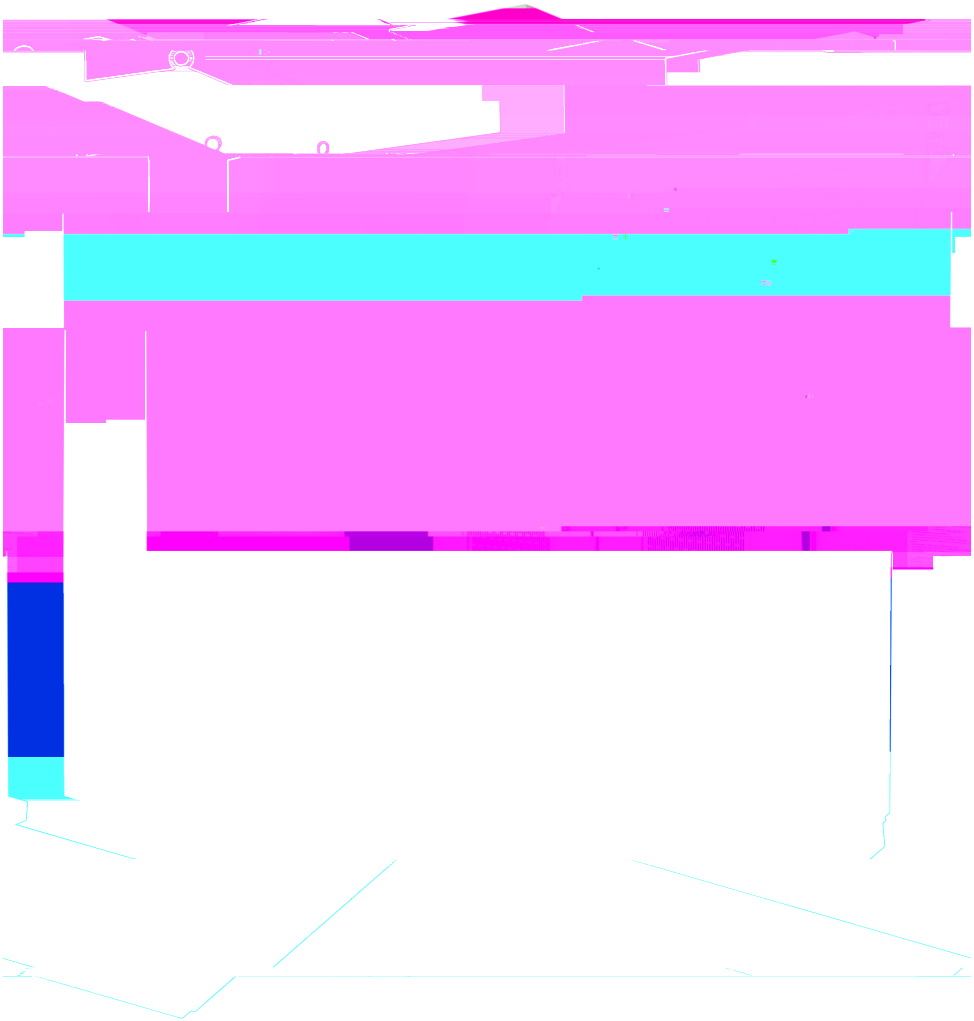
HF6000

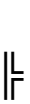
V1.00



1. Hυ 5
2. ڀ ƾ Ḥ 7
2.1. ڀ ƾ : 7
2.2. ڀ ƾ 7
2.3. ڀ ƾ ă 8
2.4. ڀ ƾ ﻡ ϒ ĭ ﻡ 8
2.4.1. ڀ ƾ ﻡ 9
2.4.2. ﻡ 9
2.4.3. Ⱨ ڀ ƾ 10
2.4.4. ڀ ƾ 12
2.5. ڀ ƾ 13
2.6. ڀ ƾ ă ‰ 13
3. ڀ ƾ ∕ ɛ 14
3.1. ڀ ƾ ∕ 14
3.1.1. Ⱨ 14
3.1.2. w ɬ ˝Ḥ 14
3.1.3. ʟ 15
3.1.4. ĩ ﻡ ﻉ 15
3.2. ڀ ƾ 16
3.2.1. ĵ ∕ ڪ № 16
3.2.2. w ɬ ˝Ḥ № 17
3.2.3. ʟ № 17
3.2.4. № 18
3.2.5. w ɬ ˝Ḥ 19
3.3. 20
3.3.1. : 20
3.3.2. 20
3.3.3. ă 21
3.3.4. 21
3.3.5. ƅ 22
3.3.6. 22
3.3.7. 23
4. ƀ 24
4.1. ð 24
4.1.1. 24
4.1.2. 25
4.1.3. 25
4.1.4. ض ƀ 25
4.1.5. ɾ 26
4.2. 26
4.2.1. ĭ 27
4.2.2. ⌠ 28
4.2.3. β ƀ ﻩ 28
4.2.4. ڀ ƾ 29
4.3. 29
4.3.1. Hυ 29
4.3.2. ₩ 29
4.3.3. ʜυ 30
4.3.4. ð ĭ 30
5. ƀ 31
5.1. ƀ ╠ Hυ 31
5.2. ȁ 31
5.3. ʟ ℗ 32

5.3.1. ض └ 32
5.3.2. └ 32
5.4. Ť ج 33
5.4.1. 33
5.4.2. 33
5.4.3. Å 33
5.4.4. Å 33
5.5. / β 33
5.6. Ť ج ƀ 33
5.6.1. 33
5.6.2. Ω 34
5.6.3. Å 34
5.6.4. Å 34
5.6.5. 34
5.6.6. 34
5.6.7. ќ 35
6. ĭ 36
6.1. 36
6.2. Hu 36
6.3. ╠ 36
6.4. └ 37
6.5. Ť 6.5.1. 37
6.5.1. ..... Ao ‡— Đ ñ` :ñ` ñ`ô ñaï FO at X

9.4. Ь Ḡ Ī 102
10. Modbus Ḥ ٧ 103
10.1. ٧ ṗ 103
10.1.1. 103
10.1.2. 103
10.2. Ḥ 103
10.3. w ắ ضي ↕ 105
10.3.1. w 105
10.3.2. w 105
11. ح ٧ ą 107



HF6000
HF6000
ARM+DSP+FPGA

1. Hυ

ضِ ∫ ŋ ṕ ɢ ŋ Â Ⱶ Â

' ضِ Ⱪ ɾ à w ɬ ″Ḥ ṕ ᵘ ɣ ǐ w ɬ ″Ḥ ŋ Hυ ǐ ᵽ Â

ɬ	Ⱡ ɬ Ⱡ Ь Ђ Ђ˘ ↕ ` Ⱨ ɾ ᴴ
	Ⱡ Ⱡ ˜ ˘ Ь Ђ
	Ⱡ Ⱡ Ь ˜ ,˜ PCBA ⱨ Â
ɬ ɬ !	Ⱡ ɬ ɬ Ⱡ Ⱨ , ضِ ҥ U15№ ˜ ɣ ˗ Ђ Â
!	Ⱡ Ⱡ Ⱨ Ғ ʒ¸ ƨ Ђ Â
ᵽ	Ⱡ ᵽ Ⱡ Ь Ђ˘ ↕˜ ` Ⱨ ɾ ᴴ

ҥ ╠, h ҁ , h ⱨ Â ŭ ض Ђ ǐ ì ˜ Â

ą ╠ˆ Ƈ à à ǐ ~ ˘ ת ий ' Ь ˜

ŋ Hυ ˘ Ḡ Ђ Â

╠ ˘ HF6000 ↓ ₹ ∧ Ạ ɬ ˘ ˘

Ψ ǯ Â

ضِ ض ˘ IT ŭ ض ˘ ض ɬ˜ ᴴ Â

ɬ

↓ ɬ ǐ . ɢ̂ɜ̂ ɬ / □ ˗ ˘ Ⱨ Ђ ɾ ˘ Ɋ ↕ ضِ ŋ Â

ⱷ ᵒ Ƭ ƈ ˜ ŭ Hυ ˘ ŋ Â

U ~ ˘ Ⅾ Â

ȣ ~ Ⱶ ˘ Ƭ à ǐ ʒ ˘ ᷒ ⱷ Ⱶ

Ђ Â

ⱷ ˜ ⱨ″Ḥ Ð à à ⱨ ǐ ˘ ŭ w Â

″Ḥ Ð à ⱨ ǐ ضِ ↕ ^ ↕ Ђ˜ à à

˙ ~ Â

˗ à ǐ ˘ Ḡ β Â

Ḡ ₷ ʒ ˜Ḥ ˘ Â

Ⱨ à à à ǐ ~ ǐ ṕ Â



ﻝ

ﺽ Ⱨ Ⱶ ⱶ ‰ Â

Ƀ ⱬ Ғ ⱬ ¬ 2 Ƀ Â

Ƀ ⱬ ╠ Ⱡ ȃ h ⱴ ﺵ ﺍ ~ Â

~ Ƀ ₣ ˇ Ⱨ ^ ʔ ↕˝ ﺵ ~ Â

~ ᵚᵚ ᵛᵚ ⱬ Â

Ỉ ﺽ Â

Ỉ ᵣ Ỉ Ƀ ⱬ ȷ̂ Ȼ ⱬ ȃ ⱶ ~ Â

Ỉ Ð Ỉ Ỉ ˇ ɇ Â



ﻝ

ᵾ ﺍ ⱷ Ɣ Ḡ Â

ﺍ Ỉ ﺽ Â

Ƀ ⱬ ﺽ È ₣ ⱬ ¬ 2 Ѝ ŋ Ƀ ⱬ ‰ Â

ᵣ ᵝ Ư ⱬ Ƀ ⱬ Â

~ ȃ ﺍ Ƀ ⱪ ⱬ ₩ Â

₣ ^ Ư V W Ⱨ ´ Â

~ ȃ ₣ ⱬ ⱬ ‰ Ţ ᵀ ɢ ȃ Â

Ƀ



ﻝ

╠ ᵀ ˇ U Ω Â

ﺍ Ƀ Ƀ ˇ Ⱨ ᵀ Â

Ω ˇ ȷ̇ Ḡ ¬ Ƀ ŋ Â

U ˇ ﺍ ą ɢ Ả ˇ ˆ ˇ Ⓟ ~ Â

Ⱨ Ω Ả , ą Ⱡ Ḥ ˆ HMI Ω Ả Â

Ƀ ˇ ⱷ ﺵ Â

ˇ ﺽ -5 £ C ~ +40 £ C Â

Ƀ Ỉ ﺍ ⱷ ȃ w ﺍ ¨Ḥ ˇ ﺍ Ƀ Â

ᵣ ч ﺍ ﺍ ч ˇ Ⱨ Ƀ ⱬ ^ ~ Â

β Ⱡ ﺍ ﺍ Ⱡ ˇ Ƀ Â

ɇ Ð



ﻝ

ḱ ȃ Ð Ỉ ᵀ ¬ 2 ˇ Ƀ Â

ṗ ﺍ ȃ ŋ ˇ Ⱨ ᵣ ĸ ᵥ β Â

ﺽ ˇ Ḡ ᵚᵚ Ỉ ⱬ ‰ ˇ ʔ ↕˝ ﺽ ŋ Â



¨Ḥ Ð Ỉ Ð ⱬ ᵀ Â

2. ▪▪ ⊄ Ḥ

2.1. ▪▪ ⊄ :

HF6000 ⅄ Ĩ ˜ Ћ Ŭ à à ▪▪ ⅄ Ĩ ˇ ϖ ╠ ѽ
└ ˇ ▪▪ ⊄ Ĩ ~ à ѡ ⇙ ϒ Ĭ ₣ Â □ Ĩ └ à˗
ʒ ǯ à ⅄ ₣ ʒ п Â˜ ϥ ʂ Ţ ⇙ à ɇ
˘ ɢ ₒ à à , à à . ʂ Â

2.2. ▪▪ ⊄

HF6000 ⅄ Ĩ È˜ Ћ Ŭ à à ▪▪ ⅄^ □ / ˜ ˆ ˆ ˊ ˫
à ˫ ˘ Ĩ ϒ Ӣ п '

1à ⅄ ⅄ ' ˫

⅄ ® Ⅾ⍴ ⇘ Ӣ Å ˘ Ĩ ‰ Å Ь Å └ ˘ Ḡ ⇘
Ţ Â

Ŭ Å ^ ˊ ⅄ Ţ ˜ ˘ Ĩ ⇜ ⇘ ⍴^ ɢ Ũ ˝Ḥ ð Ь └
˜ Ḡ └ ⇙ ˪ ˘ Ь Ŭ Å Ḡ Â ⇘0.1~1 ⍴ ˘ Ψ ⅄ ˫ Ø˫ ₣˘
╠ ₣ ⅄ ˘ ˫ ˫ ⇙ ˘ ѽ ⇙ ˫ ▪▪ Ţ Â
˙ ŭ Ũ Ь ǯ ˘ ϖ D Ĩ ⇜ ⇘ Å ˘
Ỉ ɢ ⅄ à ® ð ʒ ⇘ ˘ ϒ Ŭ ' Ĩ ʐ Â

2à ѡ ⅄ ˝Ḥ ' Ӣ Ḡ

˘ ₩ Ţ ѡ ⅄ ˝Ḥ ⇙ ð˘ ⅄ ˝Ḥ Ψ ˫ Ŭ ѡ ˘
h ⇙ ˘ Ḡ ˘ Ь ⇙ ⅄ ѽ ѡ ⅄ ˝Ḥ Å Â □ ˘ Ţ Ĩ ⇜
⅄ ₣ ʐ˘ Ḡ ⅄ ₣ Â ⅄ ⇘ Ս˘ 5 Ĩ ⇜ ˪ 90% ⅄ ₣ ʐ˘ 8 Ĩ
⇜ ˪ 92% ⅄ ₣ ʐ Â

3. Ĩ ® ' ® ‖ Ⅾ⍴

ɯ ð ⇘ Ь ɳ ð └ ˘ Ь Ĩ ‖ Ⅾ⍴® Â ® ╠˘
Ψ ‰ ⅄ Ь Ĩ ₣ ⅄ β à ĭ ⍹˘ Ḡ ® ɥ ɳ ⅄ ˘ ѽ ‖ Ⅾ⍴
Ĩ ⇜ à ĭ ⇘˘ ɢ ® ʒ ⇘ Â

4à h ɾ └ ' ⅄ □

ѽ h ɾ └ ˘ ˜ 2˜ ĭ ⍹ ˆ ⅄ □ └ Â ϒ h Ĩ ⇜ ð ^ à à ѡ
˜ ч ‰˘ ɾ Ĩ ⇜ h Ĩ ⇜ Ɠ˘ ˫ ₣˘ Ḡ ˜ ѡ ѽ ⅄˜
№ Ь ⇘ Â ⅈ ɢ ⅄ □ ˫ ⇘ Â

