

COMPANY NAME: _____

MACHINE NAME: _____

DIAGRAM NO. : DEN064

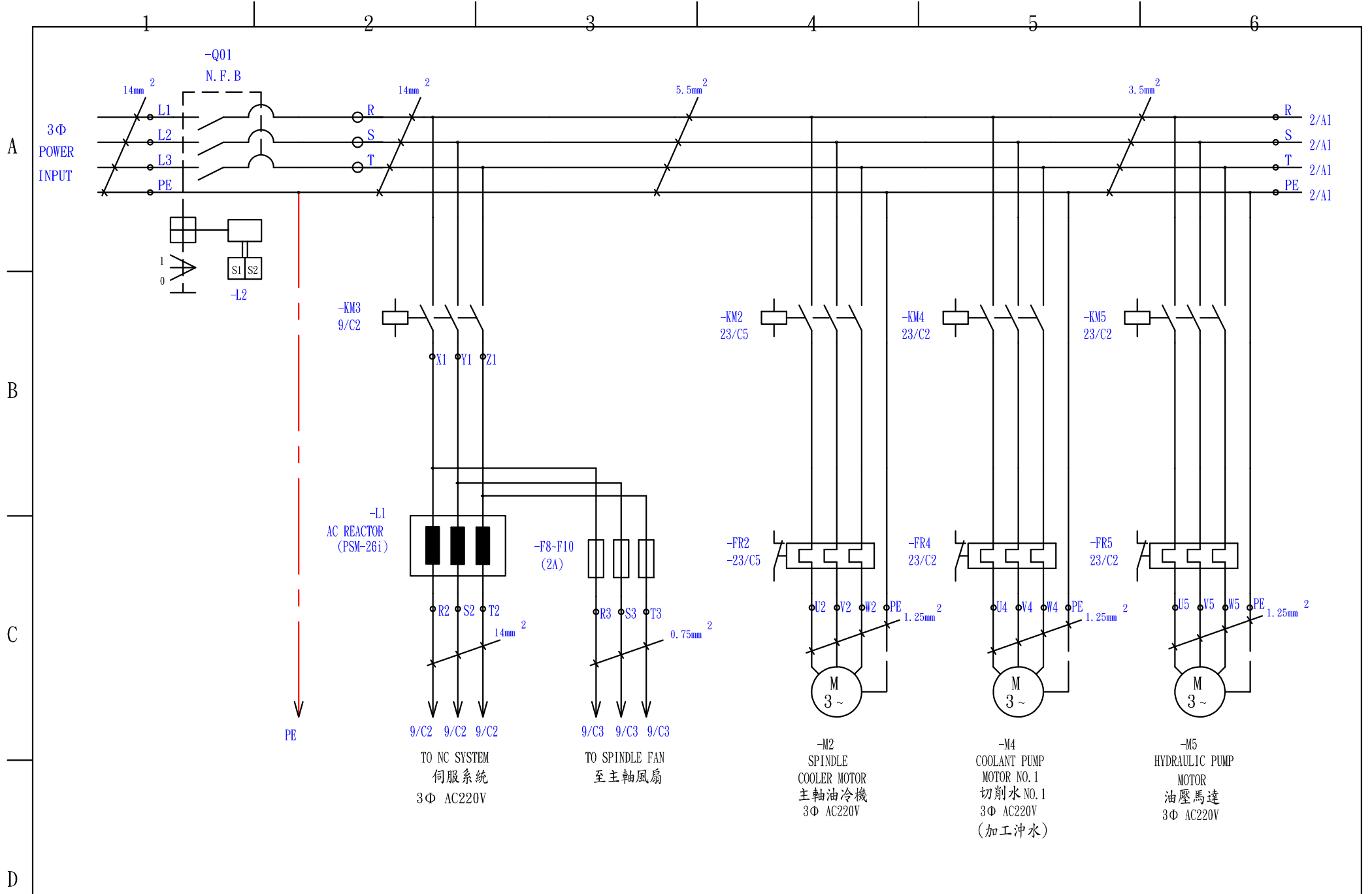
NC TYPE: FANUC 0i-TF

DATE: 2017/12/15

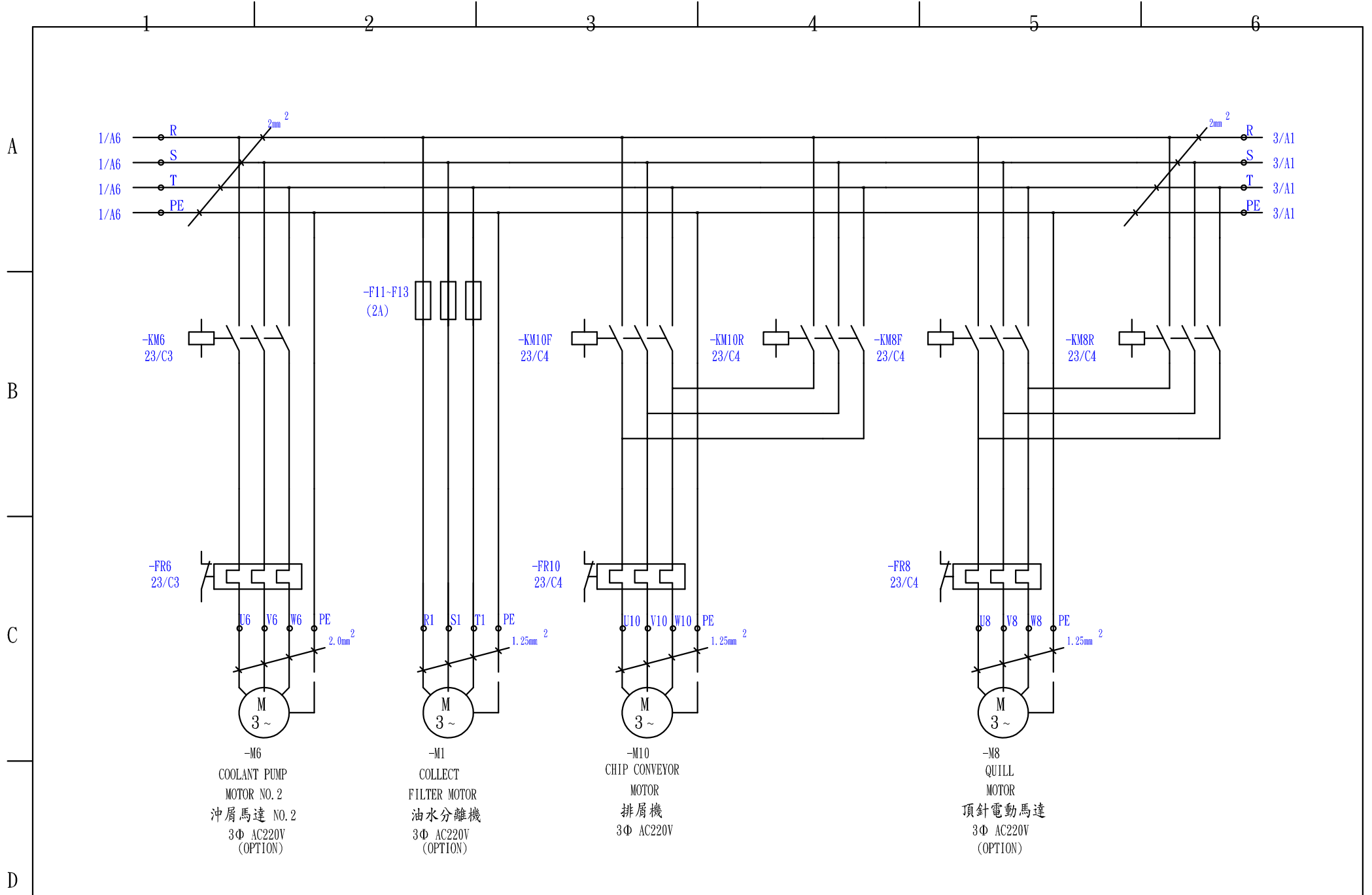
REMAKE 1: _____

REMAKE 2: _____

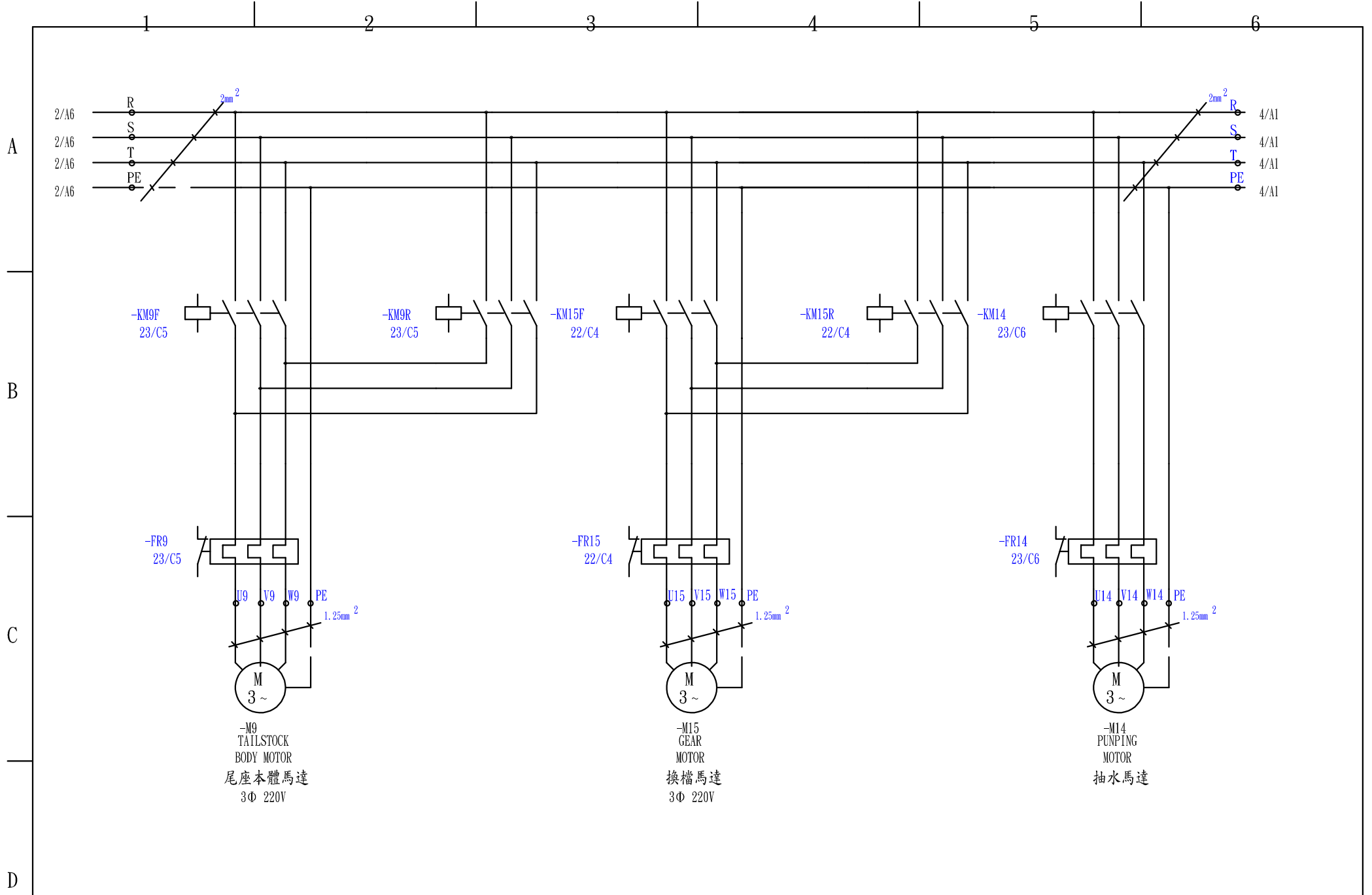
REMAKE 3: _____



CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 01



CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 02

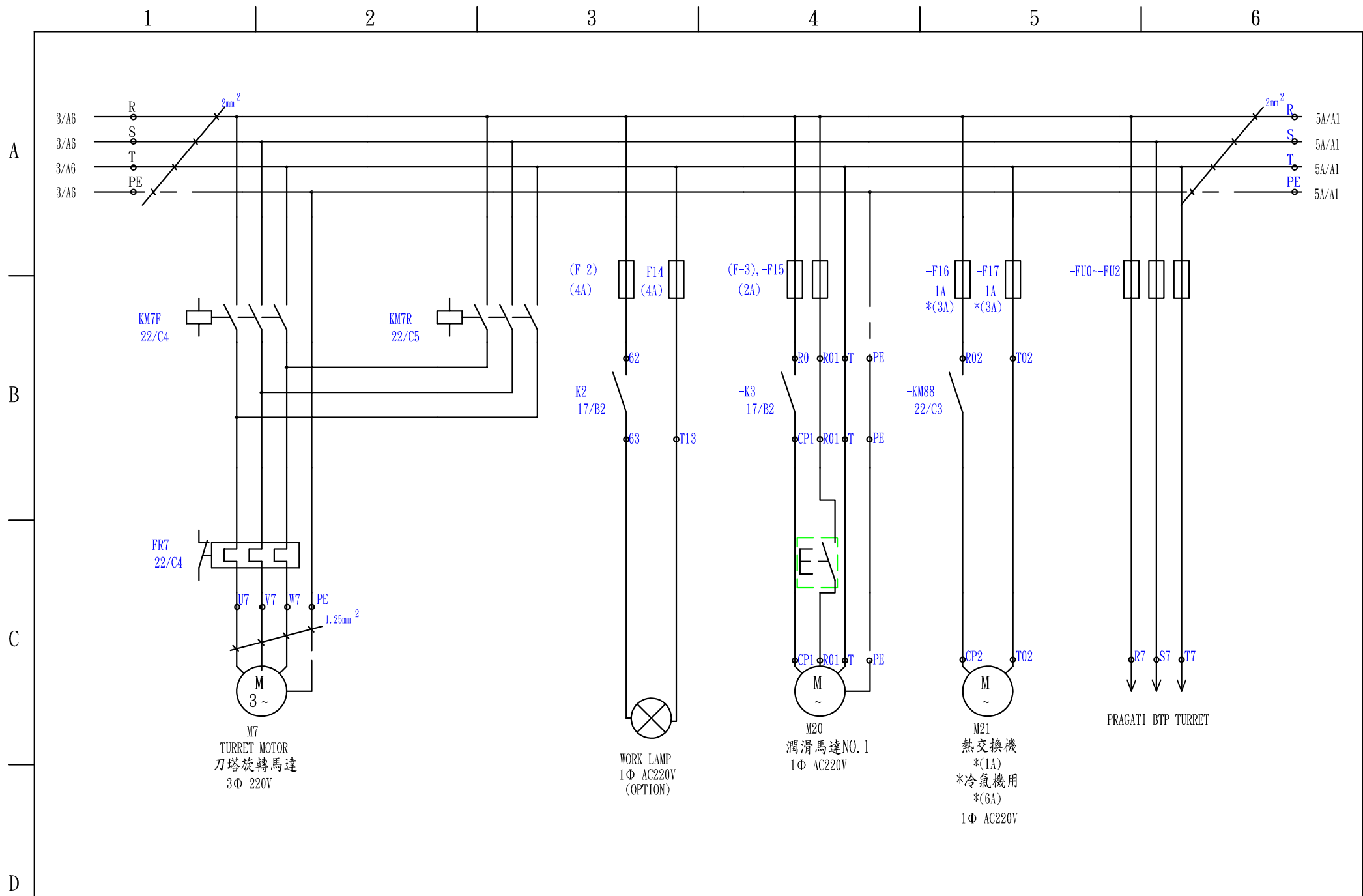


-M9
TAILSTOCK
BODY MOTOR
尾座本體馬達
3Φ 220V

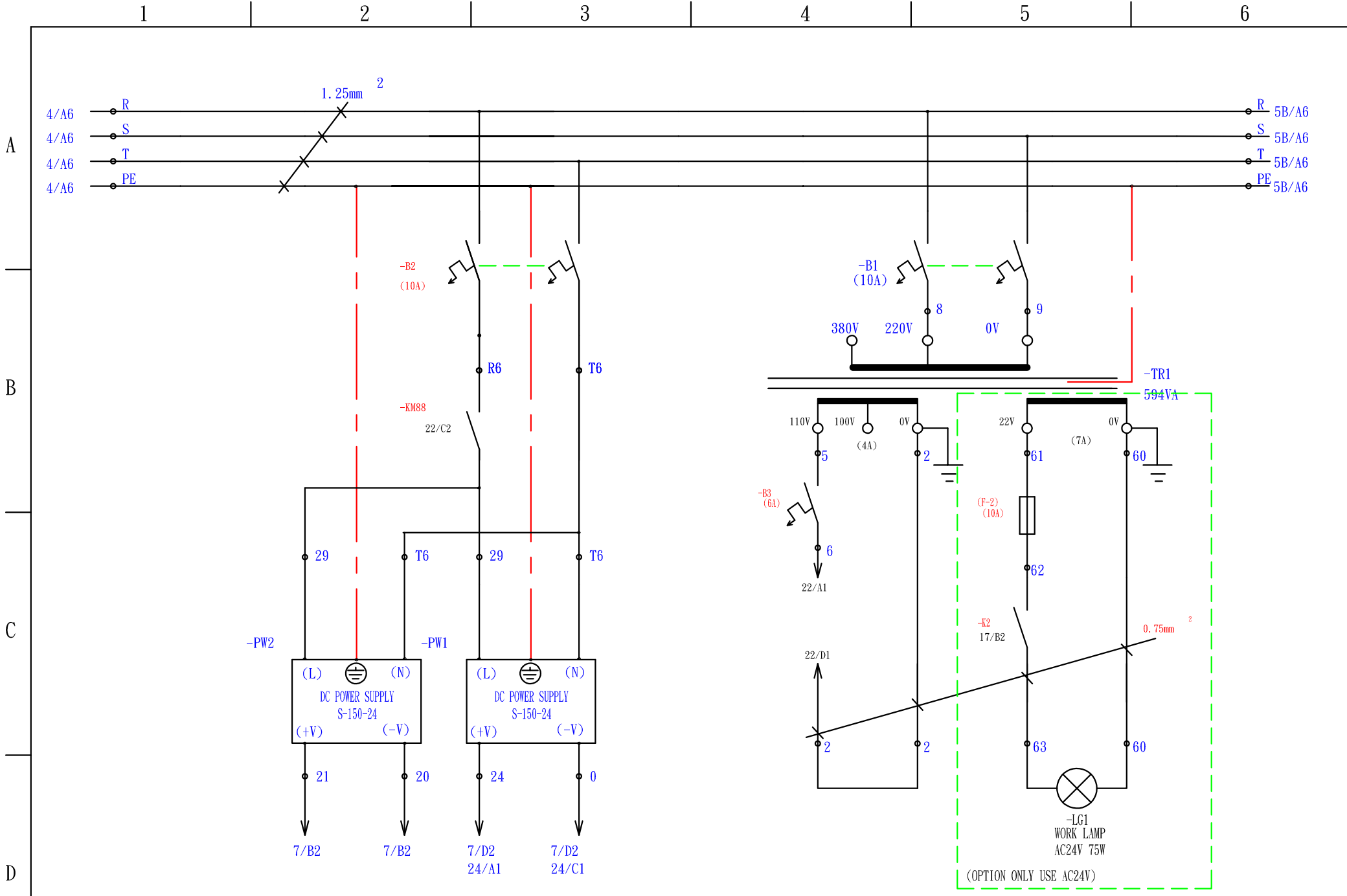
-M15
GEAR
MOTOR
換檔馬達
3Φ 220V

-M14
PUNPING
MOTOR
抽水馬達

CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	03



CHECKED								
DESIGN	陳龍君	2019	01	07				
