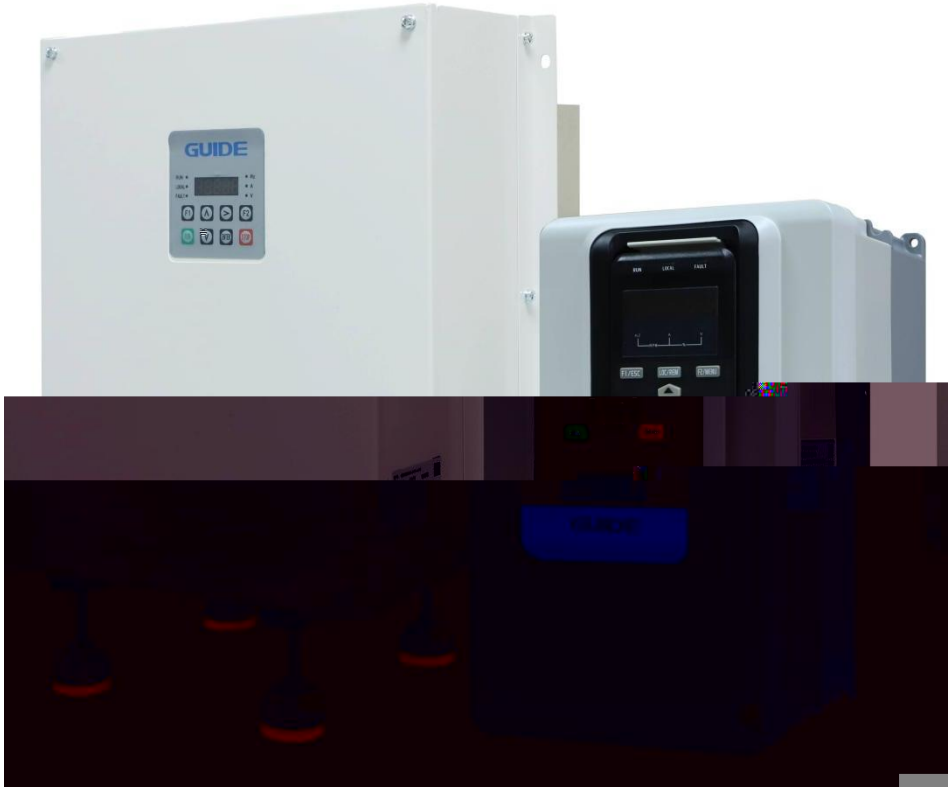
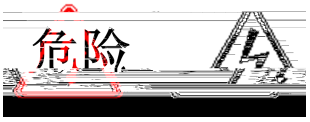

GUIDE

GF630N04

1

2

3



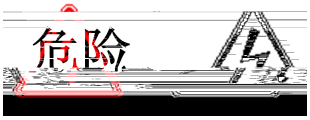
10

U V W

，

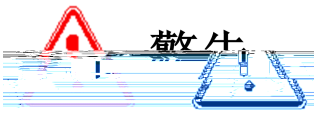
3

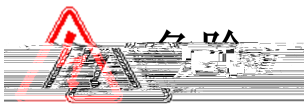
IEC

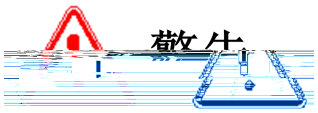


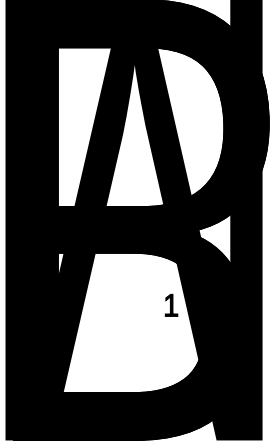
10

ESD









1

RCD

RCM

RCD RCM

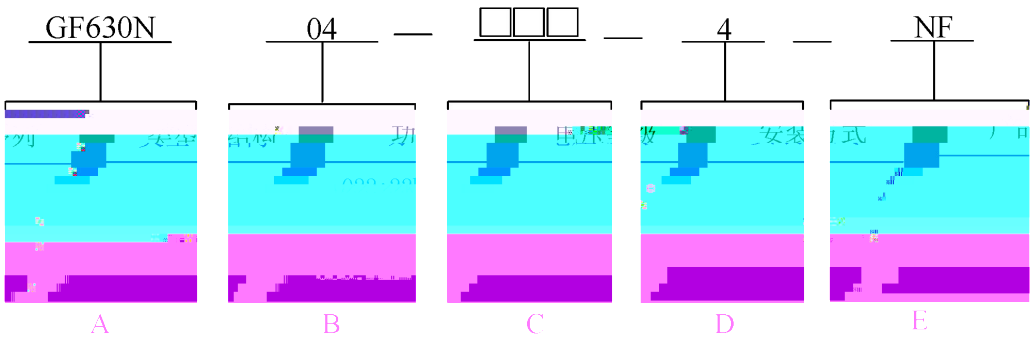
B RCD RCD

1
1.1
1.2
1.3
1.4
1.5
1.6
2
2.1
2.2
2.3
2.4
2.5
2.6 EMC
3
3.1
3.2
4
4.1
4.2 LED
5
5.1
5.2
5.3
5.4
5.5
6
6.1 P0
6.2 P2
6.3 P3
6.4 P4
6.5 P5
6.6 P6
6.7 P7
6.8 P8
6.9 P9
6.10 V/F 1 P10
6.11 2 P11
6.12 1 P12
6.13 2 P13
6.14 P14
6.15 PID P15
6.16 P16
6.17 P19

6.18 P20
6.19 P21
6.20 P23
7
7.1 P0
7.2 P2
7.3 P3
7.4 P4
7.5 P5
7.6 P6
7.7 P7

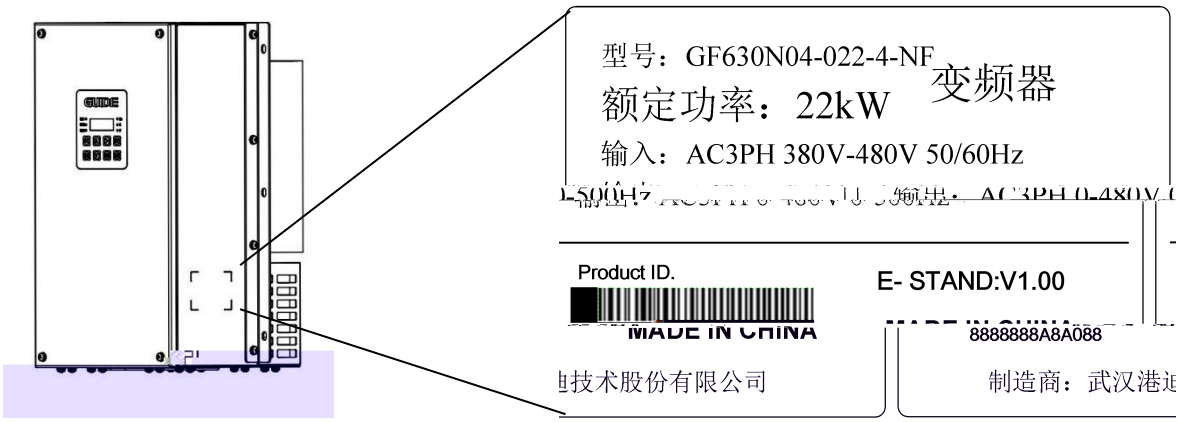
1

1.1



A	GF630N
B	04
C	022:22kW; 037:37kW; 045:45kW; 055:55kW;
D	4:380V
E	NF: NFG:

GF630N04 22kW



GF630N04-022-4 GF630N04 22kW 380V

AC

3PH

380V-480V 50/60Hz

0-480V 0-500Hz

NF

GF630N04

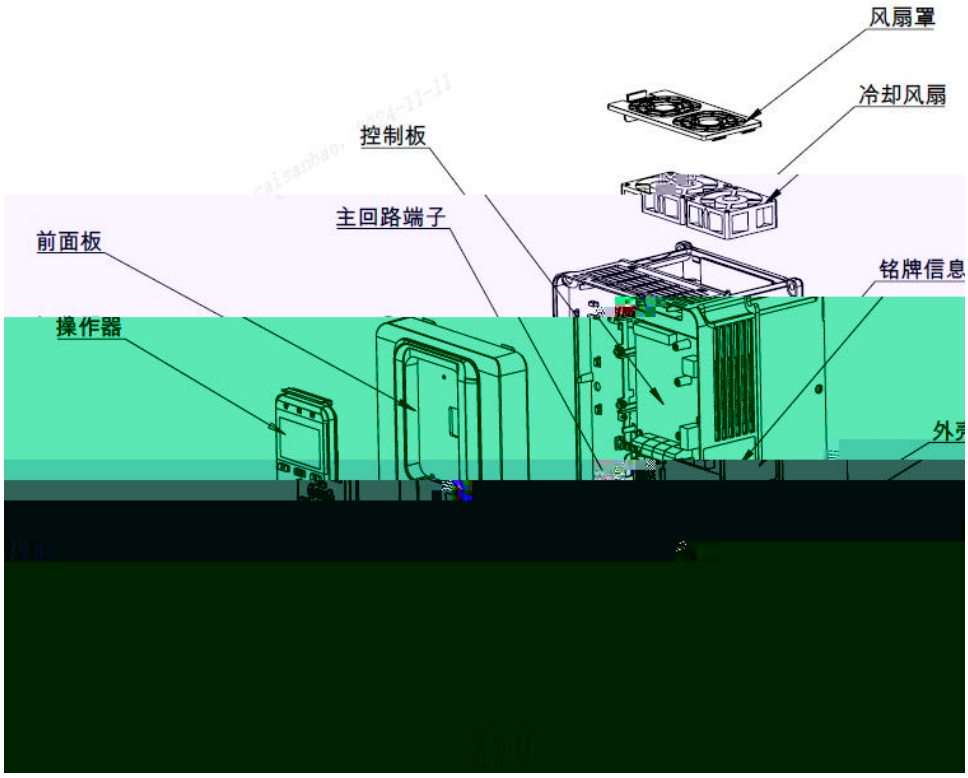
	[A]	[kW]	
GF630N04-022-4	160	2.2-3	A1
GF630N04-037-4	240	3.7-4.5	
GF630N04-045-4	340	5.5-7.5	
GF630N04-055-4	480	5.5-7.5	A2
GF630N04-022-4-NF	160	2.2-3	A3
GF630N04-037-4-NF	240	3.7-4.5	
GF630N04-045-4-NF	340	5.5-7.5	
GF630N04-022-4-NFG	160	2.2-3	A4
GF630N04-037-4-NFG	240	3.7-4.5	
GF630N04-045-4-NFG	340	5.5-7.5	
GF630N04-055-4-NF	480	5.5-7.5	A5
GF630N04-055-4-NFG	480	5.5-7.5	A6

