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ı í HF500LC ↓ ı 3 ~ ı
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| 5 ð í HF500LC ↓ ı í
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M 'E

1. η H
 - 1.1 $\sim$
 - 1.2
 - 1.3 H
2. $\mathcal{C}$ '
 - 2.1
 - 2.2^{ap} $\mathcal{C} \sim \tilde{I}$
 - 2.3^{ap} $\mathcal{C} \downarrow \sim \mathfrak{b}$
 - 2.4^{ap} $\mathcal{C} \tilde{I} \mathfrak{y} \mathfrak{d} O$
 - 2.5^{ap} $\mathcal{C}$
 - 2.6^{ap} $\mathcal{C} \text{ vii} \mathfrak{c} \text{ '}$
 - 2.7 h
 - 2.8^{ap} $\mathcal{C} w$
 - 2.9 $\tilde{I} \sim \mathfrak{d}$
 - 2.10 $\tilde{I} \tilde{I}$
3. $\tilde{I} \tilde{U} \mathfrak{c}$
 - 3.1 $\tilde{U}$
 - 3.2
 - 3.3 $h \mathfrak{b}$
 - 3.4 $\mathfrak{y} \mathfrak{c}$
 - 3.5 $\mathfrak{y} \mathfrak{b}$
 - 3.6 PG $\mathfrak{y} \mathfrak{b}$
 - 3.7 PGC1 $\mathfrak{y}$
 - 3.8 PGD1 $\mathfrak{y}$
4. $\tilde{I}$
 - 4.1 H
 - 4.2 h
 - 4.3 L
 - 4.4 $\tilde{I}$
 - 4.5 $\tilde{I} \mathfrak{A}$
 - 4.6
 - 4.7
 - 4.8 $\mathfrak{F}'$
 - 4.9 $\text{vii} \text{ EMC}$
5. $\mathfrak{b}$
 - 5.1 $\mathfrak{b}$
 - 5.2 $\mathfrak{b}$
 - 5.3 $h \mathfrak{y}$
 - 5.4 $\mathfrak{y}$
6. $\tilde{I}$
 - 6.1 $\tilde{I}$
 - 6.2 $\tilde{I} \mathfrak{b}$
 - 6.2.1
 - 6.2.2
 - 6.2.3 $\check{\alpha} \Delta$
 - 6.2.4 $\check{\alpha}$
 - 6.2.5 $\check{\alpha} \mathfrak{z}$
 - 6.2.6 $\mathfrak{z} \mathfrak{H} H$
 - 6.2.7 $\mathfrak{H}$

	6.2.8	Ў	
	6.2.9	ă Ġ	
7. Ĩ	ă		
7.1		P1	
7.2	ĩ		P2
7.3	~		P3
7.4	ƒ		P4
7.5	~		P5
7.6	ƒ		P6
7.7 Ġ	ă	P7	
7.8	1 Ω Ā	L	P8
7.9	2 Ω Ā	L	P9
7.10	3 Ω Ā	L	P10
7.11	4 Ω Ā	L	P11
7.12	1	L	P12
7.13	2	L	P13
7.14	3	L	P14
7.15	4	L	P15
7.16	1 ă	V/F	P16
7.17	2 ă	V/F	P17
7.18	3 ă	V/F	P18
7.19	4 ă	V/F	P19
7.20	1	L	P20
7.21	2	L	P21
7.22	3	L	P22
7.23	4	L	P23
7.24	MODBUS	P32	
7.25		P33	
8.	ă w		
8.1	ĩ		
8.2	~		
8.3	ƒ		
8.4	~		
8.5	ƒ		
8.6 Ġ	ă		
8.7	Ω Ā	L ă	
8.8		Ġ L	L
8.9	ă	Ġ V/F	L ă
8.10		L ă	
8.11			
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9.1	ƒ ħ		
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10.3			
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10.5	Ĥ Ġ k		

1. η Η

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1.1 Ψ



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1.2

- (1) ∞ $\mathbb{C}$ $\mathbb{F}$ $\dot{\mathbb{I}}$ $\sim$ $\mathbb{G}$ $\mathfrak{Z}^{\sim\sim}$ $\mathbb{C}$ $\mathbb{F}$ $\mathbb{F}$
- (2) $\mathbb{G}$ $\dot{\mathbb{I}}$ $\sim$ $\mathbb{H}$ $\wedge$ $\mathbb{D}$ $\mathbb{L}$
- η $\dot{\mathbb{I}}$ $\mathbb{N}$ $\sim$ $\mathbb{C}$ $\mathbb{H}$ $\mathbb{N}$ $\mathbb{F}$
- (3) $\dot{\mathbb{I}}$ $\mathbb{H}$ $\mathbb{L}$ $\mathbb{H}$ $\mathbb{L}$ $\sim$ $\mathbb{P}$ $\mathbb{G}$ $\mathbb{V}$ $\sim$ $\mathfrak{Z}$ η
- γ $\dot{\mathbb{I}}$ $\mathbb{H}$
- (4) $\dot{\mathbb{I}}$ $\mathbb{Y}$ $\mathbb{H}$ $\mathfrak{D}$ $\mathfrak{G}$ $\%$

$\mathfrak{D}$	$\mathfrak{D}$ $\mathbb{O}$	$\mathbb{H}$ $\%$
LVD $\mathfrak{D}$	2014/35/EU	EN 61800-5-1
EMC $\mathfrak{D}$	2014/30/EU	EN 61800-3

1.3 Η

$\dot{\mathbb{I}}$ $\dot{\mathbb{I}}$ $\dot{\mathbb{I}}$ $\mathbb{D}$ $\sim$ $\mathbb{C}$

$\mathbb{C}$ $\dot{\mathbb{I}}$ $\mathbb{P}$ $\sim$ $\mathbb{U}$

$\mathbb{C}$ $\dot{\mathbb{I}}$ $\mathfrak{Z}$ $\mathbb{L}$ $\mathbb{C}$ $\sim$ ∞ $\mathbb{C}$

$\neq$

$\mathbb{C}$ $\dot{\mathbb{I}}$ $\mathbb{C}$ $\mathbb{C}$ $\mathbb{C}$ $\mathbb{C}$

2.º

2.1



U Ů ƒ Ĩ ~ γ Ÿ 3
 1. Ĩ T K v ^ Đ ~ h r H ~
 2. ' T й ғ Ġ k V
 3. Ĩ ˆ ƒ
 4. ƒ Ĩ Đ ~ Đ
 Ů Ĩ Đ ~ ˆ =

2.2º

Ĩ ~ ƒ Ĩ

HF500LC	XXX	6	S
ˆ ƒ ↓	w ƒ	1	
HF500	160' 160kW 250' 250kW ... 1600' 1600kW	6' 690V	F ƒ Đ S' G3 G 6 ~
LC			

2-1 ˆ ƒ ~ ƒ Ĩ

HF500LC-6 ↓ Ĩ
 LC ƒ
 6: 1 ƒ 690V
 F HF500LC-6 ↓ Ĩ
 ~ ƒ G4 G5 ˆ ƒ ƒ Đ ~ ' ƒ Ĩ
 ˆ ƒ G 12
 || ~
 S' G3 G 6 || ~

HF500LC



2-2



γ 250kW 4 0~

型号: HF500LC-250-6

功率: 250kW

额定电

流: 290A

额定电

AC3PH 660V-690V 50/60Hz

输入:

AC3PH 0-690V 0-300Hz

输出:

ID.

E- STAND:V1.00

Product

N CHINA

MADE I

????????????

2-2 00 2

HF500LC-0250-6 HF500 250kW 1 690V
AC 3PH 660V-690V 50/60Hz 0-690V 0-300Hz

2.3 00 2 0 0

2-3 HF500LC 00 2 0

	1		2		~	
	[A]	[kW]	[A]	[kW]		
HF500LC-160-6	180	160	147	132	6 00 3	G2
HF500LC-200-6	220	200	180	160		
HF500LC-250-6	290	250	220	200		
HF500LC-280-6	320	280	290	250		
HF500LC-315-6	355	315	320	280		
HF500LC-355-6	390	355	355	315		

HF500LC-400-6	420	400	390	355		
HF500LC-450-6	472	450	420	400		
HF500LC-500-6	545	500	472	450		
HF500LC-560-6	610	560	545	500	12	II
HF500LC-630-6	675	630	610	560		
HF500LC-710-6	760	710	675	630		
HF500LC-800-6	810	800	760	710		
HF500LC-400-6-S	420	400	390	355		G3
HF500LC-450-6-S	472	450	420	400		
HF500LC-500-6-S	545	500	472	450		
HF500LC-560-6-S	610	560	545	500	6	II
HF500LC-630-6-S	675	630	610	560		
HF500LC-710-6-S	760	710	675	630		
HF500LC-800-6-S	810	800	760	710		
HF500LC-900-6-F	896	900	810			

2.4° 2 3 O

HF500LC



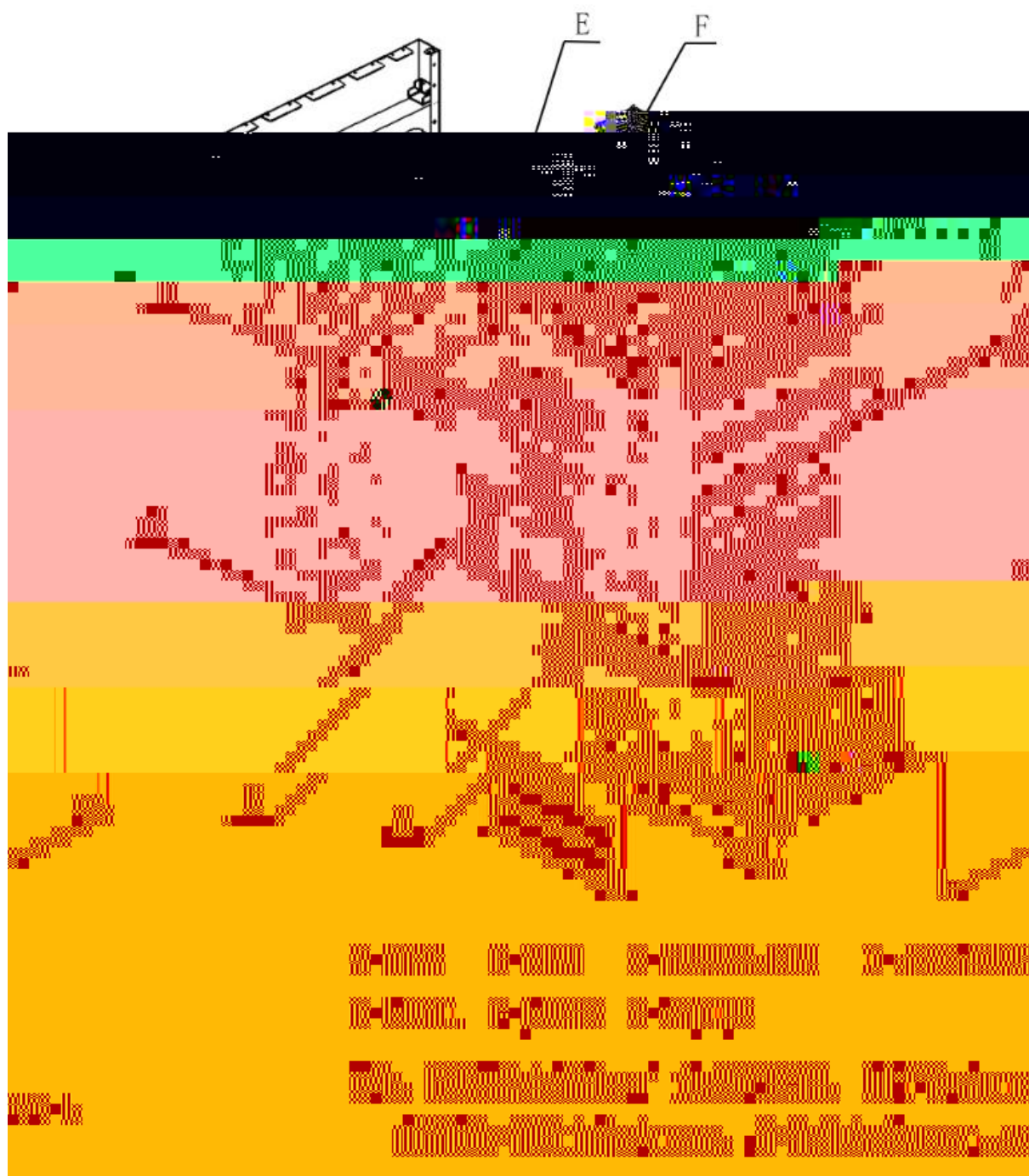
п



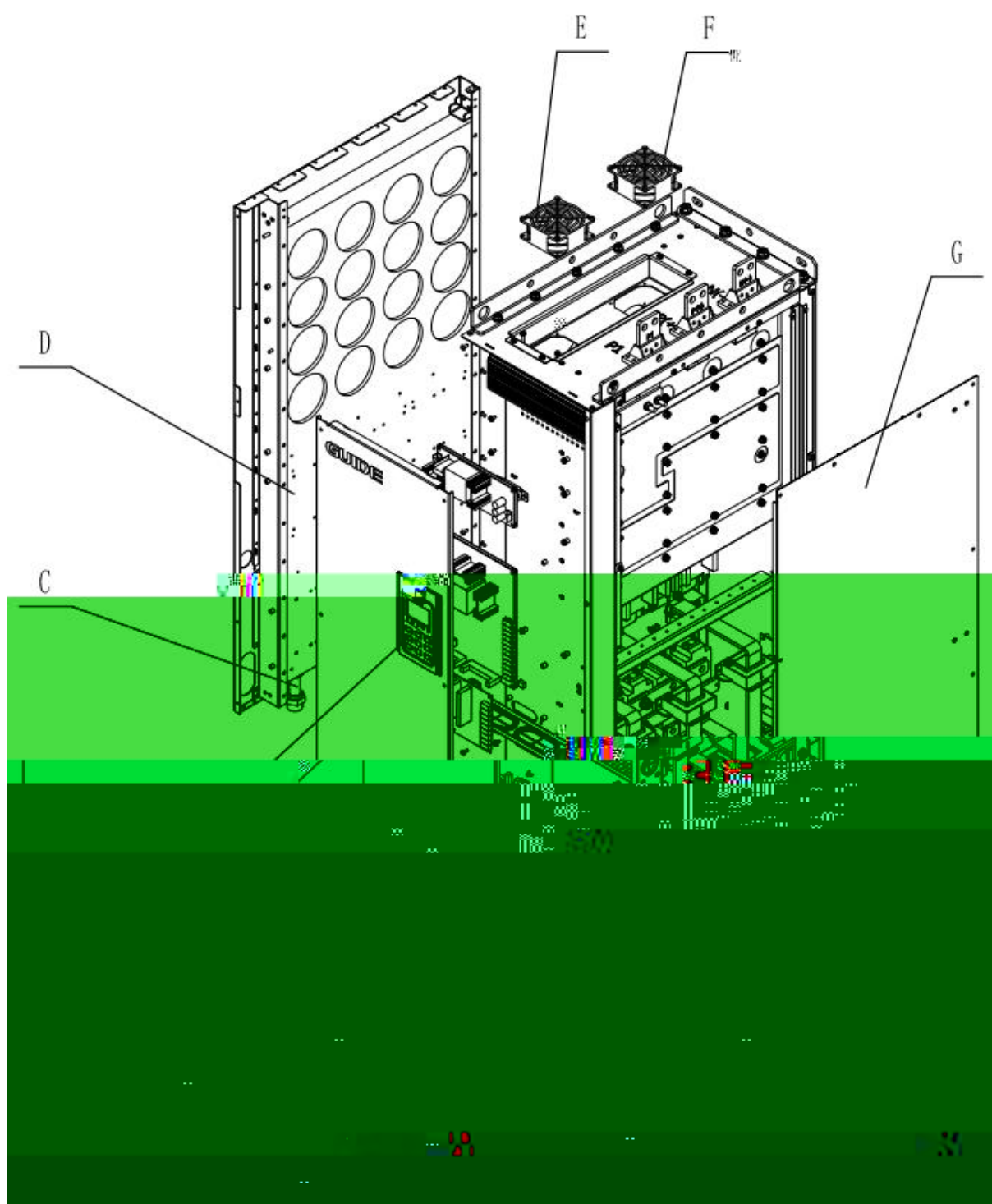
п

HF500LC-160-6

HF500LC-355-6

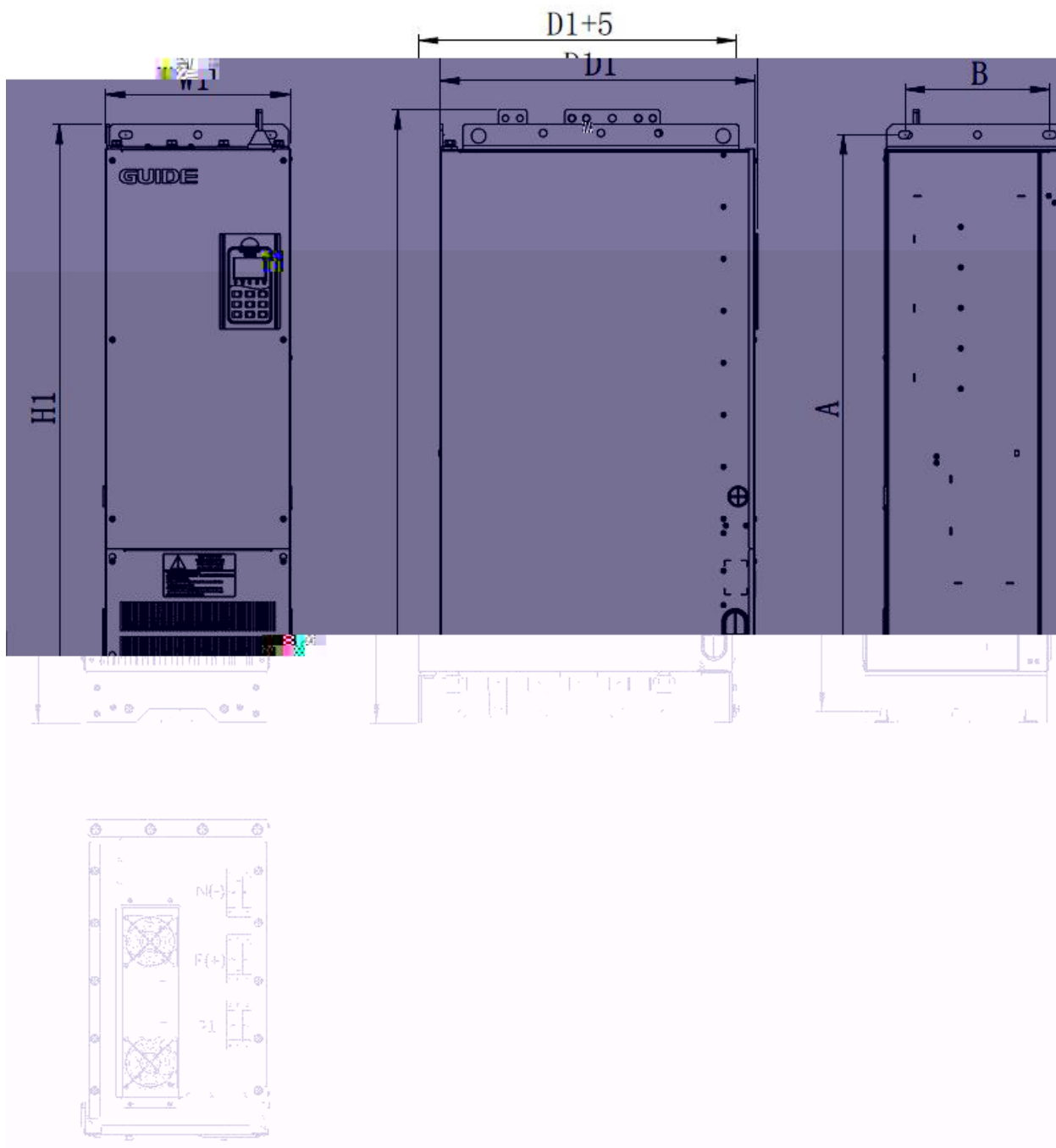


HF500LC-400-6 HF500LC-800-6

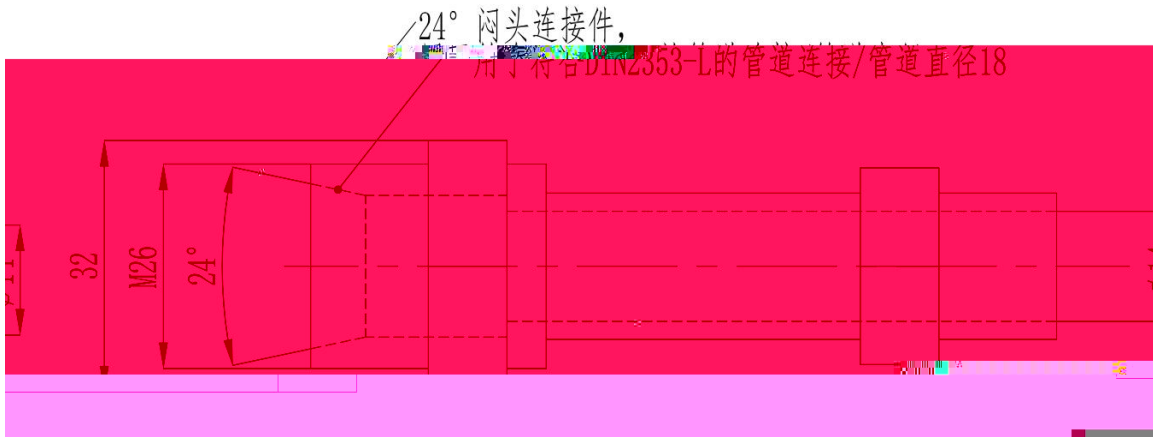


2.5

1



	3	<5ms(SVC) <5ms(VC)
	L	± 5%(SVC) ± 3%(VC)
		1:500(SVC) 1:1000(VC)
		± 0.02% (VC) ± 0.2% (SVC) ± 0.5% (V/F)
	z	5 No 150% 1 No 180% 5
	ẽ	ẽ w
	v :	H
	1	G 1
	L	Đ L Ğ Å L
	ρ PID	~ B ^ 1 z ~ L
~ F	~	~ 8 ~ 2 ^ 1 -10V +10V 0mA/4mA 20mA~
	F	F 5 ^ 3 F Ğ 2 F~ F 2 ^ 1 0 +10V 0mA/4mA 20mA~
~	b LCD	~ ă ~ 3 F F 1 F ă
G w		G 1 G 1 G G
a		b ĩ ă Ğ
		γ G 1000m
		-10 +50 ^ 50 60 ~ a .0 γ Ĩ a " ' 1 ~
		G 95%RH o
	Ů	-20 +60
	b r	/ / Өн ^ 6 4~
	(L/min)	G2 22L/min,G3 24L/min
	()	55
	F o ~	5
	1 z^ MPa~	0.6
	F o 1 (Kpa)	80~150
	F o (mm)	Ĩ
		b / ~ PA PEX Teflon
	' o β	Ĩ
	o β	Ĩ



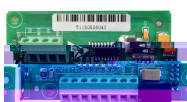
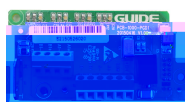
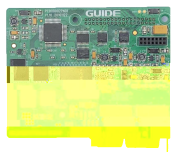
2.7 h

- (1) 200% 200%
- (2) 50% HF500LC 200%
- (3) HF500LC 200%

2.8

- 200%
- 200%
- 200%
- PID

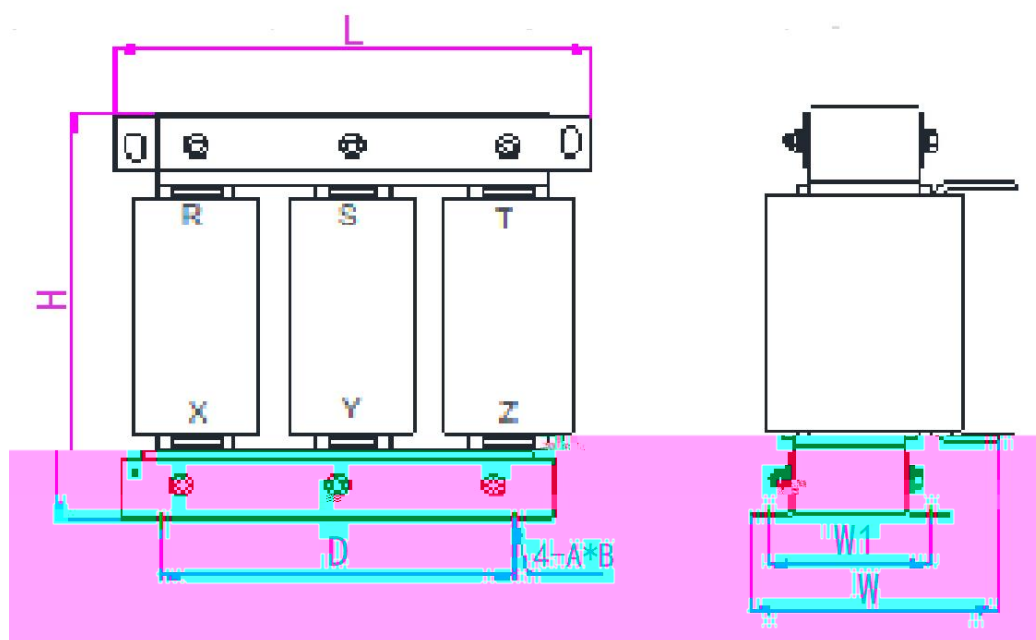
2.9 1 2

GDHF-DP02 V		GDHF-DP02 V % Profibus % HF500LC ↓ I a
GDHF-MB01 V		GDHF-MB01 V MODBUS-RTU c v RS485 o RS232 o L HF500LC RS232 MODBUS-RTU o HF500LC ↓ I a
GDHF-PGC1 PG V		GDHF-PGC1 PG V ~ b w ~ I HF500LC ↓ I a ^ 15V
GDHF-PGD1 PG V		GDHF-PGD1 PG V ~ b w ~ I HF500LC ↓ I w a ^ 15V
GDHF-KC2 b		GDHF-KC2 b w H 7 b HF500LC ↓ I b
GDHF-PN01 V		GDHF-PN01 V PROFINET 3 Y % PROFINET c v HF500LC ↓ I a