DRAWN	廖佳玲	2019	01	07	DIAGRAM NO.	DEN64	SHEET NO.	04



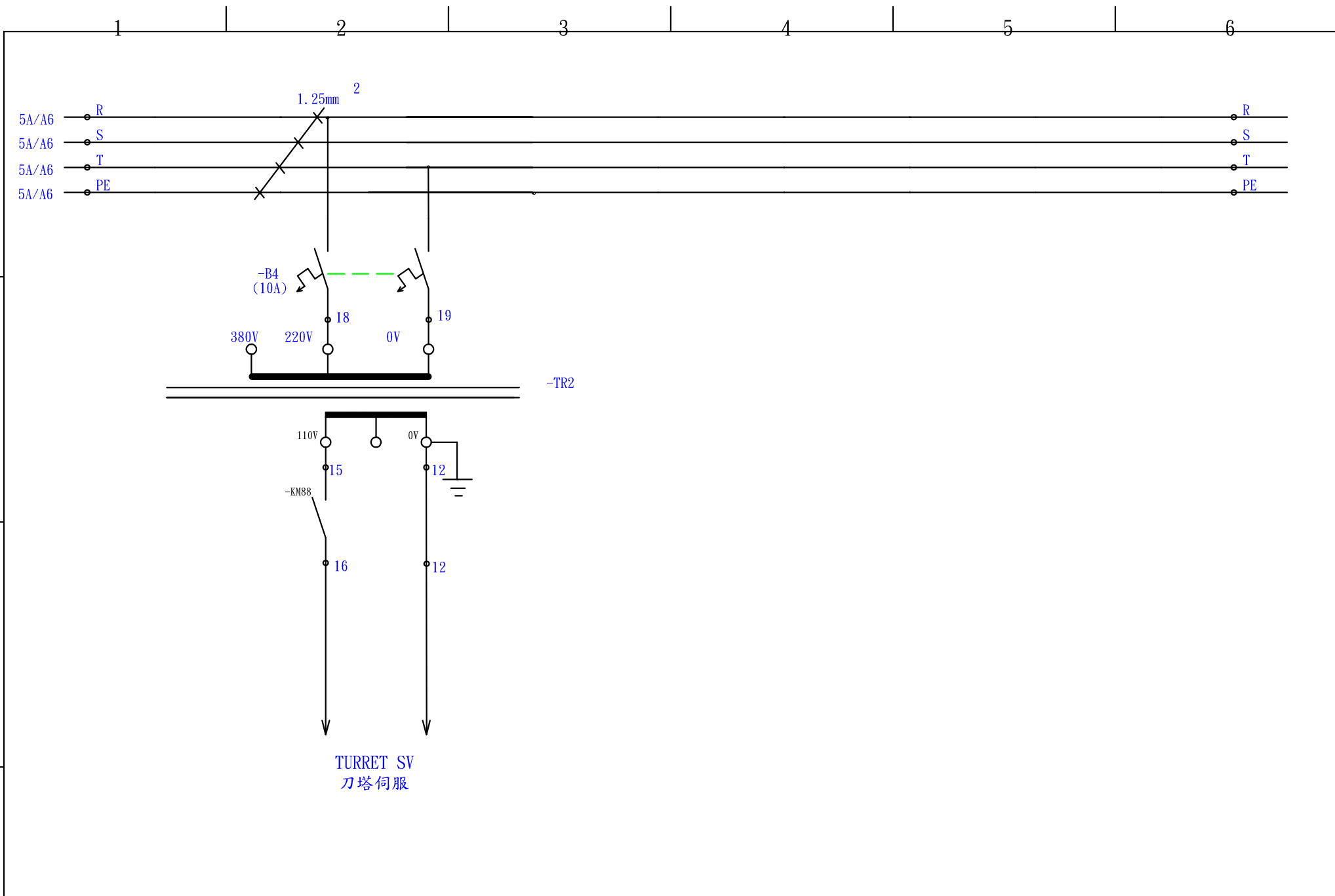
CHECKED								
DESIGN	陳龍君	2019	01	07				
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO.	05A

A

B

C

D



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	05B

0i-TF(3) control unit

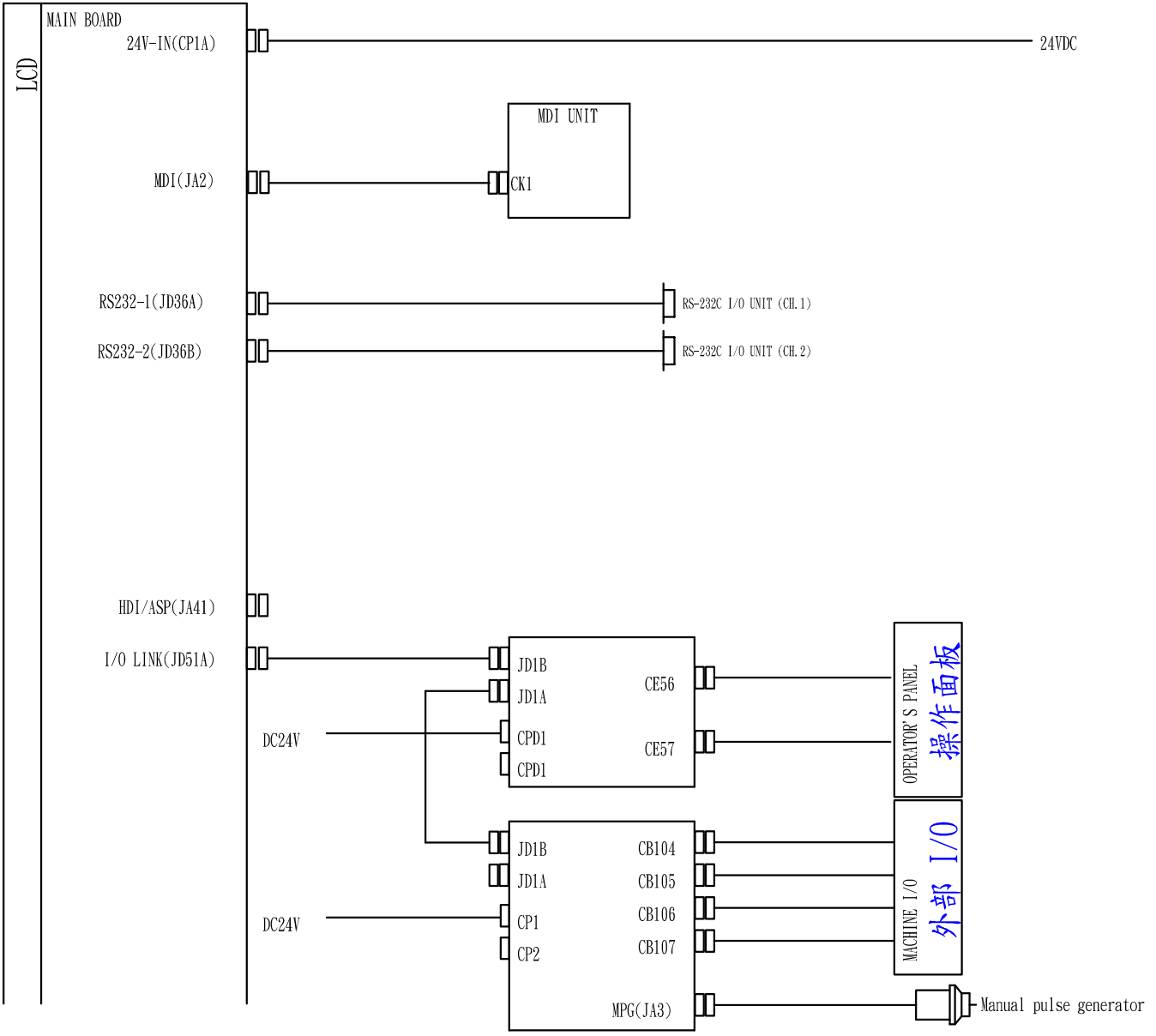
-NO

A

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D



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	06

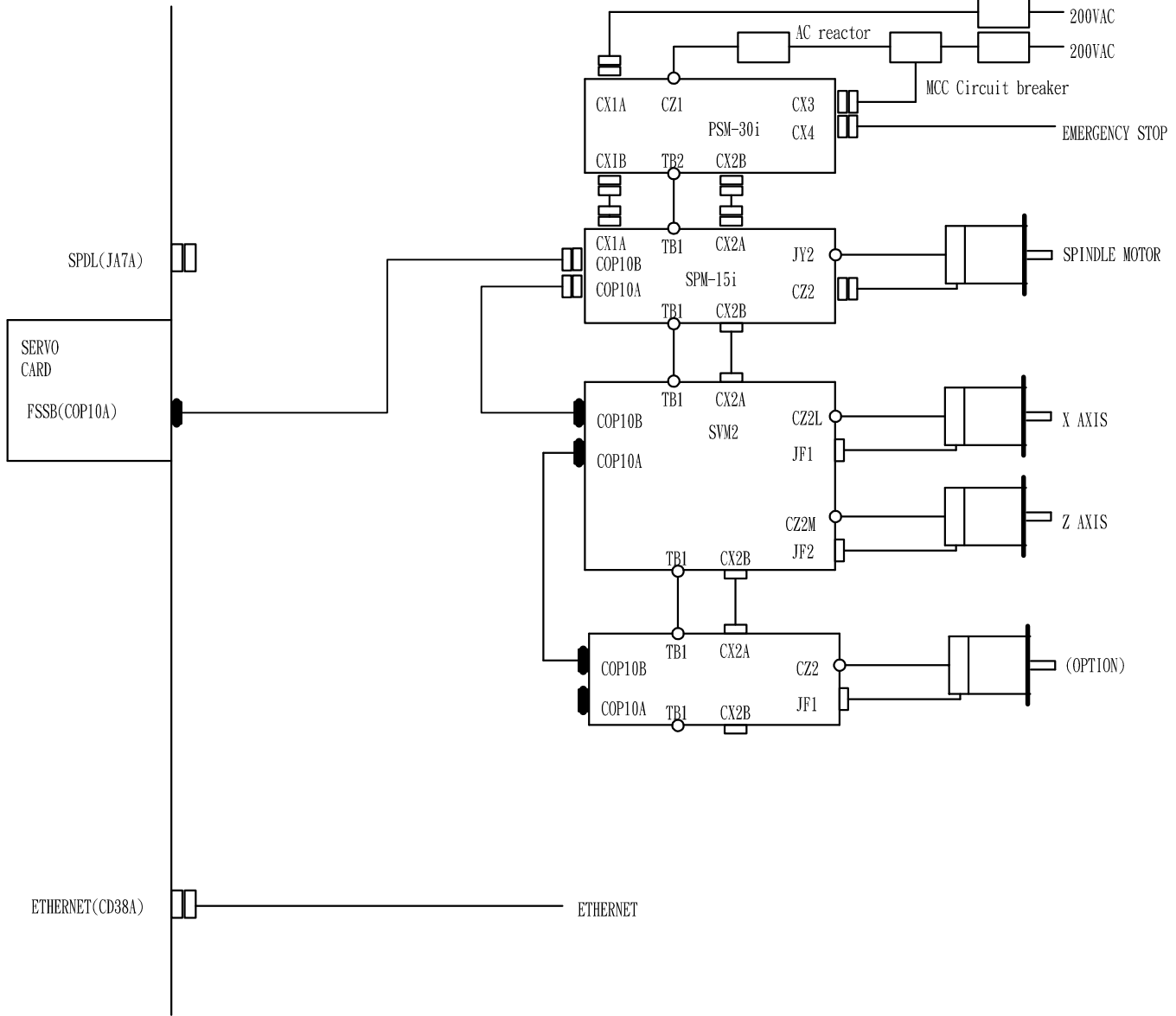
A
B
C
D

1 2 3 4 5 6

0i-TF(3) control unit

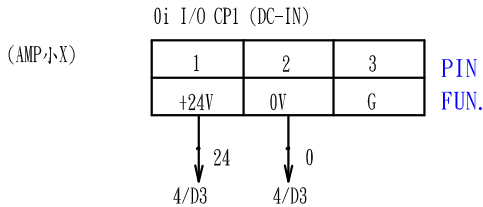
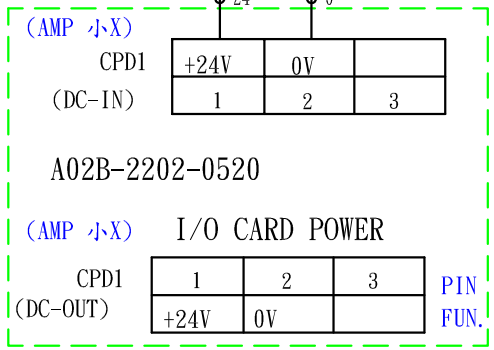
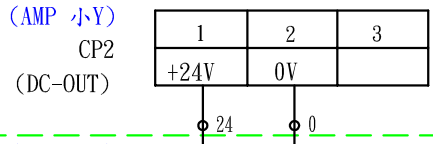
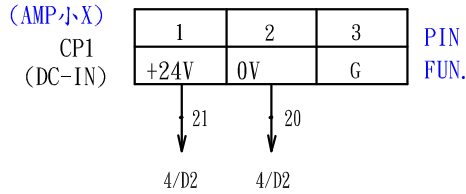
-N0

