



中元自動控制有限公司  
CHUNG-YUAN AUTOMATION CO., LTD.

COMPANY NAME: 良岱

MACHINE NAME: 五軸機

DIAGRAM NO.: ZD003

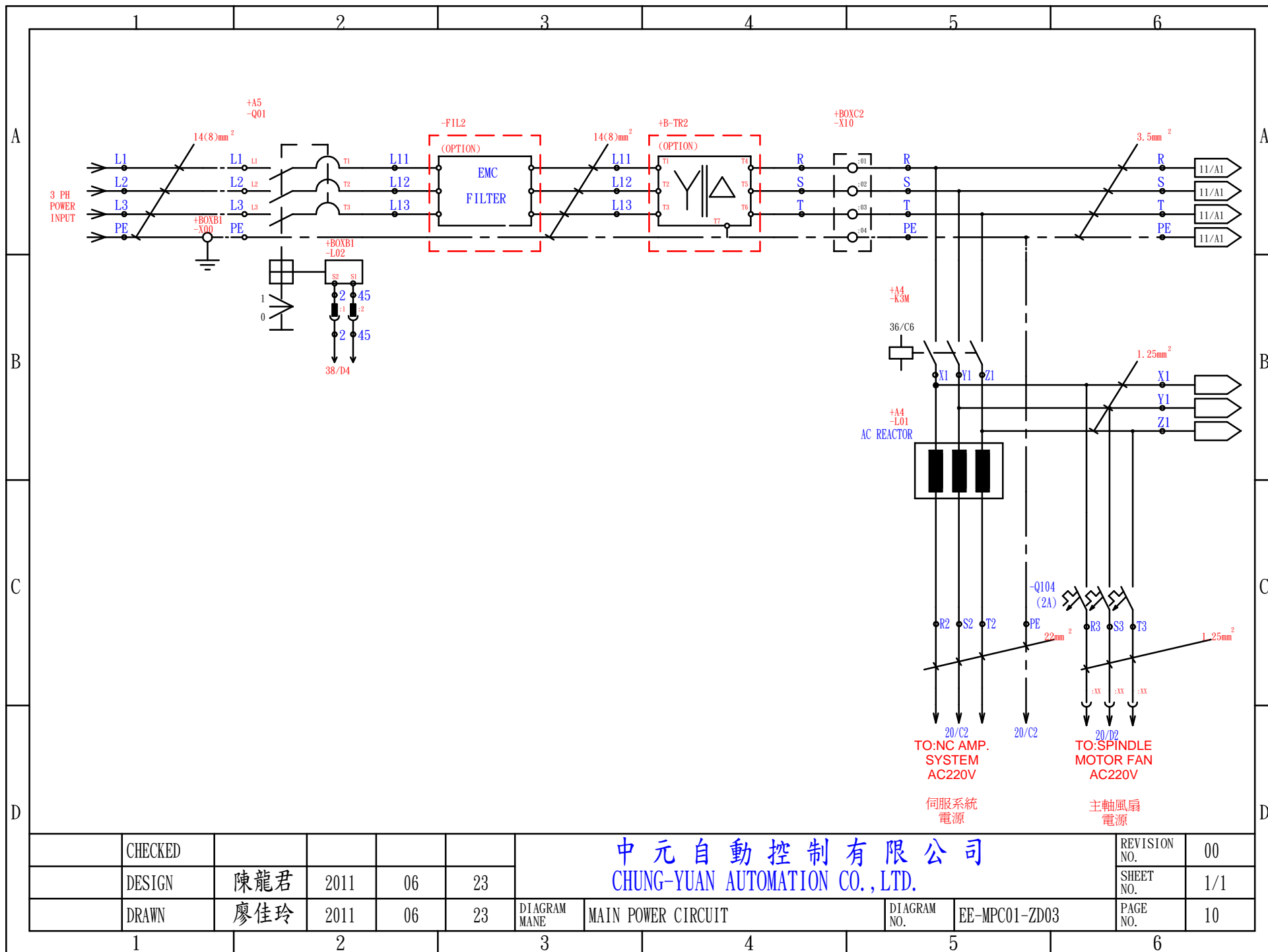
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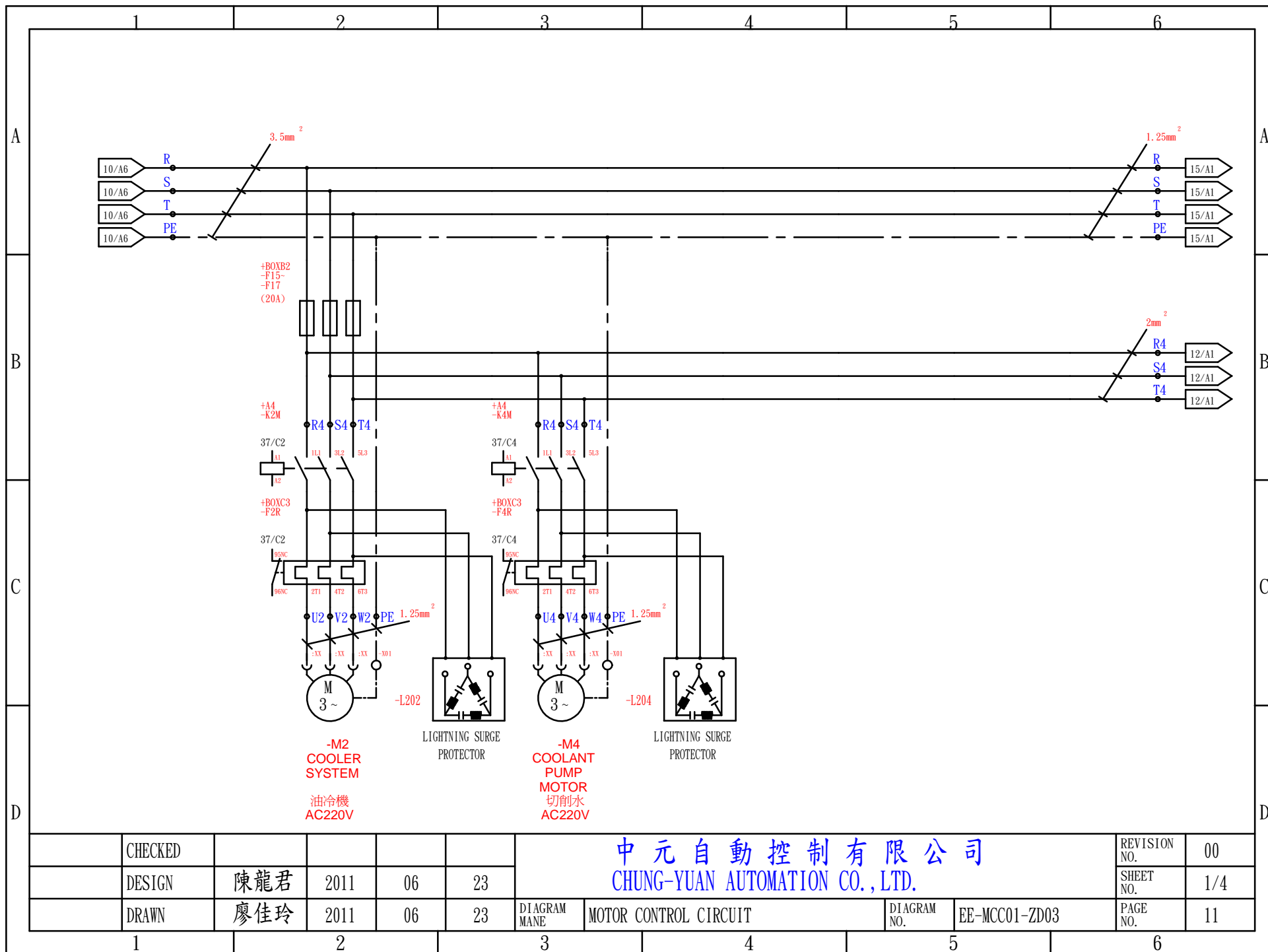
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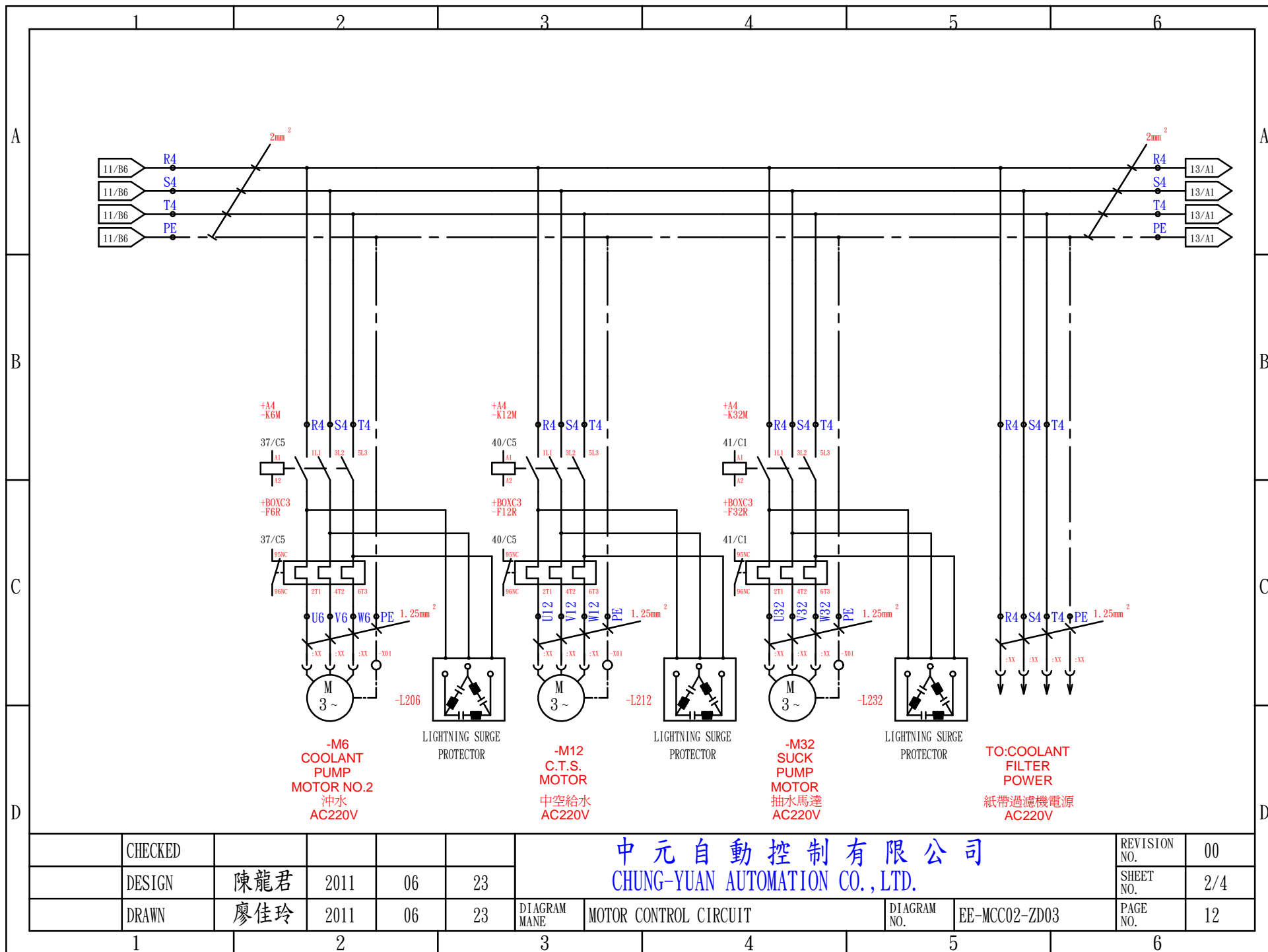
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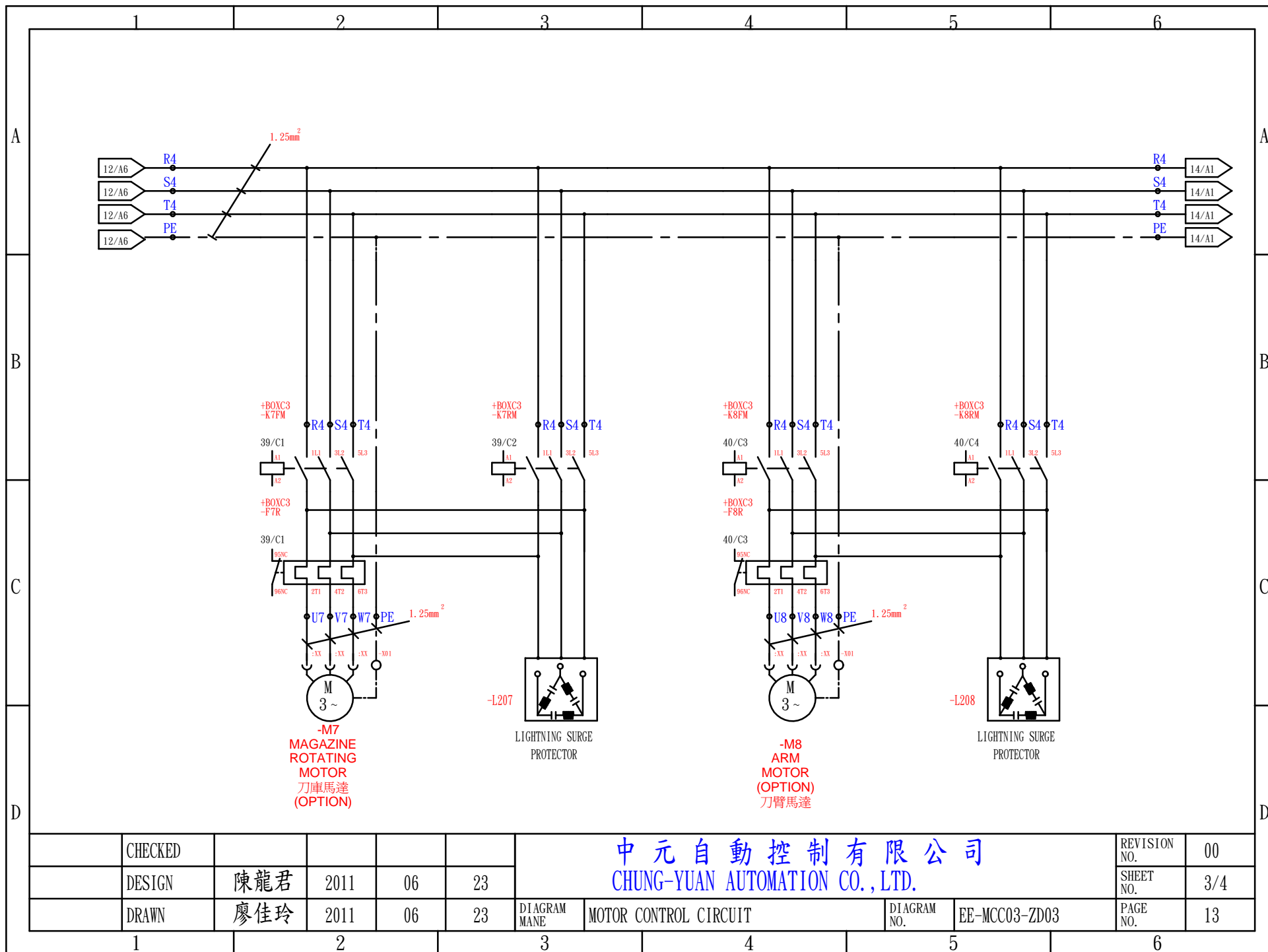