GDHF-MFB2 ဟန်		GDHF-MFB2 ဟန် ဖုန် HF500LC ↓ ဖုန် ဖုန် ဟန် 630kW~1120kW
GDHF-SFB လန်		GDHF-SFB လန် ဖုန် HF500LC ↓ ဖုန် ဖုန် လန် 630kW~1120kW
GDHF-POF02 2 ဖုန်		GDHF-POF02 ဖုန် 2 ဖုန် ဖုန် ဟန် ဖုန် လန် ဖုန် ဖုန် ဖုန် 2 ဖုန် 7 ဖုန် 2 ဖုန်
GDHF-POF03 3 ဖုန်		GDHF-POF03 ဖုန် 3 ဖုန် ဖုန် ဟန် ဖုန် လန် ဖုန် ဖုန် ဖုန် 3 ဖုန် 7 ဖုန် 2 ဖုန်
GDHF-POF05 5 ဖုန်		GDHF-POF05 ဖုန် 5 ဖုန် ဖုန် ဟန် ဖုန် လန် ဖုန် ဖုန် ဖုန် 5 ဖုန် 7 ဖုန် 2 ဖုန်

2.10 f

i



~	L [^] ± 5mm~	W	H	D	W1	A*B
ACR-0200-0M14-0.7SC	290	220	260	214	122	11*18
ACR-0250-0M11-0.7SC	290	220	260	214	122	11*18
ACR-0290-096U-0.7SC	290	260	280	214	132	11*18
ACR-0330-085U-0.7SC	290	230	310	214	122	11*18
ACR-0390-072U-0.7SC	320	245	330	243	144	11*18
ACR-0490-057U-0.7SC	320	250	350	243	155	11*18
ACR-0600-047U-0.7SC	320	260	320	243	154	11*18
ACR-0680-042U-0.7SC	360	260	320	243	154	11*18
ACR-0810-035U-0.7SC	365	280	385	260	164	15*25

~	^ W~	^ W~	^ W~
ACR-0200-0M14-0.7SC	73	232.7	305.7
ACR-0250-0M11-0.7SC	86	221.4	307.4
ACR-0290-096U-0.7SC	95	240.3	335.3
ACR-0330-085U-0.7SC	100.8	265.72	366.52
ACR-0390-072U-0.7SC	112.6	266.37	378.97
ACR-0490-057U-0.7SC	126.3	326.9	453.2
ACR-0600-047U-0.7SC	152.4	360.1	512.5
ACR-0680-042U-0.7SC	170	410	580
ACR-0810-035U-0.7SC	210	461	671

3. İ Ü Ğ

	
1.	Ψ H 2 İ ð / ☼ b b " p " T r ~ ^ İ F 3 2 " H ð / ☼ b
2.	~ 7 " H b
3.	ı a İ G b b ~ γ İ . ~ ı ı' - R S T - U V W - P1 P N
4.	7 γ U 12 № ~ a İ ~ " H b 3
5.	r G G L
	
1.	~ δ r İ H ı 7 δ ~ h r İ
2.	b ☼ ☼ ~ ı
3.	H " γ ☼ İ □ w L p ~ ' ı ~ a o G 40 γ İ G ~ Ψ İ İ H

3.1 Ü

- G ~ β
- Ü -20 | +60 p
- Ü 0% | 95% p ~ f
- Ü T b C r
- ☼ ~
- İ b ~ Ψ ω ~
- ~ G 1 p w ~ 5 a γ ☼ ~ ~ ı
- ı ı ı v

3.2

- $\dot{\rho} \sim f \dot{\rho}$
- $-10 \sim +50$ $+50 \sim +60$ H_2 $\sim$ γ $1 \sim$
 $\mathbb{F}$ $\vdots$ 2%
- $\tilde{\omega}$ $\sim$ $G \ 95\%RH$ $\mathbb{B}^{\sim}H$ o $\sim$
- $\textcircled{P} \sim$ $\mathbb{E}^{\sim}$
- $\tilde{\omega}$
- $r \ \mathbb{E} \ r$
- $\mathring{I}$
- $\sim$
- $1000 \ \gamma \ \mathbb{H}$ 1000 $\sim$ $\nu \ 100$ $\gamma \ 1\%$
 γ $\mathbb{F}$ $\sim$ $\mathbb{H} \ 3000$
 $\mathbb{E}$ $\sim$ $\mathbb{J} \ \mathring{I}$ a $\mathbb{E}$

3.4 İ Ğ

İ Ü

1 h̃ ð ƒ

2 h̃ h̃

3 h̃ ĩ

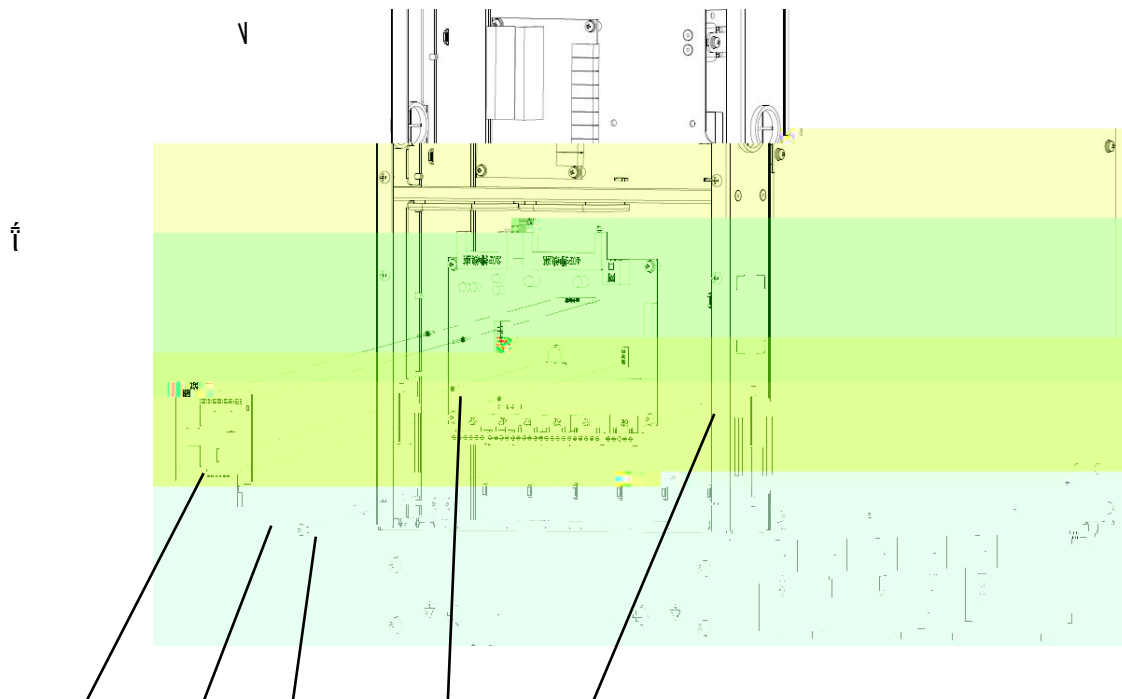
İ Ü



3.5 √ Ъ

а Ї GDHF-DP02 √ Ъ Ы

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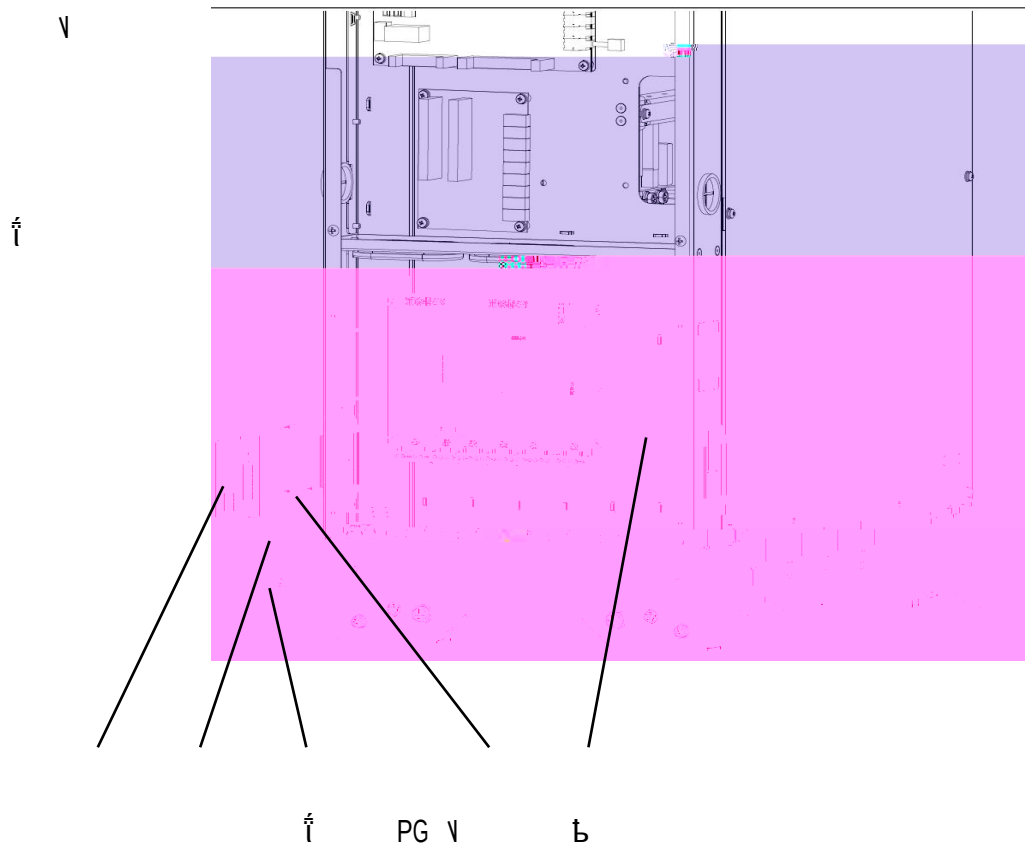


Ї √ Ъ

3.6 PG √ Ъ

а Ї GDHF-PGC1 PG √ Ğ GDHF-PGD1 □ PG

√ Ъ Ы



3.7 PGC1 ∇

GDHF-PGC1 PG ∇ 12 ∇

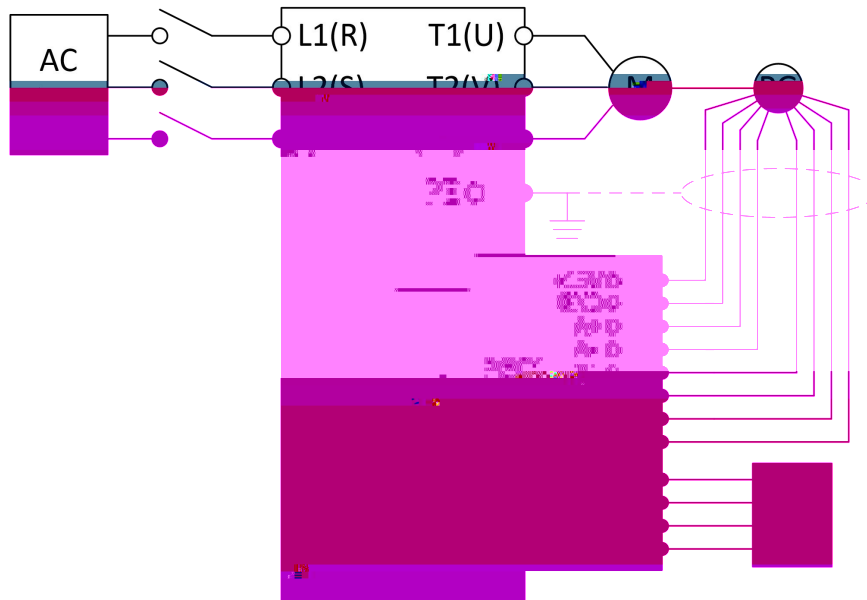
+15V	GND	A+	A-	B+	B-	Z+	Z-
AO		COM		BO		COM	

∇

∇	∇	İ	1	∇
+15V, GND	L	...	15V ± 5%	300mA
A+, A- B+, B- Z+, Z-	H~ ~	0-80kHz	0-15V	...
AO, COM BO, COM	∇	0-50kHz	0-24V	...

PE ∇ ~ a PE ~

PGC1 V A '



H₀ :

^ 1~ PG V H[°] Ё⁻ z № ~ ђ[°] ,

^ 2~ Ч ђ[°] H[°] ї | ~ Ч PG V H[°] ,

^ 3~ ^ ї PE ~ W y

 ~ γ ђ[°] H[°] ї ,

^ 4~ y №[°] PG Ψ; A- B- Z- GND ,

^ 5~ PGC1 v 1 / 15V - ^ RS-422~ №

G а ~ ђ[°] № ~ PGC1 v

1 - ^ 15V~

1~ 1~ 1~
a~

e ^o	
1~	~
	HLE45-1024L-6F.AC
0~	RHI90N-ONAK1R61N-1024
	EC120P45-H6PR-1024

b~

e ^o	
1~	~
	HLE45-600L-3F.AC
0~	RV178N-10CALA31N-1024
	EC120P45-P6PR-1024

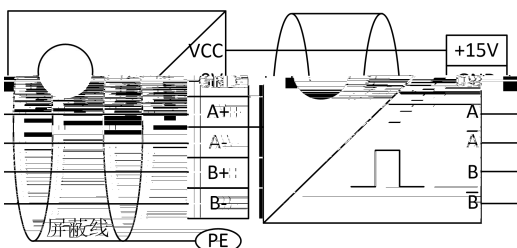
2~ 1~ 1~

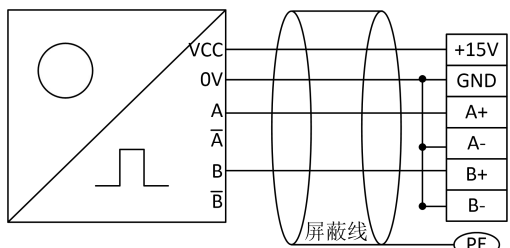
e ^o	
1~	~
	HLE45-1024L-30C.AC
	EB38A6-C4PR-1024

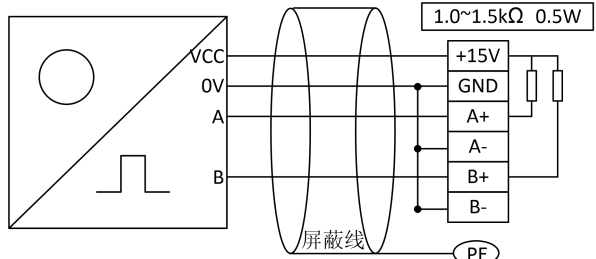
3~ 1~ 1~

e ^o	
1~	~
	HLE45-600L-3R.AC
	EB50A8-N4PR-1024

Hu '
 ^ 1~ PG V H~ b- z No ~ Ğ '
 ^ 2~ ı Ğ H~ İ | ~ ı PG V H~ '
 ^ 3~ ~ İ PE ~ Ğ ı
 ~ ı Ğ H~ İ
 G a ~ Ğ ı PGD1 V
 ı
 ^ 1~ ı ' ı
 ä -

	e D	
	ı	~
		HLE45-1024L-6F.AC
	Ö v	RHI90N-ONAK1R61N-1024
		EC120P45-H6PR-1024

	e D	
	ı	~
		HLE45-600L-3F.AC
	Ö v	RVI78N-10CALA31N-1024
		EC120P45-P6PR-1024

	e D	
	ı	~
		HLE45-1024L-30C.AC
		EB38A6-C4PR-1024

^ 3~ ¤ ' 1 . Ä

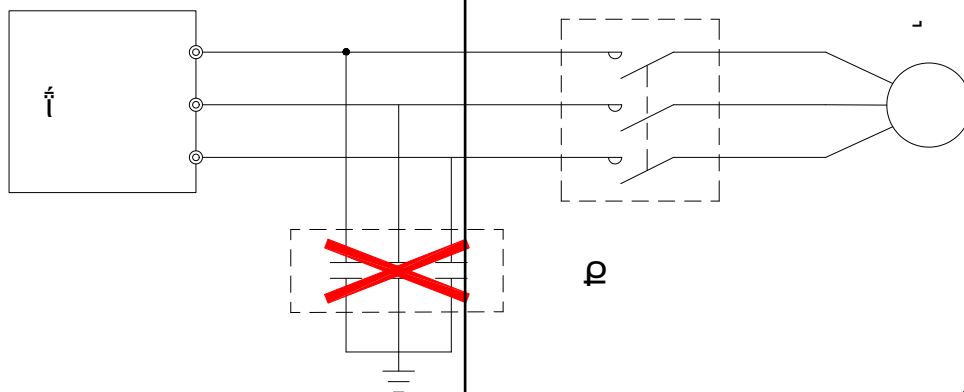


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E www.gdetec.com GUIDE

4. İ

4.1 H

^ 1~ F 3 2 b
 ^ 2~ G n 12 No y, ~ 7 t v
 ^ 3~ | İ F U V W,
 ^ 4~ İ Ğ ' n
 ^ 5~ G İ b L H T ~ y Ÿ İ H
 ^ 6~ İ b H v ~ w G ' b ~ 7 G
 İ F ~
 ^ 7~ İ U V W F b~ y v p ì p ~ 4-1

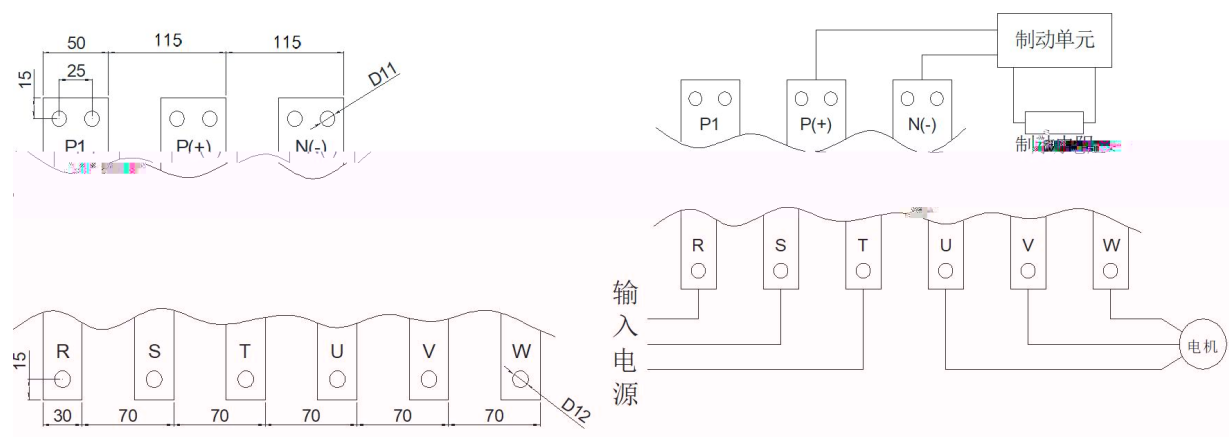


α α ' 1 U'P
 $\wedge$ 14~ 1 b i 1
 $\wedge$ 15~ 7 i b ~ G 30 m

4.2 h

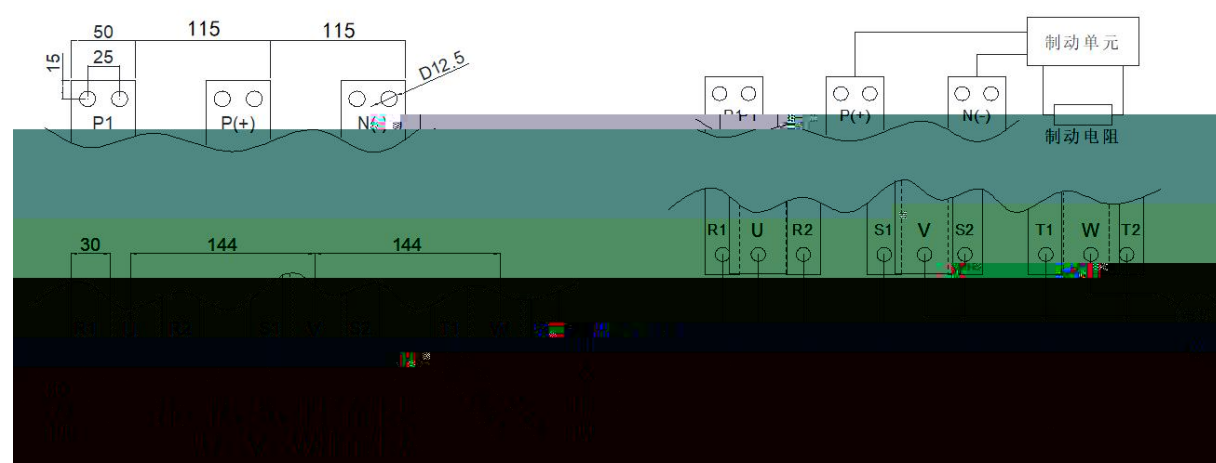
160kW ~355kW w †

G2



400kW ~800kW w †

G3



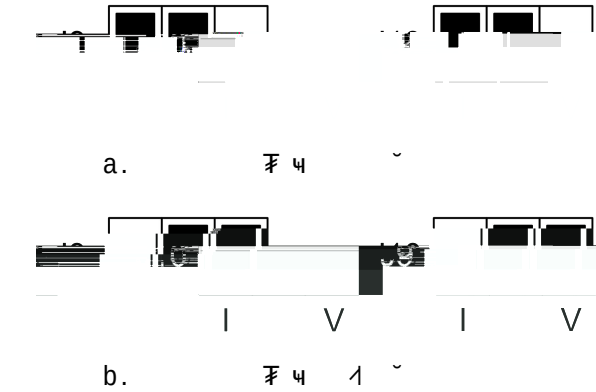
~	W	
P +~	u	1
P1		
N -~	u	1
R S T	3333	
U V W	3333	
	1	

4.3 L

~ 1~ L

~	1	2	3	4	5	6	7	8
O	+10V	GND	AI1+	AI1-	AI2+	AI2-	A01	COM
~	9	10	11	12	13	14	15	16
O	A02	COM	DI1	DI2	DI3	DI4	COM	DI5
~	17	18	19	20	21	22	23	24
O	DI6	DI7	DI8	COM	+24V	D01	+24V	D02
~	25	26	27	28	29	30	31	
O	+24V	D03	D04A	D04C	D04B	D05A	D05C	