LCD

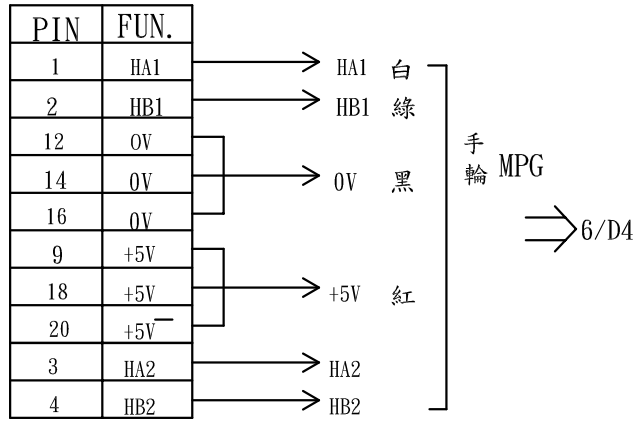


CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO.	07

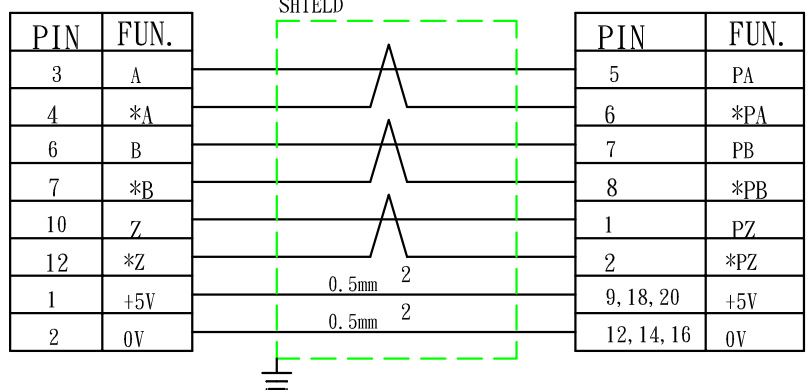
A



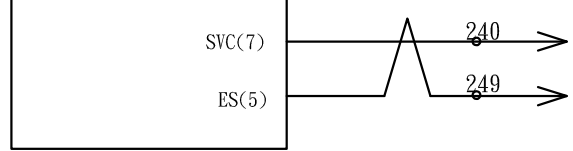
JA3 手輪 FOR MPG



JYA3 (磁性定位環) SPINDLE POSITION CODER



JA40 類比輸出 ANALOG OUTPUT



B

C

D

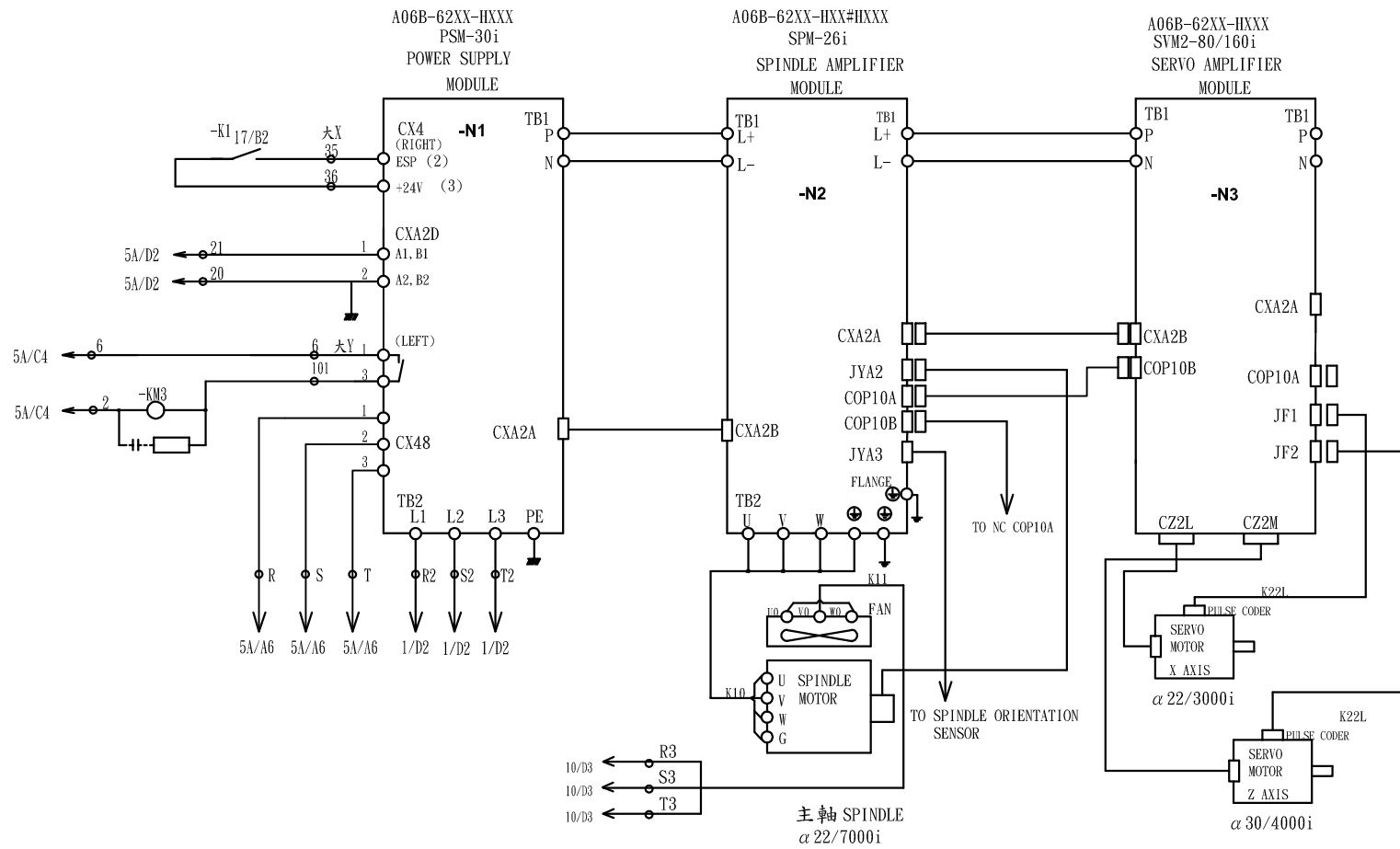
CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 08

A

B

C

D



CHECKED							
DESIGN	陳龍君	2017	12	15			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 09

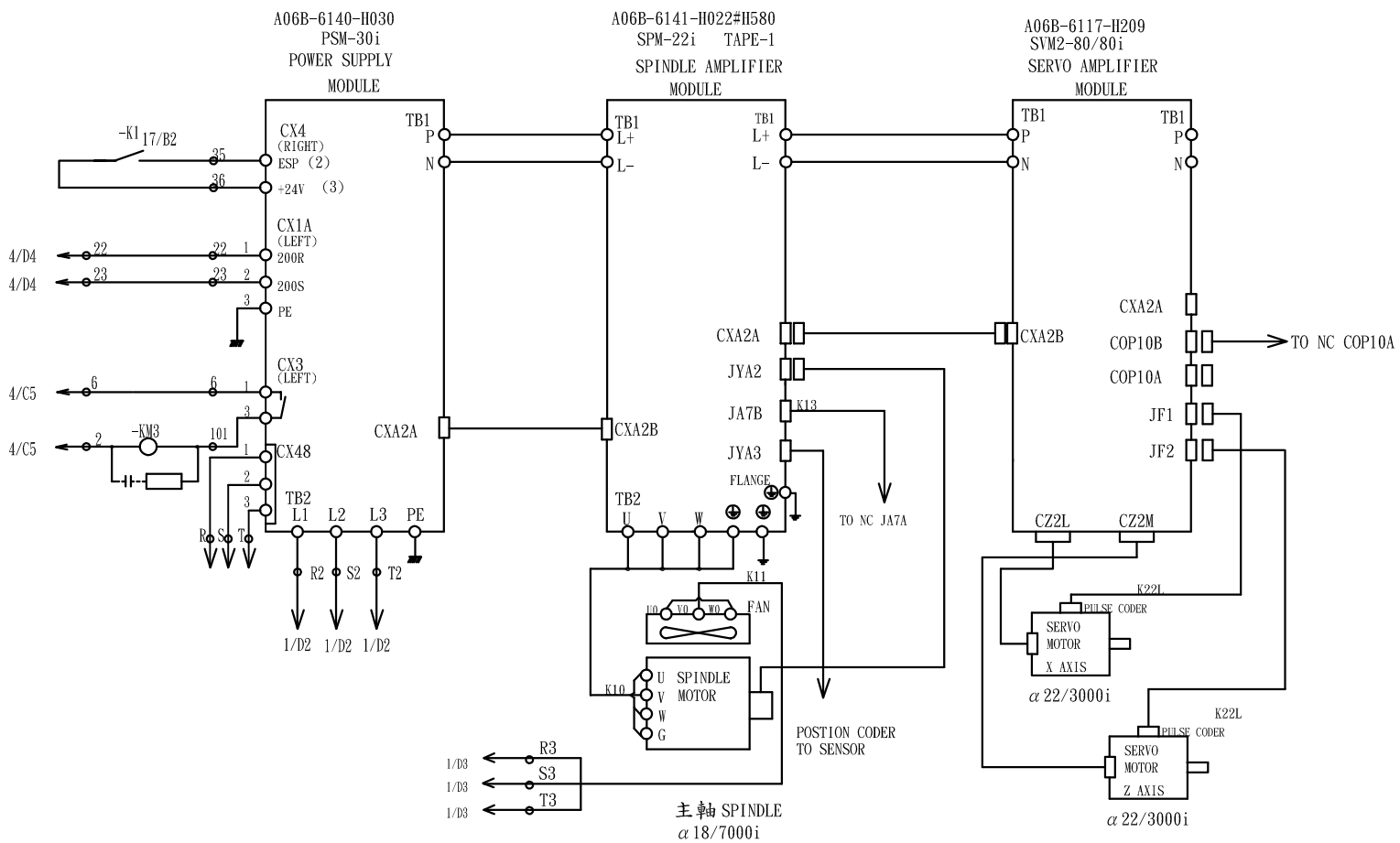
A

B

C

D

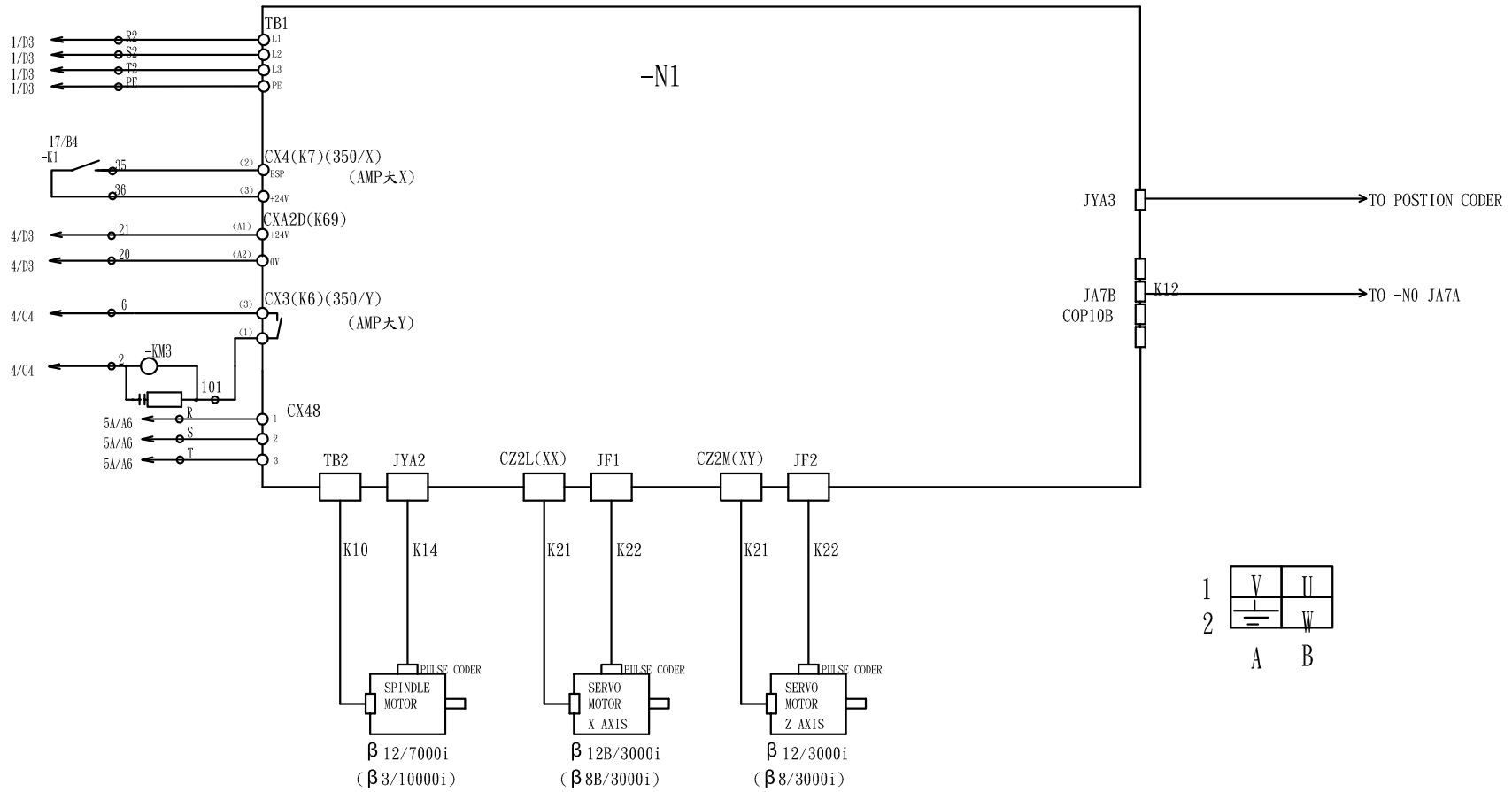
1 2 3 4 5 6



CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 09A

A06B-6134-H203#A
 SVPM2 -15i
 SERVO AMPLIFIER

-N1



CHECKED								
DESIGN	洪詠富	2017	12	15				
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO.	09B

1

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A

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C

D

CE56-1 (X201)			
PIN	ADDRESS	FUNCTION	NUMBER
A1	0V		
B1	+24V		
A2	X16.0		X160
B2	X16.1		X161
A3	X16.2		X162
B3	X16.3		X163
A4	X16.4		X164
B4	X16.5		X165
A5	X16.6		X166
B5	X16.7		X167
A6	X17.0		X170
B6	X17.1		X171
A7	X17.2		X172
B7	X17.3		X173
A8	X17.4		X174
B8	X17.5		X175
A9	X17.6		X176
B9	X17.7		X177
A10	X18.0		X180
B10	X18.1		X181
A11	X18.2		X182
B11	X18.3		X183
A12	X18.4		X184
B12	X18.5		X185
A13	X18.6		X186
B13	X18.7		X187

DC
0V



DC
+24V



0

24

CE56-1 (X201)

- CYCLE START (外接端子台)
- CYCLE STOP (外接端子台)
- Z SW
- C SW
- +X SW
- +Z SW
- CHIP CONVEYOR FORWARD 排屑機前進
- X SW
- COOLANT NO. 2 沖水2
- OTRL 極限釋放
- CHIP CONVEYPR BACKWARD 排屑機後退
- GEAR 3
- SP. JOG 主軸寸動
- SP. CCW 主軸反轉
- +Y SW
- ROV 1 (外接端子台)
- ROV 2 (外接端子台)
- MOD 1
- MOD 2 (外接端子台)
- MOD 4
- SPA
- SPB (外接端子台)
- SPC
- FV1

CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 10

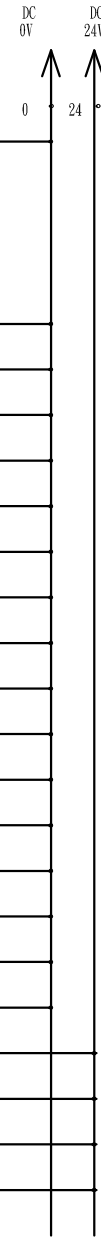
A

B

C

D

CE56-1 (X201)			
PIN	ADDRESS	FUNCTION	NUMBER
A14		DICOM0	0
B14			
A15			
B15			
A16	Y8.0		Y80
B16	Y8.1		Y81
A17	Y8.2		Y82
B17	Y8.3		Y83
A18	Y8.4		Y84
B18	Y8.5		Y85
A19	Y8.6		Y86
B19	Y8.7		Y87
A20	Y9.0		Y90
B20	Y9.1		Y91
A21	Y9.2		Y92
B21	Y9.3		Y93
A22	Y9.4		Y94
B22	Y9.5		Y95
A23	Y9.6		Y96
B23	Y9.7		Y97
A24		DCOM	24
B24		DCOM	24
A25		DCOM	24
B25		DCOM	24



- CYCLE START LAMP
- CYCLE STOP LAMP
- X HOME LAMP
- Z HOME LAMP
- C HOME LAMP
- TURRET READY LAMP
- RAPID LAMP
- CHIP CONVEYOR BACKWARD LAMP
- COOLANT NO. 2 LAMP
- OTRL LAMP
- SBK LAMP
- SPINDLE JOG LAMP
- QUILL BACKWARD LAMP
- GEAR 1 LAMP
- CHIP CONVEYOR FORWARD LAMP
- SPINDLE CW LAMP

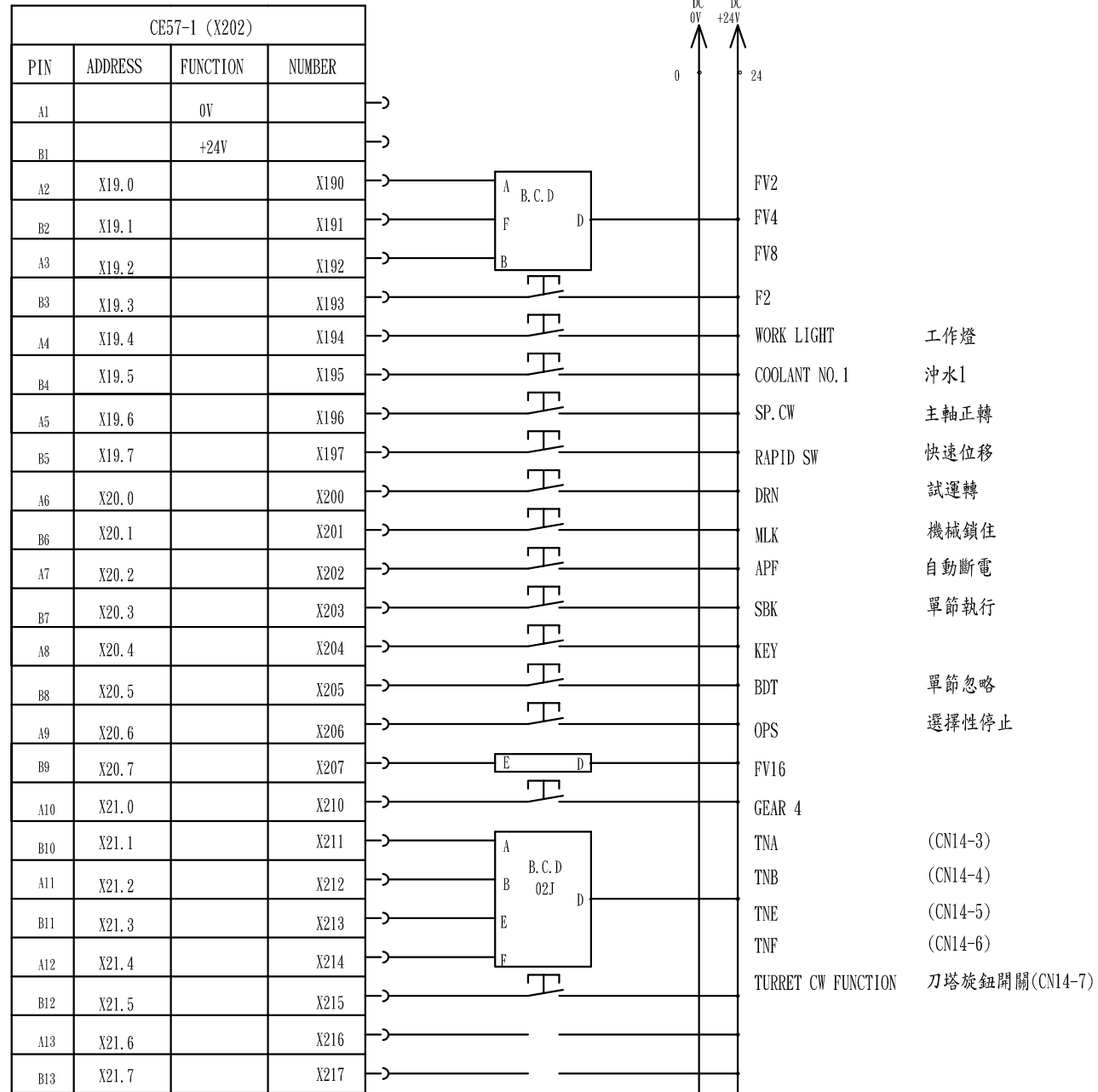
CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 11