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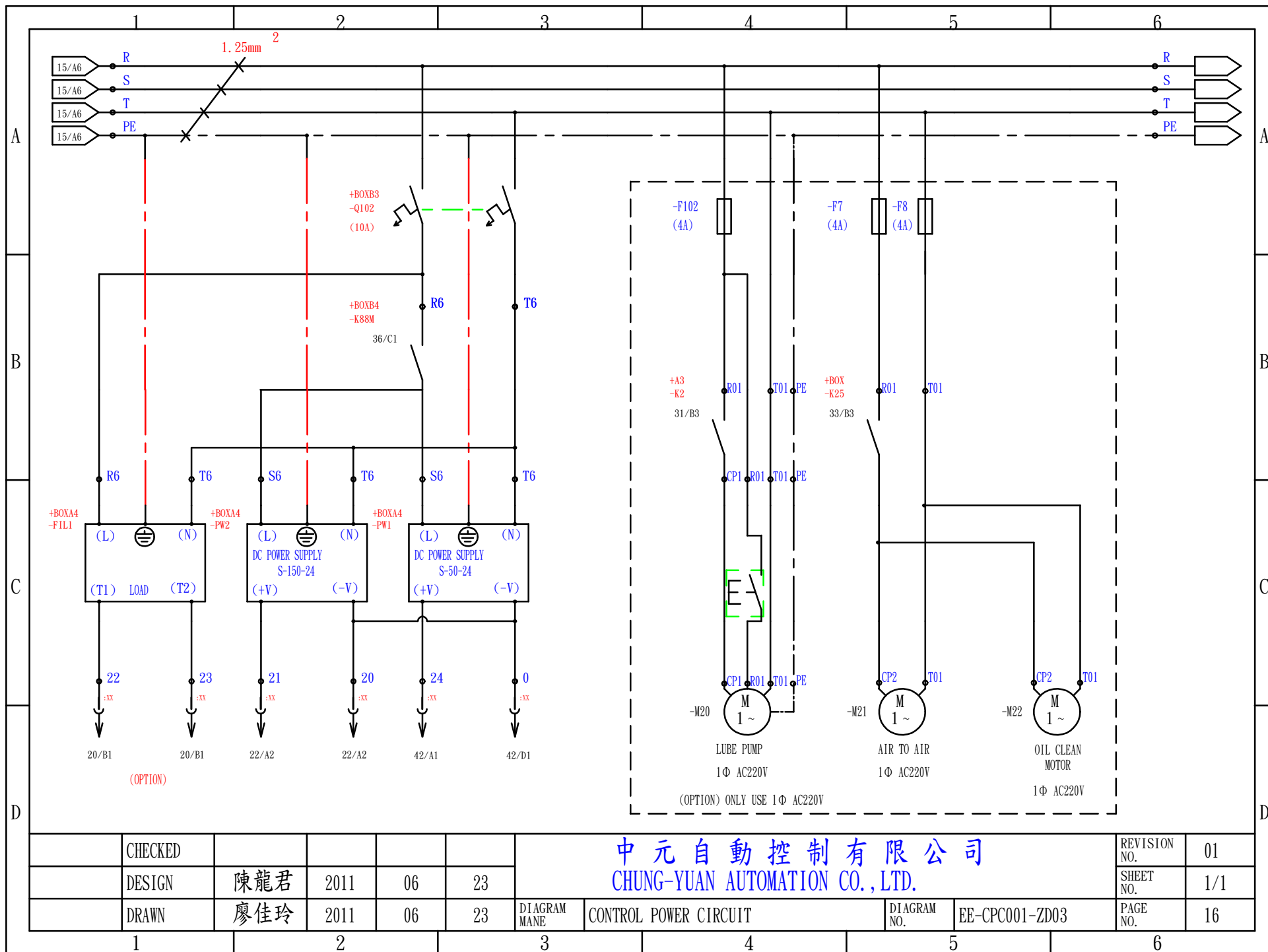
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|   | DESIGN  | 陳龍君 | 2011 | 06 | 23 |   |                       |             | SHEET NO.     | 1/4         |
|   | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM MANE                                  | MOTOR CONTROL CIRCUIT | DIAGRAM NO. | EE-MCC01-ZD03 | PAGE NO. 11 |