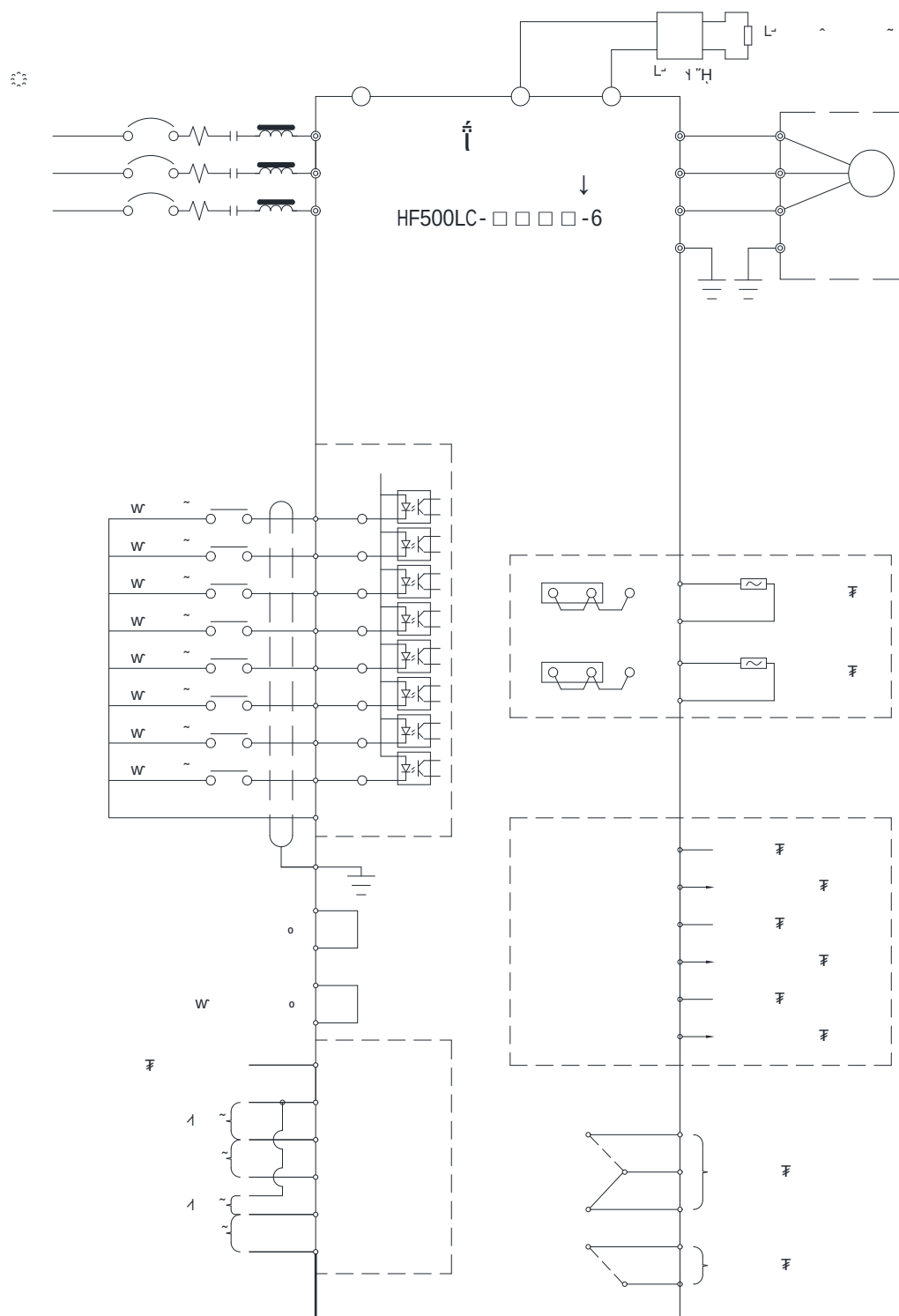
~ 2~

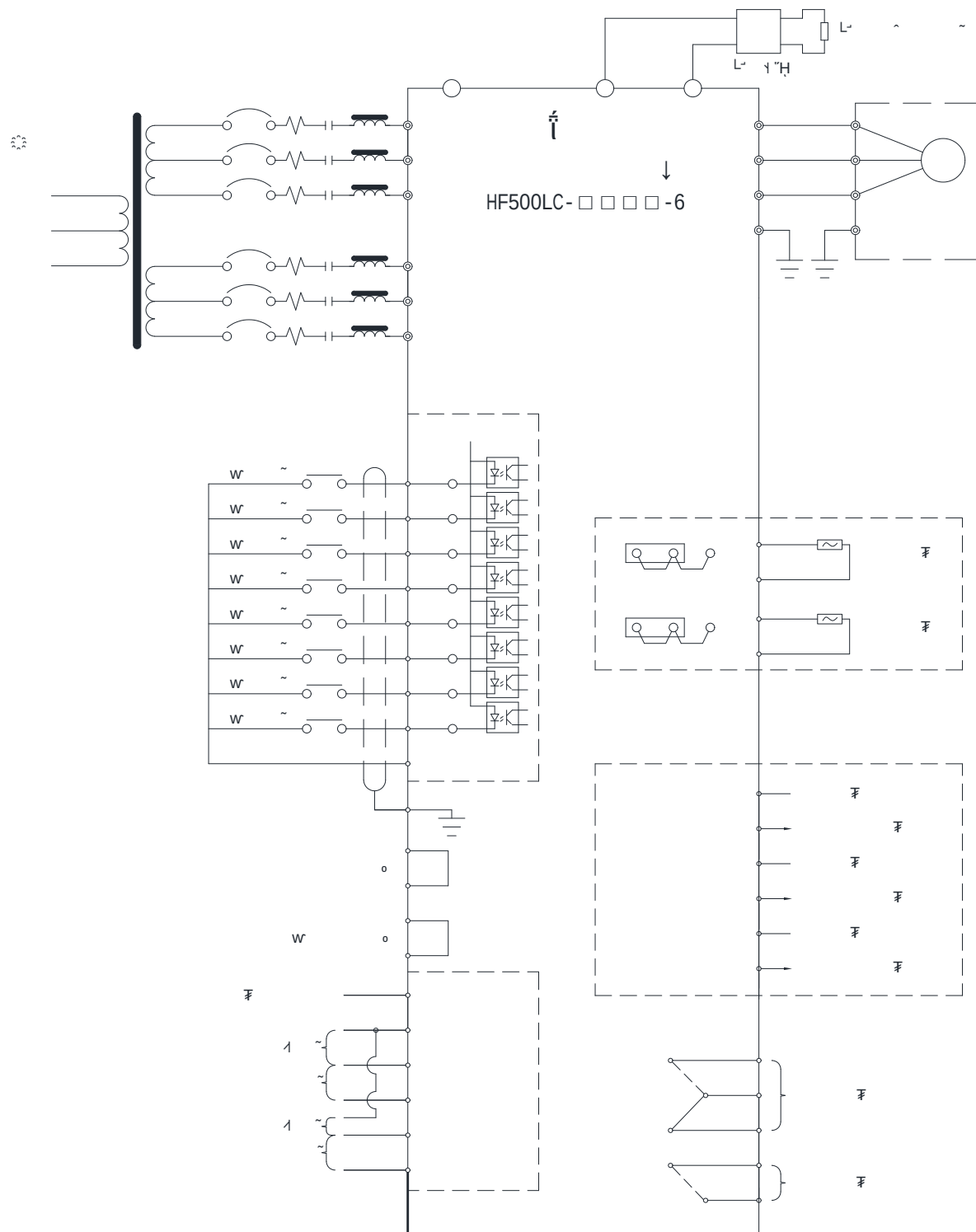


23	^	+24V	24V	Æ'			
24	^	D02		Æ	2	Æ DC24V 50mA γ İ'	
25	^	+24V	24V	Æ'			
26	^	D03		Æ	3	Æ DC24V 50mA γ İ'	
27	^	D04A		Æ	4	~	Æ'
28	^	D04C		Æ	4	'E "	'
29	^	D04B		Æ	4	~	Æ'
30	^	D05A		Æ	5	~	Æ'
31	^	D05C		Æ	5	'E "	

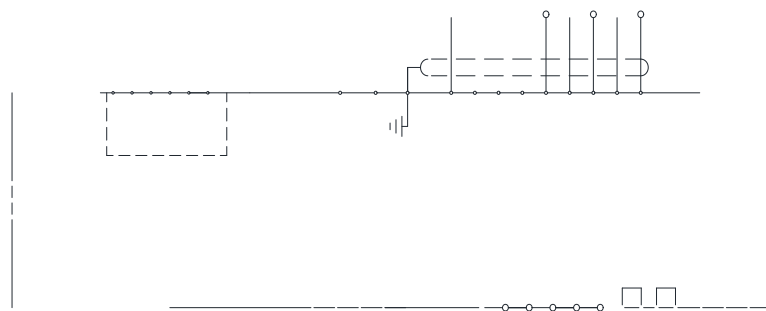
4.4 †

6 †





4.5 1 1



4

4.6

G2

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	щ а ‘Y T ~ L
h İ 1	щ L 3 β ˆˆˆ
	1 İ k Ъ ~ a İ Ъ , 2 İ ~ u 1 γ ~ ~ G
	B L İ Ğ
	İ ₣ ~ İ G
AC	1 w ‘ 2 γ İ ~ 3 』 ˆˆˆ 1 Ъ 3
L	Г P L ~ ѿ T 1

4.7

		~ / 7 ^ mm ²		^ A~	
†	~	^ ΔA~	^ CEFR †	40%L	† (AC-
		α		b ~	3)
HF500LC-160-6		220		570	200
HF500LC-200-6		260		95	240
HF500LC-250-6		350		120	320
HF500LC-280-6		384		150	350
HF500LC-315-6		426		2*70	390
HF500LC-355-6		468		2*95	430
HF500LC-400-6		2*250		2*95	2*230
HF500LC-450-6		2*285		2*95	2*260
HF500LC-500-6		2*327		2*120	2*300
HF500LC-560-6		2*360		2*150	2*330
HF500LC-630-6		2*400		4*70	2*360
HF500LC-710-6		2*435		4*70	2*400
HF500LC-800-6		2*460		4*95	2*430
HF500LC-400-6-S		500		2*95	430
HF500LC-450-6-S		570		2*95	520
HF500LC-500-6-S		654		2*120	600
HF500LC-560-6-S		720		2*150	66

HF500LC-800-6-S	920	4*95	845
HF500LC-900-6-F	1075	2*120	986
HF500LC-1000-6-F	1210	4*120	1108
HF500LC-1120-6-F	1335	4*150	1223
HF500LC-1200-6-F	1465	4*150	1344
HF500LC-1400-6-F	1640	4*185	1502
HF500LC-1600-6-F	1750	4*240	1603

4.8 ƒ

~	(KW)	ƒ	
HF500LC-160-6	160	200A	0.07 mH
HF500LC-200-6	200	250A	0.055 mH
HF500LC-250-6	250	290A	0.048 mH
HF500LC-280-6	280	330A	0.042 mH
HF500LC-315-6	315	390A	0.036 mH
HF500LC-355-6	355	390A	0.036 mH
HF500LC-400-6	400	490A	0.028 mH
HF500LC-450-6	450	490A	0.028 mH
HF500LC-500-6	500	600A	0.023 mH
HF500LC-560-6	560	600A	0.023 mH
HF500LC-400-6-S	400	490A	0.028 mH

10

b'

z ' b □ L T̃ c z í 1 L ~ w 4
 ~ ì T 3 4 ~ 1
 No ' w □ w L p b □ ~ í PLC
 n ~ ì ò é ì z ʎ b □ ' No ~
 No ~ No 4 é ~ □ □ w ʎ ~ b □
 G 20cm ʎ,;:
 L p ' L p w H̃ ^ ~ é z ^ ~ í ~
 z í No 4 é ʎ H̃ ì z ~ c a ~ b ~ H
 ~ é z No G b □ ʎ ~ H̃ H ^ 20cm p̃ ~ é ~
 b H w H̃ z ~ H H G 90
 z é ʎ 3 b ' w ~ ≠ ~
 ʎ a ʎ No ~ c a ~ b

c'

í b w η̃ b, 4 3 é η̃ f 3
 = EMC ʎ ʎ ~ n ð
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d'

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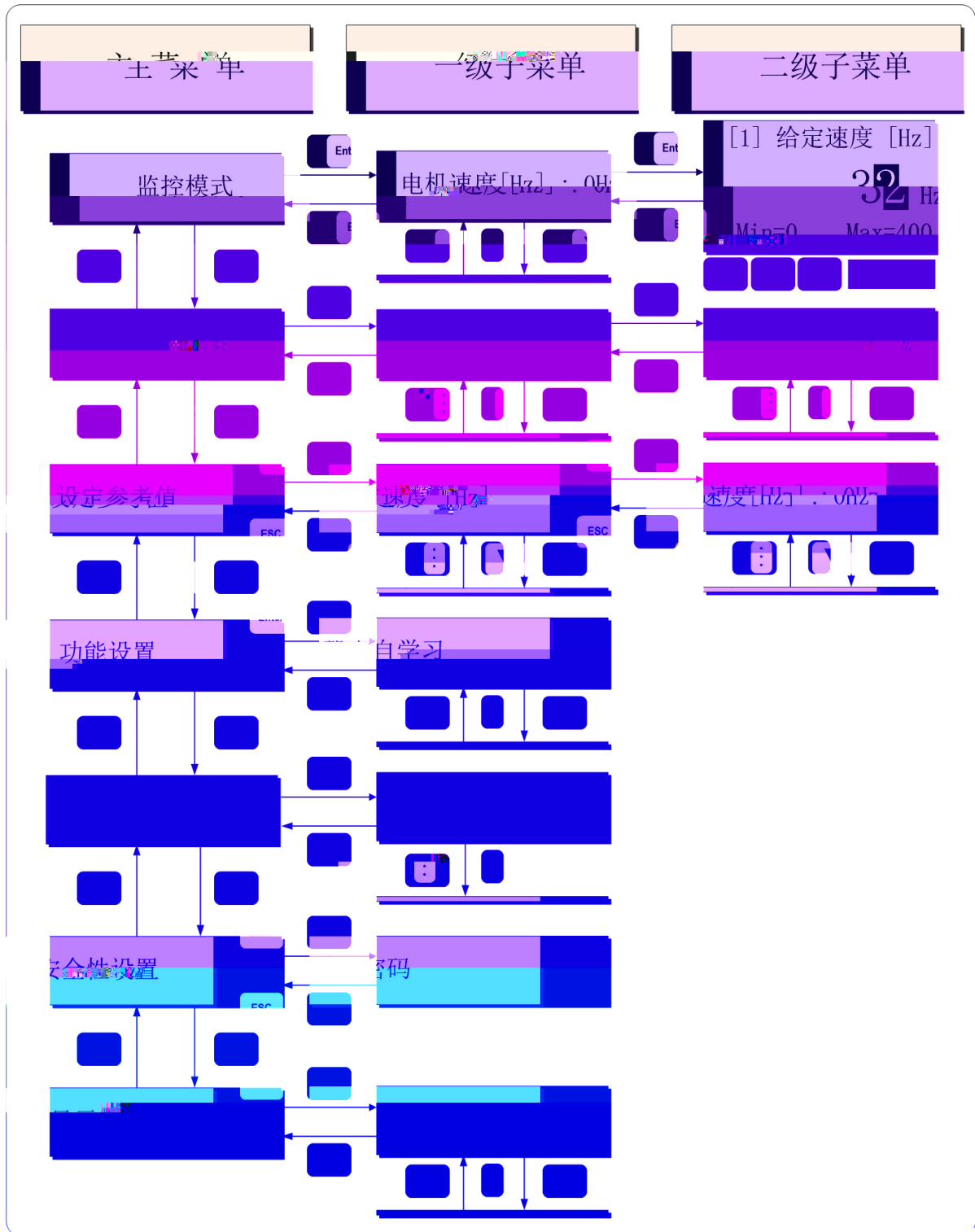
~ a İ İ İ

İ ~ v

İ ı ~ a İ İ İ

5.2 b

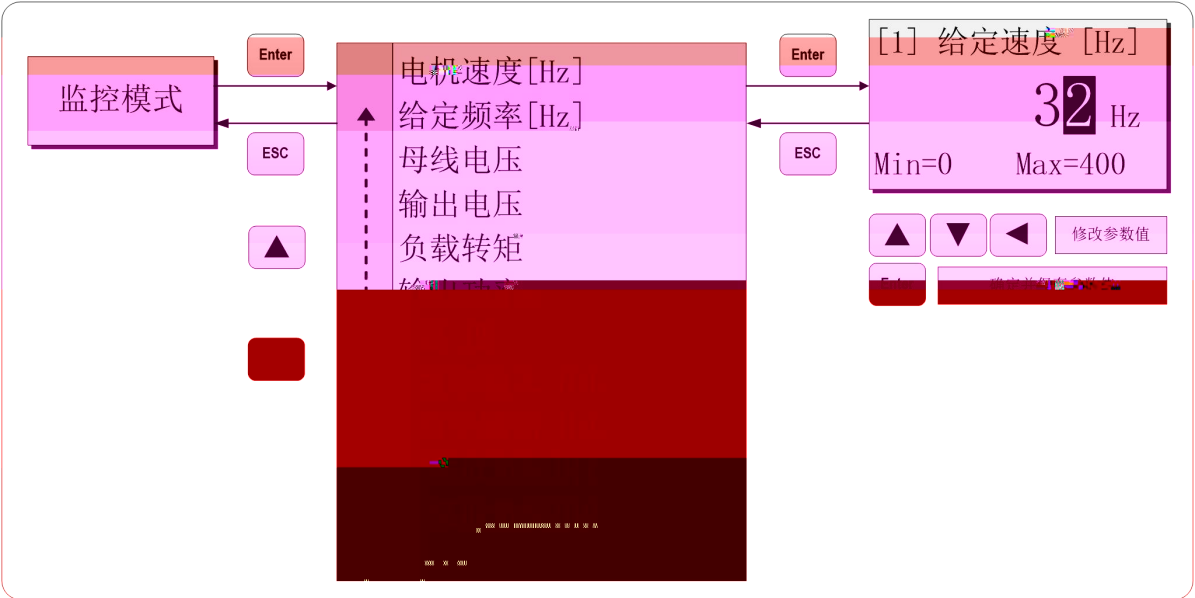
v h ı ħ h J ı



5.4

1~ Drive Monitor~

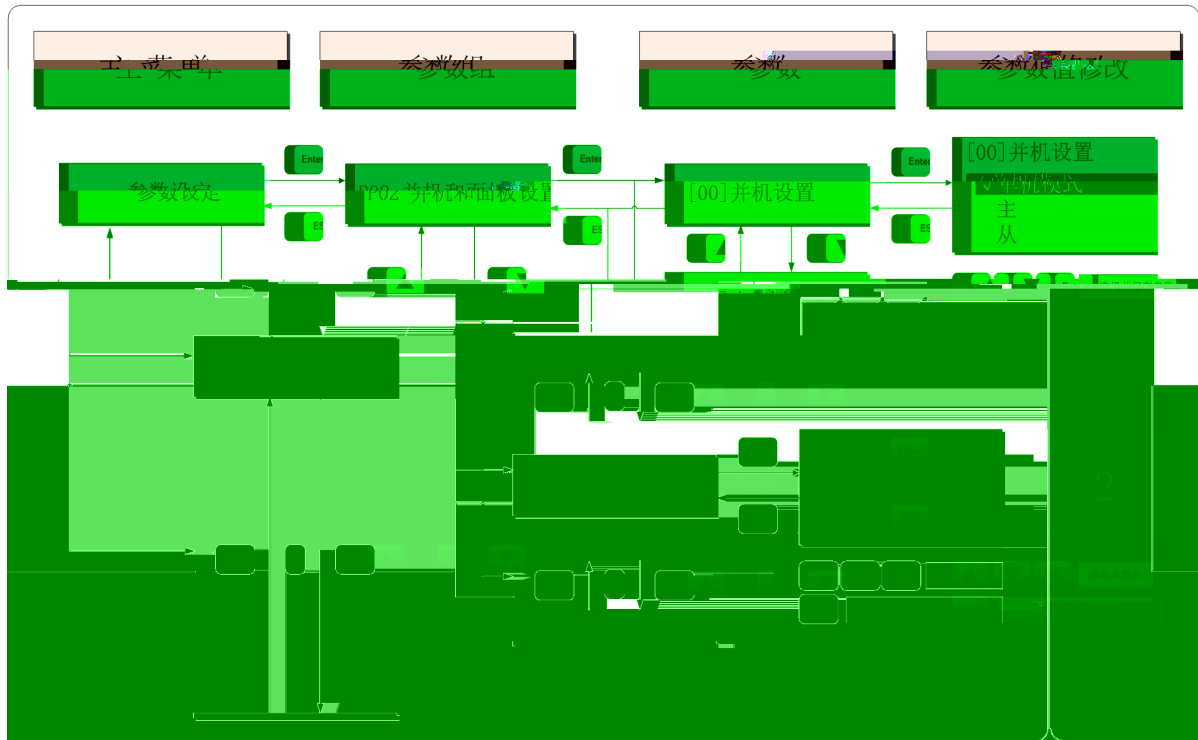
~ (I/O) ~



No	γ	β	α
[Hz]	Hz		
1	V		1
1	V	1	
	A		V
	%		
W	kW	W	
		IGBT	
[Hz]	Hz		
H:L		L	β
H:L		L	β
1	%		1
2	%		2
1	V		1
1	A		1
2	V		2
2	A		2
	rpm		
AFE	Hz		T
AFE	V		T
A	A	A	V
B	A	B	V
C	A	C	V
	A	A	T