A

B

C

D



CHECKED					中元自動控制有限公司 CHUNG-YUAN AUTOMATION CO., LTD.			
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	12

A

B

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D

CE57-1 (X202)			
PIN	ADDRESS	FUNCTION	NUMBER
A14			
B14		DICOM5	0
A15			
B15			
A16	Y10.0		Y100
B16	Y10.1		Y101
A17	Y10.2		Y102
B17	Y10.3		Y103
A18	Y10.4		Y104
B18	Y10.5		Y105
A19	Y10.6		Y106
B19	Y10.7		Y107
A20	Y11.0		Y110
B20	Y11.1		Y111
A21	Y11.2		Y112
B21	Y11.3		Y113
A22	Y11.4		Y114
B22	Y11.5		Y115
A23	Y11.6		Y116
B23	Y11.7		Y117
A24		DOCOM	24
B24		DOCOM	24
A25		DOCOM	24
B25		DOCOM	24

DC
0V

0

DC
+24V

24

AIR PRESSURE LOW
LAMP

LUBE LOW ALARM LAMP

SPINDLE ALARM LAMP

NC ALARM LAMP

CHUCK CLAMP LAMP

PROGRAM STOP LAMP

PROGRAM END LAMP

COOLANT NO.1 LAMP

GEAR 3 LAMP

SPINDLE STOP LAMP

GEAR 2 LAMP

BDT ALMP

DRN LAMP

APF LAMP

MLK LAMP

OPS LAMP

CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 13

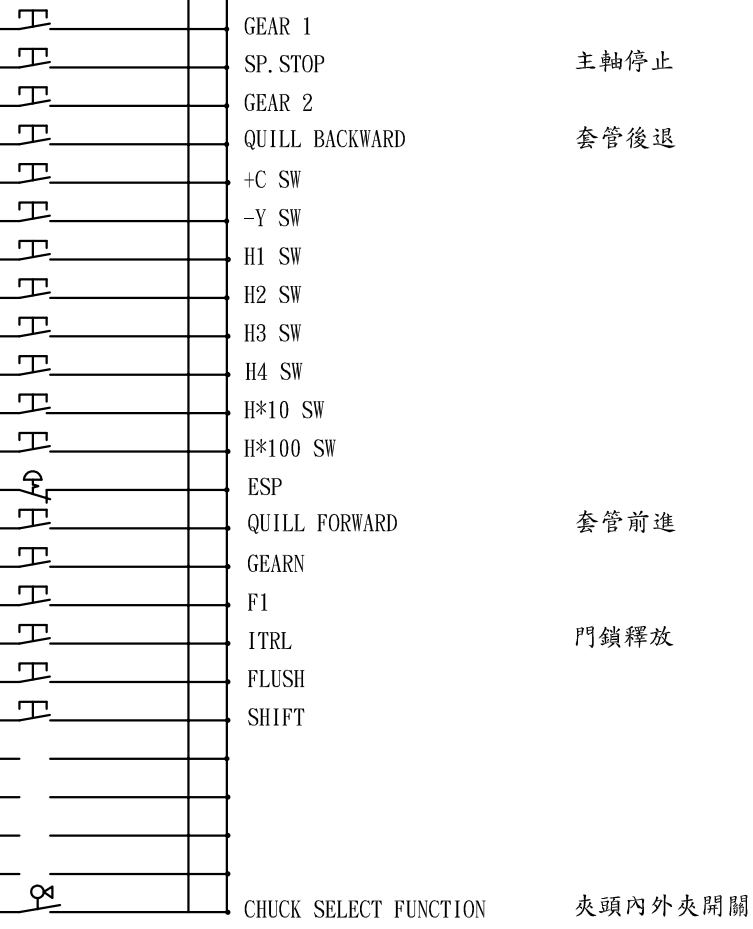
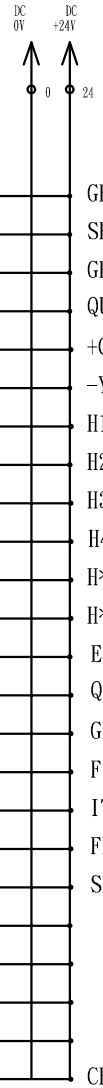
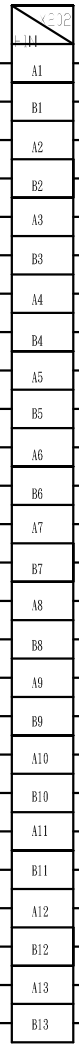
A

B

C

D

CB104 (X200)				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
1	A1		0V	
2	B1		+24V	
3	A2	X0.0		X00
4	B2	X0.1		X01
5	A3	X0.2		X02
6	B3	X0.3		X03
7	A4	X0.4		X04
8	B4	X0.5		X05
9	A5	X0.6		X06
10	B5	X0.7		X07
11	A6	X1.0		X10
12	B6	X1.1		X11
13	A7	X1.2		X12
14	B7	X1.3		X13
15	A8	X1.4		X14
16	B8	X1.5		X15
17	A9	X1.6		X16
18	B9	X1.7		X17
19	A10	X2.0		X20
20	B10	X2.1		X21
21	A11	X2.2		X22
22	B11	X2.3		X23
23	A12	X2.4		X24
24	B12	X2.5		X25
25	A13	X2.6		X26
26	B13	X2.7		X27



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	14

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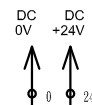
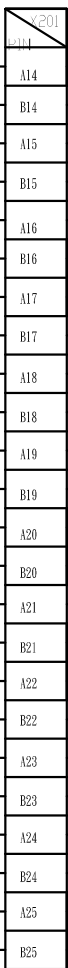
A

B

C

D

CB104(X200)				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
27	A14			
28	B14			
29	A15			
30	B15			
31	A16	Y0.0		Y00
32	B16	Y0.1		Y01
33	A17	Y0.2		Y02
34	B17	Y0.3		Y03
35	A18	Y0.4		Y04
36	B18	Y0.5		Y05
37	A19	Y0.6		Y06
38	B19	Y0.7		Y07
39	A20	Y1.0		Y10
40	B20	Y1.1		Y11
41	A21	Y1.2		Y12
42	B21	Y1.3		Y13
43	A22	Y1.4		Y14
44	B22	Y1.5		Y15
45	A23	Y1.6		Y16
46	B23	Y1.7		Y17
47	A24		DCOM	24
48	B24		DCOM	24
49	A25		DCOM	24
50	B25		DCOM	24



- GEAR 4 LAMP
- FLUSH LAMP
- SHIFT LAMP
- TURRET CW LAMP
- TL1. OUT (CN12-4)
- TL2. OUT (CN12-5)
- TL4. OUT (CN12-6)
- TL8. OUT (CN12-7)
- F2 LAMP
- LIGHT LAMP
- SPINDLE CCW LAMP
- MPG LAMP
- QUILL FORWARD LAMP
- GEARN LAMP
- F1 LAMP
- ITRL LAMP

CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	15

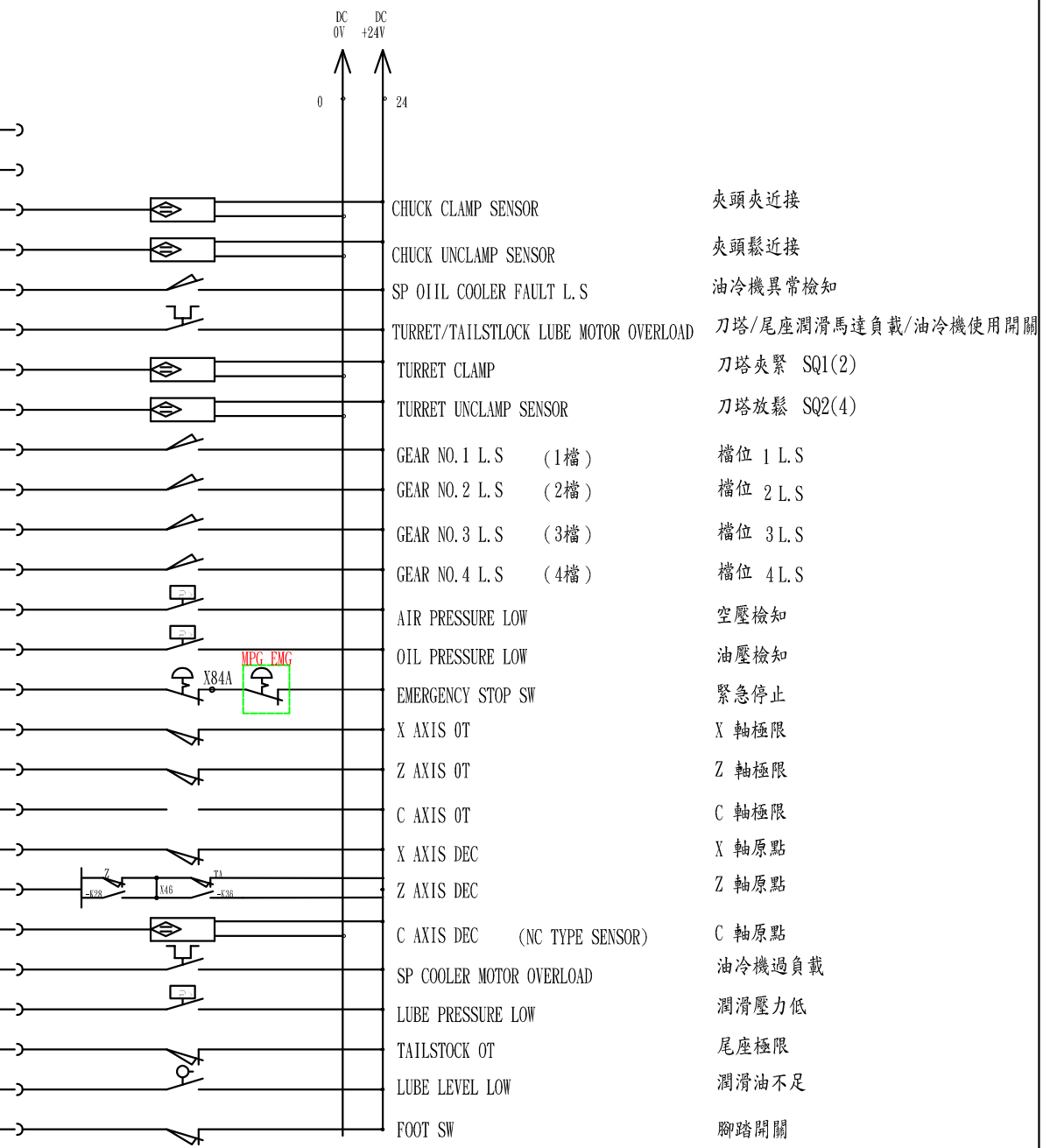
A

B

C

D

CB105				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
1	A1		0V	0
2	B1		+24V	24
3	A2	X3.0		X30
4	B2	X3.1		X31
5	A3	X3.2		X32
6	B3	X3.3	FR7/FR15	X33
7	A4	X3.4	T.CP	X34
8	B4	X3.5	T.UNCP	X35
9	A5	X3.6	GA.NO.1	X36
10	B5	X3.7	GA.NO.2	X37
11	A6	X8.0	GA.NO.3	X80
12	B6	X8.1	GA.NO.4	X81
13	A7	X8.2	AIR.P	X82
14	B7	X8.3	OIL.P	X83
15	A8	X8.4	*ESP	X84
16	B8	X8.5	X+OT	X85
17	A9	X8.6	X-OT	X86
18	B9	X8.7	COT	X87
19	A10	X9.0	*DEC1	X90
20	B10	X9.1	*DEC2	X91
21	A11	X9.2	*DEC3	X92
22	B11	X9.3	FR2	X93
23	A12	X9.4	LUB.PR	X94
24	B12	X9.5	TA07	X95
25	A13	X9.6	LUB.LO	X96
26	B13	X9.7	FOOT.S	X97



CHECKED							
DESIGN	陳龍君	2017	12	15			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 16

A

B

C

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1

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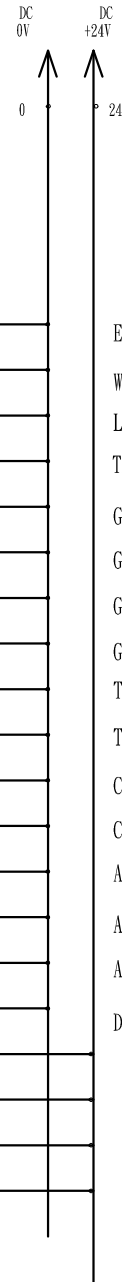
3

4

5

6

CB105				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
27	A14			
28	B14			
29	A15			
30	B15			
31	A16	Y2.0	K1	Y20
32	B16	Y2.1	K2	Y21
33	A17	Y2.2	K3	Y22
34	B17	Y2.3	K4	Y23
35	A18	Y2.4	K5	Y24
36	B18	Y2.5	K6	Y25
37	A19	Y2.6	K7	Y26
38	B19	Y2.7	K8	Y27
39	A20	Y3.0	K9	Y30
40	B20	Y3.1	K10	Y31
41	A21	Y3.2	K11	Y32
42	B21	Y3.3	K12	Y33
43	A22	Y3.4	K13	Y34
44	B22	Y3.5	K14	Y35
45	A23	Y3.6	K15	Y36
46	B23	Y3.7	K16	Y37
47	A24		DCOM	24
48	B24		DCOM	24
49	A25		DCOM	24
50	B25		DCOM	24



EMO	緊急停止
WORK LIGHT	工作燈
LUBE NO. 1	潤滑機NO. 1
TAIL. LUBE MOTOR	尾座潤滑馬達
GEAR SOL1 (低檔)	檔位電磁閥 1
GEAR SOL2 (高檔)	檔位電磁閥 2
GEAR SOL3 (1檔)	檔位電磁閥 3
GEAR SOL4 (2檔)	檔位電磁閥 4
TURRET CLAMP	刀塔夾緊
TURRET UNCLAMP	刀塔放鬆
COOLANT SOL 1	切削液電磁閥 1
COOLANT SOL 2	切削液電磁閥 2
ALARM LAMP (R)	警示燈紅
ALARM LAMP (Y)	警示燈黃
ALARM LAMP (G)	警示燈綠
DOOR INTERLOCK OPEN	門鎖解除

CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	17

A

B

C

D

CB106				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
1	A1		0V	
2	B1		+24V	
3	A2	X4.0	FR9	X40
4	B2	X4.1		X41
5	A3	X4.2		X42
6	B3	X4.3		X43
7	A4	X4.4		X44
8	B4	X4.5		X45
9	A5	X4.6		X46
10	B5	X4.7		X47
11	A6	X5.0	FR5	X50
12	B6	X5.1	FR4	X51
13	A7	X5.2	FR6	X52
14	B7	X5.3	FR10	X53
15	A8	X5.4		X54
16	B8	X5.5	FR15	X55
17	A9	X5.6		X56
18	B9	X5.7		X57
19	A10	X6.0		X60
20	B10	X6.1		X61
21	A11	X6.2		X62
22	B11	X6.3		X63
23	A12	X6.4		X64
24	B12	X6.5		X65
25	A13	X6.6		X66
26	B13	X6.7		X67

DC
0V DC
+24V

0 24

TAILSTOCK BODY OVERLAOD	尾座本體過負載
TAILSOTCK BODY UNCLAMP/CLAMP L.S 1	尾座本體鬆夾極限1
TAILSOTCK BODY UNCLAMP/CLAMP L.S 1	尾座本體鬆夾極限2
TAILSOTCK BODY PROTECTION L.S 1	尾座防摔極限
SP JOG CW OUT	外部主軸寸動正轉
TAILSTOCK BODY FORWARD SW	外部尾座本體前進開關
TAILSTOCK BODY BACKWARD SW	外部尾座本體後退開關
HYDRAULIC MOTOR OVERLOAD	油壓馬達過負載
COOLANT NO. 1 MOTOR OVERLOAD	沖水馬達過負載
COOLANT NO. 2 MOTOR OVERLOAD	沖屑馬達過負載
CHIP MOTOR OVERLOAD	排屑機過負載
DOOR INTERLOCK L.S	門鎖解除
EX. GEAR MOTOR OVERLOAD	電動檔位過負載
SP PRESSURE L.S	主軸壓力檢知
OUTSIDE ESP.	外部緊急停止
TAIL LOCK PIN L.S	尾座LOCK PIN
TURRET COUNTER	油壓刀塔計數
6H TURRET CW SENSOR	六方刀塔正旋近接 SQ3 (5)
6H TURRET CCW SENSOR	六方刀塔反旋近接 SQ4 (6)
TURRET POSITION SENSOR A	刀塔信號 A SQ5 (8)
TURRET POSITION SENSOR B	刀塔信號 B SQ6 (10)
TURRET POSITION SENSOR C	刀塔信號 C SQ7 (11)
TURRET POSITION SENSOR D	刀塔信號 D