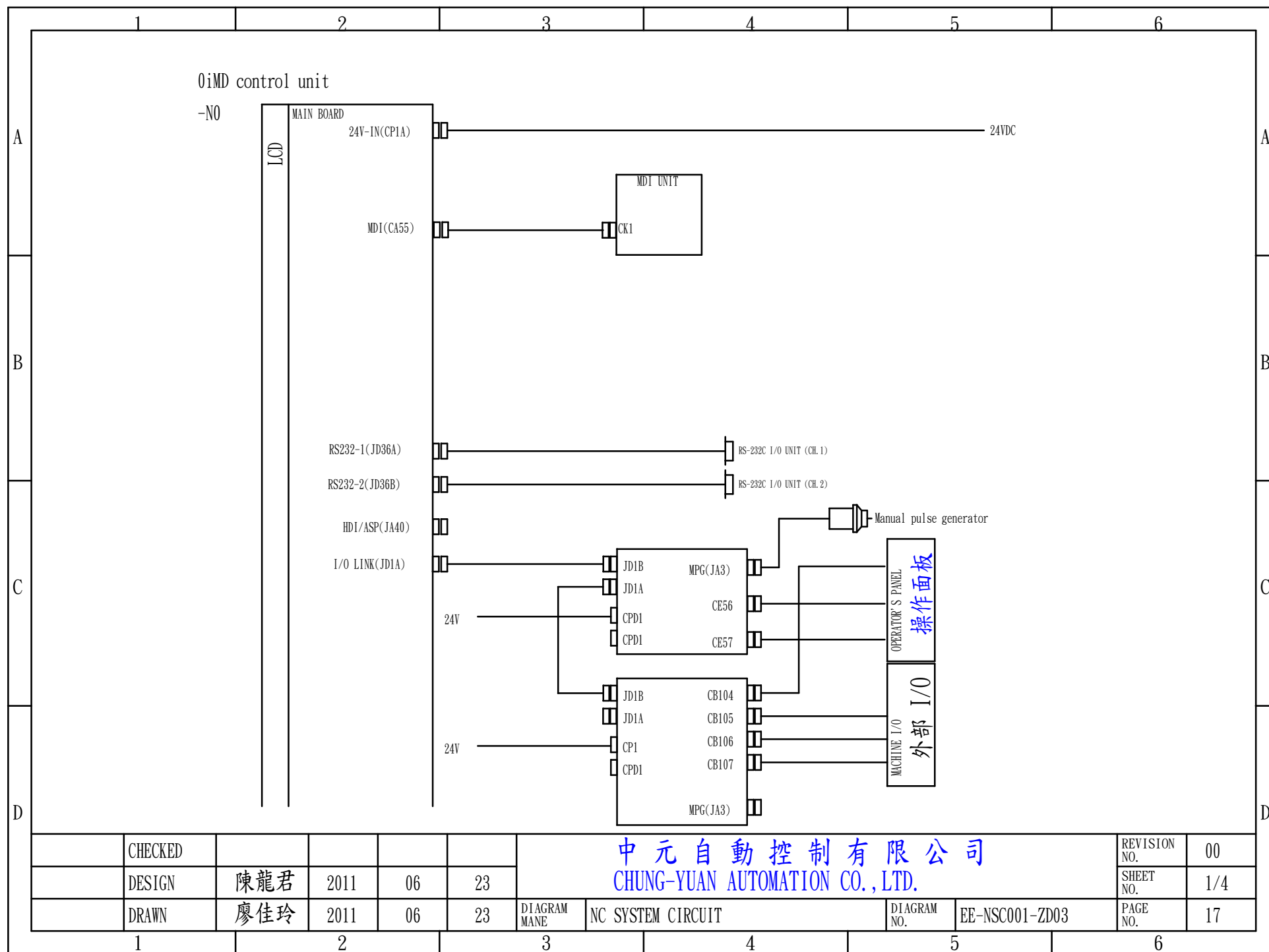




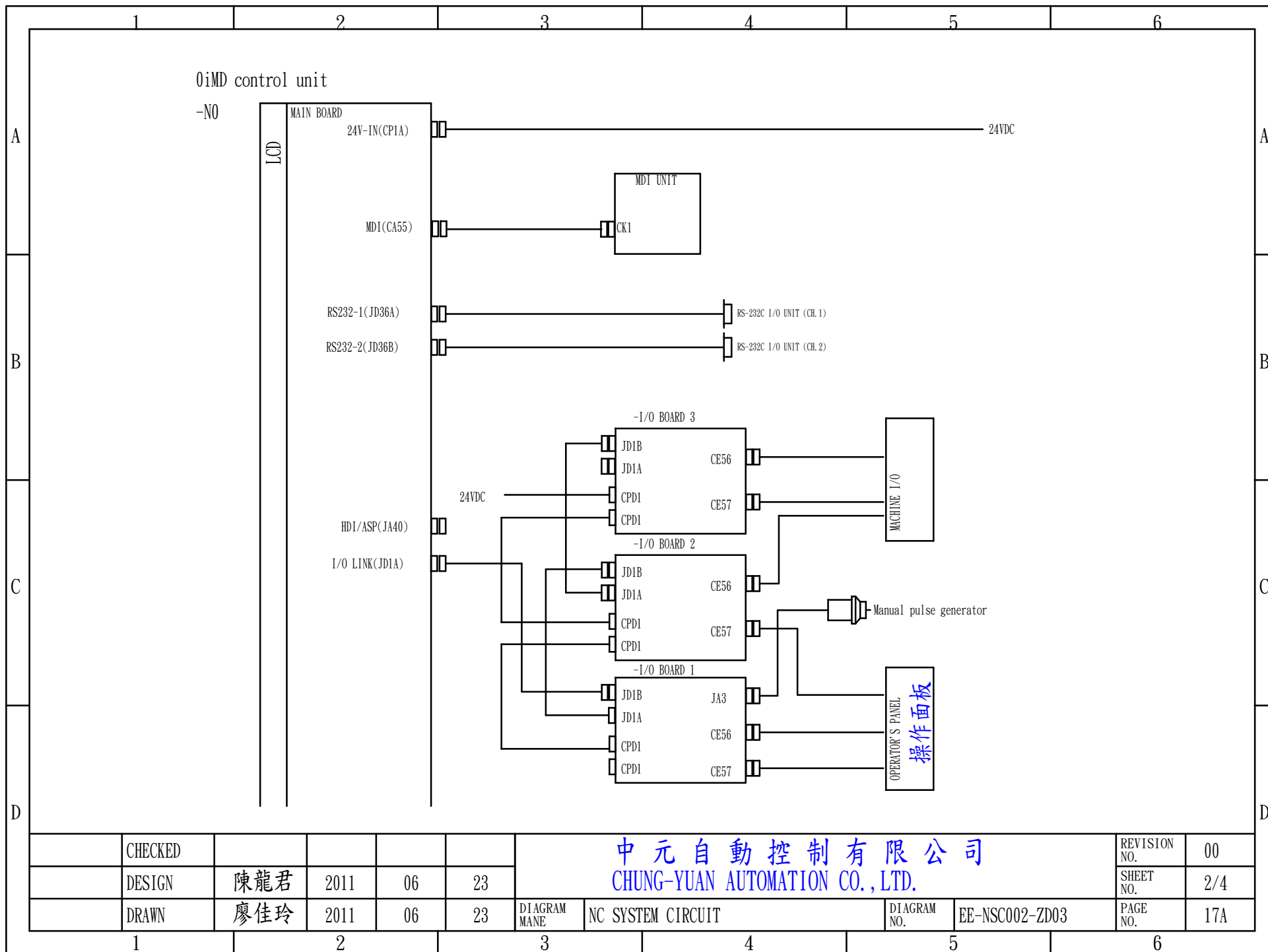


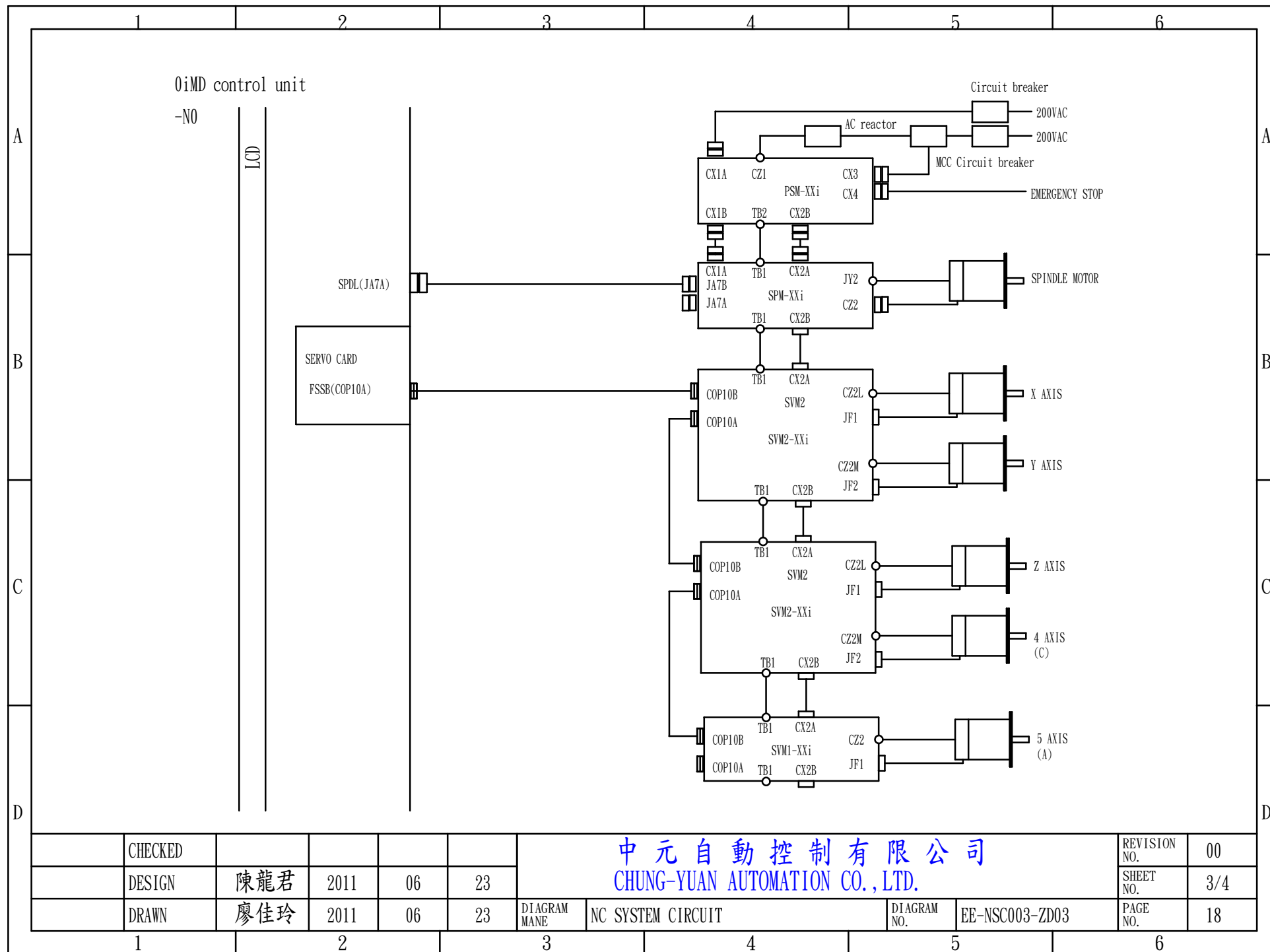




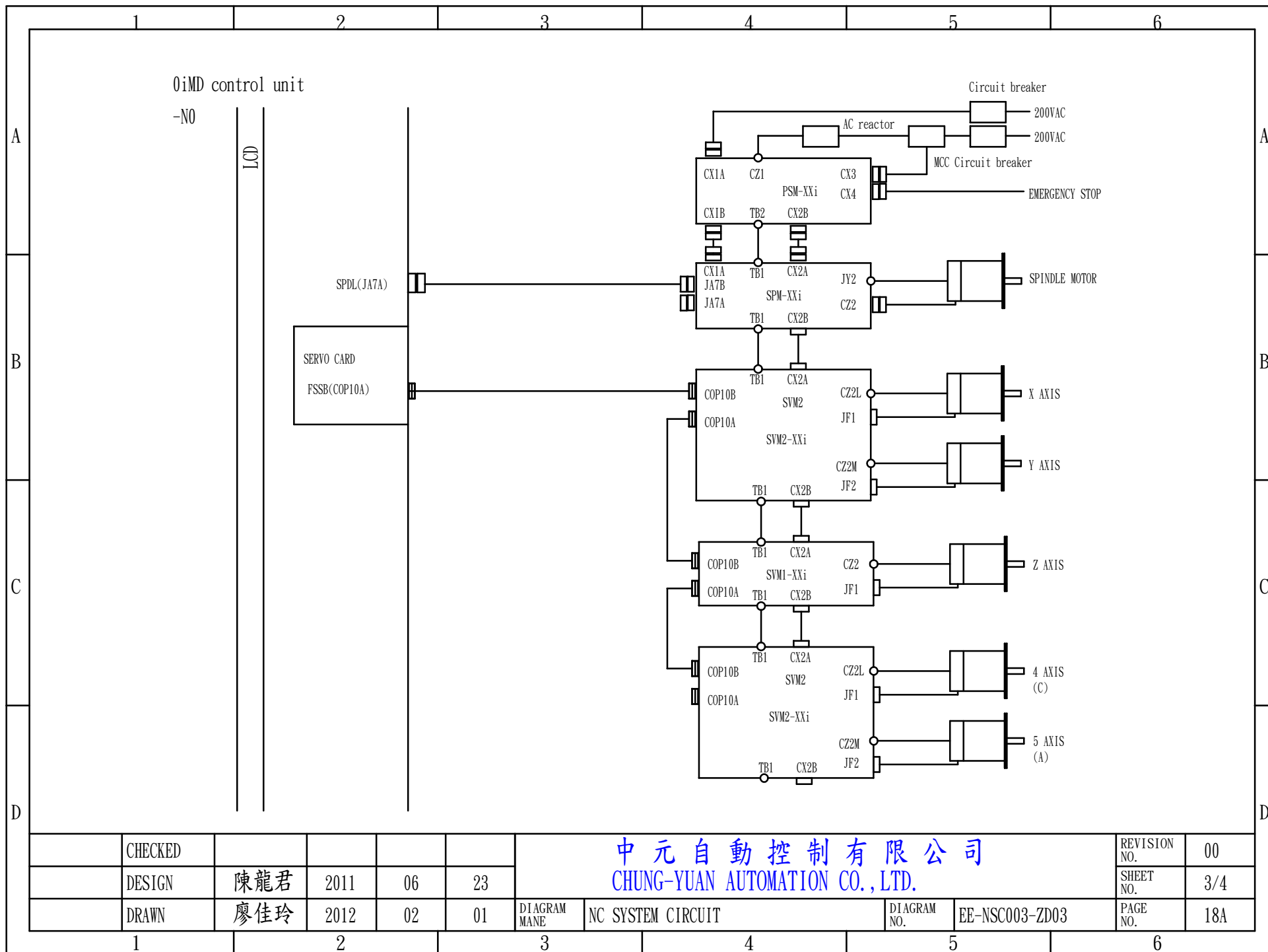


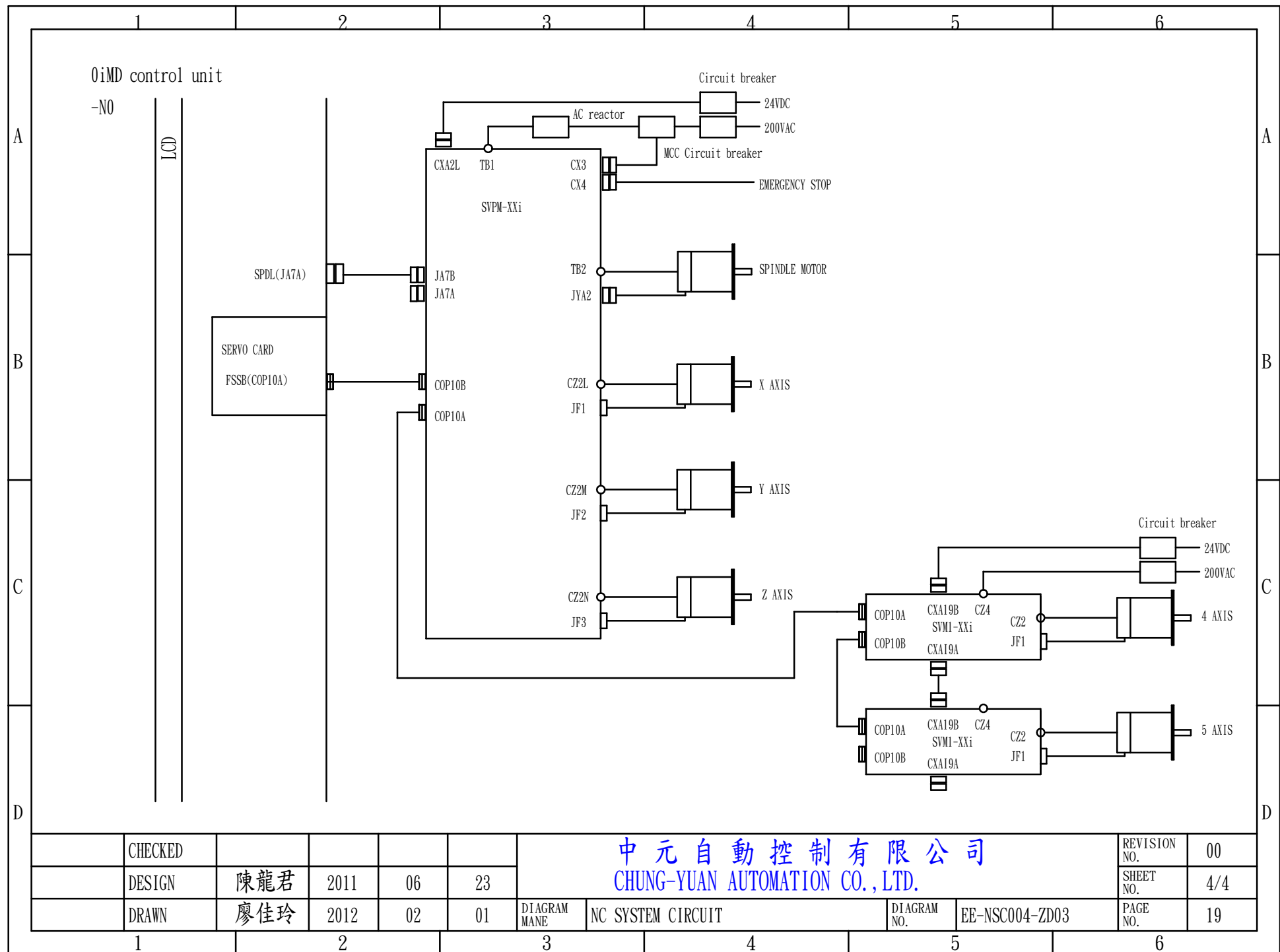
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|  | DESIGN  | 陳龍君 | 2011 | 06 | 23 | CHUNG-YUAN AUTOMATION CO.,LTD. |                   |  |  | SHEET NO.    | 1/4      |    |
|  | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM MANE                   | NC SYSTEM CIRCUIT |  |  | DIAGRAM NO.  | PAGE NO. | 17 |





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|  | DESIGN  | 陳龍君 | 2011 | 06 | 23 |   |                   |  |  | SHEET NO.      | 3/4            |             |    |
|  | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM<br>MANE                               | NC SYSTEM CIRCUIT |  |  | DIAGRAM<br>NO. | EE-NSC003-ZD03 | PAGE<br>NO. | 18 |





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01

DIAGRAM  
NAME

NC SYSTEM CIRCUIT

DIAGRAM  
NO.

EE-NSC004-ZD03

REVISION  
NO.

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SHEET  
NO.

