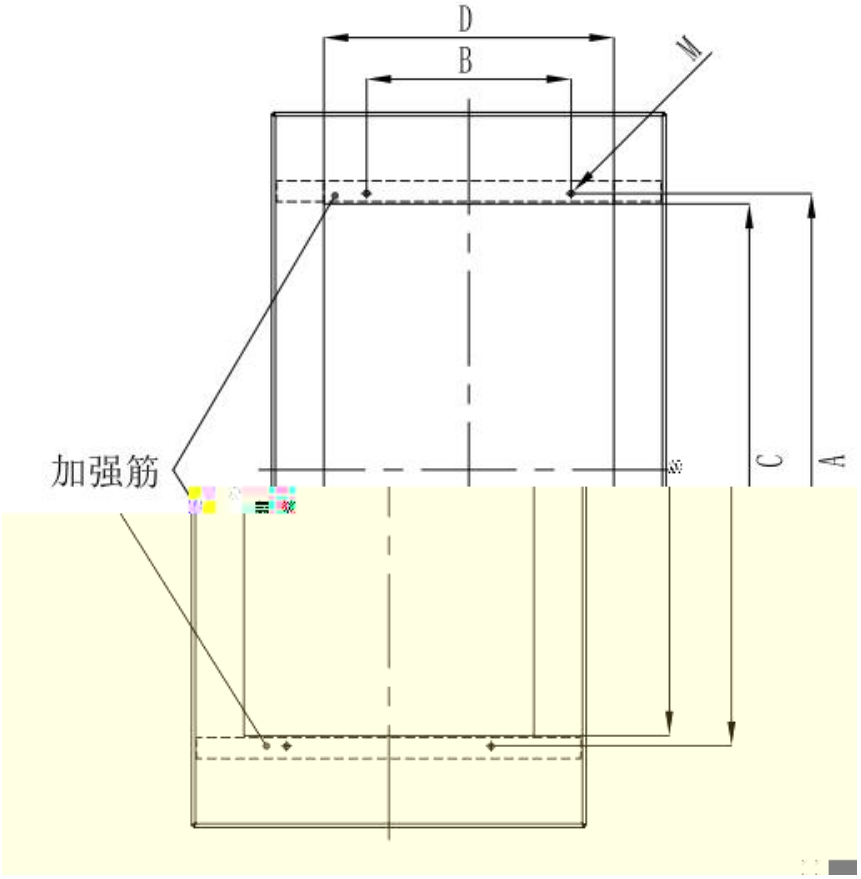
3-5 I1-I2



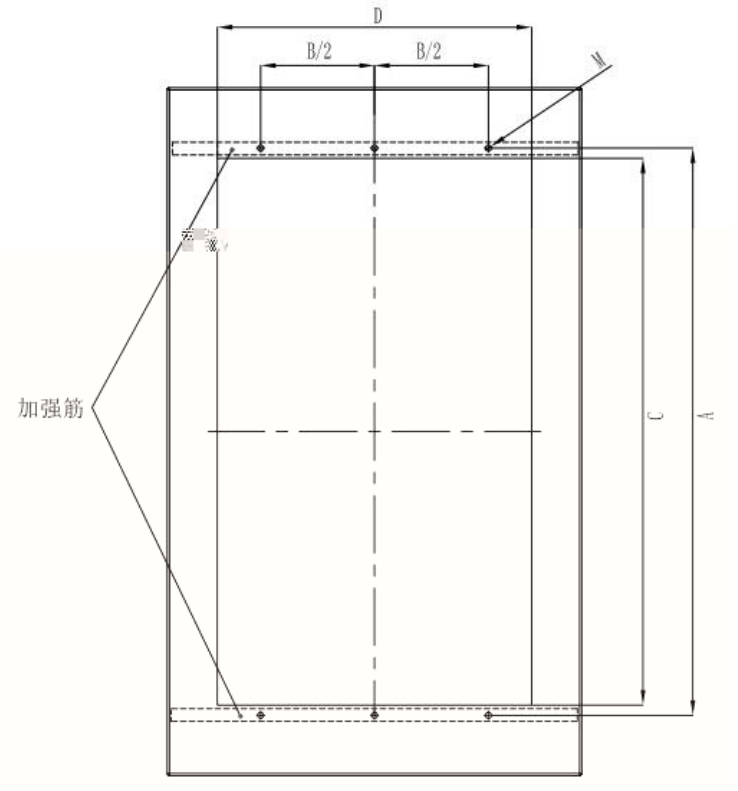
3-6 I3



3-7 I4



3-8 I5-I6



3-9 I7-I9

	(mm)		(mm)		
	A	B	C	D	
I1	240	160	262.5	138	4-M6
I2	240	160	262.5	138	4-M6
I3	270	197	304	182	4-M6
I4	360	292	374	273	6-M6
I5	585	275	570	330	4-M6
I6	742	275	715	390	4-M8
I7	900	350	855	480	6-M12
I8	1110	350	1065	490	6-M12
I9	1245	500	1200	690	6-M14

3.2.3

1

100mm

2

3-10

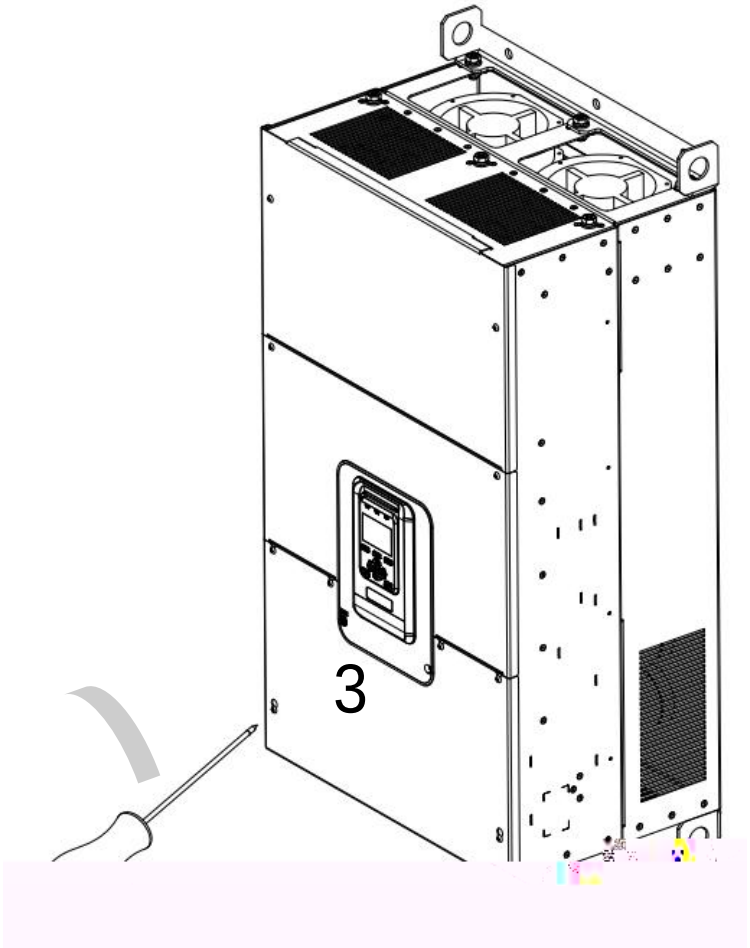
3

3-11

3-11

3.3

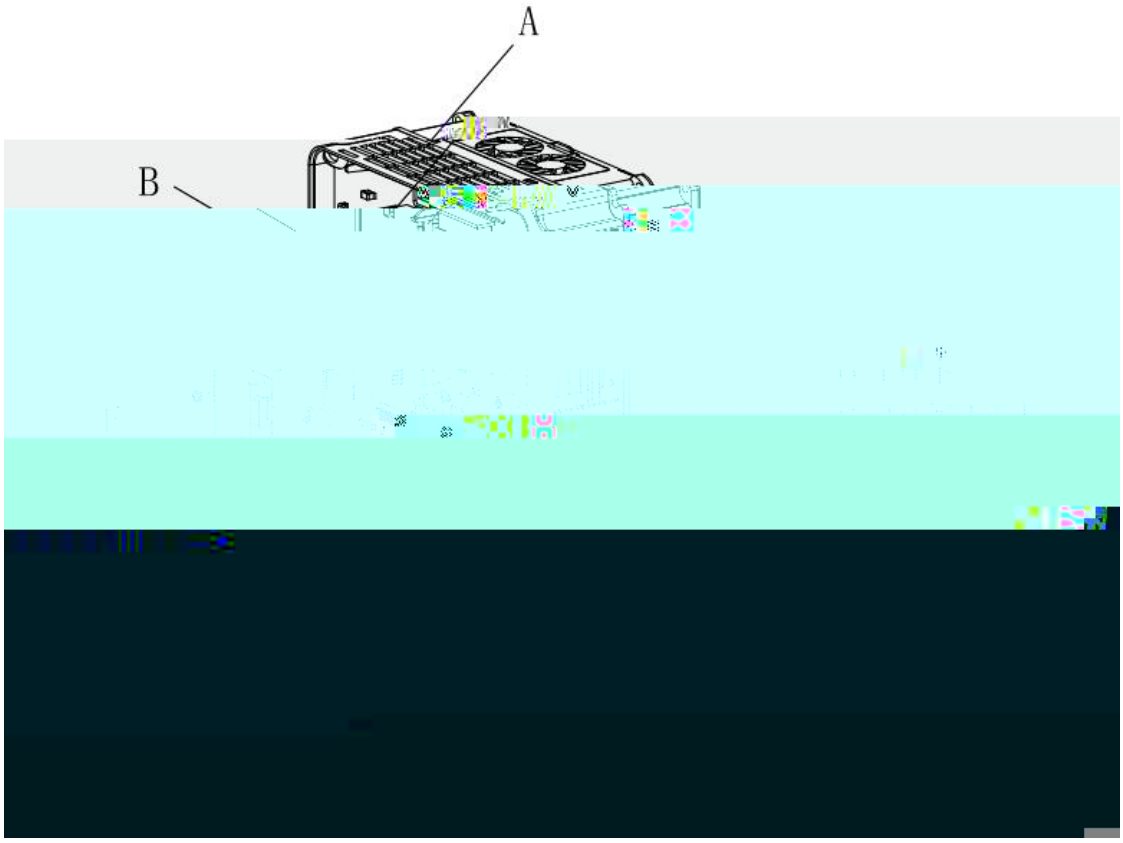
1	1	4	5mm
2	2		
3	3		



3-12

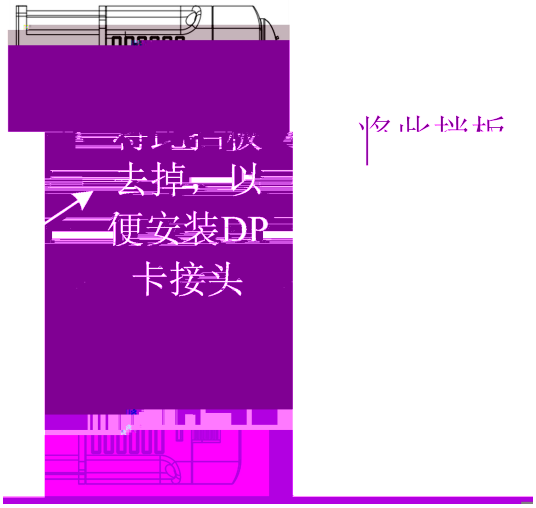
3.4

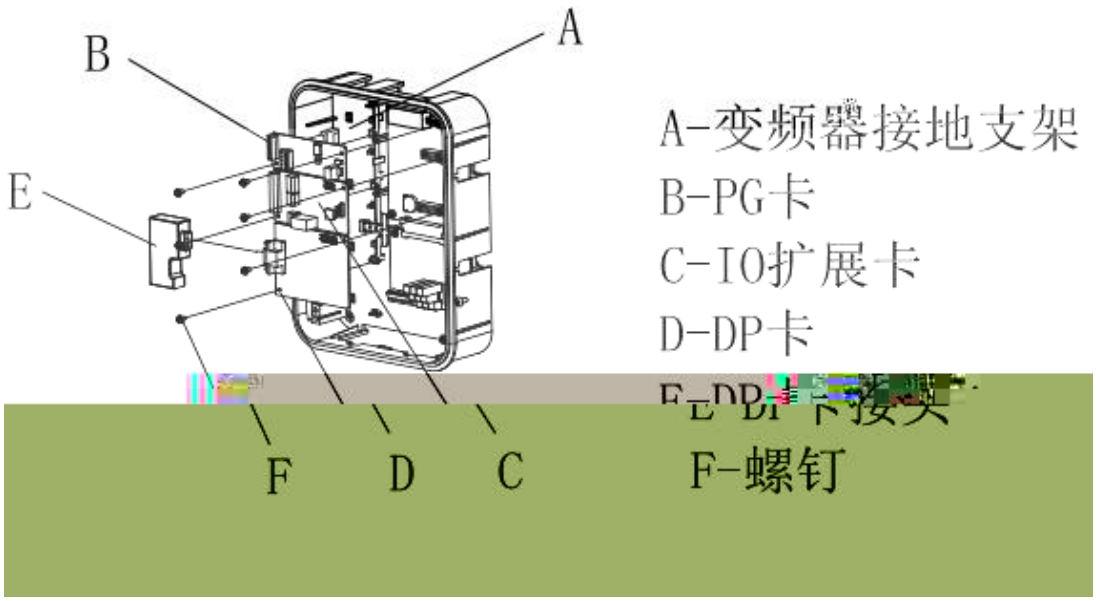
HF659



37kW

18.5KW DP





37KW

3.5 PGC2

GDHF-PGC2 PG 11

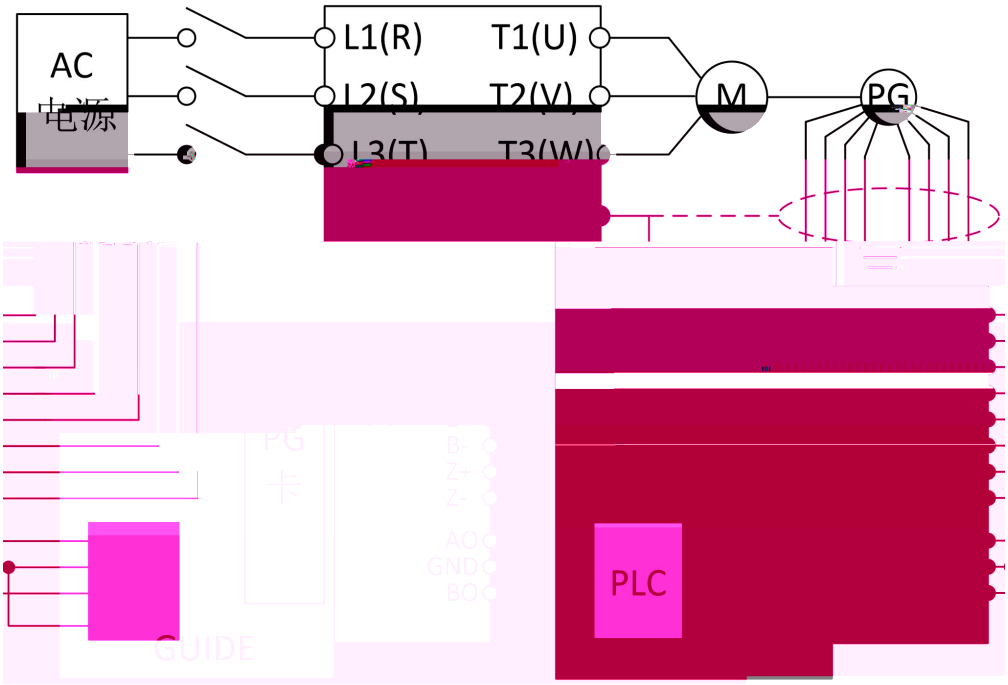
A+	A-	B+	B-	Z+	Z-

+15V	GND	AO	GND	BO

+15V,GND		…	15V ± 5%	300mA
A+,A- B+,B- Z+,Z-		0-80kHz	0-15V	…
AO,GND BO		0-50kHz	0-24V	…

PE PE

PGC2



1 PG

2 PG

3 PE

4 PG A- B- Z- GND

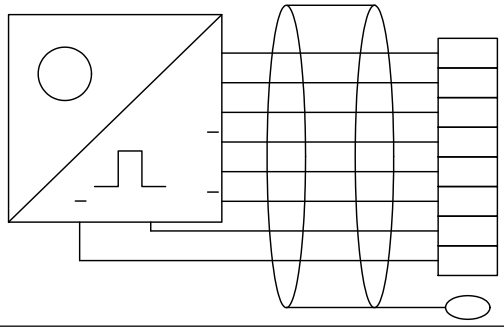
5 PGC2 15V RS-422

PGC2

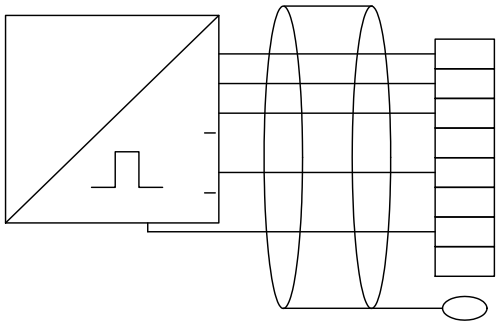
15V

1

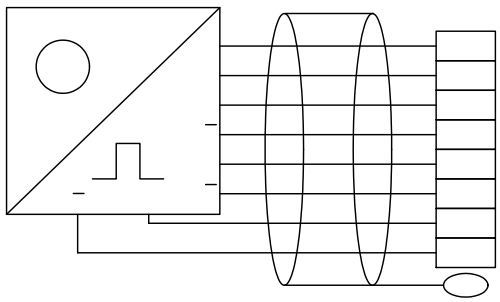
a

		
		HLE45-1024-6F.AC
		RHI90N-ONAK1R61N-1024
		EC120P45-H6PR-1024

b



4 15V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		RHI58N-0BAK1R6XN-1024
		EC120P45-L6TR-1024

