ѿ Ԧ 1
1.1 ŋ ̃ 1
1.2 ą 1
Ԧ ̆ : 1
2.1 ̆ 1
2.2 2
̂̂̂ Ԧ : 3
3.1 Ԧ ŭ 3
3.2 ŋ 4
3.3 Ԧ طي 8
ᴍ ᵊ ᵖ : 8
4.1 ᴊ ̓ 8
4.1.1 ᴊ ̓ ᴉ 8
4.1.2 ŋ 9
4.1.3 ƀ Ԧ 9
4.2 9
4.2.1 ᴉ ŭ 10
4.2.2 ŋ 10
4.2.3 ƀ Ԧ 11
4.3 LED ī́ 5X7 11
4.4 LED ī́ 16X16 11
ᴊ ƀ ᴄ ƀ ŭ ĭ 11
5.1 11
5.2 ƀ 12
5.3 ĭ ŭ 13
5.3.1 Ԧ ᴉ 13
5.3.2 13
5.3.3 ᴉ ŭ ĭ ᴉ 13
5.3.4 Ḡ ĭ 17
5.3.5 17
Ɛ ƀ Ḡ Ī 18
6.1 ƀ Ḡ Ī ŋ Ԧ 18
6.2 18
6.3 Ḡ ḱ 18
ʿ ᵊ 19

w̄ Ƕ

1.1 ŋ ˜

1. Ţ ˩ ƀ ɦ ´ 220V/110V ˩ ˜˘ ą ˘ ⊥ Ḡ Â
2.

		3	
	Å	4	¬ ~ ˘ Å ˘ ¬ ~ ˘ Ч
Ł„		6	
	Å	7	¬ ~ ˘ Å ˘ ¬ ~ ˘ Ч

5) ŋ Ḡ ˅

a) ŋ ż Ḡ ˈ ˥ ƴ ℗ ŋ ż ˘ ą ⊥ Å ’

b) ˆ ֍ Ḡ ˈ ˥ h ż ֍ „ ƀ ` ˥ Â ǔ ˆ h Ƕ ~˜ ⊥ Å ’

c) Ḡ ˈ ֍ ˀ ƀ Ƕ ’

d) ¬ Ʊ ~ Ḡ ˈ w ˘ ¬ Ʊˆ ƀ Ʊ ǐ ~ ~ ˘ ₮ Â

2.2

ƴ Й ɒ˙

1. ŋ ż ˆ X7 ˛ ~ ;
2. ֍ ~ ˘ Å X9 ˛ ˘ X9 (Ƕ ǐ);
3. ˚ Ł„ ֍ ` ₮ Â

Ł„ ˅ Å Ł ˈ

ŵ Ł Ч‘

Ł„ ˈ Ł„ ₮5S Í ŕ Y0 à Y1 ₮ ŕ Ł„ ֍ à; Й ֍ à ֍ Í ŕ 4s Å ֍ Í ŕ Ł„ ֍ Å ˈ ֍ ш .(Y0 à Y1) ˘ Â