1

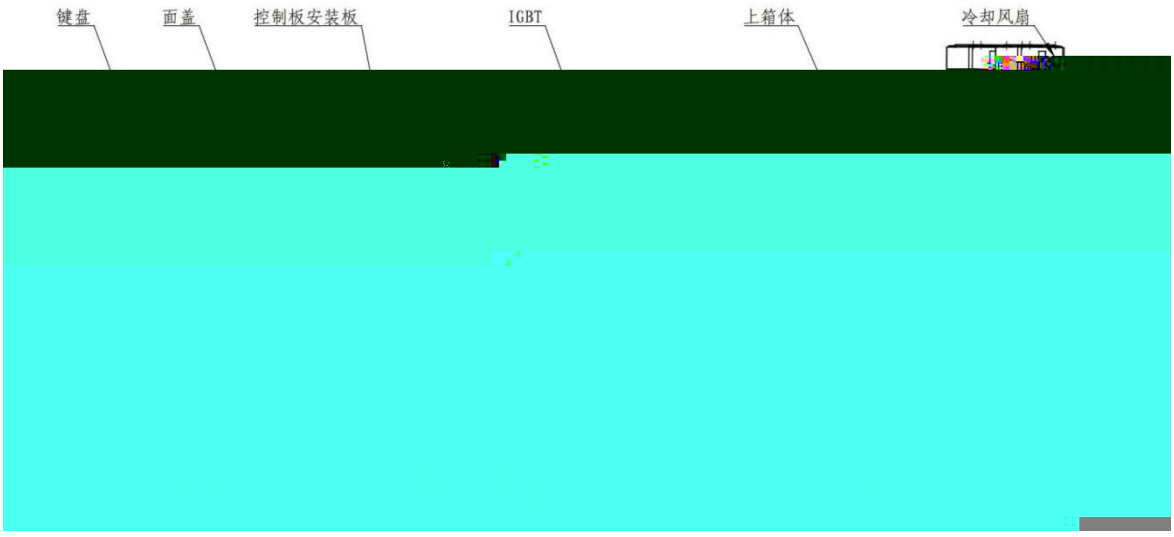
2 45kW 5.5-7.5kW , 7.5kW

1.2

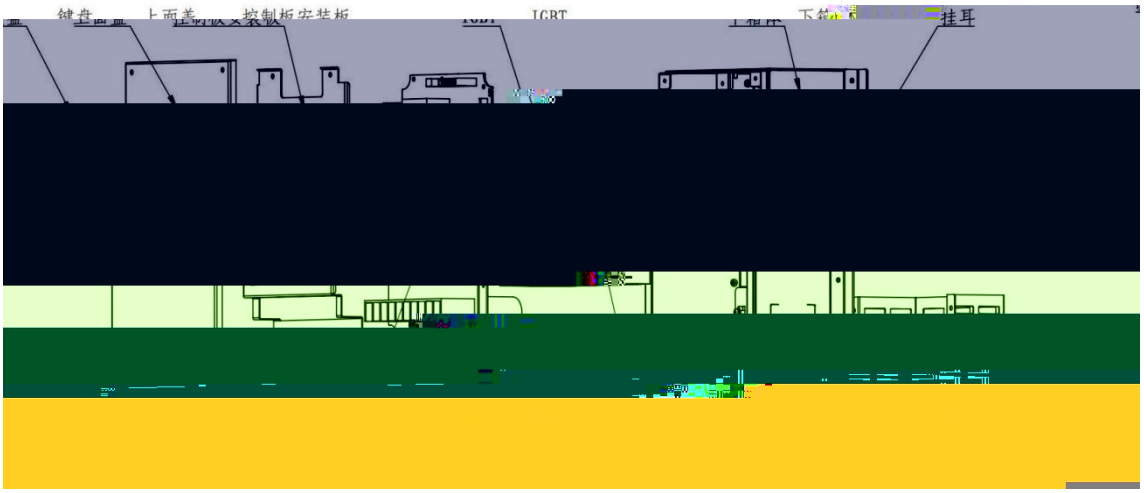
GF630N04



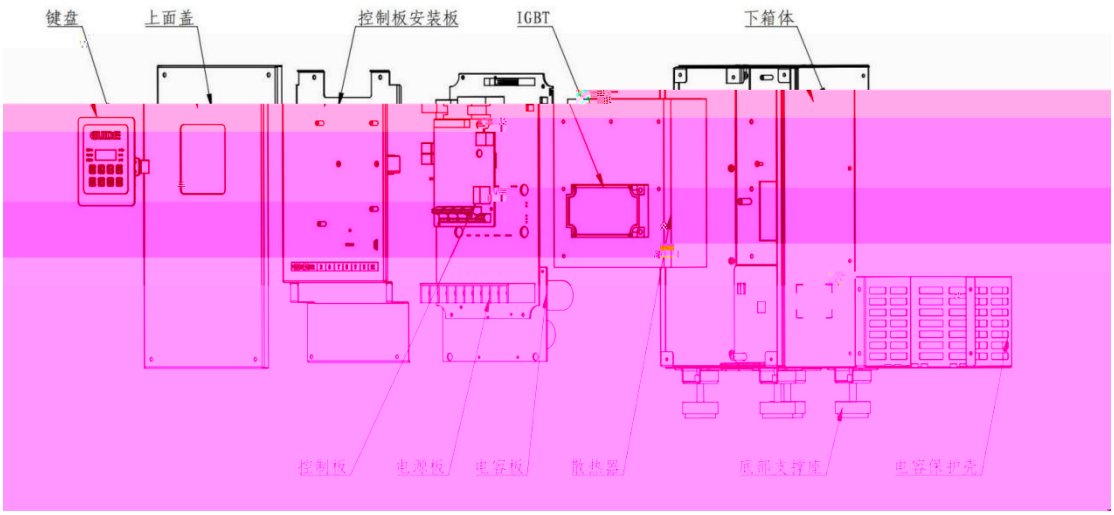
A1 380V 480V 22kW 45kW



A2 380V 480V 55kW

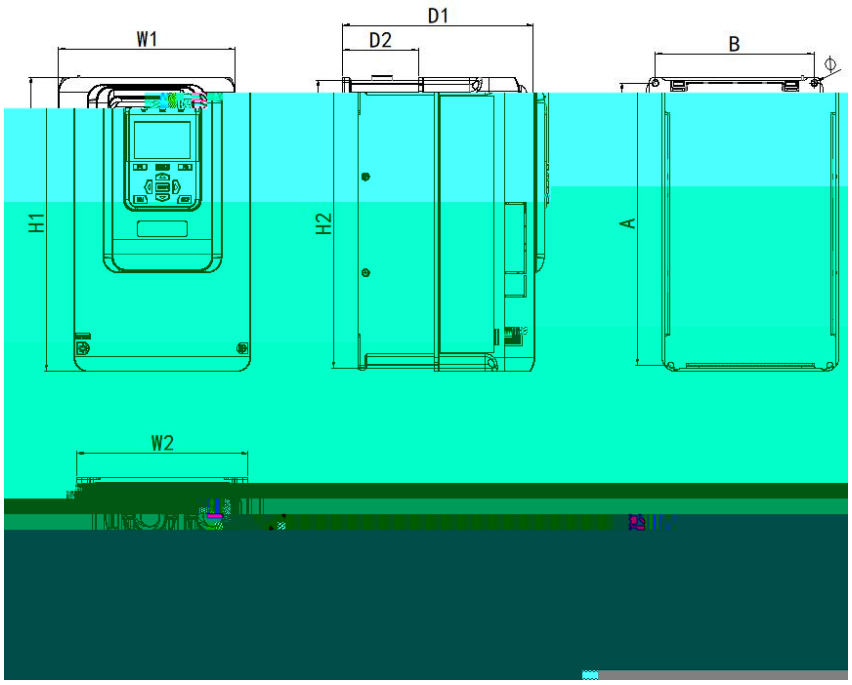


A3/A5　　380V　480V　22-55kW



A4/A6　　380V　480V　22kW-55kW

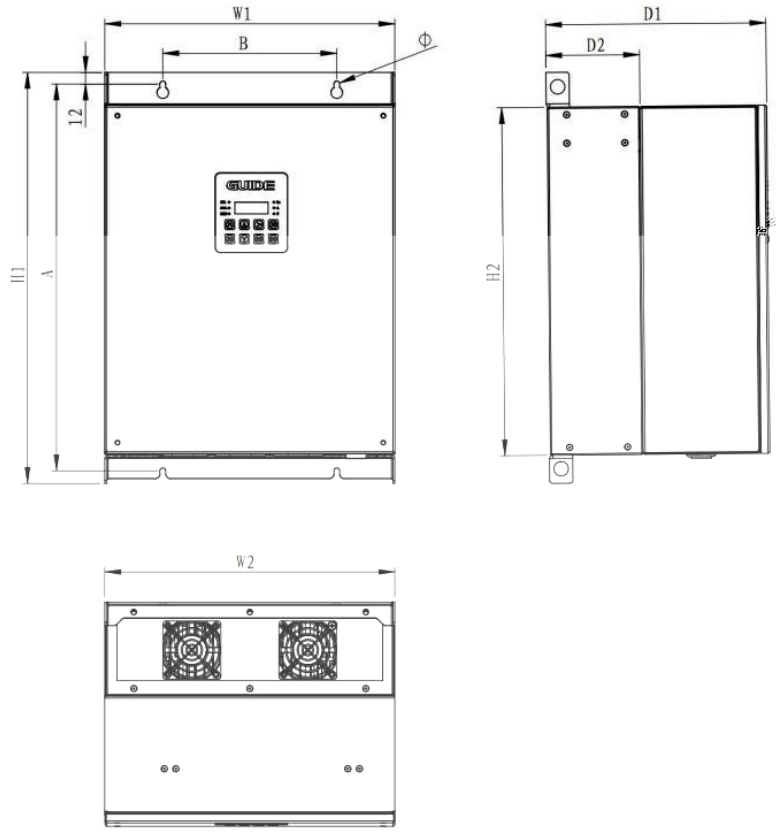
1.3



A1

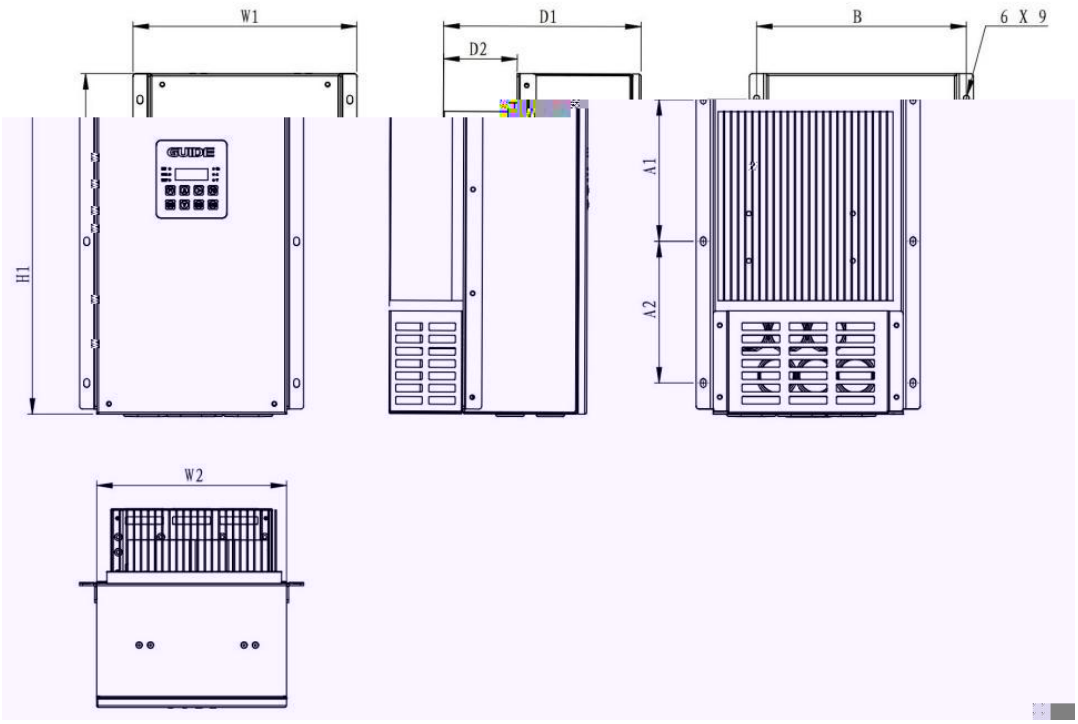
	(mm)						mm			8.8	kg
	H1	H2	W1	W2	D1	D2	A	B	φ	M	
22kW	302	294	180	174	194	78	288	162	4-φ6	4-M5	6.5
37kW	302	294	180	174	194	78	288	162	4-φ6	4-M5	6.5
45kW	302	294	180	174	194	78	288	162	4-φ6	4-M5	6.5

A1



A2

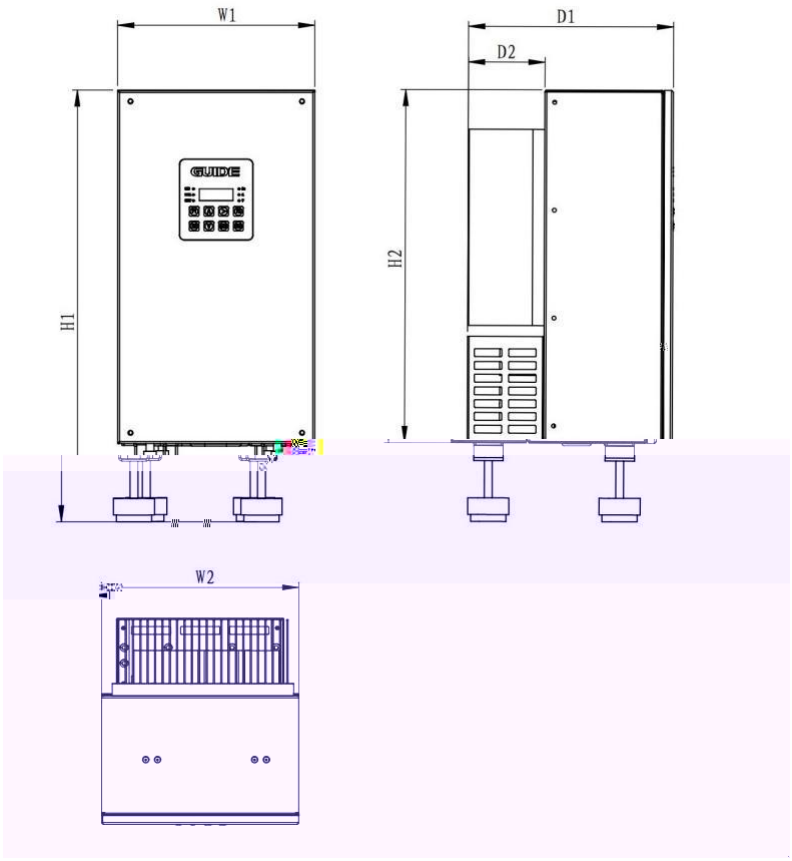
	(mm)						mm			8.8	kg
	H1	H2	W1	W2	D1	D2	A	B	φ	M	
55kW	425	360	300	300	227	97	400	180	4-φ6	4-M5	12.8



A3/A5

	(mm)						mm			8.8	kg
	H1	H2	W1	W2	D1	D2	A1/A2	B	φ	M	
22kW	360	/	236	200	208	78	150/150	222	6-φ6X9	6-M5	8.3
37kW	360	/	236	200	208	78	150/150	222	6-φ6X9	6-M5	8.3
45kW	360	/	236	200	208	78	150/150	222	6-φ6X9	6-M5	8.3
55kW	360	/	336	300	225	95	150/150	320	6-φ6X9	6-M5	10.8

A3/A5



A4/A6

(mm)

kg

H1 H2 W1 W2

A4/A6

1.4

		± ± ≤

5Hz

30 -

1.6

1. / “ ”

/

2.

3.

- R S T
- U V W
- P N
- DBR

4. 10

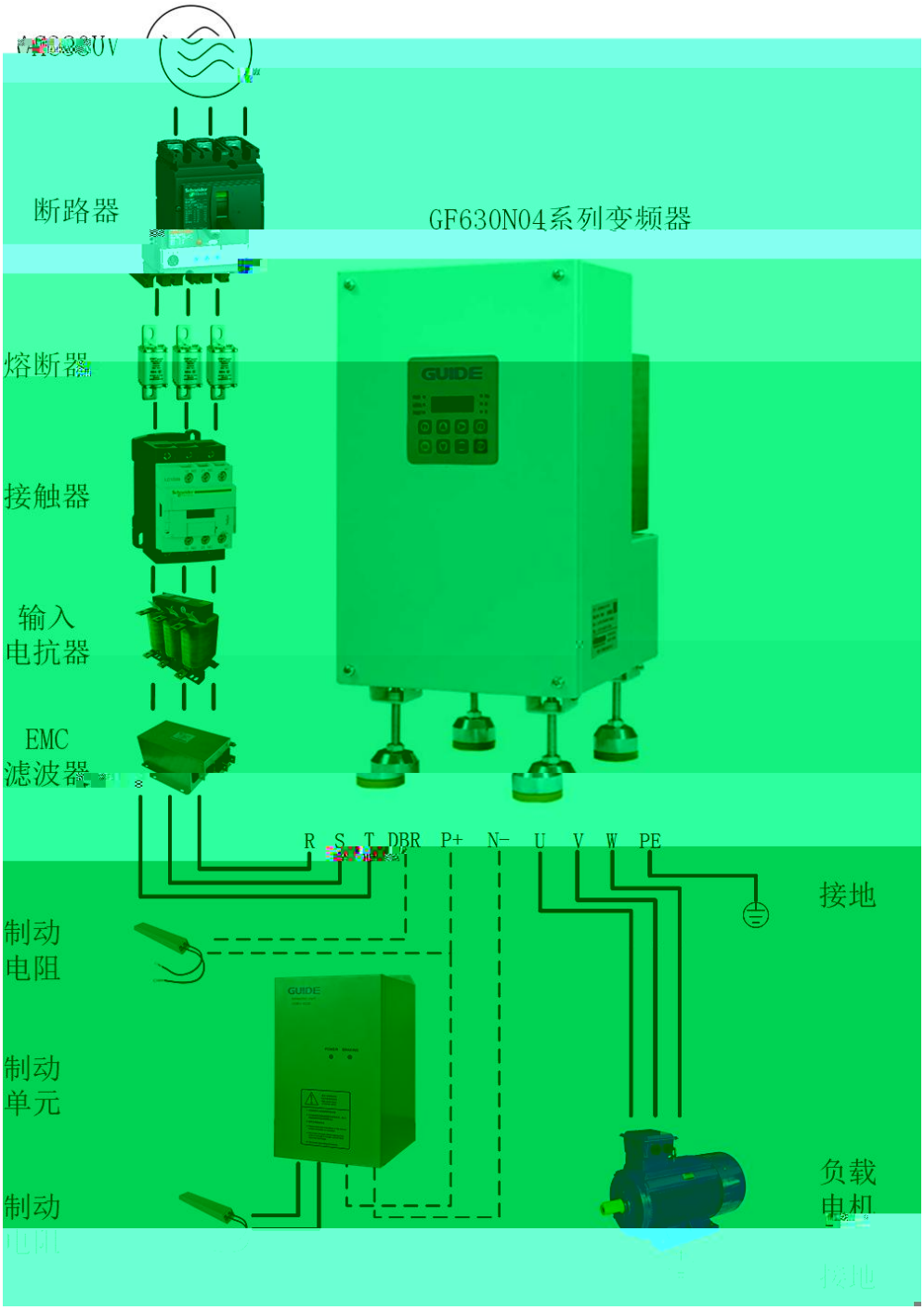
5.

1.

2.

2

2.1



GF630N04

2.3

	A	/ mm² CEFR 40%	A (AC-3)
22kW	15	2.5	18
37kW	18	2.5	18
45kW	18	2.5	18
55kW	24	2.5	25

2.4

2%					
	A	mH		A	mH
22kW	12	1.17	45kW	21.0	0.67
37kW	18.0	0.78	55kW	28.0	0.5

2.5

	Ω	Ω	KW 30% Kc	KW 50% Kc
22kW	100	40	≥0.9	≥1.5
37kW	100	40	≥2.0	≥2.5
45kW	100	40	≥2.0	≥2.5
55kW	75	40	≥3.0	≥3.5

1 100%

2 Kc

3

2.6 EMC

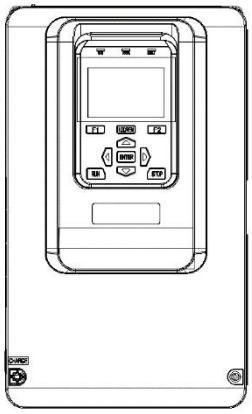
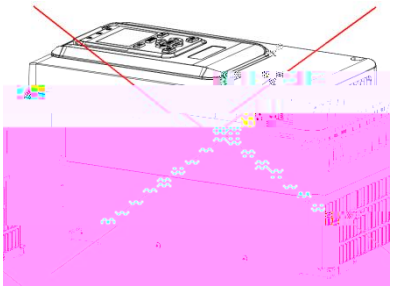
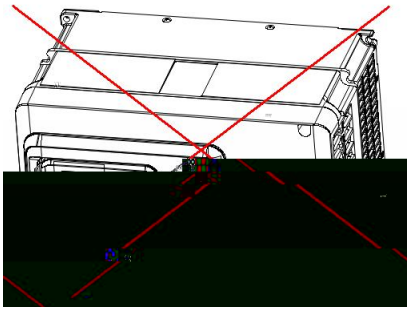
3

3.1

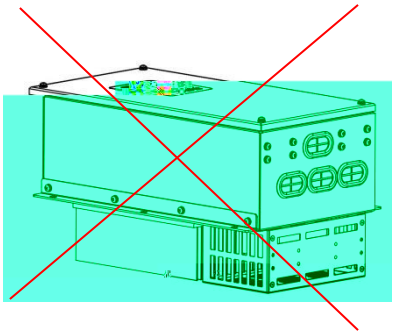
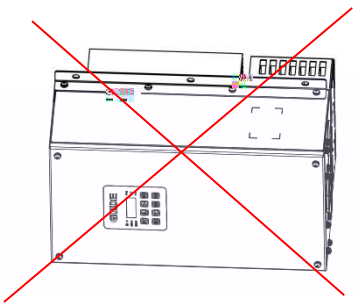
3.2

3.2.1

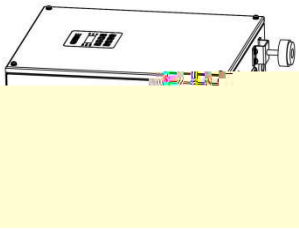
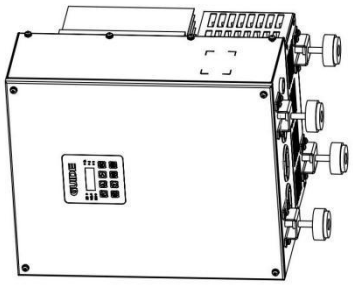
1)A1/A2

2)A3/A5

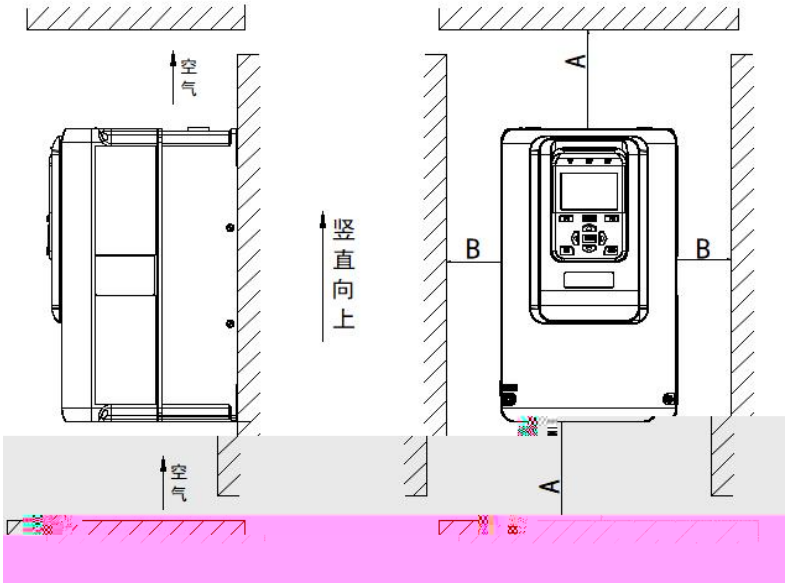
		

3)A4/A6

3.2.2

1)A1/A2



	(mm)	
22kW	A ≥ 100	B ≥ 20
37kW	A ≥ 100	B ≥ 20
45kW	A ≥ 100	B ≥ 20
55kW	A ≥ 200	B ≥ 50

