HF6000

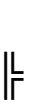
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HF6000
HF6000
ARM+DSP+FPGA

1. Hυ

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2.1. ▪▪ ⊄ :

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⅄ ₣ ʐ˘ Ḡ ⅄ ₣ Â ⅄ ⇘ Ս˘ 5 Ĩ ⇜ ˪ 90% ⅄ ₣ ʐ˘ 8 Ĩ
⇜ ˪ 92% ⅄ ₣ ʐ Â

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⅄˘ ˆ ⅄ ˘ . Â □ ˘ ˫ ˘ ɇ □ ⇘˜
˘ ғ ₣ ˘ ѽ ˫ ⇙ ▪▪ Ŭ ˘ Ḡ
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Ь ⇘ └ ε Â □ ˘ ˜ ₣ ₒ ˪ ˜ ˘ Ь □ ʒ ⇘
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~ ~ ٨ 3 6KV 3 10KV

~ ٨ ﺧﻪ 6kV/10kV ¤ 10% ˘ 10%~ 35%¨Ḥ

~ 50/60Hz

٨ ¨Ḥ ~ ٨ 690V

~ w ﺧﻪ ů 0.96̂ 20%~100%˜

~ IEEE519 2014 ẹ GBT14549 93 ‰

₣ ₣ ٨ ٨ ﺧﻪ ﺧﻪ 0 Í 6KV 0 Í 10

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2.4.1. ‰ ج ‰

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HF6000PLC-1250-100/100-DB-X-XXX+X

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Ÿ		1600:1600kVA710:710kVA
Ź	~ ا	100:10KV 060:6KV 033:3.3KV
ź	₹ ا	100:10KV 060:6KV 033:3.3KV
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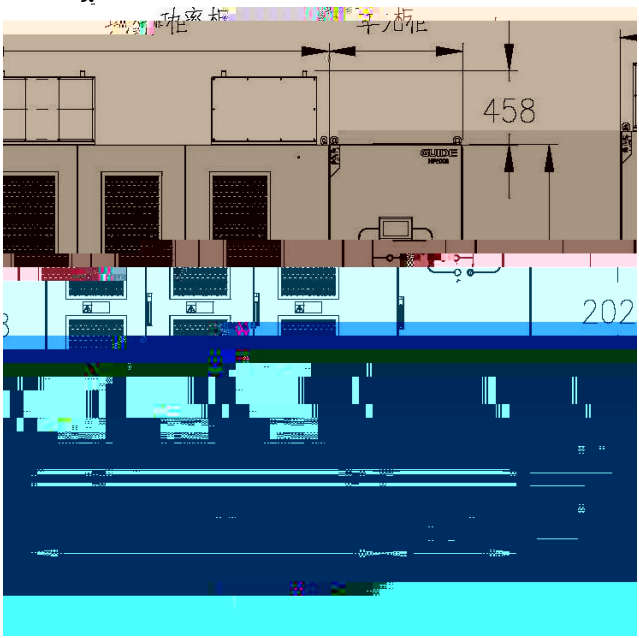
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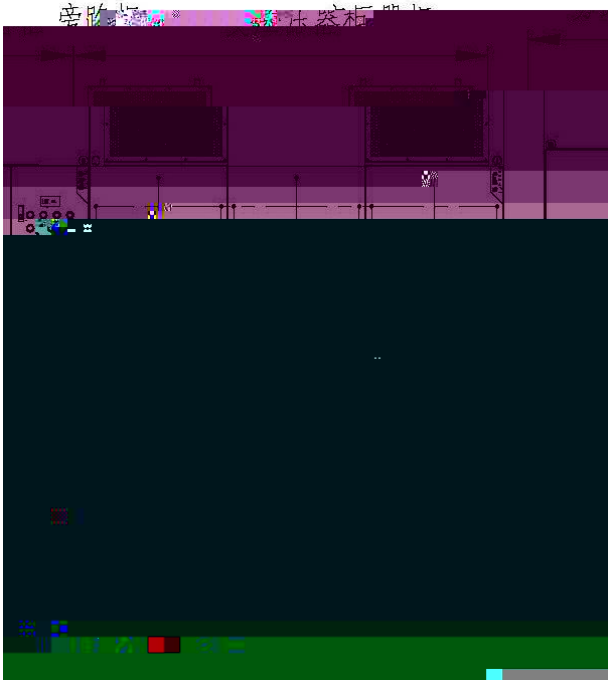
HF6000 ا أ



2.4.3. h ‍ ج

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2.

HF6000-3150-100/100-DB-M	182	2500	7.8
HF6000-3500-100/100-DB-M	202	2800	8.0
HF6000-3750-100/100-DB-M	217	3000	8.2
HF6000-4000-100/100-DB-M	231	3150	8.3
HF6000-4500-100/100-DB-M	260	3550	8.5

:2K13,	
IEC3S760721-3-3:( ) *2019, :3K22,	Ð 3 №

3.

3.1.

HF6000 3*N 690V

3.1.1. h



3-1

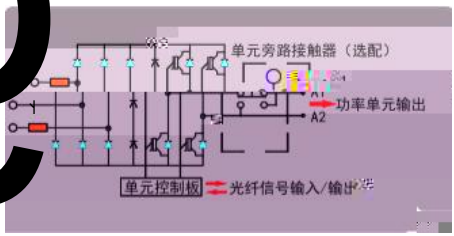
60°

移相角度 –

每相单元数

3.1.2. w

w h 3-2



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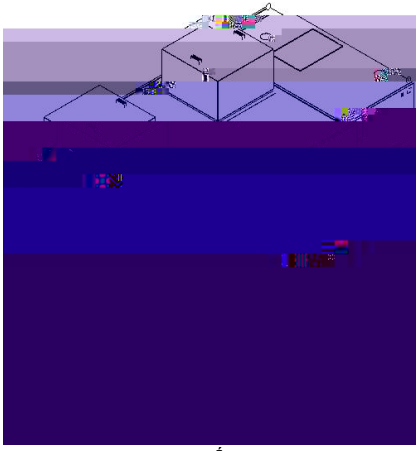
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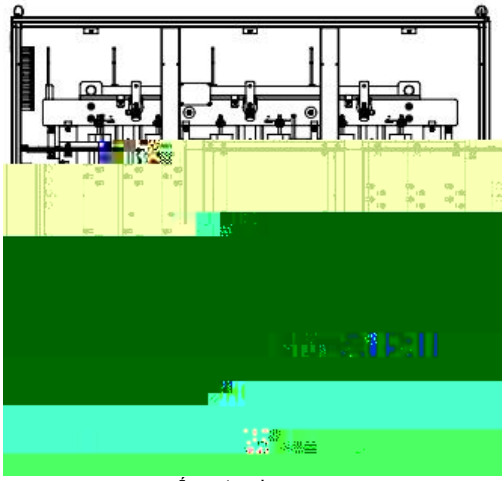
HF6000 ⅄ Ĩ ₩ ᵣ ˇ h Ĩ ⅄ ᶊ № à w ⅄ ″Ḥ № à ᴸ № à w ⅄ ″Ḥ ɣ Ĭ ˇ ą ˜ ɯ ˆ ˜ ÂHF6000 ⅄ Ĩ Й ᴝ 3-4 Â



ᴝ 3-4 HF6000 ⅄ Ĩ

3.2.1. Ĩ ⅄ ᶊ №

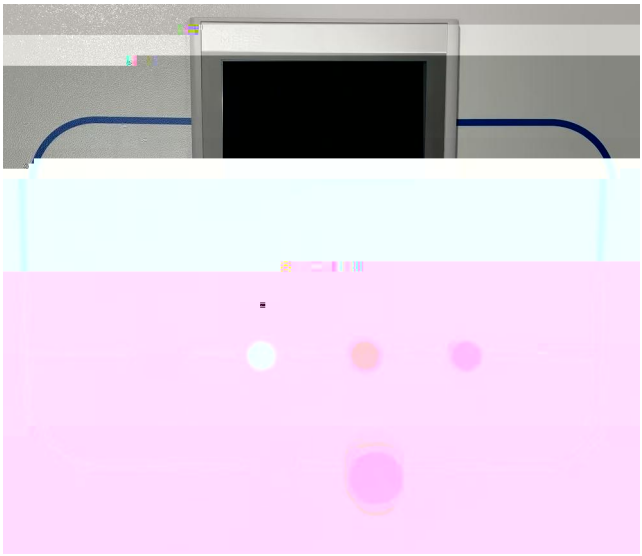
Ĩ ⅄ ᶊ ṗ Ĩ ⅄ ᶊ˜ Ĩ ⅄ ᶊ ɯ w ⅄ ″Ḥ ˇ ⅄ ⌡ ∨ ⅄ ˇ Í / ∨ ⅄ ˇ w Â Ĩ ⅄ ᶊ ˇ ɯ H ˇ ◖ ⁞ ⅄ Ĩ ᵘ Â Ĩ ⅄ ᶊ ṗ ᴰ ᶊ˜ Ỿ ˇ ᴸ Ḡ ɕ ᵽ Â ɯ ' Ĩ ⅄ ᶊ 90 Ṇ ˇ Ů ₣ ᵽ ᵖ Ь ˇ Å ' 110 Ṇ ˇ Ω˜ Ḡ ˇ Å Â Ĩ ⅄ ᶊ Ғ ض ˇ Ḃ ɢ ˜ ⅄ ض Â ض Ь Ţ Ғ ⅄ ض Â Ĩ ⅄ ᶊ ᴝ 3-5 Й Â



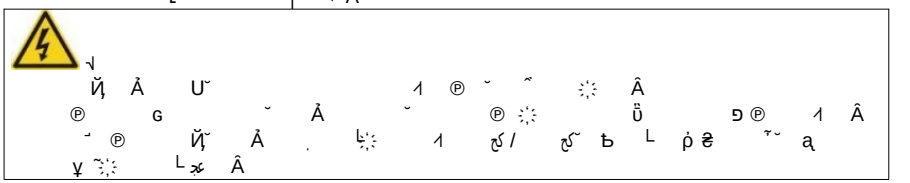
ᴝ 3-5 Ĩ ⅄ ᶊ ṗ ᴝ

3.2.2. w ۱ ״Ḥ №

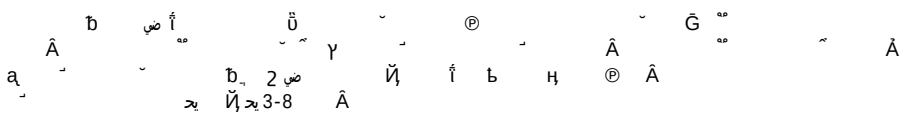
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† Ð Â w

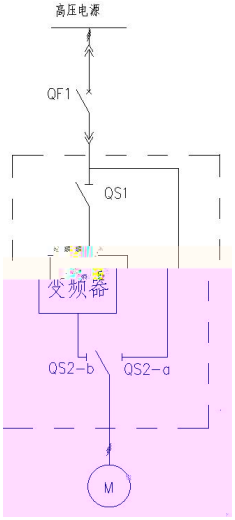


ﺱ 3-7

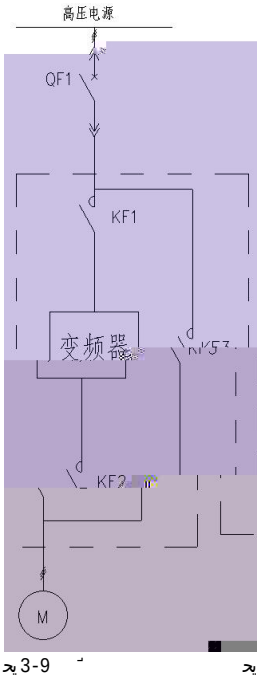


3.2.4. №





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ぇ 3-9 ˛ ぇ

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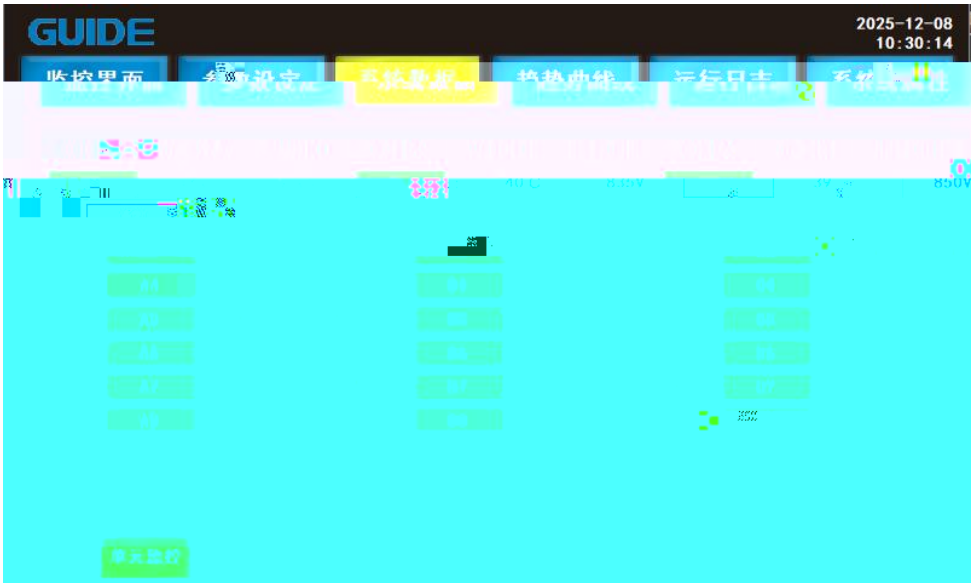
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ǎ Â



ב 3-11 ǎ

3.3.4.