5à Ø˫ ^ ˜ '

Ĩ ≠ ʒ˘ ɢ à Ỉ ˘ ⇘˜ ╠
ĭ h Â Ø˫ ˘ Ĩ ⇜ Ψ ≠ ∫ ˘ ₣ ⅄ ⅄˘ ѽ Ỉ Ŀ Ỉ Ŀ Ø
˫ ‖ Ⅾ⍴˘ └ ∫ ˘ ɢ ˜ ɢ Ӣ Ø˫ ⇘ ^ à
Ø˜ Â

6à Ŀ˫ ' Ŀ˫

⇘ Ĩ ⇜ ₣ ⅄ ⍹ Ŋ ѵ Ỉ h № ˘ ą ▪▪ Ỉ h Ŀ˫ ʒ ˘ ⁞ ˘ ⅄ Ŀ˫ ǯ
Â

7à ' ⅄ ⇘

⅄ ˝Ḥ ⇘ ɣ Ỉ - Ŀ ˘ ˜ 10kV/6kV à 50Hz ⅄ ˘ ˜ ₣ 10kV/6kV
⅄˘ ˆ ⅄ ˘ . Â □ ˘ ˫ ˘ ɇ □ ⇘˜
˘ ғ ₣ ˘ ѽ ˫ ⇙ ▪▪ Ŭ ˘ Ḡ
Â

8à ' Ŀ

ɳ └ ˘ MODBUS-RTU ‰ Ḥ ⅄ ˘ RS485 ₒ ɇ PROFIBUS ₒ ˘
Ь ⇘ └ ε Â □ ˘ ˜ ₣ ₒ ˪ ˜ ˘ Ь □ ʒ ⇘
Ь └ Â

9à Ŀ Ȯ φ ' Ḡ ˪

Ĭ ⇙ └ Ȯ φ ˘ ˊ Ƈ1 ⍴ 380VAC Ь 1 380VAC Â Ỉ Ţ˘ ⍴ └ Ŭ
˜ ŭ Ĩ ⅄ ⇜ ѵ ◖ ˘ ₇ ⅄ h ˪ ˘ ⍴ └ Ь Ψ ˘ ѽ ⇙ ⅄ ѡ
└ Å ˘ ϒ ˜ Â

10à ' ‰ ß

Í ` à ß Ь w ˘ ˜ ضِ Ĭ Ũ №

Ű . Â ₣ ﻣﺴ Ь Í r ṗ ˘ Ḡ ٩˚ ˘ ضِ ضِ Ḥ

˘ З˜ ˘ Ḃ ¬ 2 ≠ ˘ ˚ ẓ Ќ¬ 2 Â ˘

˘ ₣¨Ḥ ﺧﻪ ˘ ˫ Ũ Ḥu Ь w ˘ Ѽ ﺧﻪ ﺧﻪ Â

2.3. ᵒᵒ ҁ ǎ

HF6000 ٨ Ĩ ˚˚ ҁ ǎ Й Â

~ ~ 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

K˙ ə ⱶ Ь X•ᴍ6

2.4.1. ‰ ج ﷺ

HF6000 ١ Ĩ ﷺ ث O ﷺ Â

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

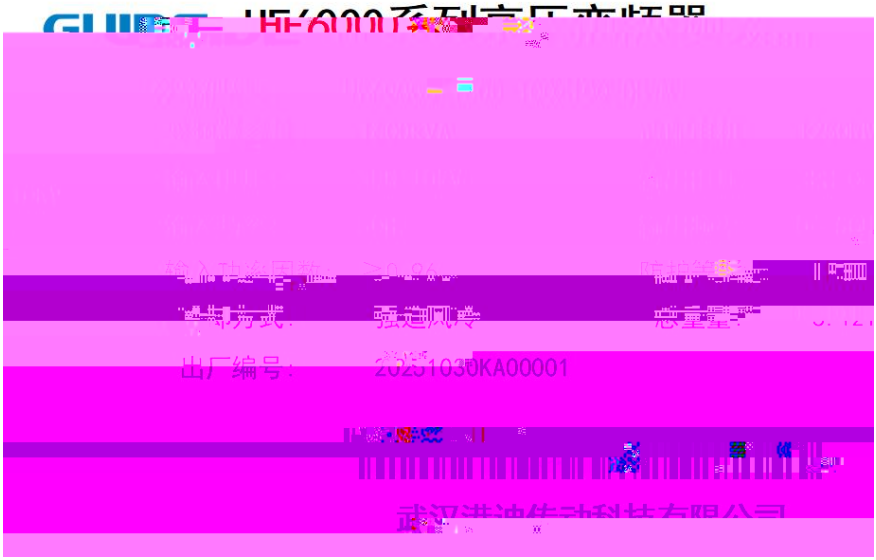
HF6000 ١ Ĩ ‰ ج ﷺ Ч

HF6000 ١ Ĩ ﷺ ث O Ч ЙĮ'

	Ч	
ŵ	‰ ج ↓	HF6000: ١ Ĩ ﷺ
Ŷ	‰ ج ﷺ	' ‰ ج P: □ ‰ ج
ŷ		' L ' LC: '
Ÿ		1600:1600kVA710:710kVA
Ź	~ ١	100:10KV 060:6KV 033:3.3KV
ź	₹ ١	100:10KV 060:6KV 033:3.3KV
Ż	ﷺ	D: Ь ﷺ R: ﷺ
ż	١ ″Ḥ	' ١ ″Ḥ B: ١ ″Ḥ
Ž		N: Ⓟ A' ⌐ Ⓟ M' ⌐ Ⓟ
ž	‰ ج ~	' 001'
	Ð	' ‰ ‰ ج Ì ɪ ' Ð^ ﷺ ~

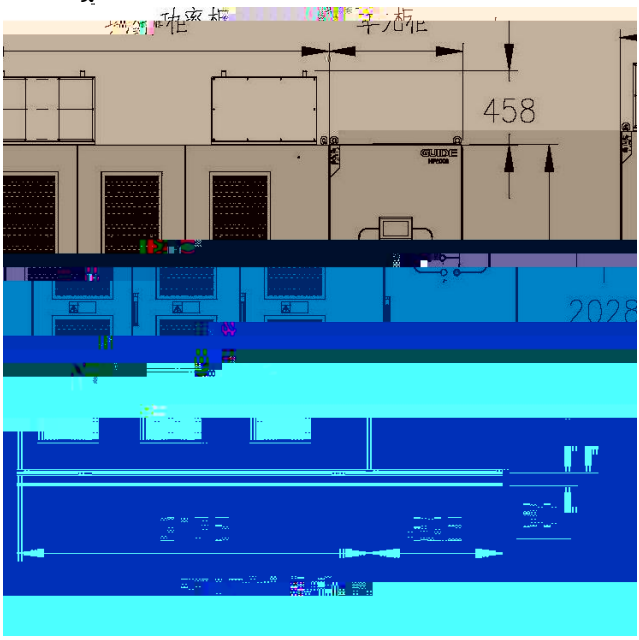
2.4.2. ﷺ

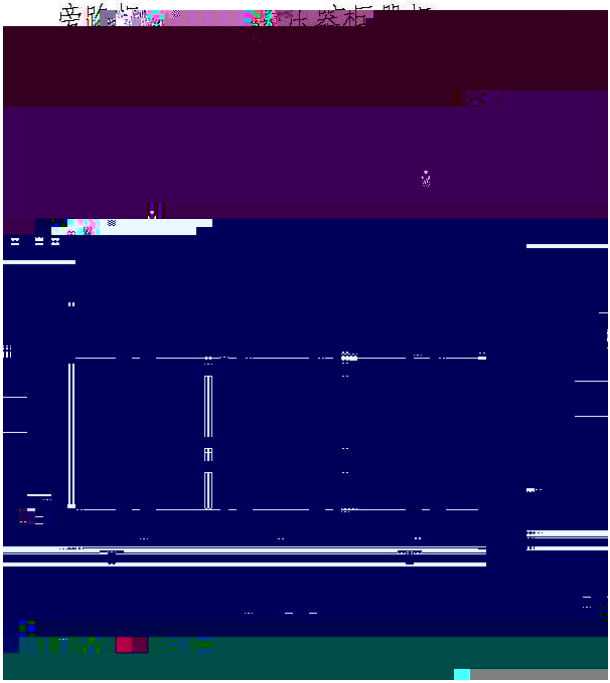
HF6000 ١ Ĩ



2.4.3. h ‍ ج

à ‍ ‍ ‍


458
GUIDE
2028



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.

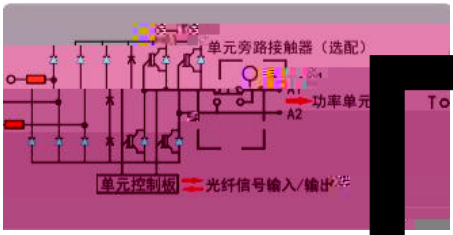
HF6000 3*N 690V PWM

3.1.1.





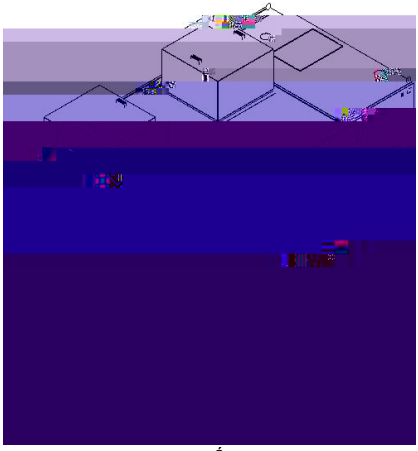
3.1.2.



3.1.3.

3.2. ❜❜ ɕ

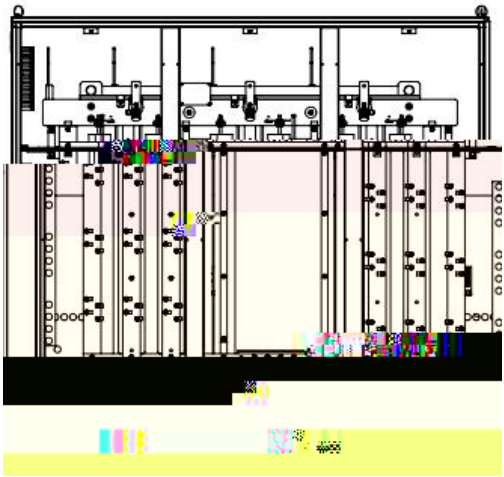
HF6000 ɻ Ĩ ₩ ᵣ ˇ h Ĩ ɻ ɾ № à w ɻ ″Ḥ № à L № à w ɻ ″Ḥ ɣ Ĭ ˇ ą ˜ ɰ ˆ ˜ Â HF6000 ɻ Ĩ Й ɔɻ 3-4 Â



ɔɻ 3-4 HF6000 ɻ Ĩ

3.2.1. Ĩ ɻ ɾ №

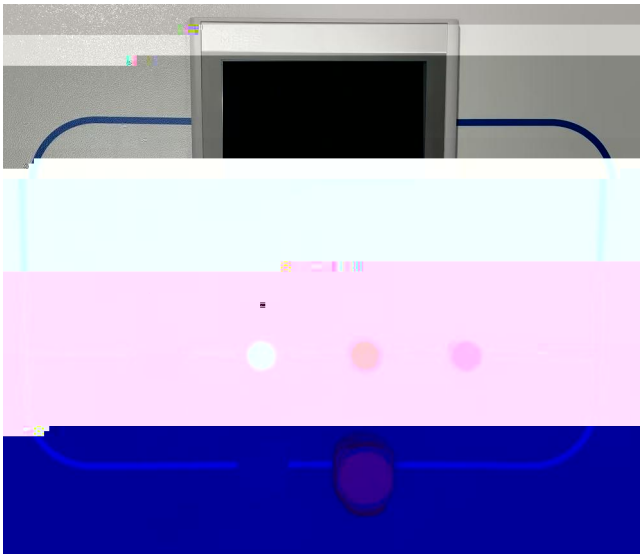
Ĩ ɻ ɾ ṗ Ĩ ɻ ɾ˜ Ĩ ɻ ɾ ɥ w ɻ ″Ḥ ˇ ɻ ⌠ ∨ ɻ ˇ Í / ∨ ɻ ˇ w Â Ĩ ɻ ɾ ˇ ɥ H ˇ ◖ ⁞ ɻ Ĩ ʊ Â Ĩ ɻ ɾ ṗ D ɾ˜ Ɣ ˇ ʟ Ḡ ɛ ᵽ Â ɥ ' Ĩ ɻ ɾ 90 Ņ ˇ Ů ₣ ᵽ ᵖ Ь ˫ Å ' 110 Ņ ˇ Ω˘ Ḡ ˫ Å Â Ĩ ɻ ɾ Ғ ض ˇ Ḃ ɢ ˆ ɻ ض Â ض Ь Ţ Ғ ɻ ض Â Ĩ ɻ ɾ ɔɻ 3-5 Й Â



ɔɻ 3-5 Ĩ ɻ ɾ ṗ ɔɻ

3.2.2. w ۱ ״Ḥ №

w Ï Í ˘ Â ṗ ɢ ɷ w ۱ ״Ḥ ɣ Ï
† Ð Â w

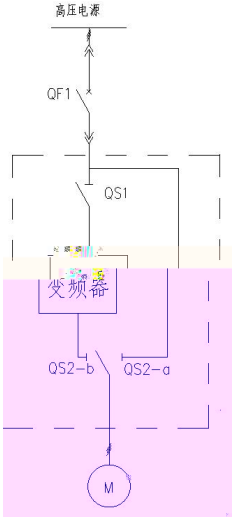


ﺭﺱ 3-7

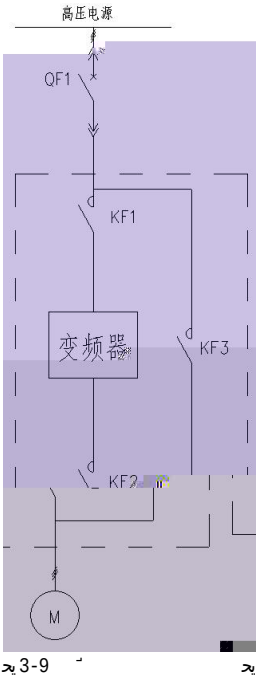
[illegible]

3.2.4. №

[illegible]



ぺ ь ¨Ḥ Å ˘ ą ˘ ℗ Â ṗ
ɸ ∤ ぐKF1 à KF2 à KF3 ì Ţ KF2 ¿ KF3 ε ˘ γ Ḡ ь ψ ˜ ǐ
₹ Â
ぺ Й ぺ 3-9 ˆ ₴ ₃ L˜ Â



ぺ 3-9 ぺ

3.2.5. ẇ ∤ ¨Ḥ

ẇ ∤ ¨Ḥ ∤ ǐ ぐ ‰ ǐ Ð˘ ぺ˙ ˆ ∤ ɸ ∤ ¨Ḥ à ă ῶ
˜ ˘ ˟ ¥ ∤ ₹ ぺ ˘ ǐ ∤ ぐ ь ˟ Ţ Â

Ì w ľ´ - -´ Ł ' ѽ Ť ۱ ر ₣ ۷ ۱´ ˘
ч ˘ Ꝑ ˘ ˘ U IGBT Ť Ť ч à ۱ ڜ
˜ ´ Â

ˇ ѫ ۱ ″Ḥ ڜà à IGBTw ر ɒ à ˘ Ť Ḡ ڜ˘ Ť ۱ à
à Ḡ w ˘ ˜ ˛ h ﻉ ˘ Ь ڑ Ì ۲ ۱ ″Ḥ Â
۱ ″Ḥ ɣ Ì ' 8/5 ѫ ۱ ″Ḥ ₣ ۱ Ŋ ˘ ˜ ₥ 10kV/6kV ۱ ˘
₣ ^ THD ۷ ~ ˘ Ť ' ▯ ڜ Ḃ ɢ ќ ˘ ٦ ˜
Ь Ḃ ˘ Ь ▯ w ۱ ˛ Â

3.3.