Ŷ1 Ł Ч‘

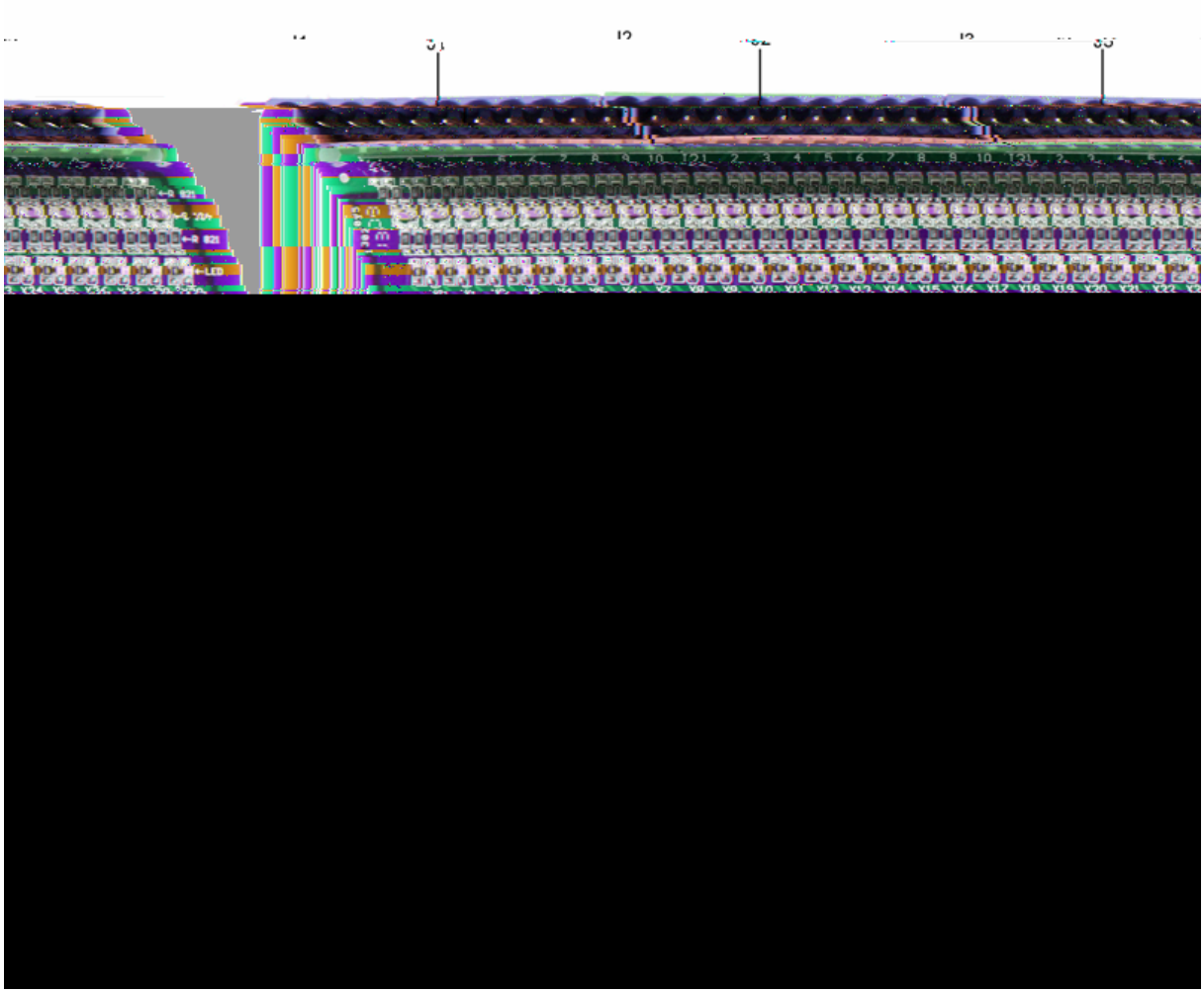
Ł„ ˈ h ֍ˆ ; ~ Í ŕ Ł„ ₮5S Í ŕ ˆ ֍ ₮ Í ŕ Ł„ Ʊ à ą Í ŕ Ḥ„ ż Ƶ ₮ Í ŕ ₮ Å ˈ ш à Ʊ à ą Í ŕ à ˆ ֍

ŷ Ł„ Ł Ч‘

Ł„ ˈ h ֍ˆ ; ~ Í ŕ Ł„ ₮5S Í ŕ ˆ ֍ ₮ Í ŕ Ł„ Ʊ à ą Í ŕ Ḥ„ ż Ƶ ₮ Í ŕ ₮ Í ŕ ą Í ŕ ˆ ֍ Í ŕ Ł„ ֍ Å ˈ ш à Ʊ à ą ä ֍ Í ŕ à ˆ ֍

ّ ّ ّ h :

3.1 h ّ ّ



طي 1 h BL2000-FTB-V3 ّ ّ ُ



طي2 Ħ

3.2 Ӈ

2 ~ Ӈ

⸗	⸗	Ӈ	
J1_1	X0	⸗ ⸗ ῷ ~	
J1_2	X1	Ӣ ῷ ~	
J1_3	X2	1 ھج Ḥ ~	
J1_4	X3	1 ھج Ḥ ~	
J1_5	X4	ھج 1 ĭ ~^ ң ھج ĭ ɣ ~	
J1_6	X5	⸗ ~	
J1_7	X6	Ӣ ~	
J1_8	X7	ŋ نج ھج ĭ ~	
J1_9	X8 [5]	⸗ / ḱ^ ч ⸗ ~	
J1_10	X9 [1]	Ƕ ĭ 1 ^ ھج ĭ	
J2_1	X10	⸗ ⸗ ~	
J2_2	X11	⸗	X11-X28 [2]
J2_3	X12		ч ŋ نج

~

J2_5	X14		
J2_6	X15		
J2_7	X16		
J2_8	X17		
J2_9	X18		
J2_10	X19		
J3_1	X20		
J3_2	X21		
J3_3	X22		
J3_4	X23		
J3_5	X24		
J3_6	X25		
J3_7	X26		
J3_8	X27		
J3_9	X28		