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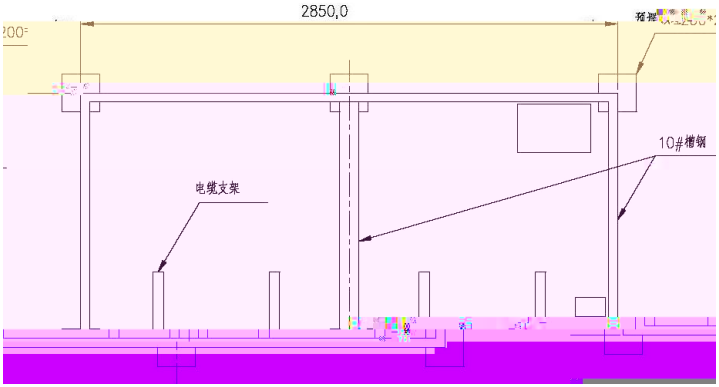
ऋ 3-12

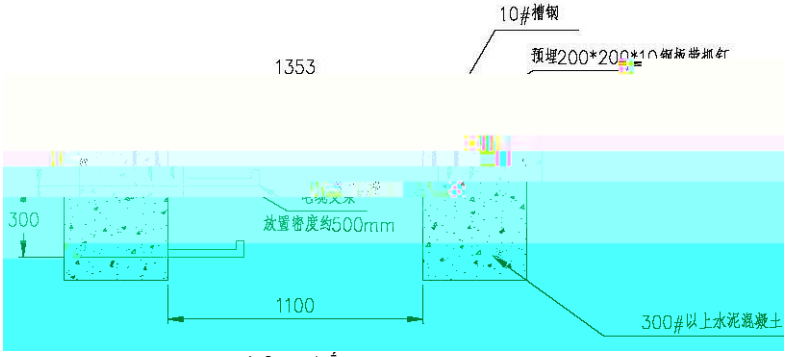
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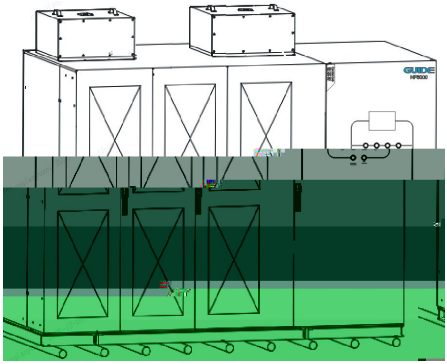
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4.2.2. ⌠

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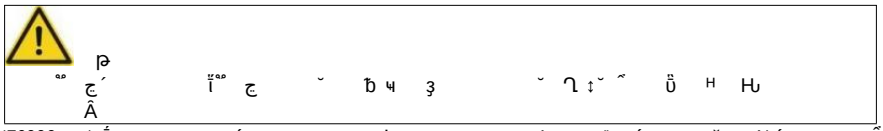
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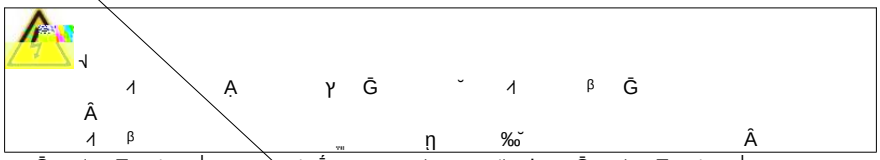
4.2.4.



HF6000

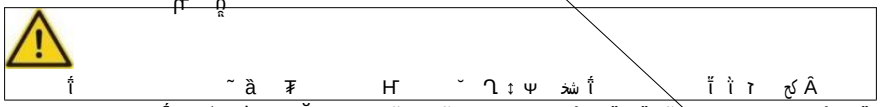
4.3.

4.3.1.



4.3.2.

4.3.2.1.



4.3.2.2.



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4.3.2.4.

4.3.2.5.

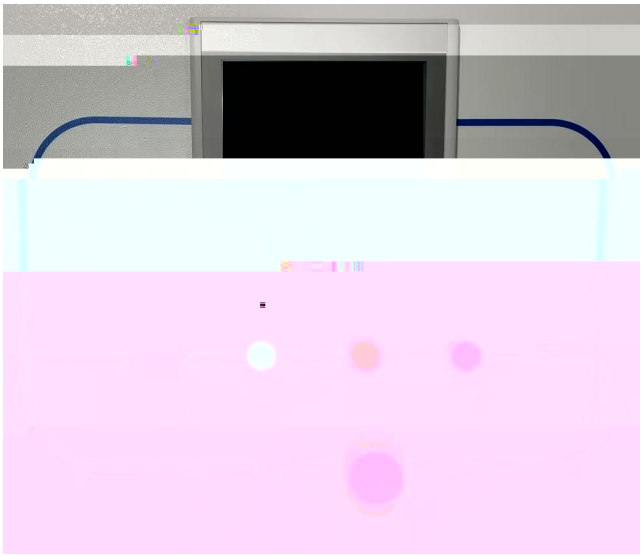


4.3.3.

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2) 0.5~1.5mm
3) 0.5~1.5mm
4) 0.5~1.5mm

4.3.4.

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5.3. Ꮮ Ⓟ

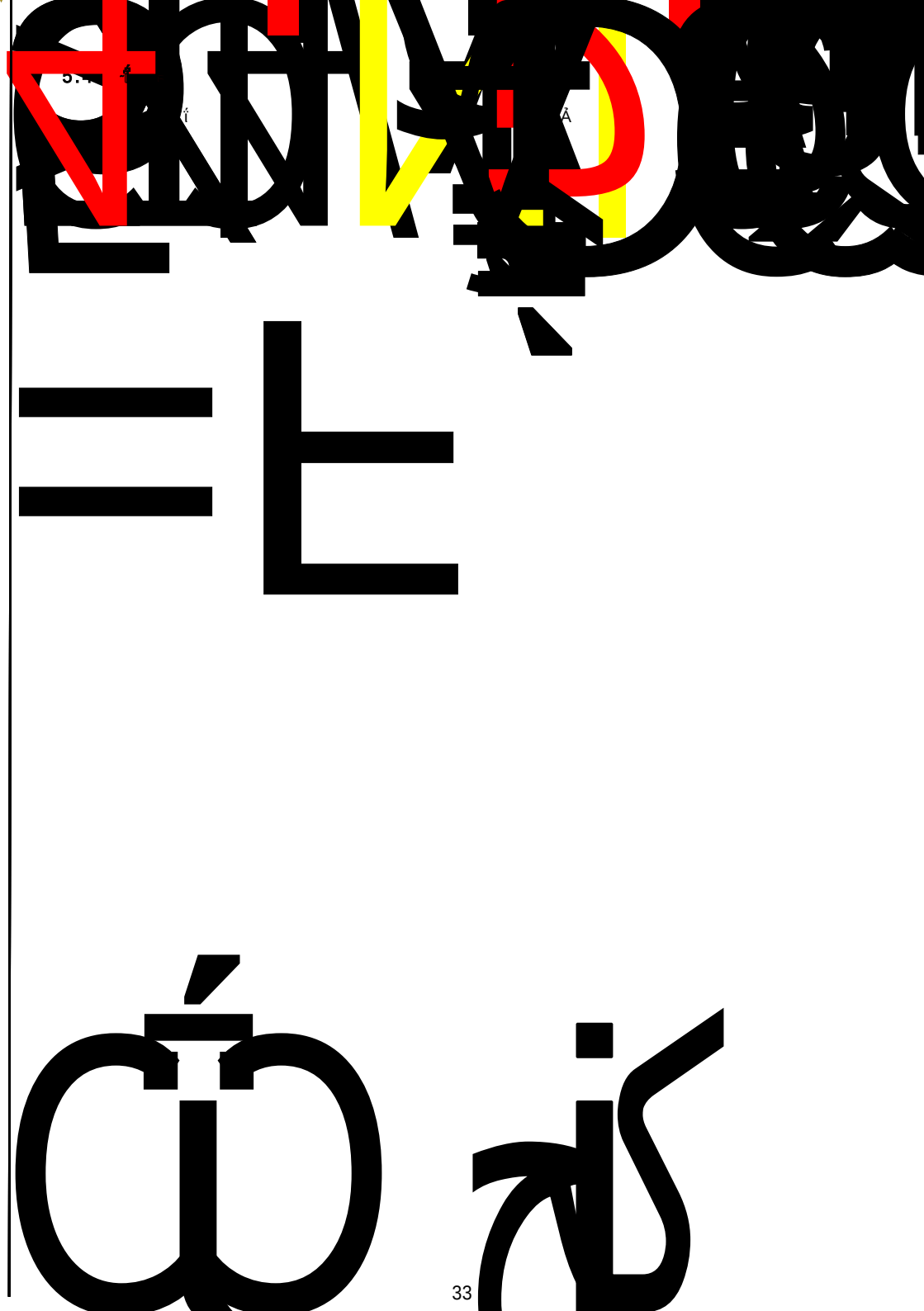
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5.3.2. Ꮮ

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5.6.2.

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5.6.3.

5.6.4.



5.6.5.



5.6.6.

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5.6.7. ќ



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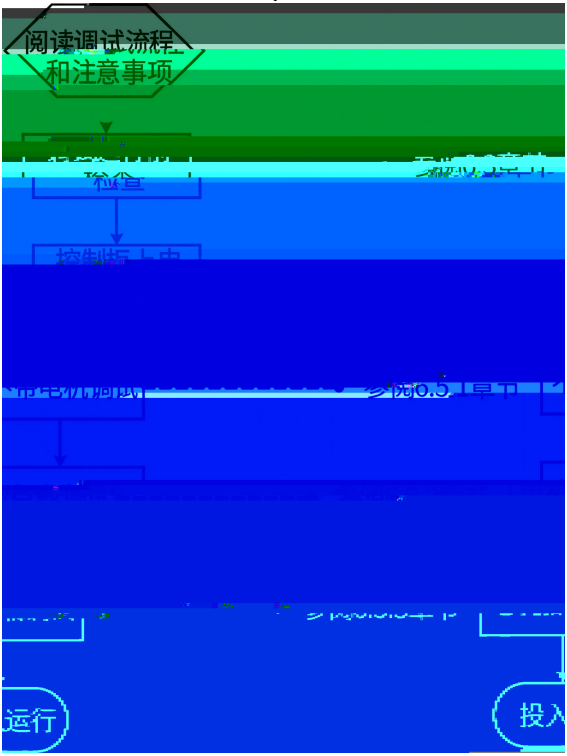
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6.5.2.



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6.5.3.



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7.1. P00 w

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1 ^ ~

^ ~ G ˗ ر ˘ ٧ ر ĩ ر Ь

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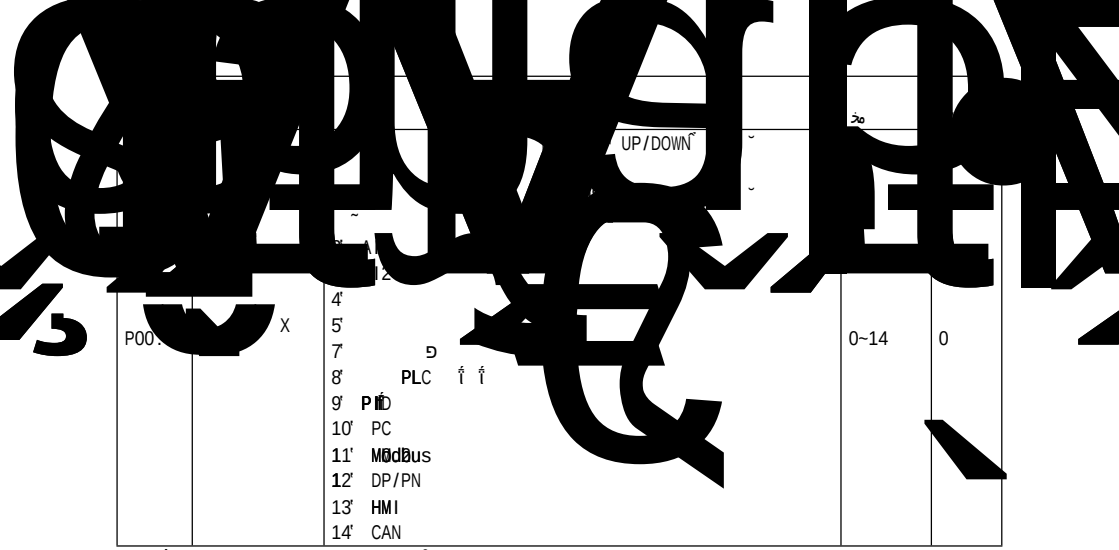
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Ь ر PG ١ Â G L L ˘ ₩ ĩ ر٧ ˗ ₩

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0'

UP à DOWN~

1'

UP à DOWN~

2' AI1

3' AI2

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P00.23

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P00.27	1ث ɒ	ɷ β' PC 0' 1' 2' AI1 3' AI2 4' 5' 6' PULSE ǁ ^ DI18˜ 8' PLC 9' PID A' PC B' Modbus C' DP/PN D' HMI E' CAN Ⅵ β' ث ɒ 1 ^ 0~E˝ ▯ ɷ β ˜ β' Modbus ^ 0~E˝ ▯ ɷ β ˜ Ⅵ β' DP/PN ^ 0~E˝ ▯ ɷ β ˜	0~E	H.0020

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P01.18	□ ´	0.01%~200	0.01~200.00	ă
P01.20	□	0.01%~200.	0.01~200.00	ă

P01.06~P01.10 ă ˘ P01.16~ 20 □ ă ˘ ă

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P01.08 ң ֎ ă ˘ ľ Ŀ ˆ ץ 2 ֎ ˆ ץ P01.10̋ ˜ ' G

□ ˘ ľ Ŀ7 P01.16̃ ľ Ŀ ˆ ץ P01.16 ˘ ˆ ץ

P01.17~P01.20 ₃ ֎ ă Â

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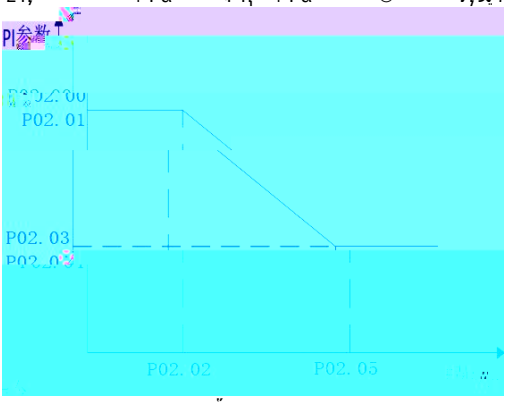
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P01.36	֍ ҡ ע	0.0% Ь 0.0%~70.0%	0.0~70.0	5.0%

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P02.03	▫ 2	0.000~1.000	0.000~1.000	0.015
P02.04	№ 2	0.000~65.535	0.000~65.535	0.025
P02.05	Ⓟ 2	P02.02~P00.10	P02.02~P00.10	10.00
P02.08	kf	0.01~1.00	0.01~1.00	1.00