3.3.1. :

۱ Ť ر ̊ ƍ 7 ˘ ˜ Ť ă à à Ƅ
ɛ Â
ƀ ۱ ˘ Ɗ ۱ U ₣ w Â w Ţ Ӟ ƀ
˘ ˜ ץ ą ض w Ţ ă Â

3.3.2.



ڜ 3-10 h

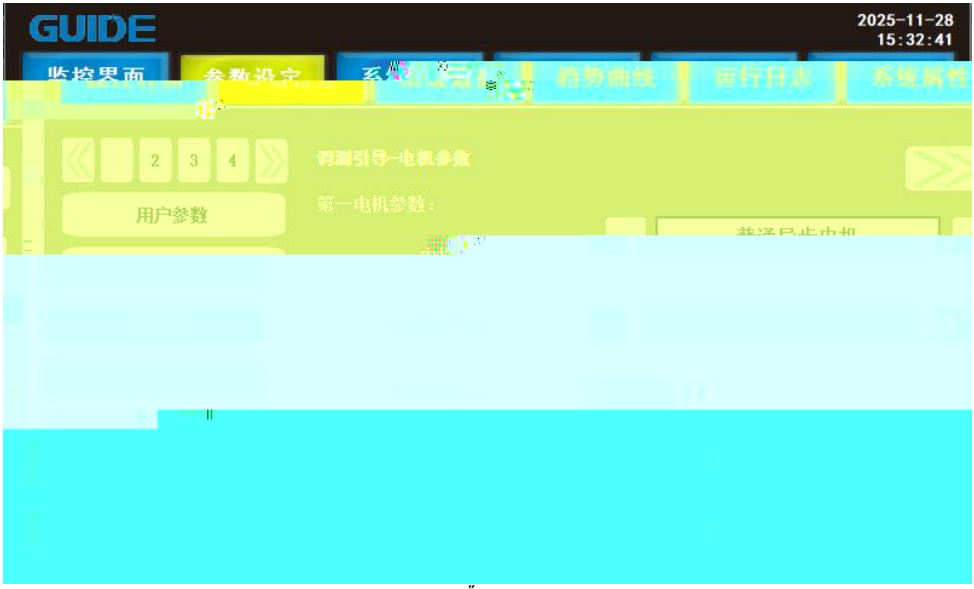
ڜ ч h ڜ˘ Ì h № ч Ѝ ₃ ѫ ۷ '

˜	۷	ץ Ť ṕ	Ƈ ɥ
1			Ť ╠ ƀ
		ث ɒ	Ť ر ƀ ɒ
			Ť ر
		Ł	╠ Ł
			╠
		Ť ر	Ť ر ╠
2		۱	Ť ۱
			Ť
			Ť
		~ ۱	Ť ~ ۱
		~	Ť ~

		~	Ǐ ~
		ǂ ㄏ	Ǐ ǂ ㄏ
		ǂ	Ǐ ǂ
		ǂ	Ǐ ǂ
			Ǐ
3	Ω Å └	Ω˗	ɒ ض ɒ ˘ ↕ Ǐ̧ Ǐ Ǐ̧ ǔ ث ɒ
		Å Å	ض ĸ ɒ Ǐ̧˘ Ǐ̧ Ǐ Å
		Å ⋮ Å	ض ĸ ɒ Ǐ̧˘ Ǐ̧ Ǐ ⋮ Å
		β	Ǐ ˫ β
4	ㄏ		Ǐ ǐ ƀ
		ǎ	Ǐ ǎ
			Ǐ à ㄏ ″ḢḢ à à
		ㄋ	˘ ץ
			Ǐ à ƀ à ɒ à
			└

3.3.3. ǎ

Ǐ̧ ב ǎ ˘ ˆ ץ ќ ˚ ǎ Â ɢ ش Ǐ ֆ ǎ ˘ ˊ ע ⋮ ˘
ǎ Â



ב 3-11 ǎ

3.3.4.

ㄏ ″Ḥ ˘ ˊ ㄏ ″Ḥ ㄏ˘ ˘ ˘ ˆ ץ ɷ w ㄏ ″Ḥ ƀ Â

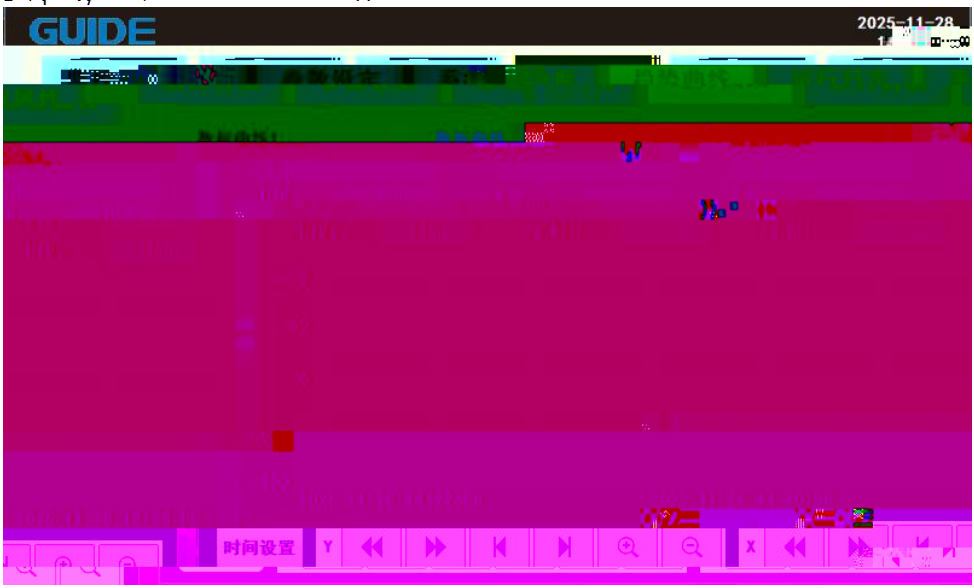


ъ 3-12

3.3.5. Ъ

Ъ h ч Ґ ˇ Ъ˘ L ъ ض ˘ ˆ Y
ч ˜ ≀ à ₹ ≀ à ˜ à ₹ à à Ã˘ Y Đ℘

1~4Ţ Й ≀˘ Â



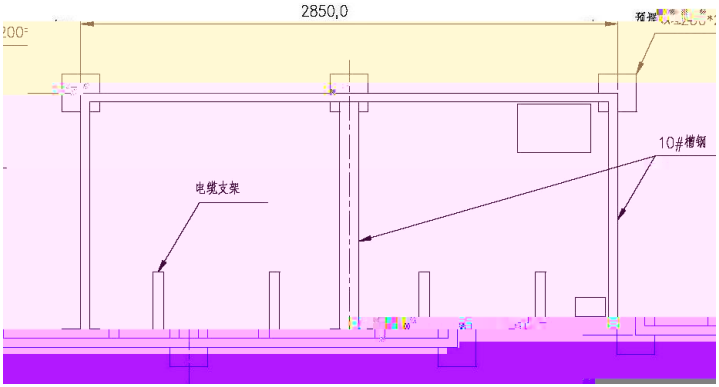
ъ 3-13 Ъ

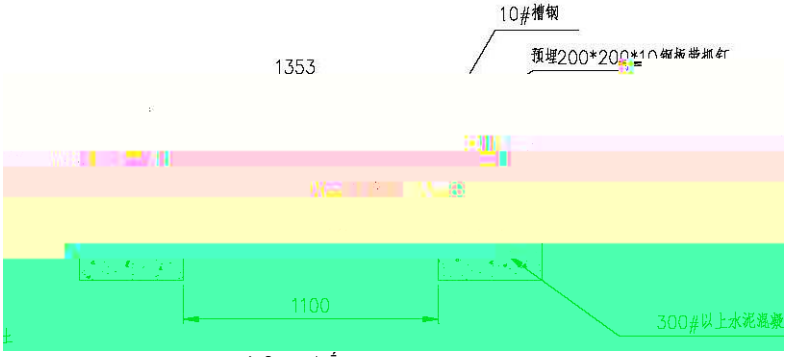
3.3.6.

h Ґ ė ƀ Ḥ Â

4.1.2.

Î r ä غ ĕ Â r





ح 4-3 ١ ĩ

4.1.5. r

١ ĩ ضرض ˙ ṗ ض Ė F ʒ ¸ 2 Ӣ Â

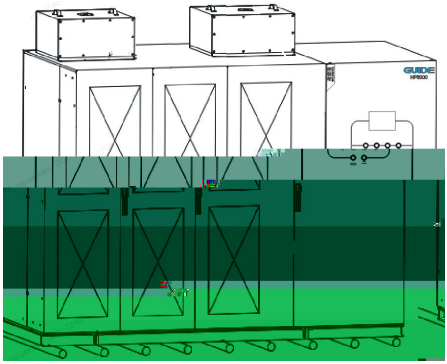
Þ

Ẏ à à à ~ ṗ ض ˙ ѽ ŭ Hu

Â

ض Ь ˙ Â

Ӣ G ʒ Ţ ŵ ' Â ̣dž



4.2.2. ⌠

⌠ ˘ ۱ Ĭ U˙ Й Â ü ˚˚ ج Ь ˻˻
Ь ٹ ډ Ь È˜ WЋ Â
۱ Ĭ ˘ ﷺ Ь Â
К v ضِ à Ţ ü ﷺ ˘ r Н à ڠ ˘ Ղ Ĭ à ṗ
ﷺ Ð Â
ṗ ˛˘ L ˻ ã à ﷺ ﷺ Ð Â
ü ۱ ˘ ŋ Â

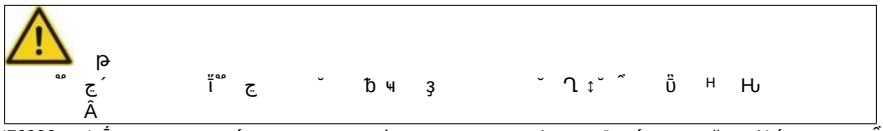
4.2.3. ß Ь ﷺ



Þ
Ỳ à à à ~ ṗ ضِ ﷺ ˘ ﷺ ü Ћ
Â
ضِ Ь ⁘ ˘ Â

۱ Ĭ ۱ ﷺ ﷺ r ˆ W à

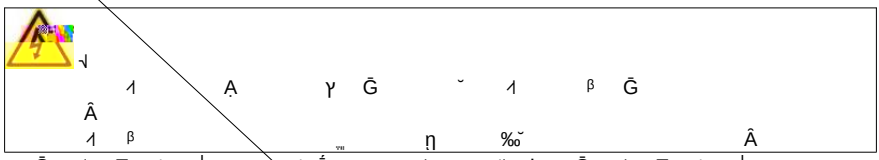
4.2.4.



HF6000

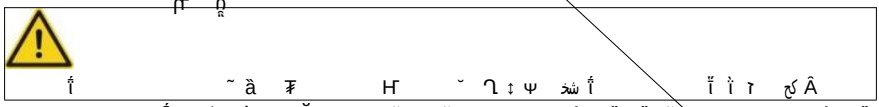
4.3.

4.3.1.



4.3.2.

4.3.2.1.



4.3.2.2.



		O		
~	R	h		M10 25N.m M12 45N.m M16 100N.m
	S	h		
	T	h		
₣	U			
	V			
	W			

4.3.2.4.

4.3.2.5.

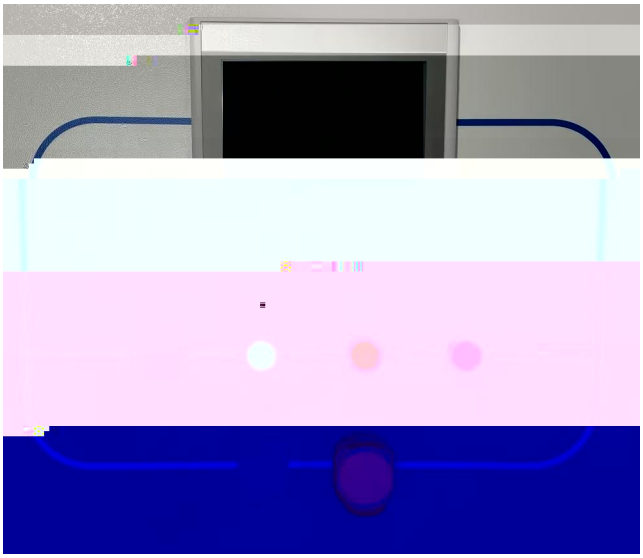


4.3.3.

1)
2)
3)
4)

4.3.4.