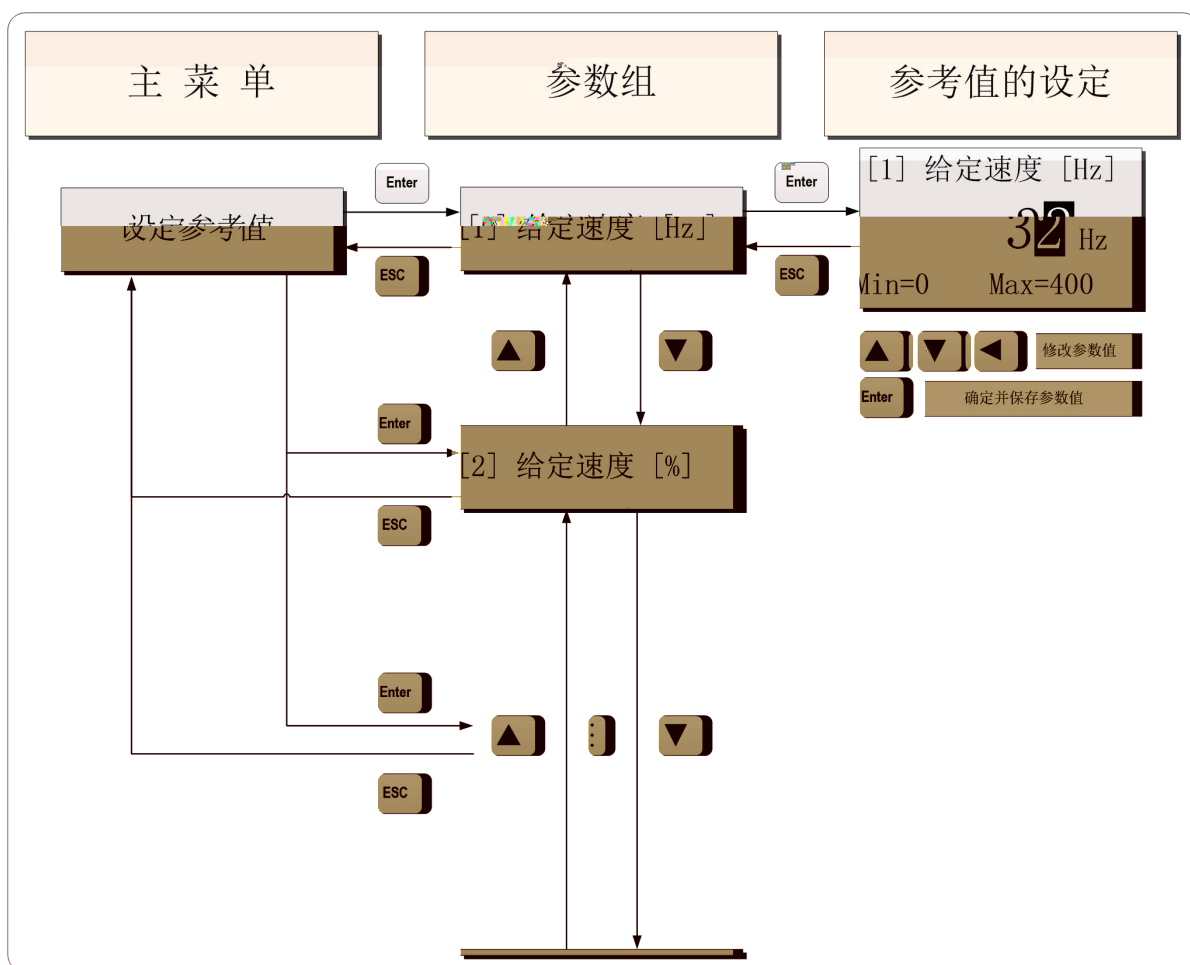
^ 2~ ǎ ^ Parameter Edit~

~ 4~ ĩ ǎ k ' ǎ 7 ü ≠ ǎ Ъ
 ~ | ü ^ H U ǎ Ы



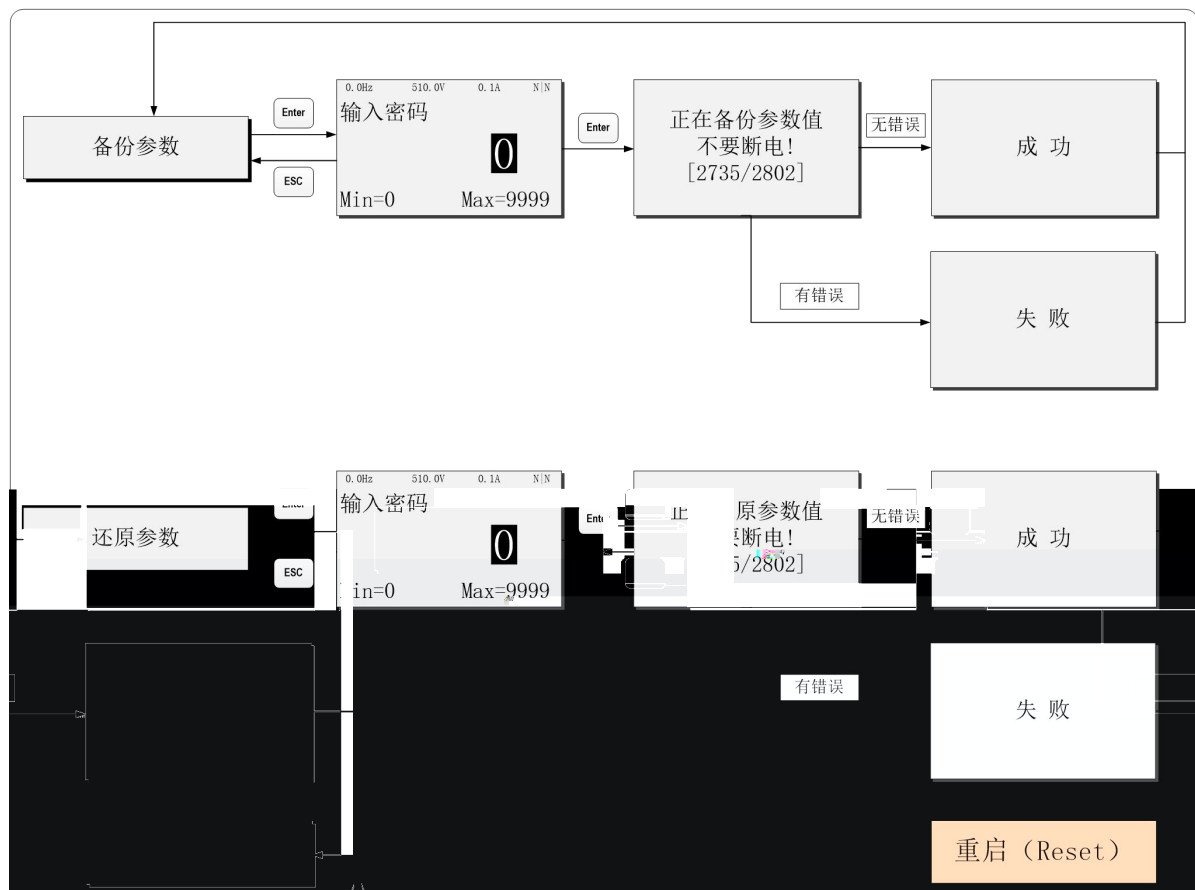
^ 3~ ã ʏ^ Reference Set~

~ ĩ Ğ ʔ Ĩ ʹ

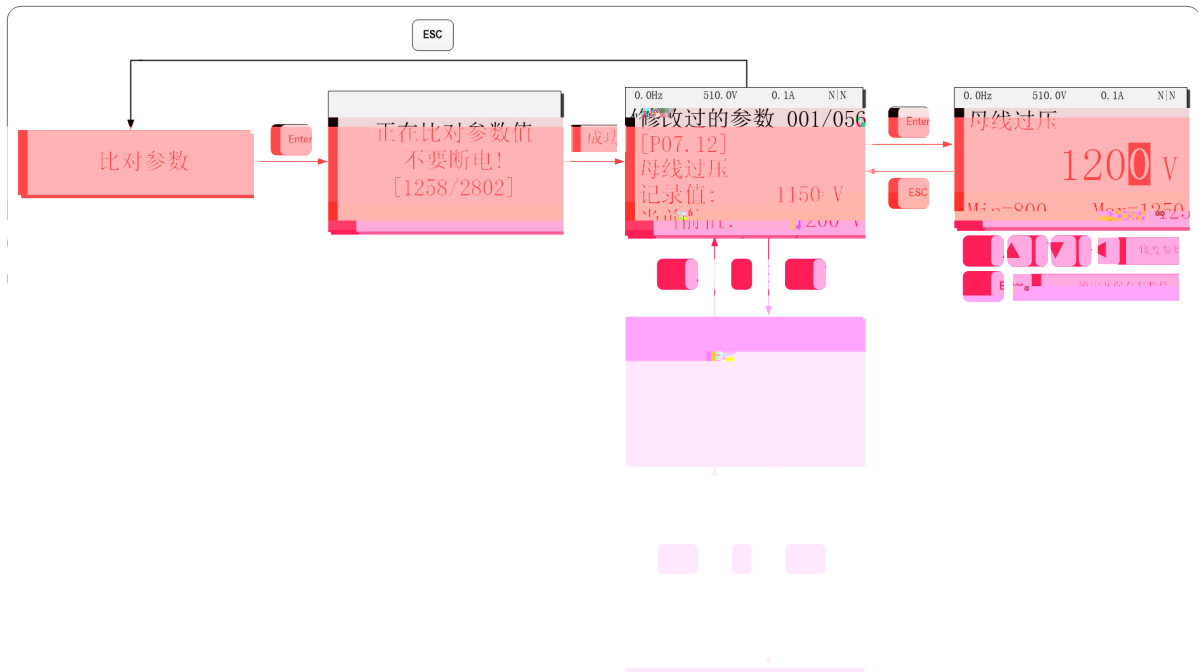


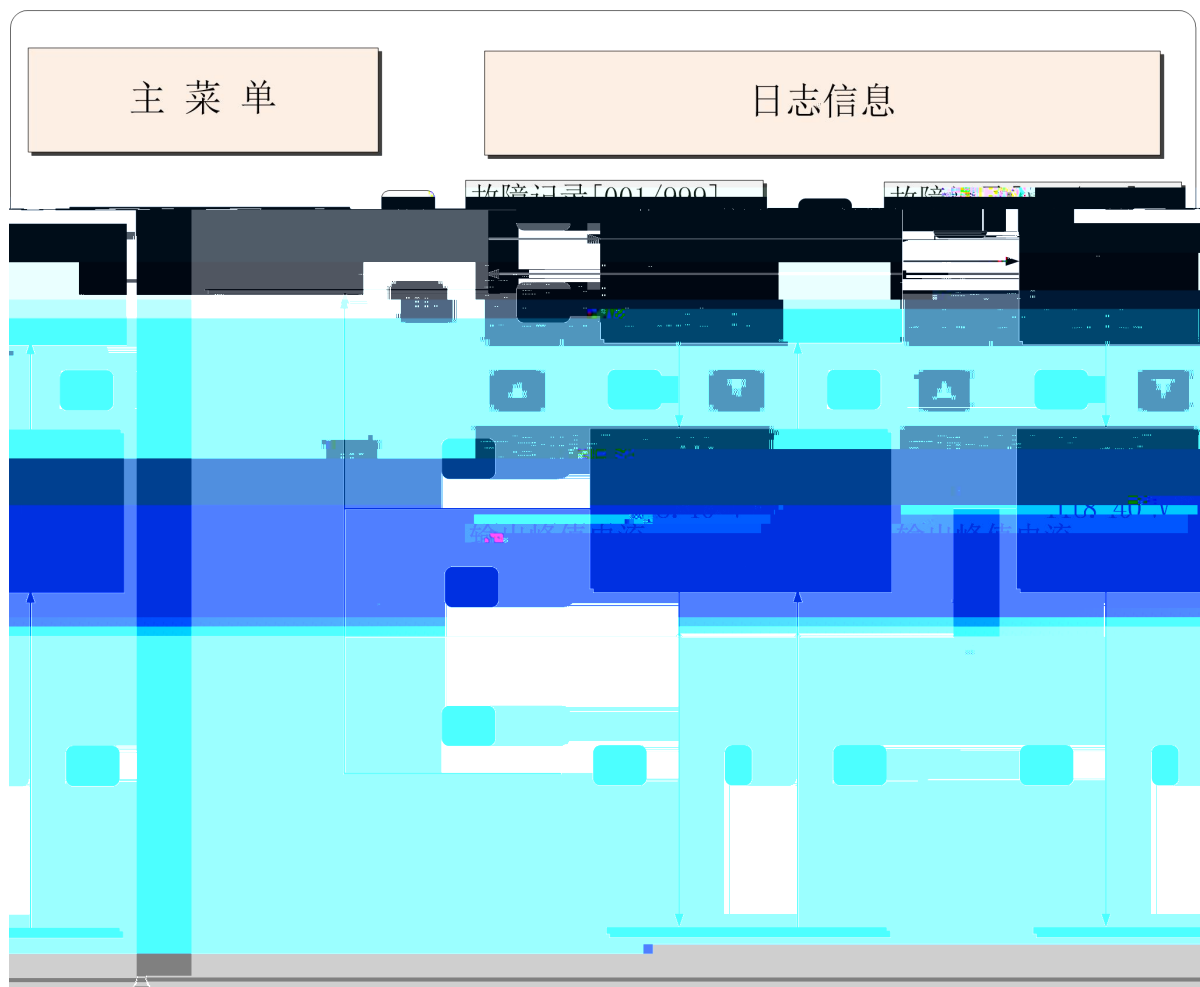
	No	ʏ ʔ	ã
Reference Set ã ʏ	Speed	[Hz]	ʏ ʔ ʔ Hz
		[%]	ʏ ʔ ʔ %
	Torque	[%]	ʏ ʔ ʔ %
	Torque limiter L	[%]	L ʏ %
	ʔ 1	[%]	1 ʔ
	ʔ 2	[%]	2 ʔ

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 ~ γ м v ~ л | □ ~ і ' і Ъ і
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 л ъ ~ ~ γ м ъ л ґ ~ ~ γ Ъ 6 л м і ~ 7
 ~ γ ~ γ л Ъ ґ ~ 2 w ~ 2
 м ' ^ 1 ~ А U Ъ ~ і Ъ ~ л Ъ ψ
 і β ^ 2 ~ л ъ wU ~ Ъ 4 ~ 5 №
 л Ъ Ѣ '



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 η Ÿ ▲,⊙ ǎ ˘ “Enter” ˘ γ ˘ k ǎ
 ‘ ǎ ˘ ψ ǎ ˘ f m γ ˘ ǎ ˘
 ǎ ˘ Ÿ





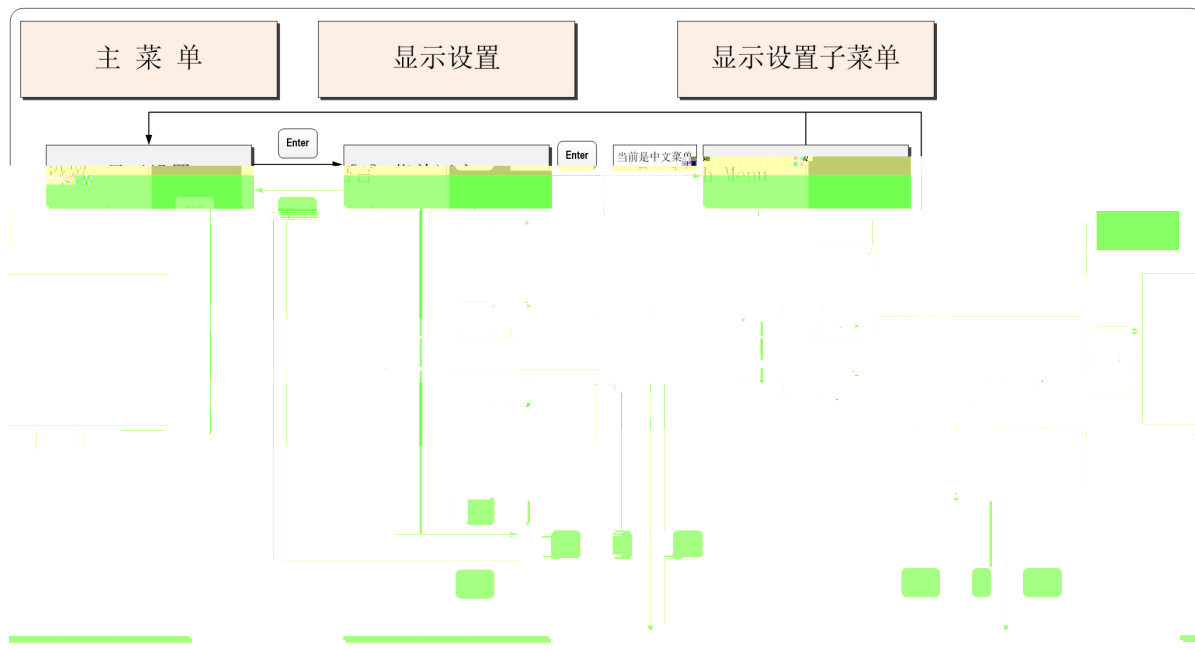


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η	~	ă í ü ≠ ă ~ ı τ g í D' E'

^ 7~ ^ Display Setting~

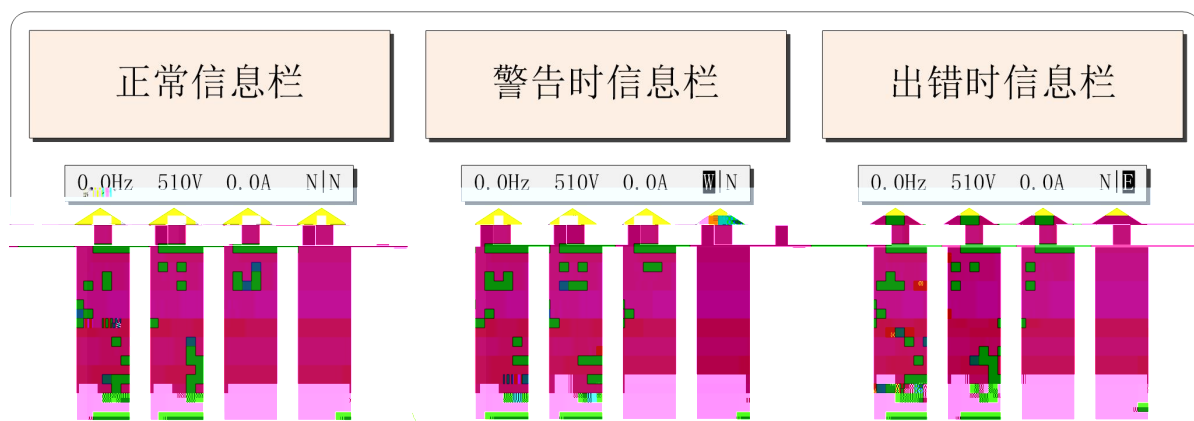
~ ~ γ ⊕ ĩ ı

b ĩ ,



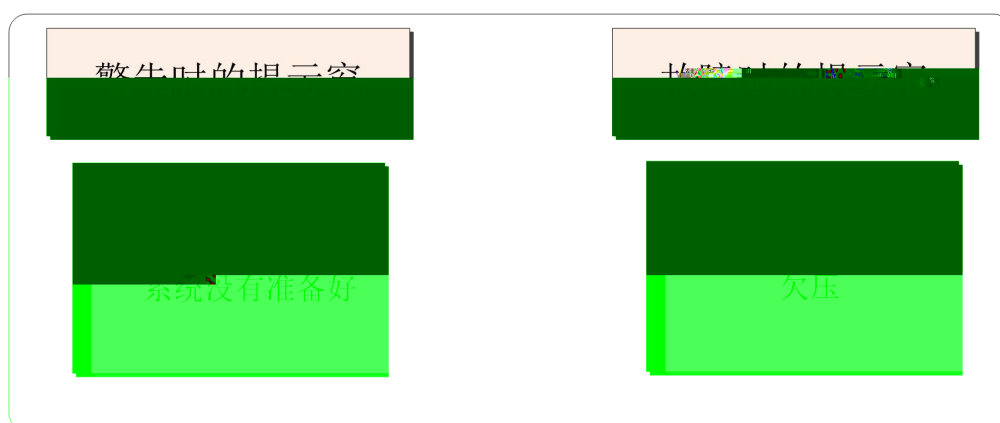
	No	ǎ
Display Set	ı	ı
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		No≠ No
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	⊙ β	b ı Ĝ w
		~ γ ~ U β~ " " ƒ U'P β

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 $\bar{H}$ $\sim$ γ $\tilde{t}$ 1 η



Warning and Error

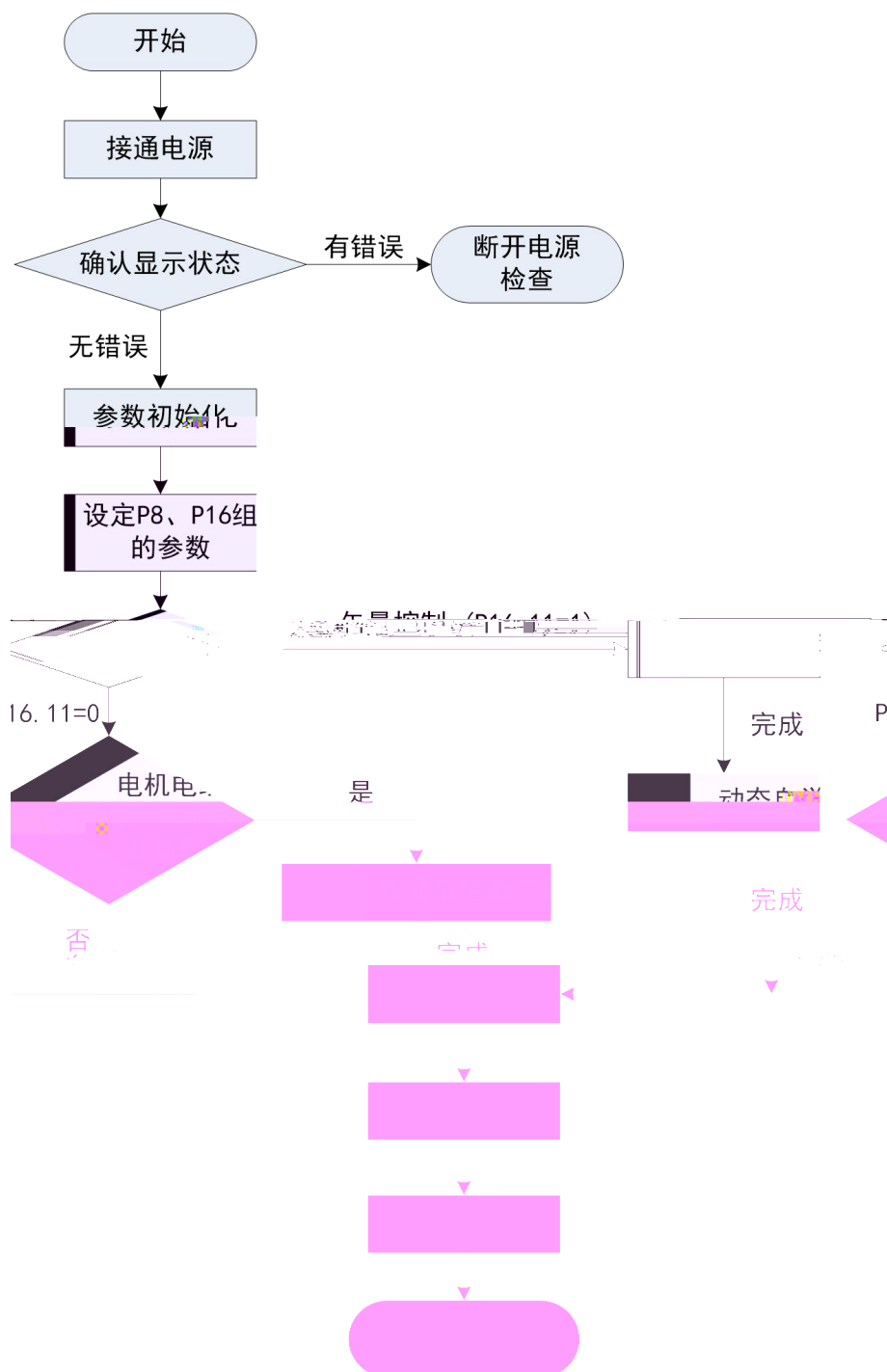
ᵱ ~ ⁂ H ~ ϑ ξ
 Й̃ ~ γ α “ RESET ” β ~ γ α “ ESC ” ϑ ξ
 ~ H ψ ϑ ϑ ξ
 U~ β~ ~ γ α “ ” τ “
 ⵜ ꝛ ϑ ξ ~ U'P “ RESET ” β
 U~ β~ ~ γ α “ ” τ “
 ξ ϑ ” ꝛ ~ U'P “ RESET ” β 15 Ъ ђ ~
 ϑ ξ ¨ ꝛ



6. 1

6.1 1

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6.2.3 ě Δ .

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6.2.4 ě

Ω Ā L ě ~ í r 7.7

w	O		v
P8.0	Ω	[0] ~ [1] b [2] DP [3] MODBUS [4] w	1
P8.3	Ā	[0] Ā [1] Ā	1
P8.6		0 300s	0
P8.7	U Ġ	Ā Ġ	0
P8.10		[0] I/O [1] ~ 1 [2] ~ 2 [3] b [4] DP [5] MODBUS [6] w	3
P8.14	v Õ	0.1 10.0	1
P8.15	v M 1	W @ v	100
P8.16	v 1	Ā P8.15 v v	3
P8.17	v M 2	H @ v	200
P8.18	v 2	Ā P8.15 v P8.17 v v	4
P8.33	∴ Õ	0.1 10.0	1
P8.34	∴ M 1	W @ ∴	100
P8.35	∴ 1	Ā P8.34 v Ā ∴	3
P8.36	∴ M 2	H @ ∴	200
P8.37	∴ 2	Ā P8.34 v P8.36 v ∴	4

ǎ

w	ǎ O	y
P16.0	~ 1	380V
P16.2	w	ǎ
P16.3	1	ǎ
P16.4		ǎ
P16.5		ǎ
P16.6		ǎ
P16.7		^ 120 × P16.5 / P16.6~ ů
P16.9	□	^ 120 × P16.5 / P16.7~
P16.11	L	[0]V/F L [1] [2]

6.2.5 ǎ ž

L ~ ž y ų ž~

- ǎ

^ 1~ L

P16.11 y~ ʈ [1] [2] † ʈ L~ ž Ğ~

ž ʈ [0] † ʈ V/F L~ 7 ž

^ 2~ ž

V/F L ų ž ž~ ʈ ž~ 7

^ P20.74~ y L ų ž ʈ y ĭ ǎ

^ P20.74 P20.78 P20.79 P20.84~

w ʈ ʈ ž~ U ~ ž ž ʈ “

ž ” ž U “ ž ”

^ 3~ - ž

L ų - ž~ - ž ʈ P20.79 P20.84 ǎ y~

⌘ P20.85~P20.97 ǎ y - ž ʈ ʈ L ų

3̃ w̄ 3̃
 w 7 7 3̃ U 3̃ 3̃ 7 “
 3̃ ” 3̃ U “
 ^ 4~ 3̃
 L Й, 3̃ U~ f t Ъ ’ Й~
 3̃ 3̃ 3̃ Ъ 50%
 3̃7 п̣ ^ P20.98~ 3̃ U~ P20.98 а
 v~ L~ γ L ↓ 3̃

6.2.6 $\exists$ $\models$ $\mathcal{H}$

HF500LC ↓ Ĩ L Ḃ ž w ‰ Ḃ ž G Ḃ

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Ъ ‰ ~ Ĩ L Ы,

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7.5%	7.5%
50%	50%
50%	50%
1/5~	1/5~
P16	P16
V/F	V/F
L	L
L	L
B	B
Z	Z

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7. ĩ ã

7.1 P1

w	O			y	
P1.21	' ↓ a	[0] ; [1] a ;	0` 1	0	

7.2 ĩ P2

w	O			y	
P2.0		[0] ĩ ' ð ç ĩ a ' [1] h' ð ç ʈ h a ' [2] ʈ' ð ç ʈ ʈ a	0` 2	0	8.1
P2.1	Ⓟ	[0] ~' L Ⓟ ' [1]DP ' L Ⓟ	0` 1	0	
P2.2		[0] ʈ ' [1]	0` 1	0	
P2.3	ʈ	' Ĩ ʈ	0` 5	1	

7.3 ~ P3

w	O			y	
P3.0	~ 1	~ w	0` 32	1	
P3.1	~ 2	~ w	0` 32	2	
P3.2	~ 3	~ w	0` 32	5	
P3.3	~ 4	~ w	0` 32	6	
P3.4	~ 5	~ w	0` 32	7	
P3.5	~ 6	~ w	0` 32	8	
P3.6	~ 7	~ w	0` 32	0	
P3.7	~ 8	~ w	0` 32	0	
P3.12	ʈ L	[0] ' [1] a	0` 1	0	



24	Å	☼ H~ w a
25	FUNC 25	
26	L	☼ H~ L ~ 7 † L
27	FUNC 27	
28	H~	☼ H~ 4
29	FUNC 29	

7.4 P4

w	O			y	
P4.0	1	w ~	0' 64	0	
P4.1	2	w ~	0' 64	0	
P4.2	3	w ~	0' 64	0	
P4.3	4	w ~	0' 64	0	
P4.4	5	w ~	0' 64	0	
P4.16	w 1	w	0' 500	0	
P4.17	w 2	w	0' 500	0	
P4.18	w 3	w	0' 500	0	
P4.19	w 4	w	0' 500	0	

w ~ w Й '

y	w	
0		K v W
1	H~	4 ^ 8.3~
2		í Õ ~ ON H~
3	L-	L- 8 4 ^ 8.3~
4		~ H~ 4
5	‰	í ‰
6	1	[6]' [9] ~ 5 4
7	2	
8	3	
9	4	
10	FUNC 10	
11	h	~ h H~

12		ð		ü		ð	
13		ð			ü		ı
14		ð		ü			ð
15		ð		ü			ð
16		FUNC 16					
17		0			1		H̃
18		1			2		H̃
19		2			3		H̃
20		3			4		H̃
21		FUNC 21					
22		γ	L	ü	γ	L	ı
23			L	ü		L	ı
24' 31		FUNC 24' FUNC 31					
32		τH̃	H̃	AFE	L		H̃ 4

+XÆ p '#rÒ ñ R' ' Póp
7

7.5 ~ P5

w	O			v	
P5.0	AI1	[0] [1]0˚ +10V [2]-10˚ +10V [3]0˚ 20mA	0˚ 3	1	
P5.1	AI1	AI1 v ĩ Ů ĩ - a v † ψ ĩ ĩ - p ĩ ψ ĩ	0.0˚ 1000.0 [ms]	25.0 [ms]	
P5.2	AI1 1 Z	AI1 1 Z	-10.00˚ 10.00 [V]	0.000 [V]	8.4
P5.3	AI1 Z	AI1 Z	-20.00˚ 20.00 [mA]	0.000 [mA]	8.4
P5.4	AI1 1	AI1 1	-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 v	AI1 v	-300.0˚ 300.0 [%]	0.0 [%]	8.4
P5.7	AI1 1	AI1 1	-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 v	AI1 v	-300.0˚ 300.0 [%]	100.0 [%]	8.4
P5.18	AI2	[0] [1]0˚ +10V [2]-10˚ +10V [3]0˚ 20mA	0˚ 3	3	

A12

P5.19 A12

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 a
 ı ĩ ψ
 ı ĩ ĩ ¨ p ĩ ψ

P6.6	A01 Z v	A01 Z v	-100.00` 100.00 [%]	0.00 [%]	
P6.7	A01 𐀀	A01 𐀀 (P6.0 𐀀 [13] v)	0.0` 100.0 [%]	0.0 [%]	
P6.8	A01	A01 𐀀 v ĩ 𐀀 ĩ 𐀀 a v † 𐀀 𐀀 v, ĩ 𐀀 p 𐀀 𐀀 ĩ	0.0` 1000.0 [ms]	10.0 [ms]	
P6.14	A02 𐀀	7-1	0` 14	4	
P6.15	w 𐀀 2	w 𐀀 v	0` 1000	0	
P6.16	A02 𐀀 v	A02 𐀀 v	-300.0` 300.0 [%]	0.0 [%]	
P6.17	A02 𐀀 v	A02 𐀀 v	-300.0` 300.0 [%]	100.0 [%]	
P6.18	A02 𐀀 [mA` V]	A02 𐀀	0.0` 100.0 [%]	0.0 [%]	
P6.19	A02 𐀀 [mA` V]	A02 𐀀	0.0` 100.0 [%]	100.0 [%]	
P6.20	A02 Z v	A02 Z v	-100.00` 100.00 [%]	0.00 [%]	
P6.21	A02 𐀀	A02 𐀀 (P6.14 𐀀 [13] v)	0.0` 100.0 [%]	0.0 [%]	
P6.22	A02	A01 𐀀 v ĩ 𐀀 ĩ 𐀀 a v † 𐀀 𐀀 v, ĩ 𐀀 p 𐀀 𐀀 ĩ	0.0` 1000.0 [ms]	10.0 [ms]	

7-1 Ȥ

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0	˘ Ȥ	˘ ĩ Ȥ
1	˘ Ȥ	˘ ĩ Ȥ
2	˘	˘
3	˘	˘
4	Ȥ	Ȥ
5	˘	˘
6	˘	˘
7		
8	1 (%)	1 (№ Ȥ)
9	Ȥ w	Ȥ w
10	Ȥ 1	Ȥ 1
11	ĩ (%)	ĩ (150 № Ȥ)
12	DP	Profibus
13	ă	ŷ ă P6.7 P6.21 ŷ Ȥ
14		β Ȥ ŷ Ȥ