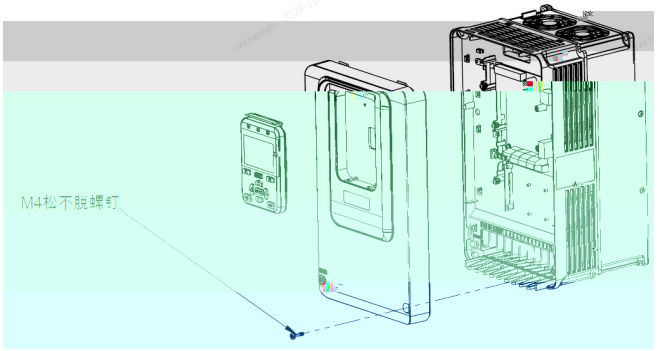
3.2.3

www.gdetd

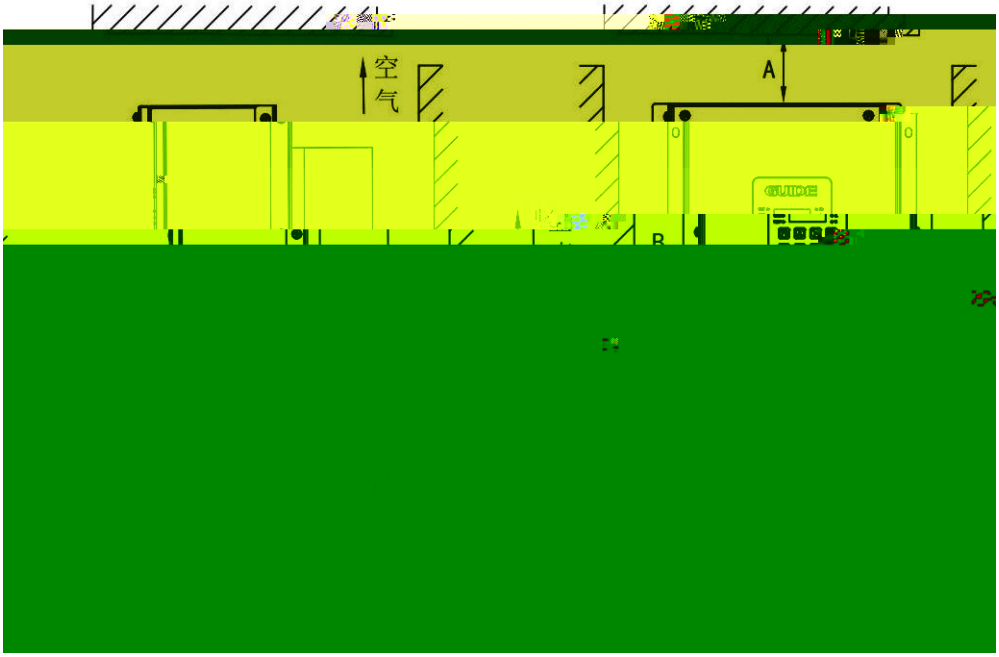
A B C

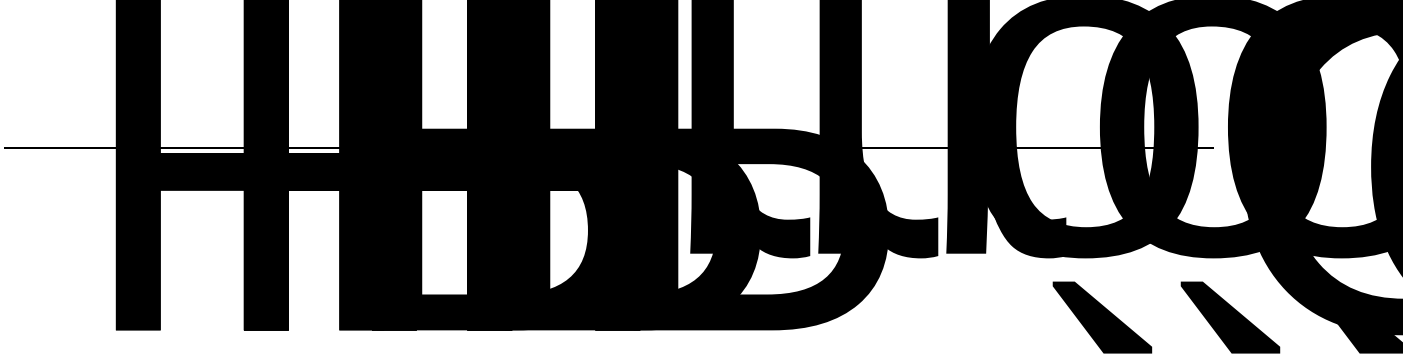
GF630N04-N3	N3	1

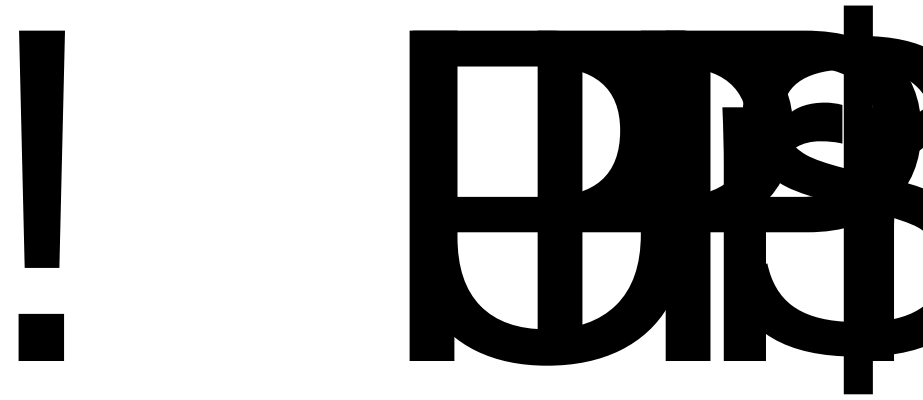
3.2.4

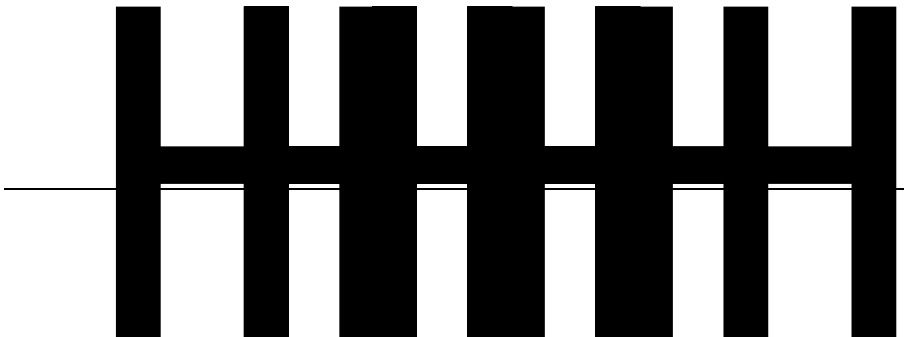
1	
2 M4	

2 A3/A5



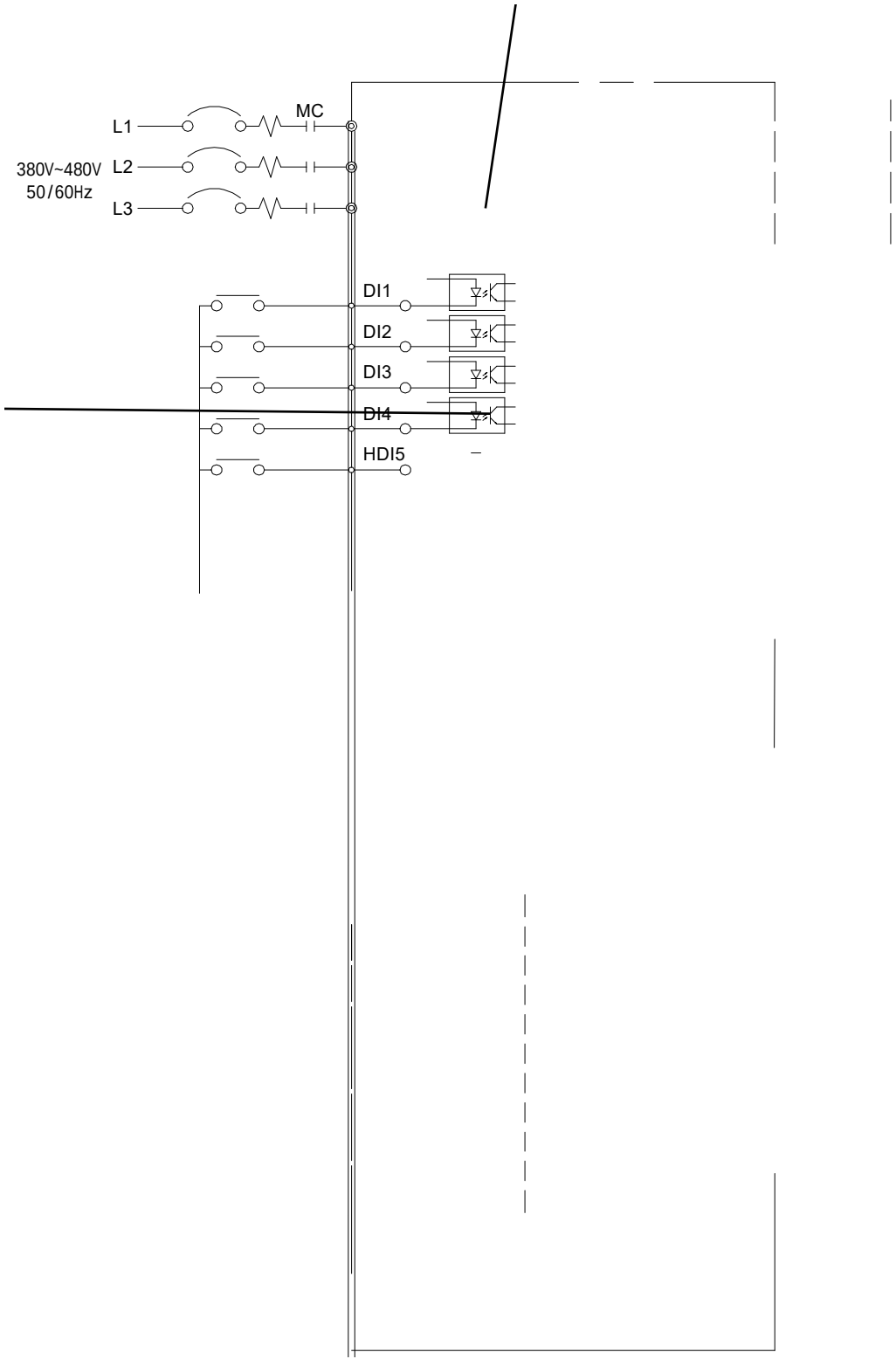




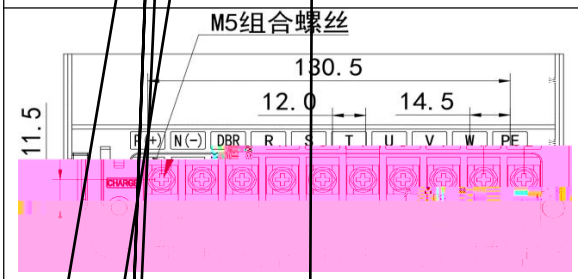
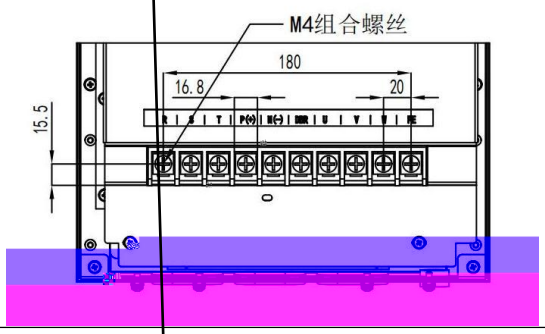
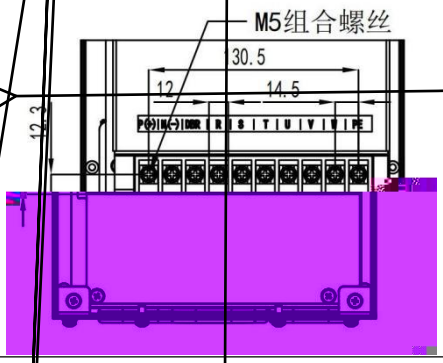
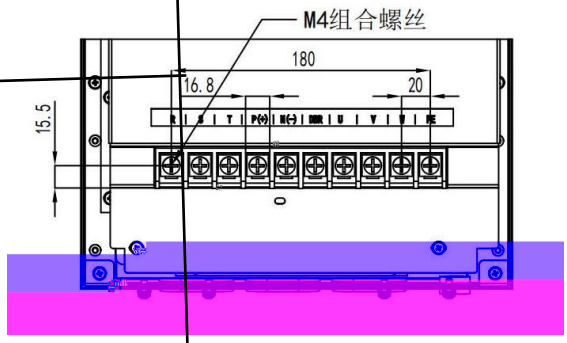


GUIDE

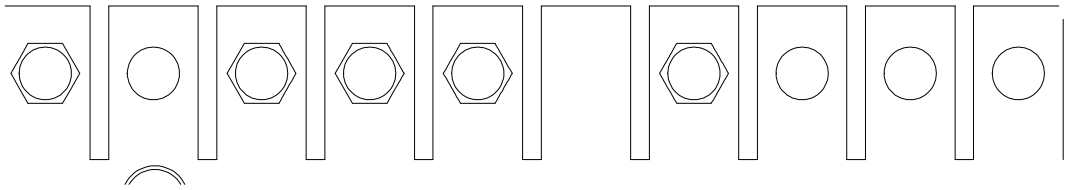
3.3.1



3.3.2

A1	A2
	
A3/A4	**A5/A6**
	

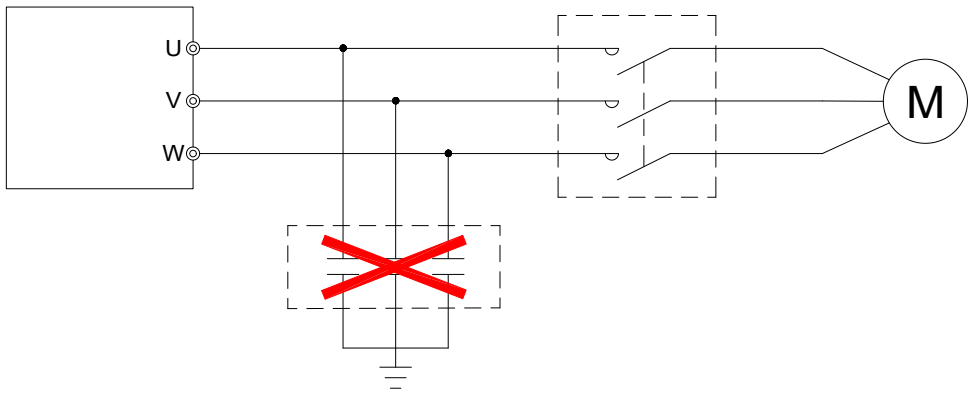
(1)A1/A3/A4



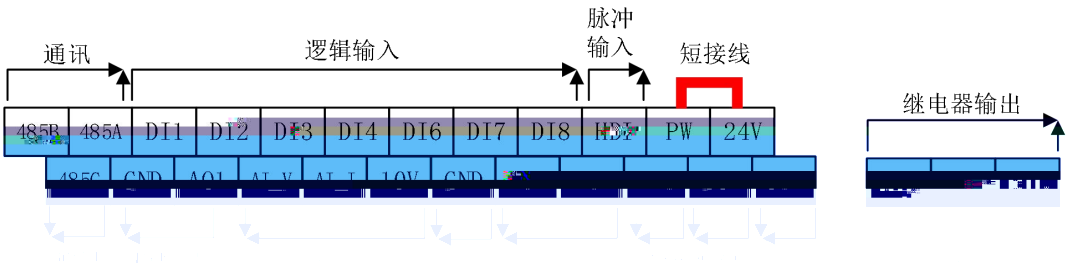
3.2.3

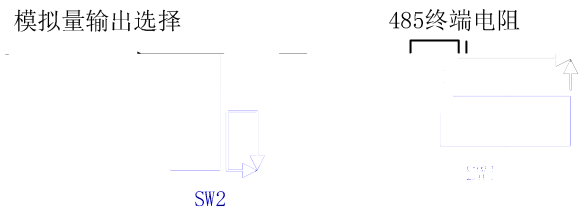
1		
2	10	
3	U V W	
4		
5		
6		
7	U V W	
8		
9	10cm	
10	0.75mm² 50m	
11	10cm	
12	50m 50m	

13		
14		
15	30 m	

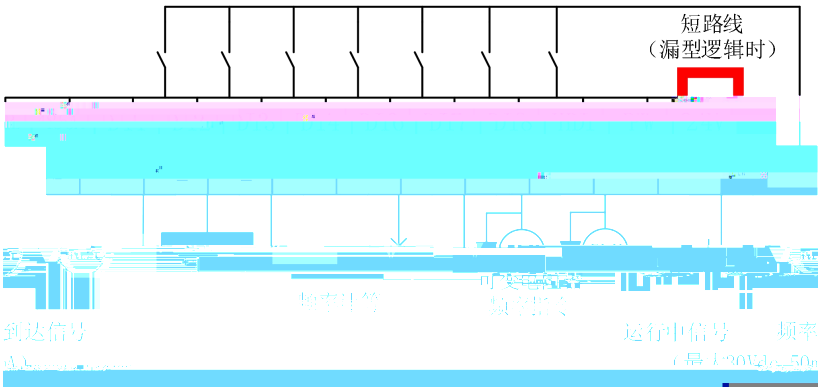


3.2.4


通讯
逻辑输入
脉冲
输入
短接线
继电器输出
485B
485A
DI1
DI2
DI3
DI4
DI6
DI7
DI8
PW
24V
485C
GND
AO1
10V
GND


模拟量输出选择
485终端电阻
SW2

			10V 10mA
10V	10V		5kΩ
			24V ± 10% 200mA
24V—COM	24V		
AI_I—GND		1	1 0~20mA 2 500Ω 3 20mA 50Hz 0.01mA 4 ± 1% 25
AI_V—GND		2	1 0~10V 2 100kΩ 3 10V 50Hz 0.01V 4 ± 1% 25
AO—GND		1	1 0 10V 4 20mA 2 3 10bit 1% 4 ± 1% 25
DI1—COM		1	1 3.3kΩ 2 12 30V 3 4 1KHz 5 PW 24V COM NPN PNP
DI2—COM		2	
DI3—COM		3	
DI4—COM		4	
DI6—COM		6	
DI7—COM		7	
HDI—COM			50kHz 20%~80%
DO1-COM			1 2 50mA/30V 3 0 1kHz 4 DO_C ON 4V
DO2-COM			
HDO-COM	(FMP)		1 50kHZ 2 30%-70% 3 0-30V
R1A R1C R1B			RO 3A/AC250V 1A/DC30V
485A 485B	485		485 485
RJ45	RJ45		
PG			



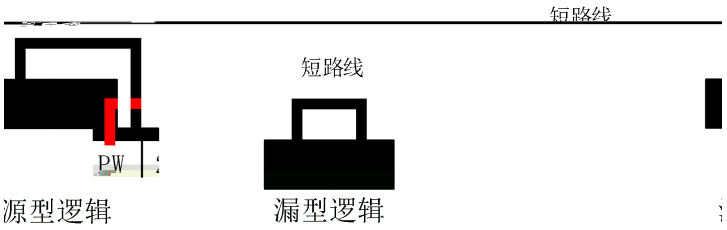
AI

DO1,DO2

ON OFF

(2)

24V PW PW COM



AI

DO1,DO2

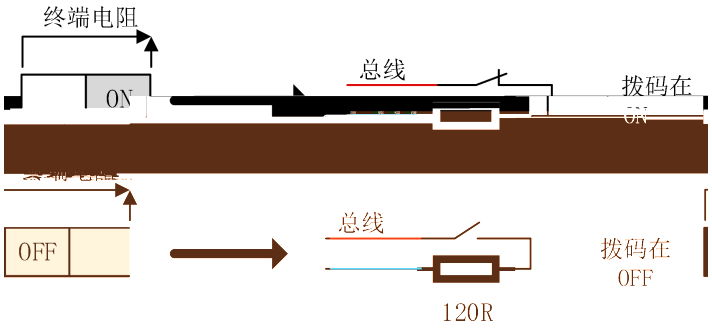
ON OFF

(3)