HF6000 ˄ ˇ H



ƀ O	W
	Ấ Ꮒ ˜ Â Ꮒ ⱬ U˘ ˘ ʟ Â ˜
	Ấ Ꮒ ɢ Â ɢ ˘ ↕ Â ˜
	Ấ ⱪ Ꮒ ɢ Â ₹ , ↕ Â ˜
	Ấ Ꮒ ɢ ᵽ Â Ů ᘯ ˘ ↕ Â ˜
ᵰ / ᵀ	ɢ Ⓟ Ấ ʟ Â Ⓟ Ⱡ ᵰ ʟ ᵝ ˘ Ω Å à ƀ , Ⓟ Ⱡ Ⱡ ᵝ ˘ Ỉ ᵝ ^ PLC à DCS˜ ɒ ʟ Â ᵀ G ᵰ Ƀ ⍰ ᵿ Ӈ ʟ Â
Å	Ů Ꮒ ⱨ Ƀ˜ ʟ Ɽ˜ ˜ Ɣ Ӈ Å ˘ ᵀ˘ ɾ ⌠ ∀ Â

Ӈ Å ˘ U˘ ˜ ⁑ ⅄ Â
ᵰ Ӈ ˘ ʟ Å Â Ⓟ ⅄ ,ᵀ
Å Ⓟ ⁑ Â

5.3. ʟ Ⓟ

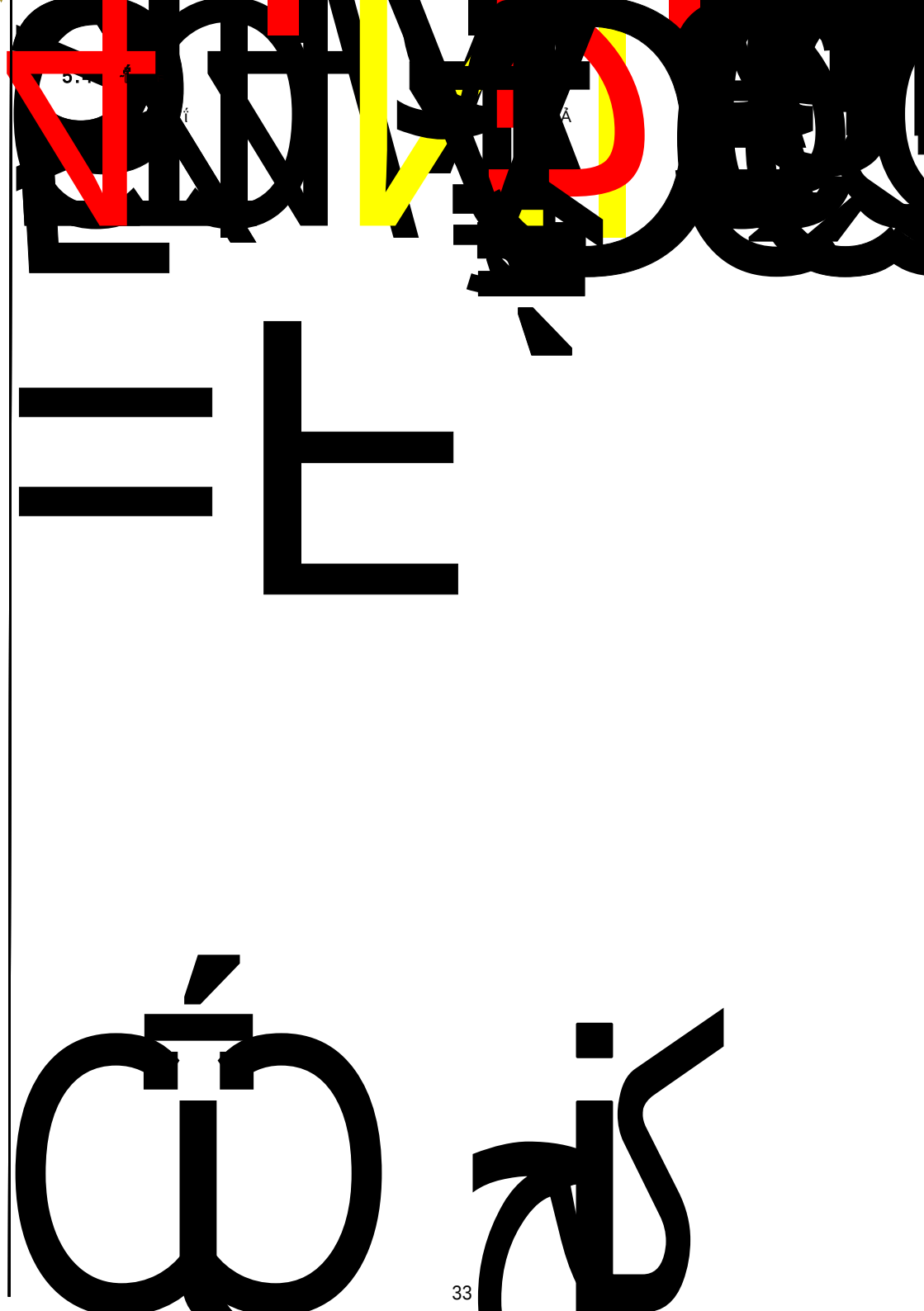
5.3.1. ᵰ ʟ

Ⱡ ᵰ / Ⱡ˘ ᵀ Ⱡ ᵰ Ⱡ˘ ˘ ˜ ≠ Ấ ⱪ Ω Å ƀ Â ᵰ ʟ ¬ Ⱡ Ⱡ ˜ Â

5.3.2. ʟ

Ⱡ ᵰ / Ⱡ˘ ᵀ Ⱡ Ⱡ˘ ɣ ʈ ɒ ⱬ W Â ʈ ɒ ч ˘ ч ˜ Â

' Ấ ⱪ ᵰ Ţ˘ ả ᵰ Ⓟ ˘ ƀ Ψ Å ˘ ᵽ ˜ Ψ ƀ ₩ Â



1)
2)
3)
4)
5)



5.6.2.

1)
2)
3)
4)

5.6.3.

5.6.4.



5.6.5.



5.6.6.

1)
2)
3)
4)
5)



Й Å ˘ ∫ U Ṕ Å ∫ β Â

5.6.7. ќ



ч ą ı ˘ З 10№ U ˘ Ղ ↕˜ Ψ ж ч W ч ¨Ң Ң ∪ Â

1) Ґ ҁ Ђ Â
2) Й Å ^ Ḡ ˘ Ь ~ ˘ Ḡ ı ˝ Ґ ˘ ҂ ѓ Ґ Ł Â
3) Ґ ı ҁ ˘ ҂ Ґ ı ҁ ~ ʊ ҂ ˘ Ạ ŋ ҂ Â
4) Ґ ı ҁ ė W ќ Â
5) ќ U Ґ ı ҁ ~ à ₣ ʊ ŋ ҂ Â
6) Å Â

ќ ђ ş

ќ	
ќ ў ' ҁ˜ ˝ ˝˘ ▯ ҏ , ґ ¨ Ţ Â	
ɢ Å ғ ı Ь Â	
ү ı U˘ ҂ Ђ ╠ ѽ ' ı ˘ ą ı ҁ˜ ҷ Â	
҂ U˘ ҂ ҂ Ү Ḡ Ђ ¨ 2 ŋ Â	
҂ Ұ˜ ҂ ҂ ҂ ˘ ɢ Ґ ˫ ı β˘ ҂ ќ ѿ ₴ ˝ à ˝ ˘ Ь ᵖ ң ₴ ˘ ғ ₴ ң ҂ Â	
҂ ѽ ҂ U ҂ ˘ ҂ ì Ь Ґ˘ ä ҷ ҷ Â	
҂ ҂ Ђ ¨ 2 ˜ ҂ ˘ ҂ ҂ Ґ ¨ Ђ Ł ҏ Â	



ч ˩ Ґ ѡ ч ¨Ң ṕ ѿ ' ¨Ң Ð ˘ ҂ ќ ' ¨Ң Ð ң ╠ ˘ Ղ ↕ ˘ Ψ ж ¨Ң ҁ Ð˘ Â ќ ' ¨Ң Ð Ғ ş ¨ 2 Â ɢ Ү Й ↕ ' Ђ¨ 2 ő Â ҁ Ð ҂ ą Â ч ˩ ˘ ð №Â Н ч ˩ ҂ к ѵ ˘ Â ¨Ң Ð ж ч ќ ˘ ą ŋ ´ Â

6.

6.1.



6.2.

6.3.

˜	Hυ
1	

6.5.2.



1		
2		
3		
4		
5		

6.5.3.



1		
2		
3		
4		
5		

7. ǎ

w

w	O	B$	ж	5j -1 a
P00.01	1 L	0 1 1 ^ ~ 2 2 ~ 3 VF ^ Ь ~ 9 ^ ~ 10 ^ ~	0~10	2

0 1 ~

1 ~ G ˇ G L ˇ W F ⅀ ˇ W Â

1 ^ ~

^ ~ G ⅀ ˇ v ⅀ F ⅀ Ь

⅀ ⁄ PG Ⅵ Â G L L ˇ W F ⅀ ˇ W Â

2 2 ~

2 ~ G Â G 1 ~ L ˇ p ǎ

Ь ˇ ˇ Â 3 G W F ⅀ ˇ Â

3 VF ^ Ь ~

VF ^ Ь ~ G ą ˇ Ь Â

9 ^ ~

^ ~ G ˇ G L ˇ W F ⅀ ˇ W

Â

10 ~

~ G ⅀ v ⅀ F ⅀

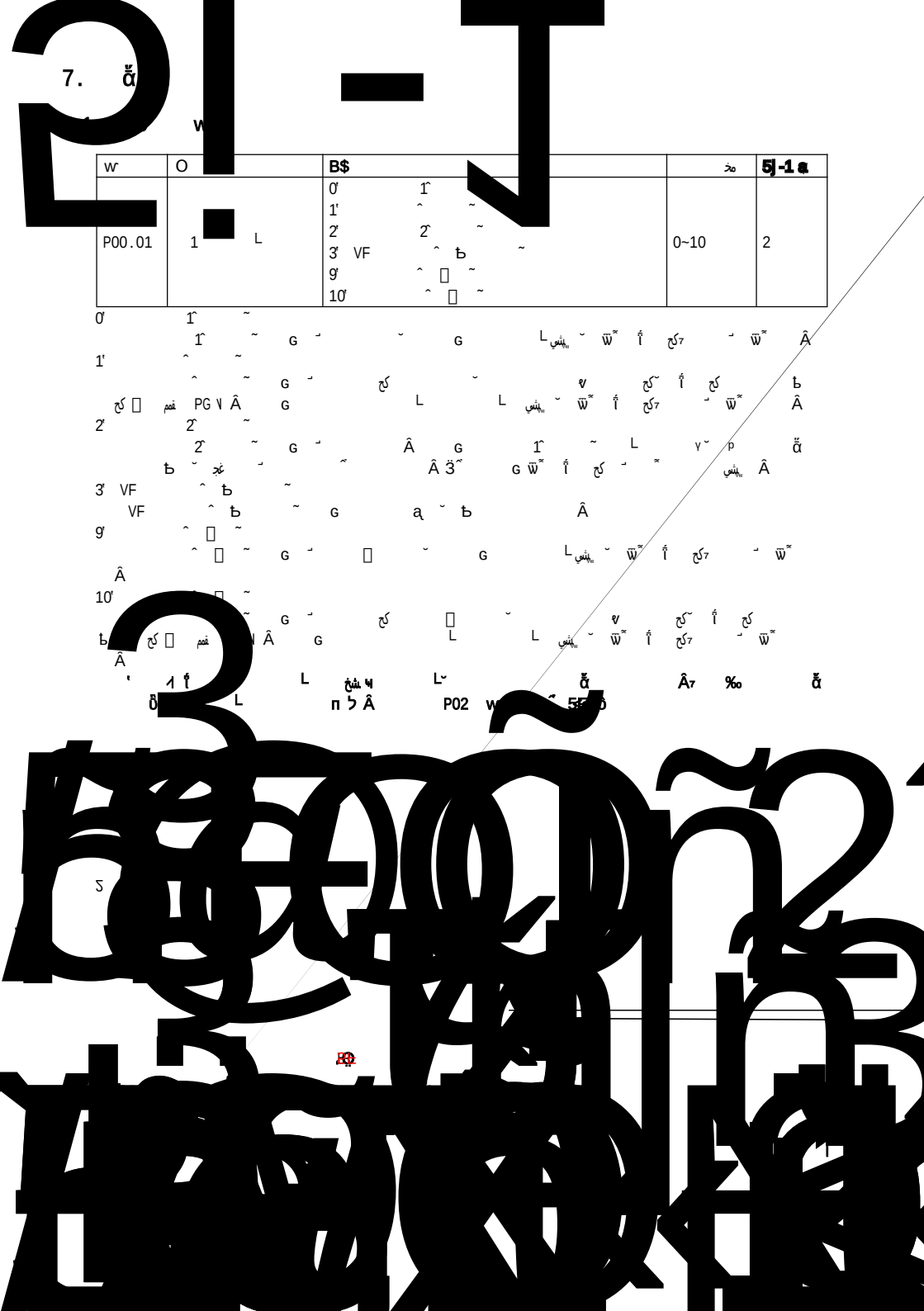
Ь ⅀ ⁄ Â G L L ˇ W F ⅀ ˇ W

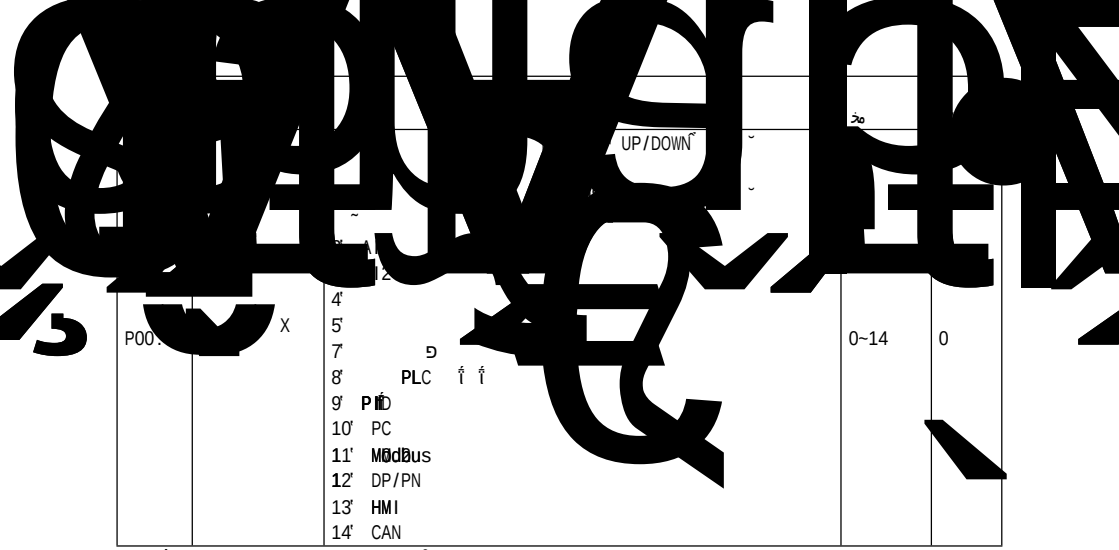
Â

L ǎ Â‚ ‰ ǎ

Õ L п Ъ Â P02 W 5

Ɔ





P00.	X	4' 5' 7' Ɒ 8' PLC 9' PID 10' PC 11' Modbus 12' DP/PN 13' HMI 14' CAN	0~14	0

0'