CHECKED							
DESIGN	陳龍君	2019	01	07			
DRAWN	廖佳玲	2019	01	07	DIAGRAM NO.	DEN64	SHEET NO. 18

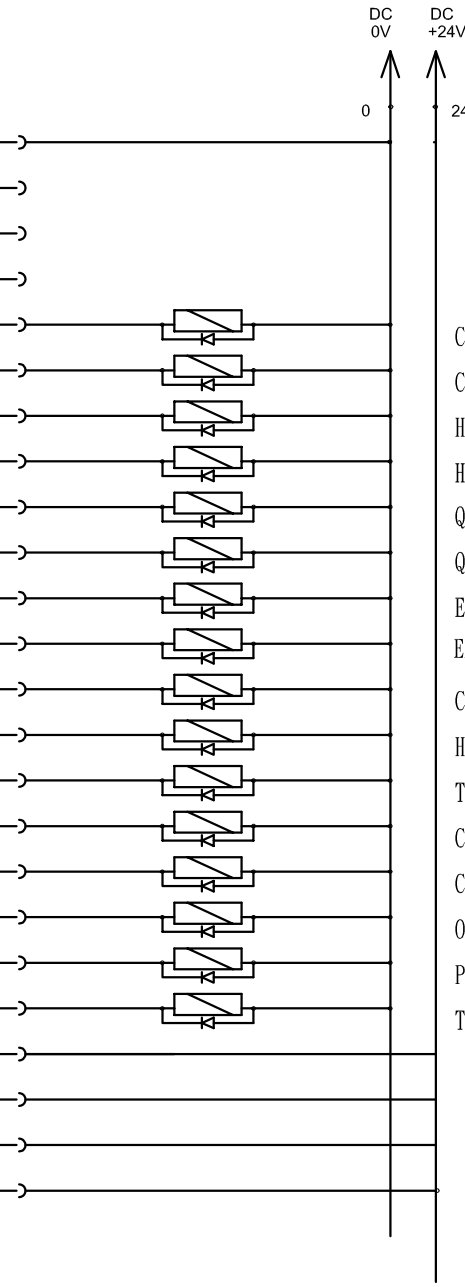
A

B

C

D

CB106				
PIN	PIN	ADDRESS	FUNCTION	NUMBER
27	A14		COM4	0
28	B14			
29	A15		HD10	
30	B15			
31	A16	Y4.0	K17	Y40
32	B16	Y4.1	K18	Y41
33	A17	Y4.2	K19	Y42
34	B17	Y4.3	K20	Y43
35	A18	Y4.4	K21	Y44
36	B18	Y4.5	K22	Y45
37	A19	Y4.6	K23	Y46
38	B19	Y4.7	K24	Y47
39	A20	Y5.0	K25	Y50
40	B20	Y5.1	K26	Y51
41	A21	Y5.2	K27	Y52
42	B21	Y5.3	K28	Y53
43	A22	Y5.4	K29	Y54
44	B22	Y5.5	K30	Y55
45	A23	Y5.6	K31	Y56
46	B23	Y5.7	K32	Y57
47	A24		DCOM	24
48	B24		DCOM	24
49	A25		DCOM	24
50	B25		DCOM	24



- CHUCK CLAMP 夾頭夾
- CHUCK UNCLAMP 夾頭放
- HY. TURRET CW 油壓刀塔正轉
- HY. TURRET CCW 油壓刀塔反轉
- QUILL ADV. SOL 頂針前進
- QUILL RET. SOL 頂針後退
- EX. TUR(GEAR) CW/TAIL. CHUCK CLAMP 電動刀塔(換檔)正轉/尾座夾頭(夾)
- EX. TUR(GEAR) CW/TAIL. CHUCK UNCLAMP 電動刀塔(換檔)反轉/尾座夾頭(鬆)
- COOLANT NO.1 MOTOR 沖水馬達
- HYDRAULIC MOTOR 油壓馬達
- TAILSTOCK BODY CW MOTOR 尾座本體正轉馬達
- CHIP MOTOR CW 排屑機正轉
- CHIP MOTOR CCW 排屑機反轉
- OIL COOLER MOTOR 油冷機馬達
- POWER OFF 自動斷電
- TAILSTOCK BODY CCW MOTOR 尾座本體反轉馬達

CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	19

A

B

C

D

CB107(X205)			
PIN	ADDRESS	FUNCTION	NUMBER
			0
B1			
A2	X7.0		X70
B2	X7.1		X71
A3	X7.2		X72
B3	X7.3		X73
A4	X7.4		X74
B4	X7.5		X75
A5	X7.6		X76
B5	X7.7		X77
A6	X10.0		X100
B6	X10.1		X101
A7	X10.2		X102
B7	X10.3		X103
A8	X10.4		X104
B8	X10.5		X105
A9	X10.6		X106
B9	X10.7		X107
A10	X11.0		X110
B10	X11.1		X111
A11	X11.2	FR8	X112
B11	X11.3	FR14	X113
A12	X11.4		X114
B12	X11.5		X115
A13	X11.6		X116
B13	X11.7		X117

DC
0V
0

DC
+24V
24

124

TURRET OVERHEAT (FOR PRAGATI BTP)

PRAGATI 刀塔過溫

TURRET PARITY (FOR PRAGATI BTP)

TAILSTOCK BODY INTERLOCK

尾座本體排齒互鎖

TAILSTOCK QUILL INTERLOCK

尾座頂針互鎖

刀塔出水閘上SENSOR

刀塔出水閘下SENSOR

TAILSTOCK QUILL EXTERNAL FORWARD PB

尾座頂針外部前進開關

TAILSTOCK QUILL EXTERNAL BACKWARD PB

尾座頂針外部後退開關

TAILSTOCK BODY UNCLAMP SW

尾座本體鬆開關

TAILSTOCK BODY CLAMP SW

尾座本體夾開關

QUILL PRESSURE SWITCH

頂針壓力檢知

TAILSTOCK BODY UN/CLAMP PRESSURE SWITCH

尾座本體壓力檢知

CTS PRESSURE SWITCH

CTS 壓力檢知

QUILL FORWARD SENSOR

頂針前SENSOR

QUILL BACKWARD SENSOR

頂針後SENSOR

TAILSTOCK QUILL MOTOR OVERLOAD

尾座頂針馬達過負載

PUMPING MOTOR OVERLOAD

抽水馬達過負載

TAILSTOCK BODY UN-CLAMP SW/COOLANT OVERHEAT DETECTION

尾座本體鬆夾開關/沖水馬達過熱檢知

STEADY REST START SW/FILTER PRESSURE DETECTION

中心架啟動開關/過濾壓力檢知

STEADY REST CLAMP SW/HIGH WATER DETECTION

中心架夾緊開關/水箱高水位檢知

STEADY REST UNCLAMP SW/LOW WATER LEVEL IS LOW DETECTION

中心架鬆開開關/水箱低水位檢知

CHECKED							
DESIGN	洪詠富	2017	12	15			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 20

A

B

C

D

CB107(X205)			
PIN	ADDRESS	FUNCTION	NUMBER
A14			
B14			
A15			
B15			
A16	Y6.0	K38	Y60
B16	Y6.1		Y61
A17	Y6.2		Y62
B17	Y6.3	K41	Y63
A18	Y6.4	K42	Y64
B18	Y6.5	K39	Y65
A19	Y6.6	K40	Y66
B19	Y6.7		Y67
A20	Y7.0	K33	Y70
B20	Y7.1	K34	Y71
A21	Y7.2	K35	Y72
B21	Y7.3	K36	Y73
A22	Y7.4	K37	Y74
B22	Y7.5		Y75
A23	Y7.6		Y76
B23	Y7.7		Y77
A24		DOCOM	24
B24		DOCOM	24
A25		DOCOM	24
B25		DOCOM	24



PUMPING MOTOR

抽水馬達

EXT MPG

外部手輪切換

SSR1 & SSR2 (FOR BRAGATI BTP TURRRET MOTOR FAST)

QUILL MOTOR FORWARD

頂針馬達前進

QUILL MOTOR BACKWARD

頂針馬達後退

刀塔出水閘上SOL

刀塔出水閘下SOL

TL16.OUT

TAILSTOCK BODY CLAMP

尾座本體夾緊

STEADY REST AIR

中心架吹氣

STEADY REST CLAMP

中心架夾緊

STEADY REST UNCLAMP

中心架鬆開

TAILSTOCK BODY UNCLAMP

尾座本體鬆開

STEADY REST START LAMP

中心架啟動指示燈

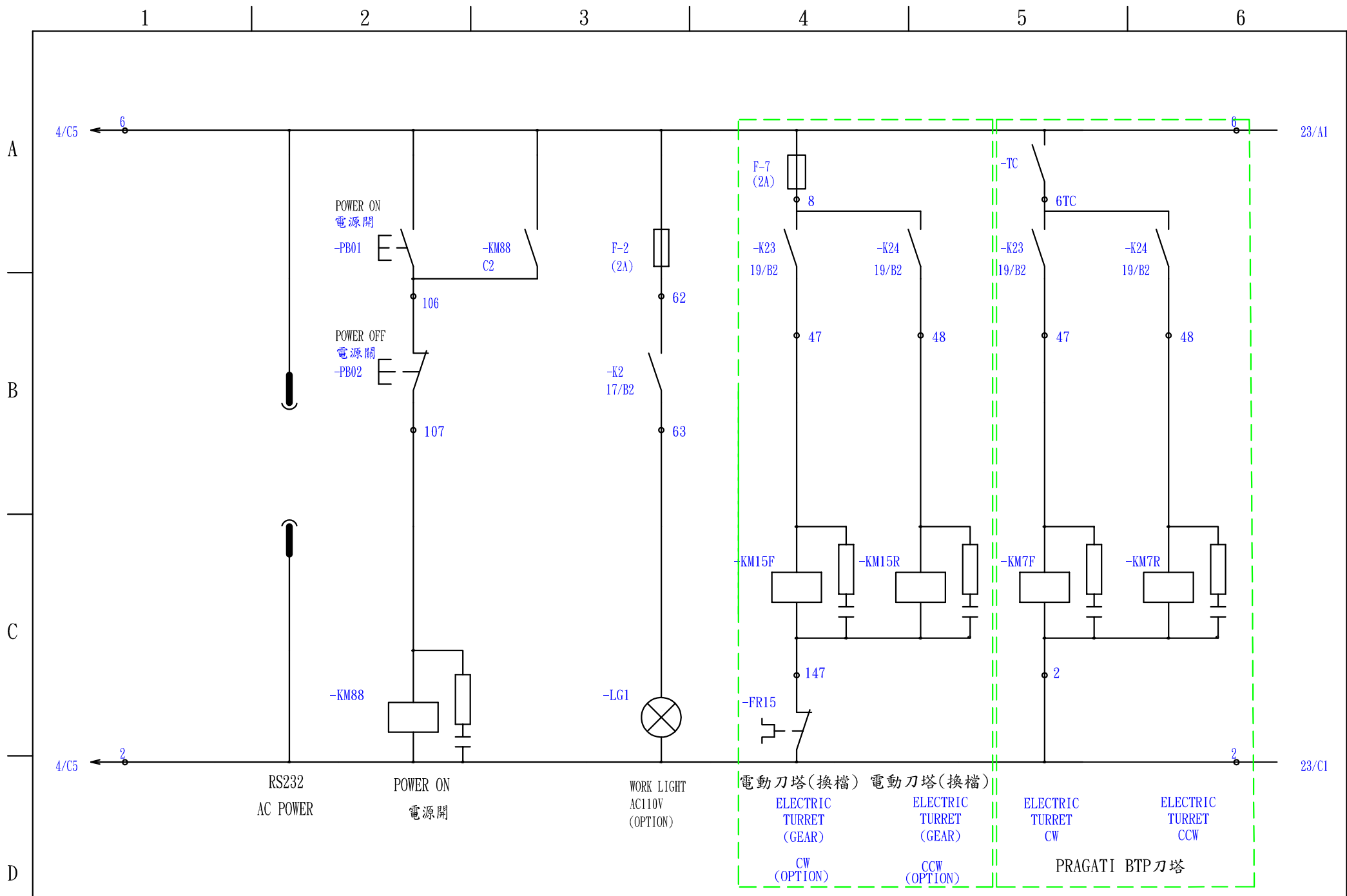
STEADY REST CLAMP LAMP

中心架夾緊指示燈

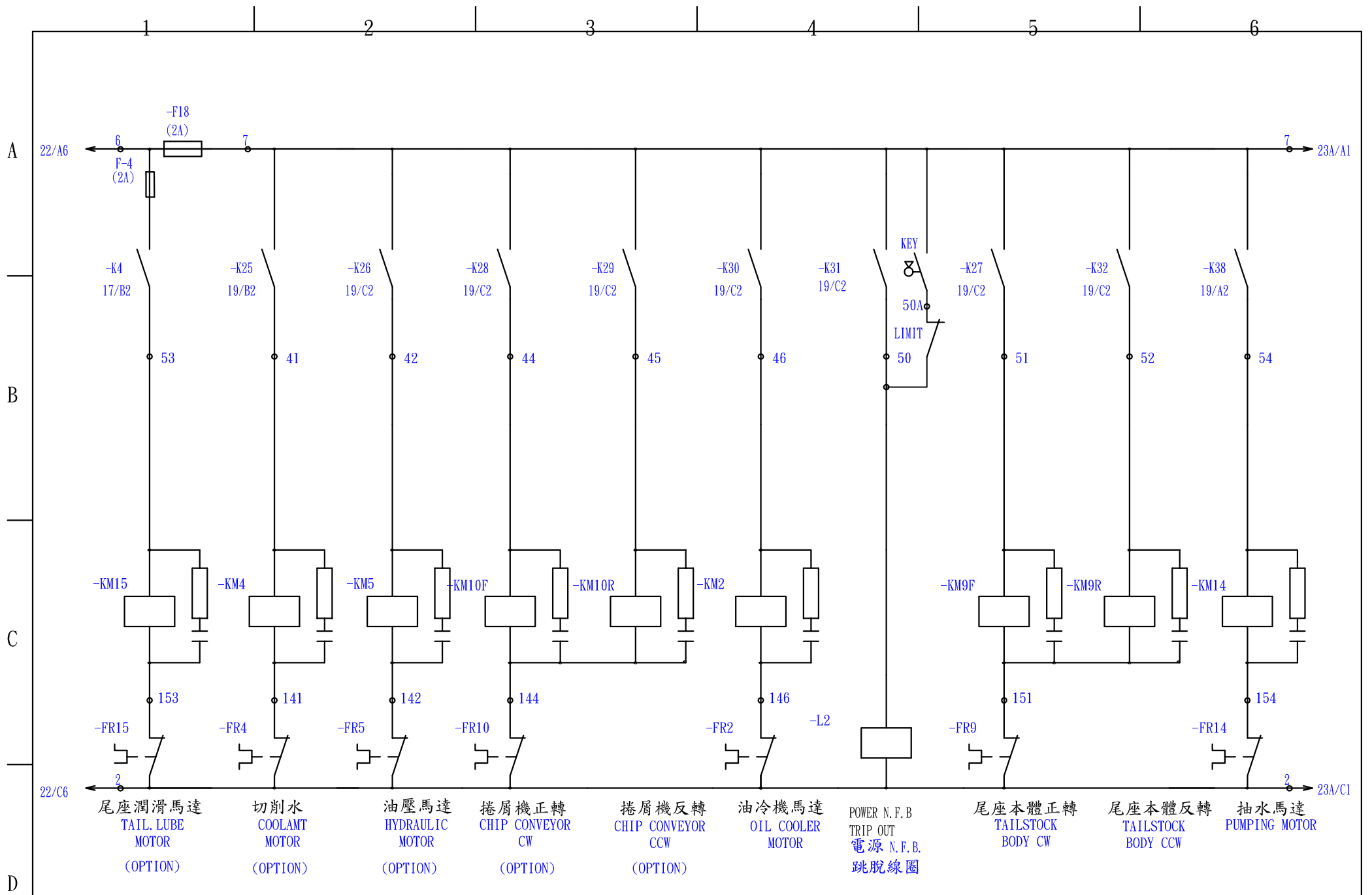
STEADY REST UNCLAMP LAMP

中心架鬆開指示燈

CHECKED							
DESIGN	洪詠富	2017	12	15			
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO. 21



CHECKED								
DESIGN	陳龍君	2019	02	25				
DRAWN	廖佳玲	2019	02	25	DIAGRAM NO.	DEN64	SHEET NO.	22



尾座潤滑馬達
 TAIL. LUBE
 MOTOR
 (OPTION)

切削水
 COOLANT
 MOTOR
 (OPTION)

油壓馬達
 HYDRAULIC
 MOTOR
 (OPTION)

捲屑機正轉
 CHIP CONVEYOR
 CW
 (OPTION)

捲屑機反轉
 CHIP CONVEYOR
 CCW
 (OPTION)