7.7 Ģ ă P7

w	O			ŷ	
P7.0	L ŷ [1]	1 L ŷ	0.0` 300.0 [%]	180.0 [%]	8.6
P7.1	L ŷ [2]	2 L ŷ	0.0` 300.0 [%]	180.0 [%]	8.6
P7.2	L ŷ [3]	3 L ŷ	0.0` 300.0 [%]	180.0 [%]	8.6
P7.3	L ŷ [4]	4 L ŷ	0.0` 300.0 [%]	180.0 [%]	8.6
P7.4	Ģ [1]	1 Ģ ŷ	0.0` 300.0 [%]	235.0 [%]	8.6
P7.5	Ģ [2]	2 Ģ ŷ	0.0` 300.0 [%]	235.0 [%]	8.6
P7.6	Ģ [3]	3 Ģ ŷ	0.0` 300.0 [%]	235.0 [%]	8.6
P7.7	Ģ [4]	4 Ģ ŷ	0.0` 300.0 [%]	235.0 [%]	8.6

				í	ã	
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				

IO

í	ă						
P7.32				Ĝ	0.00` 5.00 [s]	1 [s]	
P7.33					0.0` 1000.0 [s]	360.0 [s]	
P7.47			v		0.0` 300.0 [%]	100.0 [%]	8.6
P7.48		1		1 v	0.0` 300.0 [%]	150.0 [%]	8.6
P7.49		1	"H	1	0.00` 60.00 [s]	60.00 [s]	8.6
P7.50		2		2 v	0.0` 300.0 [%]	200.0 [%]	8.6
P7.51		2	"H	2	0.00` 5000 [s]	5.00 [s]	8.6
P7.55	~	Ĝ a	[0] [1] a		0` 1	0	
P7.56	~				0.0` 200.0 [%]	10000 [%]	1
P7.57	~	u			0.0` 12.0 [s]	5 [s]	
P7.59	ƒ	Ĝ a	[0] [1] a		0` 1	1	
P7.60	ƒ	u			0.0` 3.00 [s]	0.000 [s]	s
P7.64	L		[0] [1] a		0` 1	0s	8.6 z
P7.65	L	Ω Z	1	L Ω 1 Z v	-25` 100 [V]	0 [V]	8.6
P7.66	L	b Z	1	L Ĝ 1 Z	100` 1200 i [%] s	0 p [V]	M Ů 8.6
P7.69	1	L a	[0] [1] a		07.50 i	κ ρ	8.6 ă "
P7.70	da	L Z	v				

P7.77	ı ı		0.0` 200.0 [%]	15.0 [%]	
P7.94	ı ħ	[0] L [1] ı L	0` 1	1	
P7.95	ıı	AFE L ĩı ĩı	0.0` 3000.0 [s]	15.0 [s]	
P7.96	ı	ı	0.00` 300.00 [s]	0.00 [s]	

7.8 1 Å L P8

w	O			ı	
P8.0	ı	[0] ~ [1] ħ [2] DP [3] MODBUS [4] w	0` 4	0	
P8.1	ı	ı w			
P8.2	h	h w			
P8.3	Å	[0] Å [1] Å	0` 1	0	8.7
P8.6			0.00` 300.00 [s]	0.00 [s]	8.7
P8.7	U Ĝ	Å Ĝ	0.00` 300.00 [s]	0.00 [s]	8.7
P8.10		[0] I/O [1] ~ 1 [2] ~ 2 [3] ħ [4] DP [5] MODBUS [6] w	0` 6	0	
P8.11		w			
P8.13	ı L	[0] [1] PROFIBUS [2] MODBUS [3]	0` 3	0	8.7



				í	ã	
P8.34	:	¶ 1	W @ :	0.0` 300.0 [%]	100.0 [%]	8.7
P8.35	:	1	└ P8.34 √ Å :	0.0` 300.0 [s]	3.00 [s]	8.7
P8.36	:	¶ 2	H @ :	0.0` 300.0 [%]	200.0 [%]	8.7
P8.37	:	2	└ P8.34 √ P8.36 √ :	0.0` 300.0 [s]	4.00 [s]	8.7
P8.38	:	¶ 3	33 @ :	0.0` 300.0 [%]	240.0 [%]	8.7
P8.39	:	3	└ P8.36 √ P8.38 √ :	0.0` 300.0 [s]	7.00 [s]	8.7
P8.40	:	¶ 4	@ :	0.0` 300.0 [%]	300.0 [%]	8.7
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	'E @ :	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	ñ @ :	0.0` 300.0 [%]	300.0 [%]	8.7

P8.57	Å	[0] Å [1] Å	0 1	1	
P8.58	Å :		0.00 300.00 [s]	1.50 [s]	

7.9 2 Å L P9

w	O			y	
P9.0	Å	[0] ~ [1] b [2] DP [3] MODBUS [4] w	0 4	0	
P9.1	Å	Å w			
P9.2	h	h w			
P9.3	Å	[0] Å [1] Å	0 1	0	8.7
P9.6			0.00 300.00 [s]	0.00 [s]	8.7
P9.7	U Ĝ	Å Ĝ	0.00 300.00 [s]	0.00 [s]	8.7
P9.10		[0] I/O [1] ~ 1 [2] ~ 2 [3] b [4] DP [5] MODBUS [6] w	0 6	0	
P9.11		w			
P9.13	v L	[0] [1] PROFIBUS [2] MODBUS [3]	0 3	0	8.7
P9.14	v Õ		0.1 10.0	1.0	8.7
P9.15	v ¶ 1	W @ v	0.0 300.0 [%]	100.0 [%]	8.7

P9.16	✓ 1	¿ Å P9.15 ✓ ✓	0.0` 300.0 [s]	3.00 [s]	8.7
P9.17	✓ ¶ 2	ℋ @ ✓	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	ℋ @ ✓	0.0` 300.0 [%]	240.0 [%]	8.7
P9.20	✓ 3	¿ P9.17 ✓ P9.19 ✓ ✓	0.0` 300.0 [s]	7.00 [s]	8.7
P9.21	✓ ¶ 4	@ ✓	0.0` 300.0 [%]	300.0 [%]	8.7
P9.22	✓ 4	¿ P9.19 ✓ P9.21 ✓ ✓	0.0` 300.0 [s]	10.00 [s]	8.7
P9.23	✓ ¶ 5	ℋ @ ✓	0.0` 300.0 [%]	300.0 [%]	8.7
P9.24	✓ 5	¿ P9.21 ✓ P9.23 ✓ ✓	0.0` 300.0 [s]	10.00 [s]	8.7
P9.25	✓ ¶ 6	ℋ @ ✓	0.0` 300.0 [%]	300.0 [%]	8.7
P9.26	✓ 6	¿ P9.23 ✓ P9.25 ✓ ✓	0.0` 300.0 [s]	10.00 [s]	8.7
P9.27	✓ ¶ 7	≠ @ ✓	0.0` 300.0 [%]	300.0 [%]	8.7
P9.28	✓ 7	¿ P9.25 ✓ P9.27 ✓ ✓	0.0` 300.0 [s]	10.00 [s]	8.7
P9.29	✓ ¶ 8	ℋ @ ✓	0.0` 300.0 [%]	300.0 [%]	8.7
P9.30	✓ 8	¿ P9.27 ✓ P9.29 ✓ ✓	0.0` 300.0 [s]	10.00 [s]	8.7
P9.32	⋮ L	[0] [1]PROFIBUS [2]MODBUS [3]	0` 3	0	8.7
P9.33	⋮ Ò		0.1` 10.0	1.0	8.7
P9.34	⋮ ¶ 1	ℋ @ ⋮	0.0` 300.0 [%]	100.0 [%]	8.7

P9.35	1	ç P9.34 v Å	0.0` 300.0 [s]	3.00 [s]	8.7
P9.36	2	µ @	0.0` 300.0 [%]	200.0 [%]	8.7
P9.37	2	ç P9.34 v P9.36 v	0.0` 300.0 [s]	4.00 [s]	8.7
P9.38	3	µ @	0.0` 300.0 [%]	240.0 [%]	8.7
P9.39	3	ç P9.36 v P9.38 v	0.0` 300.0 [s]	7.00 [s]	8.7
P9.40	4	@	0.0` 300.0 [%]	300.0 [%]	8.7
P9.41	4	ç P9.38 v P9.40 v	0.0` 300.0 [s]	10.00 [s]	8.7
P9.42	5	µ @	0.0` 300.0 [%]	300.0 [%]	8.7
P9.43	5	ç P9.40 v P9.42 v	0.0` 300.0 [s]	10.00 [s]	8.7
P9.44	6	µ @	0.0` 300.0 [%]	300.0 [%]	8.7
P9.45	6	ç P9.42 v P9.44 v	0.0` 300.0 [s]	10.00 [s]	8.7
P9.46	7	µ @	0.0` 300.0 [%]	300.0 [%]	8.7
P9.47	7	ç P9.44 v P9.46 v	0.0` 300.0 [s]	10.00 [s]	8.7
P9.48	8	µ @	0.0` 300.0 [%]	300.0 [%]	8.7
P9.49	8	ç P9.46 v P9.48 v	0.0` 300.0 [s]	10.00 [s]	8.7
P9.54			0.0` 300.0 [%]	0.0 [%]	
P9.55	Í h : a	[0] [1] a	0` 1	0	
P9.56	Í h :		0.00` 300.00 [s]	3.00 [s]	
P9.57	Å	[0] Å [1] Å	0` 1	1	

P9.58	Å ÷		0.00` 300.00 [s]	1.50 [s]	
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7.10 3 Ω Å L P10

w	O			v	
P10.0	Ω`	[0] ~ [1] ¢ [2]DP [3]MODBUS [4] w	0` 4	0	
P10.1	Ω`	Ω` w			
P10.2	h	h w			
P10.3	Å	[0] Å [1] Å	0` 1	0	8.7
P10.6			0.00` 300.00 [s]	0.00 [s]	8.7
P10.7	U Ĝ	Å Ĝ	0.00` 300.00 [s]	0.00 [s]	8.7
P10.10		[0] I/O [1] ~ 1 [2] ~ 2 [3] ¢ [4]DP [5]MODBUS [6] w	0` 6	0	
P10.11		w			
P10.13	v L	[0] [1]PROFIBUS [2]MODBUS [3]	0` 3	0	8.7
P10.14	v Õ		0.1` 10.0	1.0	8.7
P10.15	v ¶ 1	̄ @ v	0.0` 300.0 [%]	100.0 [%]	8.7
P10.16	v 1	¢ Å [P10.15 v v	0.0` 300.0 [s]	3.00 [s]	8.7

Í	ă							
P10.17	✓	✓ 2	ℋ @ ✓		0.0`	300.0	200.0	8.7
					[%]		[%]	
P10.18	✓	2	└ P10.15	✓ P10.17	✓	0.0`	300.0	4.00
			✓			[s]	[s]	8.7
P10.19	✓	✓ 3	ℳ @ ✓		0.0`	300.0	240.0	8.7
					[%]		[%]	
P10.20	✓	3	└ P10.17	✓ P10.19	✓	0.0`	300.0	7.00
			✓			[s]	[s]	8.7
P10.21	✓	✓ 4	@ ✓		0.0`	300.0	300.0	8.7
					[%]		[%]	
P10.22	✓	4	└ P10.19	✓ P10.21	✓	0.0`	300.0	10.00
			✓			[s]	[s]	8.7
P10.23	✓	✓ 5	ℒ @ ✓		0.0`	300.0	300.0	8.7
					[%]		[%]	
P10.24	✓	5	└ P10.21	✓ P10.23	✓	0.0`	300.0	10.00
			✓			[s]	[s]	8.7
P10.25	✓	✓ 6	ℰ @ ✓		0.0`	300.0	300.0	8.7
					[%]		[%]	
P10.26	✓	6	└ P10.23	✓ P10.25	✓	0.0`	300.0	10.00
			✓			[s]	[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	10.00
			✓			[s]	[s]	8.7
P10.29	✓	✓ 8	ℑ @ ✓		0.0`	300.0	300.0	8.7
					[%]		[%]	
P10.30	✓	8	└ P10.27	✓ P10.29	✓	0.0`	300.0	10.00
			✓			[s]	[s]	8.7
P10.32	⋮	L	[0] [1]PROFIBUS [2]MODBUS [3]		0`	3	0	8.7
P10.33	⋮	Ö			0.1`	10.0	1.0	8.7
P10.34	⋮	✓ 1	ℱ @ ⋮		0.0`	300.0	100.0	8.7
					[%]		[%]	
P10.35	⋮	1	└ P10.34	✓ Å	⋮	0.0`	300.0	3.00
					[s]		[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
P10.54			0.0` 300.0 [%]	0.0 [%]	
P10.55	í h ∩ a	[0] [1] a	0` 1	0	
P10.56	í h ∩		0.00` 300.00 [s]	3.00 [s]	
P10.57	Å	[0] Å [1] Å	0` 1	1	
P10.58	Å ∩		0.00` 300.00 [s]	1.50 [s]	

7.11 4 2 Å L P11

w	O			v	
P11.0	2	[0] ~ [1] b [2] DP [3] MODBUS [4] w	0 4	0	
P11.1	2	2 w			
P11.2	h	h w			
P11.3	Å	[0] Å [1] Å	0 1	0	8.7
P11.6			0.00 300.00 [s]	0.00 [s]	8.7
P11.7	U Ĝ	Å Ĝ	0.00 300.00 [s]	0.00 [s]	8.7
P11.10		[0] I/O [1] ~ 1 [2] ~ 2 [3] b [4] DP [5] MODBUS [6] w	0 6	0	
P11.11		w			
P11.13	v L	[0] [1] PROFIBUS [2] MODBUS [3]	0 3	0	8.7
P11.14	v Õ		0.1 10.0	1.0	8.7
P11.15	v ¶ 1	W @ v	0.0 300.0 [%]	100.0 [%]	8.7
P11.16	v 1	ç Å [P11.15 v v	0.0 300.0 [s]	3.00 [s]	8.7
P11.17	v ¶ 2	H @ v	0.0 300.0 [%]	200.0 [%]	8.7

P11.18	v	2		└ P11.15	v	└ P11.17	v	0.0	300.0	4.00		8.7	
				v				[s]		[s]			
P11.19	v	3						0.0	300.0	240.0		8.7	
								[%]		[%]			
P11.20	v	3		└ P11.17	v	└ P11.19	v	0.0	300.0	7.00		8.7	
				v				[s]		[s]			
P11.21	v	4						0.0	300.0	300.0		8.7	
								[%]		[%]			
P11.22	v	4		└ P11.19	v	└ P11.21	v	0.0	300.0	10.00		8.7	
				v				[s]		[s]			
P11.23	v	5						0.0	300.0	30000.0		8.7	
								[%]		[%]			
P11.24	v	5		└ P11.21	v	└ P11.23	v	0.0	300.0	10.00		8.7	
				v				[s]		[s]			
P11.25	v	6						0.0	300.0	300.0		8.7	
								[%]		[%]			
P11.26	v	6		└ P11.23	v	└ P11.25	v	0.0	300.0	10.00		8.7	
				v				[s]		[s]			
P11.27	v	7						0.0	300.0	300.0		8.7	
								[%]		[%]			
P11.28	v	7		└ P11.25	v	└ P11.27	v	0.0	300.0	10.00		8.7	
				v				[s]		[s]			
P11.29	v	8											

0 1 2

í	ã							
P11.37	∴	2	└ P11.34	┐ P11.36	┐	0.0` 300.0	4.00	8.7
			∴			[s]	[s]	
P11.38	∴	∩ 3	∴	∴	∴	0.0` 300.0	240.0	8.7
						[%]	[%]	
P11.39	∴	3	└ P11.36	┐ P11.38	┐	0.0` 300.0	7.00	8.7
			∴			[s]	[s]	
P11.40	∴	∩ 4				0.0` 300.0	300.0	8.7
						[%]	[%]	
P11.41	∴	4	└ P11.38	┐ P11.40	┐	0.0` 300.0	10.00	8.7
			∴			[s]	[s]	
P11.42	∴	∩ 5	∴	∴	∴	0.0` 300.0	300.0	8.7
						[%]	[%]	

[∴]

[s]

∴

БТТ'0 А'А'П'Т'Х'О

30'0

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7.12 1 L- P12

w	O			v	
P12.0		[0] ~ [1] H L	0 1	1	8.8
P12.1	γ β	[0] [%] [1] [Hz] [2] [rpm]	0 2	1	
P12.2	1		0.0 3000.0	10.0	
P12.3	2		0.0 3000.0	20.0	
P12.4	3		0.0 3000.0	35.0	
P12.5	4		0.0 3000.0	50.0	
P12.6	5		0.0 3000.0	50.0	
P12.7	6		0.0 3000.0	50.0	
P12.8	7		0.0 3000.0	50.0	
P12.9	8		0.0 3000.0	50.0	
P12.10	9		0.0 3000.0	50.0	
P12.11	10		0.0 3000.0	50.0	
P12.12	11		0.0 3000.0	50.0	
P12.13	12		0.0 3000.0	50.0	
P12.14	13		0.0 3000.0	50.0	
P12.15	14		0.0 3000.0	50.0	
P12.16	15		0.0 3000.0	50.0	
P12.17	16		0.0 3000.0	50.0	
P12.22	h v	h v	0.0 20.0 [%]	2.0 [%]	8.8
P12.23	ĩ h v	ĩ h v	0.0 20.0 [%]	0.0 [%]	8.8
P12.24	h	h	0.0 200.0 [%]	30.0 [%]	8.8
P12.25	ĩ h	ĩ h	0.0 200.0 [%]	20.0 [%]	8.8
P12.26	h	h	0.00 2.00 [s]	0.00 [s]	8.8

P12.27	í h	í h	0.00` 2.00 [s]	0.00 [s]	8.8
P12.28	h L	h	0.00` 2.00 [s]	0.07 [s]	8.8
P12.29	í h L	í h	0.00` 2.00 [s]	0.07 [s]	8.8
P12.32	h	h	0.0` 20.0 [%]	0.0 [%]	8.8
P12.33	í h	í h	0.0` 20.0 [%]	0.0 [%]	8.8
P12.34	h	h	0.00` 2.00 [s]	0.00 [s]	8.8
P12.35	í h	í h	0.00` 2.00 [s]	0.00 [s]	8.8
P12.36	h	h	0.00` 2.00 [s]	0.50 [s]	8.8
P12.37	í h	í h	0.00` 2.00 [s]	0.50 [s]	8.8

7.13 2 L- P13

w	O			v	
P13.0		[0] ~ [1]H L	0` 1	1	8.8
P13.1	γ β	[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	

7.14 3 L- P14

w	O			v	
P14.0		[0] ~ [1] H L	0 1	1	8.8
P14.1	γ β	[0] [%] [1] [Hz] [2] [rpm]	0 2	1	
P14.2	1		0.0 3000.0	10.0	
P14.3	2		0.0 3000.0	20.0	
P14.4	3		0.0 3000.0	35.0	
P14.5	4		0.0 3000.0	50.0	
P14.6	5		0.0 3000.0	50.0	
P14.7	6		0.0 3000.0	50.0	
P14.8	7		0.0 3000.0	50.0	
P14.9	8		0.0 3000.0	50.0	
P14.10	9		0.0 3000.0	50.0	
P14.11	10		0.0 3000.0	50.0	
P14.12	11		0.0 3000.0	50.0	
P14.13	12		0.0 3000.0	50.0	
P14.14	13		0.0 3000.0	50.0	
P14.15	14		0.0 3000.0	50.0	
P14.16	15		0.0 3000.0	50.0	
P14.17	16		0.0 3000.0	50.0	
P14.22	h v	h v	0.0 20.0 [%]	2.0 [%]	8.8
P14.23	ĩ h v	ĩ h v	0.0 20.0 [%]	0.0 [%]	8.8
P14.24	h	h	0.0 200.0 [%]	30.0 [%]	8.8
P14.25	ĩ h	ĩ h	0.0 200.0 [%]	20.0 [%]	8.8
P14.26	h	h	0.00 2.00 [s]	0.00 [s]	8.8

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

7.15 4 L- P15

w	O			y	
P15.0		[0] ~ [1] h L	0` 1	1	8.8
P15.1	y ß	[0] [%] [1] [Hz] [2] [rpm]	0` 2	1	
P15.2	1		0.0` 3000.0	10.0	
P15.3	2		0.0` 3000.0	20.0	
P15.4	3		0.0` 3000.0	35.0	
P15.5	4		0.0` 3000.0	50.0	
P15.6	5		0.0` 3000.0	50.0	
P15.7	6		0.0` 3000.0	50.0	
P15.8	7		0.0` 3000.0	50.0	
P15.9	8		0.0` 3000.0	50.0	
P15.10	9		0.0` 3000.0	50.0	

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

7.16 1 ã V/F P16

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

P16.22	Ω'	Ω'	0.00' 100.00 [s]	0.00 [s]	8.9
P16.23		[^] ă 7 V/F L Ĩ ~	0.00' 300.00 [Hz]	0.00 [Hz]	
P16.24		[^] ă 7 V/F L Ĩ ~	0.00' 300.00 [Hz]	50.00 [Hz]	
P16.25	L	L	0.0' 120.0 [%]	100.0 [%]	
P16.26	V/F Ω' 1 Z	V/F Ω' 1 Z	0.00' 10.00 [%]	0.75 [%]	8.9
P16.27	ℱ 1	ℱ 1	0.0' 200.0 [%]	100.0 [%]	8.9
P16.30	ℋ Ω' 1 ẽ	ℋ Ω' 1 ẽ	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 1		0.0' 125.0 [%]	11.5 [%]	
P16.36	V/F 2		0.0' 300.0 [Hz]	50.0 [Hz]	
P16.37	V/F 1 2		0.0' 125.0 [%]	100.0 [%]	
P16.38	V/F 3		0.0' 300.0 [Hz]	50.0 [Hz]	
P16.39	V/F 1 3		0.0' 125.0 [%]	100.0 [%]	
P16.40	V/F 4		0.0' 300.0 [Hz]	50.0 [Hz]	
P16.41	V/F 1 4		0.0' 125.0 [%]	100.0 [%]	
P16.42	V/F 5		0.0' 300.0 [Hz]	50.0 [Hz]	
P16.43	V/F 1 5		0.0' 125.0 [%]	100.0 [%]	
P16.44	V/F 6		0.0' 300.0 [Hz]	50.0 [Hz]	
P16.45	V/F 1 6		0.0' 125.0 [%]	100.0 [%]	
P16.46	V/F @		0' 300	0	
P16.47	1 @		0' 300	0	

P16.48		[0] [1]PID 1 [2]PID 2 [3] w	0 3	0	
P16.49	@		0 300	0	
P16.50	Q L	Q L	0.00 300.00 [s]	0.00 [s]	8.9
P16.51	Q L	Q L	0.0 150.0 [%]	70.0 [%]	8.9
P16.52	Q L	Q L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P16.54	A L	A L	0.00 300.00 [s]	0.00 [s]	8.9
P16.55	A L	A L	0.0 150.0 [%]	75.0 [%]	8.9
P16.56	A L	A L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P16.59	G ¢	G ¢	0.0 1000.0 [%]	100.0 [%]	
P16.60	G №	G №	0.0 1000.0 [%]	100.0 [%]	
P16.61	1 L ¢	1 L ¢	0.0 1000.0 [%]	100.0 [%]	
P16.62	1 L №	1 L №	0.0 1000.0 [%]	100.0 [%]	
P16.64	V/F Ъ	V/F Ъ	0.0 1000.0 [%]	100.0 [%]	8.9
P16.66	L ¢	V/F Ы L ¢	0.0 1000.0 [%]	100.0 [%]	
P16.67	Q L ¢	Q L ¢	0.0 1000.0 [%]	100.0 [%]	
P16.68	Q L №	Q L №	0.0 1000.0 [%]	100.0 [%]	
P16.69	A L ¢	A L ¢	0.0 1000.0 [%]	100.0 [%]	
P16.70	A L №	A L №	0.0 1000.0 [%]	100.0 [%]	

7.17 2 ã V/F P17

w	O		v
P17.0	~ 1	~ 1	560 760 [V] 690
P17.2	w	ã	0.0 3000.0 [kW] [kW]
P17.3	1	ã	0 700 [V] 690
P17.4		ã	0.0 3000.0 [A] [A]
P17.5		ã	0.0 300.0 [Hz] [Hz]
P17.6		ã	0 6000 [rpm] 1465 [rpm]
P17.7		ã	2 12 [pole] 4 [pole] 8.9
P17.9	□	ã	0 7200 [rpm] 1500 [rpm] 8.9
		[0] V/F L	
		[1]	
P17.11	L	[2]	0 4 0
		[3]	
		[4]	
P17.12			1.00 10.00 [kHz] 3.00 [kHz] 8.9
		[0] V/F	
P17.14	V/F	[1] V/F	0 3 0 8.9
		[2] H	
P17.15	ẽ	[0]	0 1 0 8.9
		[1] a	
P17.16	ẽ		

P17.22	Ω'	Ω'	0.00' 100.00 [s]	0.00 [s]	8.9
P17.23		[^] ã 7 V/F L Ĩ ~	0.00' 300.00 [Hz]	0.00 [Hz]	
P17.24		[^] ã 7 V/F L Ĩ ~	0.00' 300.00 [Hz]	50.00 [Hz]	
P17.25	L	L	0.0' 120.0 [%]	100.0 [%]	
P17.26	V/F Ω' 1 Z	V/F Ω' 1 Z	0.00' 10.00 [%]	0.75 [%]	8.9
P17.27	℥ 1	℥ 1	0.0' 200.0 [%]	100.0 [%]	8.9
P17.30	℥ Ω' 1 ẽ	℥ Ω' 1 ẽ	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]	5.0 [Hz]	
P17.35	V/F 1 1		0.0' 125.0 [%]	11.5 [%]	
P17.36	V/F 2		0.0' 300.0 [Hz]	50.0 [Hz]	
P17.37	V/F 1 2		0.0' 125.0 [%]	100.0 [%]	
P17.38	V/F 3		0.0' 300.0 [Hz]	50.0 [Hz]	
P17.39	V/F 1 3		0.0' 125.0 [%]	100.0 [%]	
P17.40	V/F 4		0.0' 300.0 [Hz]	50.0 [Hz]	
P17.41	V/F 1 4		0.0' 125.0 [%]	100.0 [%]	
P17.42	V/F 5		0.0' 300.0 [Hz]	50.0 [Hz]	
P17.43	V/F 1 5		0.0' 125.0 [%]	100.0 [%]	
P17.44	V/F 6		0.0' 300.0 [Hz]	50.0 [Hz]	
P17.45	V/F 1 6		0.0' 125.0 [%]	100.0 [%]	
P17.46	V/F @		0' 300	0	
P17.47	1 @		0' 300	0	