J5_2	L1	ŋ ☓ ₋ ₮ g ^ ☬ Ẽ ₮˜	ᒣ
J5_3	L2	ŋ ☓ ₋ ₮ f ^ ☬ Ẽ ₮˜	20mA
J5_4	L3	ŋ ☓ ₋ ₮ e ^ ☬ Ẽ ₮˜	
J5_5	L4	ŋ ☓ ₋ ₮ d ^ ☬ Ẽ ₮˜	
J5_6	L5	ŋ ☓ ₋ ₮ c ^ ☬ Ẽ ₮˜	
J5_7	L6	ŋ ☓ ₋ ₮ b ^ ☬ Ẽ ₮˜	
J5_8	L7	ŋ ☓ ₋ ₮ a ^ ☬ Ẽ ₮˜	
J5_9	L8	⁛ Ъ ₮^ ☬ Ẽ ₮˜	
J5_10	L9	Ѝ Ъ ₮^ ☬ Ẽ ₮˜	
J6_1	COM7	L0-L9 ₮ ‘E ”	
J6_2	COM7	L0-L9 ₮ ‘E ”	
J6_3	Y0	KMC h ⍥ ₮(ı ⍥ ╠)	⍥ ₮
J6_4	Y1	KDY ^ ⍥ ₮^ ╠ ˜	
J6_5	Y2	⍥ 1 ₮	
J6_6	Y3	⍥ 2 ₮^ Ь₋ ч⁛ ⍥˜	
J6_7	COM1	Y0 à Y1 à Y2 à Y3 ₮ ‘E ”	
J6_8	Y4	ı ⍥ ą ₮^ ⁻ ⁛ ч ⍥ ₮˜	
J6_9	Y5	ı ⍥ ₮^ ⁻ ⁛ ч⁛ ⍥ ₮˜	
J6_10	Y6	ı ⍥ ΐ ₮^ ⁻ ⁛ ч Ѝ ⍥ ₮˜	
J7_1	COM2	Y4 à Y5 à Y6 ₮ ‘E ”	
J7_2	Y7 [3]	ı ⍥ 0 ₮(⁛ ч⁛ ⍥ ₮)	
J7_3	Y8 [3]	ı ⍥ 1 ₮	
J7_4	COM3	Y7 à Y8 ₮ ‘E ”	
J7_5	Y9	⁼ ₮	
J7_6	COM4	Y9 ₮ ‘E ”	
J7_7	Y10	Ь₋ ˇ ₮ ^ ˊ ˛ ~	
J7_8	COM5	Y10 Ь₋ ₮ ‘E ”	
J7_4	Y11 [4]	⁼ Ь₋ ⍥ ₮ ^ ˊ ˛ ~	
J7_5	COM6	Y11 ⁼ Ь₋ ⍥ ₮ ‘E ”	