油冷機馬達
 OIL COOLER
 MOTOR

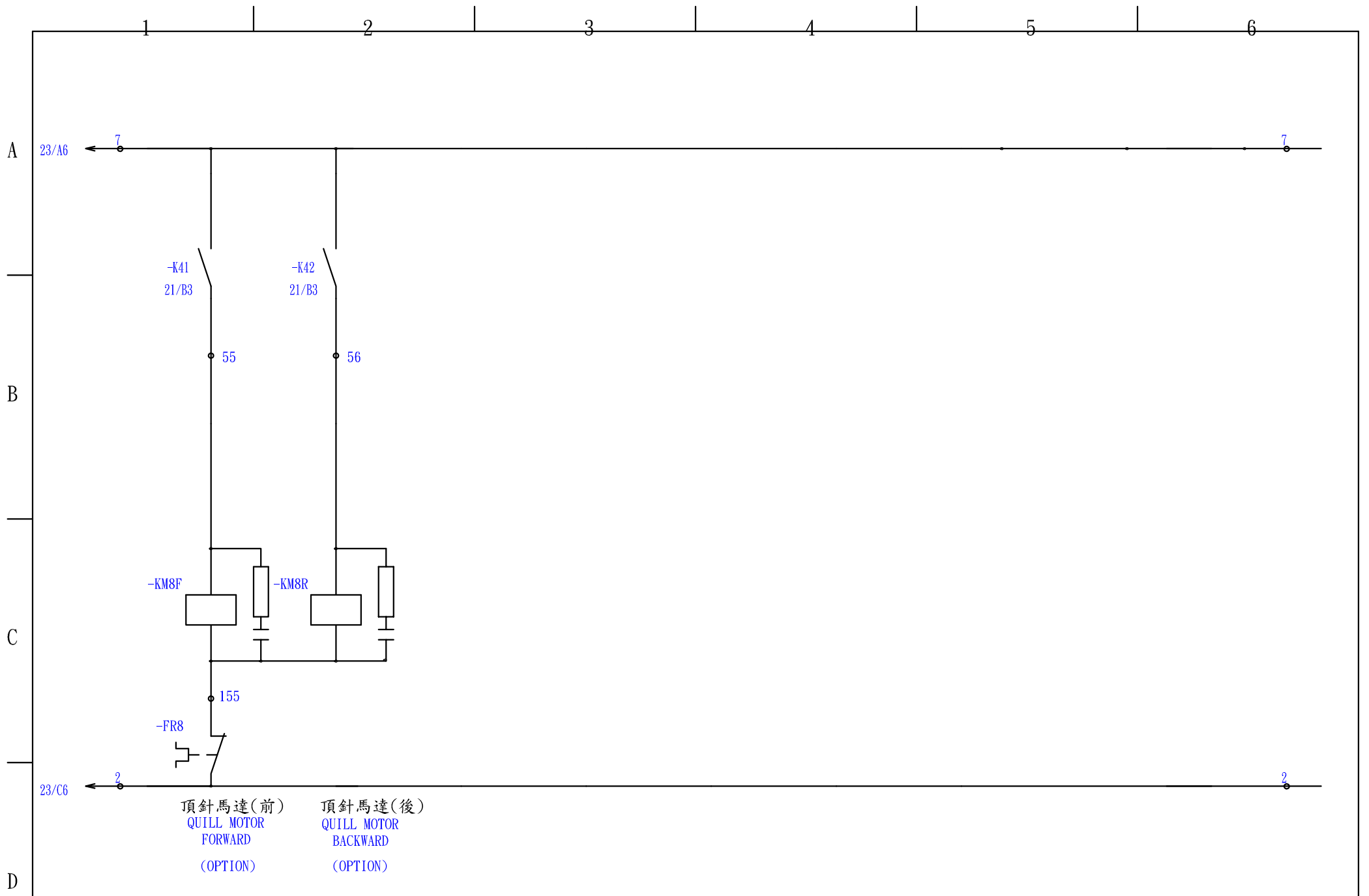
POWER N.F.B
 TRIP OUT
 電源 N.F.B.
 跳脫線圈

尾座本體正轉
 TAILSTOCK
 BODY CW

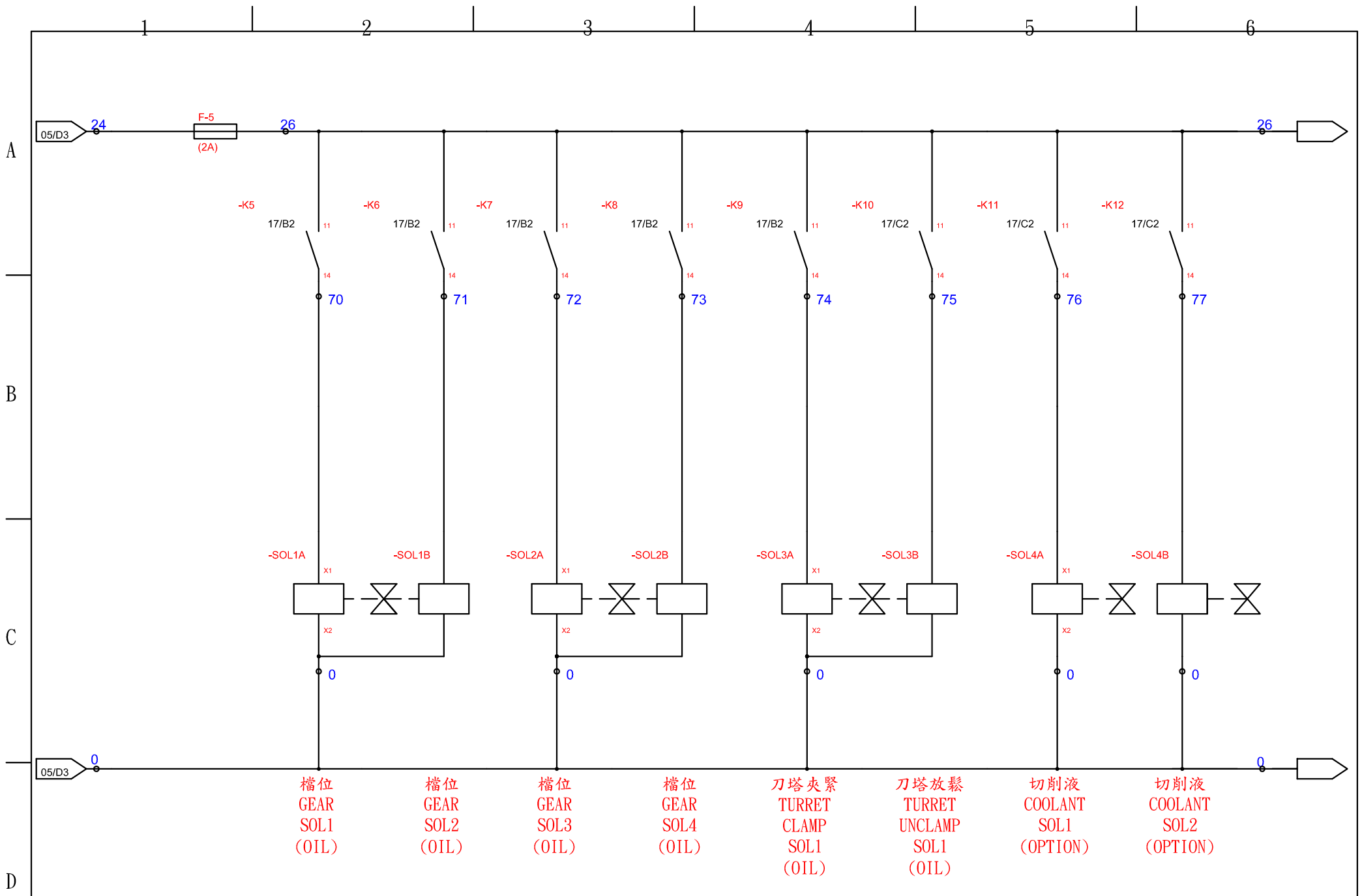
尾座本體反轉
 TAILSTOCK
 BODY CCW

抽水馬達
 PUMPING MOTOR

CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 23

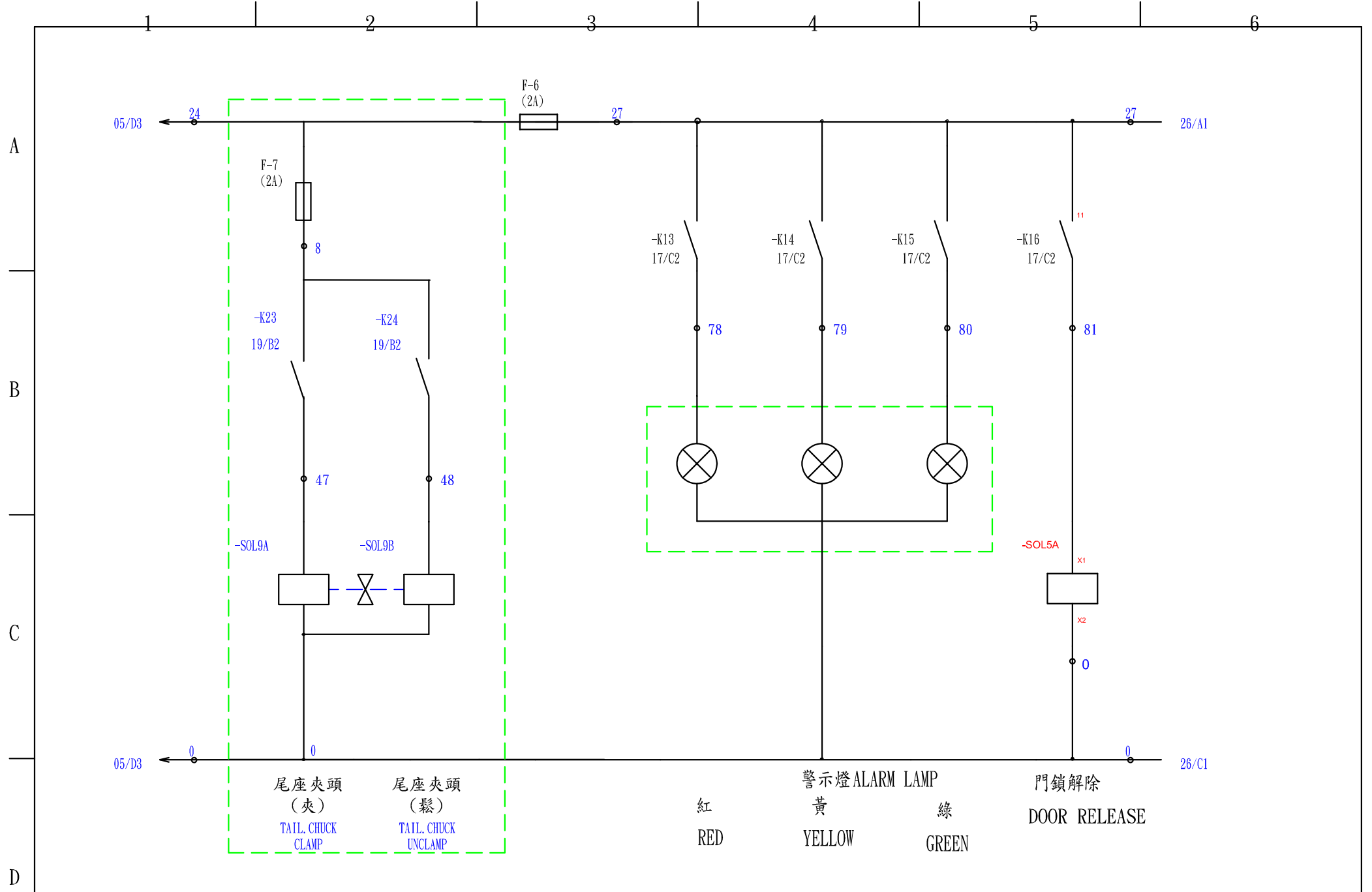


CHECKED								
DESIGN	陳龍君	2019	12	18				
DRAWN	蔡偉恩	2019	12	18	DIAGRAM NO.	DEN64	SHEET NO.	23A

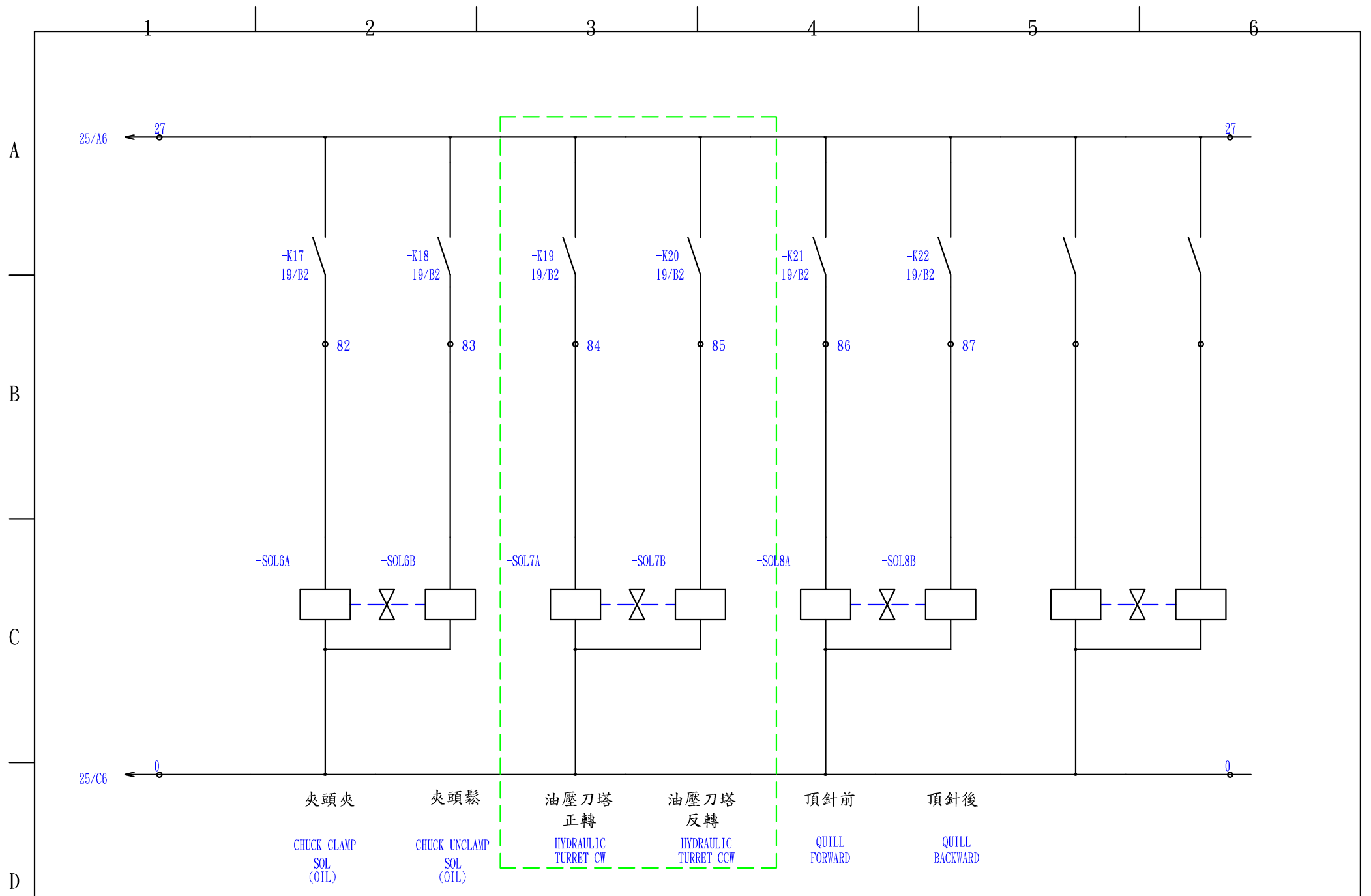


檔位 GEAR SOL1 (OIL) 檔位 GEAR SOL2 (OIL) 檔位 GEAR SOL3 (OIL) 檔位 GEAR SOL4 (OIL) 刀塔夾緊 TURRET CLAMP SOL1 (OIL) 刀塔放鬆 TURRET UNCLAMP SOL1 (OIL) 切削液 COOLANT SOL1 (OPTION) 切削液 COOLANT SOL2 (OPTION)

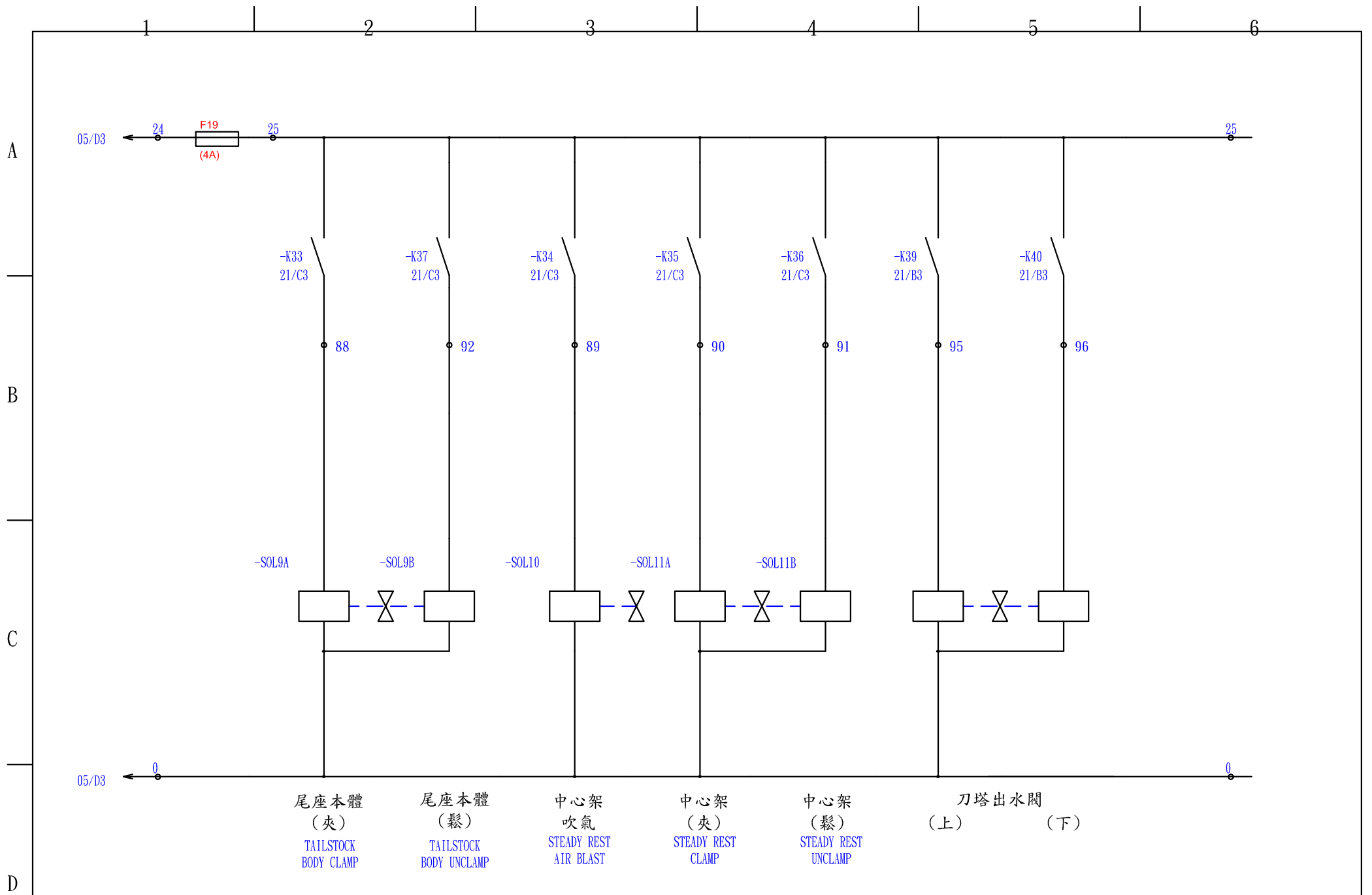
CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	24