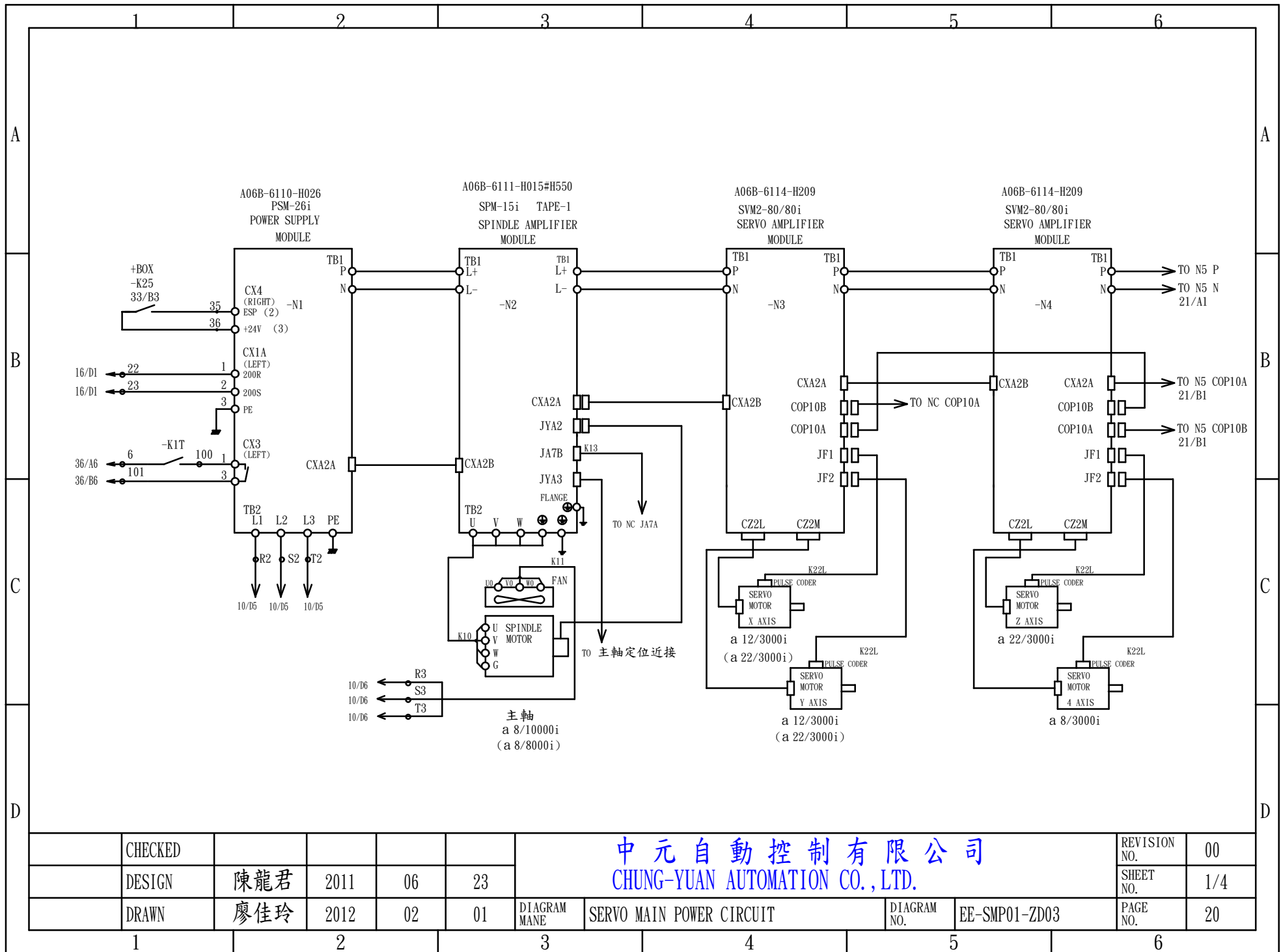
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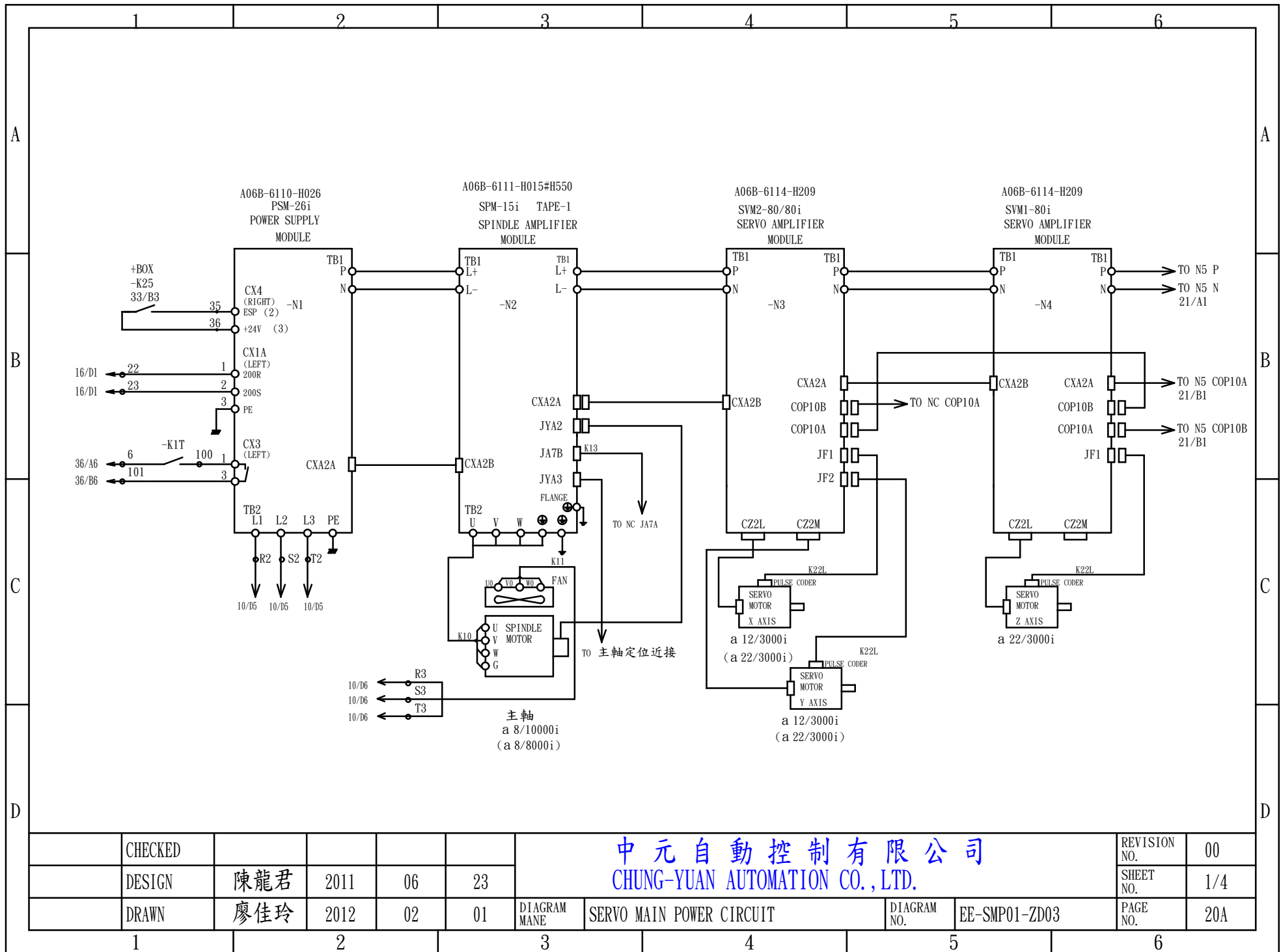
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CHUNG-YUAN AUTOMATION CO., LTD.


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DESIGN
陳龍君
2011
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DRAWN
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2012
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01
DIAGRAM MANE
SERVO MAIN POWER CIRCUIT
DIAGRAM NO.
EE-SMP01-ZD03
REVISION NO.
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CHUNG-YUAN AUTOMATION CO.,LTD.



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02

01

DIAGRAM  
MANE

SERVO MAIN POWER CIRCUIT

DIAGRAM  
NO.

EE-SMP01-ZD03

REVISION  
NO.