ɢ № ˜ Ŧ ʿ

1. ˜ X9 ⸢⸣ ⅂ ч ₃ ɢ ⱛ(⸢⸣ Ӣ ȁ ⱛ ȁ ⸢⸣ ⱛ) Ƕ ǐ

ˆ Ả Ƕ˘ ˜ ⱛ ɢ ˆ ⱛ ǐ ˘ ɢ ⱛ ˘

З ⅂ ч Ь Â

2. X11~X28 ˜ ч ŋ ⱛ ˜ ˜˘ ǐ Ţ X11 ȁ X12 ȁ X13(⸗ , ⸗ , ⸗

ⱛ) ˜ ˘ ⸗ ⸗ ⱛ ⸗ Ƀ˘ β ˘ ⅂ № ⸢⸣

˜ Ь ǐ ɾ ˜ ⅂ ≢ Â

3. Ŧ ʿ

	1 ⱛ 0 Ŧ (Y7)	1 ⱛ ˝ Ŧ (Y8)
ḱ	˝	0
ɣ	°	1
	˝	1

Ь Ƨ1 ⱛ ˘ ǐ ˘ 1 ⱛ ǐ Â

= * *3.14* ⁞ ⁄ 60*1000* ˜

4. ⸗ ⸗ ⱛ Y11 Ŧ

Y11 Ŧ ⱛ ǐ ⸗ ⸗ ⱛ Ƀ Â ч OFF ˘ ⸢⸣ Ƶ ⸗ ⸗ ⱛ

ˆ Y11˜ ⅄ Ŧ˘ ǖ ȁ ŋ ⱛ ⸢⸣ ɢ ˆ X11-X13 ˜ ˜˘ ⸗ ⸗ ⱛˆ Y11˜

Ả Ŧ’ ч ON ⸢⸣ Ƶ ⸗ ⸗ ⱛˆ Y11˜ Ŧ˘ ŋ ⱛ ⸢⸣ ɢ ˆ X11-X13

˜ ˜˘ ⸗ ⸗ ⱛˆ Y11˜ Ŧ Â ч ON, ⸢⸣ ǖ ˘ Ь

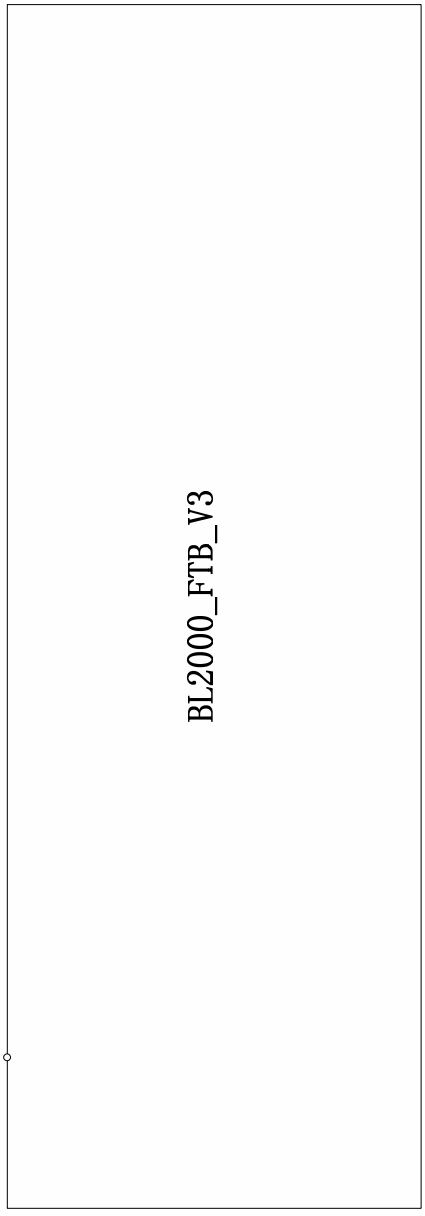
˘ β Ƶ Â

5. ⱛ ⸗ Ţ˘ ⅂ Ả ˆ ˘ Ả ˜ ɣ ⱛ ḱ / ⸗ ˜ˆ X8˜ ⱛ