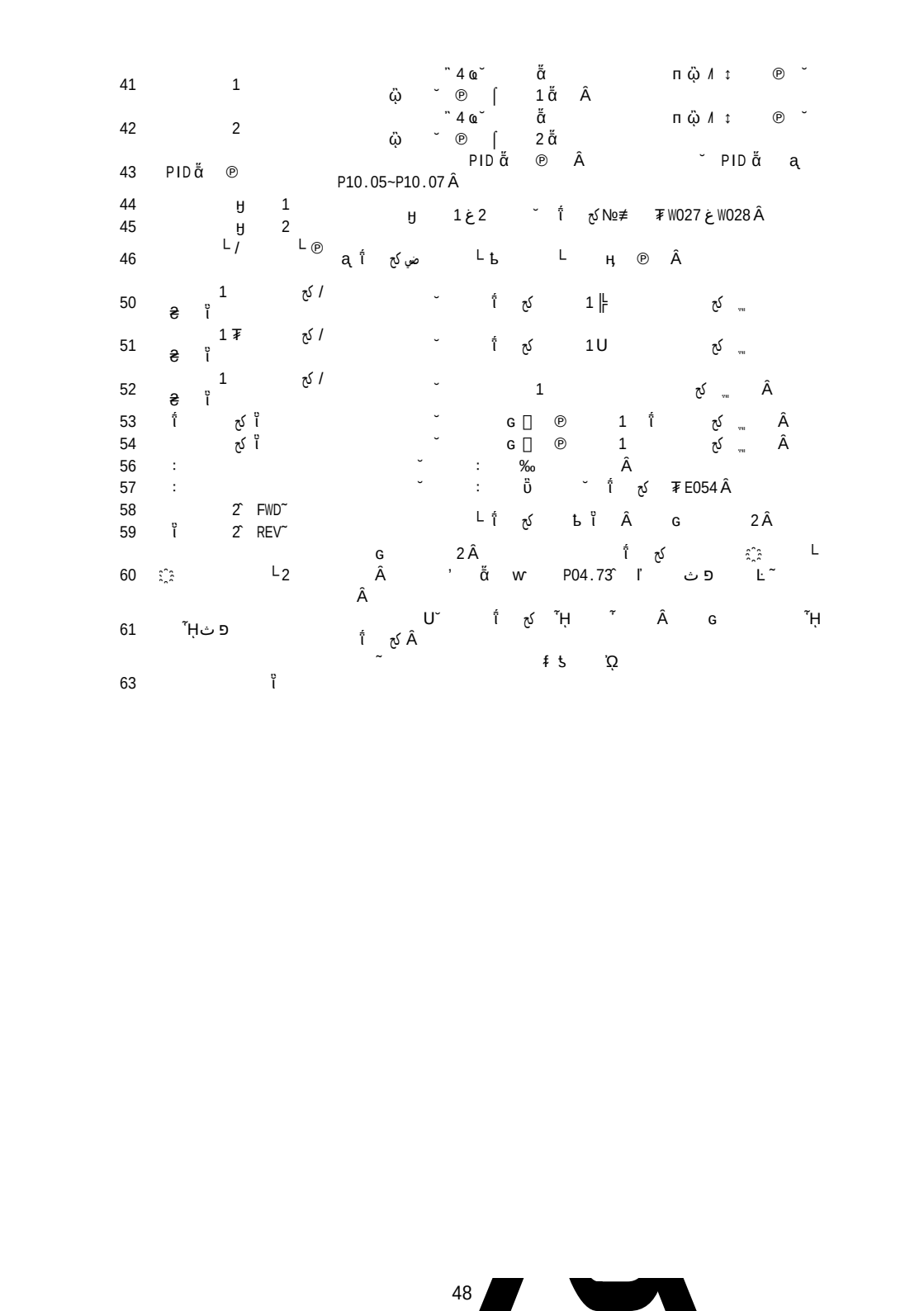
[illegible] PI [illegible] P02.00 [illegible] P02.01 [illegible] G Ⓟ 2 [illegible] PI [illegible] P02.03 [illegible] P03.04 [illegible]

Ⓟ 1 [illegible] Ⓟ 2 [illegible] PI [illegible] [illegible] PI [illegible] Ⓟ [illegible] [illegible] 7-2 [illegible]



[illegible] 7-2 PI [illegible]

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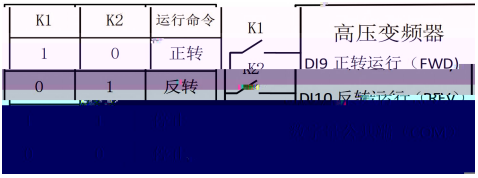
[redacted]

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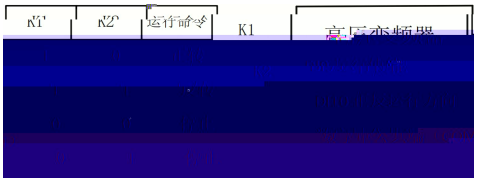
ぇ7-3 ˘ L ЙҖ˘ K1 ˘ Ґ ☹ ÂK2 ℓ Ї ˘ K1à K2 ℓ

˘ Ґ ☹Å Â

1' ң 2ˇ DI9 ѡ ч ą ˘ DI10 ѡ h Â γ 1

ъ Ɒ 1ч ᴰ˘ ѡ ЙҖ'

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P04.08	DI9 ѡ	1	^ FWD˘
P04.09	DI10 ѡ	2	Ї ^ REV˘



ぇ7-4ң 2

ぇ7-4 ˘ L ЙҖضK1 ℓ ЙҖ˘ K2 Ґ ☹ ˘ K2 ℓ Ґ ☹ Ї Â K1

˘ Ґ ☹Å Â

2' L 1ˇ DI10ч ą ˘ DI9à DI11 ═ à Ї Â

ν 1 ъ Ɒ 1ч ᴰ˘ ѡ ЙҖ'

ѡ	O	ν	ѡ
P04.73	ъ Ɒ	H.x2	1
P04.08	DI9 ѡ	1	^ FWD˘
P04.09	DI10 ѡ	1003	L
P04.10	DI11 ѡ	2	Ї ^ REV˘



ぇ7-5 L 1

ぇ7-5 ˘ L ضSB1 ЙҖ ЙҖSB2 Ґ ☹ ˘ ЙҖSB3 Ґ

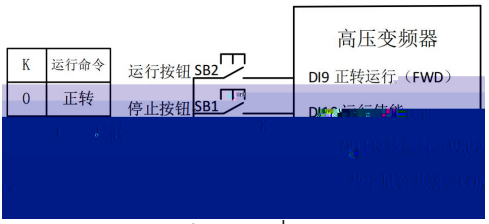
☹ Ї ˘ SB1 ℓ Ґ ☹Å Â Ø˘ ę Ţ˘ Ğ SB1 ɢ ˘ SB2à

SB3 ъ Ɒ ↕ ضˇ ℓ ъ ч ˘ Ґ ☹ γ 3ɷ U ˘ ъ ч ‰Â

3' L 2ˇ DI10 ч ą ˘ ъ Ɒ DI9 ₹˘ h DI11 ═ Â

ѡ ЙҖ'

ѡ	O	ν	ѡ
P04.73	ъ Ɒ	H.x3	2
P04.08	DI9 ѡ	1	ъ Ɒ
P04.09	DI10 ѡ	1003	L
P04.10	DI11 ѡ	2	Ї h



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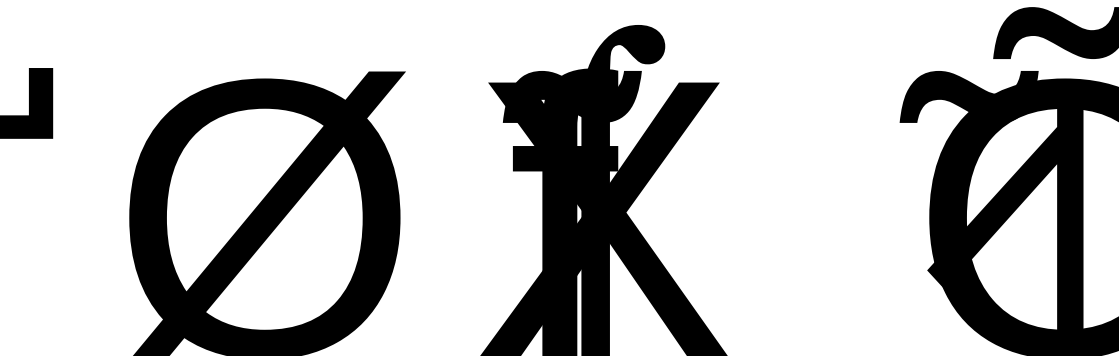
L 2

7-6 L SB1 SB2 K SB1 SB1 SB2

7.5. P05

PLC

P05.01	D01	40
P05.02	D02	1041
P05.03	D03	62
P05.04~P05.05	D04	~D05 0
P05.06	D06	41
P05.07~P05.09	D07	
P05.10		



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2′ Î h Ω˘
Î ۷ ώ Î h ˘ ΄Ρ γ ⌠ Ω˘ ˘ Ţ ‖ Ð ρ Ω˘ Â
3′ Î h Ω˘
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P06.10	Å	0′ ⁞ Å 1′ Å	0~1	1

0′ ⁞ Å

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1′ Å

Å ث Ɒ U˘ Ỉ ᶄ ʏ ₣˘ Å Â

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P06.16	Ƹ˘	1.0%~50.0%	1.0~50.0	20.0%

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P06.17	Ƹ˘ ᵠ	0.01s~5.00s	0.01~5.00	3.00s

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P06.18	Ƹ˘ ᵛ	1.0%~50.0%	1.0~50.0	19.0%

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˘ ↕ P06.16 ˘ P06.18 Â

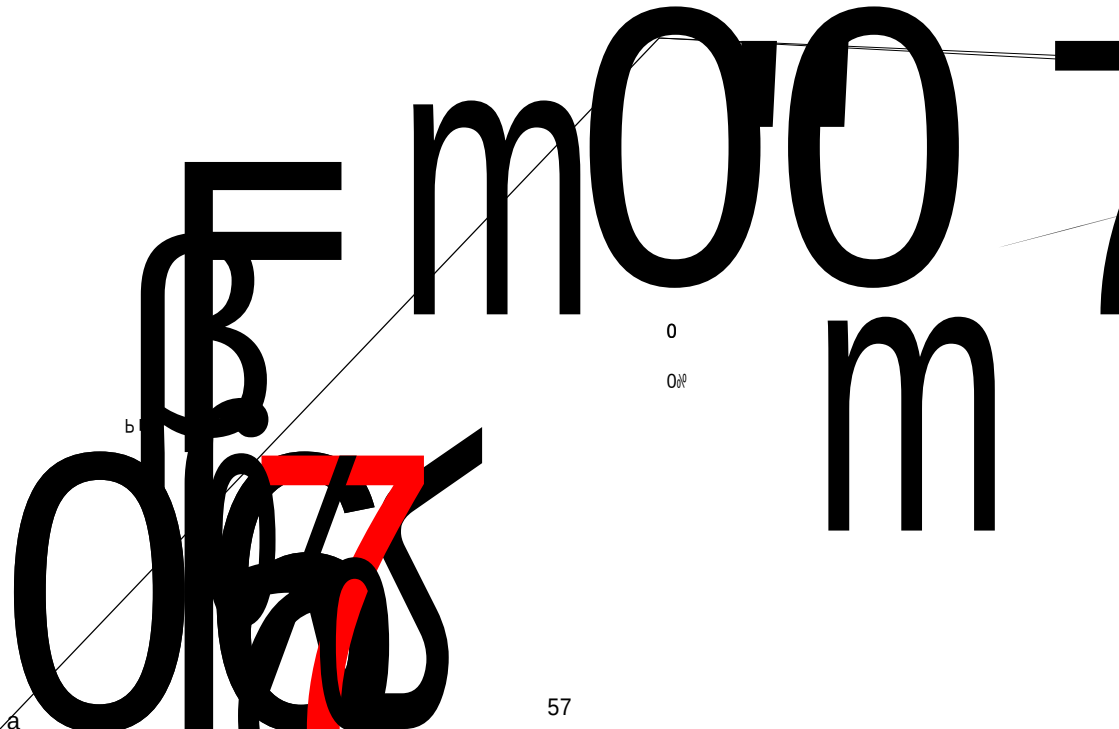
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P06.21	▯ ℗ ᵝ Ƶ	-90.0~90.0 £	-90.0~90.0	2.0

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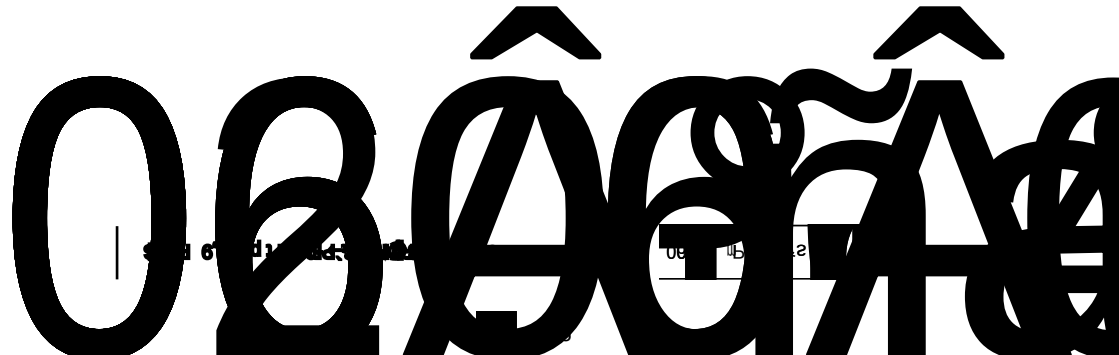
ʜ , ▯ ℗ ᵝ Ƶ ˘ Ỉ ▯ Â

ᴡ O ᵭ ᵛ

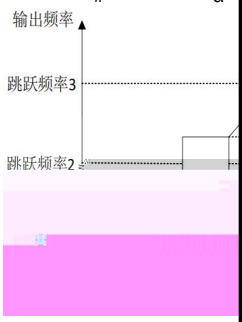
P06.22 ▯ ℗ ᵝ Ḡ ᵛ 0.0~5.0}n ´Ó–„Λ⋯ ɵ



	P06.32~10'.000s	P06.32~10.000	0.100s



P08.69	3	0.00Hz~



7-8

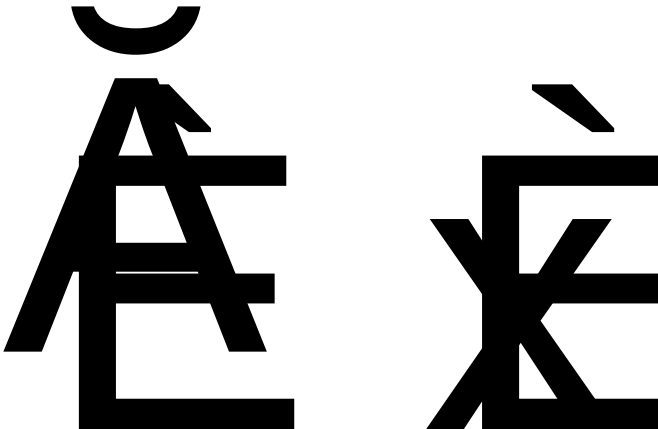
	O	
P08.13	L	0 1'