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	25



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	26



CHECKED								
DESIGN	洪詠富	2017	12	15				
DRAWN	蔡偉恩	2017	12	15	DIAGRAM NO.	DEN64	SHEET NO.	27

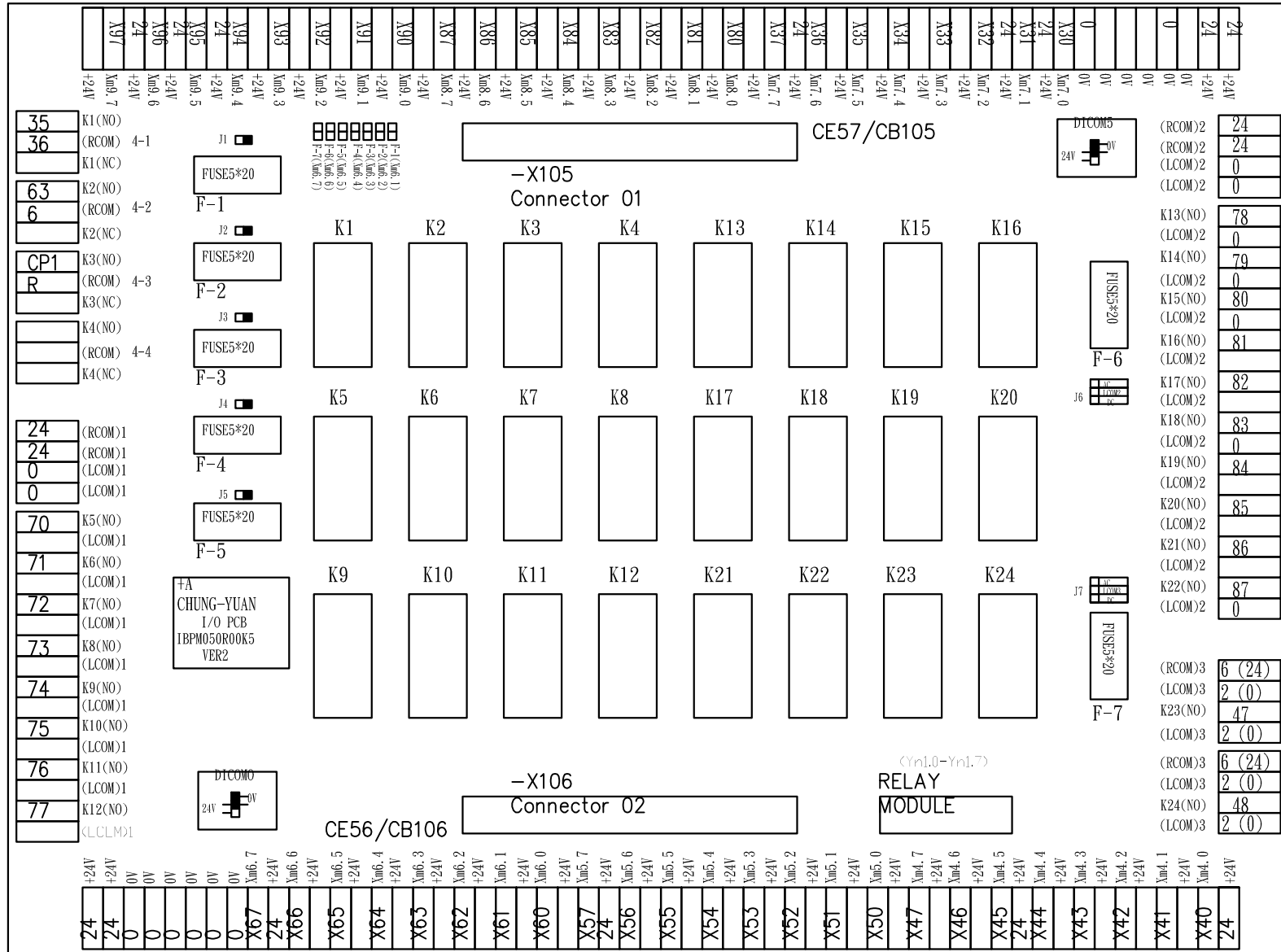
+A1

A

B

C

D



(RCOM)2	24
(RCOM)2	24
(LCOM)2	0
(LCOM)2	0
K13(NO)	78
(LCOM)2	0
K14(NO)	79
(LCOM)2	0
K15(NO)	80
(LCOM)2	0
K16(NO)	81
(LCOM)2	0
K17(NO)	82
(LCOM)2	0
K18(NO)	83
(LCOM)2	0
K19(NO)	84
(LCOM)2	0
K20(NO)	85
(LCOM)2	0
K21(NO)	86
(LCOM)2	0
K22(NO)	87
(LCOM)2	0

(RCOM)3	6 (24)
(LCOM)3	2 (0)
K23(NO)	47
(LCOM)3	2 (0)
(RCOM)3	6 (24)
(LCOM)3	2 (0)
K24(NO)	48
(LCOM)3	2 (0)

(6TC)
(2)
(47)
2 PRAGATI BTP
TURRET
(6TC)
2
48
2

CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 28

RELAY BOARD () 位置圖

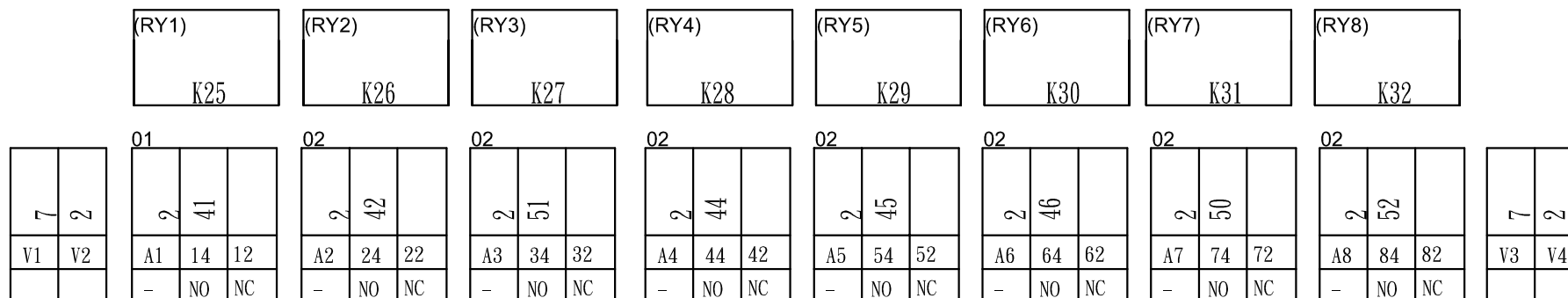
2004.06

VER.-01

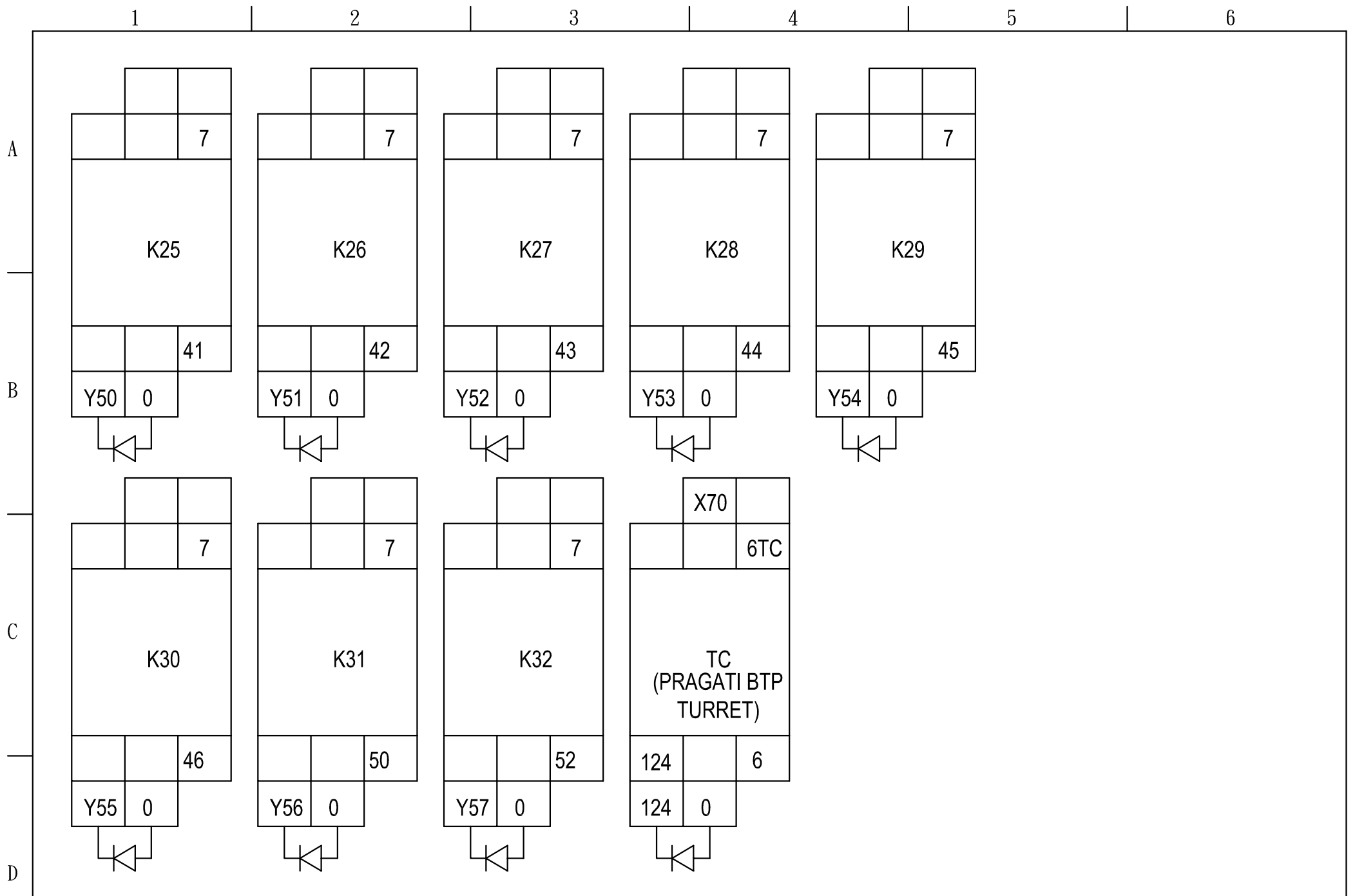
-RB0

1

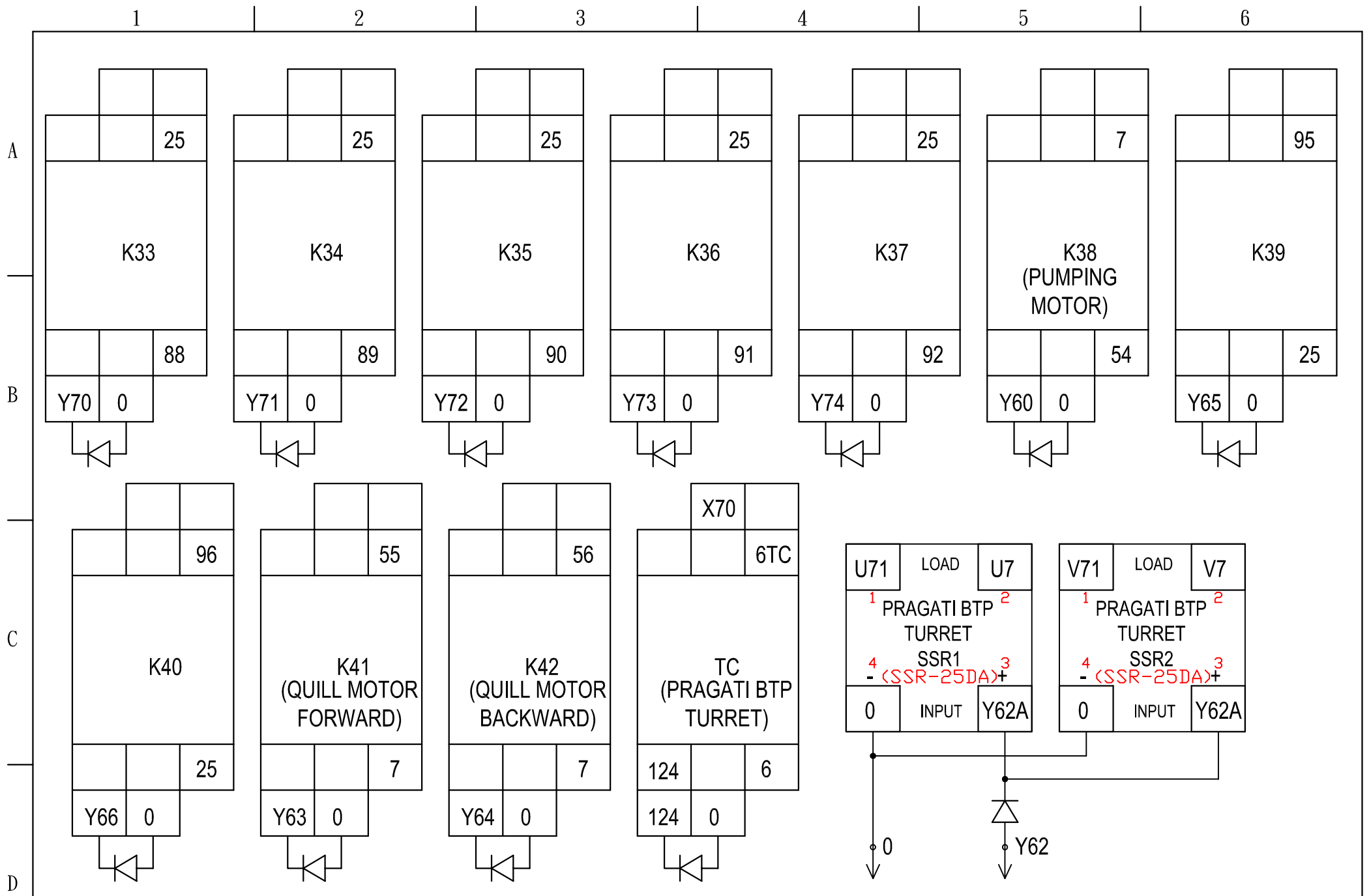
RBH08C-DC24V



CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	29



CHECKED								
DESIGN	陳龍君	2019	11	19				
DRAWN	蔡偉恩	2019	11	19	DIAGRAM NO.	DEN64	SHEET NO.	29A



CHECKED							
DESIGN	陳龍君	2019	02	25			
DRAWN	廖佳玲	2019	02	25	DIAGRAM NO.	DEN64	SHEET NO. 30

FUTURE TECHNOLOGY M. P. G CONNRCT

	MEMBRANE PANEL TB6	MEMBRANE PANEL TB3	CONNECTOR PIN	TERMINAL BLOCK TB1	LINE COLOR		NUMBER
					FANUC	IHDW	
A		HX	1	X	紅	紫	X06 (白黑1)
		HY	2	Z	橙	灰	X07 (白黑2)
		HZ	3	C	黃	白	X10 (白黑3)
		H4	4	4	綠	黑	(白黑4)
		H*10	5	*10	藍	紅白	X12 (白黑長)
B		H*100	6	*100	紫	淺綠	X13 (白紅1)
		+24V	7	COM1 COM2	黑	橙白	24 (白紅2) 24 (白紅3)
	+5V<FANUC> H12V<MITSUBISHI>		8	+12V	黑白	棕	H5V (白紅4)
	0V<FANUC> H0V<MITSUBISHI>		9	0V	紅白	紅	H0V (白紅長)
C		HA	10	A	灰	橙	HA (黃黑1)
		HB	11	B	白	粉紅	HB (黃黑2)
		MPGL<MITSUBISHI>	12	L+	棕	灰黑	Y13 (黃黑3)
		0V<MITSUBISHI> Y534<FANUC>	13	L-	粉紅	黑白	0 (黃黑4)
		E-STOP CONTACT (B1-1)	14			橙黑	X84A
		E-STOP CONTACT (B1-2)	15			粉紅黑	24
D			16				