Ţ˘ ⱛ Ӣ ˘ ˜ ḱ ˘ ɢ ḱ ч ⸗ ˘ ⱛ Ƕ ˜ ’ Ӣ˘

Ả ˘ ˘ ˜ ⸗ ˘ Ƕ ˜ ˘ Â

3.3 h طي



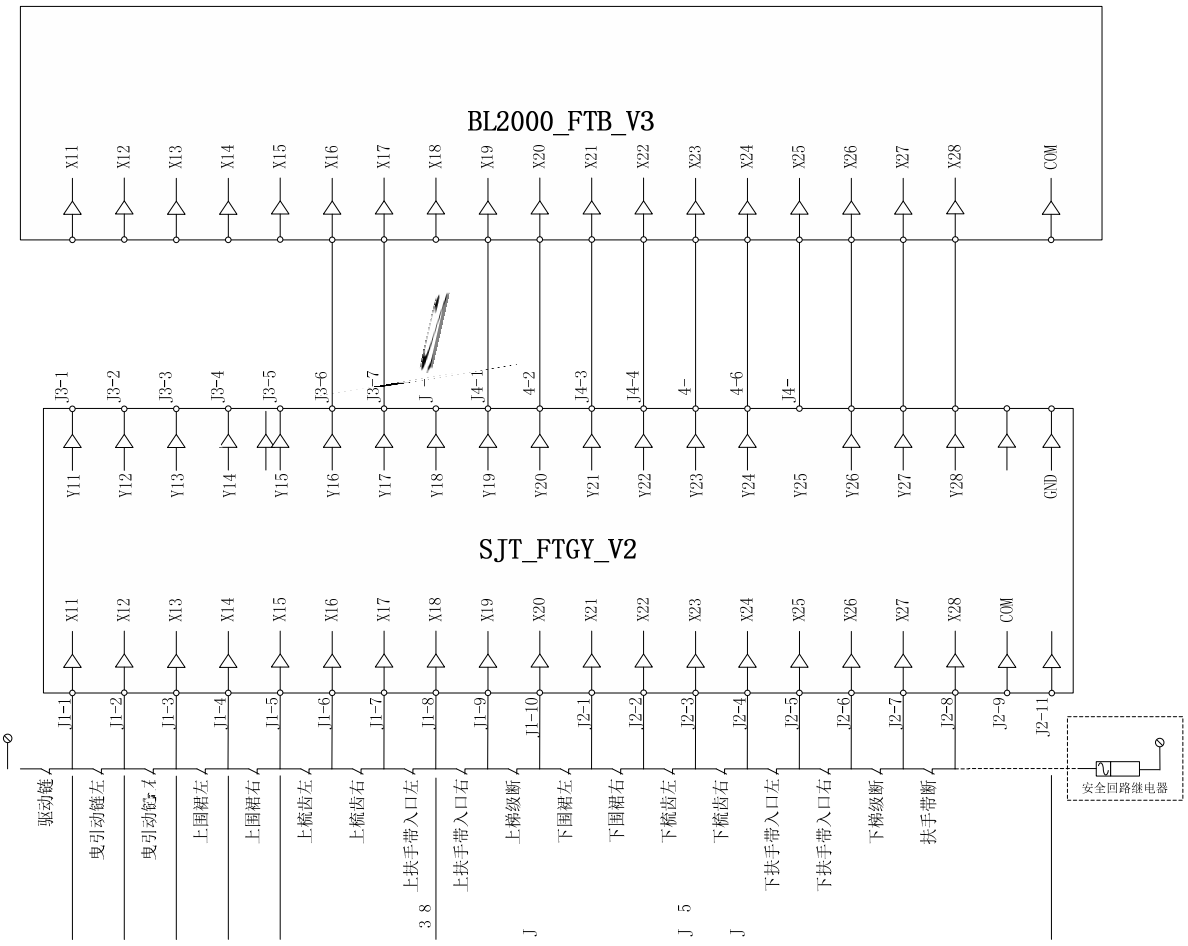
طي 4 ˩ ˀ ŭ ˀ

4.1.2 ɟ

4 ˩ ˀ ɟ

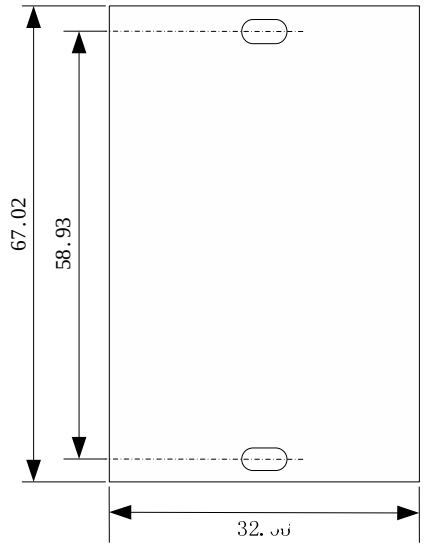
ˉ	ɟ	
COM	X11-X28 ˜ ˋE ˊ	
X11-X28	18 ŋ ɲ ˜ ˩ ˜	ť r ɟ 2
GND	Y11-Y28 Ŧ ˋE ˊ	ɦ COM
Y11-Y28	18 ŋ ɲ ˜ Ŧ	X11-X28 Ŧ

4.1.3 ƀ ɦ



4.2.1 ڳ ڳ

6 طي ڳ ٺ



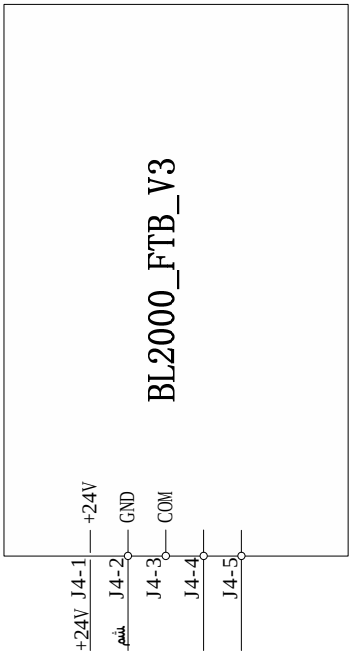
7 طي

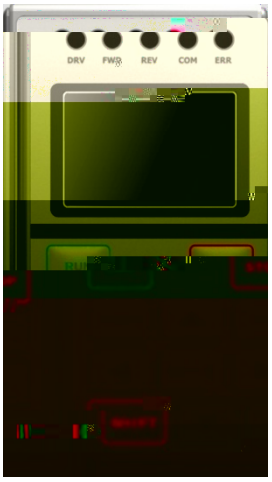
4.2.2 Ӈ

5 Ӈ

⁻	Ӈ	
J1-1	β b à c ~	
J1-2	γ β g ~	
J1-3	γ β f ~	
J1-4	γ β e ~	
J1-5	γ β d ~	
J1-6	γ β c ~	
J1-7	γ β b ~	
J1-8	γ β a ~	
J2-1	Й Ն ~	
J2-2	⁘ Ն ~	
J2-3	+24V ~	
J2-4	+24V ~	