P17.48		[0] [1]PID 1 [2]PID 2 [3] w	0 3	0	
P17.49	@		0 300	0	
P17.50	Q L	Q L	0.00 300.00 [s]	0.00 [s]	8.9
P17.51	Q L	Q L	0.0 150.0 [%]	70.0 [%]	8.9
P17.52	Q L	Q L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P17.54	A L	A L	0.00 300.00 [s]	0.00 [s]	8.9
P17.55	A L	A L	0.0 150.0 [%]	75.0 [%]	8.9
P17.56	A L	A L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P17.59	G º	G º	0.0 1000.0 [%]	100.0 [%]	
P17.60	G №	G №	0.0 1000.0 [%]	100.0 [%]	
P17.61	I L º	I L º	0.0 1000.0 [%]	100.0 [%]	
P17.62	I L №	I L №	0.0 1000.0 [%]	100.0 [%]	
P17.64	V/F Ъ	V/F Ъ	0.0 1000.0 [%]	100.0 [%]	8.9
P17.66	L º	V/F Ы L º	0.0 1000.0 [%]	100.0 [%]	
P17.67	Q L º	Q L º	0.0 1000.0 [%]	100.0 [%]	
P17.68	Q L №	Q L №	0.0 1000.0 [%]	100.0 [%]	
P17.69	A L º	A L º	0.0 1000.0 [%]	100.0 [%]	
P17.70	A L №	A L №	0.0 1000.0 [%]	100.0 [%]	

7.18 3 ă V/F P18

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

P18.22	Ω'			Ω'			0.00' 100.00	0.00	8.9
							[s]	[s]	
P18.23				V/F	L	Ń	0.00' 300.00	0.00	
						ˆ ă 7	[Hz]	[Hz]	
P18.24				V/F	L	Ń	0.00' 300.00	50.00	
						ˆ ă 7	[Hz]	[Hz]	
P18.25		L				L	0.0' 120.0	100.0	
							[%]	[%]	
P18.26	V/F	Ω'	1 Z	V/F	Ω'	1 Z	0.00' 10.00	0.75	8.9
							[%]	[%]	
P18.27			Ƒ 1			Ƒ 1	0.0' 200.0	100.0	8.9
							[%]	[%]	
P18.30	Ĥ	Ω'	1	Ĥ	Ω'	1	0.0' 100.0	0.0	8.9
	ẽ			ẽ			[%]	[%]	
P18.33	V/F			V/F			0' 6	2	8.9
P18.34	V/F		1				0.0' 300.0	5.0	
							[Hz]	[Hz]	
P18.35	V/F		1 1				0.0' 125.0	11.5	
							[%]	[%]	
P18.36	V/F		2				0.0' 300.0	50.0	
							[Hz]	[Hz]	
P18.37	V/F		1 2				0.0' 125.0	100.0	
							[%]	[%]	
P18.38	V/F		3				0.0' 300.0	50.0	
							[Hz]	[Hz]	
P18.39	V/F		1 3				0.0' 125.0	100.0	
							[%]	[%]	
P18.40	V/F		4				0.0' 300.0	50.0	
							[Hz]	[Hz]	
P18.41	V/F		1 4				0.0' 125.0	100.0	
							[%]	[%]	
P18.42	V/F		5				0.0' 300.0	50.0	
							[Hz]	[Hz]	
P18.43	V/F		1 5				0.0' 125.0	100.0	
							[%]	[%]	
P18.44	V/F		6				0.0' 300.0	50.0	
							[Hz]	[Hz]	
P18.45	V/F		1 6				0.0' 2%]	20.0	

P18.48		[0] [1]PID 1 [2]PID 2 [3] w	0 3	0	
P18.49	@		0 300	0	
P18.50	Q L	Q L	0.00 300.00 [s]	0.00 [s]	8.9
P18.51	Q L	Q L	0.0 150.0 [%]	70.0 [%]	8.9
P18.52	Q L	Q L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P18.54	A L	A L	0.00 300.00 [s]	0.00 [s]	8.9
P18.55	A L	A L	0.0 150.0 [%]	75.0 [%]	8.9
P18.56	A L	A L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P18.59	G ¢	G ¢	0.0 1000.0 [%]	100.0 [%]	
P18.60	G №	G №	0.0 1000.0 [%]	100.0 [%]	
P18.61	1 L ¢	1 L ¢	0.0 1000.0 [%]	100.0 [%]	
P18.62	1 L №	1 L №	0.0 1000.0 [%]	100.0 [%]	
P18.64	V/F Ъ	V/F Ъ	0.0 1000.0 [%]	100.0 [%]	8.9
P18.66	L ¢	V/F Ы L ¢	0.0 1000.0 [%]	100.0 [%]	
P18.67	Q L ¢	Q L ¢	0.0 1000.0 [%]	100.0 [%]	
P18.68	Q L №	Q L №	0.0 1000.0 [%]	100.0 [%]	
P18.69	A L ¢	A L ¢	0.0 1000.0 [%]	100.0 [%]	
P18.70	A L №	A L №	0.0 1000.0 [%]	100.0 [%]	

7.19 4 ă V/F P19

w	O			v	
P19.0	~ 1	~ 1	560` 760 [V]	690 [V]	
P19.2	w	ă	0.0` 3000.0 [kW]	[kW]	
P19.3	1	ă	0` 700 [V]	690 [V]	
P19.4		ă	0.0` 3000.0 [A]	[A]	
P19.5		ă	0.0` 300.0 [Hz]	50.0 [Hz]	
P19.6		ă	0` 6000 [rpm]	1465 [rpm]	
P19.7		ă	2` 12 [pole]	4 [pole]	8.9
P19.9	□	ă	0` 7200 [rpm]	1500 [rpm]	8.9
P19.11	L	[0]V/F L [1] [2] [3] [4]	0` 4	0	
P19.12			1.00` 10.00 [kHz]	3.00 [kHz]	8.9
P19.14	V/F	[0] V/F [1] V/F [2] ă	0` 3	0	8.9
P19.15	ě	[0] [1] ă	0` 1	0	8.9
P19.16	ě	ě	2` 500 [ms]	500 [ms]	
P19.17	V/F L	[0] L [1] L	0` 1	0	
P19.18	ě	ě	10` 1000 [ms]	200 [ms]	
P19.19	ž	[0] [1]	0` 1	0	

P19.22	Ω'	Ω'	0.00' 100.00 [s]	0.00 [s]	8.9
P19.23		$\hat{\alpha} \gamma$ V/F L Ĩ ~	0.00' 300.00 [Hz]	0.00 [Hz]	
P19.24		$\hat{\alpha} \gamma$ V/F L Ĩ ~	0.00' 300.00 [Hz]	50.00 [Hz]	
P19.25	L	L	0.0' 120.0 [%]	100.0 [%]	
P19.26	V/F Ω' 1 Z	V/F Ω' 1 Z	0.00' 10.00 [%]	0.75 [%]	8.9
P19.27	ℱ 1	ℱ 1	0.0' 200.0 [%]	100.0 [%]	8.9
P19.30	ℋ Ω' 1 ẽ	ℋ Ω' 1 ẽ	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 1		0.0' 125.0 [%]	11.5 [%]	
P19.36	V/F 2		0.0' 300.0 [Hz]	50.0 [Hz]	
P19.37	V/F 1 2		0.0' 125.0 [%]	100.0 [%]	
P19.38	V/F 3		0.0' 300.0 [Hz]	50.0 [Hz]	
P19.39	V/F 1 3		0.0' 125.0 [%]	100.0 [%]	
P19.40	V/F 4		0.0' 300.0 [Hz]	50.0 [Hz]	
P19.41	V/F 1 4		0.0' 125.0 [%]	100.0 [%]	
P19.42	V/F 5		0.0' 300.0 [Hz]	50.0 [Hz]	
P19.43	V/F 1 5		0.0' 125.0 [%]	100.0 [%]	
P19.44	V/F 6		0.0' 300.0 [Hz]	50.0 [Hz]	
P19.45	V/F 1 6		0.0' 125.0 [%]	100.0 [%]	
P19.46	V/F @		0' 300	0	
P19.47	1 @		0' 300	0	

P19.48		[0] [1]PID 1 [2]PID 2 [3] w	0 3	0	
P19.49	@		0 300	0	
P19.50	Q L	Q L	0.00 300.00 [s]	0.00 [s]	8.9
P19.51	Q L	Q L	0.0 150.0 [%]	70.0 [%]	8.9
P19.52	Q L	Q L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P19.54	A L	A L	0.00 300.00 [s]	0.00 [s]	8.9
P19.55	A L	A L	0.0 150.0 [%]	75.0 [%]	8.9
P19.56	A L	A L	0.00 5.00 [Hz]	0.00 [Hz]	8.9
P19.59	G D	G D	0.0 1000.0 [%]	100.0 [%]	
P19.60	G No	G No	0.0 1000.0 [%]	100.0 [%]	
P19.61	I L D	I L D	0.0 1000.0 [%]	100.0 [%]	
P19.62	I L No	I L No	0.0 1000.0 [%]	100.0 [%]	
P19.64	V/F b	V/F b	0.0 1000.0 [%]	100.0 [%]	8.9
P19.66	L D	V/F Ÿ L D	0.0 1000.0 [%]	100.0 [%]	
P19.67	Q L D	Q L D	0.0 1000.0 [%]	100.0 [%]	
P19.68	Q L No	Q L No	0.0 1000.0 [%]	100.0 [%]	
P19.69	A L D	A L D	0.0 1000.0 [%]	100.0 [%]	
P19.70	A L No	A L No	0.0 1000.0 [%]	100.0 [%]	

7.20 1 L P20

w	O			v	
P20.0	L	[0] [1] a	0` 1	0	8.10
P20.1		[0] ¤ [1] ~ 1 [2] ~ 2 [3] ¤ [4] ¤ ' P20.3 v [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P20.2		☐☐☐	0` 7	0	
P20.3	v	v	-300.0` 300.0 [%]	0.0 [%]	8.10
P20.4	@		0` 300	0	
P20.5	~ v		0` 1000 [ms]	0 [ms]	
P20.6			0.0` 200.0 [%]	100.0 [%]	8.10
P20.7	L v	[0] ¢ L v [1] ¤ ' P20.8 ¤ P20.9 [2] ~ 1 [3] ~ 2 [4] ¤ [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P20.8	h L v	P20.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P20.9	ĩ h L v	P20.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P20.10	L v		0` 300	0	
P20.11	L		0` 1000 [ms]	0 [ms]	

P20.13	τ	τ	20.0` 500.0 [ms]	100.0 [ms]	8.10
P20.14	ll	1 ll	0` 60000	1024	
P20.15	ĩ h	[0] [1] a	0` 1	0	8.10
P20.16	h	h ^ 7 L ĩ ~	0.0` 300.0 [%]	100.0 [%]	
P20.17	ĩ h	ĩ h ^ 7 L ĩ ~	0.0` 300.0 [%]	100.0 [%]	
P20.18	h	h ^ 7 L ĩ ~	0.0` 300.0 [%]	0.0 [%]	
P20.19	ĩ h	ĩ h ^ 7 L ĩ ~	0.0` 300.0 [%]	0.0 [%]	
P20.20	w L a	[0] [1] a	0` 1	0	
P20.21	w L	[0] [1]	0` 1	0	
P20.22	L y	ă w ĩ	0.0` 300.0 [%]	160.0 [%]	
P20.23	y	ă w ĩ	0.0` 200.0 [%]	20.0 [%]	
P20.24	L y	ă w ĩ	0.0` 300.0 [%]	100.0 [%]	
P20.25	y	ă w ĩ	0.0` 200.0 [%]	100.0 [%]	
P20.26	β	β	0.0` 1000.0 [%]	0.0 [%]	8.10
P20.27	β ĩ	β ₪ L y~	0.00` 15.00 [%]	2.00 [%]	8.10
P20.28	L L	[0] y' ĩ g P20.16 Ğ P20.17 [1] ~ [2] ₪ [3] DP	0` 3	0	
P20.30	z ĩ~	[0] z y' g P20.31 Ğ P20.32 y z [1] ~ 1 [2] ~ 2 [3]	0` 3	0	

P20.31	Ț	Ț ȳ	0.0ˆ 100.0 [%]	5.0 [%]	
P20.32	ĩ Ț	ĩ Ț ȳ	0.0ˆ 100.0 [%]	5.0 [%]	
P20.34	□ ã a	[0] [1] a	0ˆ 1	0	8.10
P20.35	Ĝ	Å U Ĝ	0.0ˆ 100.0 [s]	0.0 [s]	
P20.36	Ȳ	Ȳ ȳ	50.0ˆ 150.0 [%]	110.0 [%]	
P20.37	Ȳ	Ȳ	0.0ˆ 150.0 [%]	100.0 [%]	8.10
P20.38	Ȳ	Ȳ	0.0ˆ 100.0 [%]	25.0 [%]	8.10
P20.39			0.0ˆ 120.0 [%]	100.0 [%]	8.10
P20.40			0.0ˆ 150.0 [%]	100.0 [%]	8.10
P20.41			0.0ˆ 150.0 [%]	135.0 [%]	
P20.42	w	[0] [1] a	0ˆ 1	1	
P20.43			25ˆ 1000 [ms]	75 [ms]	
P20.44		ˆ w Ĩ Ɓ ~	25ˆ 1000 [ms]	250 [ms]	
P20.45	h ȳ	ã w Ĩ ˆ ~	0.0ˆ 100.0 [%]	22.0 [%]	
P20.46	ĩ h ȳ	ã w Ĩ	0.0ˆ 100.0 [%]	18.0 [%]	
P20.47	h ȳ	ã w Ĩ	0.0ˆ 200.0 [%]	92.0 [%]	
P20.48	ĩ h ȳ	ã w Ĩ	0.0ˆ 200.0 [%]	87.0 [%]	
P20.49	ȳ	ã w Ĩ	0.0ˆ 150.0 [%]	100.0 [%]	
P20.51	ı L ı	ı L ı	0.0ˆ 1000.0 [%]	100.0 [%]	
P20.52	ı L №	ı L №	0.0ˆ 1000.0 [%]	100.0 [%]	

P20.53	: L Kp	L 0	0.0` 1000.0 [%]	100.0 [%]	
P20.54	: L Ki	L N0	0.0` 1000.0 [%]	100.0 [%]	
P20.55	0	L 0	0.0` 1000.0 [%]	100.0 [%]	8.10
P20.56	N0	L N0	0.0` 1000.0 [%]	100.0 [%]	8.10
P20.57	a	[0] [1] a	0` 1	0	8.10
P20.58		v	0.0` 125.0 [%]	100.0 [%]	8.10
P20.59	Å U :	Å U : v	1.0` 25.0 [%]	2.5 [%]	8.10
P20.60	DROOP L	0 ~ DROOP L	0.0` 100.0 [%]	0.0 [%]	8.10
P20.61	DROOP L	DROOP L ě Ů ě Ě ~ v	30` 2000 [ms]	50 [ms]	8.10
P20.62	0	L 0	0.0` 1000.0 [%]	100.0 [%]	8.10
P20.63	N0	L N0	0.0` 1000.0 [%]	100.0 [%]	8.10
P20.66	1	L 1	0.0` 1000.0 [%]	100.0 [%]	
P20.67	2	L 2	0.0` 1000.0 [%]	100.0 [%]	
P20.69	v β		0.00` 2.00 [%]	1.00 [%]	
P20.70	v v		0.00` 2.00 [%]	1.00 [%]	
P20.71	a	[0] [1] a	0` 1	0	
P20.72	a	[0] [1] a	0` 1	1	
P20.73		[0] × 1 [1] × 10	0` 1	0	
P20.74			0.00` 650.00 [mOhm]	0.00 [mOhm]	
P20.75	v	v	0.70` 1.00	0.90	
P20.76	1	1	90.0` 110.0 [%]	100.0 [%]	

7.21 2 L P21

w	O			v	
P21.0	L	[0] [1] a	0` 1	0	8.10
P21.1		[0] ¤ [1] ~ 1 [2] ~ 2 [3] ¤ [4] ã ' P21.3 v [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P21.2		☐,☐	0` 7	0	
P21.3	v	v	-300.0` 300.0 [%]	0.0 [%]	8.10
P21.4	@		0` 300	0	
P21.5	~ v		0` 1000 [ms]	0 [ms]	
P21.6			0.0` 200.0 [%]	100.0 [%]	8.10
P21.7	L v	[0] ¢ L v [1] ã ' P21.8 ¤ P21.9 [2] ~ 1 [3] ~ 2 [4] ¤ [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P21.8	h L v	P21.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P21.9	ĩ h L v	P21.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P21.10	L v		0` 300	0	
P21.11	L		0` 1000 [ms]	0 [ms]	
P21.13	τ	τ	20.0` 500.0 [ms]	100.0 [ms]	8.10

P21.14	ll	1 ll	0' 60000	1024	
P21.15	ĩ h	[0] [1] a	0' 1	0	8.10
P21.16	h	h ^ 7 L ã ~	0.0' 300.0 [%]	100.0 [%]	
P21.17	ĩ h	ĩ h ^ 7 L ã ~	0.0' 300.0 [%]	100.0 [%]	
P21.18	h	h ^ 7 L ã ~	0.0' 300.0 [%]	0.0 [%]	
P21.19	ĩ h	ĩ h ^ 7 L ã ~	0.0' 300.0 [%]	0.0 [%]	
P21.20	w L a	[0] [1] a	0' 1	0	
P21.21	w L	[0] [1]	0' 1	0	
P21.22	L y	ã w ã	0.0' 300.0 [%]	160.0 [%]	
P21.23	y	ã w ã	0.0' 200.0 [%]	20.0 [%]	
P21.24	L y	ã w ã	0.0' 300.0 [%]	100.0 [%]	
P21.25	y	ã w ã	0.0' 200.0 [%]	100.0 [%]	
P21.26	β	β	0.0' 1000.0 [%]	0.0 [%]	8.10
P21.27	β ã	β ¤ L y~	0.00' 15.00 [%]	2.00 [%]	8.10
P21.28	L L	[0] y' ĩ g P21.16 Ğ P21.17 [1] ~ [2] ¤ [3] DP	0' 3	0	
P21.30	z ã	[0] z y' g P21.31 Ğ P21.32 y z [1] ~ 1 [2] ~ 2 [3]	0' 3	0	
P21.31	z	z y	0.0' 100.0 [%]	5.0 [%]	

P21.32	ĭ ě	ĭ ě ě	0.0` 100.0 [%]	5.0 [%]	
P21.34	ĭ ě a	[0] [1] a	0` 1	0	8.10
P21.35	Ĝ	Å U Ĝ	0.0` 100.0 [s]	0.0 [s]	
P21.36	Œ	Œ ě	50.0` 150.0 [%]	110.0 [%]	
P21.37	Œ	Œ	0.0` 150.0 [%]	100.0 [%]	8.10
P21.38	Œ	Œ	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	w	[0] [1] a	0` 1	1	
P21.43			25` 1000 [ms]	75 [ms]	
P21.44		~ ^ w Ĩ ħ	25` 1000 [ms]	250 [ms]	
P21.45	h v	ă w Ĩ ^ ~	0.0` 100.0 [%]	22.0 [%]	
P21.46	ĭ h v	ă w Ĩ	0.0` 100.0 [%]	18.0 [%]	
P21.47	h v	ă w Ĩ	0.0` 200.0 [%]	92.0 [%]	
P21.48	ĭ h v	ă w Ĩ	0.0` 200.0 [%]	87.0 [%]	
P21.49	v	ă w Ĩ	0.0` 150.0 [%]	100.0 [%]	
P21.51	ı L ı	ı L ı	0.0` 1000.0 [%]	100.0 [%]	
P21.52	ı L №	ı L №	0.0` 1000.0 [%]	100.0 [%]	
P21.53	: L Kp	L ı	0.0` 1000.0 [%]	100.0 [%]	

				í	ã	
P21.54	:	L Ki	L No	0.0` 1000.0 [%]	100.0 [%]	
P21.55		o	L o	0.0` 1000.0 [%]	100.0 [%]	8.10
P21.56		No	L No	0.0` 1000.0 [%]	100.0 [%]	8.10
P21.57	a	[0] [1] a		0` 1	0	8.10
P21.58			v	0.0` 125.0 [%]	100.0 [%]	8.10
P21.59	Å U :		Å U : v	1.0` 25.0 [%]	2.5 [%]	8.10
P21.60	DR00P L	4 0 ~	DR00P L	0.0` 100.0 [%]	0.0 [%]	8.10
P21.61	DR00P L	DR00P L 3 Ü -		30` 2000 [ms]	50 [ms]	8.10
P21.62	o	L o		0.0` 1000.0 [%]	100.0 [%]	8.10
P21.63		L No		0.0` 1000.0 [%]	100.0 [%]	8.10
P21.66		1	L 1	0.0` 1000.0 [%]	100.0 [%]	
P21.67		2	L 2	0.0` 1000.0 [%]	100.0 [%]	
P21.69	v	β		0.00` 2.00 [%]	1.00 [%]	
P21.70	v	v		0.00` 2.00 [%]	1.00 [%]	
P21.71						

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

7.22 3 L P22

w	O			v	
P22.0	L	[0] [1] a	0` 1	0	8.10
P22.1		[0] ¤ [1] ~ 1 [2] ~ 2 [3] ¢ [4] ã ' P22.3 v [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P22.2		☐;:	0` 7	0	
P22.3	v	v	-300.0` 300.0 [%]	0.0 [%]	8.10
P22.4	@		0` 300	0	
P22.5	~ v		0` 1000 [ms]	0 [ms]	
P22.6			0.0` 200.0 [%]	100.0 [%]	8.10
P22.7	L v	[0] ¨ L v [1] ã ' P22.8 ¤ P22.9 [2] ~ 1 [3] ~ 2 [4] ¢ [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P22.8	h L v	P22.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P22.9	ĩ h L v	P22.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P22.10	L v		0` 300	0	
P22.11	L		0` 1000 [ms]	0 [ms]	

P22.13	τ	τ	20.0´ 500.0 [ms]	100.0 [ms]	8.10
P22.14	ll	1 ll	0´ 60000	1024	
P22.15	ĩ h	[0] [1] a	0´ 1	0	8.10
P22.16	h	h ^ 7 L ĩ ~	0.0´ 300.0 [%]	100.0 [%]	
P22.17	ĩ h	ĩ h ^ 7 L ĩ ~	0.0´ 300.0 [%]	100.0 [%]	
P22.18	h	h ^ 7 L ĩ ~	0.0´ 300.0 [%]	0.0 [%]	
P22.19	ĩ h	ĩ h ^ 7 L ĩ ~	0.0´ 300.0 [%]	0.0 [%]	
P22.20	w L a	[0] [1] a	0´ 1	0	
P22.21	w L	[0] [1]	0´ 1	0	
P22.22	L y	ã w ĩ	0.0´ 300.0 [%]	160.0 [%]	
P22.23	y	ã w ĩ	0.0´ 200.0 [%]	20.0 [%]	
P22.24	L y	ã w ĩ	0.0´ 300.0 [%]	100.0 [%]	
P22.25	y	ã w ĩ	0.0´ 200.0 [%]	100.0 [%]	
P22.26	β	β	0.0´ 1000.0 [%]	0.0 [%]	8.10
P22.27	β ã	β ¢ L y~	0.00´ 15.00 [%]	2.00 [%]	8.10
P22.28	L L	[0] y' ĩ g P22.16 Ğ P22.17 [1] ~ [2] ¢ [3] DP	0´ 3	0	
P22.30	z ĩ~	[0] z y' g P22.31 Ğ P22.32 y z [1] ~ 1 [2] ~ 2 [3]	0´ 3	0	

					ĩ	ǎ	
P22.31	Ț		Ț	Ț	0.0` 100.0 [%]	5.0 [%]	
P22.32	ĩ	Ț	ĩ	Ț	0.0` 100.0 [%]	5.0 [%]	
P22.34	□	ẽ a	[0] [1] a		0` 1	0	8.10
P22.35	Ĝ		Å U	Ĝ	0.0` 100.0 [s]	0.0 [s]	
P22.36	Ω'		Ω'	Ț	50.0` 150.0 [%]	110.0 [%]	
P22.37	Ω'		Ω'		0.0` 150.0 [%]	100.0 [%]	8.10
P22.38	Ω'		Ω'		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 [%]	130.0 [%]	
P22.42	w		[0] [1] a		0` 1	1	
P22.43					25` 1000 [ms]	75 [ms]	
P22.44	Q		^	w ĩ ʔ		100	

P22.53	: L Kp	L 0	0.0` 1000.0 [%]	100.0 [%]	
P22.54	: L Ki	L №	0.0` 1000.0 [%]	100.0 [%]	
P22.55	0	L 0	0.0` 1000.0 [%]	100.0 [%]	8.10
P22.56	№	L №	0.0` 1000.0 [%]	100.0 [%]	8.10
P22.57	a	[0] [1] a	0` 1	0	8.10
P22.58		v	0.0` 125.0 [%]	100.0 [%]	8.10
P22.59	Å U :	Å U : v	1.0` 25.0 [%]	2.5 [%]	8.10
P22.60	DROOP L	0 ~ DROOP L	0.0` 100.0 [%]	0.0 [%]	8.10
P22.61	DROOP L	DROOP L ě Ů ě Ė ~ v	30` 2000 [ms]	50 [ms]	8.10
P22.62	0	L 0	0.0` 1000.0 [%]	100.0 [%]	8.10
P22.63	№	L №	0.0` 1000.0 [%]	100.0 [%]	8.10
P22.66	1	L 1	0.0` 1000.0 [%]	100.0 [%]	
P22.67	2	L 2	0.0` 1000.0 [%]	100.0 [%]	
P22.69	v β		0.00` 2.00 [%]	1.00 [%]	
P22.70	v v		0.00` 2.00 [%]	1.00 [%]	
P22.71	a	[0] [1] a	0` 1	0	
P22.72	a	[0] [1] a	0` 1	1	
P22.73		[0] × 1 [1] × 10	0` 1	0	
P22.74			0.00` 650.00 [mOhm]	0.00 [mOhm]	
P22.75	v	v	0.70` 1.00	0.90	
P22.76	1	1	90.0` 110.0 [%]	100.0 [%]	