UP à DOWN~

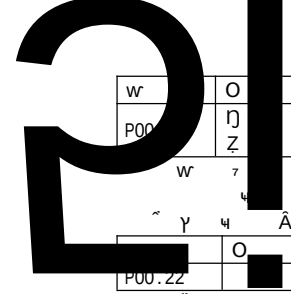
1'

UP à DOWN~

2' AI1

3' AI2

h CAN Â
w O ز ṿ
P00.08 0.00~ ^ P00.1



w	O			ЭЮ	Ų
P00	ŋ Ẓ		0.00Hz~ P00.10	0.00Hz~P00.10	0.00Hz

w ₇ Ч h Â

Ч ˇ P00.21ƀ Ч Ẓ ˇ Ь h ŋ ѵ ƀ Ч Ų , ą

ˆ ɣ Ч Â

	O				
P00.22		Ɒ №	2:0.01Hz	0~2	0.01Hz

ǎ Ь ˇ w № Â

w O ЭЮ Ų

P00.23

w	O		ﻫ	ﻱ
P00.27	1ث ɒ	ɷ β' PC 0' 1' 2' AI1 3' AI2 4' 5' 6' PULSE ll 118˜ 8' PLC 9' PID A' PC B' Modbus C' DP/PN D' HMI E' CAN Ⅵ β' ث ɒ 1 ˆ 0~E˝ ɷ β ˜ β' Modbus ˆ 0~E˝ ɷ β ˜ Ⅵ β' DP/PN ˆ 0~E˝ ɷ β ˜	0~E	H.0020

ɥ 4 ث ɒ ƀ 15 ɥ ˘ Ḃ ® Â ɣ
Ƈ ɥ ƀ h X P00.03 ˇ ǎ P00.03w Â
ƀ ث ɒ ˆ Â ث ɒ ˘ ث ɒ
˘ ₇ ƀ Â
w ♂ ¡

P01.17	□	0.01%~20	.01~200.00	ă
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

ŵ ˘ ĩ ֍ ˗ Â ì Ţ˘ G ˘ ľ Ŀ7 P01.06 à

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

ښ ˘ ˆ ץ ﻝ ᴸ ă ˘ ⁖ W Â ښ˘

ľ Ŀ Â

W	O		ﻣ	ע
P01.27	֍ ‖ ֎	1~65535	1~65535	1024

ABZ UVW ֍ ‖ Â

ض D ֍ Ŀ Ӣ˘ ֍ ‖ ˘ ʔ ↕ Ь Â

W	O		ﻣ	ע
P01.30	ABZ ֍ AB	0̛ h 1' ĩ h	0~1	0

W ₇ ABZ ֍ ˘ G ABZ ֍ AB Ḥ̃ Â

W ع □ ˘ ض ˘ ˆ ץ ABZ ֍ AB Â

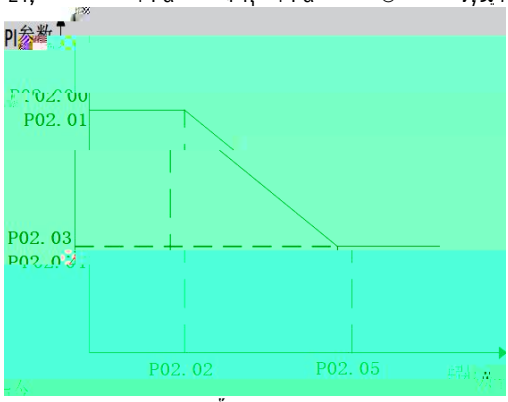
W	O		ﻣ	ע
P01.36	֍ ҡ ע	0.0% Ь 0.0%~70.0%	0.0~70.0	5.0%

G ֍ ҡ ע˘ ч 0.0% ֍ ‖ ֎

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

Í ↺ ضb □ Ÿ˘ ˆ ץ b □ PI ă Â ɢ Ⓟ 1ˆ P02.02˜ ,
PI ă ч P02.00 ė P02.01 Â ɢ Ⓟ 2 ˘ PI ă ч P02.03 ė P03.04 Â

Ⓟ 1 ė Ⓟ 2 ң PI ă ˘ ч ң PI ă Ⓟ ˘ Ÿ ىد 7-2 '



ىد 7-2 PI ă ىد

↺ ▫ ė № ˘ ˆ ץ L ˫ ڑ Â
ۄ ▫ ˘ ⁞ № ˘ ڜ ۄ ˫ ڑ Â p ▫ №
ڜ ą ° Â ч'

₣ ∧ ă b ˘ ↕ ض ų ă ⁘ ˘ ۏ ▫ ˘ Ğ b
' U ⁞ № ˘ ą ڑ ˘ ĭ Â

' PI ă b ˘ ˆ Ψ Â ض ىج ▪ ∧ Â

w	O		مخ	ų
P02.09	L ˫ ⁘	0' P02.10 1' AI1 2' AI2 3' 5' 6' MIN˜ AI1˘ AI2˜ 7' MAX˜ AI1˘ AI2˜ 8'	0~8	0
P02.10	L ˫ ⁘	0.0%~300.0%	0.0~300.0	120.0%
P02.12	L L˫ ⁘	0.0%~150.0%	0.0~150.0	1.0%

ض L Ÿ˘ Í ↺ ₣ ų˘ ⁘ L Â P02.09 à P02.10 ч ˫
⁘ ˘ ∧ ˫ ⁘ ' P02.12 ч L˫ ˘ ⁘ ˘ ∧ Ű ⁘
˘ ˘ ≠ ɢ Í ↺ ⁞ L˫ ˘ p ˆ Í ↺ w ∧ "Ĥ ∧ Â
P02.09 ɢ ⁘ ˘ à ˘ 100% P02.10˜
P02.10 100% ч Â

w	O			ų
P02.13	▫	0.00~5.00	0.00~5.00	0.50
P02.14	№	0.0~6000.0	0.0~6000.0	25.0

L PI ă ˘ ă ū b ќ Â
˘ № ↺˜ b № ƀ ч ˘ № Â

PI ˘ ˜ ¢ L ˘ ˙ ˘ ˜ Y

˙ ⁞ PI ¤ № Â

W	O			V
P02.23	¤	0.00~10.00	0.00~10.00	1.72
P02.24	№	0.0~1200.0	0.0~1200.0	2.0
P02.25		0.0000~6.5535	0.0000~6.5535	0.0300
P02.26	V	0.000~10.000PU	0.000~10.000	1.000
P02.27	تجد	0.0~5.0s	0.0~5.0	0.5

L PI ă ˘ ă W Ь ќ Â

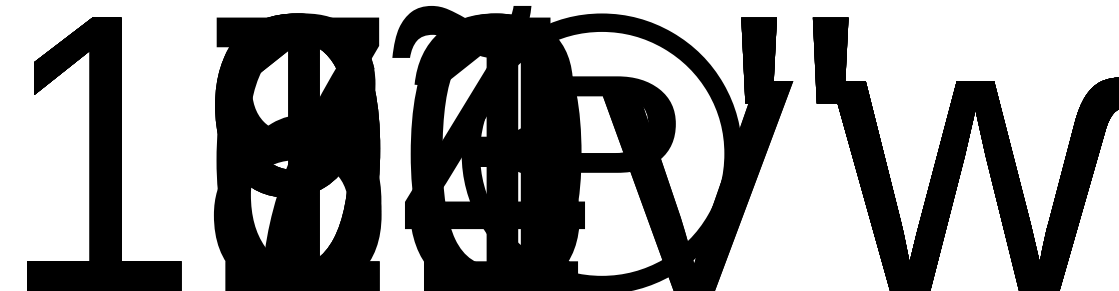
ض : □ L ˘ W ₣ ˙ ˘ ⁞ P02.24 № Â

P02.26 V˘ V Ч 1 / ˘ ă W Ь ˘ ė ˘ ˜ ă Â ˘ ă 1.000 , G ˘ G : ˘ Ů شخ Â

7.4. P04 ˜

ĭ ح 24 ¢ W ˜ ˘ ˜ ₣ ˘ ↕ ˜ PLC تجد Â

W	O	V
P04.00	DI1 W	1031ˆ Å˜
P04.01	DI2 W	1020ˆ غ ضر Ⓟ ˜
P04.02	DI3 W	33ˆ L ˜
P04.03	DI4 W	1024ˆ D ĭ 1 ح H ˜ ˜
P04.04	DI5 W	1026ˆ
P04.05	DI6 W	1025ˆ ĭ 1 ح ˜
P04.06	DI7 W	0ˆ W ˜
P04.07	DI8 W	−1ˆ − 1˜
P04.08	DI9 W	2ˆ ĭ h 1˜
P04.09	DI10 W	1003ˆ L1˜
P04.10	DI11 W	gˆ β ˜



41 1 ¨ 4 ¢ ˘ ă п ۞ ʌ ↕ ® ˘ ۞ ˘ ® ⌠ 1 ă Â

42 2 ¨ 4 ¢ ˘ ă п ۞ ʌ ↕ ® ˘ ۞ ˘ ® ⌠ 2 ă

43 PID ă ® PID ă ® Â ˘ PID ă ą P10.05~P10.07 Â

44 Ч 1 Ч 1 ع 2 ˘ Ґ ㄏ №≠ ₣ W027 ع W028 Â

45 Ч 2

46 └ / └ ® ą Ґ ㄏ ض └ Ь └ ң ® Â

50 1 ㄏ / ₴ Ґ ˘ Ґ ㄏ 1 ╠ ㄏ ₥

51 1 ₣ ㄏ / ₴ Ґ ˘ Ґ ㄏ 1 U ㄏ ₥

52 1 ㄏ / ₴ Ґ ˘ 1 ㄏ ₥ Â

53 Ґ ㄏ Ґ ˘ G □ ® 1 Ґ ㄏ ₥ Â

54 ㄏ Ґ ˘ G □ ® 1 ㄏ ₥ Â

56 : ˘ : ‰ Â

57 : ˘ : Ŭ ˘ Ґ ㄏ ₣ E054 Â

58 2 ˆ FWD ˜ └ Ґ ㄏ Ь Ґ Â G 2 Â

59 Ґ 2 ˆ REV ˜

60 G 2 Â Ґ ㄏ └ 2 Â ' ă w P04.73 ˆ ľ ث Ɒ Ŀ ˜ Â

61 ˜ Ḥ ث Ɒ U ˘ Ґ ㄏ ˜ Ḥ ˜ Â G ˜ Ḥ Ґ ㄏ Â

63 Ґ ~ ₹ Ƽ Ⱬ



| | | |

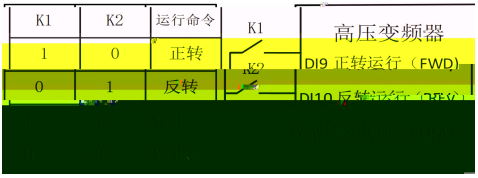
		ǐ ˘ ˆ ↙ ↑ β ٦ ض ڃ / ƨ ǐ Â Â

dz ɒ w

4 ɷ ɒ ˘ ˆ ɣ ₙₙ ч 16 ˘ 16 ɷ 16 ɷ ɒ ẏ Â ǐ ᵣ Й ˆ ↓

₹ ╠8 ₙₙ ~ '

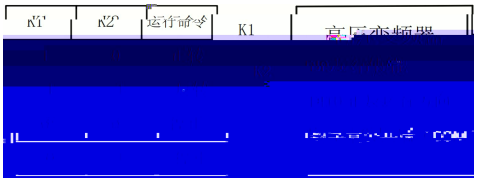
K4	K3	K2	K1	ɒ	ǎ
0FF	0FF	0FF	0FF	ɒ 0	P12.00
0FF	0FF	0FF	0N	ɒ 1	P12.01
0FF	0FF	0N	0FF	ɒ 2	P12.02



ぇ7-3ң 1

ぇ7-3 ˘ L ЙҖ˘ K1 ˘ Ґ ☹ ÂK2 ℠ Ї ˘ K1à K2 ℠
˘ Ґ ☹Å Â
1' ң 2ʹ DI9 ѡ ч ą ˘ DI10 ѡ h Â γ 1
ъ Ɒ 1ч ᴰ˘ ѡ ЙҖ'

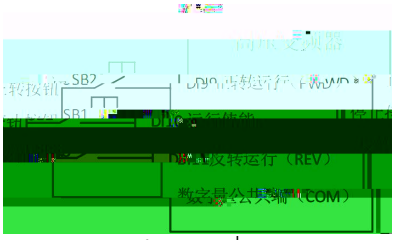
ѡ	O	ν	ѡ
P04.73	ъ Ɒ	H.x1	ң 2
P04.08	DI9 ѡ	1	^ FWD˘
P04.09	DI10 ѡ	2	Ї ^ REV˘



ぇ7-4ң 2

ぇ7-4 ˘ L ЙҖضK1 ℠ ЙҖ˘ K2 Ґ ☹ ˘ K2 ℠ Ґ ☹ Ї ÂK1
˘ Ґ ☹Å Â
2ʹ L 1˘ DI10ч ą ˘ DI9à DI11 ═ à Ї Â
ν 1 ъ Ɒ 1ч ᴰ˘ ѡ ЙҖ'

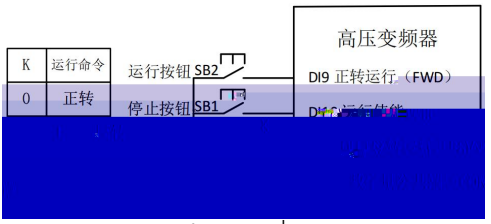
ѡ	O	ν	ѡ
P04.73	ъ Ɒ	H.x2	1
P04.08	DI9 ѡ	1	^ FWD˘
P04.09	DI10 ѡ	1003	L
P04.10	DI11 ѡ	2	Ї ^ REV˘



ぇ7-5ʹ L 1

ぇ7-5 ˘ L ضSB1 ЙҖ˘ ЙҖSB2 Ґ ☹ ˘ ЙҖSB3 Ґ
☹ Ї ˘ SB1 ℠ Ґ ☹Å Â Ø˘ ę Ţ˘ Ğ SB1 ɢ ˘ SB2à
SB3 ъ Ɒ ↕ ضˍ ℠ ˘ ƀ ч ˘ Ґ ☹ ν 3ɷ U ˘ ƀ ч ‰Â
3ʹ L 2ʹ 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