4.2.3 Ь Ь





طي 9 ƀ ھج

ƀ ھج ⅎ ⅄ Й̌

ˆ 1˜ ʻ w ȁ ḱ ʼ

ˆ 2˜ ʻ ȁ I/O ʼ ȁ Ḥ ʼ

ˆ 3˜ ĭ ʻ ĭ ȁ ĭ ȁ ĭ ʼ

ˆ 5˜ Ḡ ĭ ʼ

ˆ 6˜ Â

ṗ ӊ ɞ ʻ w̄ ɞ ˘ ḱ “J”, Ʊ ˇ خي ṗ “P”˘ ȉ ɪ “—”˘ ӈ ɞ Â ˘ ˘ Ḃ ɢ ḱ Â

№ ӊ ʻ

A ȁ Ƅ ˆ ŋ نج ĭ ˇ 1-3ـ ƀ˘ ˜ ˜˘ ᵝ Â

B ȁ ȉ ɪ ч 2 Â

5.2 ƀ

ھج Й̌ 11 ɞ ˘ ˘ ą MENU ˆ ⅂ ˜ ȁ ▲ˆ ⁘ ˜ ȁ ▼ˆ Й̌ ˜ ȁ ►ˆ ⅄ ˜ ȁ ENTER ˆ ˜ ȁ ESC ˆ Ŧ ˜ ʹE ɞ ˘ ӈ Й̌ʻ

6 ھج

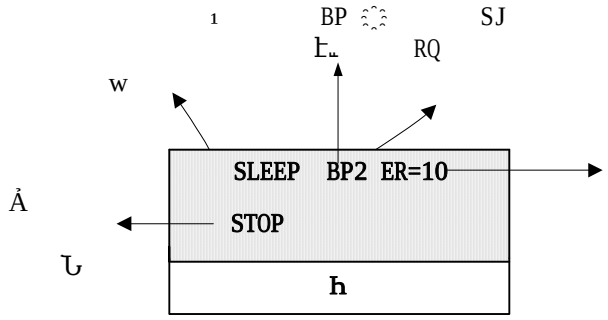
	ˇ

Ä6+Å Ã ►

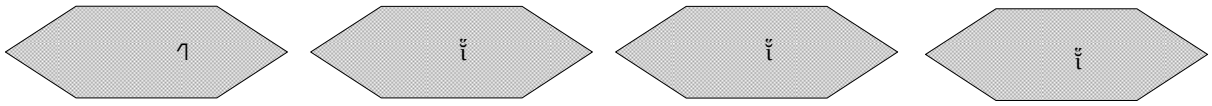
[MENU] [ ]	
▲ [ ]	
▼ [ ]	
► [ ]	
[ENTER] [ ]	
[ESC] [ ]	

5.3

5.3.1



INSP AUTO


า
ั
ั
ั



1

16	Ⱡ ⓟ 3	RQD Time3	5000ms*	0-9999ms	Ⱡ ⁂ Ⱡ
17	⁖ Ⱡ ⱡ ą	Vice Brake Enable	Yes*		` ⁖ Ⱡ ⱡ ˊ
18	Y11 Ŧ ⱡ	Y11 Output Type	ON*		⁂ Ţ :

9 ĭ ˊ

˥					
⁓	Ţ		Ŧ ⅃ ṿ	ⱡ	
1	Ⱡ	Control Mode	0*	0-5	ˊ Ⱡ Ţ :
ˇ	X9ˊ	X9 Function Set	1*	0-2	ч Å Ƕ ı ˆ ⱡ ĭ