P08.13=1

	O			
P08.14	G	0 1' 2'	0~2	0

	O			
P08.15	L	0.00Hz~10.00Hz	0.00~10.00	0.00Hz

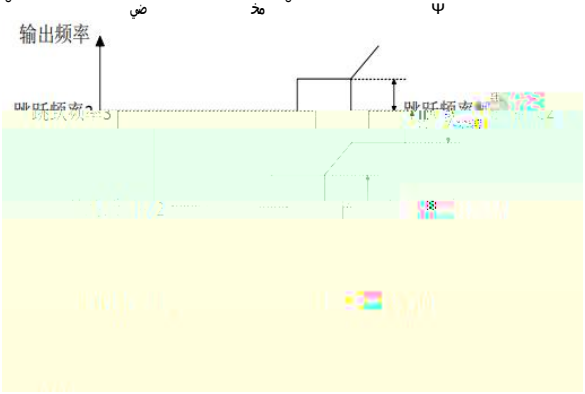
P08.19		0.00Hz~	0.00~	50.00Hz
P08.20		0.0%~100.0%	0.0~100.0	5.0%



W	O		ЭЮ	Y
P08.22	V ⁞ Ţ ϒ	0′ 1′	0~1	0

W G ˘ ضي V ⁞ Ţ˘ ϒ Â

Ч ˘ ضي ЭЮ ˘ Ψ Â

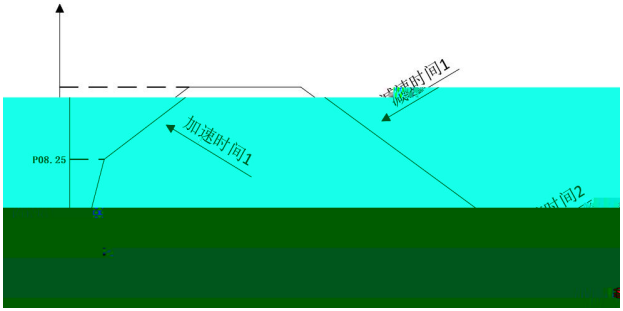


ЭЫ 7-12 V ⁞ Ţ ЭЫ

W	O		ЭЮ	Y
P08.25	V 1Ь V 2Ⓟ	0.00Hz~	0.00~	0.00Hz
P08.26	⁞ 1Ь ⁞ 2Ⓟ	0.00Hz~	0.00~	0.00Hz

W ضي Ч Ĩ˘ ғ DI Ⓟ V ⁞ Â G ضي Ĩ ڪ

Ţ˘ Ь DI ЭЮ˘ Ь □ V ⁞ Â



ЭЫ 7-13 V ⁞ Ⓟ ЭЫ

ЭЫ 7-13 Ч V ⁞ Ⓟ ЭЫ Â ضي V Ţ˘ G P08.25 ↕ V 2′

G P08.25 ↕ V 1′ Â

ضي ⁞ Ţ˘ G P08.26 ↕ ⁞ Ĩ˘ G P08.26 ↕ ⁞

2′ Â

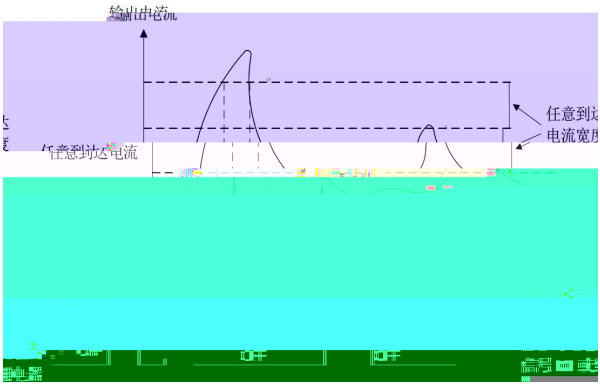
W	O		ЭЮ	Y
P08.27	˘ П ѽ	0′ 1′	0~1	0

ă G ˘ Ч ˘ W П ѽ Â

˘ П ѽ ˘ Ţ ₣ ˘ ث ϽЪ˘ ↕ Ĩ ڪ Ⓟ Ч ˘ Â

W	O		ЭЮ	Y
P08.28	Y	0.00Hz~	0.00~	50.00Hz
P08.29	U Y	0.0~100.0%	0.0~100.0	5.0%

G ỵ^ P0



P08.52		0 1	0~2	0

P08.53	1	0~FFFF	0~FFFF	H.0011

BIT0	0 1
BIT3	0 1
BIT4	0 1
BIT5	0 1
BIT7	0 E047 1 E047
BIT9	0 1
BIT11	0 HMI 1
BIT13	0: HMI 1

P08.54	2	0~FFFF	0~FFFF	H.0000

BIT0	0 1 P06.00
BIT6	0 -30000~30000 1 -10000~10000

P08.55	∞	50~100%	50~100	80%

	O			
P08.57	w	0~H.FF12	0~H.FF12	H.0000

P08.57

0

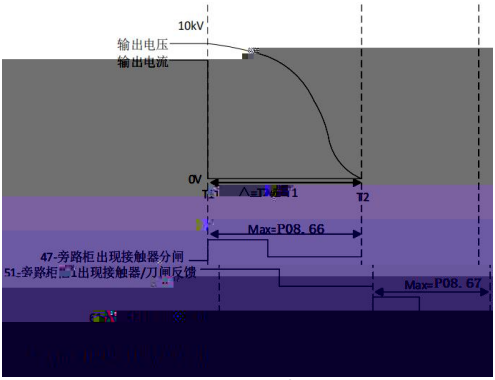
1

2

	O			
P08.58		30~3600s	30~3600	300s

	O			
P08.59		0.00~10.00	0.00	

DCS Ḡ ' ∞ ᵛᵛ ˇ W 61- ˗ Ⓟ Ḥ ₹
⌈DCS P08.67 G ᵛᵛ ¨Ḥ Ḥ Â
' ˇ ƒ Ь¨Ḥ Å ˇ ˆ P08.66 ˇ Ɣ
˜ Â

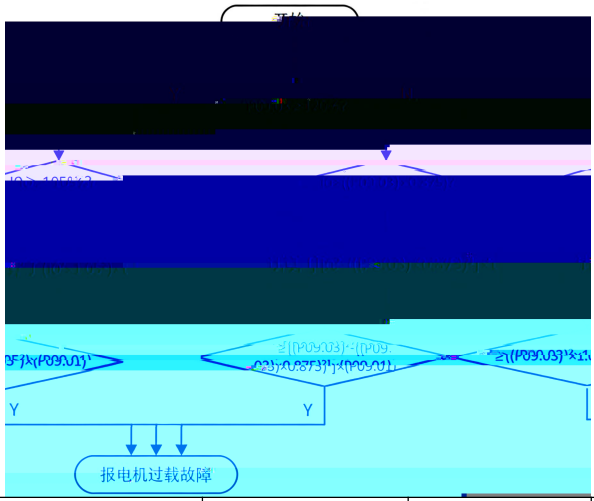


ɔɣ 7-16 ˗ Ⓟ Ḥ

7.9. P09 Ḡ ǎ

W	O		ɔo	Ɣ
P09.00	Ð Ḡ	Ơ 1' Ỉ	0~1	1
P09.01		0.01~600.00s	0.01~600.00	60.00s

P09.00=0' Ḡ W ˇ ˆ ضِ ɔشذ ˥ Â
P09.00=1' Ỉ ڪ Ḡ Ỉ ˇ ∞ ϽΙ Â
Ḡ ɔɣ Ч'



W	O		ɔo	Ɣ
P09.02		50%~100%	50~100	80%

W G ضِ dž ظ

[redacted]

P09.06	[redacted]	0.0~200.0%	0.0~200.0	125.0%

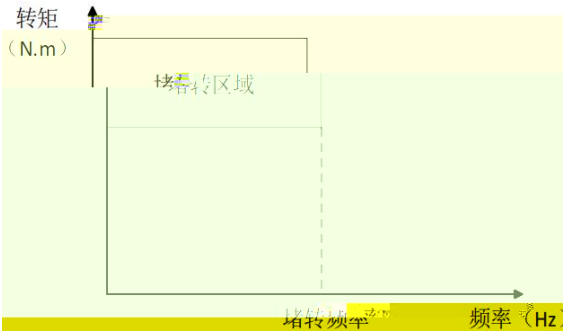
P09.08	[redacted]		0.1~1000.0	1.0h
P09.09	[redacted]	0~20	0~20	3
P09.10	[redacted]	[redacted]	0~1	0
P09.11	[redacted]	0.1~100.0s	0.1~100.0	2.0s
P09.79	[redacted]	[redacted]	0~1	0

₣ Ẓ ₣ ∧ № ˇ ₣ ∧ № P09.28 ₶ 500ms ₣

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ẘ	O		ﻫ	Ỵ
P09.30	ỉ ﷺ	0.0~180.0% ₣ 100.0% ٩ ~ ỉ ﷺ	0.0~180.0	150.0%

ﺽ ỉ ﷺ Ţ˘ ₣ Ỵ ^ ỉ ﷺ ₣ ẘ Ỵ˜ ₣



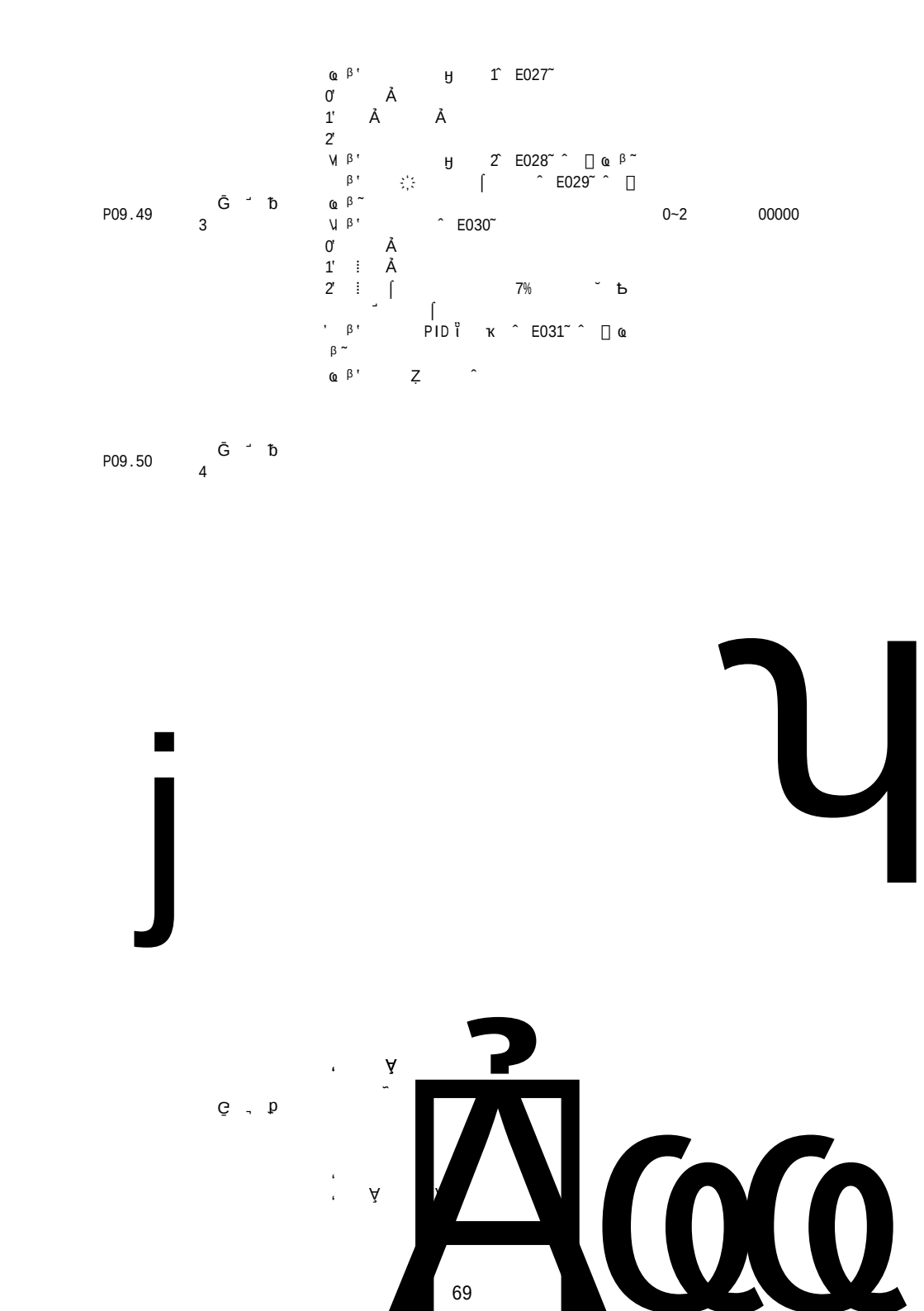
ぇ7-18 ゚

Й ↓ Ð □ ˘ '

Î ㄕ ₣ ˅ G P09.40 Â

Î ㄕ ₣ ⌠ └ Â Î ㄕ ₣ └ P09.31 ＿ ˘ └ Î ㄕ ă̈

˘ ぅ Î ㄕ ₣ Â └ ă̈



P09.70	Ẓ	0.0~60.0s	0.0~60.0	0.0s

ˆ 1.5,1.65˜	20s
1.65Ô ¼,‘:	5s

Ï Ḡ ˇ 1.2Ô1minˇ 10minẅ Â

BIT2' ₣ ⁄ ˇ ๅ ч E018- Â

BIT3' ∤ └w ĩ ض ⁞ Ţˇ ч w ∤ ″Ḥ ∤ˇ ∤ └w Â

w ˚ ˜ ˚˚ ∤ ″Ḥ ∤ E066 Â

BIT4' ~ ĩ ض Ţˇ ˩ ~ ˇ ´ ˆˆˆ

~ ∤ RST ɛ ч RT ~ Â

BIT5' ĩ ∤ ض ą ˇˇ ĩ ض Å ˇ ~ ĩ ض

~ 30% ғ 10sˇ ↕ E035- ĩ ∤ ض ˇ ч ∤ Â

w O

P10.02	PID ĩ	0ʹ AI1 1ʹ AI2 2ʹ 3ʹ AI1~AI2 5ʹ 6ʹ AI1+AI2 7ʹ MAX˜ |AI1|˜ |AI2|˜ 8ʹ MIN˜ |AI1|˜ |AI2|˜ 9ʹ	0~9	0