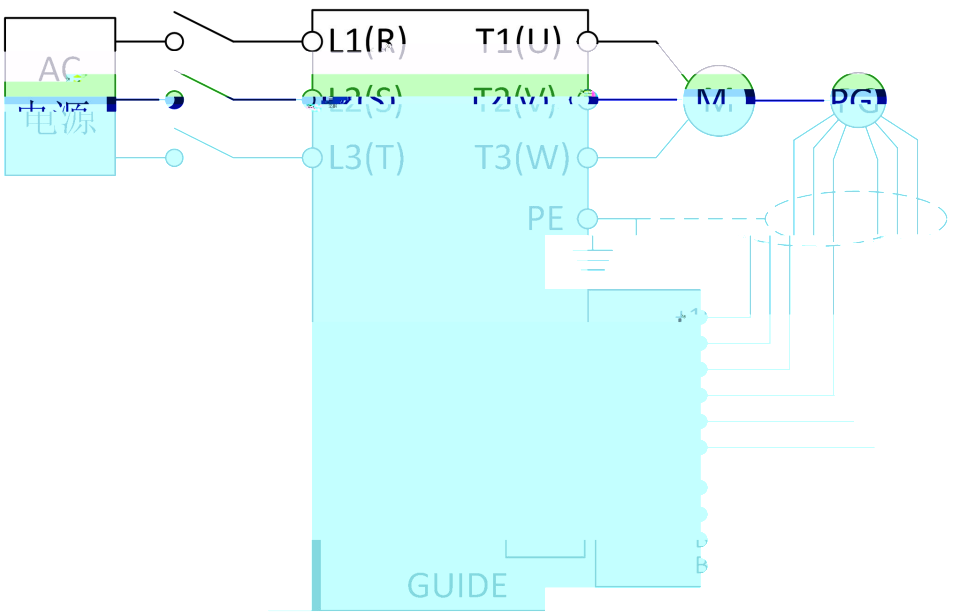
3.6PGD2

GDHF-PGD2 PG 10

B-	B+	A-	A+	GND	+15V

B1-	B1+	A1-	A1+

PGD2



1 PG

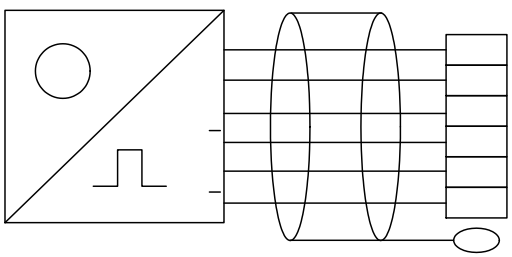
2 PG

3 PE

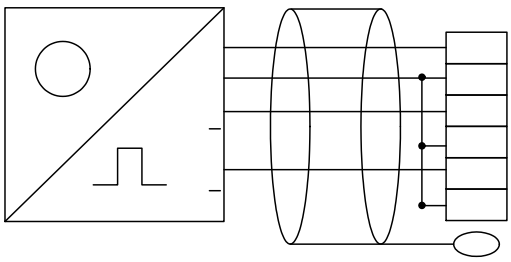
PGD2

1

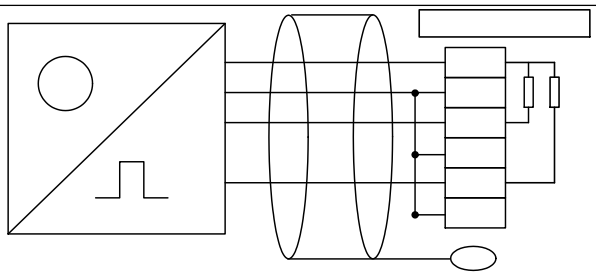
a

		
		HLE45-1024-6F.AC
		RHI90N-0NAK1R61N-1024
		EC120P45-H6PR-1024

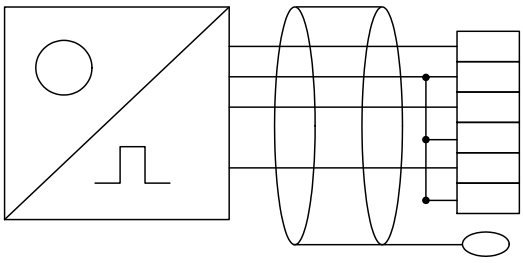
b

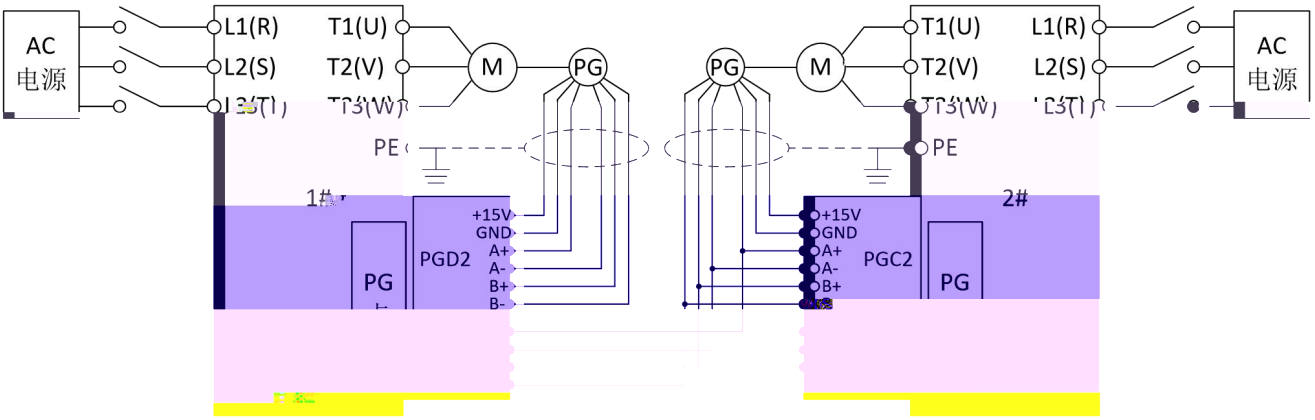
		
		HLE45-600L-3F.AC
		RVI78N-10CALA31N-1024
		EC120P45-P6PR-1024

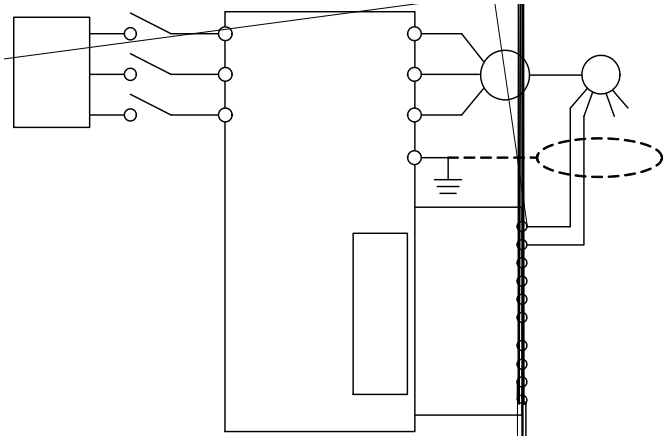
2

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

3

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


AC
电源
L1(R)
L2(S)
T1(U)
T2(V)
M
PG
PE
+15V
GND
A+
A-
B+
B-
PGD2
PG
PGC2
2#



4.

4.1

1

2 10

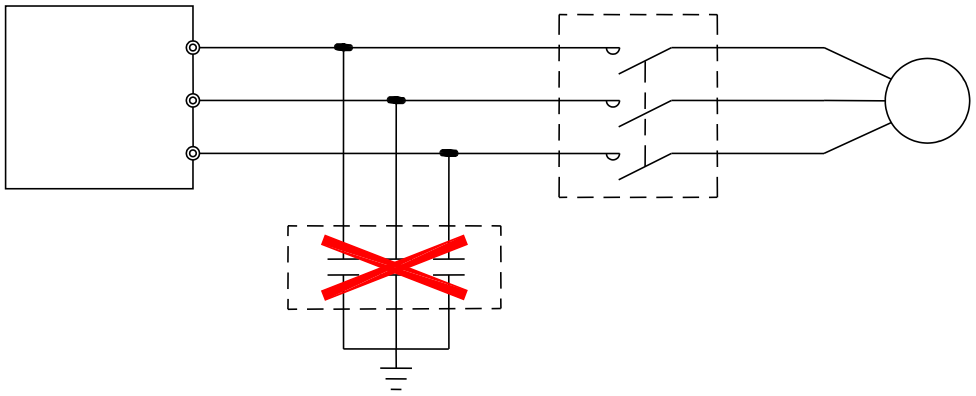
3 U V W

4

5

6

7 U V W 4-1



4-1

8

9

10cm

10 0.75mm² 50m

11 10cm

12 100m 100m

13

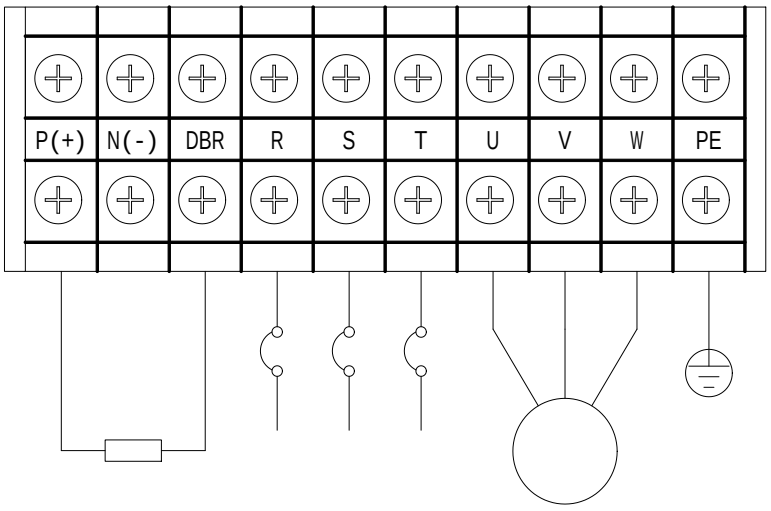
14

15 30 m

4.2

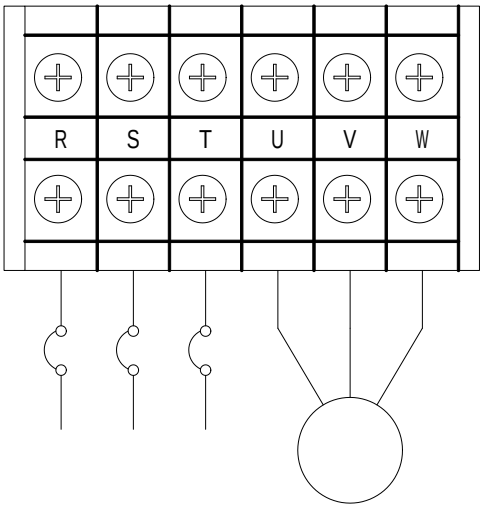
1

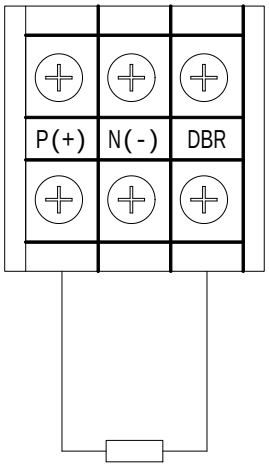
0.4kW~75kW +



2

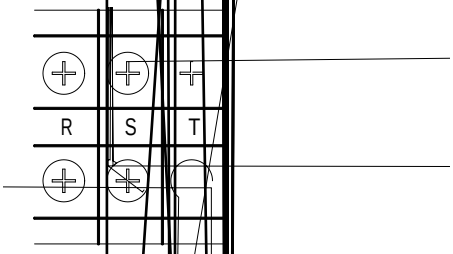
90kW~185kW





(3)

220kW~450kW



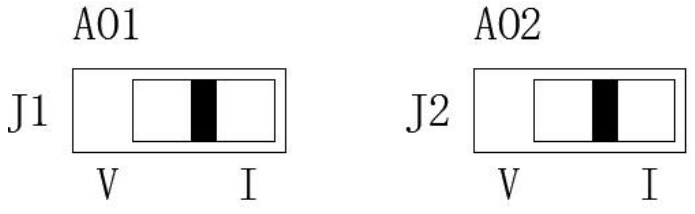
P(+)	
P1	45KW
N(-)	
R S T	
U V W	
DBR	185KW
PE	

4.3

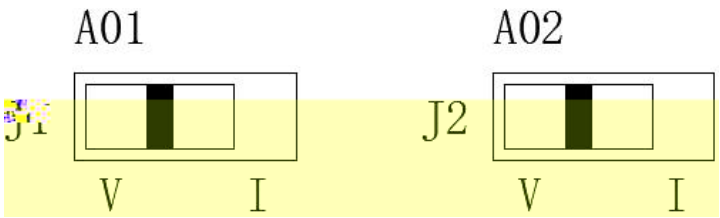
1

	1	2	3	4	5	6	7	8
	+10V	GND	AI1+	AI1-	AI2+	AI2-	AO1	AO2
	9	**10**	**11**	**12**	**13**	**14**	**15**	**16**
	DI1	DI2	DI3	DI4	DI5	DI6	DI7	DI8
	17	**18**	**19**	**20**	**21**	**22**	**23**	**24**
	PW	COM	PW	+24V	+24V	DO1	+24V	DO2
	25	**26**	**27**	**28**	**29**	**30**	**31**	
	+24V	DO3	DO4A	DO4C	DO4B	DO5A	DO5C	

2



a.



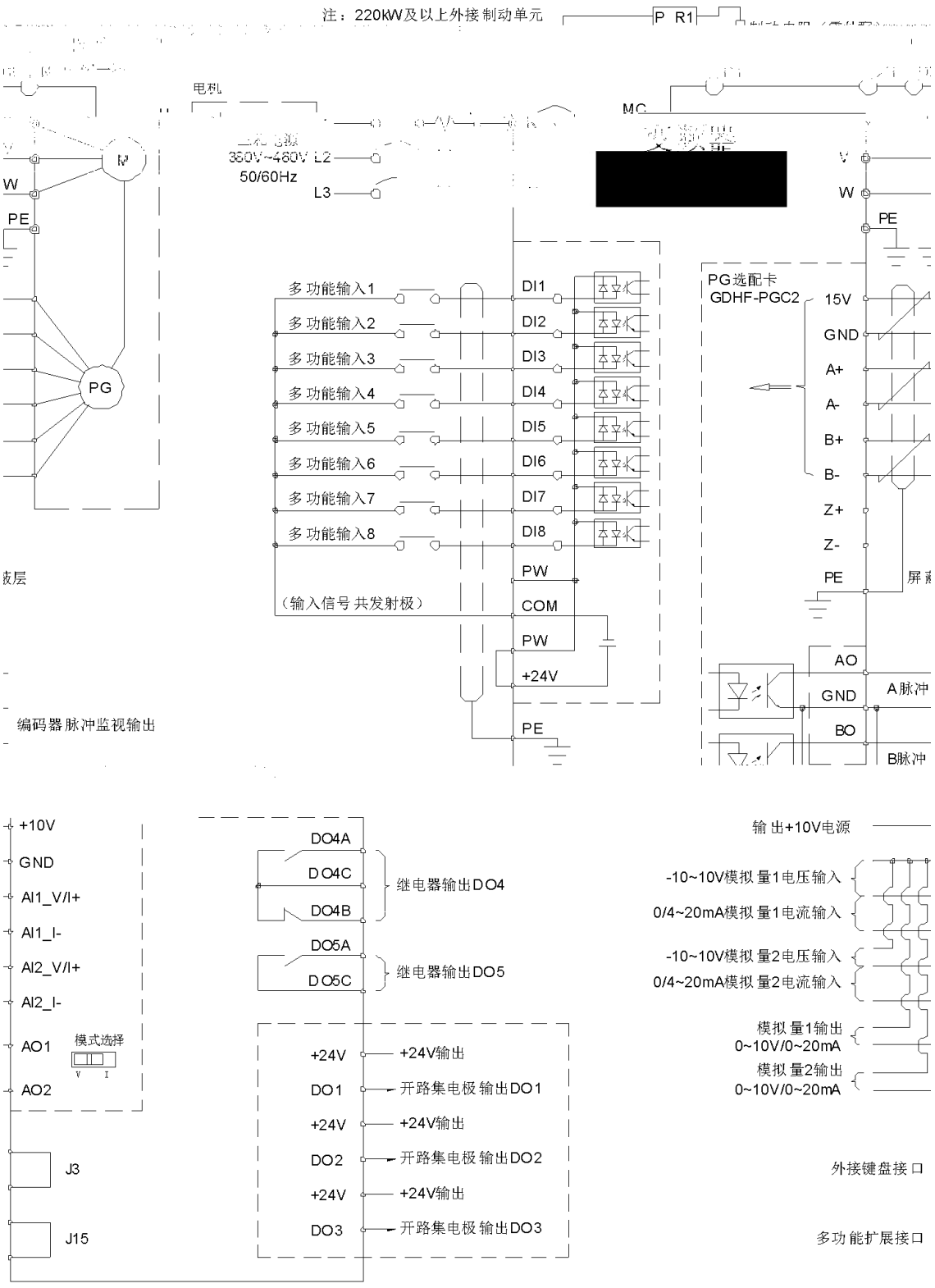
b.