10 ĭ ˊ

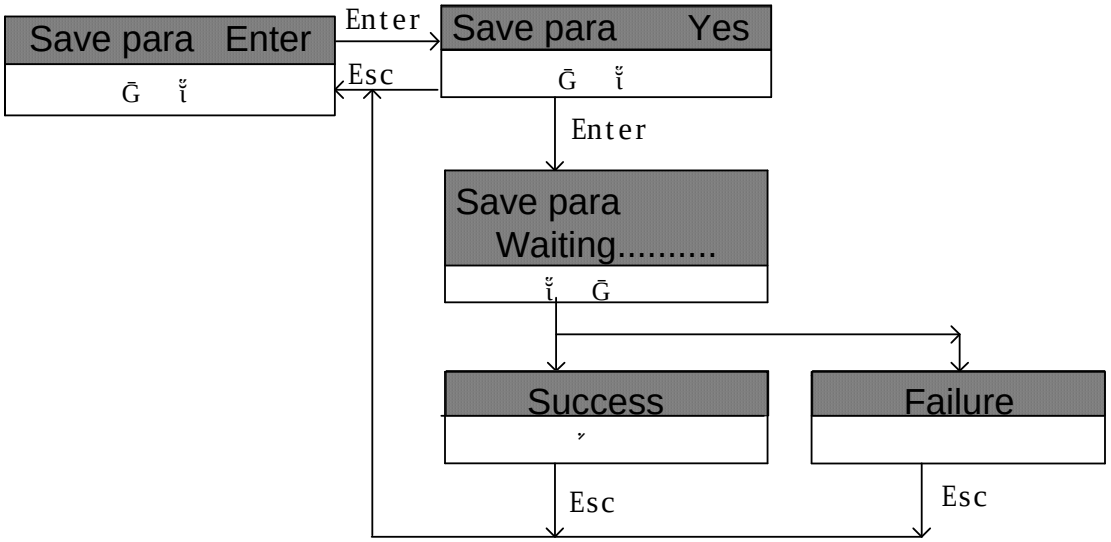
˥					
⁓	Ţ		Ŧ ⅃ ṿ	ⱡ	
1	Ŧ ⅃ ṿ	Factory para	NO		Ŧ ⅃ ĭ ṿ
2	ĭ	Read Para			ⱡ ĭ ʃ ⱡ
3	Ώ ĭ	Write Para			ⱡ ⱡ Ʊ Ώ ĭ
4	Y10 Ŧ	Y10 Function	0*	0-11	ĭ ɪ Ŧ ˀ ⱡ ⱡ ⱡ
5	Y11 Ŧ	Y11 Function	0*	0-11	Ŧ ˀ ˊ

ˊ

1. ⱡ ⁂ *⁓ Ŧ ⅃ ĭ ⅂ Δ ı ˇ Ŧ ⅃ ṿ ƀ Ⱡ Ŧ ⅃ ṿ Â

2. ĭ Ⱡˇ Ḡ ĭ ˇ ` ↕ Ⱡˇ ĭ ṿ ⅄ ṿ Â

5.3.4 Ḡ ĭ̆



طي 12 Ḡ ĭ̆ ƀ

˜ Ḡ ĭ̆ ˥ Ƶ Yes˘ ˘ ˛ Ḡ ḱ ĭ̆ Â Ḡ ĭ̆ ˊ

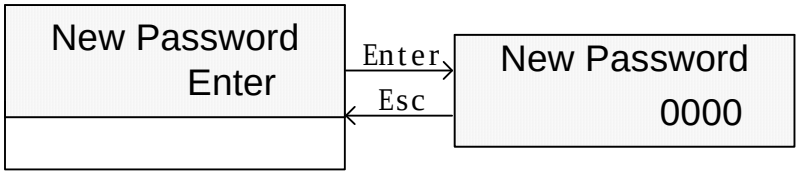
Success˘ Ḡ ĭ̆ Failure˘ Ḡ ĭ̆ ƀ ˧ Â

ˆ ˈ ˥ ĭ̆ ḱ Ƶ ˧ Â ᵖ ḱ ĭ̆ Ƶ Ḡ ƀ˘

Ƶ˘ ĭ̆ ṿ ˩ ṿ Â˜

5.3.5

ŭ̆ ḱ ˘ ꞅ Ḡ ƀ Â



طي 13 ƀ

Ѓ Ѣ Ḡ Ī

6.1 Ѣ Ḡ Ī ŋ Ѩ

危险
Ǹ ~ Ѫ ѣ
Ǹ Ţ ˩ ~˘ ~ ѝ Â
Ǹ Ѣ ŋ
Ǹ Ѭ Ғ ȝ ˬ ˭ ȁ ɒ Â
Ǹ ˬ ˭ ѣ ȝ ╟˘ Ӣ ⁘ ˆ ȁ ˜˘ ѣ ȝ ą Ѭ ȕ ȣ ί Â
Ǹ Ţ˘ ~ ˇ ˧ ȕ ⱬ Â
Ǹ ḱ Ѫ˘ ˩ Ҡ ⱬ ȕ ⱬ ⱬ Â
注意
Ǹ ~ ˪ ⁘ ˘ ą ȣ CMOS ˘ ˩ Â