P22.77	2	2	90.0´ 110.0 [%]	100.0 [%]	
P22.78			0.00´ 650.00 [mOhm]	0.00 [mOhm]	
P22.79			0.00´ 65.50 [mH]	0.000 [mH]	
P22.80	1	1	0.800´ 1.350	1.140	
P22.81	2	2	0.800´ 1.350	0.940	
P22.82	3	3	0.800´ 1.350	1.080	
P22.83	4	4	0.800´ 1.350	0.950	
P22.84			0.00´ 655.00 [mH]	0.00 [mH]	
P22.85	85%	85% ε	40.0´ 150.0 [%]	108.0 [%]	
P22.86	87.5%	87.5% ε	40.0´ 150.0 [%]	106.5 [%]	
P22.87	90%	90% ε	40.0´ 150.0 [%]	105.0 [%]	
P22.88	92.5%	92.5% ε	40.0´ 150.0 [%]	103.5 [%]	
P22.89	95%	95% ε	40.0´ 150.0 [%]	102.0 [%]	
P22.90	102.5%	102.5% ε	40.0´ 150.0 [%]	99.0 [%]	
P22.91	105%	105% ε	40.0´ 150.0 [%]	96.5 [%]	
P22.92	110%	110% ε	40.0´ 150.0 [%]	93.0 [%]	
P22.93	115%	115% ε	40.0´ 150.0 [%]	88.5 [%]	
P22.94	120%	120% ε	40.0´ 150.0 [%]	83.0 [%]	
P22.95	125%	125% ε	40.0´ 150.0 [%]	77.0 [%]	
P22.96	130%	130% ε	40.0´ 150.0 [%]	70.5 [%]	
P22.97	135%	135% ε	40.0´ 150.0 [%]	63.5 [%]	
P22.98	´	´ (γ)	0.01´ 300.00 [s]	0.75 [s]	
P22.99			0.00´ 10.00 [%]	0.00 [%]	

7.23 4 L P23

w	O			v	
P23.0	L	[0] [1] a	0` 1	0	8.10
P23.1		[0] ¤ [1] ~ 1 [2] ~ 2 [3] ¢ [4] ã ' P23.3 v [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P23.2		☐,☐	0` 7	0	
P23.3	v	v	-300.0` 300.0 [%]	0.0 [%]	8.10
P23.4	@		0` 300	0	
P23.5	~ v		0` 1000 [ms]	0 [ms]	
P23.6			0.0` 200.0 [%]	100.0 [%]	8.10
P23.7	L v	[0] ¨ L v [1] ã ' P23.8 ¤ P23.9 [2] ~ 1 [3] ~ 2 [4] ¢ [5]DP [6]MODBUS [7] w	0` 7	0	8.10
P23.8	h L v	P23.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P23.9	ĩ h L v	P23.7 [1] v	0.0` 300.0 [%]	200.0 [%]	8.10
P23.10	L v		0` 300	0	
P23.11	L		0` 1000 [ms]	0 [ms]	
P23.13	τ	τ	20.0` 500.0 [ms]	100.0 [ms]	8.10

P23.14	ll	1 ll	0' 60000	1024	
P23.15	ĩ h	[0] [1] a	0' 1	0	8.10
P23.16	h	h ^ 7 L ã ~	0.0' 300.0 [%]	100.0 [%]	
P23.17	ĩ h	ĩ h ^ 7 L ã ~	0.0' 300.0 [%]	100.0 [%]	
P23.18	h	h ^ 7 L ã ~	0.0' 300.0 [%]	0.0 [%]	
P23.19	ĩ h	ĩ h ^ 7 L ã ~	0.0' 300.0 [%]	0.0 [%]	
P23.20	w L a	[0] [1] a	0' 1	0	
P23.21	w L	[0] [1]	0' 1	0	
P23.22	L y	ã w ã	0.0' 300.0 [%]	160.0 [%]	
P23.23	y	ã w ã	0.0' 200.0 [%]	20.0 [%]	
P23.24	L y	ã w ã	0.0' 300.0 [%]	100.0 [%]	
P23.25	y	ã w ã	0.0' 200.0 [%]	100.0 [%]	
P23.26	β	β	0.0' 1000.0 [%]	0.0 [%]	8.10
P23.27	β ã	β ¤ L y~	0.00' 15.00 [%]	2.00 [%]	8.10
P23.28	L L	[0] y' ã g P23.16 ¤ P23.17 [1] ~ [2] ¤ [3] DP	0' 3	0	
P23.30	z ã ã	[0] z y' g P23.31 ¤ P23.32 y z [1] ~ 1 [2] ~ 2 [3]	0' 3	0	
P23.31	z	z y	0.0' 100.0 [%]	5.0 [%]	

P23.32	ĭ Ț	ĭ Ț ȳ	0.0` 100.0 [%]	5.0 [%]	
P23.34	□ ẽ a	[0] [1] a	0` 1	0	8.10
P23.35	Ĝ	Å U Ĝ	0.0` 100.0 [s]	0.0 [s]	
P23.36	Đ	Đ ȳ	50.0` 150.0 [%]	110.0 [%]	
P23.37	Đ	Đ	0.0` 150.0 [%]	100.0 [%]	8.10
P23.38	Đ	Đ	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	w	[0] [1] a	0` 1	1	
P23.43			25` 1000 [ms]	75 [ms]	
P23.44		~ ^ w Ĩ Ɓ	25` 1000 [ms]	250 [ms]	
P23.45	h ȳ	ă w Ĩ ^ ~	0.0` 100.0 [%]	22.0 [%]	
P23.46	ĭ h ȳ	ă w Ĩ	0.0` 100.0 [%]	18.0 [%]	
P23.47	h ȳ	ă w Ĩ	0.0` 200.0 [%]	92.0 [%]	
P23.48	ĭ h ȳ	ă w Ĩ	0.0` 200.0 [%]	87.0 [%]	
P23.49	ȳ	ă w Ĩ	0.0` 150.0 [%]	100.0 [%]	
P23.51	ı L ɒ	ı L ɒ	0.0` 1000.0 [%]	100.0 [%]	
P23.52	ı L №	ı L №	0.0` 1000.0 [%]	100.0 [%]	
P23.53	: L Кр	L ɒ	0.0` 1000.0 [%]	100.0 [%]	

P23.54	: L Ki	L №	0.0` 1000.0 [%]	100.0 [%]	
P23.55	o	L o	0.0` 1000.0 [%]	100.0 [%]	8.10
P23.56	№	L №	0.0` 1000.0 [%]	100.0 [%]	8.10
P23.57	a	[0] [1] a	0` 1	0	8.10
P23.58		v	0.0` 125.0 [%]	100.0 [%]	8.10
P23.59	Å U :	Å U : v	1.0` 25.0 [%]	2.5 [%]	8.10
P23.60	DROOP L	4 0 ~ DROOP L	0.0` 100.0 [%]	0.0 [%]	8.10
P23.61	DROOP L	DROOP L ž Ů - Ė v	30` 2000 [ms]	50 [ms]	8.10
P23.62	o	L o	0.0` 1000.0 [%]	100.0 [%]	8.10
P23.63	№	L №	0.0` 1000.0 [%]	100.0 [%]	8.10
P23.66	1	L 1	0.0` 1000.0 [%]	100.0 [%]	
P23.67	2	L 2	0.0` 1000.0 [%]	100.0 [%]	
P23.69	v β		0.00` 2.00 [%]	1.00 [%]	
P23.70	v v		0.00` 2.00 [%]	1.00 [%]	
P23.71	a	[0] [1] a	0` 1	0	
P23.72	a	[0] [1] a	0` 1	1	
P23.73		[0] × 1 [1] × 10	0` 1	0	
P23.74			0.00` 650.00 [mOhm]	0.00 [mOhm]	
P23.75	v	v	0.70` 1.00	0.90	
P23.76	1	1	90.0` 110.0 [%]	100.0 [%]	
P23.77	2	2	90.0` 110.0 [%]	100.0 [%]	

P23.78			0.00	650.00	0.00
			[mOhm]		[mOhm]
P23.79			0.00	65.50	0.000
			[mH]		[mH]
P23.80	1	1	0.800	1.350	1.140
P23.81	2	2	0.800	1.350	0.940
P23.82	3	3	0.800	1.350	1.080
P23.83	4	4	0.800	1.350	0.950
P23.84			0.00		

3 E €+6 O

7.24 MODBUS P32

w	O			y	
P32.0	MODBUS a	[0] [1] a	0 1	0	
P32.1	MODBUS l ID	h	1 255	1	
P32.2	o	[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	β	[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 4 0 Modbus	0 100 [s]	0 [s]	4 0s
P32.6	Modbus	' 0- ' 1-	0 1	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	0` 7	0	
P33.53	⌘ [W4]	7-3	0` 48	1	

P33.54	[W4]	₹	[0] × 1	0` 7	0
			[1] × 10		
			[2] × 100		
			[3] × 1000		
			[4] × 10000		
			[5] [%] × 1		
			[6] [%] × 10		
			[7] [%] × 100		
P33.55		₹ [W5]	7-3	0` 48	19
P33.56	[W5]	₹	[0] × 1	0` 7	2
			[1] × 10		
			[2] × 100		
			[3] × 1000		
			[4] × 10000		
			[5] [%] × 1		
			[6] [%] × 10		
			[7] [%] × 100		
P33.57		₹ [W6]	7-3	0` 48	26
P33.58	[W6]	₹	[0] × 1	0` 7	6
			[1] × 10		
			[2] × 100		
			[3] × 1000		
			[4] × 10000		
			[5] [%] × 1		
			[6] [%] × 10		
			[7] [%] × 100		
P33.59		₹ [W7]	7-3	0` 48	30
P33.60	[W7]	₹	[0] × 1	0` 7	1
			[1] × 10		
			[2] × 100		
			[3] × 1000		
			[4] × 10000		
			[5] [%] × 1		
			[6] [%] × 10		
			[7] [%] × 100		
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]	$[0] \times 1$ $[1] \times 10$ $[2] \times 100$ $[3] \times 1000$ $[4] \times 10000$ $[5] [\%] \times 1$ $[6] [\%] \times 10$ $[7] [\%] \times 100$	0` 7	0	
P33.71	₹ [W13]	7-3	0` 48	0	
P33.72	₹ [W13]	$[0] \times 1$ $[1] \times 10$ $[2] \times 100$ $[3] \times 1000$ $[4] \times 10000$ $[5] [\%] \times 1$ $[6] [\%] \times 10$ $[7] [\%] \times 100$	0` 7	0	
P33.73	₹ [W14]	7-3	0` 48	0	
P33.74	₹ [W14]	$[0] \times 1$ $[1] \times 10$ $[2] \times 100$ $[3] \times 1000$ $[4] \times 10000$ $[5] [\%] \times 1$ $[6] [\%] \times 10$ $[7] [\%] \times 100$	0` 7	0	
P33.75	₹ [W15]	7-3	0` 48	0	
P33.76	₹ [W15]	$[0] \times 1$ $[1] \times 10$ $[2] \times 100$ $[3] \times 1000$ $[4] \times 10000$ $[5] [\%] \times 1$ $[6] [\%] \times 10$ $[7] [\%] \times 100$	0` 7	0	

7-2 ~

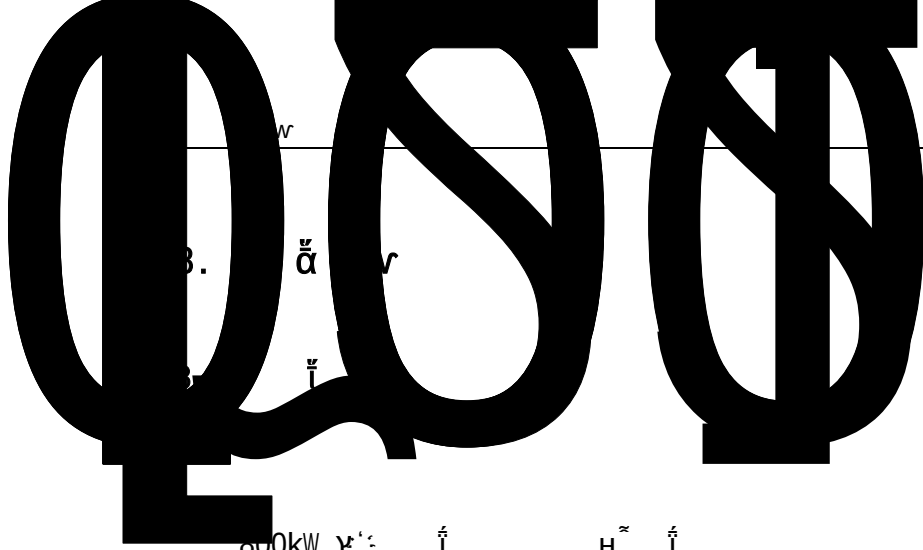
v	
0	b a
1	L 0
2	L 1
3	L 2
4	L 3
5	L 4
6	β [32]
7	v β [32]
8	32_MSW
9	32_LSW
10	⌘
11	ã L
12	ã 0 @32bit
13	ã 1 @32bit
14	ã 2 @32bit
15	ã 3 @32bit
16	ã 4 @32bit
17	ã 5 @32bit
18	[Hz]
19	[rpm]
20	[%]
21	[%]
22	L v [%]
23	L v [Hz]
24	w
25	w
26	⌘ 1[%]
27	⌘ 2[%]
28	v L
29	⋮ L
30~ 37	SET_W12~ 19

N

WW

Ww

29	C v
30	v
31	ƒ 1
32	
33	~ 1
34	~ 2
35	ƒ w
36	
37	
38	
39	v
40	
41· 48	AW22· 29



800kW $\gamma_{1,2}$ $\tilde{t}$ $H_1^{\sim}$ $\tilde{t}$ γ_{12} $\sim$ $\square$ 1600kW $H_1^{\sim}$ 800kW
 $\sim$ $\tilde{\alpha}$ P2.0 $\sim$

8.2 $\sim$

L

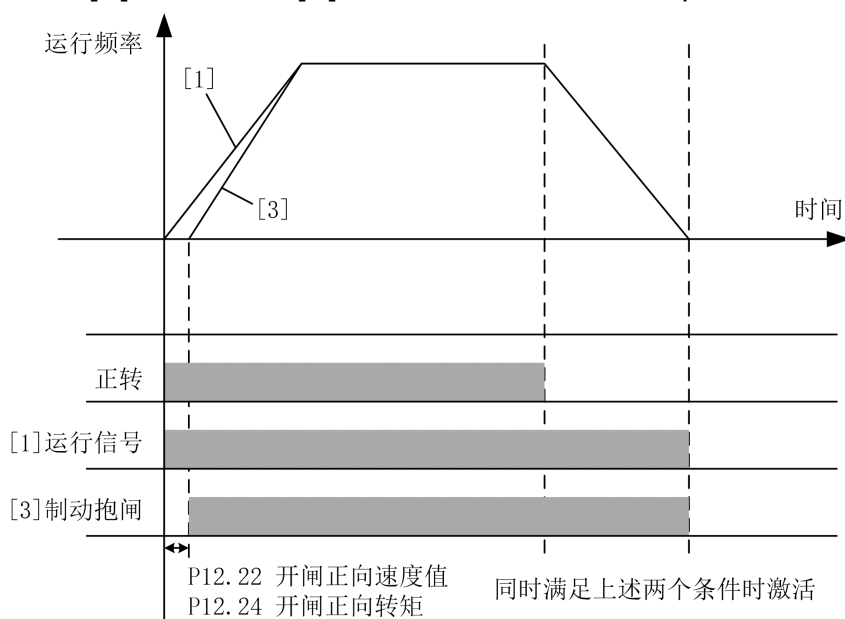
$\square \gamma$ $\tilde{\alpha}$ P12.0 $\sim$ [0]

B. [1] H L

4 16 (8421) 7 ~
 (FORWARD) i (REVERSE) H ~ γ α P12.2(1) ξ γ v
 T v

8.3 8

L L
 L ~ i L L / H L L H
 ~ 4 [1] H [3] L , L L H 4 [3] L
 H [1] H b [3] L ≠ α Y ,



i H T i h f T L b ψ

8.6 Ĝ ǎ

^ 1~ L w

P7.0 P7.1 P7.2 P7.3 L w ' L

ṽ w Ω~

^ 2~ Ĝ w

P7.4 P7.5 P7.6 P7.7 Ĝ w ' ǎ P7.4 ǎ γ ǎ P16.4

^ ~ ṽ w Ω~ ⊕ Ĩ ƒ ṽ ʝ

No

^ 3~ Ĝ

P7.8 P7.9 P7.10 P7.11 Ĝ ṽ Ĩ ƒ Ĩ I_a + I_b + I_c'

' P16.4 $\frac{I_a + I_b + I_c}{P} > P$ P ~ w Ω~

f ⊕ Ĩ ƒ

' ƒ Ψ

^ 4~ 1 1 Ĝ

P7.12 P7.13 1 1 Ĝ w ' Ĩ 1 ǎ P7.12 ṽ

w Ω~ f ⊕ Ĩ ƒ Ĩ 1 γ G P7.13 ṽ w Ω~

f ⊕ Ĩ ƒ ṽ

^ 5~ Ĝ

P7.14 w ' Ĩ IGBT ǎ P7.14 ṽ w Ω~

f ⊕ Ĩ ƒ ƒ Ĩ

P7.15 w ' Ĩ Å Ĩ Ĩ IGBT ǎ P7.15

ṽ w Ω~

^ 6~ Ĝ

P7.19 P7.20 P7.21 P7.22 w ' ǎ P7.19 ṽ

w Ω~ f ⊕ Ĩ ƒ P7.19 P7.22 ṽ No

^ 7~ Ǒ Ġ

P7.23 Ġ 7 L 4 ^ P16.11=1~ ǎ P7.23 4 ʏ
 ~ Ġ w L ǎ Ǒ Z ʏ ~ Ǒ
 ~ f P7.23 ʏ ↓ w Ǒ ~ f ②

ǐ ǎ

P7.24' P7.26 Ġ 37 L 4 ^ P17.11=1 P18.11=1 P19.11=1~
 ǎ ~ 7 ǎ □

^ 8~ Ġ

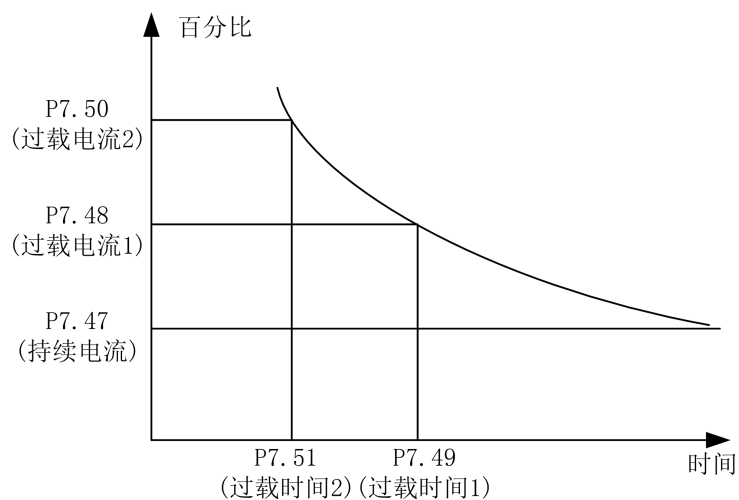
P7.31 P7.32 Ġ w ~ 7 L 4 ^ P16.11=2~ ǎ
 P7.31 Z ʏ 100% P7.32
 ǎ ǎ ~ ǎ P7.31 ʏ P7.32
 ~ w Ǒ ~ f ② ǐ ǎ

^ 9~ 3 Ġ

P7.33 3 ~ 3 ǎ ǎ ~ 3
 P7.33 ~ w Ǒ ~ 3

^ 10~ Ġ w

P7.48 P7.50 Ġ w ' Ġ ʏ ~ w Ǒ ~ f ②
 ǐ ǎ ǐ Ġ ǎ ǎ ' ǎ



^ 11~ ρ L 1H

P7.64 P7.65 P7.66 α 7 i ρ L 1H ~ 1 HF500LC ↓
i T 30kW i γ Hw b P7.64 1 U w a 1
G L Q 1 y ~ ρ L 1H b~ α P7.65 L η 1
y α P7.66 ~ L η 1 y w b G L Q 1 y ~
P16.66 ≥ P16.65 P16.0 ~ 1 1 690V P7.65 1 0V ~ L Q 1 y 1 1068V
P7.66 1 20V ~ L η 1 y 1 1088V 'E H'
L Q 1 y = √ + + ,
L η 1 y = √ + +

^ 12~ 1 Lw

P7.69 P7.70 α b U ψ j : P7.69 y 1 0 ~
i L 1H ξ P16.0 ~ 1 1 690V P7.70 1 0V ~ 1 L
y 1 1093V 'E ' 1 L y = √ + + i r H ' ,



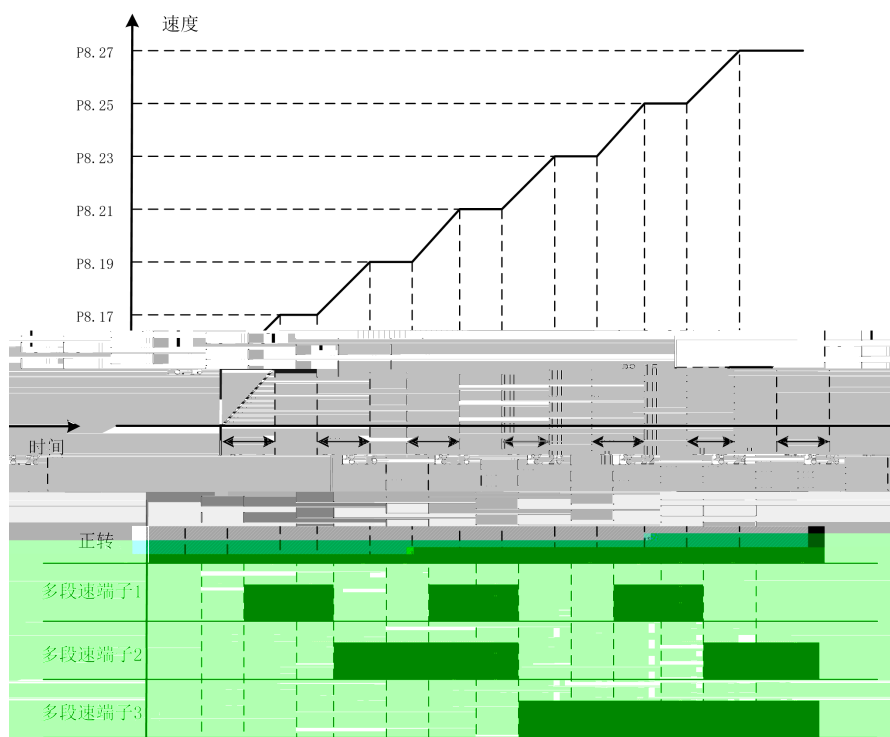
8.7 Ω Å L α

^ 1~ Ω' ' 1.1 1

w	w O		y
P16.11	Basic Control Function L	0: V/F L 1: 2: 3: 4:	0' V/F L
P16.57	Flying Start CL L y	0-100%	75%
P16.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P16.71	Flying Start IsFlt	0-500.0ms	0.0ms
P16.72	Flying Start FeType	0: 1 1: 2	0: 1
P16.73	Flying Start FeAdjE a	0: 1: a	1: a
1. DI w w ' w ч 21' Ω' ' 2. ' ' P8.06 [] = 5.0 ' 3.P16.11 0' V/F L' 4. P16.58 ' Ъ h Ġ w ~ 7 t~ ð ~ 1 ' h Ъ ' Й 2 3 5. P16.71 L Т ~ ~ ψ ' ~ v 6.P16.72 ч 0 P16.73 ч 1			

w	w O		y
P18.11	Basic Control Function L	0: V/F L 1: 2: 3: 4:	0 V/F L
P18.57	Flying Start CL L y	0-100%	75%
P18.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P18.71	Flying Start IsFlt	0-500.0ms	0.0ms
P18.72	Flying Start FeType	0: 1 1: 2	0: 1
P18.73	Flying Start FeAdjE a	0: 1: a	1: a
1. DI w w ' w 21' Q' 2. P8.06 [] = 5.0 3.P18.11 0 V/F L 4. P18.58 ' b h G w ~ 7 t~ ü ~ 1 ' h b ' Ÿ 2 3 5. P18.71 L T ~ ~ ψ ' ~ v 6.P18.72 4 0 P18.73 4 1			