485 SW2

ON

ON

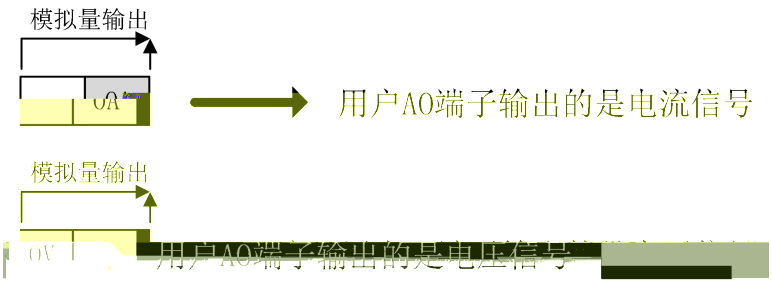


4

SW1 0A

AO 4-20mA 0V AO

0-10V

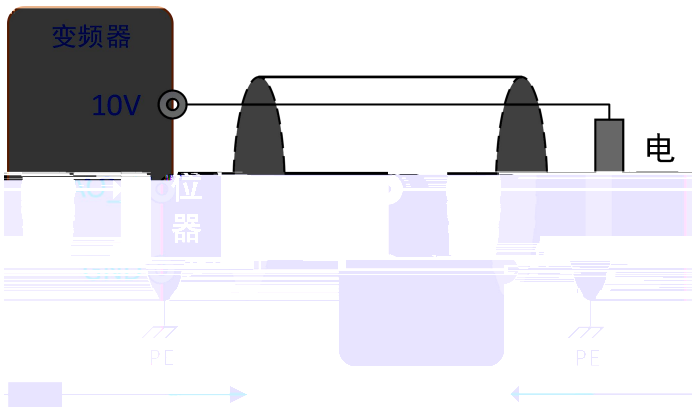


AI AO DI DO

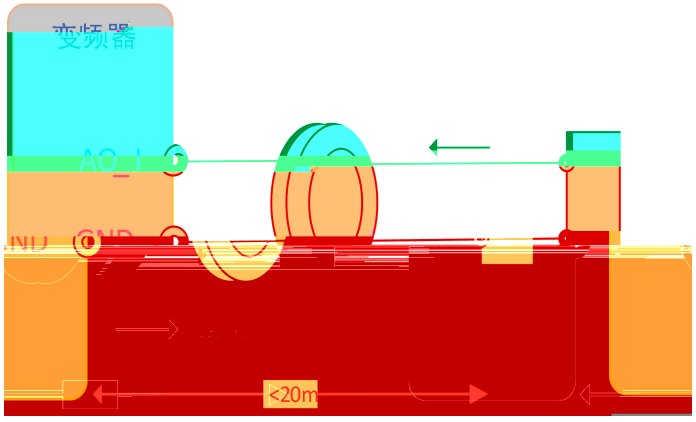
RST UVW 20CM

AO_V AO_I

20



AO_V



AO_I

2~3

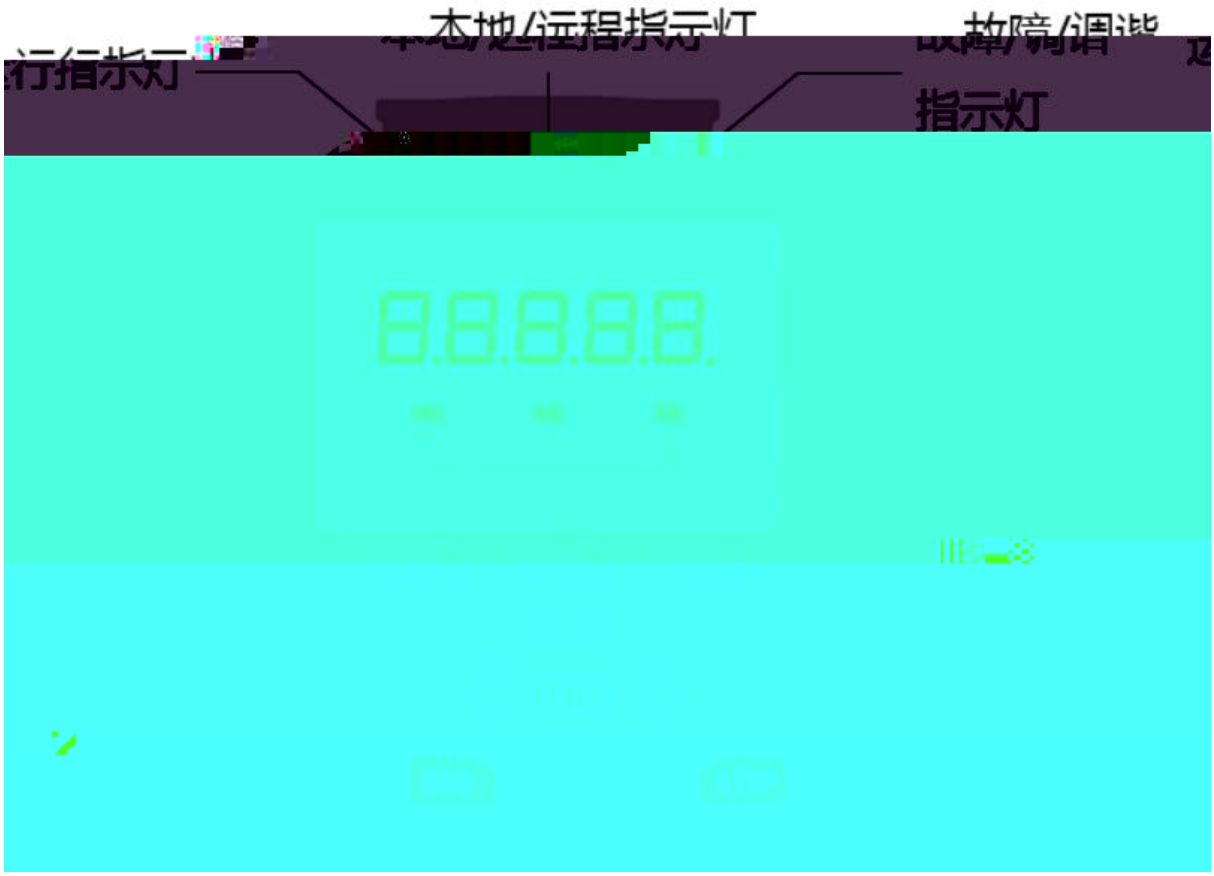
4

4.1

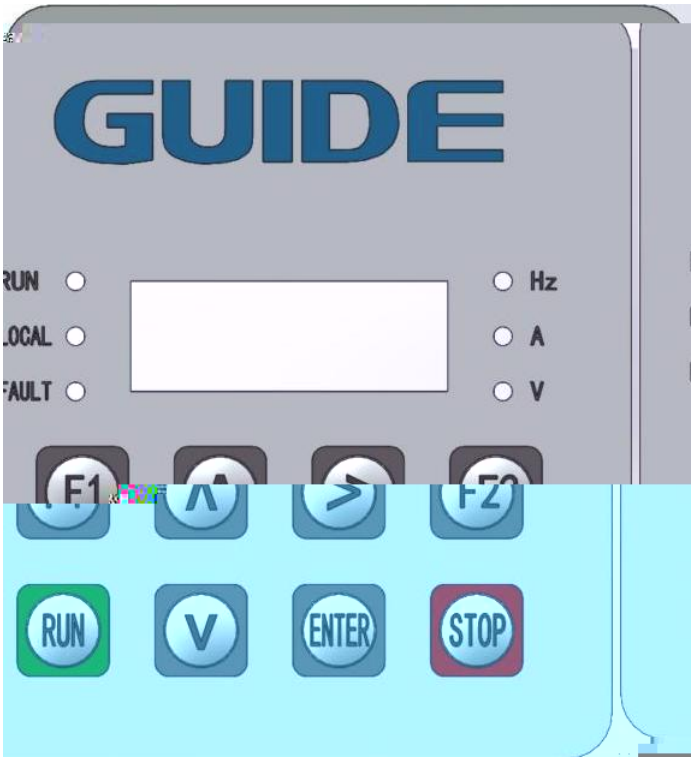
GF630N04 LED

4.2 LED

4.2.1 LED



A1



A2/A3/A4/A5/A6

1 LED

“ RUN ”

“ LOCAL ” /

“ FAULT ”

“ HZ ” Hz RPM

“ A ” A RPM %

“ V ” V %

2 LED LED

5 LED

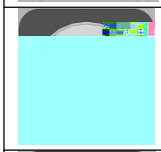
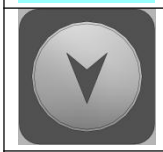
LED

显示文字	LED显示	显示文字	LED显示	显示文字	LED显示	显示文字	LED显示
0	0	A	A	K	K	U	U
1	1	B	b	L	L	V	v
2	2	C	C	M	无	W	无
3	3	D	d	N	n	X	无
4	4	E	E	O	o	Y	y
5	5	F	F	P	P	Z	无
6	6	G	G	Q	q		
7	7	H	H	R	r		
8	8	I	I	S	S		
9	9	J	J	T	t		

F1/ESC		F1 F1
LOC/REM	/	
		+1
		-1

		/

A1

		/
		+1
		-1

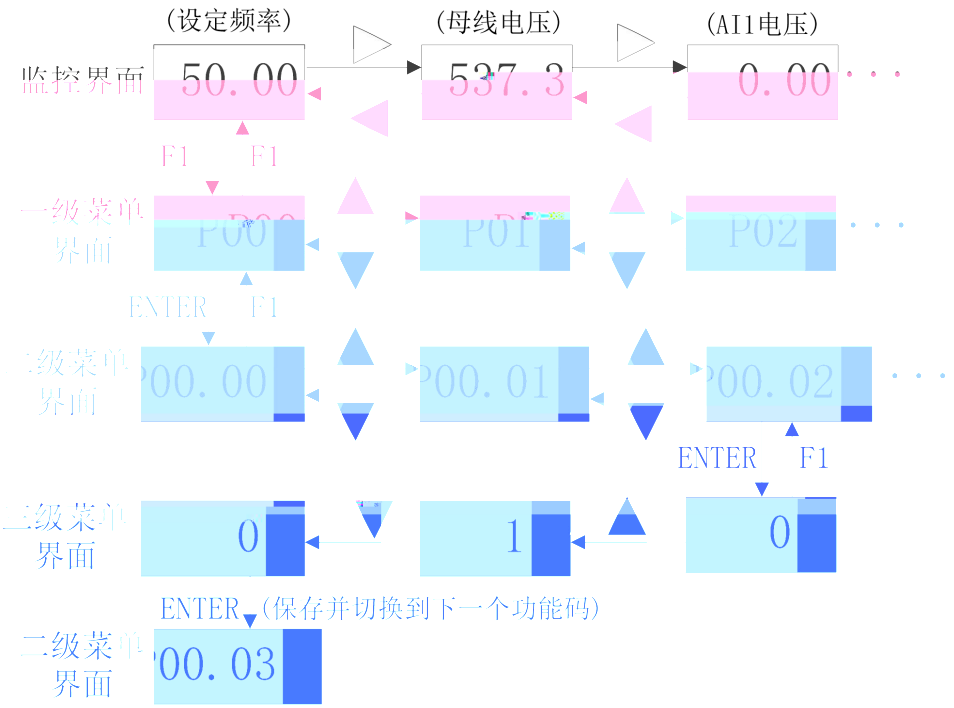
STOP		

A2/A3/A4/A5/A6

4.2.2 LED

1

LED /



( )/

( ) P02.05

F1 (▲)/

(▼) F1

ENTER (▲)/ (▼)

(

) ( )/ ( ) (

) (▲)/ (▼) (

) ( ) F1

ENTER (

) (▲)/ (▼) ( )/

( ) ENTER

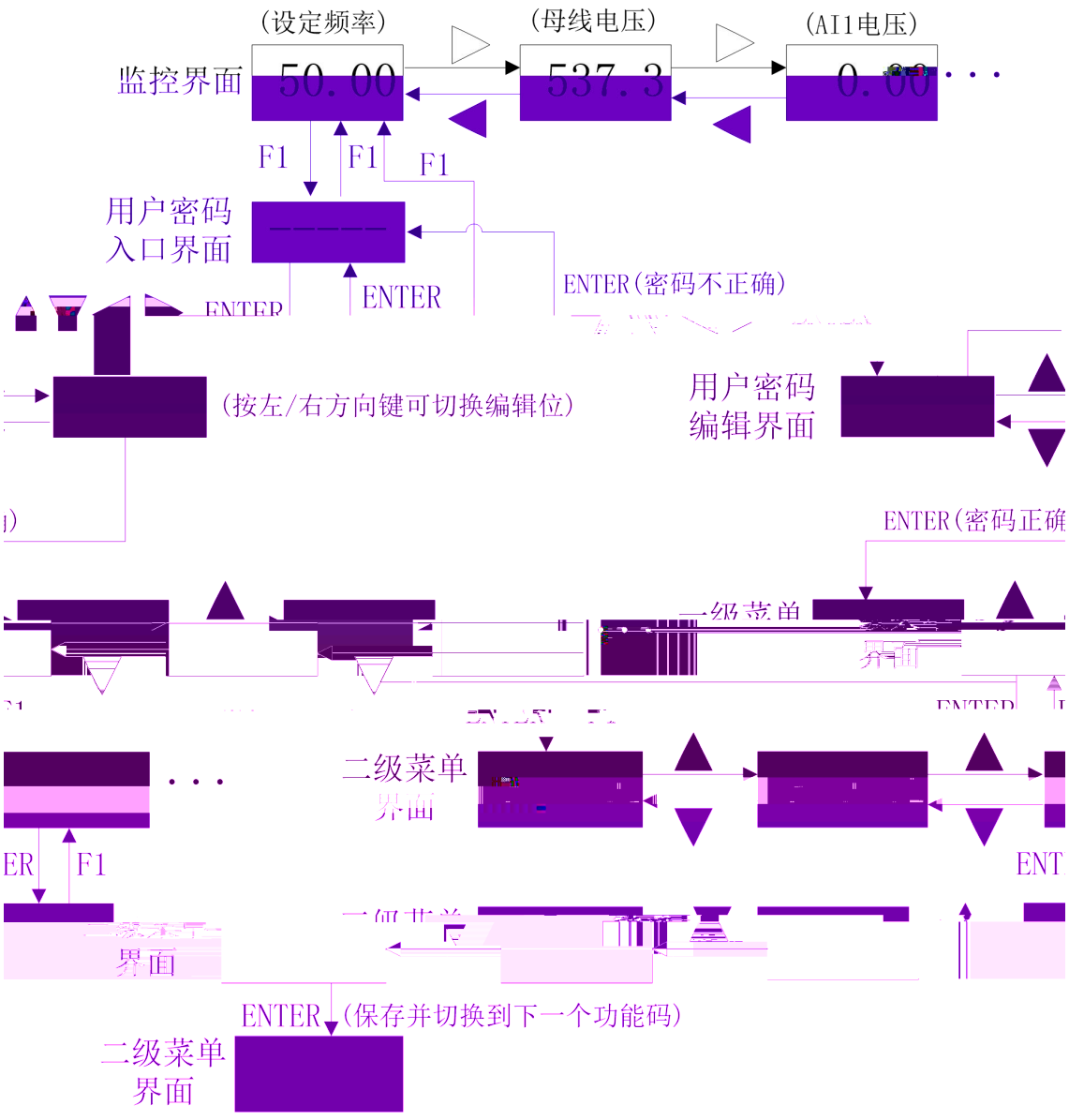
F1

1

F1

(▲)/ (▼)/ ( )/ ( )/ENTER

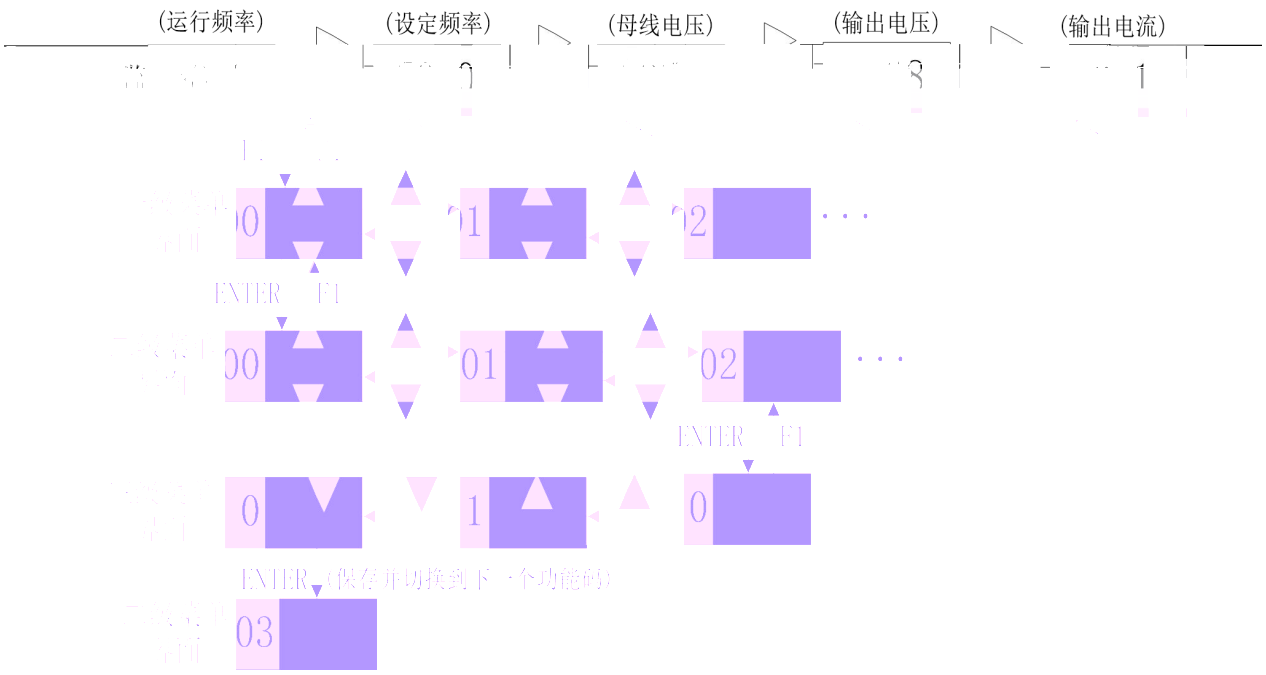
ENTER



2

LED /

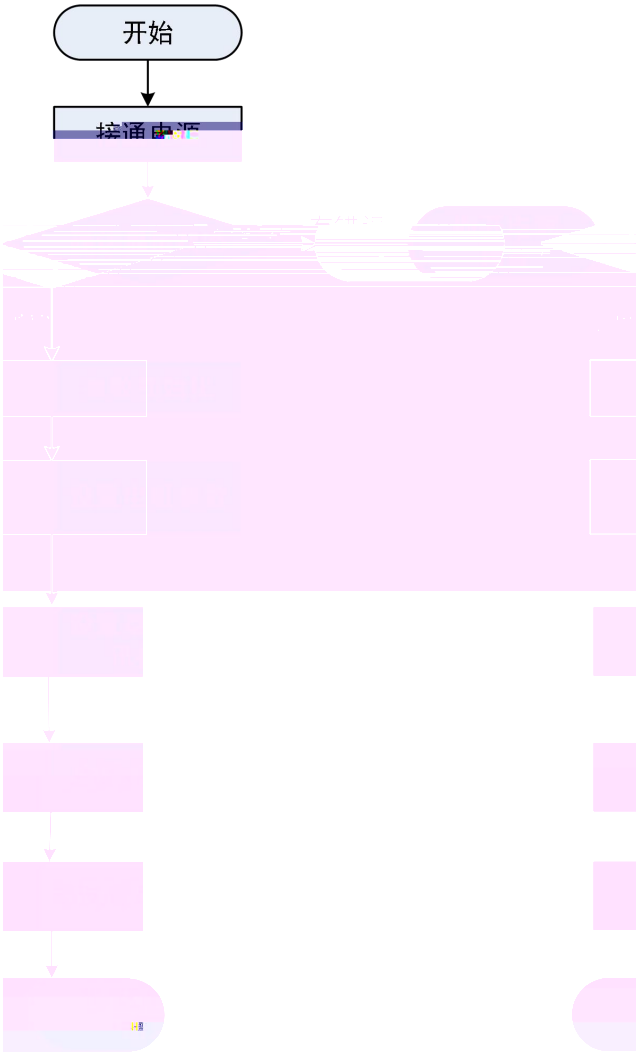
P02.03 P02.04



5

GF630N04

5.1



5.2

5.3

LED

50.00

E

P00.01

P00.01	0: 1 ( ) 2 ( )	0

5.4

V/F

P08.10	(Hz)	/ / / /	50 [Hz]
P08.12	(Hz)		
P10.35	(Kw)		
P10.36	(V)		
P10.37	(A)		
P10.38	(Hz)		
P10.39		(r/min)	
P08.01		[0] [1] [2] V/F	2

5.5

1

1		
2	LOCAL	
3	UP/DOWN 5Hz	
4	RUN RUN	
5	4 50Hz	
6	STOP	

2

		STOP	
	1		

	2	LOCAL	
	3	UP/DOWN 5Hz	
	4	RUN RUN	
	5	4 50Hz	
	6	STOP	

B$

6.1 P0

P00.00		0 65535	0	
P00.01		0 01 02	0	
P00.02		P23,P27 0 1 P11,P13,P16,P19,P20,P21 0 1	11	
P00.03				
P00.04		0 1	0	

6.2 P2

P02.01	F2	0 1 2 3 4	0	
P02.02	STOP	0 , STOP 1 , STOP	1	

P02.05	LED	0000 FFFF Bit00: Hz Bit01: V Bit02: DI Bit03: DO Bit04: AI1 V Bit05: AI2 V Bit06: AI3 V Bit07: Bit08: Bit09: PLC Bit10: Bit11: PID Bit12 PULSE kHz	33	
P02.06		0.0001 6.5000	1	
P02.07		0.0 100.0	-	●
P02.08		-	-	●
P02.09		0h 65535h	-	●
P02.11		-	-	●
P02.12		P23.14 0 0 1 1 2 2 3 3 P23.19/P23.29 1 1 2 2	21	
P02.13		0h 65535h	-	●
P02.14		0 65535	-	●

6.3 P3

P03.00	1	0 1 2 3 4	1	
P03.01	2	5 6 UP 7 DOWN 8 9 10	4	
P03.02	3	11 12 1 13 2 14 3 15 4	9	
P03.03	4	16 1 17 2 18 19 UP/DOWN 20 1	12	
P03.04	HDI	21 22 PID 23 PLC 24 25	13	
P03.05	6	26 27 28 29 30 DI5	0	
P03.06	7	31 32 33 34 35 PID	0	

P03.07	8	36 1 37 2 38 PID 39 X 40 Y	0	
P03.08		41 1 42 2 43 PID 44 1	0	
P03.09		45 2 46 / 47 48 2 49 50 51,52: 53: 54: 55:59	0	
P03.10		0.000s 1.000s	0.010s	
P03.11		0 1 1 2 2 1 3 2	0	
P03.12	UP/DOWN	0.001Hz/s 65.535Hz/s	1.00Hz/s	
P03.13		0 1 DI1 DI2 DI3 DI4 HDI	0	

P03.14	2	0 1 DI6 DI7 DI8	0	
P03.15	1	0.0s 3600.0s	0.0s	
P03.16	2	0.0s 3600.0s	0.0s	
P03.17	3	0.0s 3600.0s	0.0s	

6.4 P4

P04.03		17 18 19 20 21 22 23 2 24	0	
P04.04	1	25 FDT2 26 1 27 2 28 1 29 2 30 31 AI1 32	1	
P04.05	2	33 34 35 36 37 38 39 40	4	
P04.06		0.0s 3600.0s	0.0s	
P04.07	1	0.0s 3600.0s	0.0s	
P04.08		0.0s 3600.0s	0.0s	
P04.09	1	0.0s 3600.0s	0.0s	
P04.10	2	0.0s 3600.0s	0.0s	