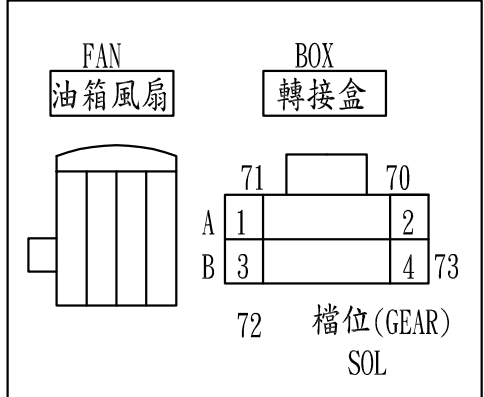
CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 31

A

B

C

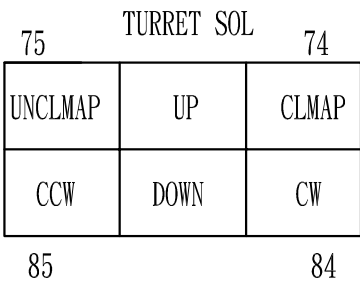
D



PIN 腳位	COLOR 線色	NUMBER 刀塔1線碼	
1	Y/B1黃黑 1		
2	Y/B2黃黑 2		
3	Y/B3黃黑 3		
4	Y/B4黃黑 4	X72	
5	Y/BL黃黑長	Y70	
6	W/B1白黑 1	X75	
7	W/B2白黑 2	Y71	
8	W/B3白黑 3	Y72	
9	W/B4白黑 4	Y73	
10	W/BL白黑長	0	
11	Y/R1黃紅 1		
12	Y/R2黃紅 2		
13	Y/R3黃紅 3	24	
14	Y/R4黃紅 4	Y74	
15	Y/RL黃紅長	53	
16	W/R1白紅 1	Y75	
17	W/R1白紅 2	Y76	
18	W/R1白紅 3	X73	
19	W/R4白紅 4	X74	
20	W/RL白紅長		

HYDRAULIC TURRET
互陽絕對式油壓刀塔

A	POSITION SENSOR	X6.4
B	POSITION SENSOR	X6.5
C	POSITION SENSOR	X6.6
D	POSITION SENSOR	X6.7
E	TURRET COUNTER	X6.1
F	CLAMP SENSOR	X3.4



※ 刀塔 CN1B 腳位接線圖
TURRET CN1B CONNECT DIAGRAM

CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 32

互陽絕對式油壓刀塔

TOOL SIGNAL

12 TOOLS				
TOOL NO	X6.4	X6.5	X6.6	X6.7
T01	1	0	0	0
T02	0	0	1	0
T03	0	1	0	0
T04	1	0	0	1
T05	1	0	1	0
T06	0	1	1	0
T07	1	1	0	1
T08	1	0	1	1
T09	1	1	1	0
T10	0	1	1	1
T11	0	1	0	1
T12	0	0	0	1

8 TOOLS				
TOOL NO	X6.4	X6.5	X6.6	X6.7
T01	0	1	0	0
T02	0	0	0	1
T03	1	0	0	0
T04	0	0	1	0
T05	1	1	1	0
T06	1	0	1	1
T07	1	1	0	1
T08	0	1	1	1

CHECKED								
DESIGN	洪詠富	2011	11	17				
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO.	33

THE WIRING DIAGRAM OF INTERNAL SPEED COMMAND

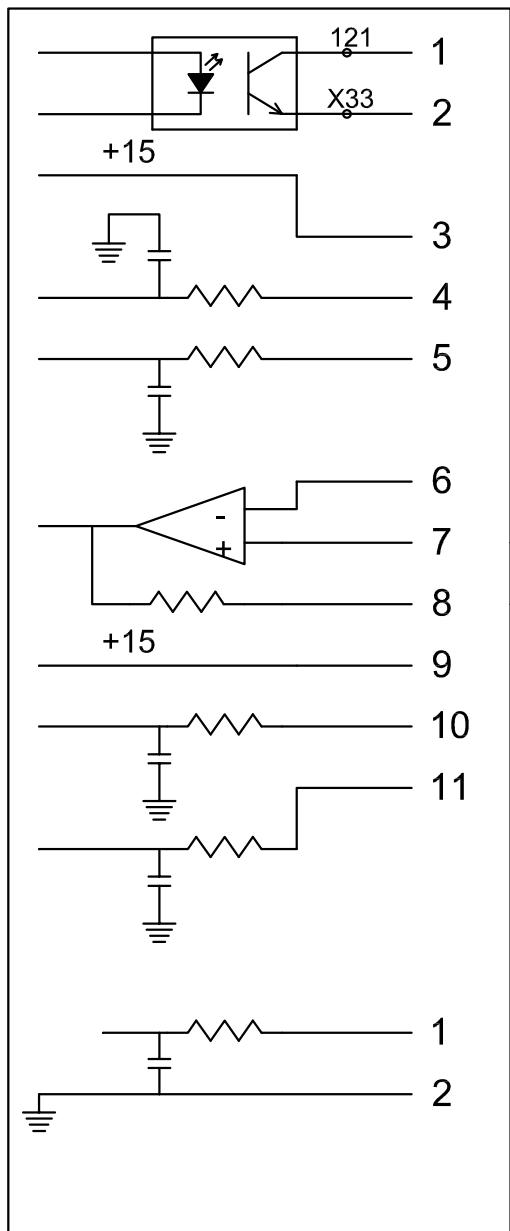
A

B

C

D

The signal terminals



1 Servo Ready Input(Max. voltage 24VDC)

2 Servo Ready Input(Max. voltage 24VDC)

Limit common >

CW limit <

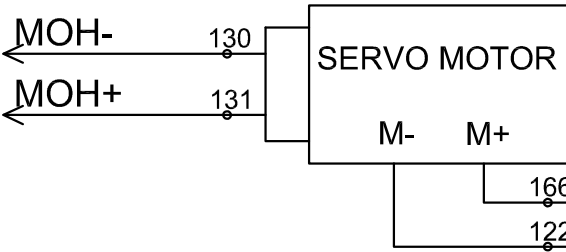
CCW limit <

short

Common > 120

CW < 123 K23 120

< 124 K24 120

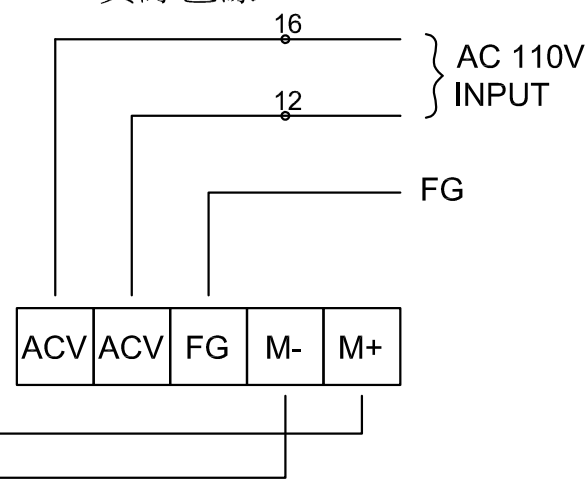


M+ 棕色線 BROWN WIRE

M- 藍色線 BLUE WIRE

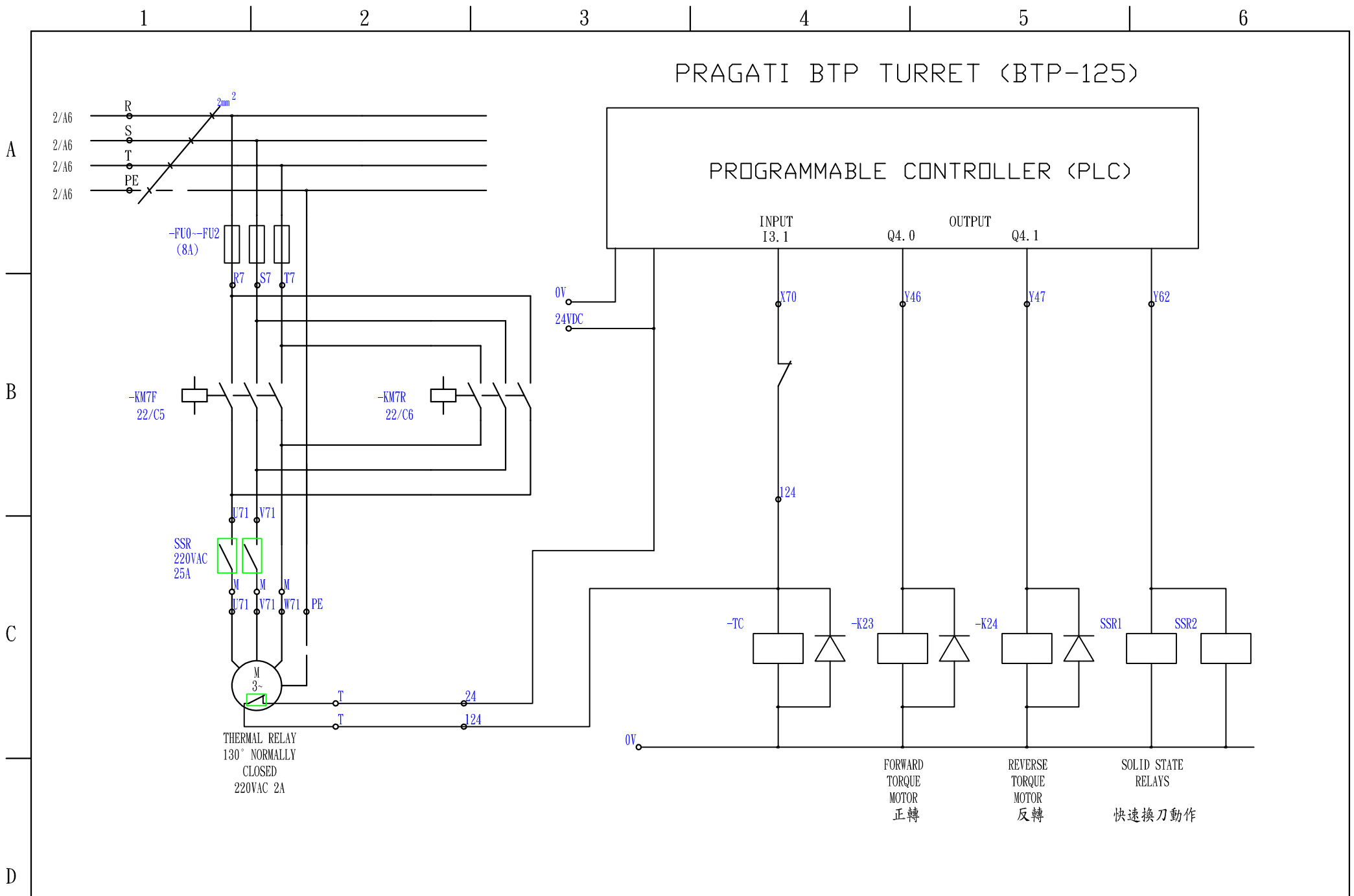
H+ 黑色線 BLACK WIRE

H- 黃綠色線 YELLOW GREEN WIRE



CHECKED							
DESIGN	洪詠富	2011	11	17			
DRAWN	趙祥順	2016	05	11	DIAGRAM NO.	DEN64	SHEET NO. 34

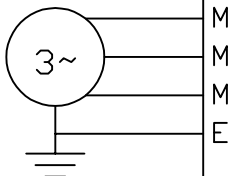
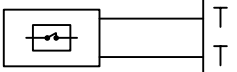
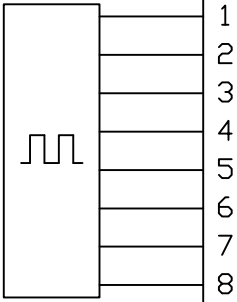
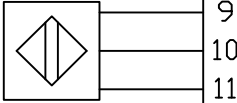
PRAGATI BTP TURRET (BTP-125)



CHECKED								
DESIGN	陳龍君	2019	02	25				
DRAWN	廖佳玲	2019	02	25	DIAGRAM NO.	DEN64	SHEET NO.	35

A

PRAGATI BTP TURRET
WIRING DETAILS FOR BI-DIRECTIONAL TOOL TURRET

NO	COMPONENT	CHARACTERISTICS	NUMBER	COLOR	DETAILS
1	TORQUE MOTOR	ALTERNATIVE VOLTAGES 415,380 AND 220 VAC 3 PHASE ALTERNATIVE FREQUENCIES 50Hz AND 60Hz MOTOR SHORT CIRCUIT POWER		RED RED RED GREEN	PHASE U7 PHASE V7 PHASE W7 EARTHING PE
2	THERMAL RELAY	130° 2A 415 VAC NORMALLY CLOSED CONTACT		BLUE BLUE	BLUE 24 BLUE 124(X70)
3	ABSOLUTE POSITION ENCODER	15-30VDC RIPPLE 10% 350mA (SUPPLY) 50mA /CHANNEL (LOAD) OUTPUT-PNP		WHITE YELLOW GREEN VIOLET BLACK PINK BLUE BROWN	BIT 1 X64 BIT 2 X65 BIT 3 X66 BIT 4 X67 STROBE X61 PARITY X71 '0' Volts 0 24VDC 24
4	PROXIMITY SWITCH (TURRET CLAMP SIGNAL)	10-30VDC RIPPLE 10% 200mA (LOAD) OUTPUT-PNP-NO		BLACK BLUE BROWN	OUTPUT X34 '0' Volts 0 24VDC 24

B

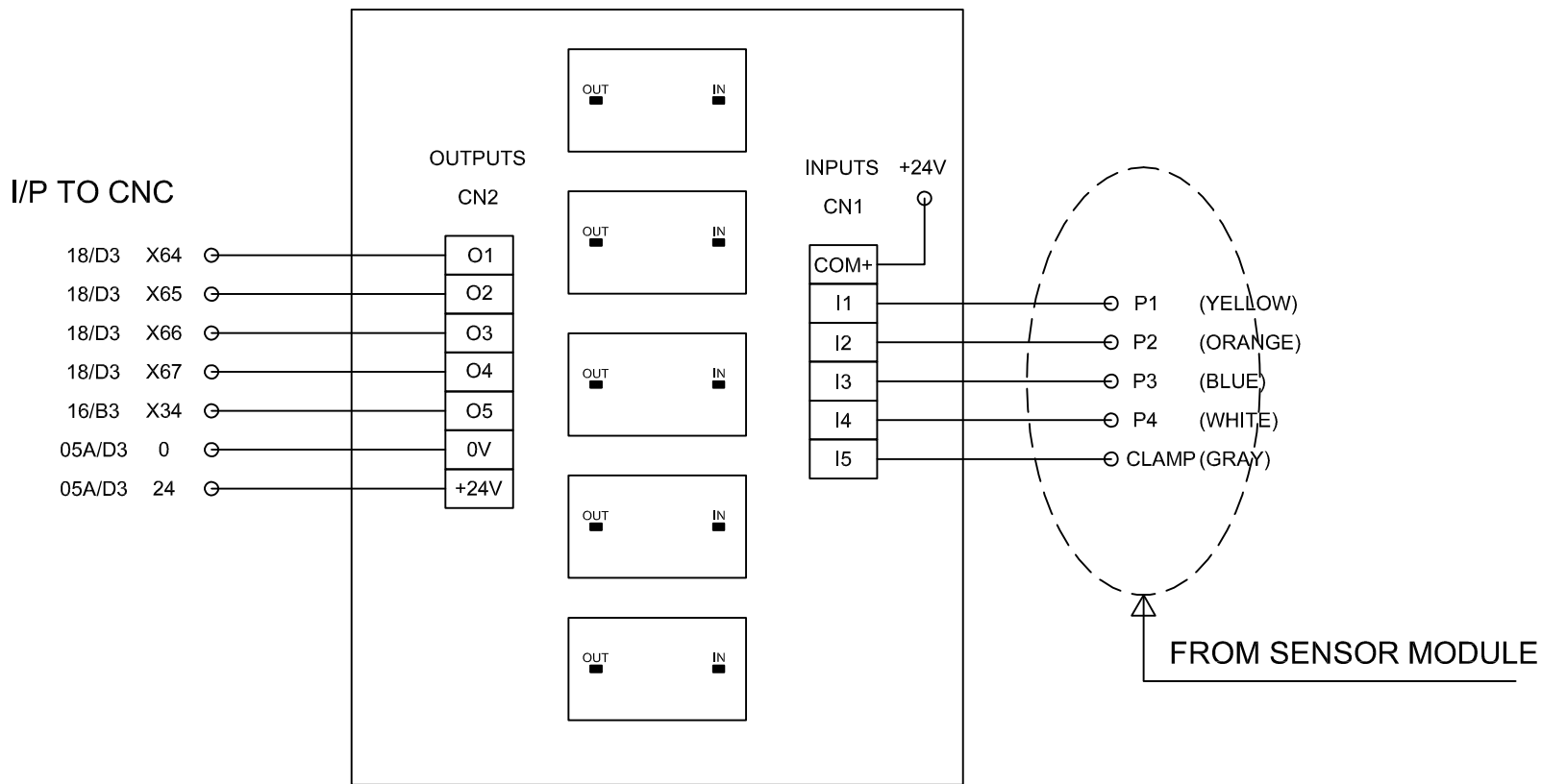
C

D

CHECKED							
DESIGN	陳龍君	2019	02	25			
DRAWN	廖佳玲	2019	02	25	DIAGRAM NO.	DEN64	SHEET NO. 36

PRAGATI 方型刀塔

(SQT TYPE)



CHECKED								
DESIGN	陳龍君	2019	11	21				
DRAWN	廖佳玲	2019	11	21	DIAGRAM NO.	DEN64	SHEET NO.	37