3

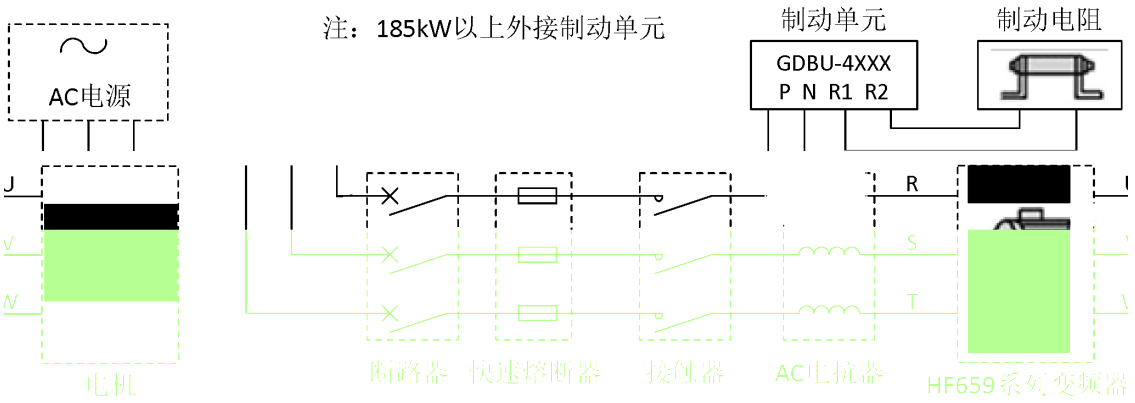
1	+10V			10V							
2	GND					,					
3	AI1+/AV1			1						0/4	20mA
					1					-10	10V
4	AI1-			1							
5	AI2+/AV2			2						0/4	20mA
					2					-10	10V
6	AI2-			2							
7	AO1			1						0/4	20mA J1
			I	a		0	10V	J1		V	b
8	AO2			2						0/4	20mA J2
			I	a		0	10V	J2		V	b
9	DI1				1						
10	DI2				2						
11	DI3				3						
12	DI4				4						
13	DI5				5						
14	DI6				6						
15	DI7				7						
16	DI8				8						
17	PW										
18	COM	24V									
19	PW										
20	+24V	24V			+						
21	+24V	24V									
22	DO1				1					DC24V	50mA
23	+24V	24V									
24	DO2				2					DC24V	50mA

25	+24V	24V			
26	DO3		3		DC24V 50mA
27	DO4A		4		
				250VAC 3A COS =0.4	
		30VDC 1A			
28	DO4C		4		
29	DO4B		4		
				250VAC 3A COS =0.4	
		30VDC 1A			
30	DO5A		5		
				250VAC 2A COS =0.4	
		30VDC 1A			
31	DO5C		5		

4.4


注：220kW及以上外接制动单元
P R1
电机
MC
380V~480V L2
50/60Hz
L3
U
V
W
PE
PG
多功能输入1
多功能输入2
多功能输入3
多功能输入4
多功能输入5
多功能输入6
多功能输入7
多功能输入8
DI1
DI2
DI3
DI4
DI5
DI6
DI7
DI8
PW
COM
（输入信号 共发射极）
PW
+24V
PE
PG选配卡
GDHF-PGC2
15V
GND
A+
A-
B+
B-
Z+
Z-
PE
AO
GND
BO
A脉冲
B脉冲
编码器脉冲监视输出
+10V
GND
AI1_V/I+
AI1_I-
AI2_V/I+
AI2_I-
AO1
AO2
模式选择
V I
J3
J15
DO4A
DO4C
DO4B
继电器输出DO4
DO5A
DO5C
继电器输出DO5
+24V
DO1
+24V
DO2
+24V
DO3
+24V输出
开路集电极输出DO1
+24V输出
开路集电极输出DO2
+24V输出
开路集电极输出DO3
输出+10V电源
-10~10V模拟量1电压输入
0/4~20mA模拟量1电流输入
-10~10V模拟量2电压输入
0/4~20mA模拟量2电流输入
模拟量1输出
0~10V/0~20mA
模拟量2输出
0~10V/0~20mA
外接键盘接口
多功能扩展接口

4.6



	1 2 3
AC	1 2 3

4.7

	A	/ mm² CEFR 40%	A (AC-3)
HF659-0R4-4	1.8	2.5	9
HF659-0R7-4	3.3	2.5	9
HF659-1R5-4	4.8	2.5	9
HF659-2R2-4	5.7	2.5	9
HF659-3R7-4	10.2	2.5	12
HF659-5R5-4	15	2.5	18
HF659-7R5-4	18	2.5	18
HF659-011-4	24	2.5	25
HF659-015-4	32	4	32
HF659-018-4	41	4	50
HF659-022-4	47	6	50
HF659-030-4	65	10	65
HF659-037-4	75	10	80
HF659-045-4	94	16	95
HF659-055-4	115	16	115
HF659-075-4	155	25	150
HF659-090-4	188	35	205
HF659-110-4	215	50	245
HF659-132-4	265	70	300
HF659-160-4	330	95	410
HF659-185-4	365	95	410
HF659-220-4	438	120	475
HF659-250-4	485	150	500
HF659-280-4	545	70*2	620
HF659-315-4	610	95*2	620
HF659-355-4	668	120*2	620
HF659-400-4	720	120*2	2*410
HF659-450-4	820	150*2	2*410

4.8

		2%		1%	
HF659-0R4-4	0.4 kW	2.2A	6.4mH	2.2A	3.2mH
HF659-0R7-4	0.7 kW	4A	3.5mH	4A	1.8 mH
HF659-1R5-4	1.5 kW	6A	2.4mH	6A	1.2 mH
HF659-2R2-4	2.2 kW	7A	2.0mH	7A	1.0 mH
HF659-3R7-4	3.7 kW	12A	1.1mH	12A	0.6 mH
HF659-5R5-4	5.5kW	19A	743uH	19A	371 uH
HF659-7R5-4	7.5kW	22A	644 uH	22A	322 uH
HF659-011-4	11kW	28A	493 uH	28A	247 uH
HF659-015-4	15kW	38A	368 uH	38A	184 uH
HF659-018-4	18.5kW	49A	283 uH	49A	141 uH
HF659-022-4	22kW	57A	247 uH	57A	123 uH
HF659-030-4	30kW	76A	184 uH	76A	92 uH
HF659-037-4	37kW	88A	159 uH	88A	79 uH
HF659-045-4	45kW	113A	123 uH	113A	62 uH
HF659-055-4	55kW	131A	106 uH	131A	53 uH
HF659-075-4	75kW	178A	78 uH	178A	39 uH
HF659-090-4	90kW	227A	62 uH	227A	31 uH
HF659-110-4	110kW	259A	54 uH	259A	27 uH
HF659-132-4	132kW	320A	44 uH	320A	22 uH
HF659-160-4	160kW	398A	35 uH	398A	18 uH

HF659-185-4	185kW	446A	31 uH	446A	16 uH
HF659-220-4	220kW	528A	26 uH	528A	13 uH
HF659-250-4	250kW	573A	24 uH	573A	12 uH
HF659-280-4	280KW	657A	21 uH	657A	11 uH
HF659-315-4	315kW	735A	19 uH	735A	10 uH
HF659-355-4	355kW	805A	17 uH	805A	9 uH
HF659-400-4	400kW	856A	16 uH	856A	8 uH
HF659-450-4	450kW	856A	16 uH	856A	8 uH

4.9

		Ω	Ω	KW 30% Kc	KW 50% Kc
HF659-0R4-4	0.4 kW	750	115	≥0.2	≥0.3
HF659-0R7-4	0.7 kW	750	115	≥0.2	≥0.35
HF659-1R5-4	1.5 kW	400	100	≥0.5	≥0.7
HF659-2R2-4	2.2 kW	250	78	≥0.8	≥1
HF659-3R7-4	3.7 kW	100	64	≥2.0	≥2.5
HF659-5R5-4	5.5kW	100	40	≥2.0	≥2.5
HF659-7R5-4	7.5kW	75	40	≥3.0	≥3.5
HF659-011-4	11kW	50	40	≥4.0	≥5.2
HF659-015-4	15kW	40	32	≥5	≥6.5
HF659-018-4	18.5kW	32	24	≥6	≥8.0
HF659-022-4	22kW	24	20	≥8	≥11
HF659-030-4	30kW	22	20	≥10	≥13

HF659-037-4	37kW	21	20	≥ 12	≥ 16
HF659-045-4	45kW	13	8	≥ 15	≥ 20
HF659-055-4	55kW	10	8	≥ 20	≥ 26
HF659-075-4	75kW	7.5	6	≥ 26	≥ 35
HF659-090-4	90kW	6.8	3.5	≥ 29	≥ 38
HF659-110-4	110kW	5.1	3.5	≥ 38	≥ 50
HF659-132-4	132kW	4.2	3.5	≥ 46	≥ 60
HF659-160-4	160kW	3.6	2.5	≥ 54	≥ 71
HF659-185-4	185kW	3.3	2.5	≥ 59	≥ 78

1 185kW 100%

2 Kc

3 Kc a 20 Kc=10% - 20%

b Kc=30%

c Kc=40 - 50%

4

4.10 EMC

1 EMC

EMC electromagnetic compatibility

EMC

EMC

EMC

EMC

EMC EMC

2 EMC

EMC

a

b PWM

c

d

3 EMC

EMC

EMC

5 EMC

a

360

b

4

3 1

PLC

20cm

20cm

90

c

EMC

d

50m

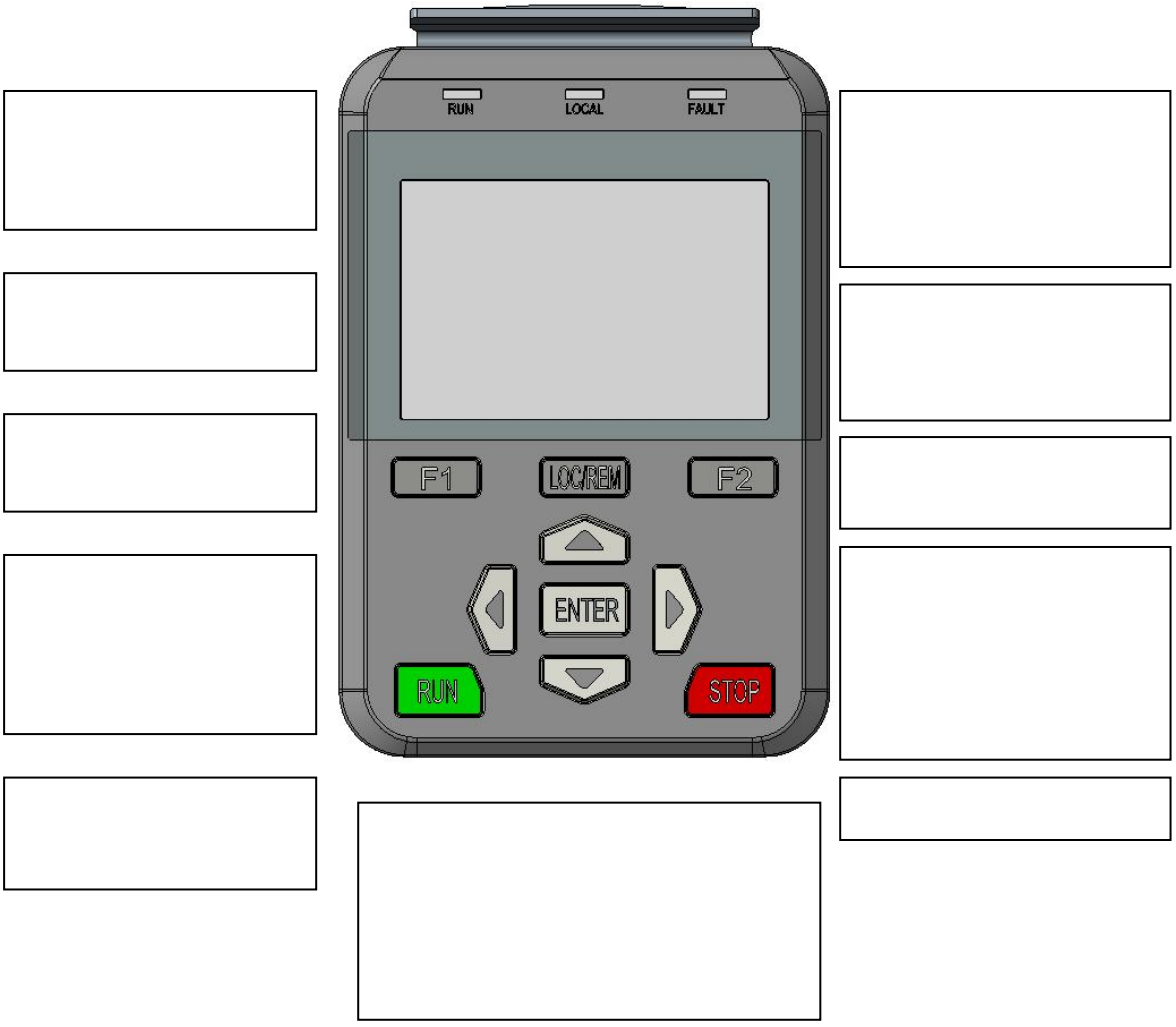
e

5.

5.1

HF659 F1

LOCAL/REMOTE F2 RUN STOP /RESET ENTER



5.2

▼

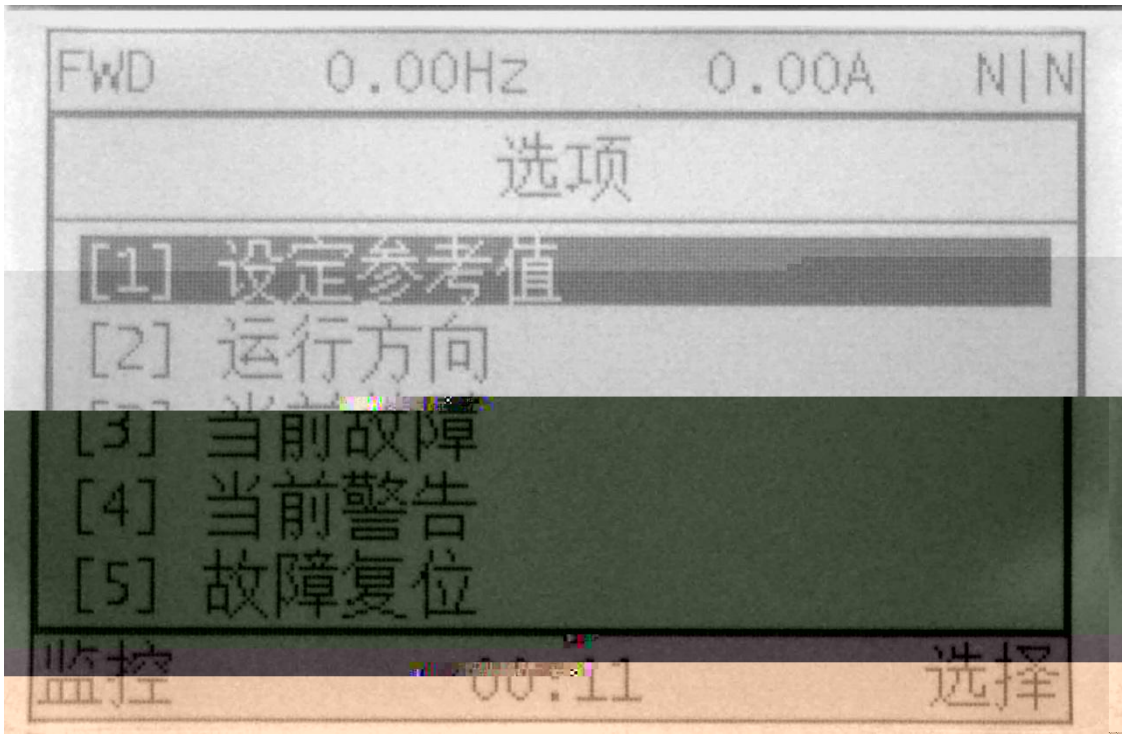
▲

ENTER

3

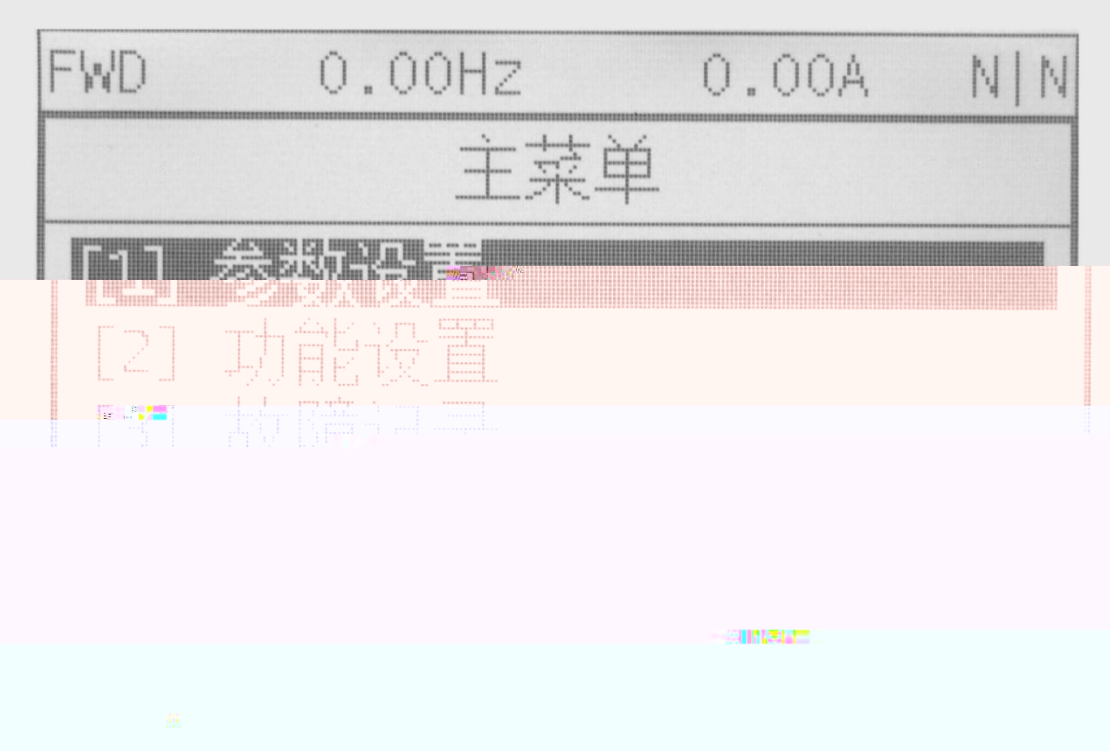
F1 F2 “ ” “ ” “ ” “ ” “ ”