7-6

2

7-6 SB1 SB2 K SB1 SB2

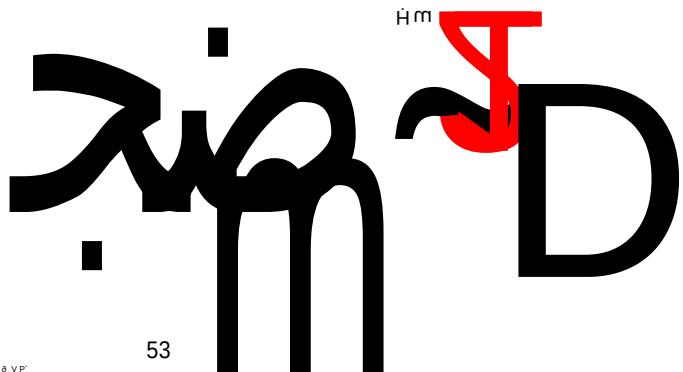
7.5. P05

34 PLC

P05.01	DO1	40
P05.02	DO2	1041
P05.03	DO3	62
P05.04~P05.05	DO4	~DO5
P05.06	DO6	41
P05.07~P05.09	DO7	
P05.10		

E2

DO 0



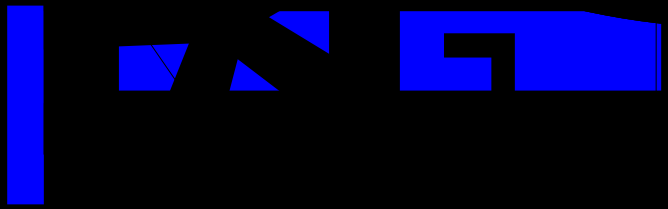
˝ Â

69 Й ®

ON L ĩ ლ3№ Â

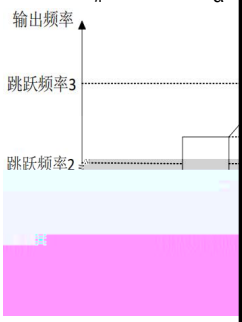
98 ლ3„ Ⓟ Ţ˘ 3 ⁘ Ⓟ ˘ Ḥ˚ ₹ON L

1′ h Ω˘
Î ۷ ώ h ˘ ΄Ρ γ ⌠ Ω˘ ˘ Ţ ‖ Ð ρ Ω˘ Â
2′ Î h Ω˘
Î ۷ ώ Î h ˘ ΄Ρ γ ⌠ Ω˘ ˘ Ţ ‖ Ð ρ Ω˘ Â
3′ Î h Ω˘
Î ۷ ώ h ˘ Ь ⌠˘ ΄Ρ Î h ˘ ΄Ρ γ ⌠ Ω˘ ˘ Ţ ‖ Ð ρ Ω˘ Â
΄Ρ



		P06.32~10'.000s	P06.32~10.000	0.100s
			P06.33 8.008	

P08.69	3	0.00Hz~



7-8

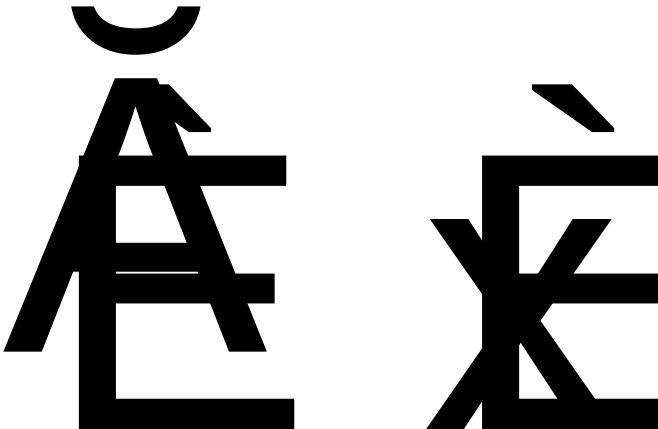
	O			
P08.13	L	0 1'		

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

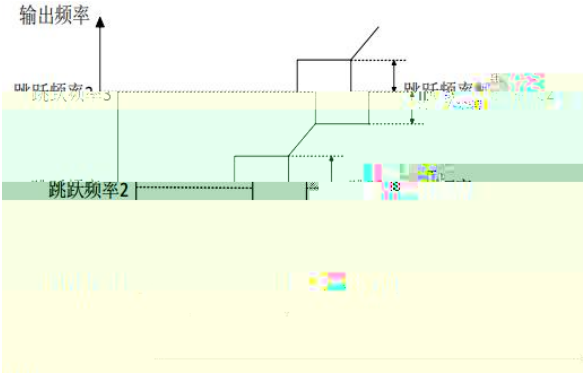
P08.19		0.00Hz~	0.00~	50.00Hz
P08.20		0.0%~100.0%	0.0~100.0	5.0%



W	O		ЖО	Y
P08.22	∀ ⋮ Ţ ϒ	0′ 1′	0~1	0

W G ˘ ضي ∀ ⋮ Ţ˘ ϒ Â

Ч ˘ ضي ЖО ˘ Ψ Â

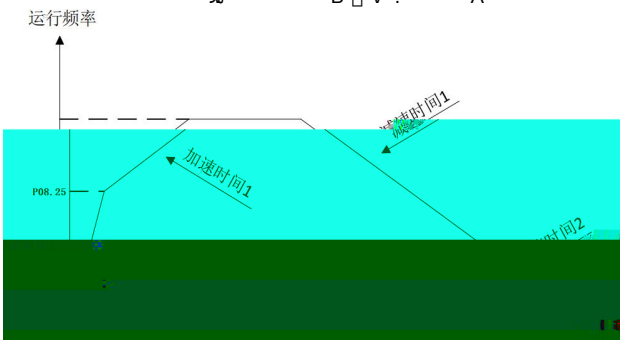


ЖЗ 7-12 ∀ ⋮ Ţ ЖЗ

W	O		ЖО	Y
P08.25	∀ 1Ь ∀ 2℗	0.00Hz~	0.00~	0.00Hz
P08.26	⋮ 1Ь ⋮ 2℗	0.00Hz~	0.00~	0.00Hz

W ضي Ч Ĩ˘ ғ DI ℗ ∀ ⋮ Â G ضي Ĩ˘ ҁ

Ţ˘ Ь DI ЖО˘ Ь □ ∀ ⋮ Â



ЖЗ 7-13 ∀ ⋮ ℗ ЖЗ

ЖЗ 7-13 Ч ∀ ⋮ ℗ ЖЗ Â ضي ∀ Ţ˘ G P08.25 ↕ ∀ 2′ G P08.25 ↕ ∀ 1 Â

ضي ⋮ Ţ˘ G P08.26 ↕ ⋮ Ĩ˘ G P08.26 ↕ ⋮ 2 Â

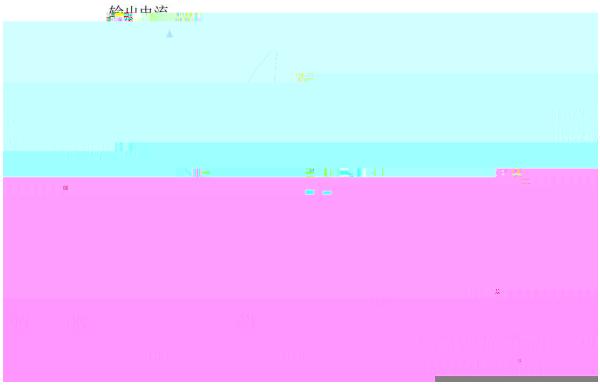
W	O		ЖО	Y
P08.27	˘ П ѽ	0′ 1′	0~1	0

ă G ˘ Ч ˘ W П ѽ Â

˘ П ѽ ˘ Ţ ∓ ˘ ث ϽЪ˘ ↕ Ĩ ҁ ℗ Ч ˘ Â

W	O		ЖО	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

P08.52 0 1 2

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	Modbus PROFIBUS	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

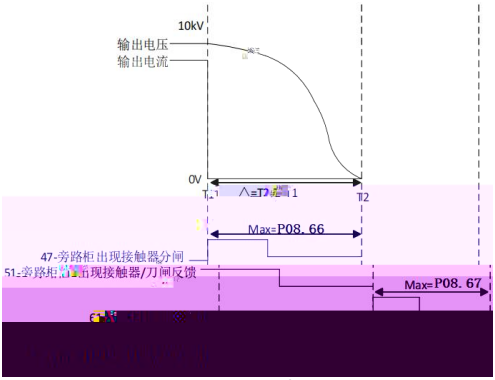
1

2

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

	O			
P08.59		0.00~10.00	0.00	

DCS Ḡ ' ∞ ᵛᵘ ˇ W 61- ˗ Ⓟ Ḥ ₹
⌈DCS P08.67 G ᵛᵘ ˝Ḥ Ḥ Â
' ˇ ⁜ ₣ Ь˝Ḥ Å ˇ ˆ P08.66 ˇ Ɣ
˜ Â

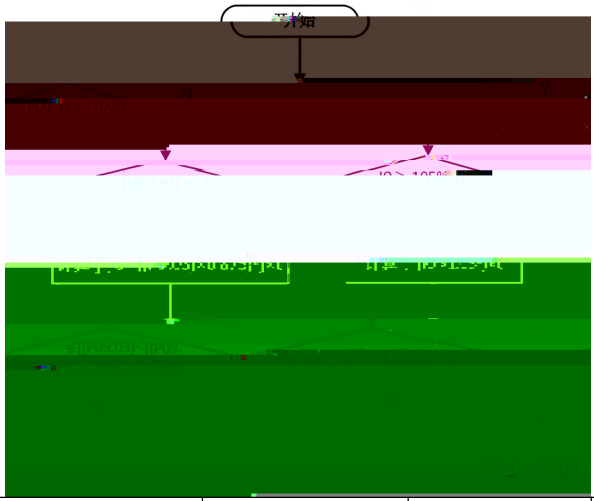


ᵡ 7-16 ˗ Ⓟ Ḥ

7.9. P09 Ḡ ǎ

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

P09.00=Ơ Ḡ W ˇ ˆ ضِ ᵡ ˧ Â
P09.00=1' ǐ ڇ Ḡ ǐ ˇ ∞ ϽΙ Â
Ḡ ᵡ Ч'



W	O		ᵡ	Ɣ
P09.02		50%~100%	50~100	80%

W G ضِ dž ظ

W	C				V
9.06		⁄ Ḡ	0.0~200.0%	0.0~200.0	125.0%

Ŧ ⁄ Ḡ ˘ ĩ ˉ Ƅ Â100.0% ĵ E÷E ĝ ĉ Ñ Ŷ ĥ ą Ñ à "Q ŷ ŧ Ð a 0 S4ˆdSV

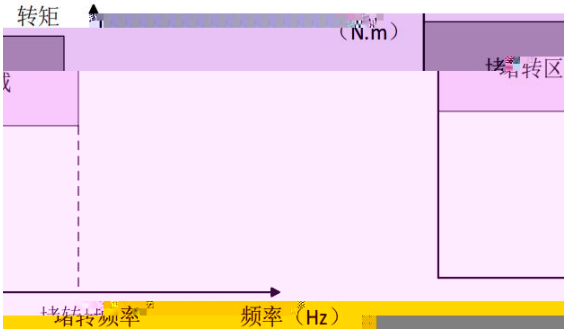
w	C				V
P09.08		ˉ β	0.1~1000.0h	0.1~1000.0	1.0h
P09.09		ˉ β	0~20	0~20	3
P09.10		ˉ β DƠ ƀ	Ơ Ь ˉ ƀ 1' ˉ ƀ	0~1	0
P09.11		ˉ β	0.1~100.0s	0.1~100.0	2.0s
P09.79		ˉ β 9 ʁ " ĥ *	Ơ Ḡ 1' Ь Ḡ	0~1	0

₣ Ẓ ₣ ∧ № ˇ ₣ ∧ № P09.28 ₶ 500ms ₣

Ẓ Â

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

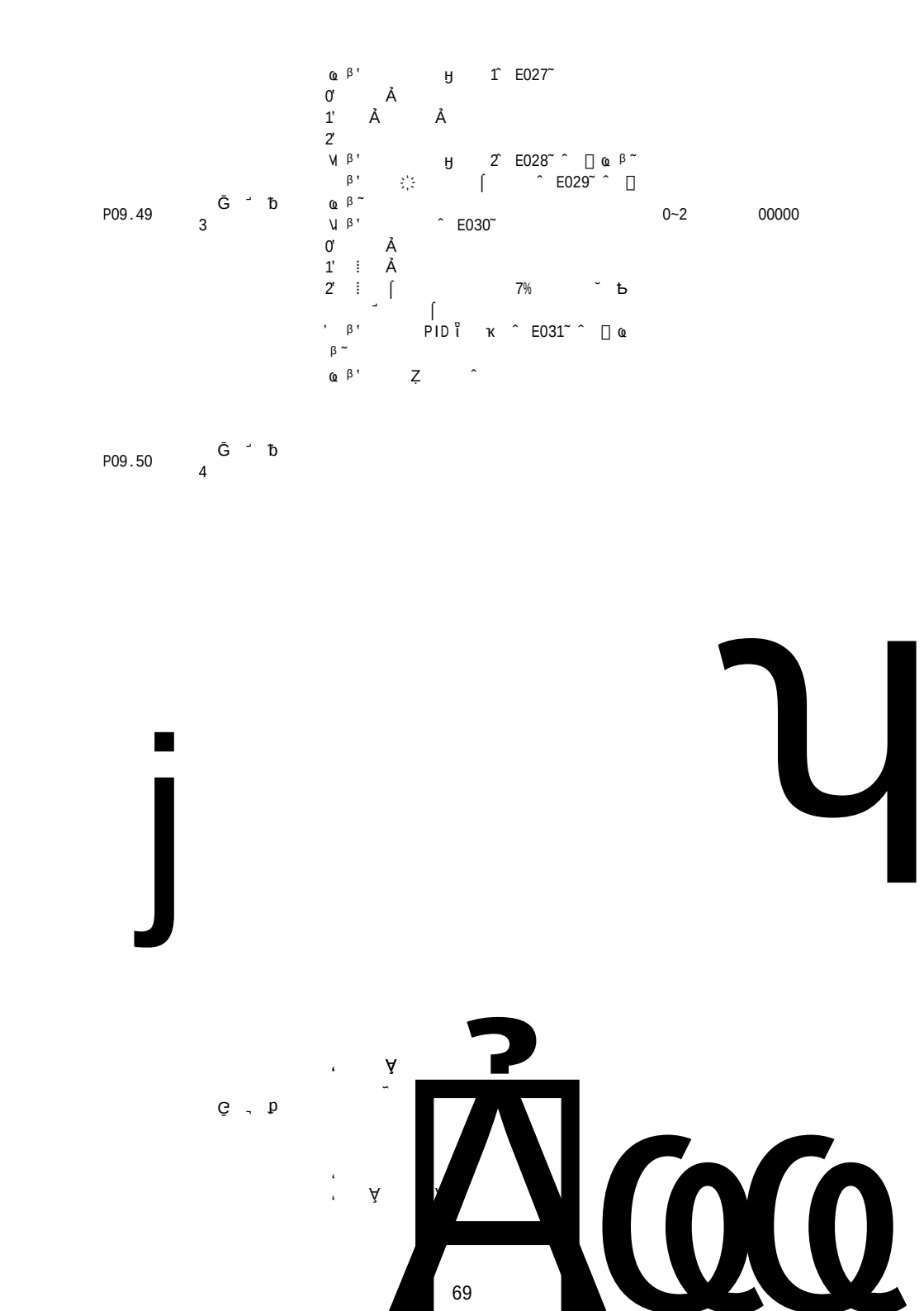
ﺽ ỉ ﷺ Ţ˘ ₣ Ỵ ^ ỉ ﷺ ₣ ẘ Ỵ˜ ₣



7-18

P09.40

P09.31



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 ï	0' AI1 1' AI2 2' 3' AI1~AI2 5' 6' AI1+AI2 7' MAX` |AI1|~ |AI2|~ 8' MIN` |AI1|~ |AI2|~ 9'	0~9	0