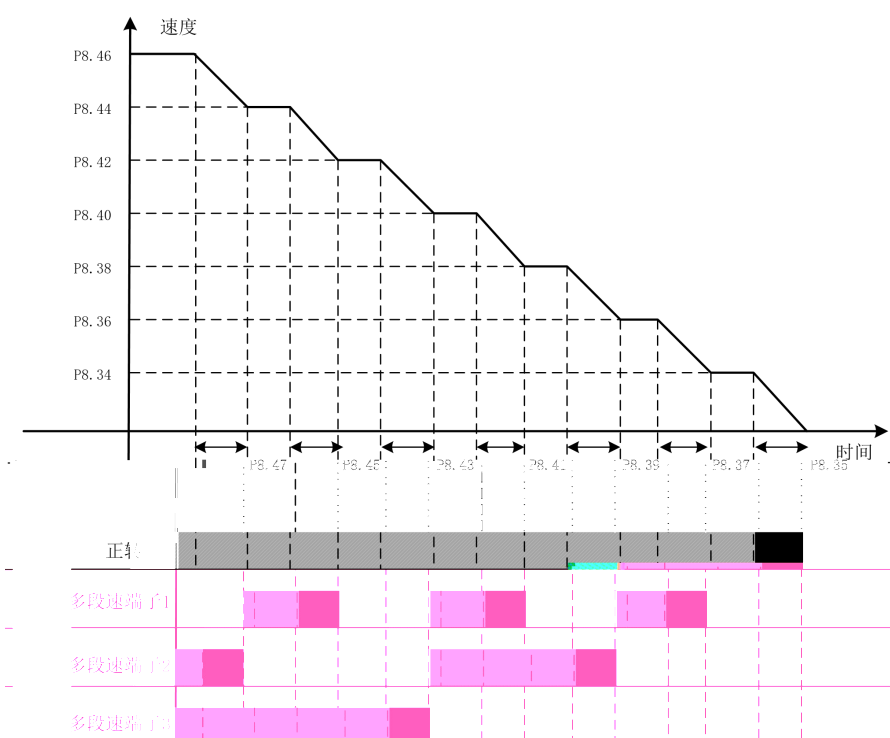
w	w O		γ
P19.11	Basic Control Function L	0: V/F L 1: 2: 3: 4:	0 V/F L
P19.57	Flying Start CL L γ	0-100%	75%
P19.58	Flying Start Mode	0: FWD 1: REV 2: REV-FWD 3: FWD-REV	0:FWD
P19.71	Flying Start IsFlt	0-500.0ms	0.0ms
P19.72	Flying Start FeType	0: 1 1: 2	0: 1
P19.73	Flying Start FeAdjE a	0: 1: a	1: a
1. DI w w ' w 21' Ω' 2. P8.06 [] = 5.0 3.P19.11 0 V/F L 4. P19.58 ' b h Ġ w ~ 7 t ~ ū ~ 1 ' h b ' Ÿ 2 3 5. P19.71 L T ~ ~ ψ ' ~ v 6.P19.72 4 0 P19.73 4 1			



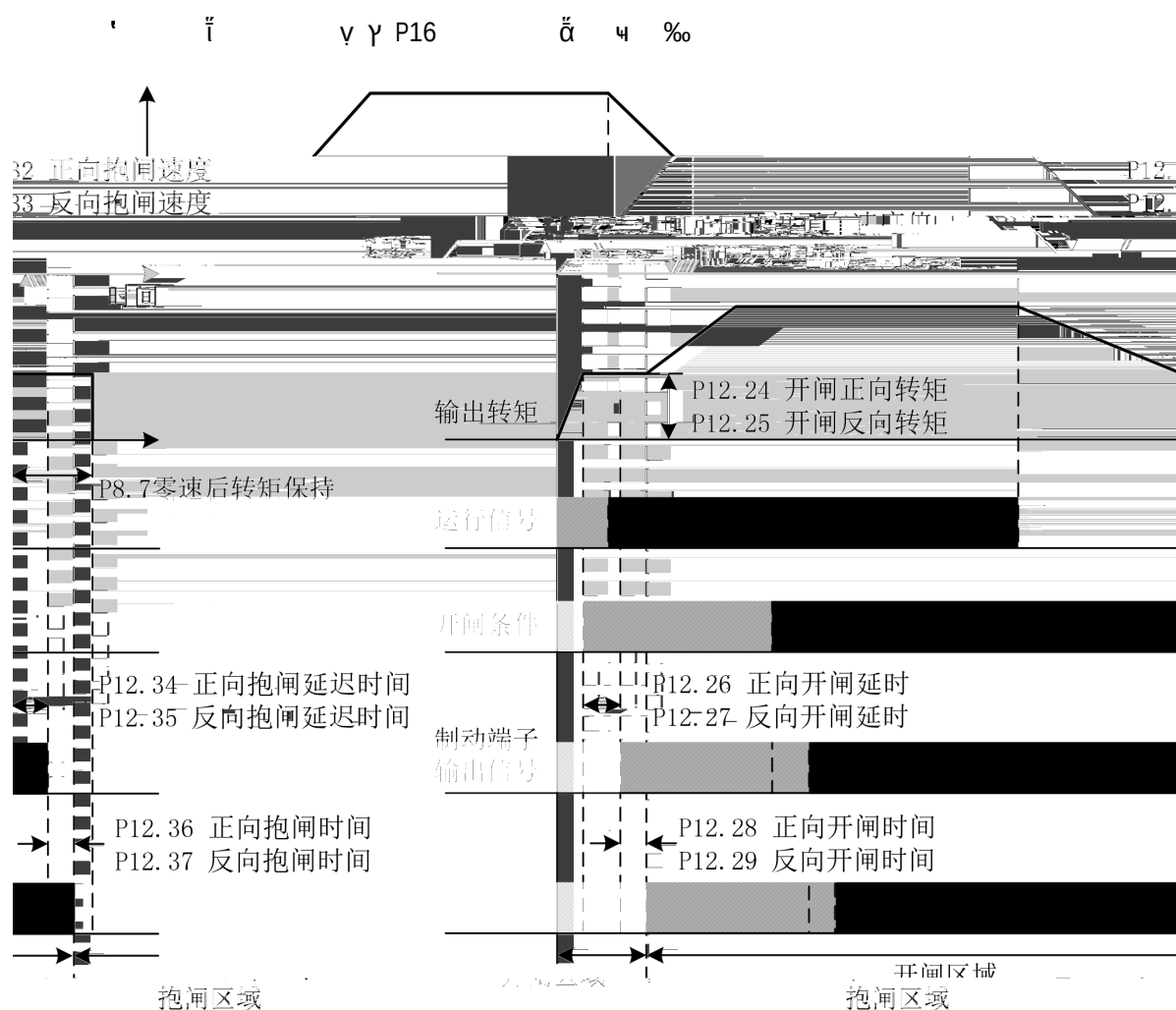
$P8.15 < P8.17 < P8.19 < P8.21 < P8.23 < P8.25 < P8.27$

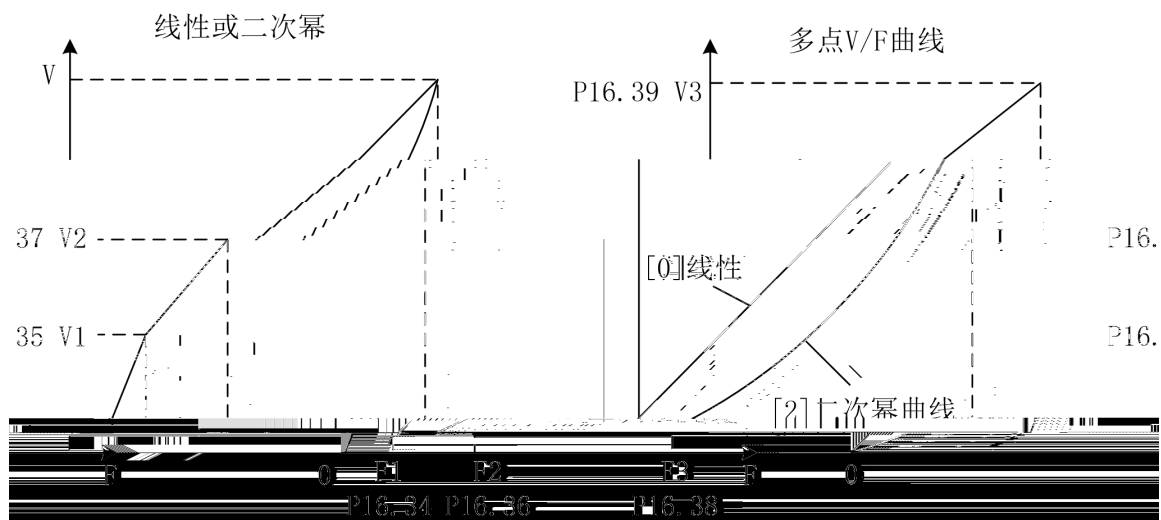
γ	ĩ	ǎ	ц	р		
P8.15	P8.17	P8.19	P8.21	P8.23	P8.25	P8.27
10%	20%	30%	50%	60%	80%	100%

⋮ ц , ѣ



^ 2~ L' L'
 P12.22' P12.37 a L' ~ w L 7 ǎ
 4 [3] L' ~ L' L w ̳
 Å ǎ Ĩ Ĩ | H~ Ĩ Ĩ h 3 Ĩ
 v □ v̇ P12.22 P12.23~ Ğ ^ P12.24 P12.25~
 H 0 ǎ Ĩ L ǎ ǎ ̳ H~
 ǎ | Å H~ Ĩ : ǎ | ǎ
 P12.32[h] P12.33[Ĩ h] v̇ Ĩ ǎ ̳
 H~
 P12.28 Ğ P12.29 [Ĩ L' H~ ǎ ǎ |
 ' P12.36 Ğ P12.37 [Ĩ L' H~ ǎ ǎ |

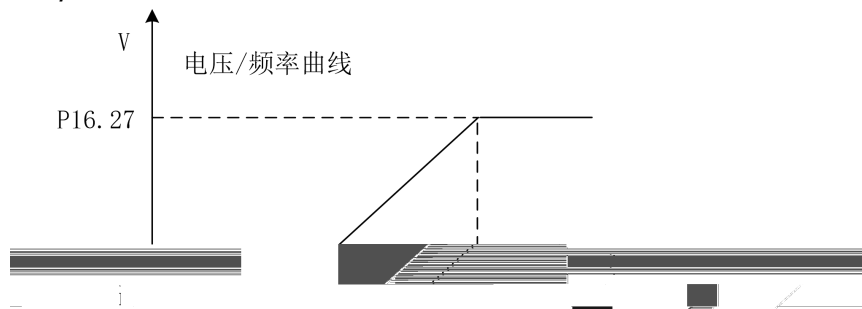




P16.34' P16.45 M H α α H V/F V/F V
V1 V2 V3 F1 F2 F3 γ 1 ~ ψ
~ f ~ ψ G

^ 4~ ε'
P16.15 ε7 V/F L H Ω' Z γ ~ α α P
V/F L H 3 U ~ γ α α α ψ v Ω'
ξ Ω' 1~ ~ ψ 7 Ω' ~
α α

^ 5~ Ω' ε 1'
P16.14=[0] V/F ~ V/F Ω' ε 1 γ ψ P16.26 P16.26 ξ
P16.27~ γ α H



P16.14=[2] H ~ V/F Ω' ε 1 γ ψ P16.30 P16.30 ξ P16.27

~ γ ã Ĩ ,

^ 6~ L ,

P16.50 P16.56 4 L w ~ Nq 4 Q L Ğ Å L w

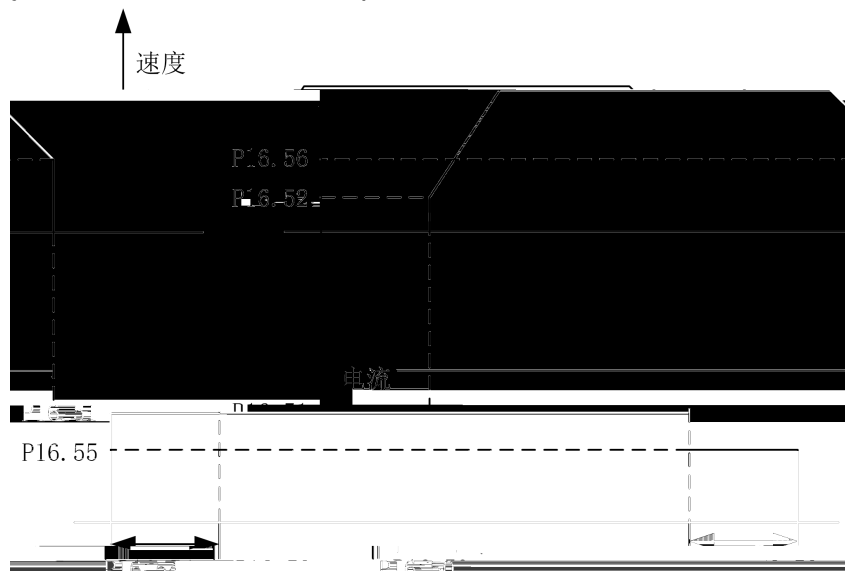
7 V/F L Ĩ b

Q L , P16.50 P16.51 P16.52 v Å T

4,5 L ~ a q Å U'P Q

Å L , P16.54 P16.55 P16.56 v : T v ~

L ~ a Å í r Ĩ ,



^ 7~ L ,

P16.64 b Ů ˆ " ~ " " ã

v b 4 ~ L - b ~ L 1 "

4 ~ L b 4 b

^ 5~ □ ã L'

H[~] ↑ ~ w @ ~ ì T w[~] ~ a H[~] G
 β w w 7 L Ÿ b ~ f ... GDHF-PGD1 □ PG V

a

L H[~] í T 7 w[~] ^ GDHF-PGD1 □ PG V í ~ □
 ã L DI w “ [10] ” DP L “ CW0.9 ” ~

P20.26 Ğ P20.27 v G Œ H[~] ~ f 3 w[~] |

2% U[~] □ ã L ~ b

P20.34 ч [0] ~ □ ã L 1 H[~] || L

ч 0 @ || P20.26 Ğ P20.27 ч G 0 v[~] □ ã L ž w

P20.26 ч 50% 100% P20.27 ч 3% 5%

P20.34 ч [1] ~ □ ã L 2 H[~] || L

ч 200 @ || G L p ~ 7 P20.26 Ğ P20.27 ч G 0 K v

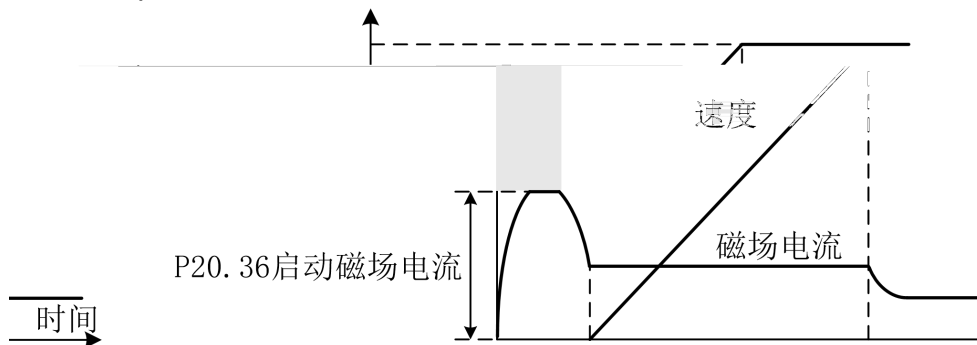
v 4[~]

H[~] í HF500LC ↓ í ~ P20.34 ч [1]' w[~]
 HF500LC ↓ í ~ 3 w[~] ì 7 Ğ í ~ P20.34 ч [0]

^ 6~ Œ'

P20.36 Œ' , L Œ' v[~] L ~ γ :

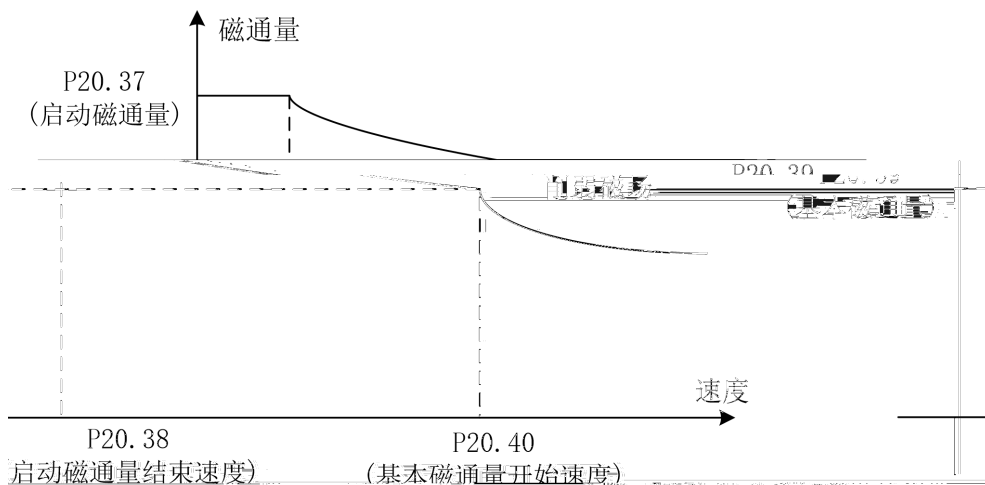
Œ' ~ Ÿ,



^ 7~

P20.37 P20.40

~ Й



^ 8~

w

P20.57 P20.58 P20.59

w

P20.57 1

w a

P20.58

v

U

G

P20.59

v

A

w

^ 9~

P20.55

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p

i

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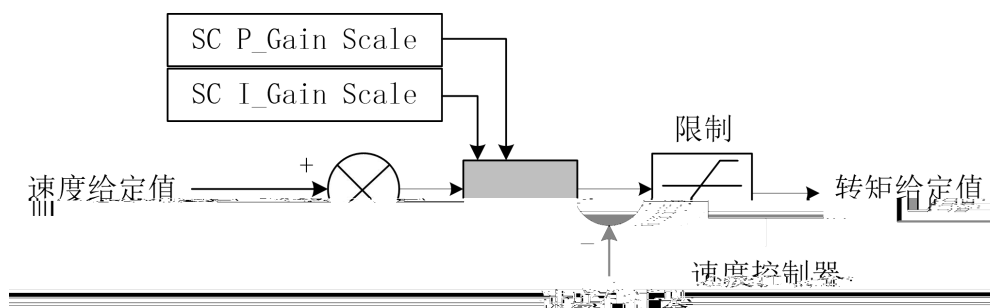
-

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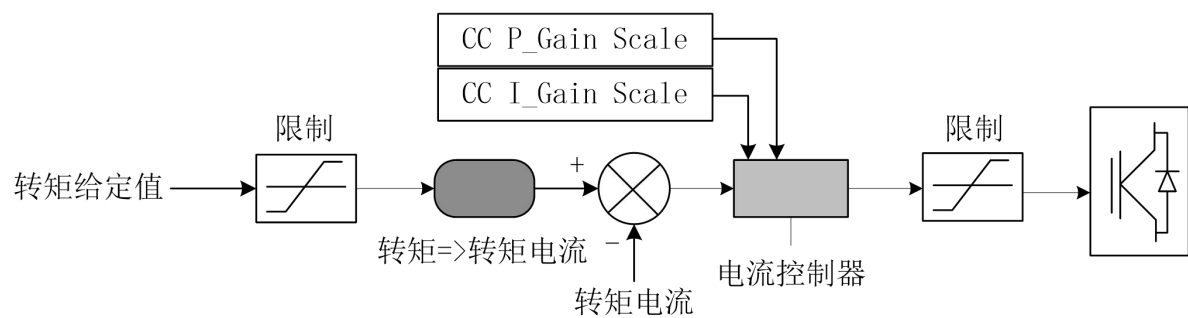


^ 10~ DROOP L'

$\tilde{H}$ $\updownarrow$ $\bar{w}$ α $\tilde{H}$ $\tilde{H}$ $\tilde{U}$
 w L $\tilde{H}$ $\tilde{I}$ DROOP L w ψ DROOP L
 a $\vdots$ γ a ψ Γ $\tilde{G}$ P20.60 ψ 0 $\sim$
 DROOP L P20.61 DROOP L $\tilde{\alpha}$ $\sim$ $\tilde{U}$ $\sim$ ξ
 ψ

^ 11~

P20.62 ξ P20.63 ψ $\mathfrak{D}$ $\mathfrak{L}$ N_0 L N_0 $\wedge$ $\% \sim$ ψ
 $\sim$ $-$ L $\tilde{H}$



8.11

L	ǎ O	L T (10' 40Hz) Ÿ	ǎ	ǎ	ǎ
V/F	P16.64 V/F b	L T (10' 40Hz) Ÿ	100	80' 150	ǎ v' Ÿ
L	P16.12		w b	w b U A w ǎ 3~	ǎ v' T Ÿ
	P16.15 ẽ	z			ǎ v' z b a
	P16.26 V/F 1 Z	v z	0.75	0.5' 1.2	ǎ v' z b a
	P7.0 L v	Dp	150	150' 220	ǎ v' z b a
L	P16.12		w b	w b U A w ǎ 3~	ǎ v' v T Ÿ
	P7.0 L v	Dp	150	150' 220	ǎ v' z b a
	P20.43	ǎ	75	50' 100	ǎ v' z b a
	P20.56 No	ǎ ǎ	100	80' 150	ǎ v' z b a

9. ĩ

4 3 Ĝ ~ ĩ ~ 1~ 1 Ĝ w Ĝ w 2'
 ψ ⊕ ĩ ƒ Ā ~ Ĝ | L ^ β~

9.1 ƒ ĩ

ƒ	ƒ ĩ	ƒ ĩ
W01	% SYS_NOT_RDY	ĩ (Ready)
W02	ƒ a Ĥ NO_DRV_ENABLE	ĩ L Ĥ
W03	ƒ LOCAL_EM	ĩ L Ĥ
W04	ƒ REMOTE_EM	ĩ L Ĥ
W06	OT	ĩ P7.14() 1
W09	DP ƒ P/B ALARM	DP ƒ
W10	MODBUS ƒ MODBUS ALARM	Modbus ƒ
W15	ǎ PARAMETER ERROR	ǎ ƒ ƒ
W18	Temp_Sensing Fail	ƒ
W20	ƒ % SLV_NOT_RDY	ƒ ƒ 0
W21	ƒ 1 SLV1_CAN_ERR	ƒ 1 ƒ

9.2 ¶

Й ҫ

№	И	А
[E050]	U  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E051]	U  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E052]	V  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E053]	V  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E054]	W  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E055]	W  ^  β ~ ERR_UT not reset	IGBT  IGBT    U 
[E056]	 ^  β ~ ERR_SLAVE_FAULT not reset	   U 
[E057]	ρ      β ~ ERR_DB not reset	 IGBT   IGBT    U 
[E100]	 OV	 P8.35( 1)   P7.12( 1)
[E105]	 UV	           P7.13( 1)
[E110]	OC	        P7.4( G)

[E111]	OL	$\dot{I}$ $\overline{P}$ $\ddot{\alpha}$ P7.48(1) P7.49(1) $\ddot{\alpha}$ P7.48 P7.49 $\dot{I}$ $\dot{I}$ $\cap$
[E112]	ZC	$\ddot{\alpha}$ P7.8 $\cap$ $\dot{I}$ D $\cap$
[E113]	~ MIP	$\dot{I}$ $\sim$ $\cap$ $\therefore$ L $\cap$
[E114]	$\overline{P}$ MOP	$\dot{I}$ $\overline{P}$ $\mid$ $\cap$
[E115]	OS	$\ddot{\alpha}$ P7.19 $\ddot{\alpha}$ P7.19 $\dot{I}$ $\cap$
[E116]	L SLVC Fail	∇ $\vdots$ $\cap$ $\ddot{\alpha}$ P7.23
[E117]	MOTOR STALL	L $\sim$ $\cap$ ξ $\ddot{\alpha}$ P20.14 P20.15
[E118]	PG ERROR	$\cap$ ξ $\ddot{\alpha}$ P20.14 P20.15
[E119]	SPEED ABNORMAL	$\cap$ ξ $\ddot{\alpha}$ P20.14 P20.15 $\ddot{\alpha}$ P7.31$\sim$ P7.32
[E121]	$\dot{I}$ IGBT1 OT1	ξ $\dot{P}$ $\dot{I}$ ' $\vee$
[E122]	$\dot{I}$ IGBT2 OT2	ξ $\dot{P}$ $\dot{I}$ ' $\vee$
[E123]	$\dot{I}$ IGBT3 OT3	ξ $\dot{P}$ $\dot{I}$ ' $\vee$
[E124]	$\dot{I}$ IGBT4 OT4	ξ $\dot{P}$ $\dot{I}$ ' $\vee$
[E125]	$\dot{I}$ IGBT5 OT5	ξ $\dot{P}$ $\dot{I}$ ' $\vee$
[E126]	$\dot{I}$ IGBT6 OT6	ξ $\dot{P}$ $\dot{I}$ ' $\vee$

[E127]	IGBT7 OT7	
[E128]	IGBT8 OT8	
[E137]	FAN STALL	
[E138]	TEMP_SENSING FAIL	
[E139]	Pre_Charging Fail	
[E140]	Line UV	
[E141]	Line OPEN	
[E142]	Line Detection Error	
[E143]	Line SW Fail	
[E144]	Line SW SHORT	
[E145]	Line OV (AFE)	
[E146]	Line Over_Freq (AFE)	
[E151]	IGBT PDP [UT]	
[E152]	IGBT PDP [UB]	
[E153]	IGBT PDP [VT]	

[E154]	V İ IGBT PDP [VB]	IGBT İ IGBT İ İ İ İ İ İ İ İ
[E155]	W İ IGBT PDP [WT]	IGBT İ IGBT İ İ İ İ İ İ İ İ
[E156]	W İ IGBT PDP [WB]	IGBT İ IGBT İ İ İ İ İ İ İ İ
[E157]	İ İ İ İ PDP [DB]	W İ İ İ İ İ İ İ W İ İ İ İ İ İ İ
[E160]	İ SLAVE FAULT	İ İ İ İ
[E161]	İ % SLV_NOT_RDY	İ İ İ İ İ İ İ İ
[E162]	İ 1 CAN SLV1_CAN_ERR	İ İ İ İ İ İ İ İ
[E167]	CAN CAN_ERR	İ İ İ İ İ İ İ İ
[E170]	İ MOTOR TUNING FAIL	İ İ İ İ İ İ İ İ
[E180]	DP P/B ERROR	İ İ İ İ İ İ İ İ
[E181]	DP İ P/B_EM	İ İ İ İ İ İ İ İ
[E200]	LOCAL_EM	İ İ İ İ İ İ İ İ
[E201]	REMOTE_EM	İ İ İ İ İ İ İ İ
[E202]	Modbus MODBUS EMERGENCY	Modbus İ İ İ İ İ İ İ İ
[E203]	İ İ İ İ DRIVE DISABLED	DP İ İ İ İ İ İ İ İ
[E210]	İ Panel Error	İ İ İ İ İ İ İ İ
[E220]	İ CRC MEMORY CRC ERR	İ İ İ İ İ İ İ İ
[E221]	İ PARAMETER ERROR	İ İ İ İ İ İ İ İ

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		√							
3.	⊥	~	H*						
	ψ								

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