ENTER



1	Reference Set	
2	Change Direction	
3	Current Error	
4	Current Warnning	

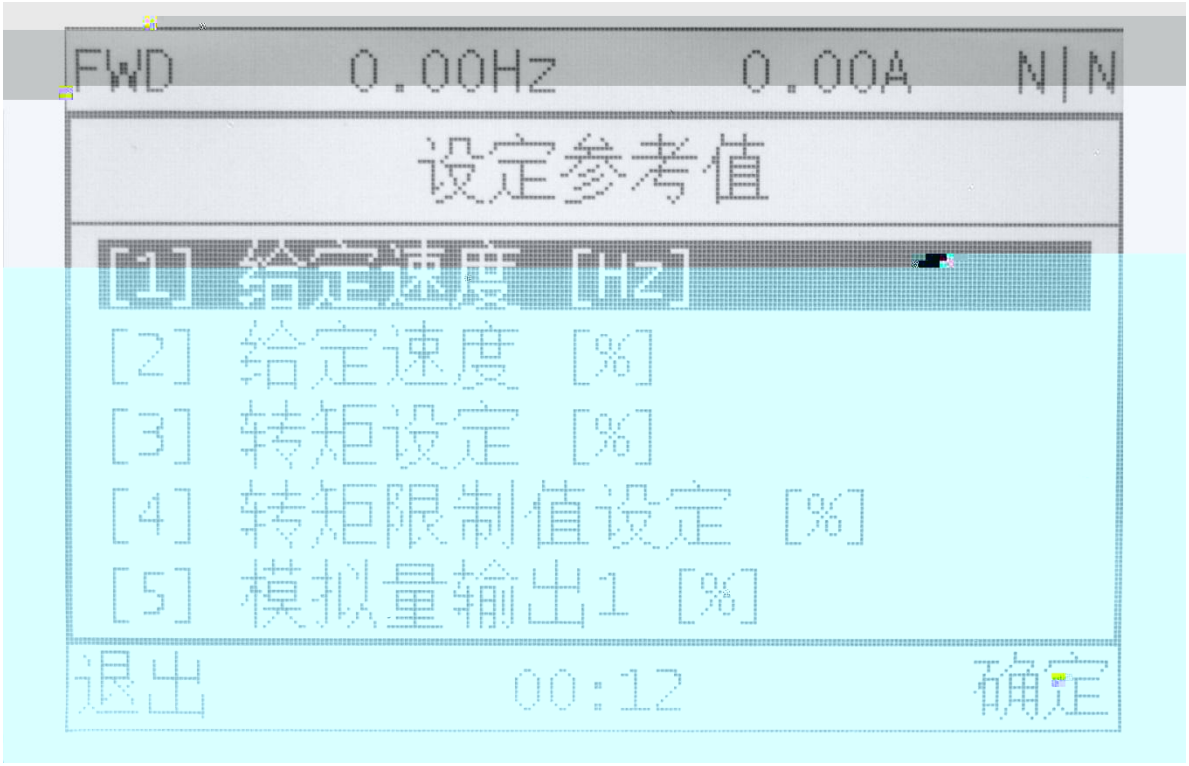
5	Reset Error	
6	Monitor Setting	
7	Firmware Version	
8	Menu Language	



1	Parameter Setting	
2	Function Setting	

3	Fault Record	
4	Access Permissions	
5	Display Setting	

5.4



1 Reference Set

Reference Set	Speed	[Hz]	Hz
		[%]	%
	Torque	[%]	%

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

2 Change Direction

3 Current Error

4 Current Warnning

5 Reset Error

6 Monitor Setting

7 Firmware Version

8 Menu Language

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	

1

2

5

▼ ▲ “Enter”

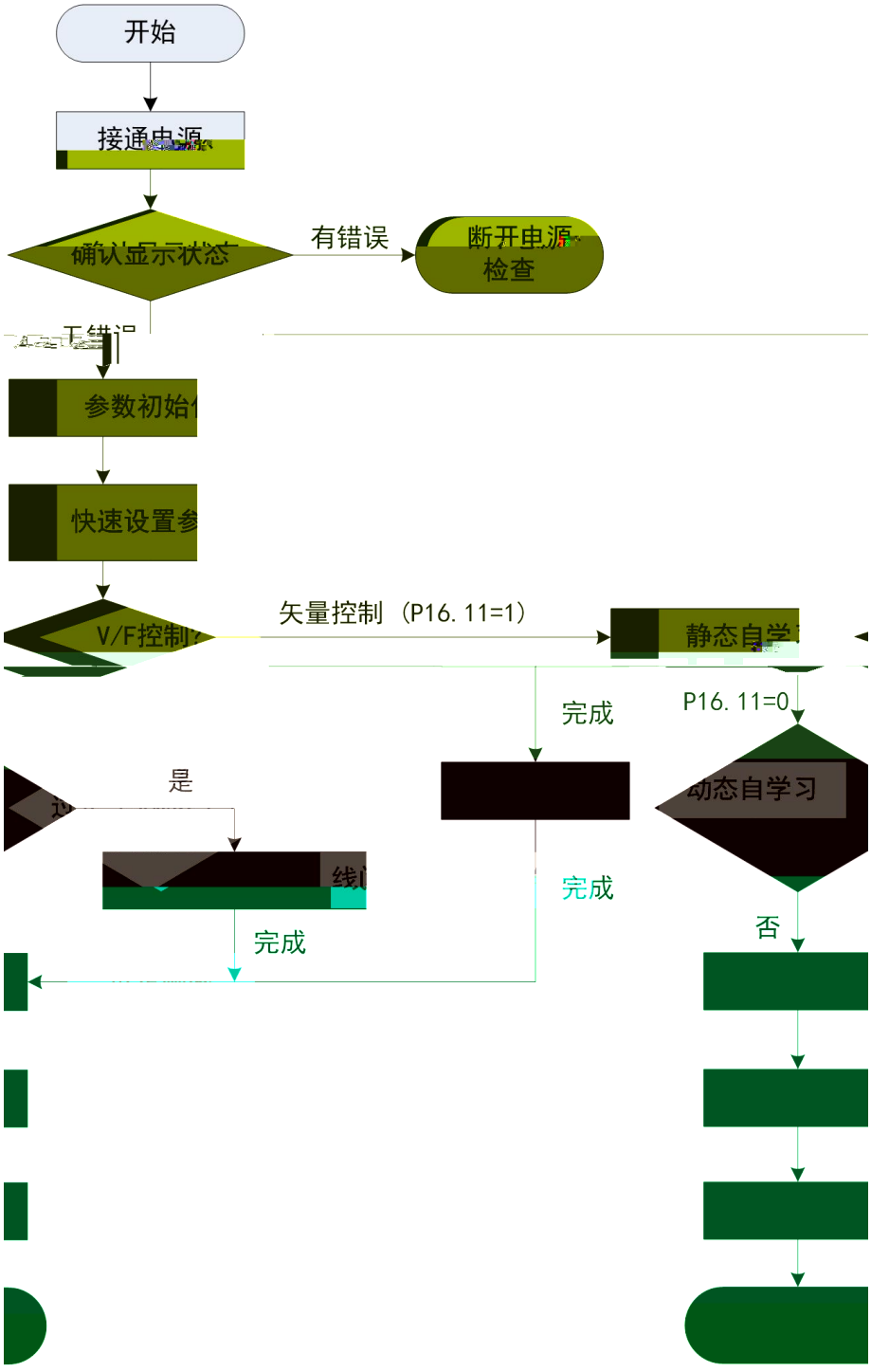
3 Fault Record

4 Access Permissions

5 Display Setting

6.

6.1


开始
接通电源
有错误
断开电源
检查
参数初始
快速设置参
矢量控制（P16. 11=1）
静态自学
完成
P16. 11=0
是
动态自学习
完成
否

/

V/F P16.11=0 V/F

P16.11=2 P16.11=1

V/F

6.2

6.2.1

1 AC380~480V 50/60Hz

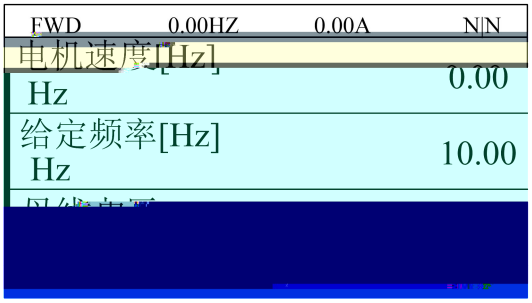
2 U,V,W

3

4 PG PG

5

6.2.2



LOCAL/REMOTE LOCAL

LOCAL/REMOTE

LOCAL “

” “ ”

4

50%

6.2.6

HF659

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

6.2.7

1

2 LOC/REM LOCAL LOCAL

3 ENTER [1] RUN

RUN 5Hz

4

5 4 50Hz

6 STOP

6.2.8

1

2

3

4

5

6 STOP

1

2

1

2

6.2.9

7.

7.1 P0

P0.0		[0] [1]	0 1	0	
P0.1			0 27	14	
P0.3		[0]50HZ [1]60HZ	0 1	0	
P0.4					

7.2

P3.4	5		0 41	7	
P3.5	6		0 41	8	
P3.6	7		0 41	0	
P3.7	8		0 41	0	
P3.12		[0] [1]	0 1	0	

0		
1		
2		
3		
4	.NC	
5		</RST
6	1 0	8.2
7	2 1	
8	3 2	
9	4 3	
10		8.10
11		
12		
13	.NC	
14		
15	.NC	
16		
17	0	1 0 00 1 01 2 10 3 11 4
18	1	

19	FUNC 19	
20		AFE
21		
22	FUNC 22	
23	FUNC 23	
24		
25		
26		
27	FUNC 27	
28		8.10
29		
30	/	
33		
40		
41		

7.4 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		8.8
17	0	1

18	1	2
19	2	3
20	3	4
21 31	FUNC 21 FUNC 31	
32		AFE
33 48	FUNC 33 FUNC 48	
49	PROFIBUS 1	PROFIBUS 1 1
50	PROFIBUS 2	PROFIBUS 2 1
51	PROFIBUS 3	PROFIBUS 3 1
52	PROFIBUS 4	PROFIBUS 4 1
53	PROFIBUS 5	PROFIBUS 5 1
54 56	FUNC 54 FUNC 56	
57	1	1 1
58	2	2 1
59	3	3 1
60	4	4 1
61	1	1 1
62	2	2 1
63	3	3 1
64	4	4 1

7.5 P5

P5.0	AI1	[0] [1]0 +10V [2]-10 +10V [3]0 20mA	0 3	1	
P5.1	AI1	AI1	0.0 1000.0 [ms]	0.0 [ms]	
P5.2	AI1	AI1	-10.00 10.00 [V]	0.000 [V]	8.4
P5.3	AI1	AI1	-20.00 20.00 [mA]	0.000 [mA]	8.4
P5.4	AI1	AI1	-10.00 10.00 [V]	0.000 [V]	8.4
P5.5	AI1	AI1	0.00 20.00 [mA]	0.000 [mA]	8.4
P5.6	AI1	AI1	-300.0 300.0 [%]	0.0 [%]	8.4
P5.7	AI1	AI1	-10.00 10.00 [V]	10.000 [V]	8.4
P5.8	AI1	AI1	0.00 20.00 [mA]	20.000 [mA]	8.4
P5.9	AI1	AI1	-300.0 300.0 [%]	100.0 [%]	8.4
P5.18	AI2	[0] [1]0 +10V [2]-10 +10V [3]0 20mA	0 3	3	

P5.19	AI2	AI2	0.0 1000.0 [ms]	0.0 [ms]	
P5.20	AI2	AI2	-10.00 10.00 [V]	0.000 [V]	
P5.21	AI2	AI2	-20.00 20.00 [mA]	0.000 [mA]	
P5.22	AI2	AI2	-10.00 10.00 [V]	0.000 [V]	
P5.23	AI2	AI2	0.00 20.00 [mA]	0.000 [mA]	
P5.24	AI2	AI2	-300.0 300.0 [%]	0.0 [%]	
P5.25	AI2	AI2	-10.00 10.00 [V]	10.000 [V]	
P5.26	AI2	AI2	0.00 20.00 [mA]	20.000 [mA]	
P5.27	AI2	AI2	-300.0 300.0 [%]	100.0 [%]	

7.6 P6

P6.0	AO1		7-1		0 14	2
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		AO1		-100.00 100.00 [%]	0.00 [%]
P6.7	AO1		AO1 [13]	(P6.0) AO1	0.0 100.0 [%]	0.0 [%]
P6.8	AO1			)	0.0 1000.0 [ms]	10.0 [ms]
					[ ]	
P6.14	AO2		7-1		0 14	4
P6.16	AO2		AO2		-300.0 300.0 [%]	0.0 [%]
P6.17	AO2		AO2		-300.0 300.0 [%]	100.0 [%]
P6.18	AO2	[mA V]	AO2		0.0 100.0 [%]	0.0 [%]
P6.19	AO2	[mA V]	AO2		0.0 100.0 [%]	100.0 [%]
P6.20	AO2		AO2			

P6.22	AO2	AO1	0.0 1000.0 [ms]	10.0 [ms]	

7-1

0
1
2
3
4
5
6
7
8 (%) ( )
9
10
11 (%) (150)
12 DP Profibus
13 P6.Ď η

7.7 P7

P7.0	[1]	1	0.0 300.0 [%]	180.0 [%]	8.6
P7.1	[2]	2	0.0 300.0 [%]	180.0 [%]	8.6
P7.2	[3]	3	0.0 300.0 [%]	180.0 [%]	8.6
P7.3	[4]	4	0.0 300.0 [%]	180.0 [%]	8.6
P7.4	[1]	1	0.0 300.0 [%]	235.0 [%]	8.6
P7.5	[2]	2	0.0 300.0 [%]	235.0 [%]	8.6
P7.6	[3]	3	0.0 300.0 [%]	235.0 [%]	8.6
P7.7	[4]	4	0.0 300.0 [%]	235.0 [%]	8.6
P7.8	[1]	1	0.0 100.0 [%]	20.0 [%]	8.6
P7.9	[2]	2	0.0 100.0 [%]	20.0 [%]	8.6
P7.10	[3]	3	0.0 100.0 [%]	20.0 [%]	8.6
P7.11	[4]	4	0.0 100.0 [%]	20.0 [%]	8.6
P7.12			600 820 [V]	800 [V]	8.6
P7.13			300 500 [V]	350 [V]	8.6
P7.14			60.0 100.0 [ ]	87.5 [ ]	8.6
P7.15			50.0 100.0 [ ]	80.0 [ ]	8.6
P7.19	[1]	1	100.0 720.0 [%]	120.0 [%]	8.6
P7.20	[2]	2	100.0 720.0 [%]	120.0 [%]	8.6
P7.21	[3]	3	100.0 720.0 [%]	120.0 [%]	8.6

P7.22	[4]	4	100.0 720.0 [%]	120.0 [%]	8.6
P7.23	1 M1	1	0.00 3.00 [s]	0.50 [s]	8.6
P7.24	1 M2	2	0.00 3.00 [s]	0.50 [s]	8.6
P7.25	1 M3	3	0.00 3.00 [s]	0.50 [s]	8.6
P7.26	1 M4	4	0.00 3.00 [s]	0.50 [s]	8.6
P7.27	1	1	0.00 3.00 [s]	2.00 [s]	
P7.28	2	2	0.00 3.00 [s]	2.00 [s]	
P7.29	3	3	0.00 3.00 [s]	2.00 [s]	
P7.30	4	4	0.00 3.00 [s]	2.00 [s]	
P7.31			0.0 100.0 [%]	25.0 [%]	
P7.32			0.00 5.00 [s]	1 [s]	
P7.33			0.0 1000.0 [s]	360.0 [s]	
P7.34		[0] [1]	0 1	0	
P7.47			0.0 300.0 [%]	100.0 [%]	8.6
P7.48	1	1	0.0 300.0 [%]	150.0 [%]	8.6
P7.49	1	1	0.00 60.00 [s]	60.00 [s]	8.6
P7.50	2	2	0.0 300.0 [%]	200.0 [%]	8.6
P7.51	2	2	0.00 5.00 [s]	5.00 [s]	8.6
P7.55		[0] [1]	0 1	0	
P7.56			0.0 200.0 [%]	120.0 [%]	
P7.57			0.0 12.0 [s]	5 [s]	

P7.59		[0] [1]	0 1	1	
P7.60			0.10 3.00 [s]	0.30 [s]	
P7.64		[0] [1]	0 1	0	8.6
P7.65			-25 150 [V]	50 [V]	8.6
P7.66			-25 150 [V]	100 [V]	8.6
P7.69		[0] [1]	0 1	0	8.6
P7.70			-25 150 [V]	100 [V]	8.6
P7.71	1	[0] [1]	0 1	0	8.6
P7.73		[0] [1]	0 1	0	
P7.74			300 500 [V]	460 [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]	

7.8 1 P8

		[0]			
		[1]			
P8.0		[2]DP	0	4	0
		[3]MODBUS			
		[4]			
		[0]			
P8.3		[1]	0	1	0
P8.6			0.00 [s]	300.00 [s]	0.00 [s]
P8.7		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					

P8.41	4	P8.38 P8.40	0.0 300.0 [s]	10.00 [s]	8.7
P8.42	5		0.0 300.0 [%]	300.0 [%]	8.7
P8.43	5	P8.40 P8.42	0.0 300.0 [s]	10.00 [s]	8.7
P8.44	6		0.0 300.0 [%]	300.0 [%]	8.7
P8.45	6	P8.42 P8.44	0.0 300.0 [s]	10.00 [s]	8.7
P8.46	7		0.0 300.0 [%]	300.0 [%]	8.7
P8.47	7	P8.44 P8.46	0.0 300.0 [s]	10.00 [s]	8.7
P8.48	8		0.0 300.0 [%]	300.0 [%]	8.7
P8.49	8	P8.46 P8.48	0.0 300.0 [s]	10.00 [s]	8.7
P8.53		[0] [1]	0 1	0	8.7
P8.54			0.0 300.0 [%]	0.0 [%]	8.7
P8.55		[0] [1]	0 1	0	8.7
P8.56			0.00 300.00 [s]	1.50 [s]	8.7
P8.57		[0] [1]	0 1	1	
P8.58			0.00 300.00 [s]	1.50 [s]	
P8.59			0.00 100.00	0.00	8.12
P8.60			0.00 50.00	0.00	8.12
P8.61		[0] [1]	0 1	0	8.12
P8.66			0.00 100.00 [ ]	0.00	8.12

P8.67		0	0.00 50.00	0.00	8.12
P8.68	16		0 65535	0	8.12
P8.69	16		0 65535	0	8.12
P8.70			0 1000	100	8.12
P8.71		[0] [1]	0 1	0	8.12
P8.72	T		0.00 100.00 [s]	0 [s]	
P8.73			0 10000	0	
P8.74			1 2	0	

7.9 2 P9

P9.0		[0] [1] [2]DP [3]MODBUS [4]	0 4	0	
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	
P9.15	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

P9.68	16		0 65535	0	8.12
P9.69	16		0 65535	0	8.12
P9.70			0 1000	100	8.12
P9.71		[0] [1]	0 1	0	8.12
P9.72	T		0.00 100.00 [s]	0 [s]	
P9.73			0 10000	0	
P9.74			1 2	0	

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	0.0 300.0 [s]	4.00 [s]	8.7
P10.38	3		0.0 300.0 [%]	240.0 [%]	8.7
P10.39	3	P10.36 P10.38	0.0 300.0 [s]	7.00 [s]	8.7
P10.40	4		0.0 300.0 [%]	300.0 [%]	8.7
P10.41	4	P10.38 P10.40	0.0 300.0 [s]	10.00 [s]	8.7