00

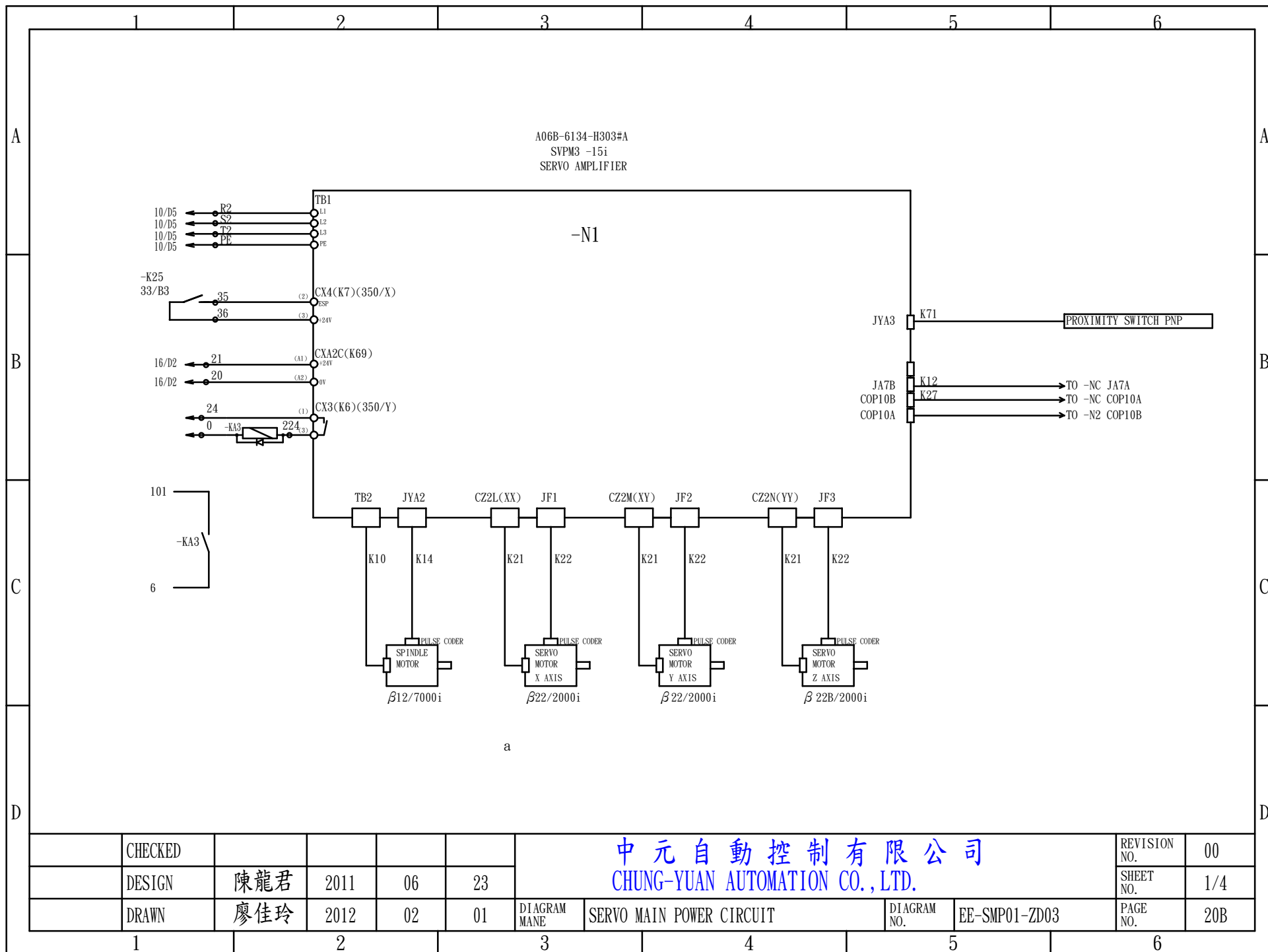
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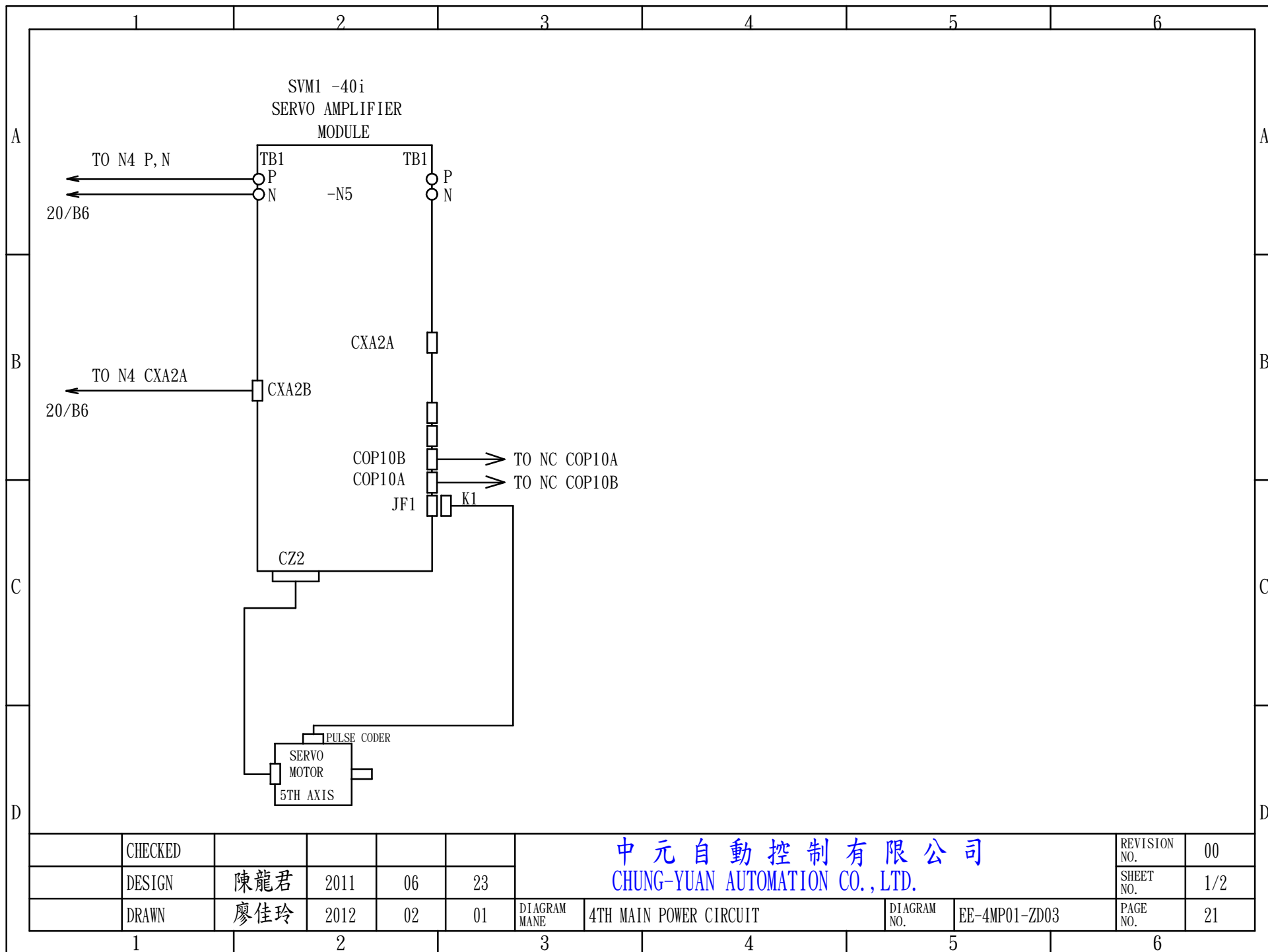
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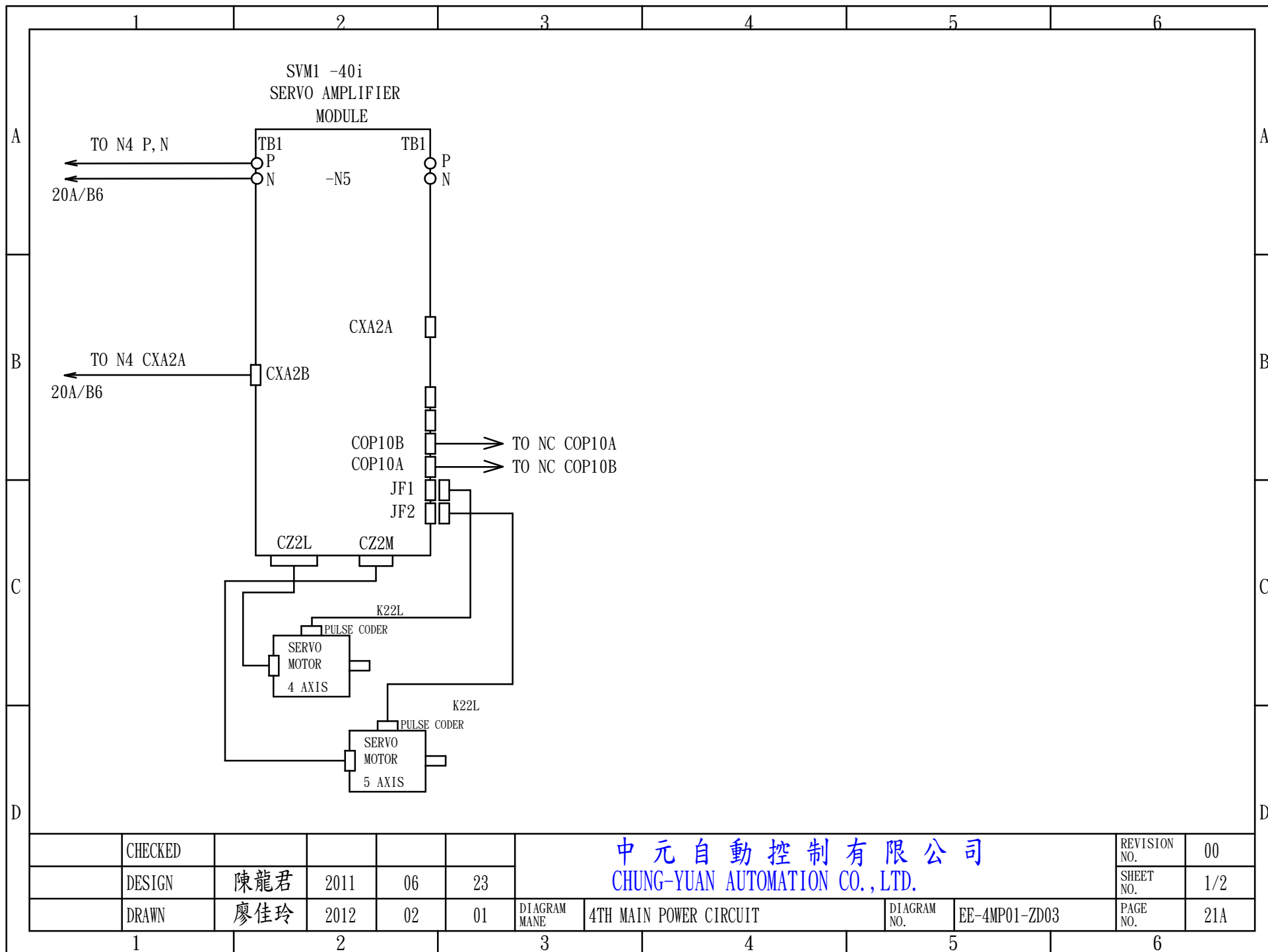
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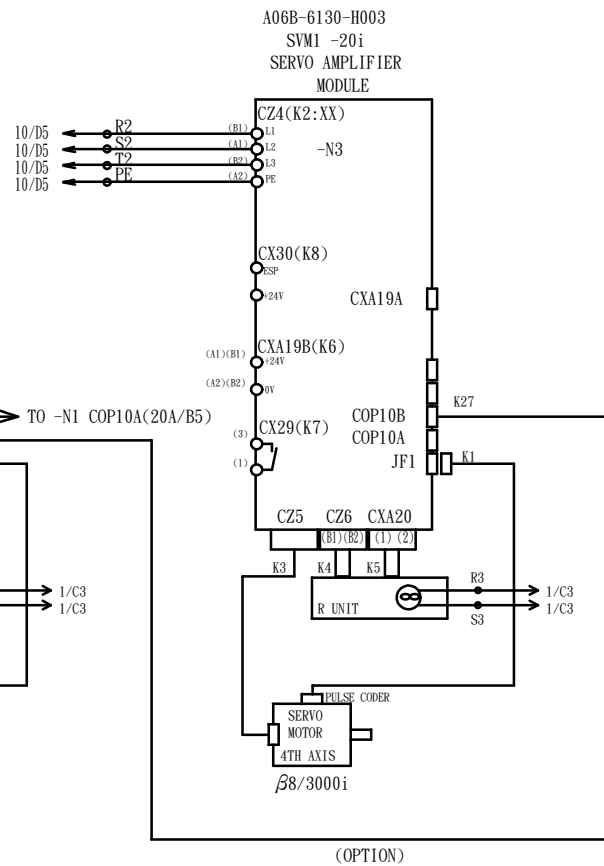
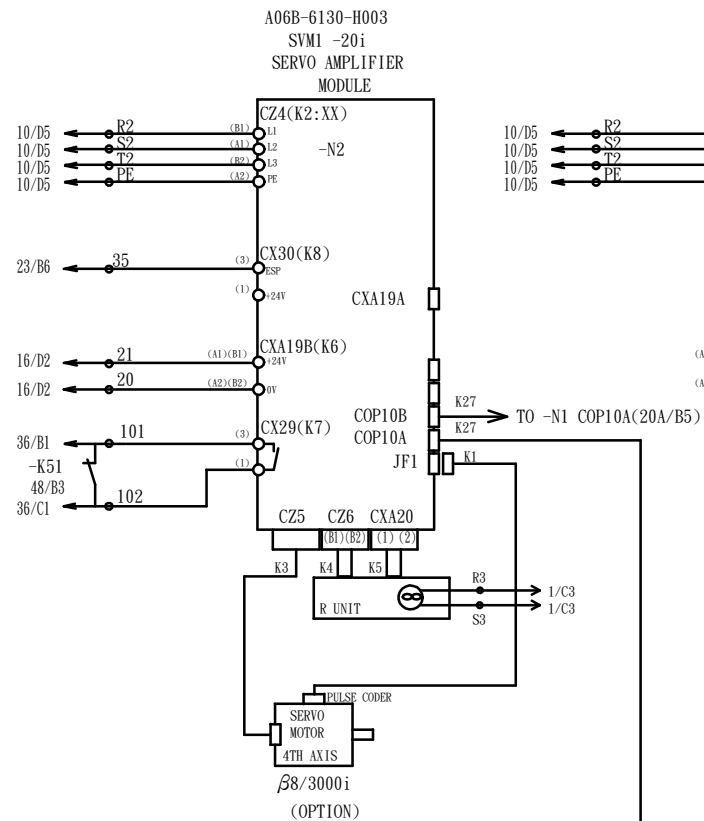
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| REVISION NO. | 01  |
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| PAGE NO.     | 21B |