ă g PID ï H˝ Â

PID ï 3 ч v˘ ₀ ч 0.0%~100.0% Â

w-	O		₀	v
P10.03	PID b h	0' b 1' ï b	0~1	0

b ' PID,´ ÿ O¸H˝ g ₀ t

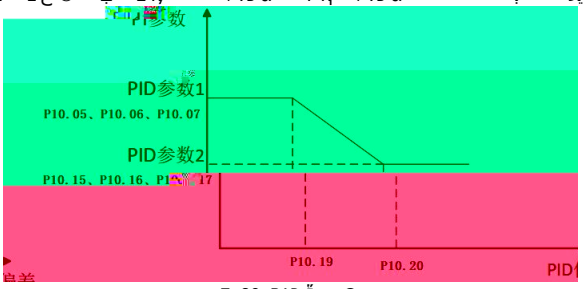
PID ü í ˇ PID ų í í ˇ ∨ ü í
Ь ≠ ǯ Â

w	O		ɔ́	ų
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 ɢ PID ǐ ˇ ≠ ɢ ∨ ǐ ǯˇ p Ψ
ǯ Ǐ Â
P10.13 ɢ PID ₣ ˇ Ψ ⋮ í ϛ ₣ íˇ p Ψ
ǯ Ǐ Â

w	O		ɔ́	ų
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 ǎ Ⓟ Ð	0 Ь Ⓟ 1 DI Ⓟ 2 Ƶ ⌟ Ⓟ	0~2	0
P10.19	PID ǎ Ⓟ Ƶ 1	0.0%~P10.20	0.0~P10.20	20.0%
P10.20	PID ǎ Ⓟ Ƶ 2	P10.19~100.0%	P10.19~100.0	80.0%

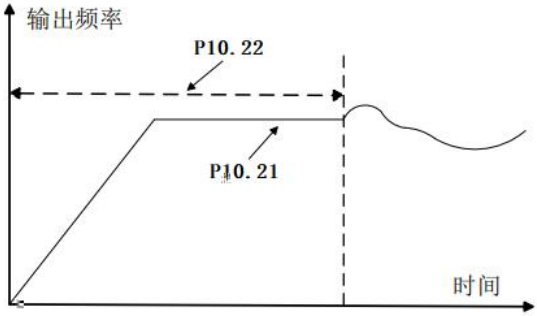
ضِ ' ِ ˇ ₩ PID ǎ Ь ¢ ˇ Ь ' Ǐ Ь PID ǎ
Â
w ɢ Ң PID ǎ Ⓟ Â ì Ţ ϛ ǎ P10.15~P10.17 ˇ Ь ǎ
P10.05~P10.07 ³ Â
Ң PID ǎ ˆ ϒ w DI Ⓟ ˇ ϑˆ ϒ PID Ƶ ⌟ Ⓟ Â
ч w DI Ⓟ ˇ w w ч43ˆ PID ǎ Ⓟ ~ ˇ
ǎ 1ˆ P10.05~P10.07˜ ˇ ǎ 2ˆ P10.15~P10.17˜ Â
ч ⌟ Ⓟ ˇ Ь ǐ Ң Ƶ ų ɢ PID ǎ Ⓟ Ƶ 1P10.19 ˇ PID ǎ ǎ
1 Â Ь ǐ Ң Ƶ ų ɢ PID Ⓟ Ƶ 2P10.20 ˇ PID ǎ ǎ 2 Â Ь ǐ Ң
Ƶ ɢ Ⓟ Ƶ 1 ȩ Ⓟ Ƶ 2 Ң ˇ PID ǎ ч Ң PID ǎ ųˇ ɔ́ 7-20 Â



ɔ́ 7-20 PID ǎ Ⓟ

w	O		ɔ́	ų
P10.21	PID Δ ų	0.0~100.0%	0.0~100.0	0.0%
P10.22	PID Δ ų Ḡ	0.00~650.00s	0.00~650.00	0.00s

í ϛ Ƣˇ ˇ PID ₣ ϕ ч PID Δ ų P10.21ˇ PID Δ ų Ḡ P10.22 Uˇ PID
Â ɔ́ 7-21 ч PID Δ ų w ɔ́ Â



ぇ 7-21 PIDΔ ỵ w ぇ

w O

P11.03	Ж	ﻓﻤﻢ
P11.04	И ^ Ш ~	ﻓﻤﻢ

Ї ҫ Л ﻓﻤﻢ 0 Ч Â ˇ G Ҁ Ч ˆ И ﻍ Ї _ , ă

8 Ї Â

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	

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

Â

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·



Î ȿ W ¢ U˘ ˗ ЙĮ W ¢ ˘ ⌠ Å ъ Ɒ Å Â

ѡ	O		ъ	ỵ
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

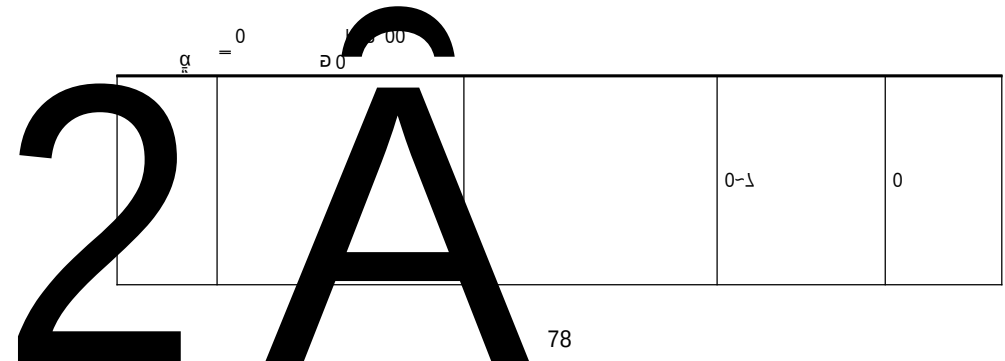
3

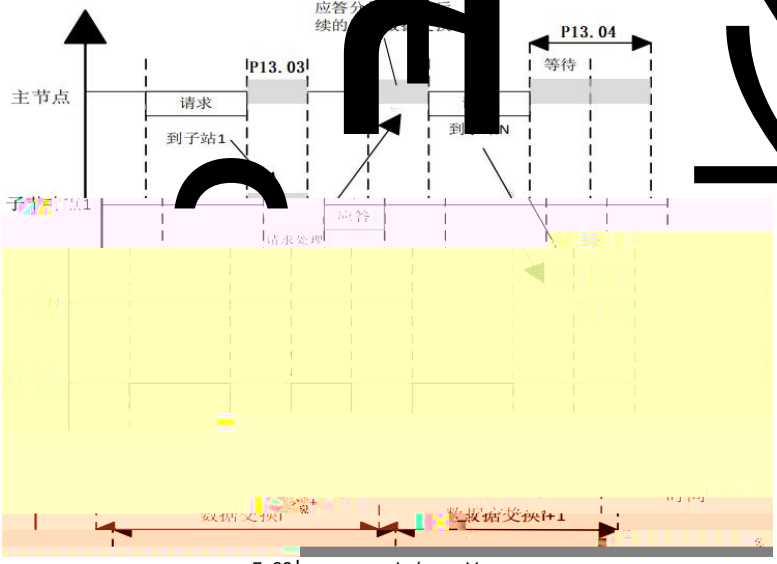
P12.51 ɒ 0

6 08˜

˜ ḱ

7 ش





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

P13.05	D	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

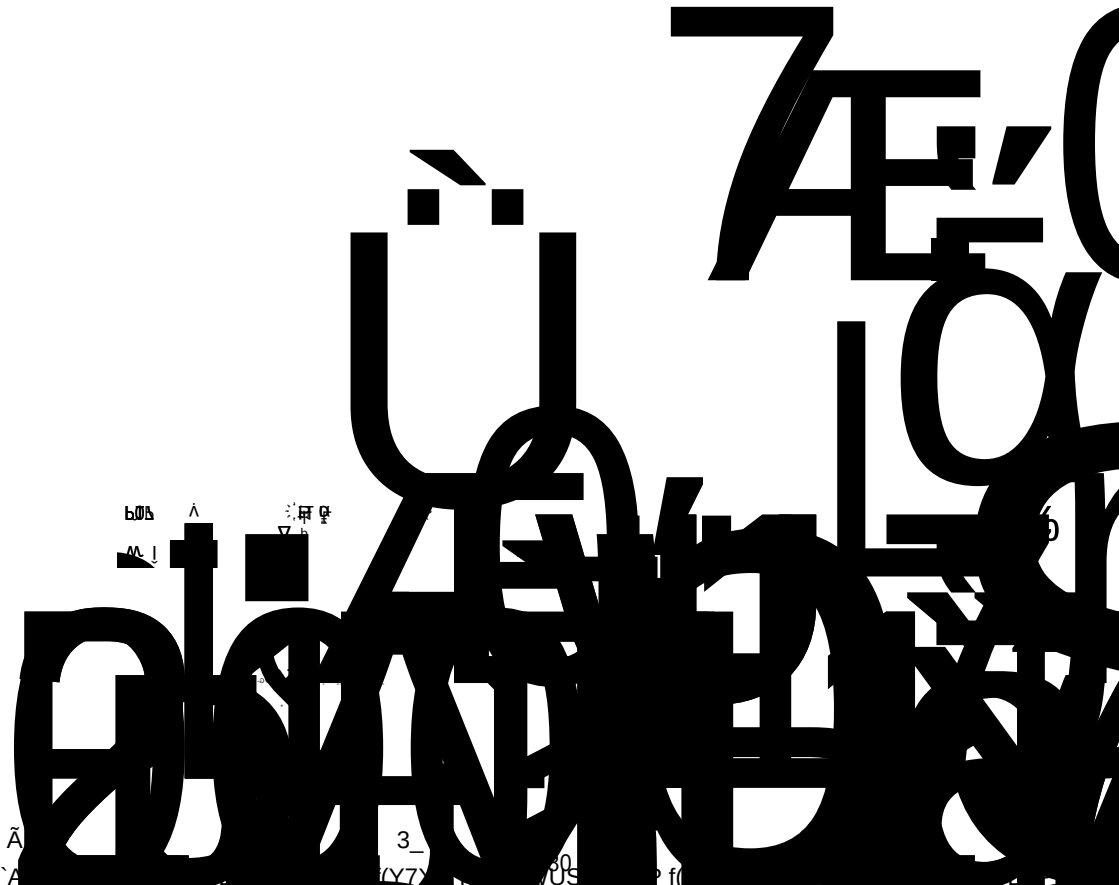
Ḥ à ^ P07.07˜ à ^ P07.06˜ à ^ P07.08 à P07.23˜ à P16

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 ۲ 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 № Ь Â ˘ PI ă ˘ ض ⋮ L˗ ۱ L Ţ ₣ ĩ Ң 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 ˘ ~ Ь ĩ Ղ 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

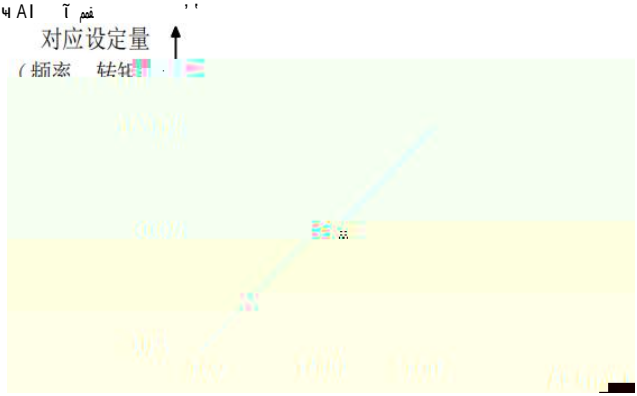
AI ~ ˘ G AI Ð ˘ ض ˘ ₹ ˘

Ɣ ą G ˘ p ↕ ڑ Ѓ ˘ v

' Â

ض Ь ض ˘ 100.0% ų Ƈ ң Ь ˘ Ѓ r ă Ӌ № Â

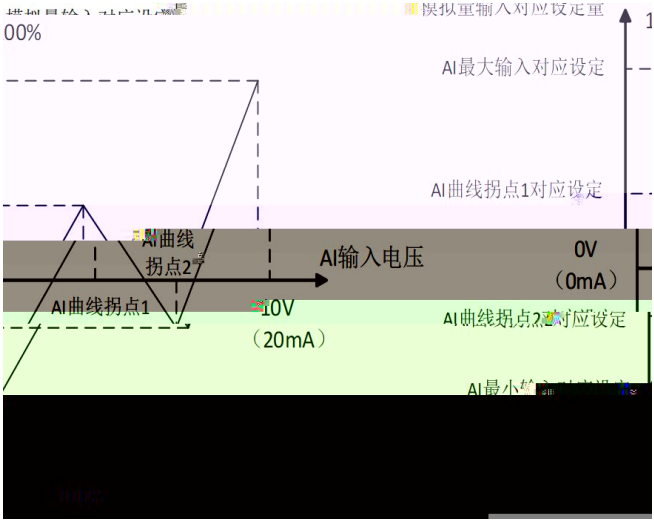
Ӆ ىح 7-24 ч AI ĩ قمم ' '