P10.42	5		0.0 300.0 [%]	300.0 [%]	8.7
P10.43	5	P10.40 P10.42	0.0 300.0 [s]	10.00 [s]	8.7
P10.44	6		0.0 300.0 [%]	300.0 [%]	8.7
P10.45	6	P10.42 P10.44	0.0 300.0 [s]	10.00 [s]	8.7
P10.46	7		0.0 300.0 [%]	300.0 [%]	8.7
P10.47	7	P10.44 P10.46	0.0 300.0 [s]	10.00 [s]	8.7
P10.48	8		0.0 300.0 [%]	300.0 [%]	8.7
P10.49	8	P10.46 P10.48	0.0 300.0 [s]	10.00 [s]	8.7
P10.53		[0] [1]	0 1	0	8.7
P10.54			0.0 300.0 [%]	0.0 [%]	8.7
P10.55		[0] [1]	0 1	0	8.7
P10.56			0.00 300.00 [s]	1.50 [s]	8.7
P10.57		[0] [1]	0 1	1	
P10.58			0.00 300.00 [s]	1.50 [s]	
P10.59			0.00 100.00	0.00	
P10.60			0.00 50.00	0.00	8.12
P10.61		[0] [1]	0 1	0	8.12
P10.66			0.00 100.00 [ ]	0.00	8.12
P10.67		0	0.00 50.00	0.00	8.12

P10.68	16	0	65535	0	8.12
P10.69	16	0	65535	0	8.12
P10.70		0	1000		

7.11 4 P11

P11.0		[0] [1] [2]DP [3]MODBUS [4]	0 4	0	
P11.3		[0] [1]	0 1	0	8.7
P11.6			0.00 300.00 [s]	0.00 [s]	8.7
P11.7			0.00 300.00 [s]	0.00 [s]	8.7
P11.10		[0]I/O [1] 1 [2] 2 [3] [4]DP [5]MODBUS [6]	0 6	0	
P11.15	1		0.0 300.0 [%]	100.0 [%]	8.7
P11.16	1	P11.15	0.0 300.0 [s]	3.00 [s]	8.7
P11.17	2		0.0 300.0 [%]	200.0 [%]	8.7
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	0.0 300.0 [s]	4.00 [s]	8.7
P11.38	3		0.0 300.0 [%]	240.0 [%]	8.7
P11.39	3	P11.36 P11.38	0.0 300.0 [s]	7.00 [s]	8.7
P11.40	4		0.0 300.0 [%]	300.0 [%]	8.7
P11.41	4	P11.38 P11.40	0.0 300.0 [s]	10.00 [s]	8.7

P11.42	5			0.0 300.0 [%]	300.0 [%]	8.7
P11.43	5	P11.40	P11.42	0.0 300.0 [s]	10.00 [s]	8.7
P11.44	6			0.0 300.0 [%]	300.0 [%]	8.7
P11.45	6	P11.42	P11.44	0.0 300.0 [s]	10.00 [s]	8.7
P11.46	7			0.0 300.0 [%]	300.0 [%]	8.7
P11.47	7	P11.44	P11.46	0.0 300.0 [s]	10.00 [s]	8.7
P11.48	8			0.0 300.0 [%]	300.0 [%]	8.7
P11.49	8	P11.46	P11.48	0.0 300.0 [s]	10.00 [s]	8.7
P11.53		[0] [1]		0 1	0	8.7
P11.54					0	

7.12 1 P12

P12.0		[0] [1]	0	1	1	8.8
P12.1		[0][%] [1][Hz] [2][rpm]	0	2	1	
P12.2	1		0.0	3000.0	10.0	
P12.3	2					

P12.24			0.0 200.0 [%]	30.0 [%]	8.8
P12.25			0.0 200.0 [%]	20.0 [%]	8.8
P12.26			0.00 2.00 [s]	0.00 [s]	8.8
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 [%]	8.8
P12.33			0.0 20.0 [%]	0.0 [%]	8.8
P12.34			0.00 2.00 [s]	0.00 [s]	8.8
P12.35			0.00 2.00 [s]	0.00 [s]	8.8
P12.36			0.00 2.00 [s]	0.50 [s]	8.8
P12.37			0.00 2.00 [s]	0.50 [s]	8.8
P12.38		[0] [1]	0 1	0	8.12
P12.40			0.0 100.0 [%]	10.0 [%]	8.12
P12.41			0.00 100.00 [s]	0.10 [s]	8.12
P12.42			0 3000 [s]	3 [s]	8.12
P12.43			0.0 50.0 [%]	20.0 [%]	8.12
P12.44			0.00 5.00 [s]	0.20 [s]	8.12

P12.45			20.0 100.0 [%]	25.0 [%]	8.12
P12.46			0.00 5.00 [s]	0.10 [s]	8.12
P12.47			0 30.0 [%]	10.0 [%]	8.12
P12.48			0.00 5.00 [s]	0.00 [s]	8.12
P12.49			0.00~1.00	0.1	8.12
P12.50			0.0 10.0 [%]	10.0 [%]	8.12

7.13 2 P13

P13.0		[0] [1]	0 1	1	8.8
P13.1		[0][%] [1][Hz] [2][rpm]	0 2	1	
P13.2	1		0.0 3000.0	10.0	
P13.3	2		0.0 3000.0	20.0	
P13.4	3		0.0 3000.0	35.0	
P13.5	4		0.0 3000.0	50.0	
P13.6	5		0.0 3000.0	50.0	
P13.7	6		0.0 3000.0	50.0	
P13.8	7		0.0 3000.0	50.0	
P13.9	8		0.0 3000.0	50.0	
P13.10	9		0.0 3000.0	50.0	
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	
P13.18	FCD LSW_2X	16	0 65535	1000	8.12
P13.19	FCD MSW_2X	16	0 100	2	8.12
P13.20	FCD m/min _2X	m/min	0.0 100.0	5.0	8.12
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 [s]	2.00 [s]	0.00 [s]	8.8
P13.27		0.00 [s]	2.00 [s]	0.00 [s]	8.8
P13.28		0.00 [s]	2.00 [s]	0.07 [s]	8.8
P13.29		0.00 [s]	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 [s]	2.00 [s]	0.00 [s]	8.8
P13.35		0.00 [s]	2.00 [s]	0.00 [s]	8.8
P13.36		0.00 [s]	2.00 [s]	0.50 [s]	8.8
P13.37		0.00 [s]	2.00 [s]	0.50 [s]	8.8
P13.38	[0] [1]	0	1	0	8.1
P13.40		0.0	-	.	p

P1[illegible]5		20.0 [%]	[illegible].0	25.0 [%]	8.12
[illegible].46		0.00 [s]	[illegible].00	0.10 [s]	8.12
P13.47	.00				

7.14 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	
P14.18	FCD LSW_2X		16	0 65535	1000	8.12
P14.19	FCD MSW_2X		16	0 100	2	8.12
P14.20	FCD _2X	m/min	m/min	0.0 100.0	5.0	8.12
P14.22				0.0 2000 [%]	2.0 [%]	8.8
P14.23						

P14.24			0.0 200.0 [%]	30.0 [%]	8.8
P14.25			0.0 200.0 [%]	20.0 [%]	8.8
P14.26			0.00 2.00 [s]	0.00 [s]	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
P14.38		[0] [1]	0 1	0	8.12
P14.40			0.0 100.0 [%]	10.0 [%]	8.12
P14.41			0.00 100.00 [s]	0.10 [s]	8.12
P14.42			0 3000 [s]	3 [s]	8.12
P14.43			0.0 50.0 [%]	20.0 [%]	8.12
P14.44			0.00 5.00 [s]	0.20 [s]	8.12

P14.45			20.0 100.0 [%]	25.0 [%]	8.12
P14.46			0.00 5.00 [s]	0.10 [s]	8.12
P14.47			0 30.0 [%]	10.0 [%]	8.12
P14.48			0.00 5.00 [s]	0.00 [s]	8.12
P14.49			0.00~1.00	0.1	8.12
P14.50			0.0 10.0 [%]	10.0 [%]	8.12

7.15 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					

P15.24		0.0 [%]	200.0 [%]	30.0 [%]	8.8
P15.25		0.0 [%]	200.0 [%]	20.0 [%]	8.8
P15.26		0.00 [s]	2.00 [s]	0.00 [s]	8.8
P15.27		0.00 [s]	2.00 [s]	0.00 [s]	8.8
P15.28		0.00 [s]	2.00 [s]	0.07 [s]	8.8
P15.29		0.00 [s]	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 [s]	2.00 [s]	0.00 [s]	8.8
P15.35		0.00 [s]	2.00 [s]	0.00 [s]	8.8
P15.36		0.00 [s]	2.00 [s]	0.50 [s]	8.8
P15.37	s	0.00 [s]	2.00 [s]	0.50 [s]	8.8
P15.38	[0] [1]	0	1	0	8.12
P15.40	s İ				

P15.45			20.0 100.0 [%]	25.0 [%]	8.12
P15.46			0.00 5.00 [s]	0.10 [s]	8.12
P15.47			0 30.0 [%]	10.0 [%]	8.12
P15.48			0.00 5.00 [s]	0.00 [s]	8.12
P15.49			0.00~1.00	0.1	8.12
P15.50			0.0 10.0 [%]	10.0 [%]	8.12

7.16 1 V/F P16

P16.0			320 460 [V]	380 [V]	
P16.2			0.0 4000.0 [kW]	 [kW]	
P16.3			320 460 [V]	380 [V]	
P16.4			0.0 6500.0 [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]	0 2	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 2	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 [%]	
P16.48		[0] [1]PID 1 [2]PID 2 [3]	0 3	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 [%]	

7.17 2 V/F P17

P17.0			320 460 [V]	380 [V]	
P17.2			0.0 4000.0 [kW]	 [kW]	
P17.3			320 460 [V]	380 [V]	
P17.4			0.0 6500.0 [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]	0 2	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 2	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			0.00 100.00 [s]	0.00 [s]	8.9

P17.23	V/F		0.00 300.00 [Hz]	0.00 [Hz]	
P17.24	V/F		0.00 300.00 [Hz]	50.00 [Hz]	
P17.25			0.0 120.0 [%]	100.0 [%]	
P17.26	V/F	V/F	0.00 10.00 [%]	0.75 [%]	8.9
P17.27			0.0 200.0 [%]	100.0 [%]	8.9
P17.30			0.0 100.0 [%]	0.0 [%]	8.9
P17.33	V/F	V/F	0 6	2	8.9
P17.34	V/F 1		0.0 300.0 [Hz]		

[Hz]
30.

10.

P17.

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	

7.18 3 V/F P18

P18.0		320 460 [V]	380 [V]	
P18.2		0.0 4000.0 [kW]	[kW]	
P18.3		320 460 [V]	380 [V]	
P18.4		0.0 6500.0 [A]	[A]	
P18.5		0.0 300.0 [Hz]	50.0 [Hz]	8.9
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]	0 2	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 2	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	M خ			

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 [%]	
P18.48	[0] [1]PID 1 [2]PID 2 [3]	0 3	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			0.0 1000.0 [%]	100.0 [%]	
P18.68			0.0 1000.0 [%]	100.0 [%]	
P18.69			0.0 1000.0 [%]	100.0 [%]	
P18.70			0.0 1000.0 [%]	100.0 [%]	

7.19 4 V/F P19

P19.0		320 460 [V]	380 [V]	
P19.2		0.0 4000.0 [kW]	[kW]	
P19.3		320 460 [V]	380 [V]	
P19.4		0.0 6500.0 [A]	[A]	
P19.5		0.0 300.0 [Hz]	50.0 [Hz]	8.9
P19.6		0 6000 [rpm]	1465 [rpm]	
P19.7		2 12 [pole]	4 [pole]	8.9
P19.9		0 7200 [rpm]	1500 [rpm]	8.9
P19.11	[0]V/F [1] [2]	0 2	0	
P19.12		1.00 10.00 [kHz]	3.00 [kHz]	8.9
P19.14 V/F	[0] V/F [1] V/F [2]	0 2	0	8.9
P19.15	[0] [1]	0 1	0	8.9
P19.16		2 500 [ms]	500 [ms]	
P19.17 V/F	[0] [1]	0 1	0	
P19.18		10 1000 [ms]	200 [ms]	
P19.19 M				

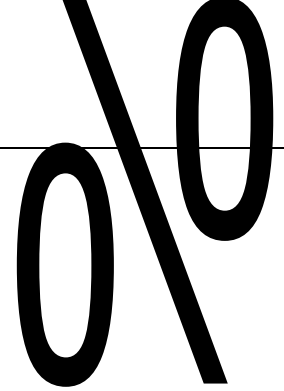
P19.23	V/F	0.00 300.00 [Hz]	0.00 [Hz]	
P19.24	V/F	0.00 300.00 [Hz]	50.00 [Hz]	
P19.25		0.0 120.0 [%]	100.0 [%]	
P19.26 V/F	V/F	0.00 10.00 [%]	0.75 [%]	8.9
P19.27		0.0 200.0 [%]	100.0 [%]	8.9
P19.30		0.0 100.0 [%]	0.0 [%]	8.9
P19.33 V/F	V/F	0 6	2	8.9
P19.34 V/F 1		0.0 300.0 [Hz]	5.0 [Hz]	
P19.35 V/F 1		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 [%]	
P19.48	[0] [1]PID 1 [2]PID 2 [3]	0 3	0	
P19.50		0.00 300.00 [s]	0.00 [s]	8.9

P19.51			0.0 150.0 [%]	70.0 [%]	8.9
P19.52			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P19.54			0.00 300.00 [s]	0.00 [s]	8.9
P19.55			0.0 150.0 [%]	75.0 [%]	8.9
P19.56			0.00 5.00 [Hz]	0.00 [Hz]	8.9
P19.59			0.0 1000.0 [%]	100.0 [%]	
P19.60			0.0 1000.0 [%]	100.0 [%]	
P19.61			0.0 1000.0 [%]	100.0 [%]	
P19.62			0.0 1000.0 [%]	100.0 [%]	
P19.64	V/F	V/F	0.0 1000.0 [%]	100.0 [%]	8.9
P19.66		V/F	0.0 1000.0 [%]	100.0 [%]	
P19.67			0.0 1000.0 [%]	100.0 [%]	
P19.68			0.0 1000.0 [%]	100.0 [%]	
P19.69			0.0 1000.0 [%]	100.0 [%]	
P19.70			0.0 1000.0 [%]	100.0 [%]	

7.20 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
P20.5			0 1000 [ms]	0 [ms]	
P20.6			0.0 200.0 [%]	100.0 [%]	8.10
P20.7		[0] [1] P20.8 P20.9 [2] 1 [3] 2 [4] [5]DP [6]MODBUS [7]	0 7	0	8.10
P20.8		P20.7 [1]	0.0 300.0 [%]	200.0 [%]	8.10
P20.9		P20.7 [1]	0.0 300.0 [%]	200.0 [%]	8.10
P20.11			0 1000 [ms]	0 [ms]	
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 [%]	100.0 [%]	



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		Å		

P20.55			0.0 1000.0 [%]	100.0 [%]	8.10
P20.56			0.0 1000.0 [%]	100.0 [%]	8.10
P20.60	DROOP	0 DROOP	0.0 100.0 [%]	0.0 [%]	8.10
P20.61	DROOP	DROOP	30 2000 [ms]	50 [ms]	8.10
P20.62			0.0 1000.0 [%]	100.0 [%]	8.10
P20.63			0.0 1000.0 [%]	100.0 [%]	8.10
P20.64	2	2	0.0 100.0 [%]	0.0 [%]	8.10
P20.65	2	2	30 2000.0 ms	50 ms	
P20.98		( )	0.01 300.00 [s]	0.75 [s]	
P20.99			0.00 10.00 [%]	0.00 [%]	

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 [%]	
P21.32			0.0 100.0 [%]	5.0 [%]	

P21.34	[0] [1]	0 1	0	8.10
P21.35		0.0 100.0 [s]	0.0 [s]	
P21.36		50.0 150.0 [%]	110.0 [%]	
P21.37		0.0 150.0 [%]	100.0 [%]	8.10
P21.38		0.0 100.0 [%]	25.0 [%]	8.10
P21.39		0.0 120.0 [%]	100.0 [%]	8.10
P21.40		0.0 150.0 [%]	100.0 [%]	8.10
P21.41		0.0 150.0 [%]	135.0 [%]	
P21.42	[0] [1]	0 1	1	
P21.43		25 1000 [ms]	75 [ms]	
P21.44		25 1000 [ms]	250 [ms]	
P21.45		0.0 100.0 [%]	22.0 [%]	
P21.46		0.0 100.0 [%]	18.0 [%]	
P21.47		0.0 200.0 [%]	92.0 [%]	
P21.48		Å		

P21.55			0.0 1000.0 [%]	100.0 [%]	8.10
P21.56			0.0 1000.0 [%]	100.0 [%]	8.10
P21.60	DROOP	0 DROOP	0.0 100.0 [%]	0.0 [%]	8.10
P21.61	DROOP	DROOP	30 2000 [ms]	50 [ms]	8.10
P21.62			0.0 1000.0 [%]	100.0 [%]	8.10
P21.63			0.0 1000.0 [%]	100.0 [%]	8.10
P21.64	2	2	0.0 100.0 [%]	0.0 [%]	8.10
P21.65	2	2	30 2000.0 ms	50 ms	
P21.98		( )	0.01 300.00 [s]	0.75 [s]	
P21.99			0.00 10.00 [%]	0.00 [%]	

7.22 3 P22

P22.0		[0] [1]	0 1	0	8.10
P22.1		[0] [1] 1 [2] 2 [3] [4] P22.3 [5]DP [6]MODBUS [7]	0 7	0	8.10
P22.2			0 7	0	
P22.3			-300.0 300.0 [%]	0.0 [%]	8.10
P22.5			0 1000 [ms]	0 [ms]	
P22.6			0.0 200.0 [%]	100.0 [%]	8.10
P22.7		[0] [1] P22.8 P22.9 [2] 1 [3] 2 [4] [5]DP [6]MODBUS [7]	0 7	0	8.10
P22.8		P22.7 [1]	0.0 300.0 [%]	200.0 [%]	8.10
P22.9		P22.7 [1]	0.0 300.0 [%]	200.0 [%]	8.10
P22.11			0 1000 [ms]	0 [ms]	
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 [%]	100.0	