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| DESIGN  | 陳龍君 | 2011 | 06 | 23 |  |
| DRAWN   | 廖佳玲 | 2012 | 02 | 01 |  |

DIAGRAM NO. 4 TH MAIN POWER CIRCUIT

DIAGRAM NO. EE-4MP02-ZD03

NC 電源供應器單元接腳圖 POWER UNIT E

(AMP-X)

| 1    | 2  | 3 | 腳位<br>用途 |
|------|----|---|----------|
| +24V | 0V | G |          |

21  
16/D2

20  
16/D2

16/D3  
24

16/D3  
20

(AMP-X) CPD1  
(DC-IN)

| 1    | 2  | 3 | 腳位<br>用途 |
|------|----|---|----------|
| +24V | 0V |   |          |

A02B-2202-0520

(AMP-X) I/O CARD POWER  
CPD1  
(DC-OUT)

| 1    | 2  | 3 | 腳位<br>用途 |
|------|----|---|----------|
| +24V | 0V |   |          |

(AMP-X) Oi I/O CP1 (DC-IN)

| 1    | 2  | 3 | 腳位<br>用途 |
|------|----|---|----------|
| +24V | 0V | G |          |

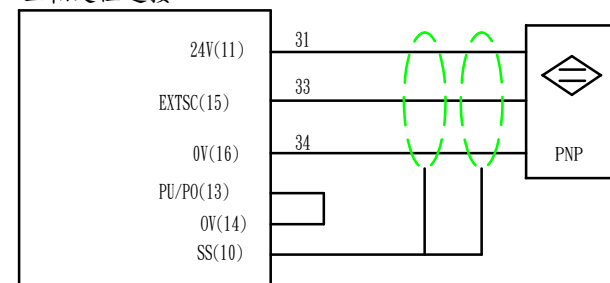
24  
16/D3

0  
16/D3

JA3 手輪

| 腳位 | 功能  |       |
|----|-----|-------|
| 1  | HA1 | HA 白  |
| 2  | HB1 | HB 綠  |
| 12 | 0V  |       |
| 14 | 0V  | 0V 黑  |
| 16 | 0V  |       |
| 9  | +5V |       |
| 18 | +5V | +5V 紅 |
| 20 | +5V |       |

主軸定位近接 JYA3



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DIAGRAM  
MANE

NC CONNECTOR CIRCUIT

DIAGRAM  
NO.

EE-NCC01-ZD03

REVISION  
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PAGE  
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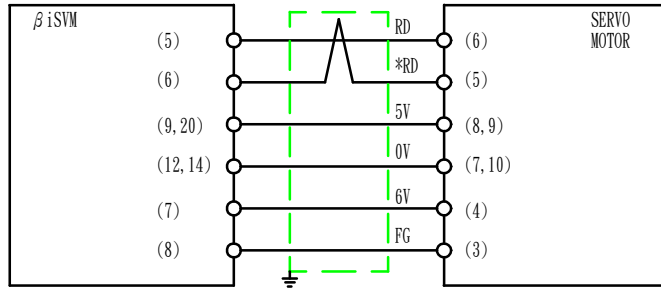
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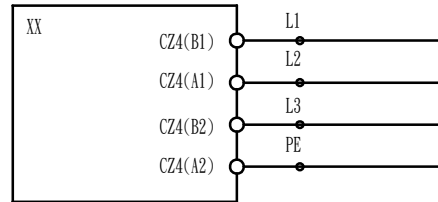
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# $\beta$ iAMP CONNECTION

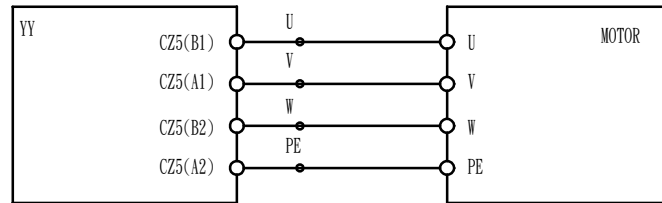
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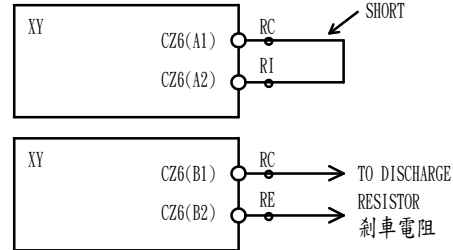
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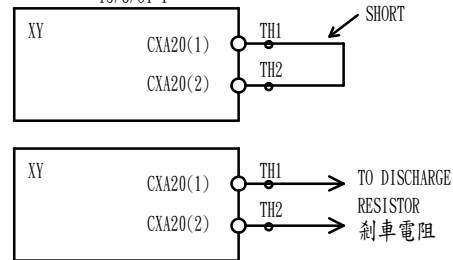
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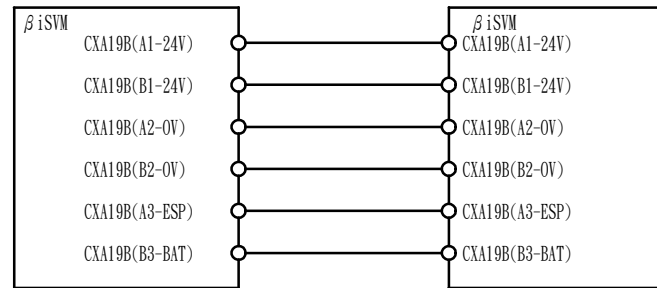
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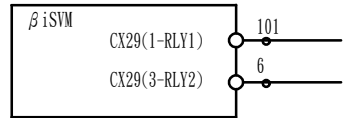
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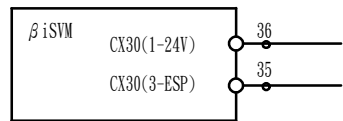
## K6



## K7:MCC



## K8:ESP



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$\beta$ iAMP CONNECTION

DIAGRAM  
NO.

EE- $\beta$ iAC01-ZD03

REVISION  
NO.