6.2

ɣ Ӣ ȝ

1˜ ⁘ LED Ḥ˛ ˇ LED Â

2˜ ` ȁ ˇ ع Â

3˜ ȕ Â

4˜ خ ` Ѭ ˚ ѣ Â

6.3 Ḡ ḱ

ą ’ Ӣ˘ ȕ ˘ ˧ Ḡ ḱ ṗ Ḡ ḱ˘ ˚ Ḡ ḱ ч Ŧ ˧ ӊ ˆ ɣ ˜ 18 ɞ ṗ˘ Ḡ ḱ Ŋ Ѭ ḱ Â

Ḡ ḱ ṗ˘ Ӣ ˧ ȝ ẽ ḱ‘

1. й ą ˜Ḥ ḱ Â

2. Ŧ ‰ ą Â

3. ⌠ Ѫ ȕ ȕ Â

4. Ѣ ˥ ˦ ˆ ȁ ȁ ȁ Ɗρ ȕ ѝ ᵉ ˧ ˜ Â

ʿ ҕ

ҕ		
01	ҍ	~ ˘ ҍ № Â ҍ ˘ ҍ
02	ҍ	~ ˘ ҍ Ð˘ ѻѻ
03	ҍ ҟ	~ ˘ ҍ ҟ Ð˘ ѻѻ
04	ҁ ѽ	~ ҁ ѽ Ð˘ ѻѻ Â
05	ҁ ѽ ҟ	~ ҁ ѽ ҟ Ð˘ ѻѻ
06	ҁ	~ ҁ Ð˘ ѻѻ
07	ҁ ҟ	~ ҁ ҟ Ð˘ ѻѻ
08	ҁ ~ʾ	~ ҁ ~ʾ Ð˘ ѻѻ
09	ҁ ~ʾ ҟ	~ ҁ ~ʾ ҟ Ð˘ ѻѻ
10	ҁ	~ ҁ Ð˘ ѻѻ
11	Ӣ ѽ	~ ˘ Ӣ ѽ Ð˘ ѻѻ
12	Ӣ ѽ ҟ	~ ˘ Ӣ ѽ ҟ Ð˘ ѻѻ
13	Ӣ	~ ˘ Ӣ Ð˘ ѻѻ
14	Ӣ ҟ	~ ˘ Ӣ ҟ Ð˘ ѻѻ
15	Ӣ ~ʾ	~ ˘ Ӣ ~ʾ Ð˘ ѻѻ
16	Ӣ ~ʾ ҟ	~ ˘ Ӣ ~ʾ ҟ Ð˘ ѻѻ
17	Ӣ	Ӣ
18		
19	ҟ	ҟ
20-31	ṗ	ѶE„
30	ŋ ҙ ҷ ي Ь ĭ Ь w̄	~ ѡ˘ ~ ˘ ŋ ҷ˘ ҷ ѻ˘ Â
31	ŋ ҙ	~ ˘ ŋ ҷ˘ ҷ ѻ˘ Â
32	Ь ì ҍ Ь Ь w̄	~ ѡ˘ ˇ ŭ ˘ ˇ ĭ ą ^ Break˘ Feedback˜ ч OFF Â
34	Ћ ĭ ~	~ ѡ˘ ~ Ь ҷ, ҷ ѻ˘ ҷ Â
35	Ҷ	ҁ Ҷ ˇ Ӣ Ҷ ~
36	¹ ҷ	¹ ҷ Ҷ à ą Ḥ„ ŭ Ḥ„ Ŧ ҙ ˘ ¹ ҷ ˇ ĭ Â ч Ĺ~ Â
37	¹ ҷ	¹ ҷ ҁ ˘ ʎ ҙ Â ŭ ¹ ҷ ˘ ¹ ҷ ß 2 ˘ ˘ ¹ h ҷ Â
38	X29 ~	ŋ Ḡ SJT_APE_V2 ` ⌡ ˘

		SJT_APE_V2 Ŧ˘ ๆ Â
40	w w	w
41-49	ṗ	̀E˛
50	1 ˆ ھ ƀ ǐ ˛ ƀ ƀ w̄ ˆ ч Ƕ ǐ ˜	˜ ƀ ھ , ˜ ǰ ھ ھ ھ Â
51-57	ṗ	̀E˛
58	˙ L˛ ھ ƀ ǐ ǐ ƀ w̄	˜ ǰ ˜ ˇ ˙ L˛ ھ Â