P22.34		[0] [1]	0 1	0	8.10
P22.35			0.0 100.0 [s]	0.0 [s]	
P22.36			50.0 150.0 [%]	110.0 [%]	
P22.37			0.0 150.0 [%]	100.0 [%]	8.10
P22.38			0.0 100.0 [%]	25.0 [%]	8.10
P22.39			0.0 120.0 [%]	100.0 [%]	8.10
P22.40			0.0 150.0 [%]	100.0 [%]	8.10
P22.41			0.0 150.0 [%]	135.0 [%]	
P22.42		[0] [1]	0 1	1	
P22.43			25 1000 [ms]	75 [ms]	
P22.44			25 1000 [ms]	250 [ms]	
P22.45			0.0 100.0 [%]	22.0 [%]	
P22.46			0.0 100.0 [%]	18.0 [%]	
P22.47			0.0 200.0 [%]	92.0 [%]	
P22.48			0.0 200.0 [%]	87.0 [%]	
P22.49			0.0 150.0 [%]	100.0 [%]	
P22.51			0.0 1000.0 [%]	100.0 [%]	
P22.52			0.0 1000.0 [%]	100.0 [%]	
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
P22.60	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
P22.64	2	2	0.0 100.0 [%]	0.0 [%]	8.10
P22.65	2	2	30 2000.0 ms	50 ms	
P22.98		( )	0.01 300.00 [s]	0.75 [s]	
P22.99			0.00 10.00 [%]	0.00 [%]	

P23.15	[0]		0	3.13	0	ǰ8.10ǰ
P23.16	[1]		0.0	300.0	100.0	[%]
P23.17	[0]		0.0	300.0	100.0	[%]
P23.18	[0]		0.0	300.0	100.0	[%]

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				

P27.27	DO_8		0 6	0	8.13
P27.28	DI_1_	[0] [1]	0 1	1	8.13
P27.29	DI_2_	[0] [1]	0 1	1	8.13
P27.30	DI_3_	[0] [1]	0 1	1	8.13
P27.31	DI_4_	[0] [1]	0 1	1	8.13
P27.32	DI_5_	[0] [1]	0 1	1	8.13
P27.33	DI_6_	[0] [1]	0 1	1	8.13
P27.34	DI_7_	[0] [1]	0 1	0	8.13
P27.35	DI_8_	[0] [1]	0 1	0	8.13
P27.36	DI_9_	[0] [1]	0 1	0	8.13
P27.37	DI_10_	[0] [1]	0 1	0	8.13
P27.38	DI_11_	[0] [1]	0 1	0	8.13
P27.39	DI_12_	[0] [1]	0 1	0	8.13
P27.40	DI_13_	[0] [1]	0 1	0	8.13
P27.41	DI_14_	[0] [1]	0 1	0	8.13
P27.42	DI_15_	[0] [1]	0 1	0	8.13

P27.43	DI_16_	[0] [1]	0 1	0	8.13
P27.44	DI_17_	[0] [1]	0 1	0	8.13
P27.45	DI_18_	[0] [1]	0 1	0	8.13
P27.46	DI_19_	[0] [1]	0 1	1	8.13
P27.47	DI_20_	[0] [1]	0 1	1	8.13
P27.48	DI_21_	[0] [1]	0 1	0	8.13
P27.49	DI_22_	[0] [1]	0 1	1	8.13
P27.50	DI_23_	[0] [1]	0 1	0	8.13
P27.51	110%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	1	8.13

P27.52	110%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	2	8.13
P27.53	100%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	1	8.13
P27.54	100%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	2	8.1 3

P27.55	90%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	5	8.1 3
P27.56	90%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	6	8.1 3
P27.57	100%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	1	8.1 3

P27.58	100%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	2	8.1 3
P27.59	90%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	4	8.1 3
P27.60	90%_	[0] [1] [2] 1 [3] 2 [4] 3 [5] 4 [6] 5	0 6	4	8.1 3

0		
1		
2		ON
3	90% / _	90% /
4		
5		
6		

7.25 CAN P31

P31.0	CAN	[0] [1]	0 1	0	
P31.1	Canopen ID		1 127	1	
P31.2		[0] 20 Kbps [1] 50 Kbps [2] 125 Kbps [3] 250 Kbps [4] 500 Kbps [5] 800 Kbps [6] 1000 Kbps	0 6	5	
P31.3	Can		0 60 [s]	0 [s]	
P31.4	Can	[0] [1] [2] [3]	0 3	0	

7.26 MODBUS P32

P32.0	MODBUS	[0] [1]	0 1	0	
P32.1	MODBUS ID		1 255	1	
P32.2		[0]RS485 [1]RS232	0 1	0	
P32.3		[0] 9600 BPS [1] 14400 BPS [2] 19200 BPS [3] 38400 BPS [4] 56000 BPS [5] 57600 BPS [6] 115200 BPS	0 6	3	
P32.4		[0] None_8_1_CFG [1] Even_8_1_CFG [2] Odd_8_1_CFG [3] None_8_2_CFG [4] Even_8_2_CFG [5] Odd_8_2_CFG	0 5	0	
P32.5	Modbus	Modbus 0 Modbus	0 100 [s]	0 [s]	0s

7.27 P33

P33.0	Profibus	[0] [1]	0 1	0	
P33.1		PLC	1 255	1	
P33.2		[0]PPO1 [1]PPO2 [2]PPO5 [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	[WO]	7-2	0 37	0	
P33.14	[WO]	[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	

P33.18	[W2]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.19	[W3]	7-2	0 37	0	
P33.20	[W3]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.21	[W4]	7-2	0 37	1	
P33.22	[W4]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	0	
P33.23	[W5]	7-2	0 37	18	
P33.24	[W5]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	2	
P33.25	[W6]	7-2	0 37	21	
P33.26	[W6]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	1	
P33.27	[W7]	7-2	0 37	22	
P33.28	[W7]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	1	
P33.29	[W8]	7-2	0 37	23	
P33.30	[W8]	[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0 4	1	

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	

P33.44	[W15]		[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000	0	4	0
P33.45		[W0]	7-3	0	48	0
P33.46	[W0]		[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0	7	0
P33.47		[W1]	7-3	0	48	0
P33.48	[W1]		[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0	7	0
P33.49		[W2]	7-3	0	48	0
P33.50	[W2]		[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100	0	7	0
P33.51		[W3]	7-3	0	48	0
P33.52	[W3]		[0] × 1 [1] × 10 [2] × 100 [3] × 1000 [4] × 10000 [5] [%] × 1 [6] [%] × 10 [7] [%] × 100			

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	Mwh
42	Kwh
43	Mwh
44	Kwh
45 48	AW26 29

8.

8.1

450kW 800kW 400kW

P2.0

8.2

1

P12.0 [0] [1]

A. [0]

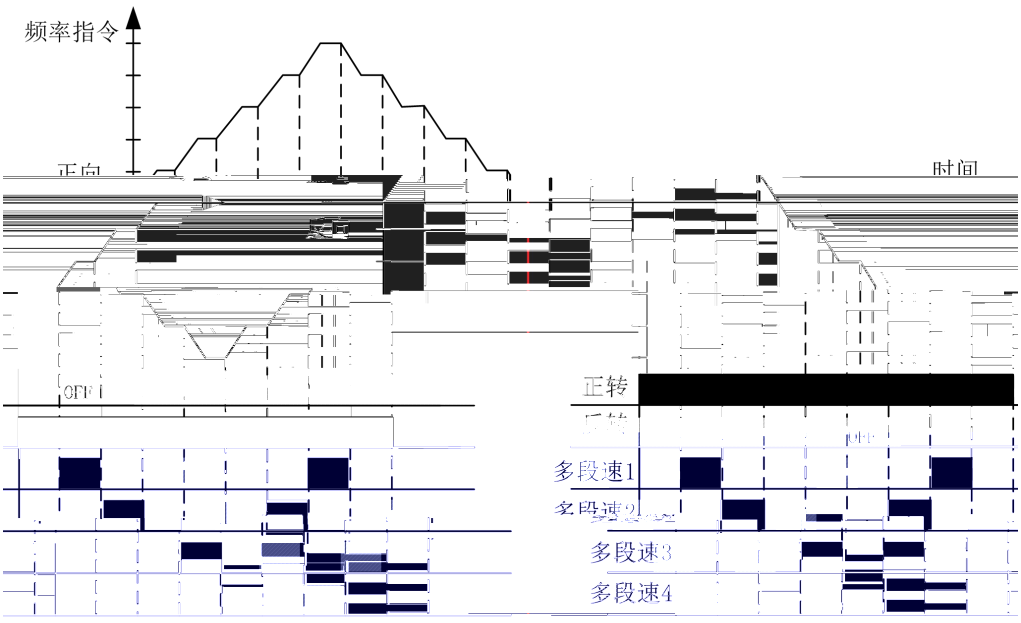
[1] [2] ---1

[6] 1 0 ---2

[7] 2 1 ---3

[8] 3 2 ---4

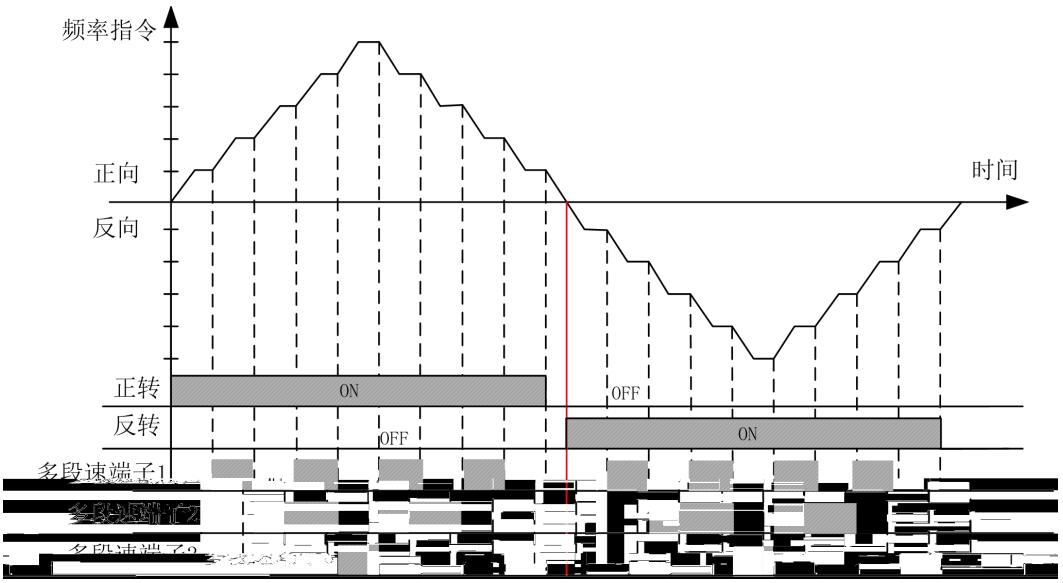
[9] 4 3 ---5



B. [1]

4 16 (8421)

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



2

DI 22 “ ”

10Hz E106 “ 1 ”

10Hz 2s E107

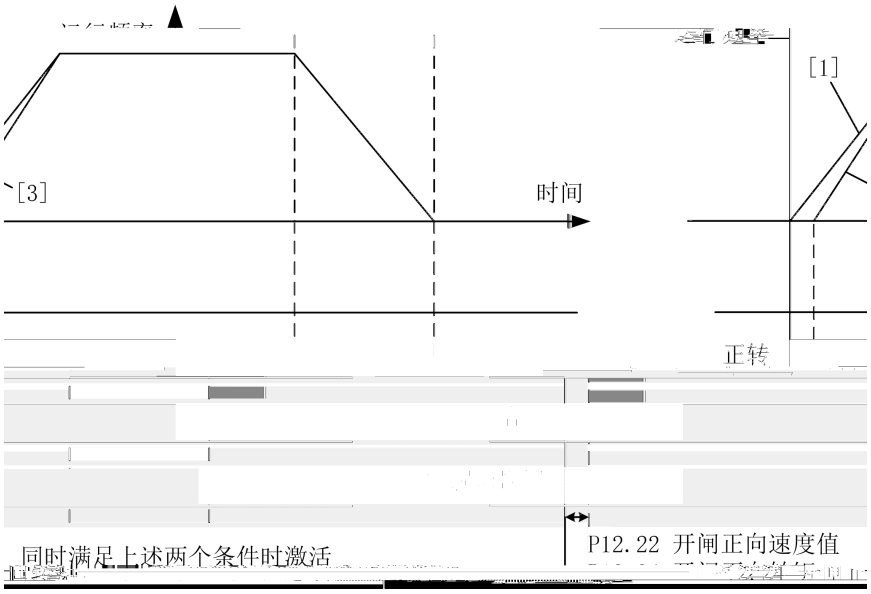
“ 2 ”

8.3

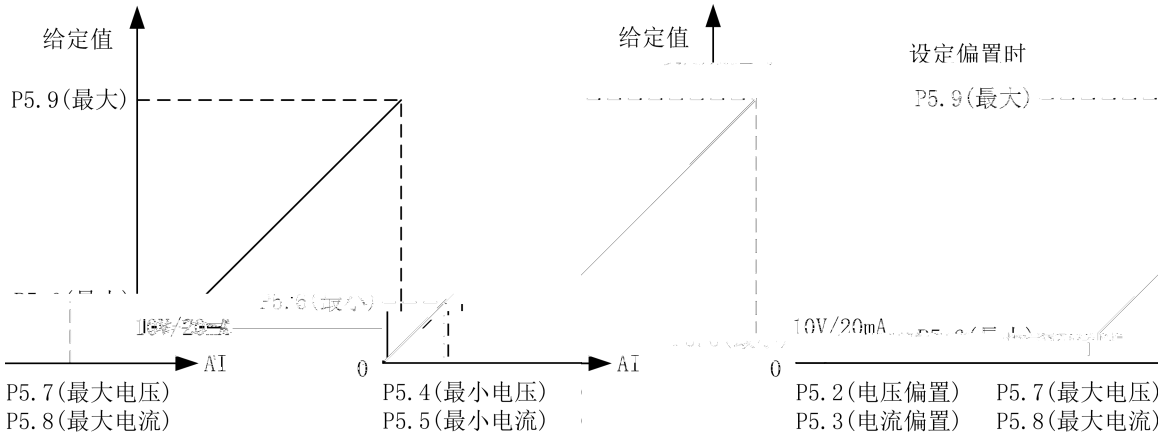
/

[1] [3] [3]

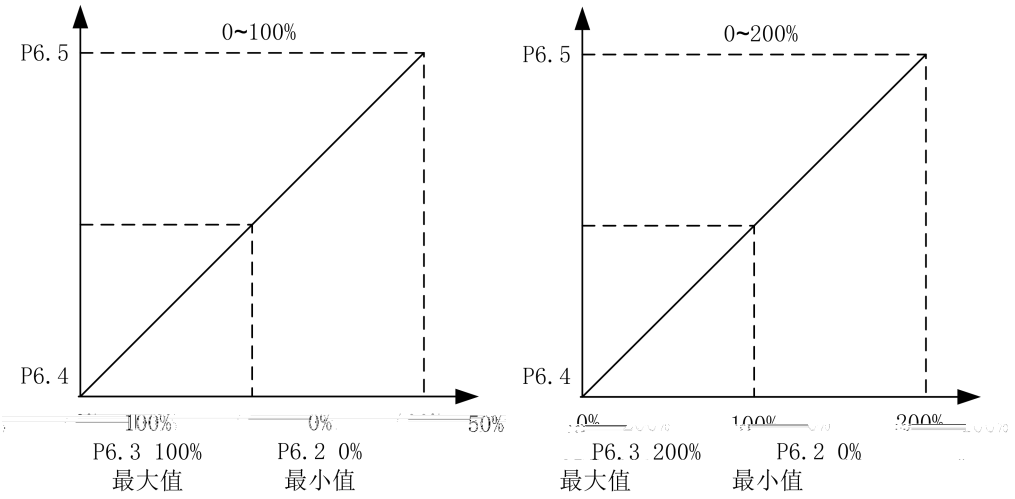
[1] [3]


[1]
[3]
时间
正转
同时满足上述两个条件时激活
P12.22 开闸正向速度值

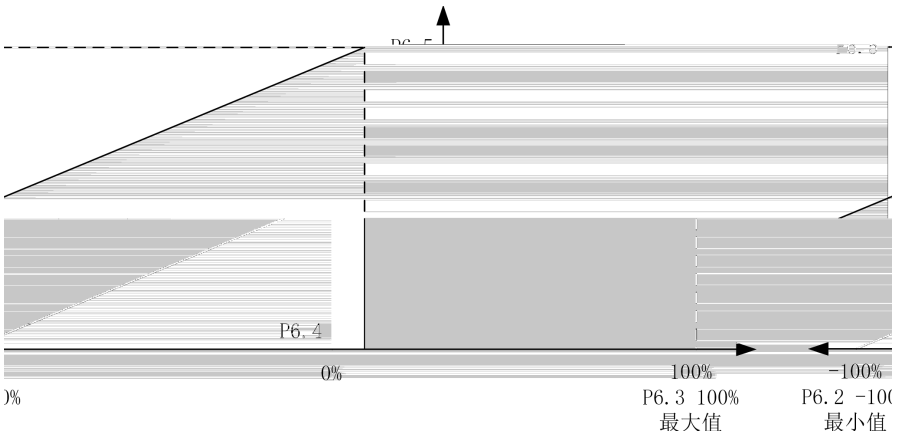
8.4


给定值
P5.9(最大)
AI
0
P5.7(最大电压)
P5.8(最大电流)
P5.4(最小电压)
P5.5(最小电流)
给定值
设定偏置时
P5.9(最大)
0
P5.2(电压偏置)
P5.3(电流偏置)
P5.7(最大电压)
P5.8(最大电流)