ǎ ɢ PID ĩ H

PID ĩ Ӟ ч ỵ˘ 0% Â

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P10.03	PID ĩ h	0~1	0

ƀ ' PID ĩ ˆH˜

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P10

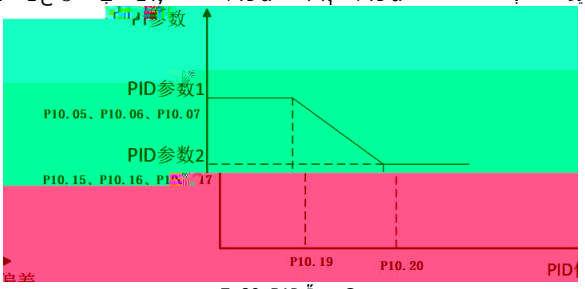
PID ü f ˇ PID v f f ˇ y ü f
b ≠ ǯ Â

w	O		ж	v
P10.12	PID ǐ	0.00~60.00s	0.00~60.00	0.00s
P10.13	PID ₣	0.00~60.00s	0.00~60.00	0.00s

P10.12 g PID ǐ ˇ ≠ g y ǐ ǯˇ p Ψ
ǯ Ǐ Â
P10.13 g PID ₣ ˇ Ψ ⋮ f ϛ ₣ fˇ p Ψ
ǯ Ǐ Â

w	O		ж	v
P10.15	ᴅ Kp2	0.0~100.0	0.0~100.0	20.0
P10.16	№ Ti2	0.01~10.00s	0.01~10.00	2.00s
P10.17	№ Td2	0.00~10.000	0.00~10.000	0.000s
P10.18	PID ă Ⓟ Ð	0 b Ⓟ 1 DI Ⓟ 2 Ẓ ˩ Ⓟ	0~2	0
P10.19	PID ă Ⓟ Ẓ 1	0.0%~P10.20	0.0~P10.20	20.0%
P10.20	PID ă Ⓟ Ẓ 2	P10.19~100.0%	P10.19~100.0	80.0%

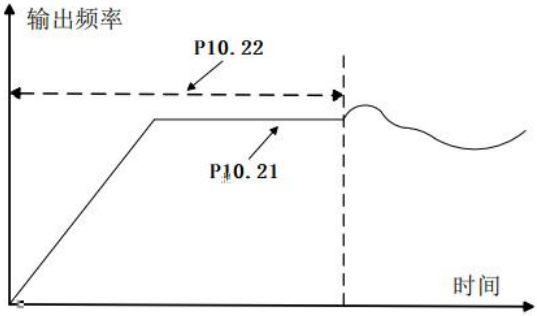
ض ' ش ˇ ₩ PID ă b ¢ ˇ b ' Ǐ b PID ă
Â
w g ɳ PID ă Ⓟ Â ì Ţ ϛ ă P10.15~P10.17 ˇ b ă
P10.05~P10.07 ³ Â
ɳ PID ă ˜ y w DI Ⓟ ˇ 3 ˜ y PID Ẓ ˩ Ⓟ Â
ч w DI Ⓟ ˇ w w ч43 PID ă Ⓟ ~ ˇ
ă 1 P10.05~P10.07 ˜ ˇ ă 2 P10.15~P10.17 ˜ Â
ч ˩ Ⓟ ˇ b ǐ ɳ Ẓ v g PID ă Ⓟ Ẓ 1P10.19 ˇ PID ă ă
1 Â b ǐ ɳ Ẓ v g PID Ⓟ Ẓ 2P10.20 ˇ PID ă ă 2 Â b ǐ ɳ
Ẓ g Ⓟ Ẓ 1 ȩ Ⓟ Ẓ 2 ɳ ˇ PID ă ч ɳ PID ă vˇ ъ 7-20 Â



ъ 7-20 PID ă Ⓟ

w	O		ж	v
P10.21	PID Δ v	0.0~100.0%	0.0~100.0	0.0%
P10.22	PID Δ v G	0.00~650.00s	0.00~650.00	0.00s

ǐ ϛ Ƣˇ ˇ PID ₣ ϕ ч PID Δ v P10.21ˇ PID Δ v G P10.22 Uˇ PID
Â ъ 7-21 ч PID Δ v w ъ Â



ぇ 7-21 PIDΔ ỵ w ぇ

w O

P11.03	Ж	ﻓﻤﻢ
P11.04	И ^ Ш ~	ﻓﻤﻢ

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W	O	
P11.05	И ^ Ш ~	Ш
P11.06	И ^ Ш ~ ₹	Ш ₹
P11.07	И ^ Ш ~ ₹ И	Ш ₹ И
P11.08	И ^ Ш ~ ~	Ш ~
P11.09	И ^ Ш ~ ~ И	Ш ~ И
P11.10	И ^ Ш ~ Ї ҫ	Ш Ї ҫ
P11.11	И ^ Ш ~ Ḥ	Ш Ḥ
P11.15	Ж	
P11.16	Ж ₹	
P11.17	Ж ₹ И	
P11.18	Ж ~	P11.05~P11.11
P11.19	Ж ~ И	
P11.20	Ж Ї ҫ	
P11.21	Ж Ḥ	
P11.25	Ђ	
P11.26	Ђ ₹	
P11.27	Ђ ₹ И	
P11.28	Ђ ~	P11.05~P11.11
P11.29	Ђ ~ И	
P11.30	Ђ Ї ҫ	
P11.31	Ђ Ḥ	
P11.35	≠	
P11.36	≠ ₹	
P11.37	≠ ₹ И	
P11.38	≠ ~	P11.05~P11.11
P11.39	≠ ~ И	
P11.40	≠ Ї ҫ	
P11.41	≠ Ḥ	
P11.45	Ѓ	
P11.46	Ѓ ₹	
P11.47	Ѓ ₹ И	
P11.48	Ѓ ~	P11.05~P11.11
P11.49	Ѓ ~ И	
P11.50	Ѓ Ї ҫ	
P11.51	Ѓ Ḥ	
P11.55	Л ﻓﻤﻢ	Л ﻓﻤﻢ ^ 0~199 ~
P11.56	Л Ḥ	
P11.57	ﺿﻤﻪ ﻓﻤﻢ	P11.55
P11.58	ﺿﻤﻪ Ḥ	
P11.59	ﻓﻤﻢ	P11.55
P11.60	Ḥ	
P11.61	Ԋ ﻓﻤﻢ	P11.55
P11.62	Ԋ Ḥ	
P11.63	Ш ﻓﻤﻢ	P11.55
P11.64	Ш Ḥ	

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PLC Â ﻙ ﺇ ﻙ ﻉ Â
PLCﻭ ﺏ ▯ ﻍ ﻝ ﺃ ﺯ ﻭ ﺇ PLC ﺩ ﻝ

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ﻭ	O		ﺥ	ﻉ
P12.00	ﺩ 0	-100.0~100.0%	-100.0~100.0	0.0%
P12.01	ﺩ 1	-100.0~100.0%	-100.0~100.0	0.0%
P12.02	ﺩ 2	-100.0~100.0%	-100.0~100.0	0.0%
P12.03	ﺩ 3	-100.0~100.0%	-100.0~100.0	0.0%
P12.04	ﺩ 4	-100.0~100.0%	-100.0~100.0	0.0%
P12.05	ﺩ 5	-100.0~100.0%	-100.0~100.0	0.0%
P12.06	ﺩ 6	-100.0~100.0%	-100.0~100.0	0.0%
P12.07	ﺩ 7	-100.0~100.0%	-100.0~100.0	0.0%
P12.08	ﺩ 8	-100.0~100.0%	-100.0~100.0	0.0%
P12.09	ﺩ 9	-100.0~100.0%	-100.0~100.0	0.0%
P12.10	ﺩ 10	-100.0~100.0%	-100.0~100.0	0.0%
P12.11	ﺩ 11	-100.0~100.0%	-100.0~100.0	0.0%
P12.12	ﺩ 12	-100.0~100.0%	-100.0~100.0	0.0%
P12.13	ﺩ 13	-100.0~100.0%	-100.0~100.0	0.0%
P12.14	ﺩ 14	-100.0~100.0%	-100.0~100.0	0.0%
P12.15	ﺩ 15	-100.0~100.0%	-100.0~100.0	0.0%

ﺩ ﻱ ﺽ ﷺ ' ﺏ ﻙ à ﺏ ﻙ PLC Â
ﷺ Й ﺩ ﻙ ﻉ ﺥ -100.0%~100.0% ﺏ ﻙ ﺇ ﻙ
P00.10 № ' G PLC ﻙ ﻉ ﺩ ﺏ ﻙ PID ﺏ Â
ﺩ ﻭ DI ﺏ ▯ ® ﺇ ﺭ ﷺ P04 Â

ﻭ	O	ﺥ	ﻉ
P12.16	PLC	0' ﻥ ↑' Å 1' ﻝ ﷺ " ﻉ ﻫ~2 0y · n 0 0y ﻯ 0y 2' ﷺ	

ﷺ ﷺ P00·



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P12.17	PLC	¢ β' Ơ Ь 1' Ѵ β' Å Ơ Å Ь 1' Å	00~11	00

PLC ╠PLC Ĭ ˘ ЙĮ ⁘ ɾ Â
Ь ˘ ↕ ⁘ PLC Â
PLC Å Å ╠ W PLC Ĭ ˘ ЙĮ ɾ Â
Ь ˘ ↕ Ø˘ PLC Â

ѡ	O		ъ	ỵ
P12.18	PLC 0	0~6500.0s	0~6500.0	0.0s
P12.19	PLC 0 ѵ ⁞	0~3s	0~3	0s
P12.20	PLC 1	0~6500.0s	0~6500.0	0.0s
P12.21	PLC 1 ѵ ⁞	0~3s	0~3	0s
P12.22	PLC 2	0~6500.0s	0~6500.0	0.0s
P12.23	PLC 2 ѵ ⁞	0~3s	0~3	0s
P12.24	PLC 3	0~6500.0s	0~6500.0	0.0s
P12.25	PLC 3 ѵ ⁞	0~3s	0~3	0s
P12.26	PLC 4	0~6500.0s	0~6500.0	0.0s
P12.27	PLC 4 ѵ ⁞	0~3s	0~3	0s
P12.28	PLC 5	0~6500.0s	0~6500.0	0.0s
P12.29	PLC 5 ѵ ⁞	0~3s	0~3	0s
P12.30	PLC 6	0~6500.0s	0~6500.0	0.0s
P12.31	PLC 6 ѵ ⁞	0~3s	0~3	0s
P12.32	PLC 7	0~6500.0s	0~6500.0	0.0s
P12.33	PLC 7 ѵ ⁞	0~3s	0~3	0s
P12.34	PLC 8	0~6500.0s	0~6500.0	0.0s
P12.35	PLC 8 ѵ ⁞	0~3s	0~3	0s
P12.36	PLC 9	0~6500.0s	0~6500.0	0.0s
P12.37	PLC 9 ѵ ⁞	0~3s	0~3	0s
P12.38	PLC 10	0~6500.0s	0~6500.0	0.0s
P12.39	PLC 10 ѵ ⁞	0~3s	0~3	0s
P12.40	PLC 11	0~6500.0s	0~6500.0	0.0s
P12.41	PLC 11 ѵ ⁞	0~3s	0~3	0s
P12.42	PLC 12	0~6500.0s	0~6500.0	0.0s
P12.43	PLC 12 ѵ ⁞	0~3s	0~3	0s
P12.44	PLC 13	0~6500.0s	0~6500.0	0.0s
P12.45	PLC 13 ѵ ⁞	0~3s	0~3	0s
P12.46	PLC 14	0~6500.0s	0~6500.0	0.0s
P12.47	PLC 14 ѵ ⁞	0~3s	0~3	0s
P12.48	PLC 15	0~6500.0s	0~6500.0	0.0s
P12.49	PLC 15 ѵ ⁞	0~3s	0~3	0s
P12.50	PLC ч β	Ơ ŝ ~ 1' ĥ ~	0~1	0

0 P12.00

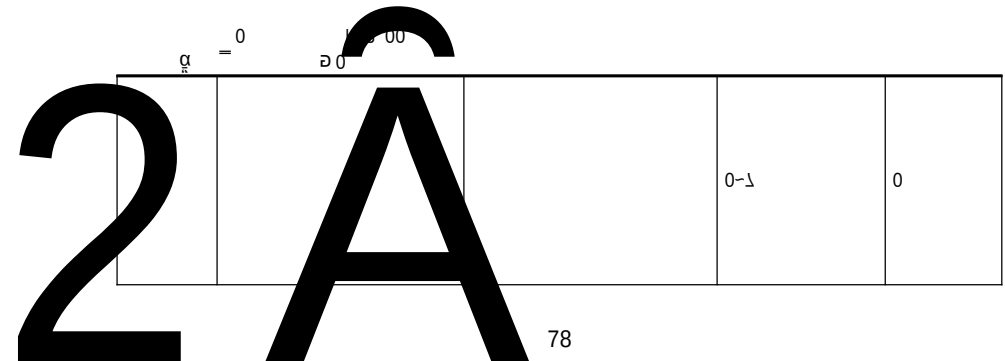
3

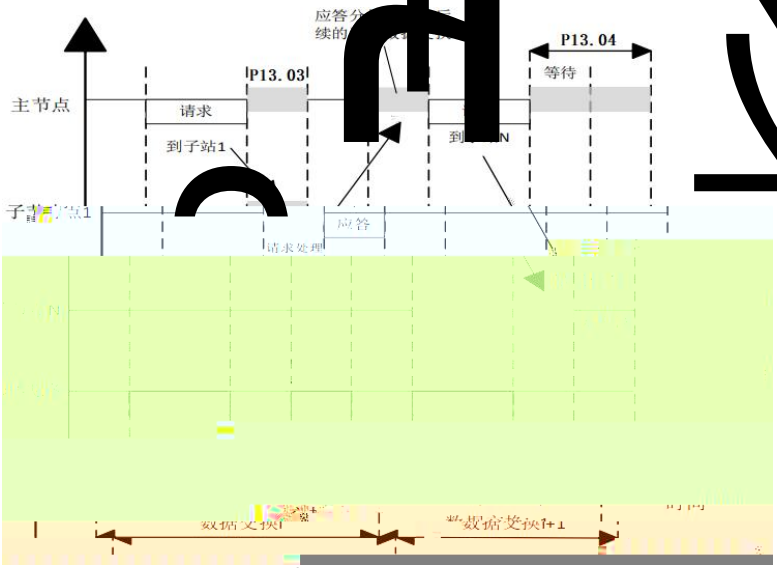
P12.51 ɒ 0

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P13.04	MODBUS	0.0 ~ 0.1~60.0s	0.060.0	0.0s