P04.11		0 1 FMR 1 DO1 DO2	0	

6.5 P5

P05.00	AI 1	-10.00V P05.02	-10.00V	
P05.01	AI 1	-100.0% +100.0%	-100.00%	
P05.02	AI 1	P05.00 +10.00V	10.00V	
P05.03	AI 1	-100.0% +100.0%	100.00%	
P05.04	AI 1	0.00s 10.00s	0.10s	
P05.05	AI 2	-10.00V P05.07	-10.00V	
P05.06	AI 2	-100.0% +100.0%	-100.00%	
P05.07	AI 2	P05.05 +10.00V	10.00V	
P05.08	AI 2	-100.0% +100.0%	100.00%	
P05.09	AI 2	0.00s 10.00s	0.10s	
P05.10	AI 3	-10.00V P05.12	-10.00V	
P05.11	AI 3	-100.0% +100.0%	-100.00%	
P05.12	AI 3	P05.10 +10.00V	10.00V	
P05.13	AI 3	-100.0% +100.0%	100.00%	
P05.14	AI 3	0.00s 10.00s	0.10s	
P05.15		0.00kHz P05.17	0.00kHz	
P05.16		-100.0% 100.0%	0.00%	
P05.17		P05.15 50.00kHz	50.00kHz	
P05.18		-100.0% 100.0%	100.00%	
P05.19		0.00s 10.00s	0.10s	

P05.20	AI	AI_V 1 1 2 P05.00 P05.03 2 2 2 P05.05 P05.08 3 3 2 P05.10 P05.13 4 4 4 P19.00 P19.07 5 5 4 P19.08 P19.15 AI_I	321	
P5.21	AI	:AI_V 0: 1:0.0% AI_I	0	

6.6 P6

P06.00		0 1 2 3 4 5	0	
P06.01	AO1	6 100.% 50.0kHz 7 AI1 8 AI2 9 AI3 10	0	

P06.02		11 12 13 14 100.0% 1000.0A 15 100.0% 1000.0V 16		
P06.03		0.01kHz 50.00kHz	50.00kHz	
P06.04	AO1	-100.0% +100.0%	0.00%	
P06.05	AO1	-10.00 +10.00	1	
P06.06				
P06.07				
P06.08				
P06.09				
P06.10				

6.7 P7

P07.00		0 1	1	
P07.01		0.20 10.00	1	
P07.02		50% 100%	80%	
P07.03		0 100	0	
P07.04		200.0 2200.0	760.0	
P07.05		0 100	20	
P07.06		50% 200%	150%	
P07.07		0 1	11	
P07.08		200.0V 2000.0V		

P07.09		0 20	0	
P07.10	DO	0 1	0	
P07.11		0.1s 100.0s	1.0s	
P07.12	/	0 1	00	
P07.13		0 1	11	
P07.14		0 1 2 3 4 8 11 15 18 21 22 24		•

P07.15		25 26 27: 1 28: 2 29: 30 31 PID 40 41 45 51 100 101		●
P07.16		102 105 108 111 112 113 114 115 118 /PG 119: 120 170 202		●
P07.17				●
P07.18				●
P07.19				●
P07.20				●
P07.21				●

P07.22	•
P07.23	•
P07.24	•
P07.25	•
P07.26	
P07.27	•
P07.28	•
P07.29	•
P07.30	•
P07.31	•
P07.32	•
P07.33	•
P07.34	•
P07.35	•
P07.36	
P07.37	•
P07.38	•
P07.39	•
P07.40	•
P07.41	•
P07.42	

P07.47	1	11 0 1 2 113 114 15 202	0	
P07.48	2	/PG 118 0 21 0 1 111 45 26	0	
P07.49	3	1 27 0 1 2 2 28 0 1 2 29 0 1 2 30 0 1 2 7% PID 31 0 1 2	0	

P07.50	4	119 0 1 2 115 51	0	
P07.51	5			
P07.52	1			
P07.53	2			
P07.54		0 1 2 3 4	0	
P07.55		0% 100.0% 100.0% P08.10	100.00%	
P07.56		0 1 PT100 2 PT1000	0	
P07.57		0 200	110	
P07.58		0 200	90	
P07.59				
P07.60				
P07.61				
P07.62				
P07.63		0 1	0	
P07.64		0.0 100.0	10.00%	
P07.65		0.0 60.0s	1.0s	
P07.66				
P07.67		0.0 50.0	20.00%	
P07.68		0.0s 60.0s	1.0s	

P07.69		0.0 50.0	20.00%	
P07.70		0.0s 60.0s	0.0s	
P07.71		0 100	40	
P07.72		0 100	30	
P07.73		0 300.0	20.0	
P07.74				
P07.75	6	51 0 1 170 0	11	

6.8 P8

P08.00				
P08.01	1	0 SVC 1 FVC 2 V/F	2	
P08.02		0 LED 1 LED 2 LED	0	
P08.03	X	0 P08.08 UP/DOWN 1 P08.08 UP/DOWN 2 AI1 3 AI2 4 AI3 5 PULSE DI5 6 7 PLC 8 PID 9	0	

P08.04	Y	P08.03 X	0	
P08.05	Y	0 1 X	0	
P08.06	Y	0% 150%	100%	
P08.07		0 X 1 2 X Y 3 X 4 Y 0 + 1 - 2 3	0	
P08.08		0.00Hz P08.10	50.00Hz	
P08.09		0 1	0	
P08.10		50.00Hz 500.00Hz	50.00Hz	
P08.11		0 P08.12 1 AI1 2 AI2 3 AI3 4 PULSE 5	0	
P08.12		P08.14 P08.10	50.00Hz	
P08.13		0.00Hz P08.10	0.00Hz	
P08.14		0.00Hz P08.12	0.00Hz	
P08.15		0.5kHz 16.0kHz		
P08.16		0 1	1	

P08.17	1	0.00s 6500.0s		
P08.18	1	0.00s 6500.0s		
P08.19		0 1 1 0.1 2 0.01	1	
P08.20		0 F08.47 1	0	
P08.21		0.00Hz P08.10	0.00Hz	
P08.22		2 0.01Hz	2	
P08.23		0 1	0	
P08.24		0 1 1 2	0	
P08.25		0 P08.10 1 2 100Hz	0	
P08.26	UP/DOWN	0 1	0	
P08.27		0 1 2 AI1 3 AI2 4 AI3 5 PULSE DI5 6 7 PLC 8 PID 9	0	

P08.28		0 1 2	0	
P08.29		0 1 2	0	
P08.30		1 100	20	
P08.31		0.00Hz 10.00Hz	0.00Hz	
P08.32		0.0s 100.0s	0.0s	
P08.33	/	0% 100%	0%	
P08.34	/	0.0s 100.0s	0.0s	
P08.35		0 1 S A 2 S B	0	
P08.36	S	0.0% 100.0%- P08.37	30.00%	
P08.37	S	0.0% 100.0%- P08.36	30.00%	
P08.38		0 1	0	
P08.39		0.00Hz	0.00Hz	
P08.40		0.0s 100.0s	0.0s	
P08.41		0% 100%	0%	
P08.42		0.0s 100.0s	0.0s	
P08.43		0% 100%	100%	
P08.44		0s 65000s	0s	
P08.45		0 1	0	
P08.46		220 400V	380	
P08.47		0.010-10.000s	0.200s	
P08.48		0.010-10.000s	0.500s	

P08.49		0.010-10.000s	5.000s	
P08.51		0 1	0	
P08.52	DI	0 1 1 2	0	

6.9 P9

P09.00		0 1	0
P09.01		0.0% 100.0%	0.00%
P09.02		0.0% 50.0%	0.00%
P09.03		0.1s 3000.0s	10.0s
P09.04		0.1% 100.0%	

P09.43	PLC 7	0 3	0	
P09.44	PLC 8	0.0s h 6553.5s h	0.0s h	
P09.45	PLC 8	0 3	0	
P09.46	PLC 9	0.0s h 6553.5s h	0.0s h	
P09.47	PLC 9	0 3	0	
P09.48	PLC 10	0.0s h 6553.5s h	0.0s h	
P09.49	PLC 10	0 3	0	
P09.50	PLC 11	0.0s h 6553.5s h	0.0s h	
P09.51	PLC 11	0 3	0	
P09.52	PLC 12	0.0s h 6553.5s h	0.0s h	
P09.53	PLC 12	0 3	0	
P09.54	PLC 13	0.0s h 6553.5s h	0.0s h	
P09.55	PLC 13	0 3	0	
P09.56	PLC 14	0.0s h 6553.5s h	0.0s h	
P09.57	PLC 14	0 3	0	
P09.58	PLC 15	0.0s h 6553.5s h	0.0s h	
P09.59	PLC 15	0 3	0	
P09.60	PLC	0 s 1 h	0	

P09.61	0	0 P09.10 1 AI1 2 AI2 3 AI3 4 PULSE 5 PID 6 P08.08 UP/DOWN	0	

6.10 V/F 1 P10

P10.00	VF	0 V/F 1 V/F 2 V/F 3 1.2 V/F 4 1.4 V/F 6 1.6 V/F 8 1.8 V/F 9 10 VF 11 VF	0	
P10.01		0.0% 0.1% 30.0%		
P10.02		0.00Hz	50.00Hz	
P10.03	VF 1	0.00Hz P10.05	0.00Hz	
P10.04	VF 1	0.0% 100.0%	0.00%	
P10.05	VF 2	P10.03 P10.07	0.00Hz	
P10.06	VF 2	0.0% 100.0%	0.00%	
P10.07	VF 3	P10.05 P10.38	0.00Hz	
P10.08	VF 3	0.0% 100.0%	0.00%	
P10.09	VF	0.0% 200.0%	0.00%	
P10.10	VF	0 200	64	
P10.11	VF	0 100		
P10.12		0 4	3	
P10.13	VF	0 P10.14 1 AI1 2 AI2 3 AI3 4 PULSE DI5 5 6 PLC 7 PID 8 100.0%	0	
P10.14	VF	0V	0V	

P10.15	VF	0.0s 1000.0s 0V	0.0s	
P10.16	VF	0.0s 1000.0s 0V	0.0s	
P10.17	VF	0 / 0 1 0	0	
P10.18	VF	50 200%	150%	
P10.19	VF	0 1	1	
P10.20	VF	0 100	20	
P10.21	VF	50 200%	50%	
P10.22		650.0V ~800.0V	760.0V	
P10.23		0 1	0	
P10.24		0 100	30	
P10.25		0 100	30	
P10.26		0 50Hz	5Hz	
P10.27				
P10.28				
P10.29				
P10.30				
P10.31				
P10.32				
P10.33				
P10.34	1	0 1 2	0	
P10.35	1	0.1kW 1000.0kW		

P10.36	1	1V 2000V		
P10.37	1	0.01A 655.35A <=55kW 0.1A 6553.5A >55kW		
P10.38	1	0.01Hz		
P10.39	1	1rpm 65535rpm		
P10.40				
P10.41				
P10.42				
P10.43				
P10.44				
P10.45~ P10.49				
P10.50	1	0.001Ω 65.535Ω <=55kW 0.0001Ω 6.5535Ω >55kW		
P10.51	1D	0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW		
P10.52	1Q	0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW		
P10.53	1	0 12	0	
P10.54	1	0.1V 6553.5V		
P10.55	1	0 60000	0	
P10.56~ P10.60				
P10.61		1 65535	1024	
P10.62		0 ABZ 1	0	

		2 3 4		
P10.63				
P10.64	ABZ AB	0 1	0	
P10.65		0.0 359.9 °	0.0 °	
P10.66				
P10.67				
P10.68		1 65535	1	
P10.69				
P10.70		0.0 0.1s 10.0s	0	
P10.71		0 1 2 11 12	0	

6.11 2 P11

P11.00	2	0 1 2	0	
P11.01		0.1kW 1000.0kW		
P11.02		1V 2000V		
P11.03		0.01A 655.35A <=55kW 0.1A 6553.5A >55kW		
P11.04		0.01Hz		
P11.05		1rpm 65535rpm		
P11.06				
P11.07				
P11.08				
P11.09				

P11.10				
P11.11~ P11.15				
P11.16		0.001Ω 65.535Ω <=55kW 0.0001Ω 6.5535Ω >55kW		
P11.17	D	0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW		
P11.18	Q	0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW		
P11.19		0 12	0	
P11.20		0.1V 6553.5V		
P11.21		0 60000	0	
P11.22~ P11.26				
P11.27		1 65535	1024	
P11.28		0 ABZ 1 2 3 4	0	
P11.29			0	
P11.30	ABZ AB	0 1	0	
P11.31		0.0 359.9 °	0.0 °	
P11.32			0	
P11.33			0.0 °	
P11.34		1 65535	1	
P11.35			4	

P11.36	PG	0.0 0.1s 10.0s	0	
P11.37		0 1 2 11 12	0	

6.12 1 P12

P12.00	1	1 100	30	
P12.01	1	0.01s 10.00s	0.50s	
P12.02	1	0.00 P02.05	5.00Hz	
P12.03	2	1 100	20	
P12.04	2	0.01s 10.00s	1.00s	
P12.05	2	P02.02	10.00Hz	
P12.06		50% 200%	100%	
P12.07				
P12.08		0 200	64	
P12.09		0 P12.10 1 AI1 2 AI2 3 AI3 4 PULSE 5 6 MIN(AI1,AI2) 7 MAX(AI1,AI2) 1-7 P12.10	0	
P12.10		0.0% 200.0%	150.00%	

P12.11		0 P12.12 1 AI1 2 AI2 3 AI3 4 PULSE 5 6 MIN(AI1,AI2) 7 MAX(AI1,AI2) 1-7 P12.12	0.00%	
P12.12		0.0% 200.0%	150.00%	
P12.13		0 60000	2000	
P12.14		0 60000	1300	
P12.15		0 60000	2000	
P12.16		0 60000	1300	
P12.17		0 1	0	
P12.18		0: 1: 2:	1	
P12.19		0 50	5	
P12.20		1% 300%	50%	
P12.21		10% 500%	100%	
P12.22		0 1	0	
P12.23		1% 50%	5%	
P12.24		50% 180%	80%	
P12.25		0,1,2	0	
P12.26				
P12.27		50 500	100	
P12.28		0,1	0	
P12.29		0	0	

P12.30	Kp	1 100	6
P12.31	Ki	1 100	6
P12.32 Z		0,1	1
P12.33 SVC			

P13.05	2	P13.02	10.00Hz
P13.06		50% 200%	100%
P13.07		0.000s 0.100s	0.000s
P13.08		0 200	64
		0 P13.10	
		1 AI1	
		2 AI2 خه	
		3 AI3	
		4	
P13.09			

P13.18		0: 1: 2:	1	
P13.19		0 50	5	
P13.20				
P13.21				
P13.22		0,1	0	
P13.23	2	0 SVC 1 FVC 2 V/F	2	
P13.24	2	0 1 1 1 2 2 3 3 4 4	0	
P13.25		0.0% 0.1% 30.0%		
P13.26				
P13.27		0 100		
P13.28		1% 50%	5%	
P13.29		50% 180%	80%	
P13.30		0,1,2	0	
P13.31				
P13.32		50 500	100	
P13.33		0,1	0	
P13.34		0	0	
P13.35	Kp	1 100	6	
P13.36	Ki	1 100	6	
P13.37	Z	0,1	1	
P13.38	SVC	10 1000	100	
P13.39	SVC	5 200	40	

P14.02	MODBUS	0 (8-N-2) 1 (8-E-1) 2 (8-O-1) 3 (8-N-1) (MODBUS)	3	
P14.03		1 247 0	1	
P14.04		0ms 20ms	2	
P14.05		0.0 0.1s 60.0s	0	
P14.06		MODBUS 0 MODBUS 1 MODBUS PN 0 PPO1 1 PPO2 2 PPO3 3 PPO5	31	
P14.07		0 0.01A 1 0.1A	0	
P14.08		0,1	0	
P14.09		0 60.0	0	

6.15 PID P15

P15.00	PID	0 P15.01 1 AI1 2 AI2 3 AI3 4 PULSE DI5 5 6	0	
P15.01	PID	0.0% 100.0%	50.00%	

P15.02	PID	0 AI1 1 AI2 2 AI3 3 AI1.AI2 4 PULSE DI5 5 6 AI1+AI2 7 MAX |AI1|, |AI2| 8 MIN |AI1|, |AI2|	0	
P15.03	PID	0 1	0	
P15.04	PID	0 65535	1000	
P15.05	Kp1	0.0 100.0	20	
P15.06	Ti1	0.01s 10.00s	2.00s	
P15.07	Td1	0.000s 10.000s	0.000s	
P15.08	PID	0.00	2.00Hz	
P15.09	PID	0.0% 100.0%	0.00%	
P15.10	PID	0.00% 100.00%	0.10%	
P15.11	PID	0.00 650.00s	0.00s	
P15.12	PID	0.00 60.00s	0.00s	
P5.13	PID	0.00 60.00s	0.00s	
P15.14		-	-	
P15.15	Kp2	0.0 100.0	20	
P15.16	Ti2	0.01s 10.00s	2.00s	
P15.17	Td2	0.000s 10.000s	0.000s	
P15.18	PID	0 1 DI 2 3	0	
P15.19	PID 1	0.0% P15.20	20.00%	
P15.20	PID 2	P15.19 100.0%	80.00%	
P15.21	PID	0.0% 100.0%	0.00%	
P15.22	PID	0.00 650.00s	0.00s	

P16.06	VDI	0 1 VDI1 VDI2 VDI3 VDI4 VDI5	0	
P16.07	AI1 DI	0 59	0	
P16.08	AI2 DI	0 59	0	
P16.09	AI3 DI	0 59	0	
P16.10	AI DI	0 1 AI1 AI2 AI3	0	
P16.11	VDO1	0 DIx 1 40 P04 DO	0	
P16.12	VDO2	0 DIx 1 40 P04 DO	0	
P16.13	VDO3	0 DIx 1 40 P04 DO	0	
P16.14	VDO4	0 DIx 1 40 P04 DO	0	
P16.15	VDO5	0 DIx 1 40 P04 DO	0	
P16.16	VDO1	0.0s 3600.0s	0.0s	
P16.17	VDO2	0.0s 3600.0s	0.0s	
P16.18	VDO3	0.0s 3600.0s	0.0s	
P16.19	VDO4	0.0s 3600.0s	0.0s	
P16.20	VDO5	0.0s 3600.0s	0.0s	

P16.21	VDO	0 1 VDO1 VDO2 VDO3 VDO4 VDO5	0	

6.17 P19

P19.00	AI 4	-10.00V P19.02	-10.00V	
P19.01	AI 4	-100.0% +100.0%	-100.0%	
P19.02	AI 4 1	P19.00 P19.04	3.00V	
P19.03	AI 4 1	-100.0% +100.0%	30.00%	
P19.04	AI 4 2	P19.02 P19.06	6.00V	
P19.05	AI 4 2	-100.0% +100.0%	60.00%	
P19.06	AI 4	P19.04 +10.00V	10.00V	
P19.07	AI 4	-100.0% +100.0%	100.00%	
P19.08	AI 5	-10.00V P19.10	-10.00V	
P19.09	AI 5	-100.0% +100.0%	-100.00%	
P19.10	AI 5 1	P19.08 P19.12	-3.00V	
P19.11	AI 5 1	-100.0% +100.0%	-30.00%	
P19.12	AI 5 2	P19.10 P19.14	3.00V	
P19.13	AI 5 2	-100.0% +100.0%	30.00%	
P19.14	AI 5	P19.12 +10.00V	10.00V	
P19.15	AI 5	-100.0% +100.0%	100.00%	
P19.16~ P19.23				
P19.24	AI1	-100.0% 100.0%	0.00%	
P19.25	AI1	0.0% 100.0%	0.50%	
P19.26	AI2	-100.0% 100.0%	0.00%	
P19.27	AI2	0.0% 100.0%	0.50%	