8.5



(a) 0~100% b 0~200%



c -100~100%

8.6

1

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

2

P7.4 P7.5 P7.6 P7.7 P7.4 P16.4

3

P7.8 P7.9 P7.10 P7.11 $I_a + I_b + I_c$

P16.4 $\frac{I_a + I_b + I_c}{} > P$ P

4

P7.12 P7.13 P7.12

P7.13

5

P7.14 IGBT P7.14

P7.15 IGBT P7.15

6

P7.19 P7.20 P7.21 P7.22 P7.19

P7.19 P7.22

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

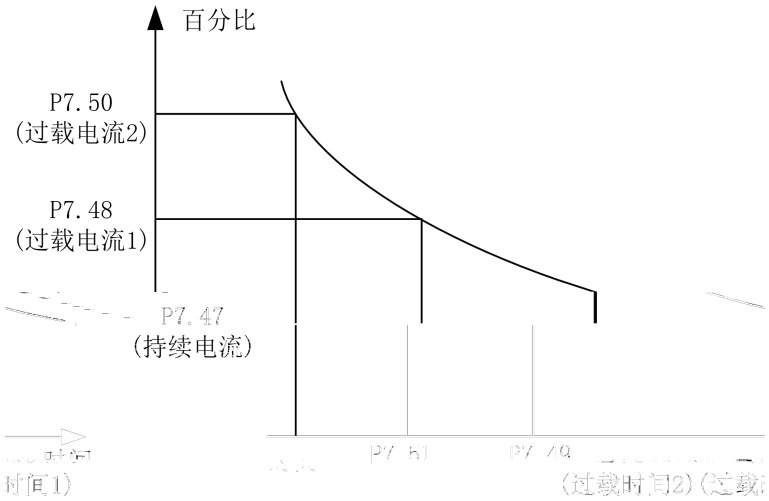
9

P7.33

P7.33

10

P7.48 P7.50



11

P7.64 P7.65 P7.66 HF659

45KW-185KW P7.64 1

P7.65

P7.66 P7.66

≥P7.65 P16.0 380V P7.65 50V 647V P7.66

100V 697V

= √ + +

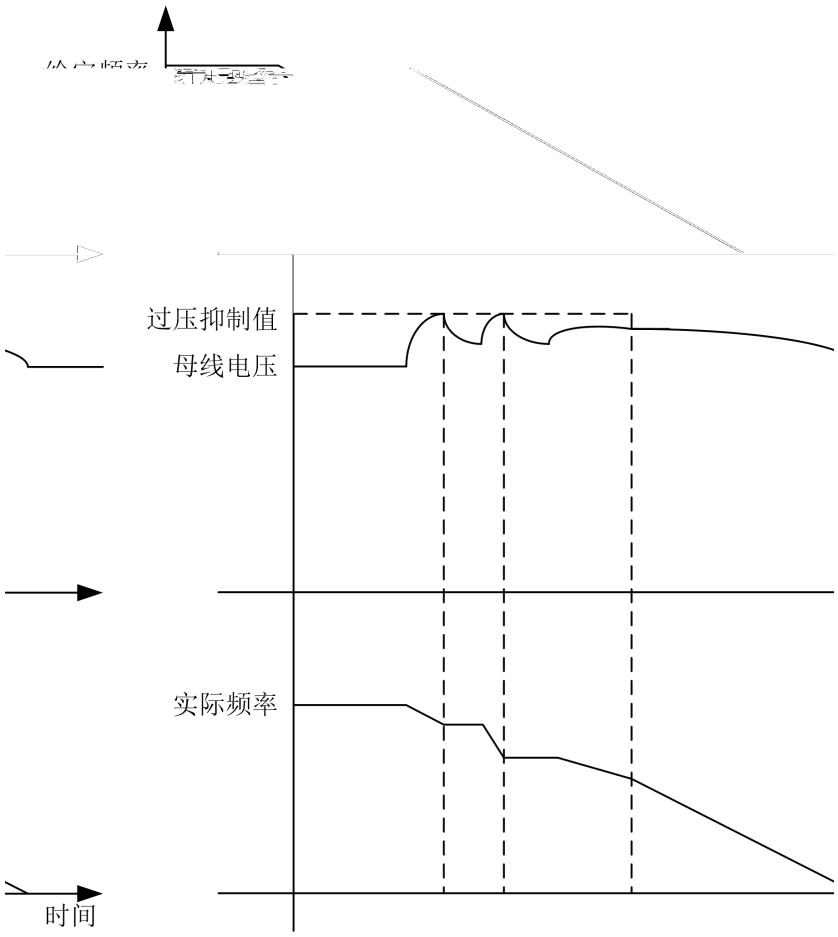
= √ + +

12

P7.69 P7.70 P7.71 P7.69

0 P16.0 380V P7.70 100V

711V = √ + +



P7.71 P7.71

8.7

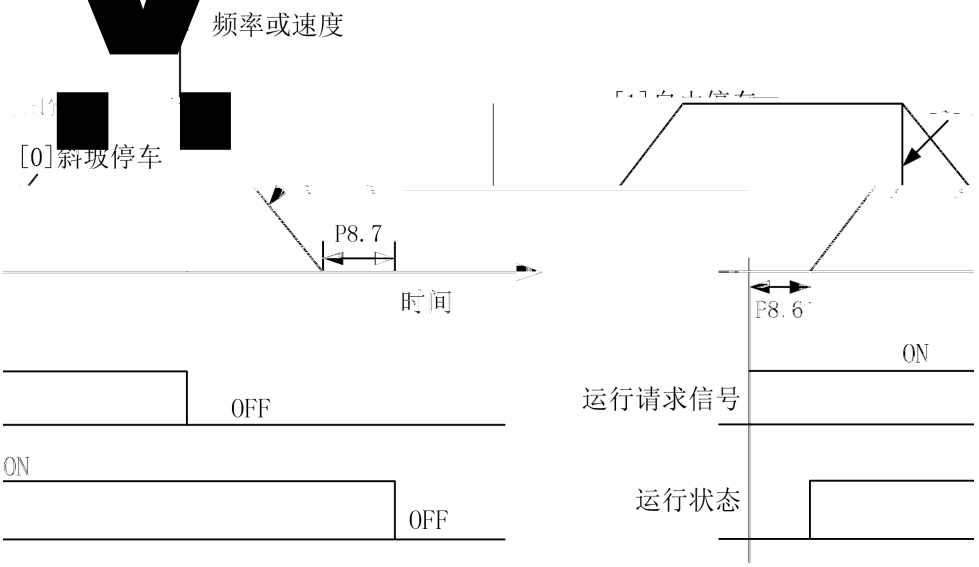
1

P8.3

[0]

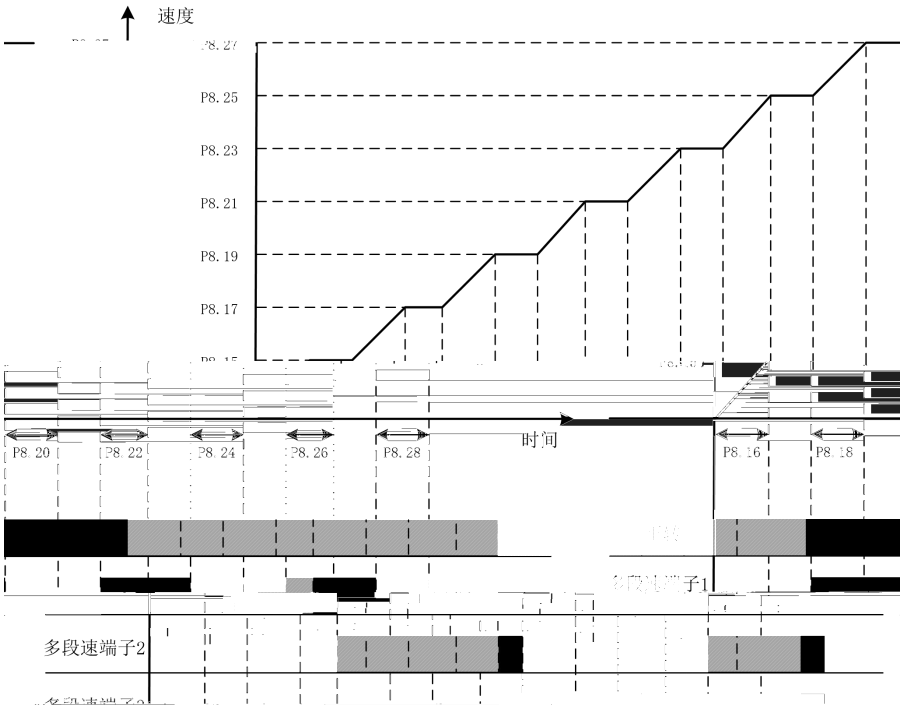
[1]

P8.6 P8.6



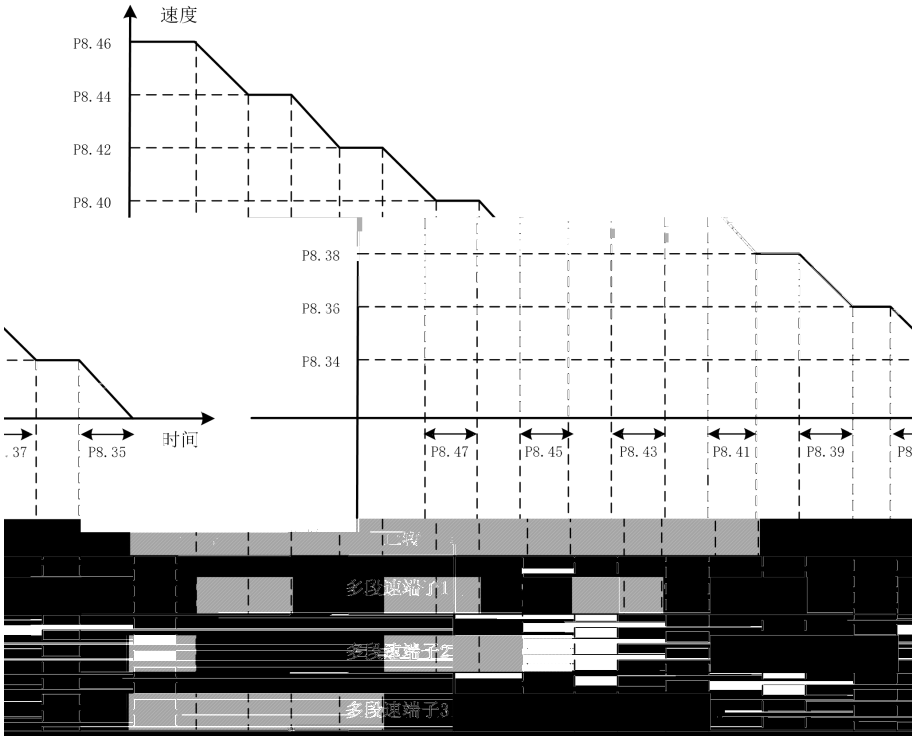
P8.54 0 P8.3 [0]

P8.54



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%

3

PROFIBUS MODBUS

P8.32

1 =P8.33 × P8.35 × (× 0.001)

4

P8.53 [0] P8.55

[1] P8.56 P8.53 [1] P8.55 [1]

P8.56

8.8

1

P12.2 P12.17

P12.0=[1]

	1	2	3	4
1	0	0	0	0
2	1	0	0	0
3	0	1	0	0
4	1	1	0	0
5	0	0	1	0
6	1	0	1	0
7	0	1	1	0
8	1	1	1	0
9	0	0	0	1
10	1	0	0	1
11	0	1	0	1
12	1	1	0	1
13	0	0	1	1
14	1	0	1	1
15	0	1	1	1
16	1	1	1	1

0 OFF 1 ON

2

P12.22 P12.37

[3]

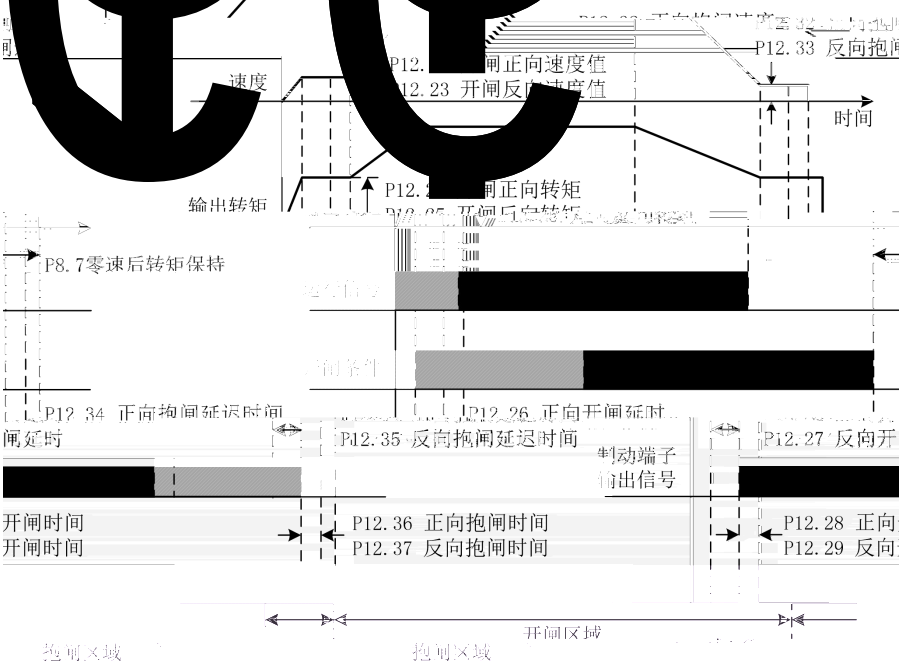
P12.22 P12.23 P12.24 P12.25

P12.32[ ] P12.33[ ]

P12.28 P12.29

P12.36 P12.37

P16



8.9 V/F

1

P16.0 P16.9

P16.7

0.5Hz~2Hz >50Hz

1kHz			
5kHz			
10kHz			

	kHz
0.4kW 37kW	5
45kW 160kW	3
185kW 450kW	2

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

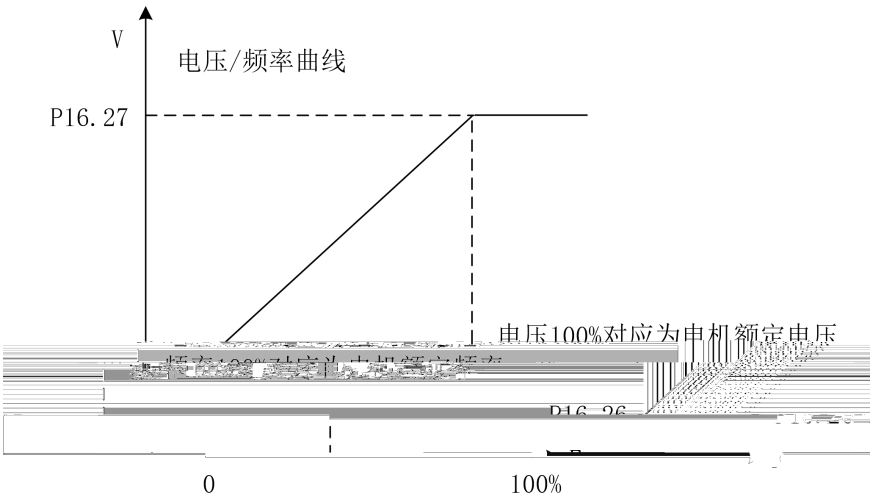
4

P16.15 V/F

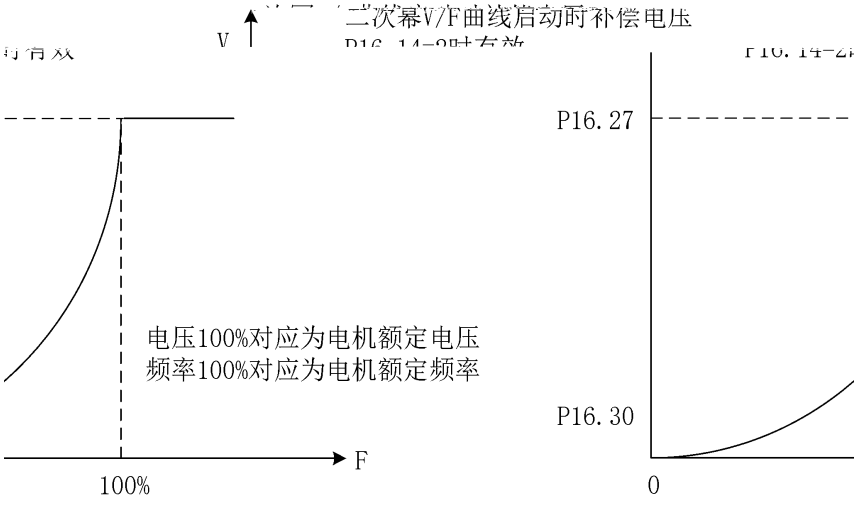
V/F

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



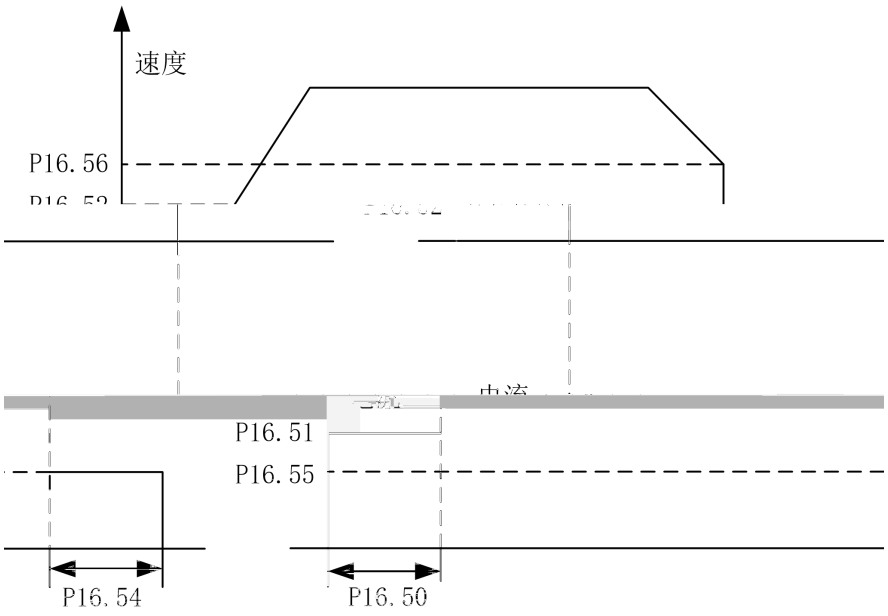
6

P16.50 P16.56

/F

P16.50 .51 P 2

P16.54 P16.55 P16.56



7

P20.0=1 P20.1≠0 P20.2≠0 1

0

P16.11 [1] [2]

P20.3 P20.1 [4]

2

P12.24 P12.25 0%

3

P20.7

P20.8 P20.9 P20.7=1

4

P20.15 A B

A B U V W

[0]