P13.05		Modbus 0 Modbus 1 Modbus	0~1	0

P13.08	Profibus	0.0 ~ 0.1s~60.0s	0.0~60.0	0.0s

7.14. P16

P16.00		0~65535	0~65535	0

P16.01	ă Δ .	ơ Þ 1' ₣ ∧ ă ˘ Ь´ ă	0~1	0

1' ₣ ∧ ỵ˘ Ь´ ă

P16.01 ч 1 Ư˘ Ĩ ƍ w ă № ч ∧ ₣ ∧ ă ˘ p ă à

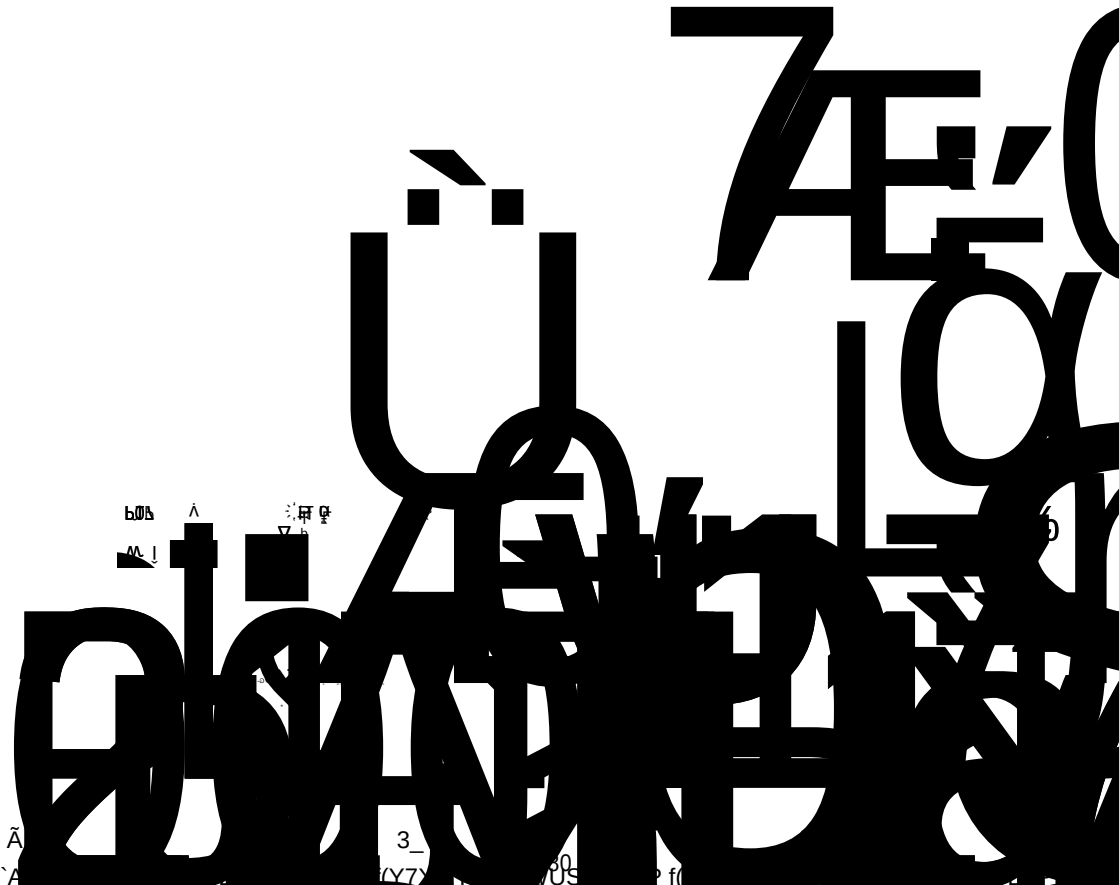
Ḥ à ^ P07.07˜ à ^ P07.06˜ à ^ P07.08 à P07.23˜ à P16

à ₣ ∧ ð ă ^ P22.08˜ Ь Â

7.15. P17 L ă

w O ɔₒ ỵ

P17.00 / L



BIT15 : ą Â w Ø ض ĩ ڑ Ø ╠ : Â

w	O		ж	ų
P22.27	۱ L ۱ ɒ	0.0~100.0 0.0 ۳ ۱ L	0.0~100.0	10.0
P22.28	۱ L ۱ №	0.0~100.0	0.0~100.0	5.0

w ضP09.72BIT3 ˘ ۱ Lw ą ˘ ŵ ' Ӆ˘ ۱ L ۱ ɒ ė № Þ Â ˘ PI ă ˘ ض ⋮ L˗ ۱ L Ţ ₣ ĩ Ⱶ Â

7.17. P23

w	O			ж	ų
P23.00	AI	1	~	0.00mA~P23.02	0.00~P23.02	4.00mA
P23.01	AI	1	~	-100.00~100.0%	-100.00~100.0	0.0%
P23.02	AI	1	~	P23.00~20.00mA	P23.00~20.00	20.00mA
P23.03	AI	1	~	-100.00~100.0%	-100.00~100.0	100.0%
P23.04	AI1			0.00~10.00s	0.00~10.00	0.10s
P23.05	AI	2	~	0.00mA~P23.07	0.00~P23.07	4.00mA
P23.06	AI	2	~	-100.00~100.0%	-100.00~100.0	0.0%
P23.07	AI	2	~	P23.00~20.00mA	P23.00~20.00	20.00mA
P23.08	AI	2	~	-100.00~100.0%	-100.00~100.0	100.0%
P23.09	AI2			0.00~10.00s	0.00~10.00	0.10s
P23.10	AI	3	~	0.00mA~P23.12	0.00~P23.12	4.00mA
P23.11	AI	3	~	-100.00~100.0%	-100.00~100.0	-100.0%
P23.12	AI	3	~	P23.10~20.00mA	P23.10~20.00	20.00mA
P23.13	AI	3	~	-100.00~100.0%	-100.00~100.0	100.0%

w G ˘ ~ Þ ĩ ף ų ң ˜ Â

~ G Ľ ~ Ŀ^ ɒ ' P23.02˜ ˘ ↕ Ľ

˜ Ŀ ' ˘ ~ G Ľ ~ Ŀ^ ɒ ' P23.00˜ ˘ ↕ Ɣ ~

0.0% Â P23.11 ↕ -100.0% Â

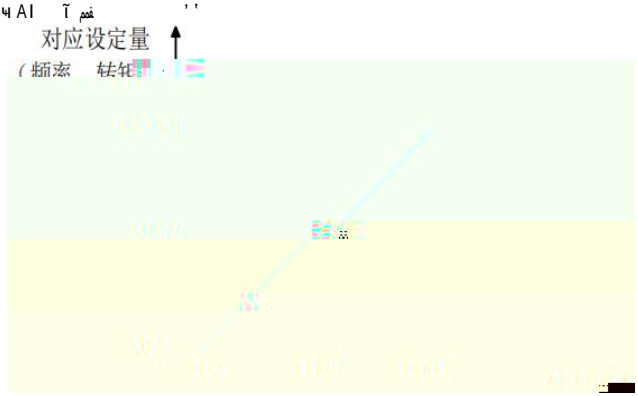
AI ~ ˘ G AI Ð ˘ ض ˘ ₰ ˘

Ɣ ą G ˘ p ↕ ڑ Ĩ ˘ v

' Â

ض Þ ض ˘ 100.0% ų Ƈ ң Þ ˘ Í r ă Ⱶ № Â

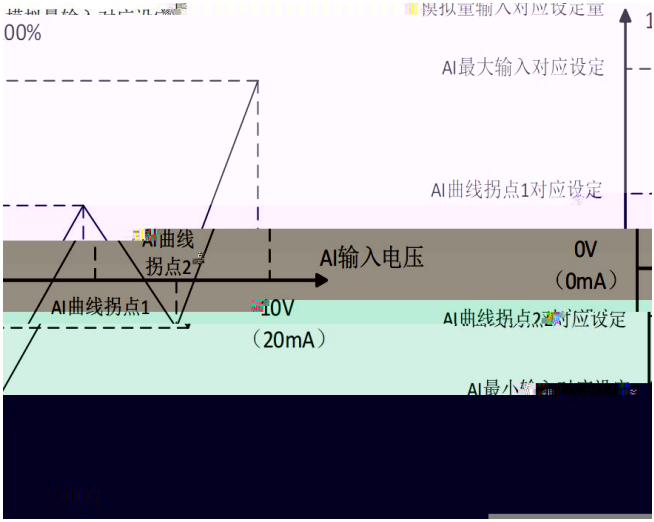
Ӆ ىح 7-24 ч AI ĩ قمم ' '



ىح 7-24 Þ ۳

w	O			ж	ų
P23.14	AI	4	~	0.00~P23.16	0.00~P23.16	4.00mA
P23.15	AI	4	~	-100.00~100.0%	-100.00~100.0	0.0%

P23.16	AI 4 1 ~	P23.14~P23.18	P23.14~P23.18	8.80mA
P23.17	AI 4 1 ~	-100.00~100.0%	-100.00~100.0	30.0%
P23.18	AI 4 2 ~	P23.16~P23.20	P23.16~P23.20	13.60mA
P23.19	AI 4 2 ~	-100.00~100.0%	-100.00~100.0	60.0%
P23.20	AI 4 ~	P23.18~20.0mA	P23.18~20.0	20.00mA
P23.21	AI 4 ~	-100.00~100.0%	-100.00~100.0	100.0%
P23.22	AI 5 ~	0.00~P23.24	0.00~P23.24	4.00mA
P23.23	AI 5 ~	-100.00~100.0%	-100.00~100.0	-100.0%
P23.24	AI 5 1 ~	P23.22~P23.26	P23.22~P23.26	9.60mA
P23.25	AI 5 1 ~	-100.00~100.0%	-100.00~100.0	-30.0%
P23.26	AI 5 2 ~	P23.24~P23.28	P23.24~P23.28	14.40mA
P23.27	AI 5 2 ~	-100.00~100.0%	-100.00~100.0	30.0%
P23.28	AI 5 ~	P23.26~20.00mA	P23.26~20.00	20.00mA
P23.29	AI 5 ~	-100.00~100.0%	-100.00~100.0	100.0%



ɔ 7-25 ~ -AI ~ ˄

ɔ ˇ AI 4 5 ɟ 1 2 ą W ɏ ض AI

~ ụ Â AI ~ ˄ ~ à 1 ˄ ~ à 2 ˄

~ à ˄ ~ ш Â

W	O		ض	ụ
P23.30	AI1	-100.0~100.0%	-100.0~100.0	0.0%
P23.31	AI1	0.0~100.0%	0.0~100.0	0.5%
P23.32	AI2	-100.0~100.0%	-100.0~100.0	0.0%
P23.33	AI2	0.0~100.0%	0.0~100.0	0.5%
P23.34		-100.0~100.0%	-100.0~100.0	0.0%
P23.35		0.0~100.0%	0.0~100.0	0.5%
P23.36		-100.0~100.0%	-100.0~100.0	0.0%
P23.37		0.0~100.0%	0.0~100.0	0.5%

~ AI1~AI2 ɏ ụ W Â W ˇ ض

Й ч ˇ ч ụ Â

ᴅ ' AI1 ~ ﾉ ﺽ5.00Ⱨ ː Й ˫ ˇ ˫ ﺧ ч 4.90-5.10 AI1 ~ 10.00V
100.0% Ꮋ ⌠ AI1 ﺽ49.0%-51.0% Ꮋ ˫ Â AI1 ч 50.0% AI1
ч 1.0% ⁝ː AI1 ~ ᴡ Ս ⌠ AI1 ~ ﻩ ч 50.0% AI1
Ỉ ч ᾱ ɷ ~ˇ ɔ ˫ Â

ᴡ	O		ﺧ	Ⱬ
P23.48	AI 1	ɷ β' AI1 Ⱶ β' AI2 β' Ⱶ β' 1' 1 2' 2 3' 3 4' 4 5' 5	1~5	1111

≠ P26.14 AI1 ⌡ AI2 ~ ˇ Ỉ ᵣ 1-5 ˁ P23.01 ⌡ P23.29 Â

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¬ Ⱨ ˈ ι O
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ɕ ιΛ Ⱨ ɋ 人 [illegible]

P23.65	A03 Ƶ	100 -100.0%	-100.0~+100.0	20.0%
P23.66	A03	10.00 0.00	-10.00~+10.00	0.80
P23.67	A04 Ƶ	100.0~ .0%	-100.0~+100.0	20.0%
P23.68	A04	10.00~+1	-10.00~+10.00	0.80

☼ w w̄ ɢ ƙ ₣ ₣ ʏ ʏ ɢ Ꮒ A0 ₣
Â
Ƶ l' b Ł ˘ l' k Ł ₣ l' Y Ł ‰ ₣ l' X Ł ˘ ↕
₣ ч' Y=kX̄ bÂ
ỉ Ţ˘ A01 à A02 à A03 à A04 Ƶ 100% ‰ ₣ ضِ Ƶ ǐ ƙ Ӄ˘
₣ 0mA~20mA ₣ Â
ă U˘ I0 o ☼ β

w	O		ɲ	ʏ
P23.90	AI	ɷ β' AI1 BITƟ' BIT1' AI1 Ḥ̂ Ḡ Ⴘ β' AI2 BITƟ' BIT1' AI2 Ḥ̂ Ḡ β' Ⴑ β'	Ɵ Ƅ Ḡ 1' Ḡ	2222

P23.90w ˜ ʏ AI1 ⌠ AI2 ɷ ˜ ضِ ˘ w̄ β
ч l' 2 Ł ↕ Ḡ w Ω Â Ů AI ʏ Ӄ ʏ ↕ ∞ ╠AI
~ ˘ Ω ϡ Ḡ ↕ Ψ ~ ʏ Ḡ ضِ ҥ ╠ Â