P19.28	AI3		-100.0% 100.0%	0.00%
P19.29	AI3		0.0% 100.0%	0.50%
P19.30	AI1	1	-10.000V 10.000V	
P19.31	AI1	1	-10.000V 10.000V	
P19.32	AI1	2	-10.000V 10.000V	
P19.33	AI1	2	-10.000V 10.000V	
P19.34	AI2	1	-10.000V 10.000V	
P19.35	AI2	1	-10.000V 10.000V	
P19.36	AI2	2	-10.000V 10.000V	
P19.37	AI2	2	-10.000V 10.000V	
P19.38	AI3	1	-10.000V 10.000V	
P19.39	AI3	1	-10.000V 10.000V	
P19.40	AI3	2	-10.000V 10.000V	
P19.41	AI3	2	-10.000V 10.000V	
P19.42	AO1	1	0.500V 4.000V	
P19.43	AO1	1	0.500V 4.000V	
P19.44	AO1	2	6.000V 9.999V	
P19.45	AO1	2	6.000V 9.999V	
P19.46	AO2	1	0.500V 4.000V	
P19.47	AO2	1	0.500V 4.000V	
P19.48	AO2	2	6.000V 9.999V	
P19.49	AO2	2	6.000V 9.999V	

P20.01		0 1 P20.03 1 AI1 2 AI2 3 AI3 4 5 6 MIN AI1,AI2 7 MAX AI1,AI2 1-7 P20.03	0	
P20.02				
P20.03		-200.0% 200.0%	150.00%	
P20.04		0 10.00	0.00%	
P20.05		0.00Hz	50.00Hz	
P20.06		0.00Hz	50.00Hz	
P20.07		0.00s 650.00s	0.00s	
P20.08		0.00s 650.00s	0.00s	

6.19 P21

P21.00		0.00Hz	2.00Hz	
P21.01		0.0s 6500.0s	20.0s	
P21.02		0.0s 6500.0s	20.0s	
P21.03	2	0.0s 6500.0s		
P21.04	2	0.0s 6500.0s		
P21.05	3	0.0s 6500.0s		
P21.06	3	0.0s 6500.0s		
P21.07	4	0.0s 6500.0s		
P21.08	4	0.0s 6500.0s		
P21.09	1	0.00Hz	0.00Hz	
P21.10	2	0.00Hz	0.00Hz	

P21.34			0.0% 300.0% 100.0%		5.00%
P21.35			0.01s 600.00s		0.10s
P21.36			0.0% 0.1% ,300.0%		200.00%
P21.37			0.00s 600.00s		0.00s
P21.38		1	0.0% 300.0%		100.00%
P21.39		1	0.0% 300.0%		0.00%
P21.40		2	0.0% 300.0%	≤	100.00%

P23.12		1	700CH	
P23.13		1	700DH	
P23.14		1	700EH	
P23.15	PID	1	700FH	
P23.16	PID	1	7010H	
P23.17	PLC	1	7011H	
P23.18	PULSE	0.01kHz	7012H	
P23.19	(Hz)	0.01Hz	7013H	
P23.20		0.1Min	7014H	
P23.21	AI1	0.001V	7015H	
P23.22	AI2 V	0.001V/0.01mA	7016H	
P23.23	AI3	0.001V	7017H	
P23.24		1m/Min	7018H	
P23.25		1Min	7019H	
P23.26		0.1Min	701AH	
P23.27	PULSE	1Hz	701BH	
P23.28		0.01%	701CH	
P23.29		0.01Hz	701DH	
P23.30	X	0.01Hz	701EH	
P23.31	Y	0.01Hz	701FH	
P23.32		1	7020H	
P23.33			7021H	
P23.34		1	7022H	
P23.35	(%)	0.10%	7023H	
P23.36		100.00%	7024H	
P23.37		0.1 °	7025H	
P23.38	ABZ	1	7026H	
P23.39	VF	1V	7027H	
P23.40	VF	1V	7028H	
P23.41	DI	1	7029H	

P23.42	DO		1	702AH
P23.43	DI		1	702BH
P23.44	DO		1	702CH
P23.45			1	702DH
P23.46				702EH
P23.47~ P23.57				
P23.58	Z		100.00%	703AH
P23.59		(%)	0.01%	703BH

7

7.1 P0

P00.00			0
		0 65535	

P00.00

P00.00 00000

P00.01			0
	0		
	1		
	2		

1

P00.01 1

1 (P1);

2 P00.00, P00.01;

3 P07.14 P07.45;

4 P10.34 P10.55, P11.00 P11.21;

5 P02.09 P02.13 P02.14 ;

6 P08.10 P08.12 ;

7 P12.13 P12.16, P13.13 P13.16;

2

P02.09 P02.13

P02.14

P00.02			11
			P23,P27
		0	
		1	
			P11,P13,P16,P19,P20,P21
		0	
		1	

P00.04			0
		0	
		1	

0 1

7.2 P2

P02.01	F2		0
		0	F2
		1	
		2	
		3	
		4	

F2 F2

0

1

2

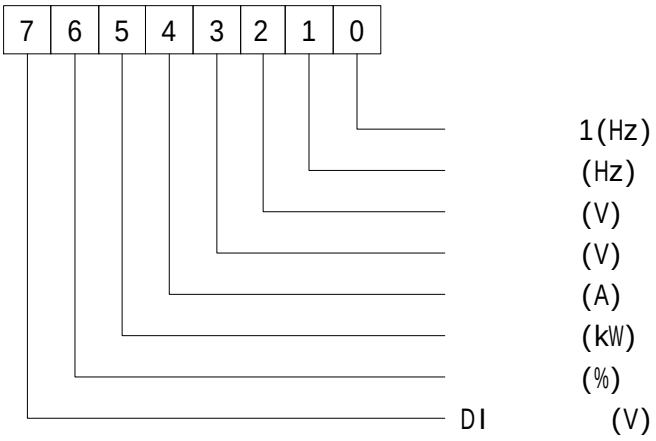
F2

3

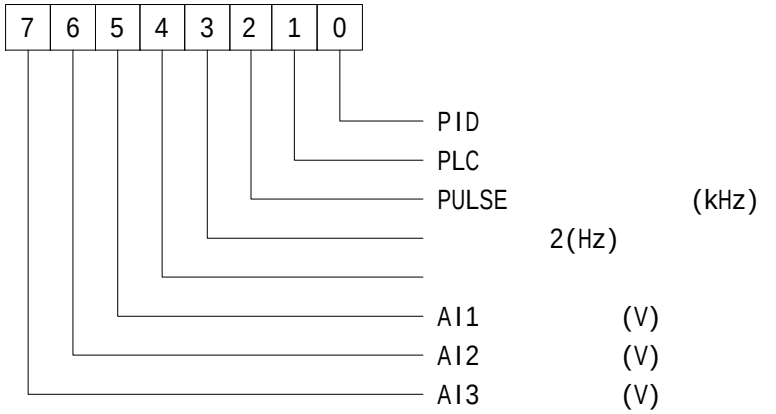
F2 FJOG

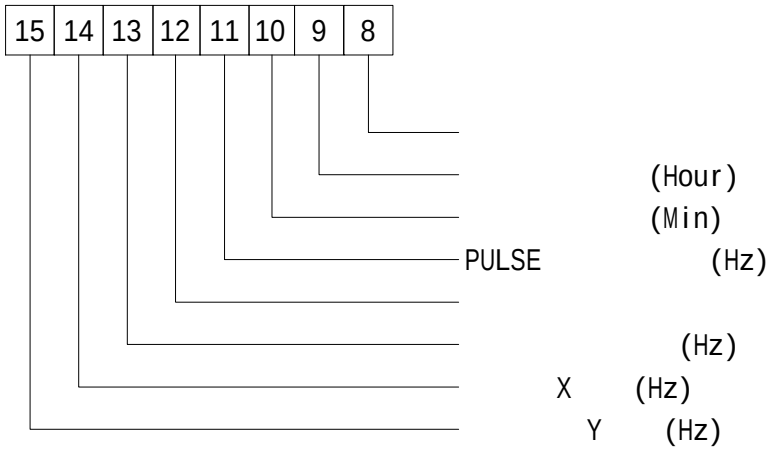
4

F2 RJOG

	LED	1		1F
P02.03		0000 FFFF	 1 P02.03	

P02.02	STOP/RESET			1
		0	,STOP/RES	
		1	,STOP/RES	
P02.04	LED	2		0
	0000 FFFF			





1

P02.04

32 P02.03 P02.04

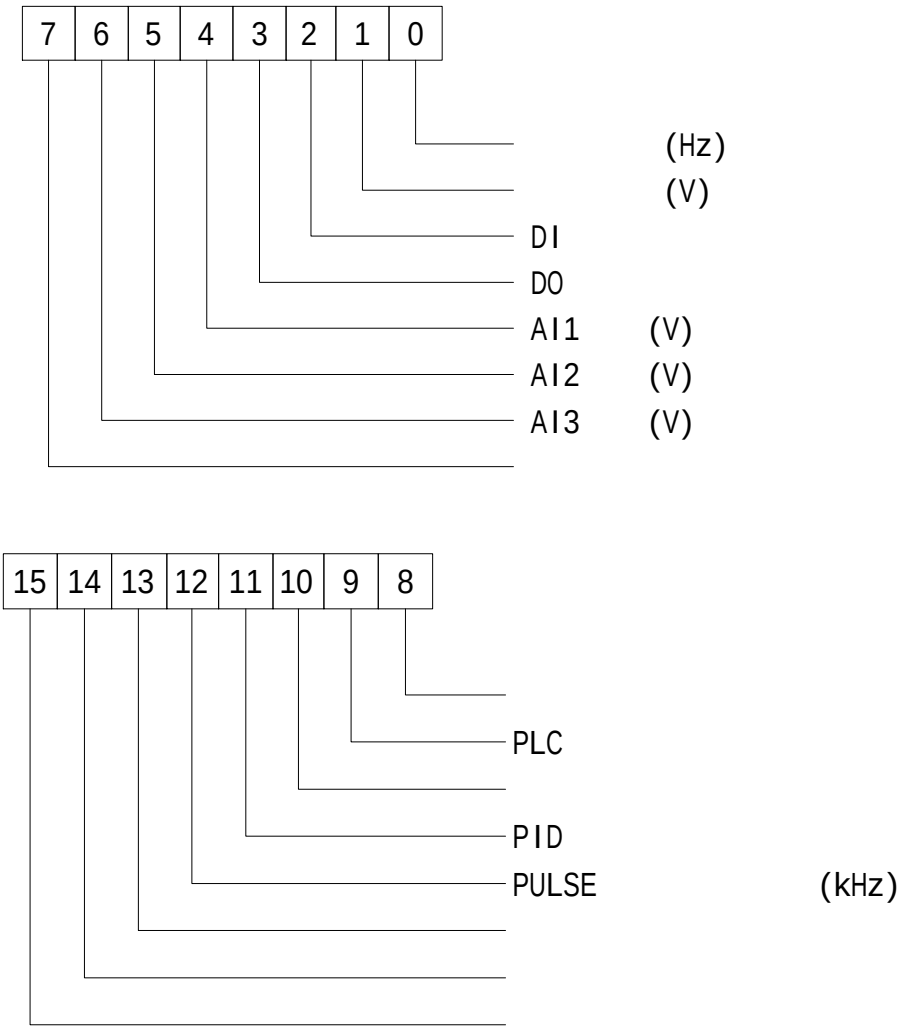
P02.03

	LED		0

P02.05

0000

FFFF



1

P02.05

P02.06			1.0000
		0.0001 6.5000	

P02.12

P02.07			0
		0.0 100.0	

IGBT

IGBT

P02.09			0h
		0h 65535h	

P21.17

12 ON

P02.11			
P02.12			1
		0	0
		1	1
		2	2
		3	3

P02.06 2.000 P02.12 2 2

40.00Hz 40.00*2.000 = 80.00 2

“

” 50.00Hz 50.00*2.000 = 100.00 2

P02.13			0h
		0h 65535h	

P21.17 24 ON

P02.14			-
		0 65535	

7.3 P3

GF630N04 8 HDI
2

P03.00	DI1	1	
P03.01	DI2	4	
P03.02	DI3	9	
P03.03	DI4	12 1	
P03.04	HDI	13 2	
P03.05	DI6	0	
P03.06	DI7	0	
P03.07	DI8	0	

0		“ ”
1	FWD	

2	REV	
3		P03.01 “ ”
4	FJOG	FJOG RJOG
5	RJOG	P21.00 P21.01 P21.02
6	UP	
7	DOWN	
8		P08.38
9	RESET	RESET
10		PLC PID
11		E015 P07.47
12	1	16 16 16
13	2	
14	3	
15	4	
16	1	4 4
17	2	
18		P08.07
19	UP/DOWN	UP/DOWN UP/DOWN P08.08

20		P08.02=1 P08.02=2
21		
22	PID	PID PID
23	PLC	PLC PLC
24		
25		
26		
27		
28		
29		
30	PULSE DI5	DI5
31		
32		
33		E015
34		
35	PID	PID P15.03
36	1	STOP
37	2	

38	PID	PID PID
39	X	X P08.08
40	Y	Y P08.08
41	1	4 4
42	2	
43	PID	PID DI P15.18=1 PID P15.05 P15.07 P15.15 P15.17
44	1	1 2 E027 E028 P07.49
45	2	
46	/	P20.00 /
47		
48	2	4
49		
50		P21.42 P21.53

4

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	1		
OFF	OFF	1	P08.17 P08.18
OFF	ON	2	P21.03 P21.04
ON	OFF	3	P21.05 P21.06
ON	ON	4	P21.07 P21.08

2	1		
OFF	OFF	1	P10 P12
OFF	ON	2	P11

P03.10	DI		0.010s
		0.000s 1.000s	

DI

DI

P03.11			0
		0	1
		1	2
		2	1
		3	2

DI1 DI10 DI1 DI2 DI3

P03.00 P03.02 DI1 DI2 DI3

P03.00 P0309

0 1 DIx DIy

DIx	1	FWD
DIy	2	REV

DIx DIy DI1 DI10

1 2 DIx DIy

DIx	1	FWD

Dly	2	REV

Dlx Dly DI1 DI10

2 1 DIn Dlx Dly

Dlx	1	FWD
Dly	2	REV
DIn	3	

DIn Dlx Dly

DIn Dlx Dly DIn DI1

DI10 Dlx Dly DIn

3 2 DIn Dlx Dly

Dlx	1	FWD
Dly	2	REV
DIn	3	

DIn Dlx Dly

DIn DIx DIy DIn DI1

DI10 DIx DIy DIn

P03.12	UP/DOWN		1.00Hz/s
		0.01Hz/s 65.535Hz/s	

UP/DOWN

P8.22 2 0.001Hz/s 65.535Hz/s P8.22

1 0.01Hz/s 655.35

P03.15	DI1		0.0s
		0.0s 3600.0s	
P03.16	DI2		0.0s
		0.0s 3600.0s	
P03.17	DI3		0.0s
		0.0s 3600.0s	

DI

DI1 DI2 DI3

P03.13	DI	1		00000
			DI1	
		0		
		1		
			DI2	0 1
			DI3	0 1
			DI4	0 1
			HDI	0 1
P03.14	DI	2		00000
			DI6	

		0	
		1	
			DI7 0 1
			DI8 0 1

DI

COM DI COM

7.4 P4

GF630N04 1 (AO1) 2

(DO1 DO2) 1 (R1) 1 HDO

P04.00	HDO		0
		0	FMP
		1	FMR

HDO FMP

FMR

FMP 50kHz FMP P06.06

P04.01	FMR		0
P04.02	1		2
P04.03			0
P04.04	DO1		1
P04.05	DO2		4

5 5

0

1 ON

2 ON

3 FDT1 P21.19 P21.20

4 P21.21

5 0 ON
OFF

6 ON
P07.00 P07.02

7 10s ON

8

15		ON
16	AI1>AI2	AI1 AI2 ON
17		ON
18		ON OFF
19		ON
20		
21		
22		
23	2	0 ON ON
24		P02.13 P21.16 ON
25	FDT2	P21.28 P21.29
26	1	P21.30 P21.31
27	2	P21.32 P21.33
28	1	P21.38 P21.39
29	2	P21.40 P21.41
30		P21.42 ON
31	AI1	AI1 P21.46 AI1 P21.45 AI1 ON
32		ON
33		ON
34		P21.28 P21.29

			DO1 0 1
			DO2 0 1

FMR 1 DO1 DO2

0

7.5 P5

P05.00	AI 1		-10.00V
		-10.00V P05.02	
P05.01	AI 1		-100.00%
		-100.00% 100.0%	
P05.02	AI 1		10.00V
		P05.00 10.00V	
P05.03	AI 1		100.0%
		-100.00% 100.0%	
P05.04	AI1		0.10s
		0.00s 10.00s	

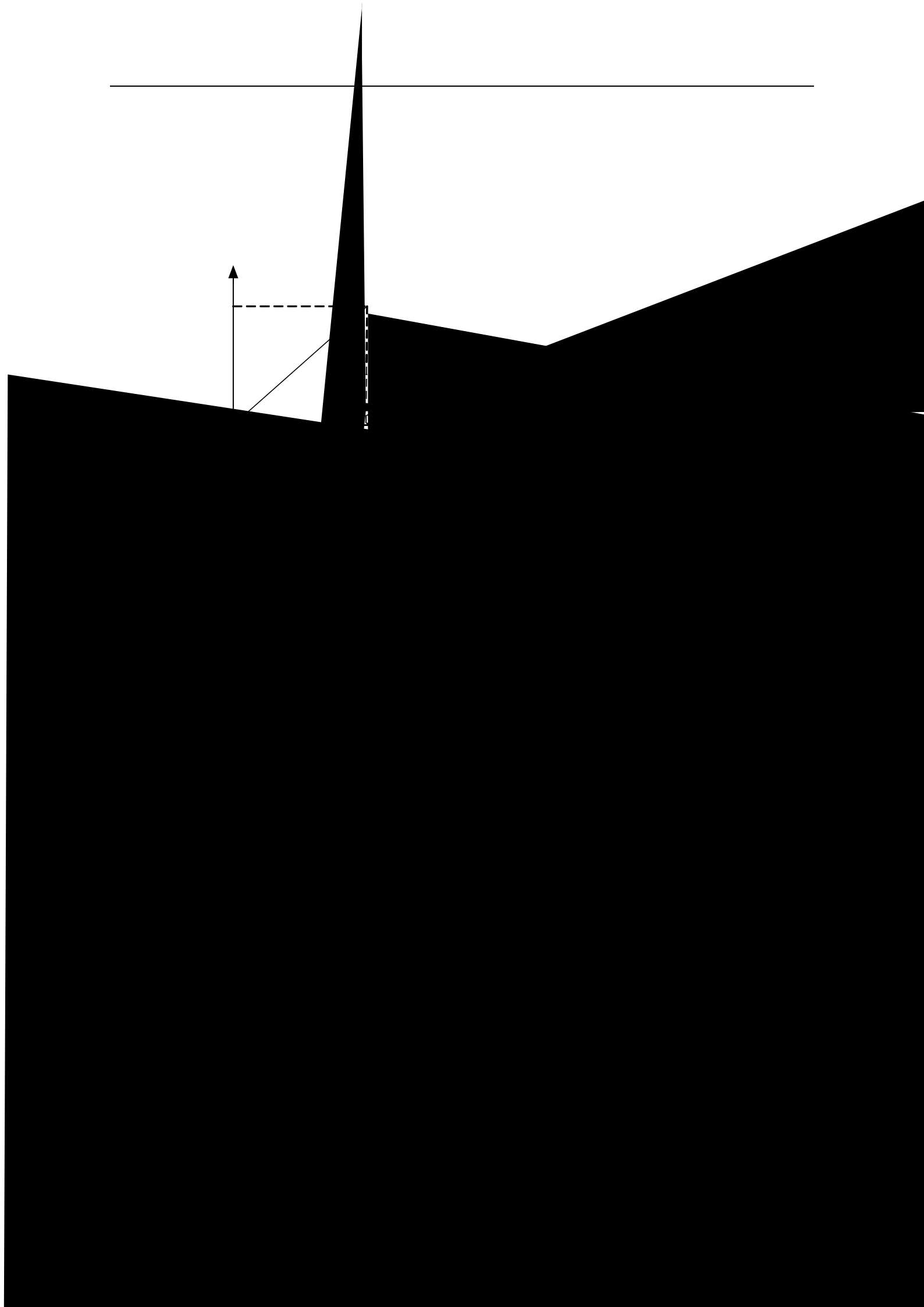
“ ” P05.02

“ ” “ ” P05.00

“AI ” P05.21 0.0%

1mA 0.5V

AI1 AI1



P05.08	AI 2		100.0%
		-100.00% 100.0%	
P05.09	AI2		0.10s
		0.00s 10.00s	

2 1

P05.10	AI 3		-10.00V
		0.00s P05.12	
P05.11	AI 3		-100.00%
		-100.00% 100.0%	
P05.12	AI 3		10.00V
		P05.10 10.00V	
P05.13	AI 3		100.0%
		-100.00% 100.0%	
P05.14	AI3		0.10s
		0.00s 10.00s	