[1] A B

5

GDHF-PGD2 PG

GDHF-PGD2 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

HF659 P20.34 [1]

HF659 P20.34 [0]

6 DROOP

DROOP DROOP

P20.60 0

DROOP P20.61 DROOP

7 1

8 2

P20.1 P20.2 [0]

9

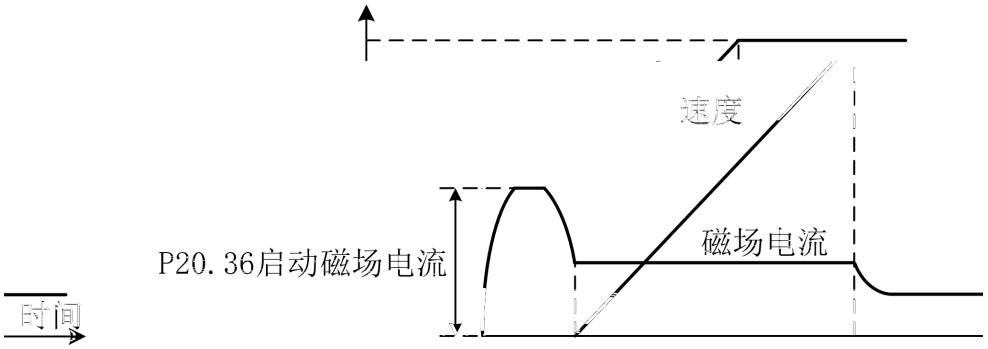
PGD1

PLC DI

DP CW0.10 “1”

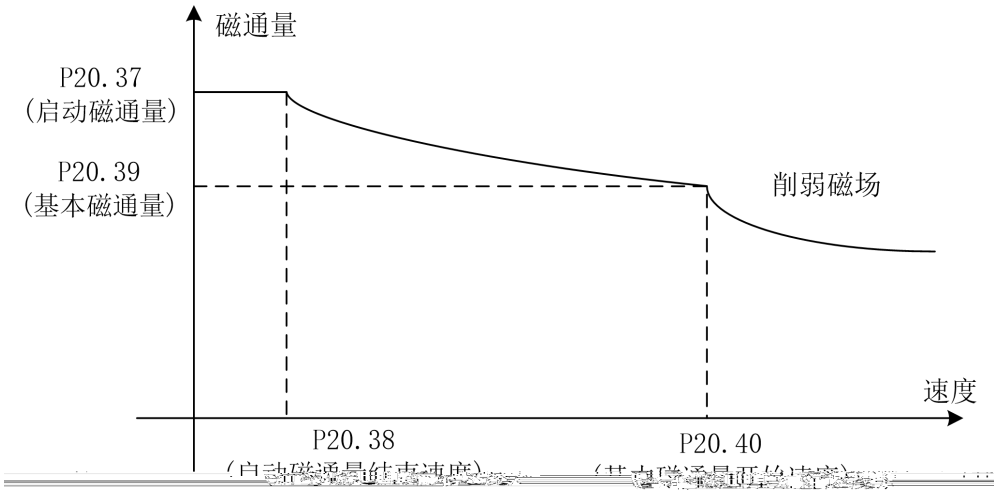
10

P20.36



11

P20.37 P20.40

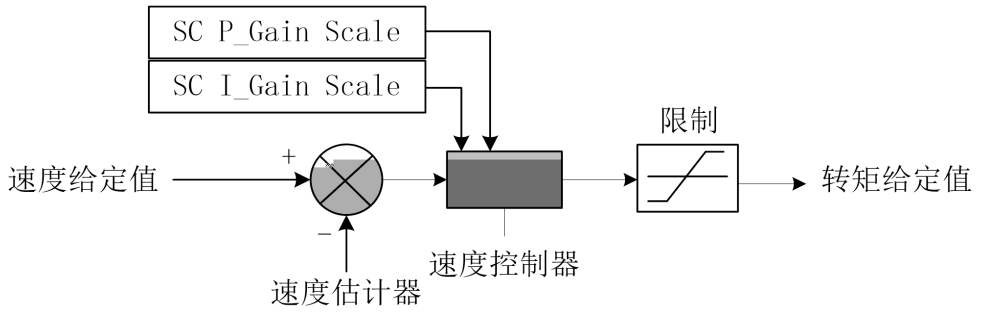


12

P20.55 ,

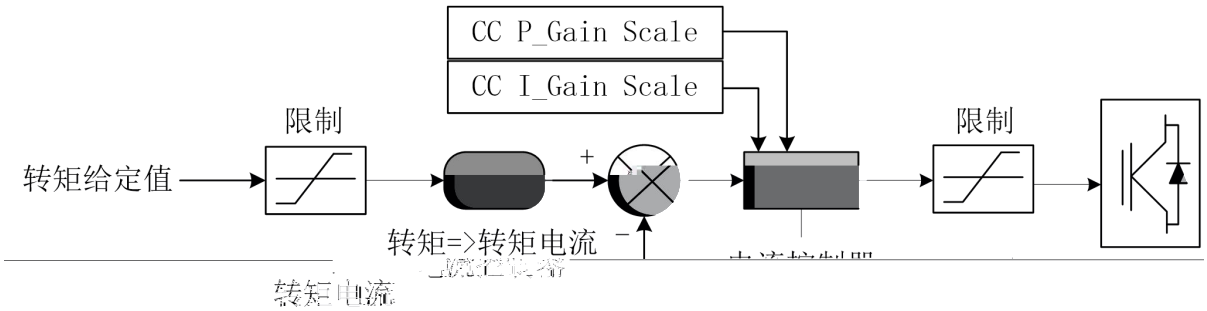
P20.56 ,

%



13

P20.62 P20.63 %



8.11

V/F	P16.64 V/F	(10 40Hz)	100	80 150	
	P16.12				
	P16.15				
	P16.26 V/F		0.75	0.5 1.2	
	P7.0		150	150 220	
	P16.12				
	P7.0		150	150 220	
	P20.43		75	50 100	
	P20.56		100	80 150	

8.12

1` ÐŒð 6

P12.40

P12.41

40

P8.7		0.5	0.5
P12.22		0. 8; 1. 5;	0.8
P12.23		0. 8; 1. 5;	
P12.24		30; 5;	
P12.25		20; 5;	
P12.32		0.5%	0.5
P12.33		0.5%	0.5
P12.40		10	100% P16.6 10 %
P12.41		0.1s	0.3s 0.1s
P12.42		xxx s	3s P12. 42 300s
P16.11		/	

1

P12.42

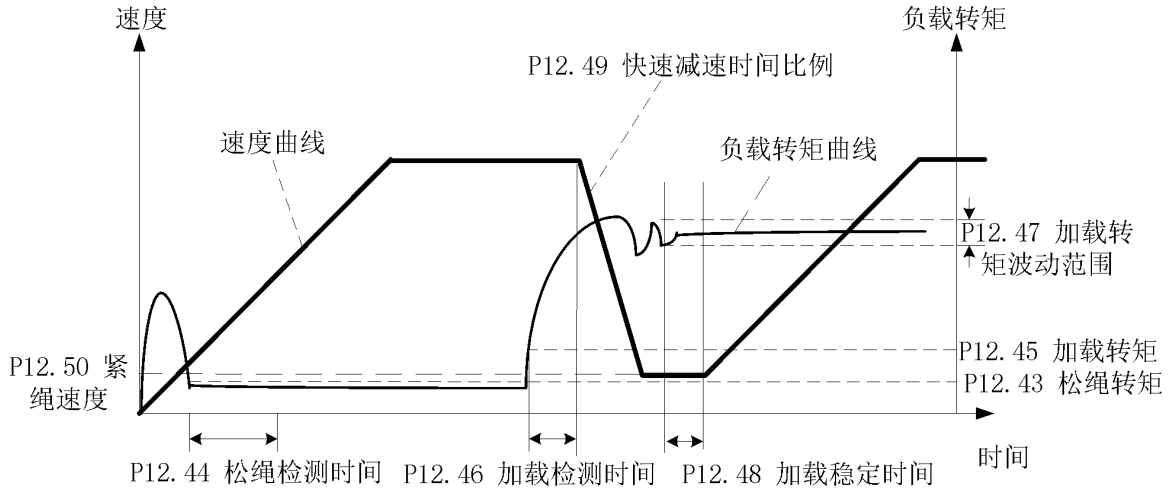
2

2

P20.21		0 “ ”	
P20.22		%	50HZ 85HZ 85 /50*100%=170%
P20.23		P2 0.22 10%-40%	10T 4T P20.22 4/10*1 00=40 40 P2 0.22
P20.24		100%	
P20.25		100%	
P20.45		6%	
P20.46		5%	
P20.47		90%	
P20.48		77%	
P20.49		100%	
P20.20		1 “ ”	

3

P12.43		20%	
P12.44		0.2s	
P12.45		30%	P12.43
P12.46		0.1s	
P12.47		10%	
P12.48		3s	P12.47
P12.49		0.2	
P12.50		3%	
P12.38		1	1 0
P4.3	4	3	



4

V/F

P8.7		15	
P8.66		70	
P8.67		40%	0
P8.70			

1

2 PLC

3

5

P3.5	6	30 /	COM COM
P3.6	7	40	COM 2
P3.7	8	41	COM
P12.18	FCD LSW_2X	2	1 16
P12.19	FCD MSW_2X	2	1 16
P12.20	FCD m/mi n _2X	2	

1 FCD LSW FCD MSW

101.62 1 32 LSW 102.63 1 32 MSW

2 40

30HZ

3 “ ” 2

4 “ ”

6

“ ”

“ ” 5

P27.10-P27.24	DI9-DI23	22	DI DI “ ”
P12.8	7	Hz	
P12.9	8	Hz	
P12.10	9	Hz	
P12.11	10	Hz	
P12.12	11	Hz	

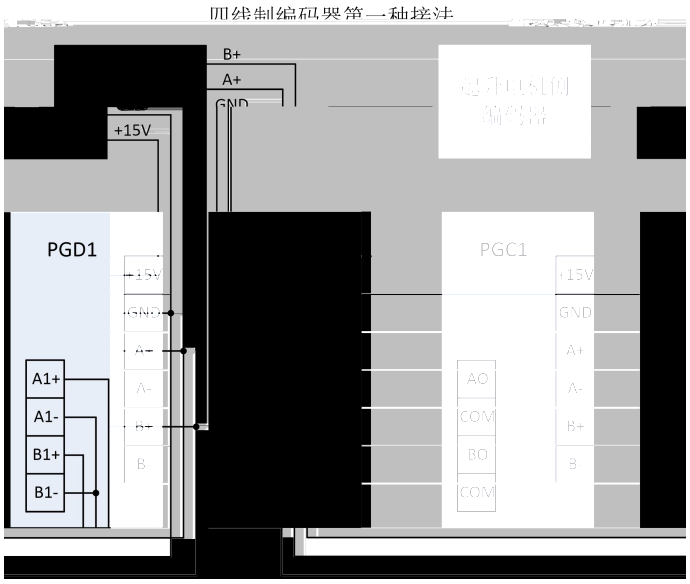
7

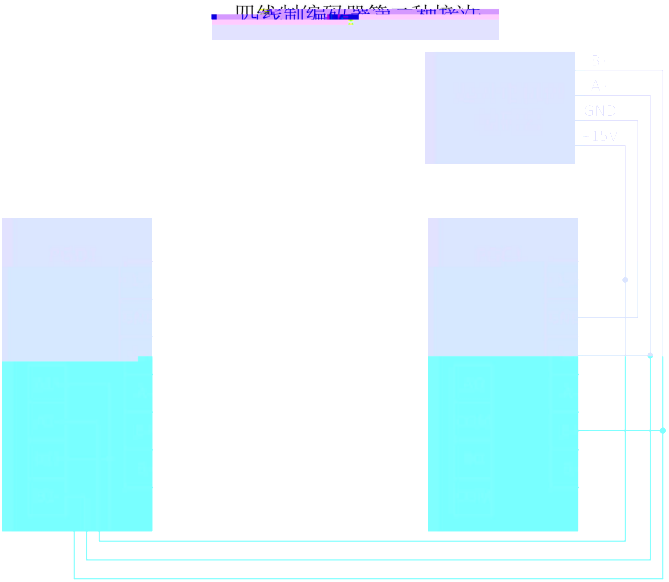
PGD1 PGD1 A1+

A1- B1+, B1-

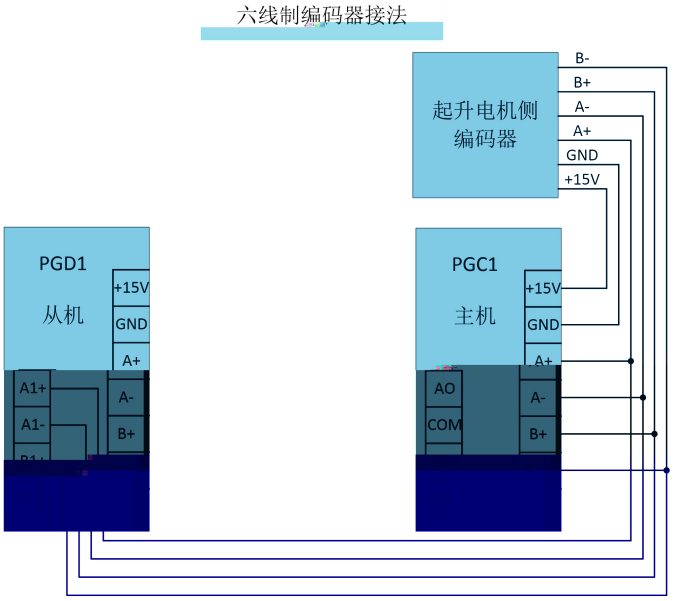
a

1





2



P20.14

101.64 101.65

b

P3.6	7	21	DI
P3.7	8	29	1
P8.8		15s	8
P8.59			
P8.60		15	P8.60

P8.68	16		
P8.69	16		
P8.70		50ms	P8.70
P8.71		0	0 1

c

T

=

_____ = . P8.59.
( )( )

d

1) ” ” 101.64 ‘ 2 32
LSW ’ 101.65 ‘ 2 32 MSW ’

2) 1m

101.64 101.65 101.64 x 101.65
y

3) L

4) total_pulse=[(65535-y)*65535+(65535-x)]/(L- P8.59)
P8.68 16 P8.69
16 P8.68=total_pulse/65535 P8.69=total_pulse/65535
2 101.64

8.13

1

DI “ ” “ ” “2 ”

“3 ” “4 ” “5 ” 6 DI

“ ” “ ”

	2	3	4	5	
	/	/	/	/	
					1
					2
	/				3
	/	/			4
	/	/	/		5
/:					

2

P08.00 3 MODBUS

P08.10 5 MODBUS

Vx.xxMT AI_1

0VDC-10VDC

P05.00 AI_1 1 0~10V

P12.2 – P12.6 1-5 5 1-5

DI

Hz

Vx.xxMT 5

1 – 5 Hz

P12.07 0V ~ 10V

0% ~ 100% :

= *

DI		
1	1	P12.2
2	2	P12.3
3	3	P12.4
4	4	P12.5
5	5	P12.6
		P12.7

3

P27.00 0 1

2

P27.1 1

OEM 1

4 DI DO

P27.02 P27.27 DI DO

P27.28 P27.50 DI

5

		1 1
		1 1
110%		P27.51
1		P27.52
100%		P27.53
2		P27.54
90%		P27.55
3		P27.56
100%		P27.57
4		P27.58
90%		P27.59
5		P27.60
50%		P27.61

6		P27.62
25%		P27.63
7		P27.64

110% 1 ~ 25% 7

7 P27.51 ~ P27.64

0		
1		
2 1	1	1
3 2	2	2
4 3	3	3
5 4	4	4
6 5	5	5
	Vx.xxMT	

110% 100% 7

110% 1

P27.51 110%_ 1

P27.52 110%_ 2 1

110%

P27.51 110%_ 1

P27.52 110%_ 1

6

P27.00 2

DO

P27.65

7

P27.66

DO

GDHF-GY01

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/BALARM	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

[E051]	U IGBT ERR_UT not reset	IGBT IGBT
[E053]	V IGBT ERR_UT not reset	IGBT IGBT
[E054]	W IGBT ERR_UT not reset	IGBT IGBT
[E056]	ERR_SLAVE_FAULT not reset	
[E057]	ERR_DB not reset	IGBT IGBT
[E100]	OV	P8.35(1) P7.12( )
[E105]	UV	P7.13( )
[E106]	1 Brake abnormal 1	DI
[E107]	2 Brake abnormal 2	DI
[E108]	DC switch open	
[E109]	15V DC15V fail	15V 15V
[E110]	OC	P7.4( )
[E111]	OL	P7.48(1) P7.49(1)

P7.48 P7.49

P7.8

[E112] ZC

[E113] MIP

[E114] MOP

P7.19

[E115] OS 3 P7.19

[E116] SLVC Fail P7.23

[E117] MOTOR STALL 0.15 P20.14 P2

P20.14 P20.15

[E118] PG ERROR

P20.14 P20.15

[E119] SPEED ABNORMAL P7.31 P7.32

[E120]

[E143]	Line SW Fail	DI
[E144]	Line SW SHORT	
[E145]	(AFE) Line OV	P16.0
[E146]	(AFE) Line Over_Freq	
[E152]	U IGBT PDP[U]	IGBT IGBT
[E154]	V IGBT PDP[V]	IGBT IGBT
[E155]	W IGBT PDP[W]	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
[E204]	DI ERR DUPLICATE DI SET	DI
[E210]	Panel Error	
[E220]	CRC MEMORY CRC ERR	
[E221]	PARAMETER ERROR	

9.3

		• • ON • COM	• • ON • COM
		•	• •
		•	• •
		•	•
		•	•
		•	• •
		•	•
		•	•
		•	•
		• ON	• ON
		•	• V W
		•	• /
		•	• •
		•	•
		• • •	• • •
		•	•
		•	•
		•	•
		•	•
		•	•

10.

1.

2.

3.

4.

1. CMOS

2.

3.

10.1

10.2

	1. 2.	1. > 40 < 95% 2.
	1. 2.	1. 2.
	1. 2. 3.	1. 2. 3.
	1. 2.	1. 2.
	1. 2.	1. 2.

10.3

	2	1 2
PCB		

10.4

5

5

(400-0077-570)

1 40

2 80%

3 24 /

10.5

1

2

5