7.18. P24 ض

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w	O		ж	ų
P25.21	ɾ	1~8	1~8	1

h ɾ └ ˘ ɾ ч h Ů щ ˘ ↙ з ⓠ ɾ Ů з ' Ӟ P25.22, P25.23 ɾ ɇ Ḡ ˉ ƀ щ ˘ Â ᵬ 3ⓠ ɾ ˘ P25.21 ч 3 Â

w	O		ж	ų
P25.22	ɾ	BIT0~7' ɾ 1~8 ą BIT8~16' ɾ 1~8 ą 0' Ь ' 1'	0x0000~0xFFFF	0
P25.23	ɾ Ḡ ˉ ƀ	BIT0~7 ɾ Ḡ ˉ ƀ BIT8~15' Ḡ 0' ' 1' ҏ	0x0000~0xFFFF	0

h ɾ └ ˘ ˜ β P25.22w ∨ 8 β˘ №≠ 1~8˜ ɾ Ḥ ɇ ɾ ˆ h ă ˜ ˘ №≠ 1˜ ɾ ɇ 2˜ ɾ ˘ ↕ β 0x01 , ∨ β 0x02 ⎡ h w P25.22 ч 0x0102 Â P25.23˜ ɣ β 1~8˜ ɾ Ů Ḡ ˉ ƀ˘ 0 ч ˘ 1 ч ҏ ˘ ч 0 ˘ 3˜ ɾ ⎡ ˘ Ь ҏ ˘ ↕ BIT2 ч 1 ↙ ˘ P25.23 ч 0x04 Â h ɾ └ ˘ ₇ h à ɾ P13.00 Ⴓ β --CANlink ₩ ˘ ضP25.01№ h ɾ ضخ˘ ˜ ɣ h ɾ ҕ ˜ ˘ ɾ 'P ث Ɒ à ↙ ˜ h Ⴗ Å ث Ɒ˘ ˘ ˘ ɣ ї h ˘ Ḃ Â ɣ ₩ h ₩ ɾ ч ᵬ˘ ҕ ˜ ї ↺ CANlink ч 500k˘ 'P h P25.01 ч 1˘ ɾ P25.01 2˜ Ⴗ˘ h ˘ ɾ ˉ h Ɒ˘ Â

7.19. P26 w ч ˜Ḥ ă

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	ⓠ β 0'		
P26.00	ą		

W	O		ض	ע
P26.13	ɬ ˝Ḥ ⁿ Ĭ ˗ β 1	₡ β' ɬ ˝Ḥ ɬ Ɯ β' ɬ ˝Ḥ ɬ β' Ɯ β' ɬ ˝Ḥ ' β' ɬ ˝Ḥ ˗	00000~33333	33333

W	O		ض	ע
P26.14	ɬ ˝Ḥ ⁿ Ĭ ˗ β 2	₡ β' ɬ ˝Ḥ Ɯ β' β' ɬ ˝Ḥ Ɯ β' ' β'	00000~33333	33333

≠ P26.13 ɇ P26.14 W ˘ ˆ Ɣ ك' ⁿ ɬ ˝Ḥ ˝Ḥ ˗ β Â ᵖ
'

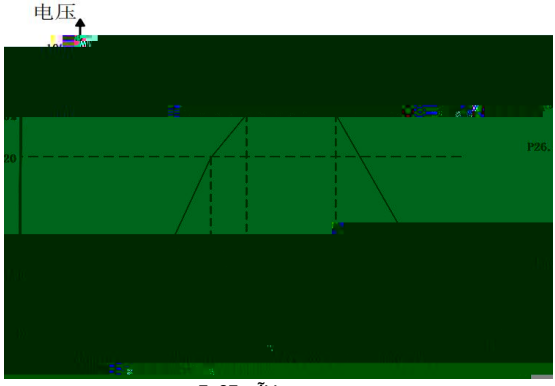
P26.13 Ţ ₡ β ч Ґ 3 Ŀ˘ ɬ ˝Ḥ Ŭ ϖ ɬ ˝Ḥ ɬ ˘ ɇ ˗ β ˝Ḥ ' ч
Ґ 2 Ŀ ₇ ˝Ḥ ˗ β ᵖ Ь˝Ḥ ' ч Ґ 1 Ŀ ↕₇ ˝Ḥ Ь˝Ḥ ˗ β' ч Ґ 0 Ŀ ↕
ɇ β Ь˝Ḥ Â

ă P26.13 Й '

₡ β' ɬ ˝Ḥ ɬ BIT0: 0' 1' ˝Ḥ ע ч Ȝ ч Ґ ˝Ḥ Ŀ'
BIT1: ˗ β 0' 1' ˝Ḥ ˗ β ч Ґ ˝Ḥ Ŀ Â
Ɯ β' ɬ ˝Ḥ ɬ BIT0: 0' 1ض ע ч Ȝ ч Ґ ˝Ḥ Ŀ'
˗ β ч Ґ ˝Ḥ Ŀ Â

β' ヶ"Ḥ	BIT0:	0'	ṿ ч 3' ч Ґ"Ḥ Ŀ' ⁻ β ч Ґ"Ḥ Ŀ Â
		1' "Ḥ	
	BIT1: ⁻ β	0'	
		1' "Ḥ	
Ч β' ' β'	BIT0:	0'	ṿ ч 3 Â
		1' "Ḥ	
	BIT1: ⁻ β	0'	
		1' "Ḥ	

ᴡ	O		ɔ₀	ṿ
P26.15	ᵀḤ	0:A01 1:A02	0~1	0
P26.18	ῡ ʜ Ⓟ	0~80%	0~80	30.0%
P26.19	ῡ ᵀḤ ᵛ	0.1~50.0s	0.1~50.0	8.0s
P26.20	ʜ ⁂ Ⓟ	5.0~78.0%	5.0~78.0	70.0%
P26.21	ʜ ᵀḤ ᵛ	0.5~50.0s	0.5~50.0	4.0s
P26.22	⁂ ᵀḤ ᵛ	0.0~10.0s	0.0~10.0	1.0s



ɔ₀ 7-27 ᵀḤ

P26.15 Ţ ₣ ң ₣ˇ G ضʜ ᵀḤ Ţ └ ヶ ҁ ₣ ヶ Â ʜ ᵀḤ ᵀ ヶ ˜ № ч⁂ ˇ P26.18 G ῡ U ⌠ ヶ ṿˇ P26.19 ↕ G ῡ ⍵ ᵀḤ Â ³ ضˇ P26.20˝ P26.21˜ P26.22№≠ ʜ ȁ⁂ ᵀḤ ɇ ⌠ ヶ ṿˇ ⁂ ヶ ⌠ ヶ ṿ Â

ᴡ	O		ɔ₀	ṿ
P26.23	ᵀḤ	1.0~10.0s	1.0~10.0	2.0s
P26.24	ᵀḤ ⁞	0.0s		1.5s
P26.29	ᵀḤ ṿ	0~15%	0~15	7%

ʜ ᵀḤ ᵀ ヶ ң U ヶ "Ḥ ヶ Ȝ ᵀˇ ヶ ⌠ ᵀḤ ヶ Ḡ P26.23 ң U 'P ᵀḤ ⁞ '

ضP26.24 ᵀḤ ⁞ ṗˇ h Ψ ヶ ҁ ヶ ɾ ᵀḤ ヶ ʏ ⌠ ṿ Â ᵀḤ h ч ϑ ᵀ ヶ ⁞ ⁘ Ⅱ Ð ᵖˇ ⍵ Ţ Ъ Â ɔ₀ Ψ Ъ Й ˘ ᵀḤ Ţ ǐ ヶ ҁ ヶ G P26.29 Ţ ṿˇ ↕ ᵀḤ Ţ ˜ Ь Â

7.20. P29 ‰ ă

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P29.00	AI1	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.01	AI1	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.02	AI1	2	16.000~19.999mA	16.000~19.999	₣ ∧

P29.03	AI1	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.04	AI2	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.05	AI2	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.06	AI2	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.07	AI2	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.08		1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.09		1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.10		2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.11		2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.12		1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.13		1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.14		2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.15		2	16.000~19.999mA	16.000~19.999	₣ ∧

w ˘ ~ AI1 ɇ AI2 ˘ ϒ AI ~ₒ Ƶ Ь ǯ Â

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Ь Â

˘ ' Л ϛ ₣ ˘ Ѝ ϛ ₣

ν˘ U0 AI ╟ ^ U00.21 à U00.22 à U00.23~ Â

˘ ضِ ⊄ AI ~ ₒ Ⴝ ~ Ң ⊄ ν˘ №≠ ' ν Ь U0 Ǔ ν˘

‰ ~ w ˘ ↕ Ѝ ϛ Ψ ˫ AI Ƶ Ь Â

ɢ Ѝ ϛ Ь ϒ شِ ˘ ˆ ϒ شِ ˘ ą Ѝ ϛ

ν Ь ν ₩ ˘ ϒ AI1 ч ᵒ˘ شِ Ѝ'

1. AI1 Ң ^ 5.000mA ˚ ~

AI1 ν˘ ~ w ǎ P29.00

U00.21 ν˘ ~ w ǎ P29.01

2. AI1 Ң ^ 19.000mA ˚ ~

AI1 ν˘ ~ w ǎ P29.02

U00.21 ν˘ ~ w ǎ P29.03

w	O			ж	ν
P29.16	A01	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.17	A01	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.18	A01	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.19	A01	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.20	A02	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.21	A02	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.22	A02	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.23	A02	2	16.000~19.999mA	16.000~19.999	₣ ∧
P29.24	A03	1	4.500~8.000mA	4.500~8.000	₣ ∧
P29.25	A03	1	4.500~8.000mA	4.500~8.000	

8.

		4. Ĩ ☹ ₣ ض 5. └ Ð
WO27	1	1. ₩ DI ~ Ꮒ Ꮒ 1 Ḥ̃ ч 2. IO
WO28	2	1. ₩ DI ~ Ꮒ Ꮒ 2 Ḥ̃ ч 2. IO
WO29	⌠	⁜ ¬ 2
WO31	PID Ĩ ϰ	PID Ĩ G P10.26 Ṿ
WO36	~ Ь	1. ~ ⁓ 2. ~ ε ☹ 3. ~ Ĩ ۸ ☹ ~ ʊ 4. └ Ð
WO39	PLC	1.PLC ⁜ 2.PLC ϰ

	2. ⁜ ₣ ۸ ⁓ ˘ ٦ ˘ ٦ ą̀
	3. Ĩ ☹ Ь ˘ ⁜
	4. Ĩ ☹ Ь ˘ ' Ĩ ☹ UV⁜ ₣ ض ٦ ˘ Ṿ ч ѽ ^ G 100M ß ~ ч ^ ~ Â
	5. IO h
	1. β 2. ɜ ₩ DI IO
	1. β 2. ɜ ₩ DI IO
	⁓ ¬ 2
	PID Ĩ Ḥ̃ P10.26 ч‴ Ṿ
	1. ~ ⁓ ' ٦ ˘ ٦ ą̀
	2. Ꮋ ~ ε ☹ ٦ ˘
	3. ⁓ ¬ 2
	4. IO h



W052	DP/PN	1.DP/PN ۷ Ь PLC Ꮒ Ţ 2.DP/PN ۷ ɾ ˜ 3.DP/PN ۷ Ь PLC Ꮒ	1. DP/PN ۷ Ь PLC Ꮒ ң Ɑ ȁ˜ 2. ќ DP/PN ۷ ɾ ˜ ⌈ ¨Ң ۶ ң ṗ 3. Profibus P13.08
W080	۷ ˝Ң	1. 2. ۷ ˝Ң Ь 3. 4. 5. ۷ ˝Ң L	1. ۷ ą 2. ۷ ˝Ң ˜ ¬ 2 3. 4. Ɑ ĩ ' 5. ۷ ˝Ң L
W082		1.AI1~AI2 ض Ẓ 2.P23.90 Ţ ą AI ẹ AI I	

W120	~ ≀ Ь	1. ~ ≀ 2. ~ ≀ ⊁ 3. └ ɒ 4. ~ ≀	5. I0 h 1. ~ ≀ ⁊ ' ỵ ⁊ ' ⁊ ' Ỉ ⁄RS₮ ~ ʐ ⁊ 2. ~ ≀ ⊁ ˘ ⁊ ˘ ⁊ ȁ 3. I0 h 4. ~ ≀ ⁊
W121	₣ ≀ Ь	1. ₣ ≀ 2. ₣ ≀ ⊁ 3. └ ɒ	1. ₣ ≀ ⁊ ' ỵ ⁊ ' ⁊ ' Ỉ ⁄UVW ₣ ʐ ⁊ 2. ₣ ≀ ⊁ ˘ ⁊ ˘ ⁊ ȁ 3. I0 h
W123		1. Ŭ 2. w Ь ˘ ⁄ Ƶ 3. ă ˘ P09.40 ɇ P09.41	1. ˈP └ 2. ⁞ ǐ ' 3. ă ₣ ∧
W163	℗	1. ▯ ℗ Ƶ 2. ~ ŭ ⌟	1. P06.24∞ ỵ 2. ⁼ ⁻ Ƨ
W165		Ỉ Ь └ Ḥ ˜ Ь ₩ ˘ ∧ ƀ Ӣ Ỉ ˘ ƀ Ӣ Ỉ	1. Ỉ DI ⁊ à ⁊ ' 2. └DO ₣ ⁄ ⁊ ƀ˘ Ь DO ₣ ⁊ ₩
W180	⌟ ⁄	⌟ Ӣ ℗ ⁄ ⁊ №	1. ⌟ ⁄№ ⊁ 2. ⌟ ⁄ Ỉ ⁊
W181	~	1. ~ ≀ 2. ~	1. Ɛ ~ ∧ ⌈ I0 ~ ∧ ⁊ 2. IR à IT ~ ⁊
W182	∧ ˝Ḥ ⁄	1. ∧ ˝Ḥ Ỉ 2. ∧ ˝Ḥ	1. ∧ ˝Ḥ ˘ HMI ∧ ˝Ḥ ∧ ˝Ḥ ⁊ 2. ∧ ˝Ḥ └
W183	⁄ ⁄	⁄ ⁄ Ỉ	⁄ ⁄ Ỉ Ė № ⊁ ⁊
W184	:	1. ₣ ≀ 2. ₣ ≀ ⊁ 3. Ƹ˘ P06.16	

W188	Ḥ	1. 2. Ь h RS2 o ڜ à ǐ à o	1. 2.

8.2.