3 1

P05.15	PULSE		0.00kHz
		0.00kHz P05.17	
P05.16	PULSE		0.0%
		-100.00% 100.0%	
P05.17	PULSE		50.00kHz
		P05.15 50.00kHz	

		0	
		1	0.0%
			AI_I 0 1

“ ”

AI_V AI_I

0 AI “ ”

“ ” P05.01 P05.06 P05.11

1 AI 0.0%

7.6 P6

P06.00	FMP		0
P06.01	AO1		0

FMP 0.01kHz ~ P06.03 FMP

P06.03 0.01kHz~50.00kHz

AO1 0V 10V 0mA 20mA

		0.0%~100.0%
0		0
1		0
2		0 2
3		0 2
4		0 2
5		0 1.2
6	PULSE	0.01kHz 50.00kHz

7	AI1	0V	10V		
8	AI2	0V	10V	0	20mA
9	AI3	0V	10V		
10		0			

0 8V

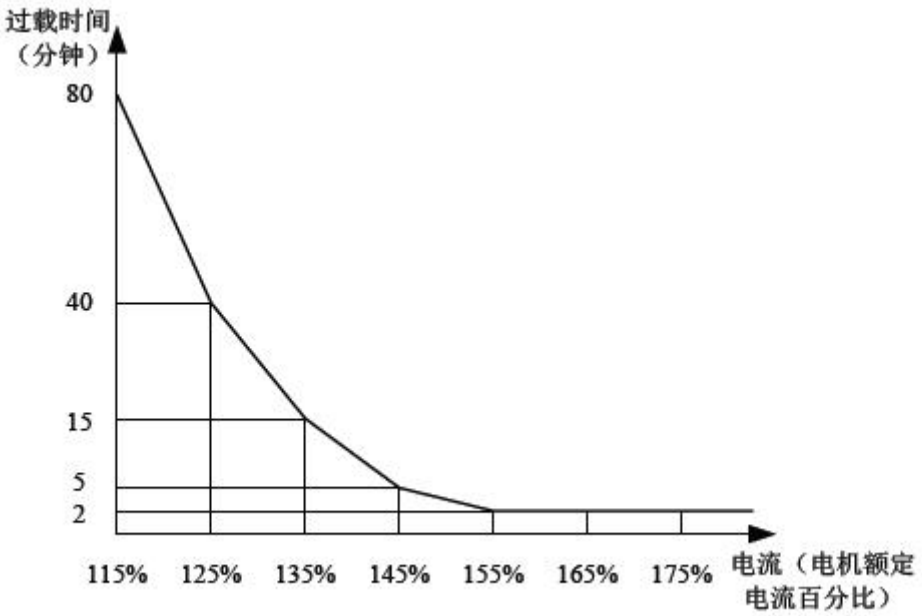
3V “ -0.50 ”， “ 80% ”

7.7 P7

P07.00			1
		0	
		1	
P07.01			1.00
			0.20 10.00

P07.00=0

P07.00=1



120% 30

30 Ix

30 125% 135%

30 Ix (40-30) ÷ (125%-Ix)=(40-15) ÷ (125%-135%)

Ix=129% 120% 30

P07.01=120% ÷ Ix=120% ÷ 129%=0.93

P07.01

P07.02			80%
		50% 100%	

DO

P07.02

DO “ ” ON

P07.03			0
		0 100	
P07.04			760.0
		200.0~2200.0	

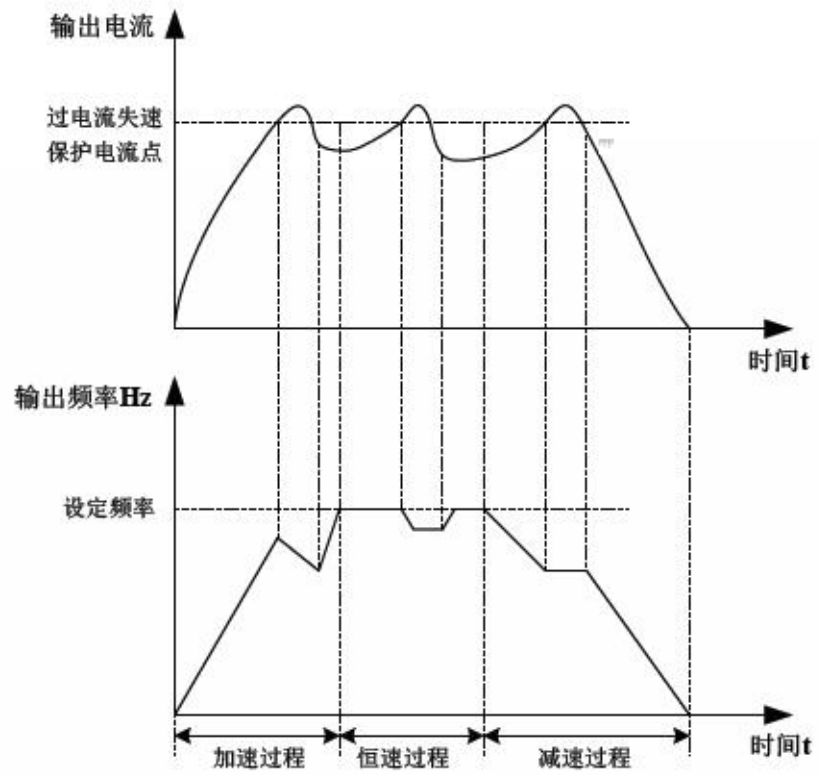
0

P07.05			20
		0 100	
P07.06			150%
		50% 200%	

P07.06

P07.06

20 0



P07.07			11
P07.08			
		200.0V~2000.0V	

UVW

P07.09			0
		0 20	

P07.10	DO		1
		0 1	

DO

P07.10

P07.11			1.0s
		0.1s 100.0s	

P07.12			1
		0 1	

P07.13			11
		0 1	

P07.14		0 999
P07.15		
P07.16		

0

P07.17		
P07.18		
P07.19		

P07.20		BIT9 BIT8 BIT7 BIT6 BIT5 BIT4 BIT3 BIT2 BIT1 BIT0 DI0 DI9 DI8 DI7 DI6 DI5 DI4 DI3 DI2 DI1 ON 1 OFF 0 DI
P07.21		BIT4 BIT3 BIT2 BIT1 BIT0 DO2 DO1 DO4 DO5 FMP ON 1 OFF 0 DI
P07.22		
P07.23		
P07.24		
P07.27		P07.17 P07.24
P07.28		
P07.29		
P07.30		
P07.31		
P07.32		
P07.33		
P07.34		
P07.37		P07.17 P07.24
P07.38		
P07.39		
P07.40		
P07.41		
P07.42		

3

00000

1 E027 P07.47

2 E028 P07.47

E029 P07.47

P07.49 E030

0 0

		4	
P07.55			100.0%
			0% 100.0%

A** P07.54

P07.55

P07.56			0
		0	
		1	PT100
		2	PT1000
P07.57			110
			0 200
P07.58			90
			0 200

AI3 AI3

PGND

GF630N04 AI3 PT100 PT1000

P20.34

P07.57

P07.58 DO

ON

P07.63			0
		0	
		1	
P07.64			10.0%
		0.0% 100.0%	
P07.65			1.0s
		0.0s 60.0s	

P07.64

P07.65 7%

P07.67			15.0%
		0.0% 50.0%	
P07.68			1.0s
		0.0s 60.0s	

P07.67

P07.68 E115

P07.69			20.0%

		0.0% 50.0%	
P07.70			2.0s
		0.0s 60.0s	

P07.69 P07.70 E119

0.0s

7.8 P8

P08.01	1		0
		0	SVC
		1	FVC
		2	V/F

0

1

PG

2 V/F

P12 2 P13

GF630N04

P08.02			0
		0	LOCAL
		1	LOCAL
		2	LOCAL

0 “ LOCAL ” RUN STOP

1 “ LOCAL ” FWD( ) REV( )

FJOG( ) RJOG( )

2 “ LOCAL ”

P08.03	X		0
		0	P08.08 UP/DOWN
		1	P08.08 UP/DOWN
		2	AI1
		3	AI2
		4	AI3
		5	DI5
		6	

		7	PLC
		8	PID
		9	

10

0

P08.08 “ ” ▲ ▼

UP DOWN

P08.08 “ ”

1

P08.08 “ ” ▲ ▼

UP DOWN

▲ ▼

UP DOWN

P08.23 “ ” P08.23

P08.23

2 AI1

3 AI2

4 AI3

GF630N04 2 AI1

AI2 I/O 1 AI3

8 PID

PID

PID P15 “PID ”

9

P08.04	Y		0
		0	P08.08 UP/DOWN
		1	P08.08 UP/DOWN
		2	AI1
		3	AI2
		4	AI3
		5	DI5
		6	
		7	PLC
		8	PID
		9	

X Y

X P08.03

X+Y X X+Y Y X+Y

1 P08.08 ▲

▼ UP DOWN

2 AI1 AI2 AI3

100% P08.05 P08.06

3 Y

X P08.03 P08.04

P08.05	Y		0
	0		
	1	X	
P08.06	Y		0
		0% 150%	

“ ” P08.07 1 3 4

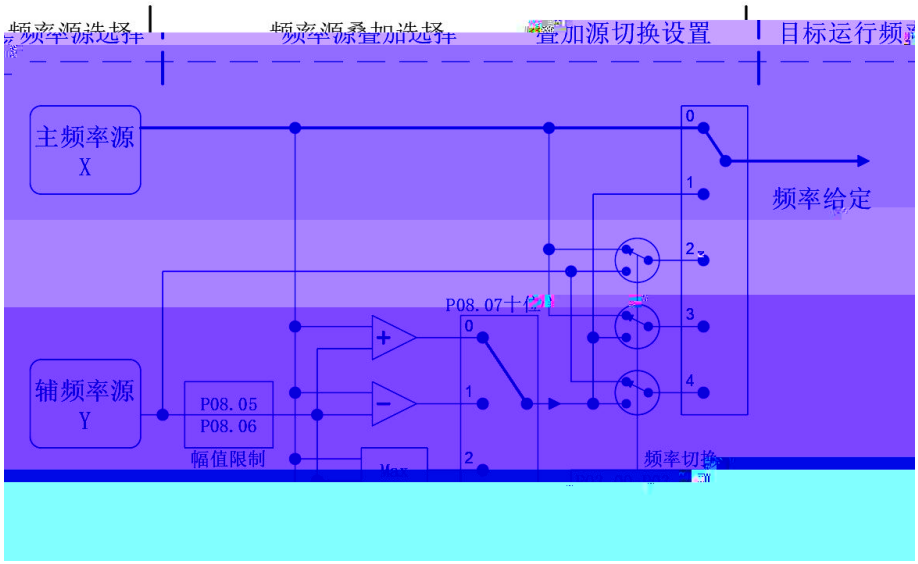
P08.05

X X

P08.07			0

		0	X
		1	
		2	X Y
		3	X
		4	Y
		0	+
		1	-
		2	
		3	

X Y



0 X

X

1 “ ”

2 X Y 18

X 18

Y

3 X 18

X 18

4 Y 18

Y 18

0 X+ Y

X Y

1 X- Y

X Y

2 MAX X Y X Y

P08.08			50.00Hz
		0.00	

“ ” “ UP/DOWN ”

P08.09			0
		0	
		1	

U V W

P08.10			50.00 Hz
		5.00Hz 500.00Hz	

GF630N04 DI5

100.0% P08.10

GF630N04 500Hz

P08.22

P08.22 1 0.1Hz P08.10 50.0Hz

500.0Hz

P08.22 2 0.01Hz P08.10 50.00Hz

500.00Hz

P08.11			0
		0	P08.12
		1	AI1
		2	AI2
		3	AI3
		4	PULSE
		5	

P08.12

100% P08.12

“ ”

P08.12			50.00Hz
		P08.14 P08.10	
P08.13			0.00Hz
		0.00Hz P08.10	

PULSE P08.13

P08.11

P08.14			0.00Hz
		0.00Hz P08.12	

P08.14

P21.14

P08.15			
		0.5kHz 16.0kHz	

	→
	→
	→
	→

	→
	→
	→

P08.16			0
		0 1	

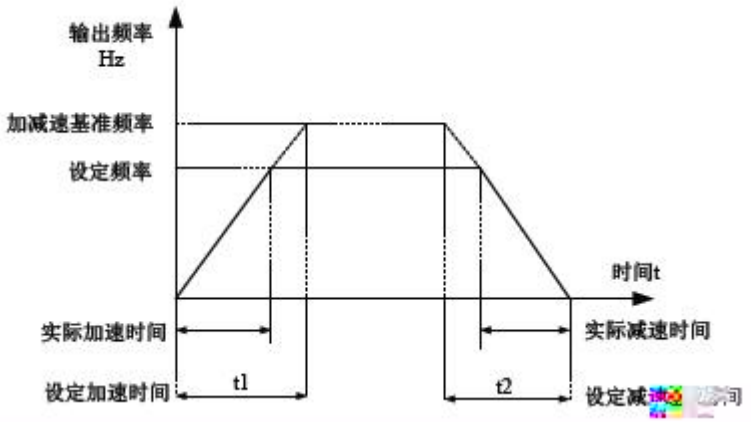
P08.17	1		
		0.00s 6500.0s	
P08.18	1		
		0.00s 6500.0s	

P08.25

t1

P08.25

t2



GF630N04 4 DI

P08.17 P08.18

P21.03 P21.04

P21.05 P21.06

P21.07 P21.08

P08.19			1
		0	1
		1	0.1
		2	0.01

GF630N04 3 1 0.1

0.01

P8

P08.21			0.00Hz

		0.00Hz P08.10

P8.21

P08.23			0
		0	
		1	

“ ” P08.08

▲ ▼ UP DOWN

“ ” ▲

▼ UP DOWN

P08.24			0
		0	1
		1	2

GF630N04 2 2

1 P10 P12 2 P11 P13

P08.24 DI

P08.25			0
		0	P08.10
		1	
		2	100Hz

P08.25

P08.25 1

UP/DOWN 0

P08.26

P08.03~ P08.07

P08.28			0
		0	
		1	
		2	

0

0

0

1

2

P08.31			0.00Hz
		0.00Hz 10.00Hz	
P08.32			0.0s
		0.0s 100.0s	

P08.31

PLC

1

P08.31 0

P08.08 2.00Hz 2.00Hz

P08.31 5.00Hz 5.00Hz

P08.32 2.0s 2.0s

0.00Hz

2

P08.03 0

P08.08 10.00Hz 10.00Hz

P08.31 5.00Hz 5.00Hz

P08.32 2.0s 2.0s

5.00Hz 2.0s 10.00Hz

P08.33			0%
		0% 100%	
P08.34			0.0s
		0.0s 100.0s	

0

P08.35			0
		0	
		1	S A
		2	S B

0

1 S A S

S P08.36

P08.37 S

$$t = (\frac{4}{9} \times (\frac{f}{f_b})^2 + \frac{1}{9}) \times T$$

f f b T 0 f b

P08.36	S		30.0%
		0.0%	100.0%- P08.37
P08.37	S		30.0%
		0.0%	100.0%- P08.36

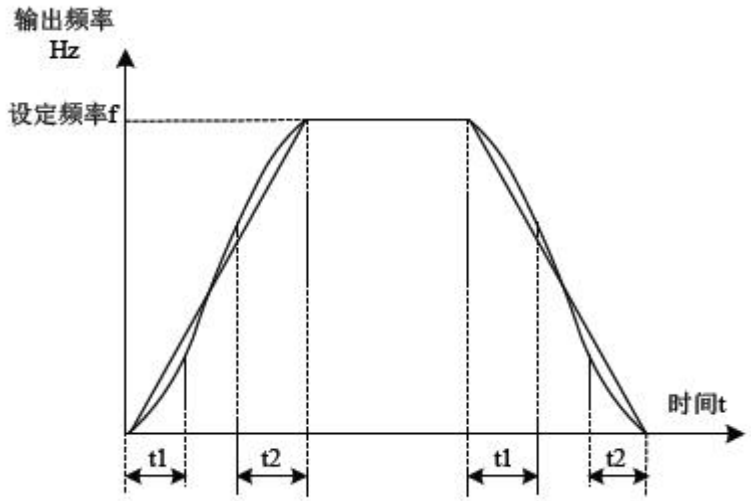
P08.36 P08.37 S A

P08.36 + P08.37 ≤ 100.0%

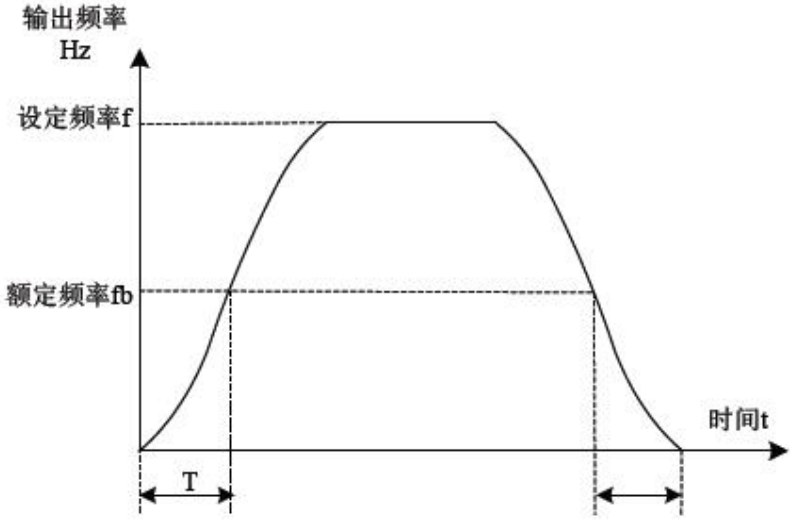
t1 P08.36

t2 P08.37 0

t1 t2



S A



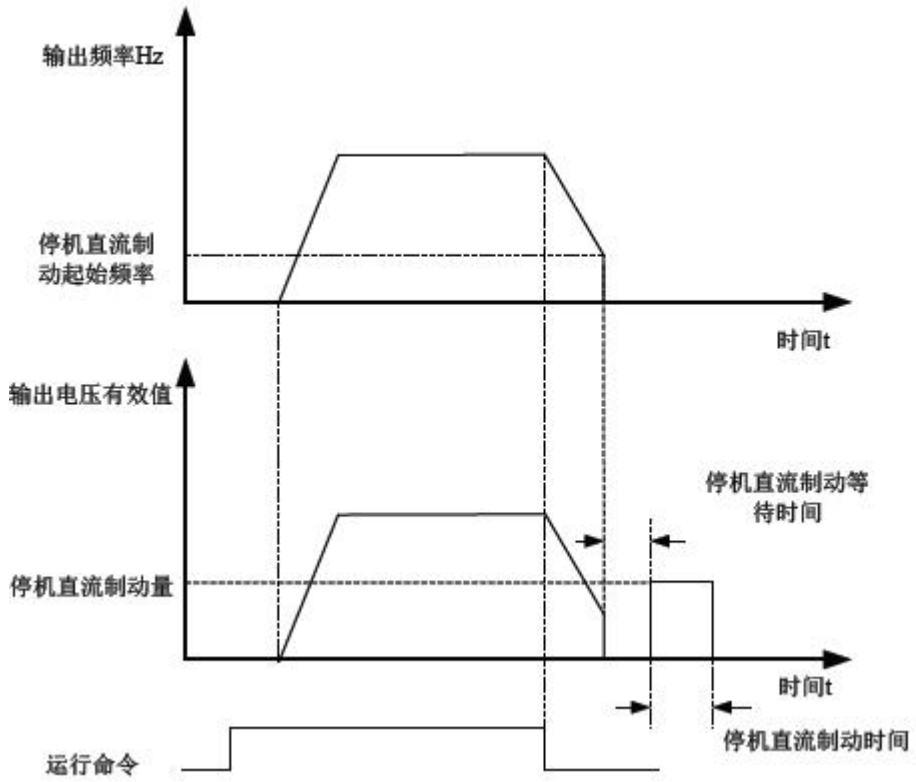
S B

P08.38			0
		0	
		1	

0 0

1

P08.39			0.00Hz
		0.00Hz	
P08.40			0.0s
		0.0s 36.0s	
P08.41			0%
		0% 100%	
P08.42			0.0s
		0.0s 36.0s	