ىح 7-24 Ь ˘

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%



ج 7-25 ~ -AI ~ ا

ج ~ AI 4 ج 5 ~ ~ ج 1 ج 2 ~ ~ ~ ~ AI
~ ~ AI ~ ا ~ ~ 1 ا ~ ~ 2 ا
~ ~ ا ~ ~ ~

~	O		~	~
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 ~ ~ ~ ~

ᴅ ' AI1 ~ ۱ض5.00Ⱨ꞉ Ѝ ˗ ˘ ˗ مخ ч 4.90-5.10̃ AI1 ~ 10.00V
100.0%̃ Ꮋ ⌠ AI1 ض49.0%-51.0% ң ˗ Â AI1 ч 50.0%̃ AI1
ч 1.0%̃ ⁝꞉ AI1 ~ ѡ Ս˘ ⌠ AI1 ~ ڡ ч 50.0%̃ AI1
Ỉ ч ѿ ⓠ ~˘ ϶ ˗ Â

ѡ	O		مخ	Ⱬ
		ⓠ β' AI1 Ⴏ β' AI2 β' Ⴑ β'		
P23.48	AI 1	1' 1 2' 2 3' 3 4' 4 5' 5	1~5	1111

≠ P26.14 **AI1** ⌠ AI2 ~ ˘ Ỉ ᵣ **1**-5̃ ϒ P23.01 ⌠ P23.29 Â

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

ʍ

ƧWǫʌ ƺ

Ɽ ₳

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

w	O	ж	ų
	ⓠ 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
'

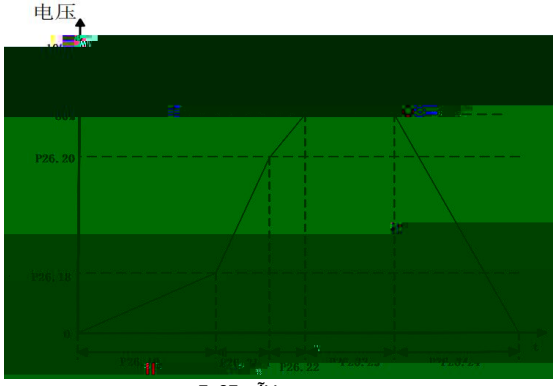
P26.13 Ţ ₡ β ч Ґ 3 Ŀ˘ ɬ ˝Ḥ Ŭ ϖ ɬ ˝Ḥ ɬ ˘ ɇ ˗ β ˝Ḥ ' ч
Ґ 2 Ŀ ₇ ˝Ḥ ˗ β ᵖ Ь˝Ḥ ' ч Ґ 1 Ŀ ↕₇ ˝Ḥ Ь˝Ḥ ˗ β' ч Ґ 0 Ŀ ↕
ɇ β Ь˝Ḥ Â

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	
Ɯ β' ' β'	BIT0:	0'	ṿ ч 3 Â
		1' "Ḥ	
	BIT1: ⁻ β	0'	
		1' "Ḥ	

ẘ	O		ɔo	ṿ
P26.15	ᵀḤ	0:A01 1:A02	0~1	0
P26.18	ῶ ʜ Ⓟ	0~80%	0~80	30.0%
P26.19	ῶ ᵀḤ ∀	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 ∀	0.5~50.0s	0.5~50.0	4.0s
P26.22	⁂ ᵀḤ ∀	0.0~10.0s	0.0~10.0	1.0s



ɔɕ 7-27 ᵀḤ

P26.15 Ţ ₣ ң ₣ˇ ɢ ضʜ ᵀḤ Ţ Ĺ ∧ ϛ ₣ ∧ Â ʜ ᵀḤ ᵀ∧ ˜ № ч⁂ ˇ P26.18 ɢ ῶ U ⌠ ∧ ṿˇ P26.19 ↕ ɢ ῶ ⍵ ᵀḤ Â ³ ضˇ P26.20˝ P26.21ˇ P26.22№≠ ʜ ⁂ ᵀḤ ɛ ⌠ ∧ ṿˇ ⁂ ∧ ⌠ ∧ ṿ Â

ẘ	O		ɔo	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∧ ң U ヶ"Ḥ ∧ Ɜ ᵀˇ ∧ ⌠ ᵀḤ ∧ Ḡ P26.23 ң U 'P ᵀḤ ⁞ '

ضP26.24 ᵀḤ ⁞ ṗˇ h Ψ ∧ ϛ ∧ ɾ ᵀḤ ∧ ʏ ⌠ ṿ Â ᵀḤ h ч ϶ ᵀ ∧ ⁞ ⁘ Ⅱ Ɗṗˇ ⍵ Ţ ƀ Â ɔɕ Ψ ƀ Ѝ ˇ ᵀḤ Ţ ĩ ∧ ϛ ∧ ɢ P26.29 Ţ ṿˇ ↕ ᵀḤ Ţ ˜ Ь Â

7.20. P29 ‰ ǎ

ẘ	O			ɔo	ṿ
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

w ǎ ₣ ∧ ˘ ν ˘ Ψ ч ₣ ∧ U ν Â ₩ ضِ شِ

Ь Â

˘ ' Л ϛ ₣ ˘ Ấ 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 ˘ ↕ Ấ ϛ Ψ ˫ AI Ƶ Ь Â

ɢ Ấ ϛ Ь ∖ شِ ˘ ˆ ϒ شِ ˘ ą Ấ ϛ

ν Ь ν ₩ ˘ ϒ AI1 ч ᴅ˘ 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 ٧ Ь PLC Ꮒ Ţ 2.DP/PN ٧ ɾ ˜ 3.DP/PN ٧ Ь PLC Ꮒ	1. DP/PN ٧ Ь PLC Ꮒ ң Ὰ ἂ˜ 2. ќ DP/PN ٧ ɾ ˜ ⌈ ¨Ḥ ᾮ ң ṗ 3. Profibus P13.08
W080	٧ ˝Ḥ	1. 2. ٧ ˝Ḥ Ь 3. 4. 5. ٧ ˝Ḥ ᒪ	1. ᵞ ą 2. ٧ ˝Ḥ ˜ ¬ 2 3. 4. Ὰ ΐ ᾽ 5. ٧ ˝Ḥ ᒪ
W082		1.AI1~AI2 ض Ẓ 2.P23.90 Ţ ą AI ἐ AI ą	

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.

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

E010

1.
2.
3.

E011

1.
2.
3.
4.
5.

E012

1.
2.
3.
4.

5.

1.
2.
3.

1.
2.
3.
4.
5.

1.

E026

E027

E028

E029

E031

E032

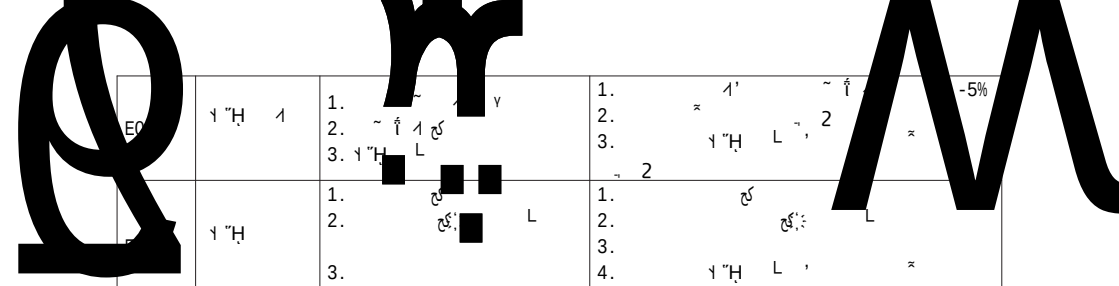
		2.DIo 3. L ɒ	2. ~ DI ч ˇ DIo IO 3. IO h
E042	Ẓ	1. ֆ ă Ь 2. 3. Ẓ ă Ьvw 4. ֆ ⌈PG ∖ 5.PG ∖ 6.24V 15V ˟ 7. h 8. ֆ	1. P01 ֆ ă 2. Ṗ 3. 'vw P09.69 4. ֆ й˘ Ь PG ∖ ' Ţ ϩ à 5.PG ∖ ϩ ' ϩ 6. 24V 15V ˟ ϩ ' IO 7. IO h 8. ֆ
E043		1. ֆ ă Ь 2. 3. Ẓ ă Ьvw 4. ֆ ⌈PG ∖ 5.PG ∖ 6.24V 15V ˟ 7. h 8. ֆ	1. P01 ֆ ă 2. Ṗ 3. 'vw 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

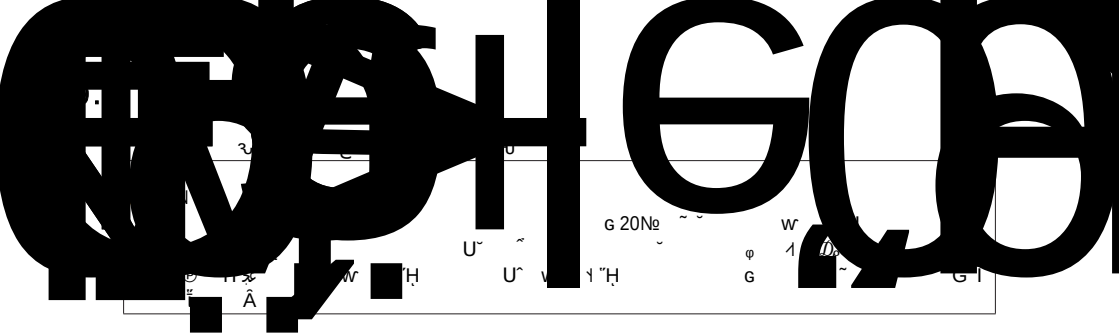
E161 ಸ್



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



9.1. ќ ђ ş Ни

1) ќ ў ' ҷ˘ Йӌ ˟ ƨ ˟˘ □ ҏ ˘ ґ„ Â
2) ɢ Å ғ ۱ Ь Â
3) ۷ ۱ U˘ ض ђ ╠ ѽ ' ۱ ˘ ą ۱ ҷ˘ ҷ Â
4) ض U˘ ˜ ضˇ ϒ Ḡ ђ„ 2 ŋ Â
5) ض ˘ ɢ ǐ ᴸ ۱ β˘ ض ќ ₩ ƨ ˟ à Ь ᵖ Ң ƨ ˘ ғ ƨ Ң ضр Â
6) ضр ѽ ضˇ U ضр ˘ ضр ǐ Ь ǐ˘ à ҷ Â
7) ضр ض ђ„ 2 ˆ ضр ˘ ض ضр ǐ˙ „ ђ Ŀ ҏ Â
8) ۱ ɢ 20V U˘ ˜ ќ ђ ş Â

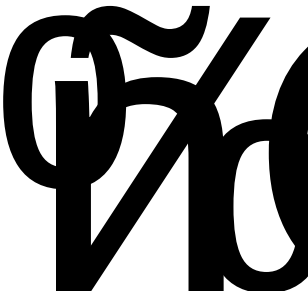
9.2. ђ Ни

1) ǐ ҷ ч ۱ ۷ ˘ к ѵ ђ„ 2 Н˙ ђ Â
2) ѽ„ Ŀ ˘ ǐ ҷ ₹ ۱ₙ ˝Ң U˘ ˙P₦ ۱ Â
3) ą ˘ ₇ ۷ ض ۱₦ ˘U ˙P₦ Â

	p Ѓ Ь Ղ			۸ ڿ
	p Ь Ղ			
	p à Ѓ à ˘ p	, ṿ	ů Δ ṿ ¦ 0.85	
	p p r	,	ṿ ض ¤ 10% ɣ ṗ	
Ѓ ۸ ک	p ˗ ė ء	∩ ش		۸ ڿ
۷ ⊥	p Ж Ь ک ˗ Ь Ղ p ء Ѓ p ˘ à Ѓ à p Ѓ Ь Ղ			à ќ
' ۷	p ˗	∩		
	p	∩		

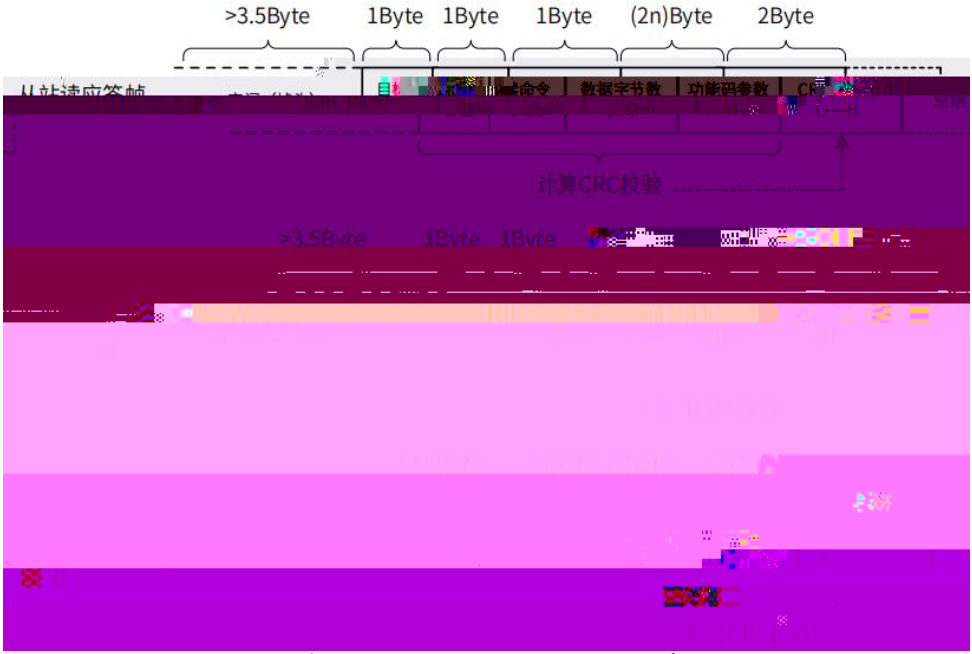
9.4. Ь Ḡ Ī

۸ Ѓ ک ί ˜ Ṛ đ



10. Modbus 통신

RS485

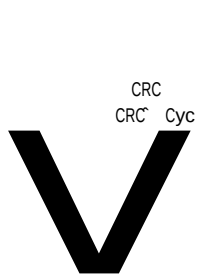


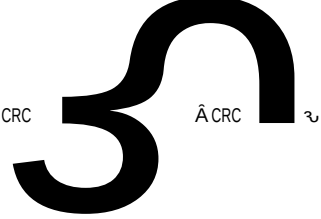


START	≥3.5 字符
从站地址 ADR	通讯地址：1~247
命令 CMD	03：读取寄存器；06：写入寄存器
寄存器地址高字节 H	寄存器地址高字节
寄存器地址低字节 L	寄存器地址低字节
寄存器个数高字节 H	寄存器个数高字节
寄存器个数低字节 L	寄存器个数低字节
CRCCHK 低字节	CRC16 校验低字节
CRCCHK 高字节	CRC 校验高字节
END	≥3.5 字符

CRC

CRC˜ CyclicalRedundancyCheck˜ ą RTU ˘ ´ ₹ G CRC Â 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]