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E002	∨	1. ǂ ڜ 2. ǂ 3.P01 ă ˘ L Ч L ғ 4.P09.30ˆ ǐ ڑ ~ 5. h 6. Ѻ˘ ض 7. ∨ Ţ ∨ 8. ǐ ڑ ڤ Ẓ 9. ١ ″Ḥ ǂ T1 à T2 ǐ	1. ǂ ڜ ˘ ٦ ˘ ʻ ٦ à ' ǂ ٦ ǐ h 2. ¤ 15V ˆ MḤˆ ٦ ' 3. P01 ă ˘ ʻP 3 4. P09.30 5.

E010

1.
2.
3.

E011

1.
2.
3.
4.
5.

E012

1.
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E026

E027

E028

E029

E031

E032

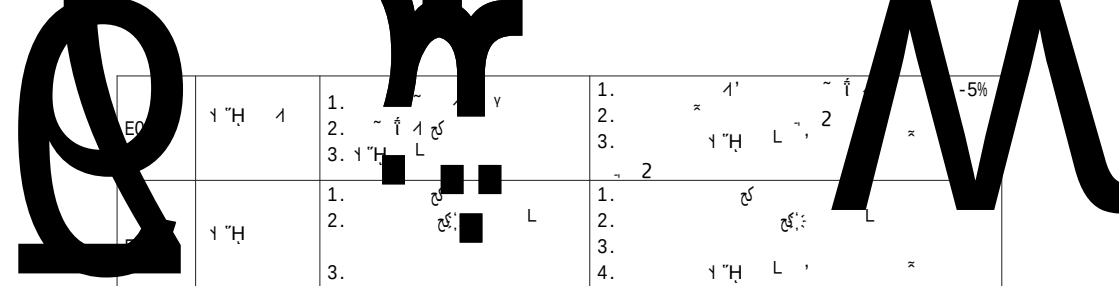
		2.DIo 3. L ɒ	2. ~ DI ч ˇ DIo IO 3. IO h
E042	Ẓ	1. ֆ ă Ь 2. 3. Ẓ ă Ьvw 4. ֆ ⌈PG ∖ 5.PG ∖ 6.24V 15V ˟ 7. h 8. ֆ	1. P01 ֆ ă 2. Ṗ 3. 'vw P09.69 4. ֆ й˘ Ь PG ∖ ' Ţ ϩ à 5.PG ∖ ϩ ' ϩ 6. 24V 15V ˟ ϩ ' IO 7. IO h 8. ֆ
E043		1. ֆ ă Ь 2. 3. Ẓ ă Ьvw 4. ֆ ⌈PG ∖ 5.PG ∖ 6.24V 15V ˟ 7. h 8. ֆ	1. P01 ֆ ă 2. Ṗ 3. 'vw P09.69 4. ֆ й˘ Ь PG ∖ ' Ţ ϩ à 5.PG ∖ ϩ ' ϩ 6. 24V 15V ˟ ϩ ' IO 7. IO h 8. ֆ
E044	˟Ḥ	1. ˟Ḥ ֆ vw 2: ~ ∧ Ь 3. ˟Ḥ L 4. ˟Ḥ L ֆ 5. к ѿ ∖ ˝Ḥ ∧ ˟Ḥ Ьɨ ˇ 6. ∖ ˝Ḥ ɒ 7. ˟Ḥ ~ 8. L ɒ	1. ˟Ḥ ֆ №vw 2. ~ ∧ 3. ˟Ḥ L ϩ ˇ Ţ ɛ́ 4. ˟Ḥ L ֆ ϩ 5. ∖ ˝Ḥ ~ ϩ 6. ∖ ˝Ḥ ̈ ä ∖ ˝Ḥ L ˇ ˟Ḥ 7.P26.29 8. IO h
E046	L	1.24V L 2. L ⌘ 3.IO DIo 4. L ɒ	1. L ϩ 24V 2. L ⌘ 3. ì ɾ DI ϥ IO 4. IO h
E047	IO	1.IO ⌘ 2. L ɒ	1. IO ⌘ ϩ ˇ ∧ ⌘' 2. IO h '
E048	ˊ ε	1. h : DSP ä ARM o 2. ض DSP 3. h	1. h o ₣ ∖ β 2. ˇ ₣ ∖ ˇ : L 3. h
E051	β	˟ ¬ 2	˟ ¬ 2
E052	DP/PN ∖	1.DP/PN ∖ Ь PLC h Ţ 2.DP/PN ∖ ɾ ˟ 3.DP/PN ∖ Ь h	1. DP/PN ∖ Ь PLC h ҥ ϩ ä˟ 2. ќ DP/PN ∖ ɾ ˟ ⌈˝Ḥ ⌘ ҥ ṗ 3. Profibus P13.08
E054	:	1. w 57- : ì 2. : : ʇ ɒ ₣ Ь : ì Ь ѿ	1. ~ Ḥ˟ ϩ ض 2. : ϩ ض ˇ β : 3. L : : ʇ ɒ Ḥ˟ ϩ ض ˇ : ϩ ʇ ɒ Ȣ Å 4. : ì Ḥ˟ ϩ ض

E055		1. Ь 2.P01	1. 2. P01
E057	~	1. ^ G 40 ~ 2. 3. 4. Ъ 5. Ḥ 6. 7. Ь I0 8. L Ð	1. ˘ Ạ 2. 3. 4. 5. ầ Ḥ 6. 7. 8. I0 h 2
E058		1. 2. 3. 4.I0 DI 5. L Ð	1. 2. 3. ầ ầ Ḥ 4. DI 5. I0 h
E059		1. 2. 3.I0 DI 4. L Ð	1. 2. 3. DI 4. I0 h
E120	~ Ь	1 ~ 2 ~ 3. L Ð 4. ~	1. ~ ầ ụ ầ ~ 2. ~ ầ 3. I0 h 4. ~ ầ
E121	Ь	1 2 3. L Ð	1. ụ ầ 2. ầ 3. I0 h
E122	:	1 2 3. P06.16 4. L Ð	1. ụ ầ 2. ầ 3. P06.16 ụ P01.10 4. I0 h
E157		ضِ	2
E160	~	1 ~ 2 ~ 3. L Ð 4. ~ 5. 6. Ḥ	1. ~ ầ ụ ầ ~ 2. ~ ầ 3. I0 h 4. ~ ầ

5. ಸ್ à l0 ˜ Ḥ˝ ೧ 6.
˝Ḥ ೧

1. ಸ್

E161 ಸ್

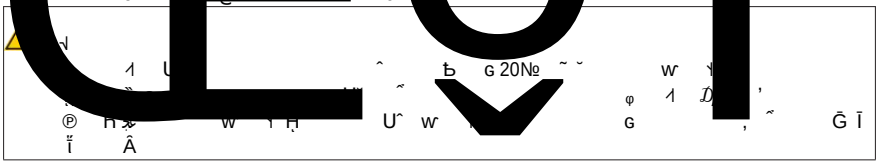


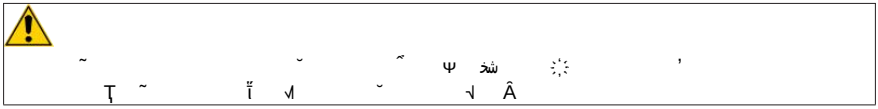
E0	۱ ״Ḥ ۱	1. ~ ۱ ۷ 2. ~ ĵ ۱ ح 3. ۱ ״Ḥ L	1. ۱’ ~ ĵ -5% 2. ״ 3. ۱ ״Ḥ L ¬ , 2 ״ ¬ 2
	۱ ״Ḥ	1. ح 2. ح L 3. 4. ۱ ״Ḥ L	1. ح 2. ح L 3. 4. ۱ ״Ḥ L , ״ ¬ 2
E071	¬	״ ¬ 2	״ ¬ 2

8.4. w ۱ ״Ḥ

w ۱ ״Ḥ ŋ ŵ Ŏw ح ¯ ¬ 2 w ۱

9. Ī Ь





9.1. ќ ƀ ʒ Ни

1) ќ ŭ ' ҁ˘ Ѝ ˇ ƨ ˇ˘ ▯ ҏ ˘ ґ Â
2) # ƨ Å ? ғ ≀ Ь Â
3) ʏ ≀ U˘ ض ƀ ╠ ѽ ' ≀ ˘ ą ≀ ҁ˘ ƨ Â
4) ض U˘ ~ ضˇ ʏ Ḡ ƀ 2 ŋ Â
5) ض ˘ ɢ Ĭ ʟ ≀ β˘ ض ќ ѿ ƨ ˇ à Ь ᵖ ң ƨ ˘ ғ ƨ ң ض Â
6) ض ѽ ضˇ U ض ˘ ض ĭ Ь Ĭ˘ à ښ ƨ Â
7) ض ض ƀ 2 ˆ ض ˘ ض ض ґ ¬ ƀ Ł ҏ Â
8) ≀ ɢ 20V U˘ ˆ ќ ƀ ʒ Â

9.2. ý ƀ E Ни b Ô Ú Ò{@

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1) 8 Â
2) ѽ Ł ˘ Ĭ ҁ ₹ ≀ „ "Ң U˘ P „ ≀ Â U˘ ˘ ض ˜ "Ң
3) ą ˘ ₇ ≀ ᴩ ښ "Ң ґ P „ ƨ ą

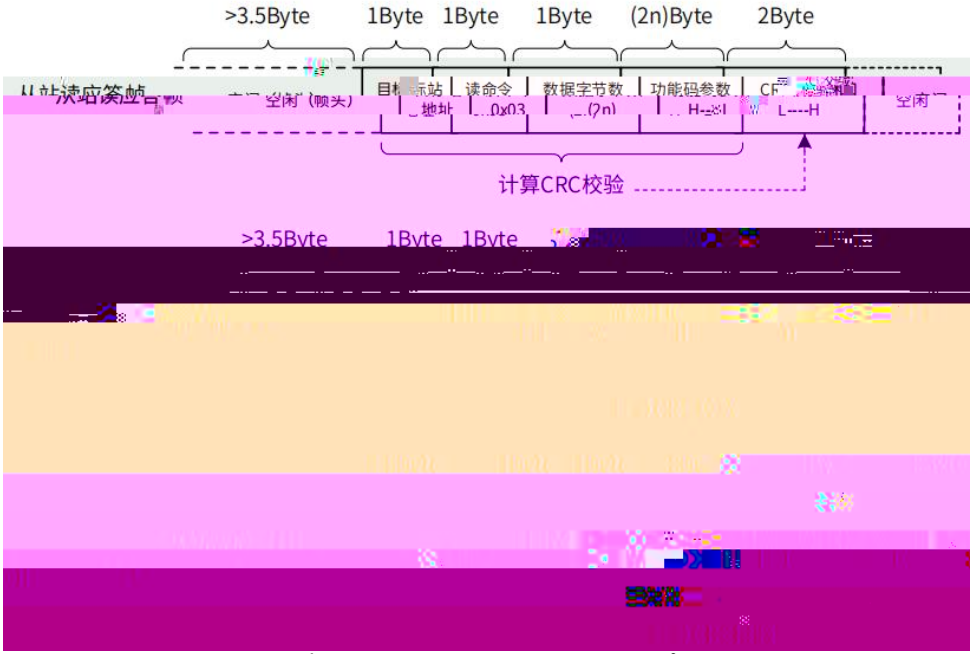
	p Ѓ Ь Ղ			ﻝ ﺧ
	p Ь Ղ			
	p à Ѓ à ˘ p	, ṿ	ů Δ ṿ ¦ 0.85	
	p p ɾ	,	ṿ ض ¤ 10% ɣ ṗ	
Ѓ ﻝ ﺝ	p ˗ ﻍ ء	∩ ش		ﻝ ﺧ
ﻍ ⊥	p Ж Ь ﺝ ˗ Ь Ղ p ء Ѓ p ˘ à Ѓ à p Ѓ Ь Ղ			à ḱ
' ﻍ	p ˗	∩		
	p	∩		

9.4. Ь Ḡ Ī

ﻝ Ѓ ﺝ ﺃ ˜ Ṛ ﺃ ﺝ ﺵ

10. Modbus 통신

RS485



ڭ ڤ ۋ ې ۇ ۆ ۈ ۋ ې ۇ ۆ ۈ ۋ ې ۇ ۆ ۈ

CRC

CRC CyclicalRedundancyCheck RTU G CRC CRC

UOO l' 10.2 ă Ł ˇ ˇ ì ضخ ҕ Ӣ'
UOO ì ضخ ђ β ч 70Ң' ٧ ђ β ч ă ضخ Ţ ˆ ˇ ٹ ᴅ Ӣ' UOO.23˝ ì ضخ ч 7017H Â
ì ɾ ضخ' UOX ضخ ђ β ч 7XҢ' ђ β ضخ Ь UOO □˜ ч ă ˆ Â
b˜ ĭ ҁ ^ ٧ ˜ '
ŭ ĭ ҁ ˇ ضخ ћ ч 3000Ң' 485 ŭ ضخ ˇ ˆ ٢ ŭ ╠ ĭ ҁ
Ң ˇ ҕ Ӣ'

ضخ	w˗
3000H	0001'
	0002' ĭ
	0003' Å 2000

c˜ ĭ ҁ ^ ٧ ˜ '
ŭ ĭ ҁ ˇ ضخ ћ ч 8000Ң' ⁚ β ŭ ضخ ˇ ˆ ٢ ŭ ╠ ĭ ҁ
٩ ˇ ٩ 9 ҕ Â

ĭ ҁ ضخ	Ң ҁ ĭ
8000H	ћ' 0~199

2. Ł ă
a˜ ٧'
٧ h ɢ ĭ ҁ Ţ ч Â ì ضخ ч 1000Ң' 485
ضخ ٧ ˇ ì ћ ч -30000~30000 Â

ضخ ă	ă
1000H	-30000~30000 ' Ł˜ ' ٧ ^

b˜ ٧'
٧ h ɢ ĭ ҁ Ţ ⁚ ä P= î

0 ˆ ˚ ٹ

11. ק ׀ ą

Í ק ק ׀^ ׀ PG ׀ ~ ˘ ƀ ч Ð ą ˘ Í ק Ạ L Ð˘
ק ₣ PG ׀˘ Í ᵣ ם̂ Ǐ'

Ð	
PCBGY6000PGC01	ם ק ׀' ם à ם à ׀ ם ɇ ˪ ם̂ +15V˜ ק ₣'
PCBGY6000PGC02	Í ׀ ק ם ק ׀' Í ׀ ק ם ק'

[redacted]