P08.43			100%
		0% 100%	

P08.45			0
		0	
		1	
P08.47			0.200S
		0.010-10.000S	
P08.49			5.000S
		0.010-10.000S	
P08.51			0
		0	

		1	
P08.52	DI		0
		0	1
		1	2

P08.51

P08.47

DI 1 2

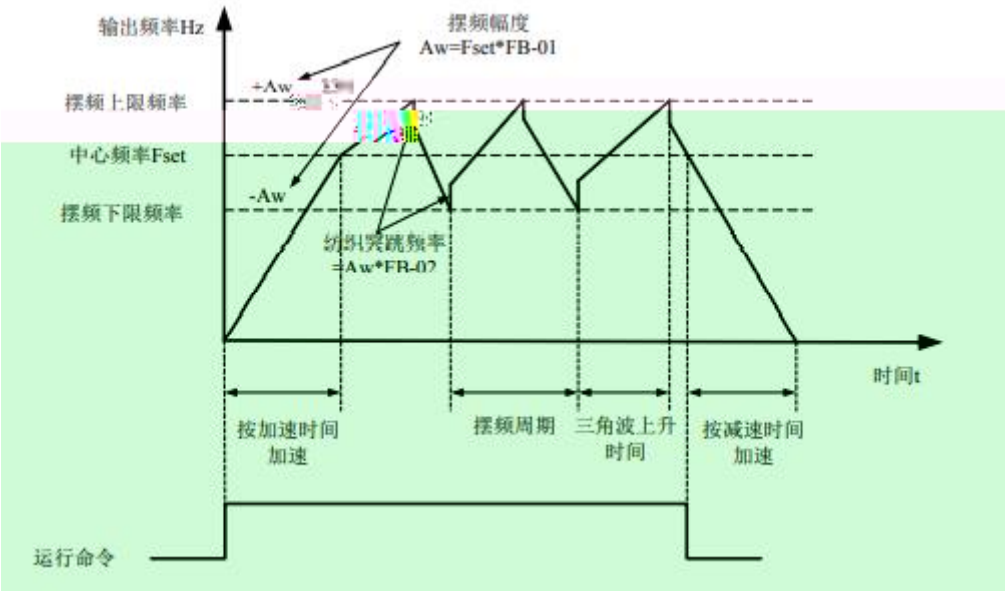
DI1 1 P03.00=1 DI2 4 P03.01=4

1 DI1

2 DI1 DI2 DI1

7.9 P9

P09.00 P09.01 P09.01 0 0



P09.00			0
		0	
		1	

0

1

P09.01			0.0%
		0.0% 100.0%	
P09.02			0.0%
		0.0% 50.0%	

P09.00=0 AW × P09.01

P09.00=1 AW × P09.01

AW ×　　P09.02　　P09.00=0

P09.00=1

P09.03			10.0s
		0.0s 3000.0s	
P09.04			50.0%
		0.0% 100.0%	

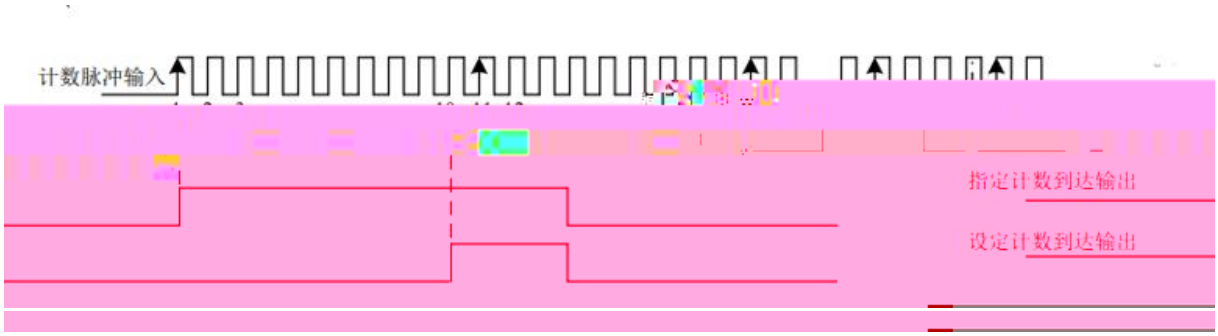
P09.04　　P09.03

P09.03 ×　　P09.04

P09.03 × 1　　P09.04

P09.05			1000m
		0m 65535m	
P09.06			0m
		0m 65535m	
P09.07			100.0
		0.1 6553.5	

P09.07　　P09.06　　P09.05



GF630N04

VF PID

PLC

P09.10	0		0.0%
		-100.0% 100.0%	
P09.11	1		0.0%
		-100.0% 100.0%	
P09.12	2		0.0%
		-100.0% 100.0%	
P09.13	3		0.0%
		-100.0% 100.0%	
P09.14	4		0.0%
		-100.0% 100.0%	
P09.15	5		0.0%
		-100.0% 100.0%	
P09.16	6		0.0%
		-100.0% 100.0%	
P09.17	7		0.0%
		-100.0% 100.0%	

P09.18	8		0.0%
		-100.0% 100.0%	
P09.19	9		0.0%
		-100.0% 100.0%	
P09.20	10		0.0Hz
		-100.0% 100.0%	
P09.21	11		0.0%
		-100.0% 100.0%	
P09.22	12		0.0%
		-100.0% 100.0%	
P09.23	13		0.0%
		-100.0% 100.0%	
P09.24	14		0.0%
		-100.0% 100.0%	
P09.25	15		0.0%
		-100.0% 100.0%	

VF PID

-100.0%~100.0%

VF

PID PID

DI I אo א

7.10 V/F 1 P10

P10.35			
		0.1kW 1000.0kW	
P10.36			
		1V 2000V	
P10.37			
		0.01A 655.35A <=55kW 0.1A 6553.5A >55kW	
P10.38			
		0.01Hz	
P10.39			
		1rpm 65535rpm	

VF

VF

P10.50			
		0.001Ω 65.535Ω <=55kW 0.0001Ω 6.5535Ω >55kW	
P10.51	D		
		0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW	
P10.52	Q		
		0.01mH 655.35mH <=55kW 0.001mH 65.535mH >55kW	

P10.54			
		0.1V 6553.5V	

P10.50~10.54

“

” “ ” P10.50~10.54 4

“ ” P10.54

1 Ke E=(Ke* *2*pi)/60

2) E'(V/1000r/min) E=E'* /1000

3) E=P/(1.65*I)

(rpm) P (w) I (A)

“ ” A064

P10.50~10.54

P10.61			1024
		1 65535	

P10.62			0
		0	ABZ
		1	
		2	
		3	
		4	

P10.71			0
		0	
		11	
		12	

P10.34~P10.39ضد

P21.03	2		20.0s
		0. 0s 6500.0s	
P21.04	2		20.0s
		0. 0s 6500.0s	
P21.05	3		20.0s
		0. 0s 6500.0s	
P21.06	3		20.0s
		0. 0s 6500.0s	
P21.07	4		20.0s
		0. 0s 6500.0s	
P21.08	4		20.0s
		0. 0s 6500.0s	

GF630N04 4 P08.17\P08.18 3

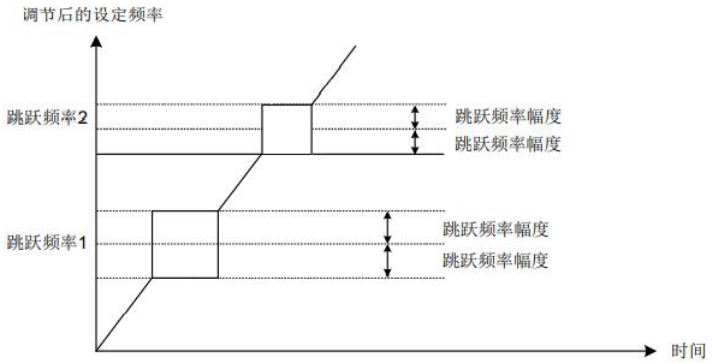
4 P08.17 P08.18

DI 4

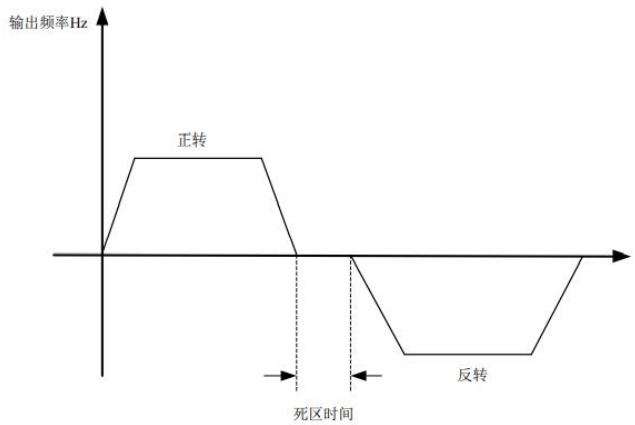
P03.01 P03.05

P21.09	1		0.00Hz
		0.00Hz	
P21.10	2		0.00Hz
		0.00 Hz	
P21.11			0.00Hz
		0.00	

GF630N04 0



P21.12			0.0s
		0.00s 3000.0s	



0Hz

P21.13			0
		0	
		1	

P21.13=1

P21.14			
	0		
	1		
	2		

GF630N04

P21.15			0.0%
		0.0% 100.0%	

0 4

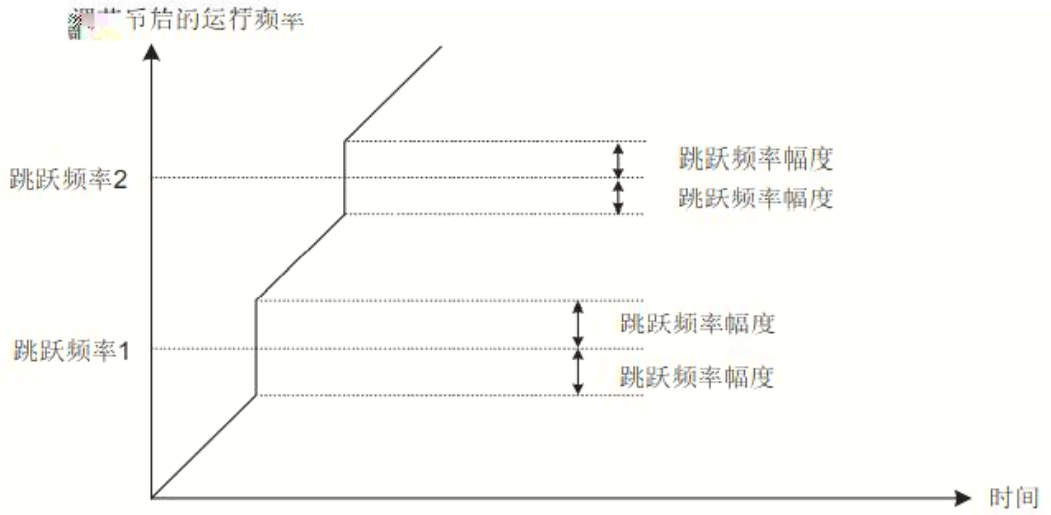
P21.15 4

204

1

1

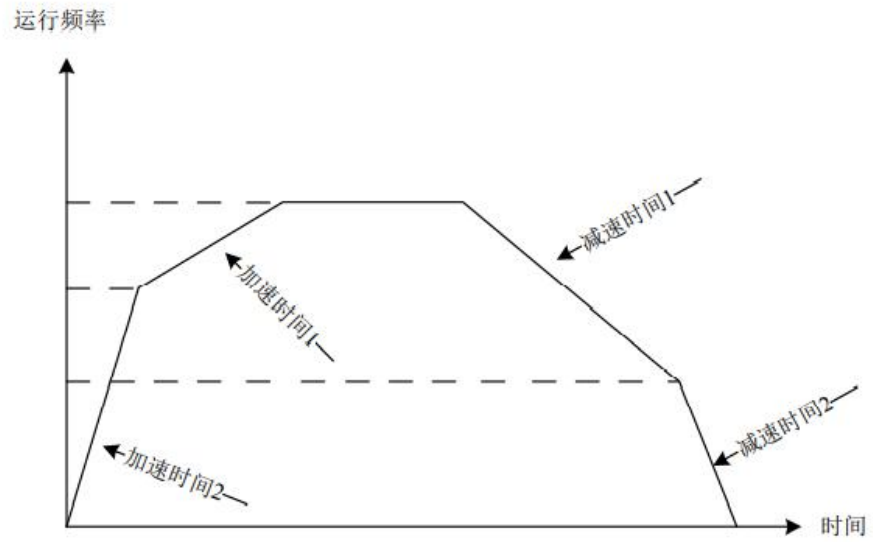
P21.22			0
		0 1	



P21.25	1 2		0.00Hz
		0.00Hz	
P21.26	1 2		0.00Hz
		0.00Hz	

1 DI

DI



P21.25

2 P21.25 1

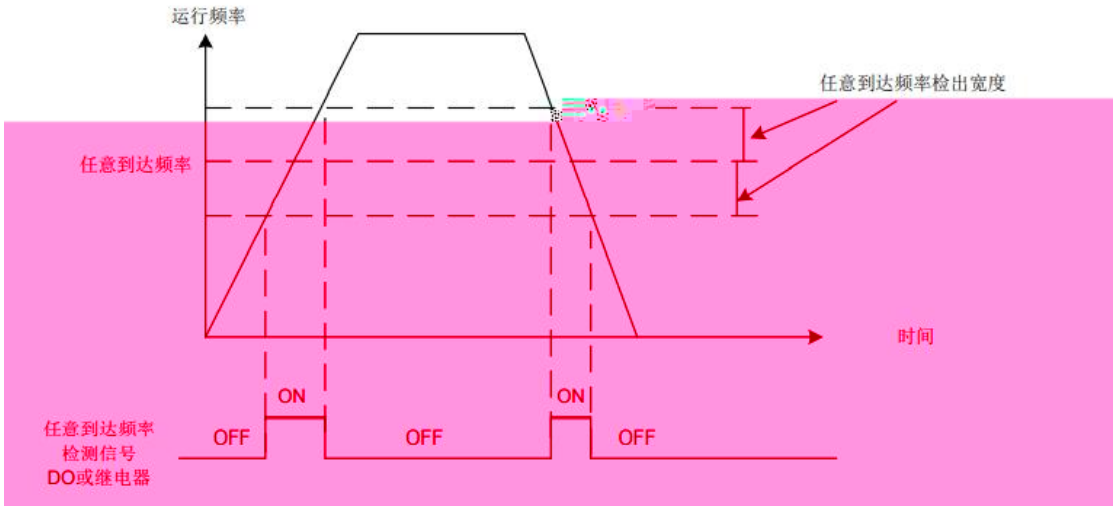
P21.26 1

P21.26 2

P21.31	1		0.0%
		0.0% 100.0%	
P21.32	2		50.00Hz
		0.00Hz	
P21.33	2		0.0%
		0.0% 100.0%	

DO

ON



P21.42			0
		0	
		1	
P21.43			0
		0	P21.44
		1	AI1
		2	AI2
		3	AI3
		100% P21.44	
P21.44			0.0Min
		0.0Min 6500.0Min	

P21.42

DO ON

0 P23.20

P21.43 P21.44

P21.61				1
		0		
		1		

E040

7.12 P19

P19.30	AI1 1		
		-10.000V 10.000V	
P19.31	AI1 1		
		-10.000V 10.000V	
P19.32	AI1 2		
		-10.000V 10.000V	
P19.33	AI1 2		
		-10.000V 10.000V	
P19.34	AI2 1		
		-10.000V 10.000V	
P19.35	AI2 1		

		-10.000V 10.000V	
P19.36	AI2 2		
		-10.000V 10.000V	
P19.37	AI2 2		
		-10.000V 10.000V	
P19.38	AI3 1		
		-10.000V 10.000V	
P19.39	AI3 1		
		-10.000V 10.000V	
P19.40	AI3 2		
		-10.000V 10.000V	
P19.41	AI3 2		
		-10.000V 10.000V	

AI AI

P23 AI P23.21 P23.22 P23.23

AI P23

AI

AI1

AI1 (2V)

AI1 P19.30

P23.21 P19.31

AI1 (8V) AI1 P19.32

P23.21 P19.33

AI2 AI3 P23.22 P23.23

-8V 8V

P19.42	A01 1		
		0.500V 4.000V	
P19.43	A01 1		
		0.500V 4.000V	
P19.44	A01 2		
		6.000V 9.999V	
P19.45	A01 2		
		6.000V 9.999V	

AO

8

8.1

E001	1 2 3 4 5 6 7	1 2 3 4 5 6 7
E003	1 2 3 4 5 6	1 2 3 4 5 6
E004	1 2 3 4 5	1 2 3 4 5
E008	1	1
E011	1 2 3	P07.10

EEPROM	E021	1 EEPROM	1
	E022	1 2	1 2
	E026	1	1
1	E027	1 DI 1 2 IO 1	1 2
2	E028	1 DI 2 2 IO 2	1 2
	E029	1	1
	E030	1 P07.64	1 P07.64 P07.65
PID	E031	1 PID P15.26	1 PID P15.26
	E040	1 2	1 2
	E041	1	1
	E045	1 2	1 2
	E051	SVC	P12.25 1 2 P07.72 1

PB “ + ”

PB “ + ”

E060

1

P08.44

1

E061

P08.44 0

1

2

E100

3

4

1

2

3

4

E101

	E113	1 2 3 4	1 2 3 4
	E114	1 2 3 4	1 2 3 4
	E115	1 2 3 P07.67 P07.68	1 2 3
	E118	P23.45 P19.45 1 7 11 12 9 1 P23.45=1 PG 2 P23.45=3 Z 3 P23.45=5 Z 3 P23.45=6 Z ABZ P10.65 4 P23.45=7 5 P23.45=12 PG	Z Z P10.65 P07.71 1 P07.71 1
	E119	1 2 3 P07.69 P07.70	1 2 3
	E120	1 2 3 4 5	1 2 3 4 5

	E170	1 P12.10 2 3 PG 4 5 P10.64	1 P12.10 2 3 PG 4 5 P07.72 0 P10.64
	E202	1 2 3 P14.00 3 P14	1 2 3 4
	A064	1. 2. P10.54 3. 4. 5.	1. 2. P10.54 3. 40% 40% 4. 5. “ STOP ”

8.2

	1 2 3 4 5 6	1 2 3 34 4~6

HF630	1 2 3 4 5	 1 34 2~5
“ E112 ”	1 2	1 2
“ HF630 ”	1 2	1 2
E120	1 2 3	1 P08.15 2 3
	1 2 3 4	1 2 3 4
DI	1 2 3 PW +24V 4	1 P3 2 3 PW +24V 4
	1 2 3 PG 4	1 2 PG 3~4
	1 2 3	1 2 3
Err17	1	1 2 3 24V 4
8.8.8.8.8	1	1

9

1.

2.

3.

4.

1. CMOS

2.

3.

9.1

9.2

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

9.3

	2	1 2
PCB		

9.4

5

5

(400-0077-570)

1 40

2 80%

3 24 /

9.5

1

2

5

1

2

3

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6

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