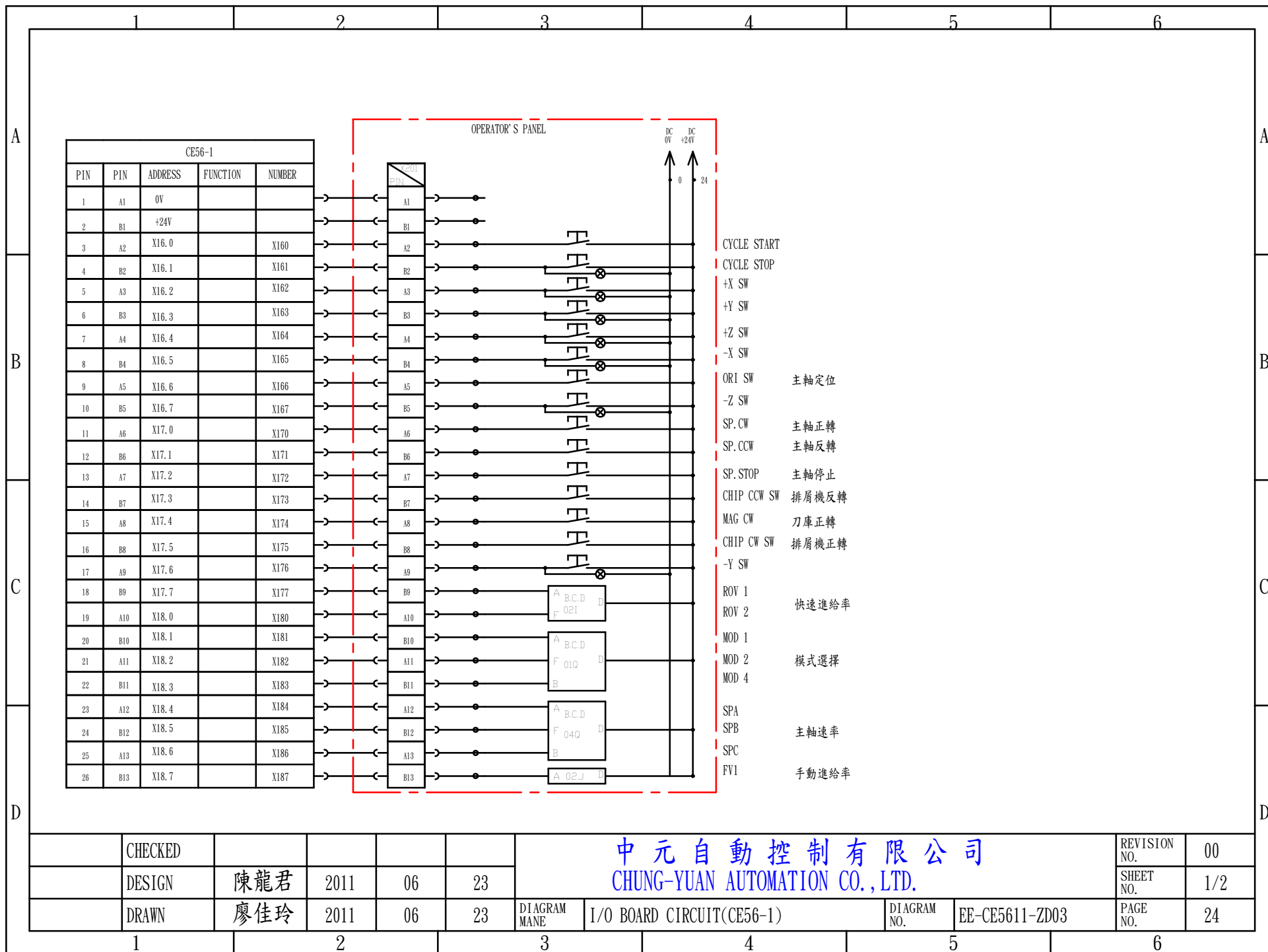
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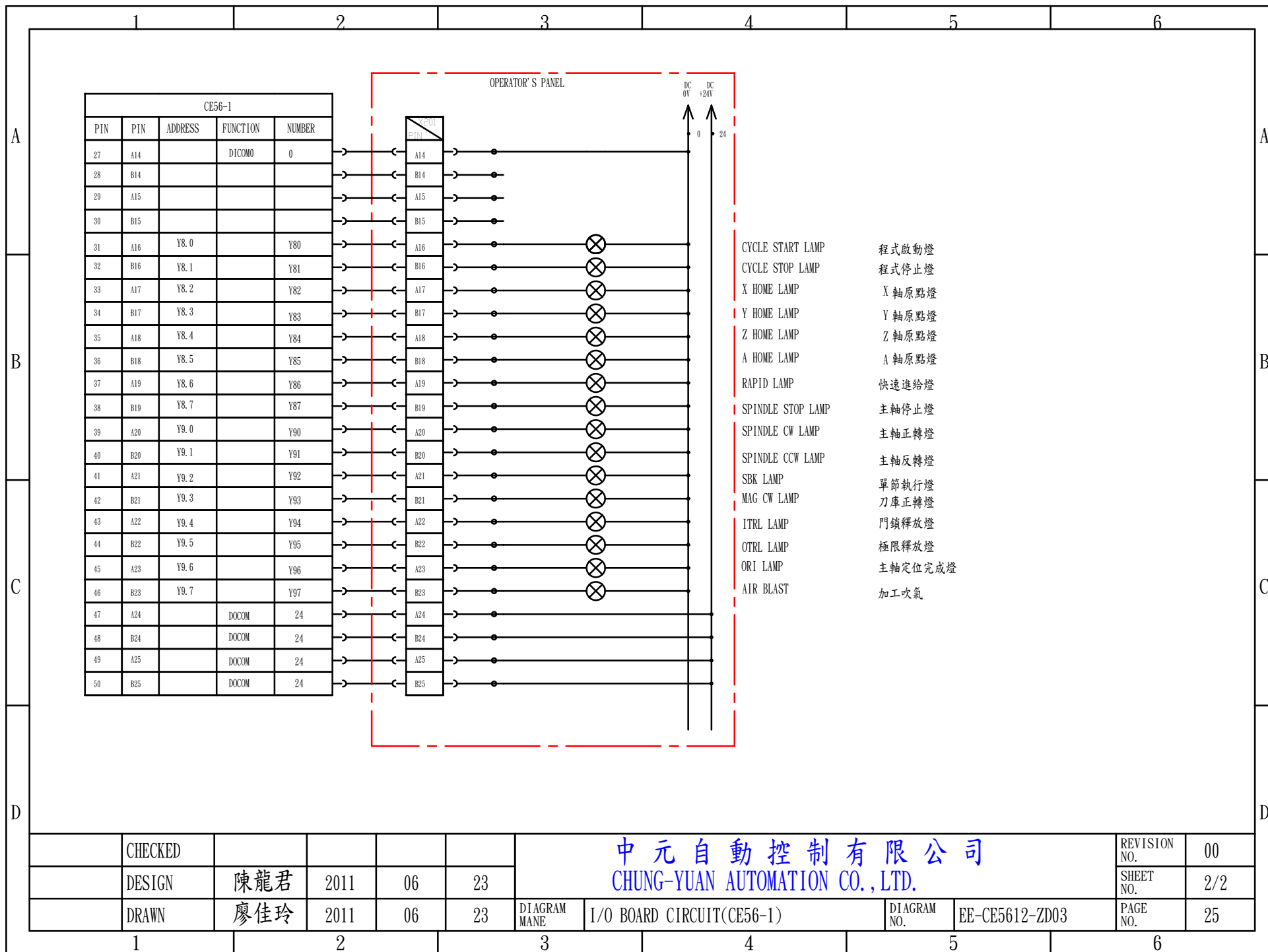
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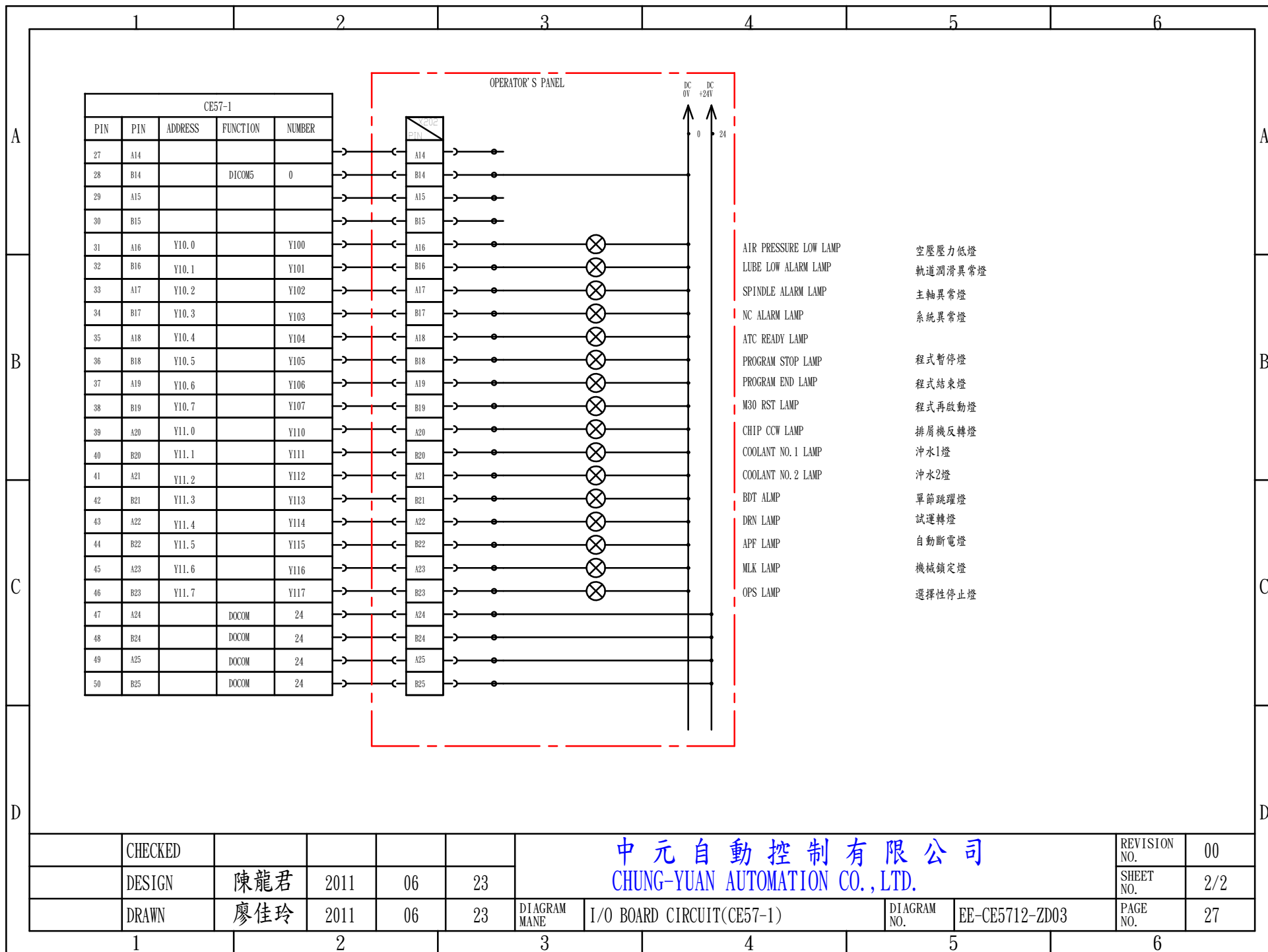
23











OPERATOR'S PANEL

DC 0V

DC +24V

0

24

AIR PRESSURE LOW LAMP

LUBE LOW ALARM LAMP

SPINDLE ALARM LAMP

NC ALARM LAMP

ATC READY LAMP

PROGRAM STOP LAMP

PROGRAM END LAMP

M30 RST LAMP

CHIP CCW LAMP

COOLANT NO.1 LAMP

COOLANT NO.2 LAMP

BDT ALMP

DRN LAMP

APF LAMP

MLK LAMP

OPS LAMP

空壓壓力低燈

軌道潤滑異常燈

主軸異常燈

系統異常燈

程式暫停燈

程式結束燈

程式再啟動燈

排屑機反轉燈

沖水1燈

沖水2燈

單節跳躍燈

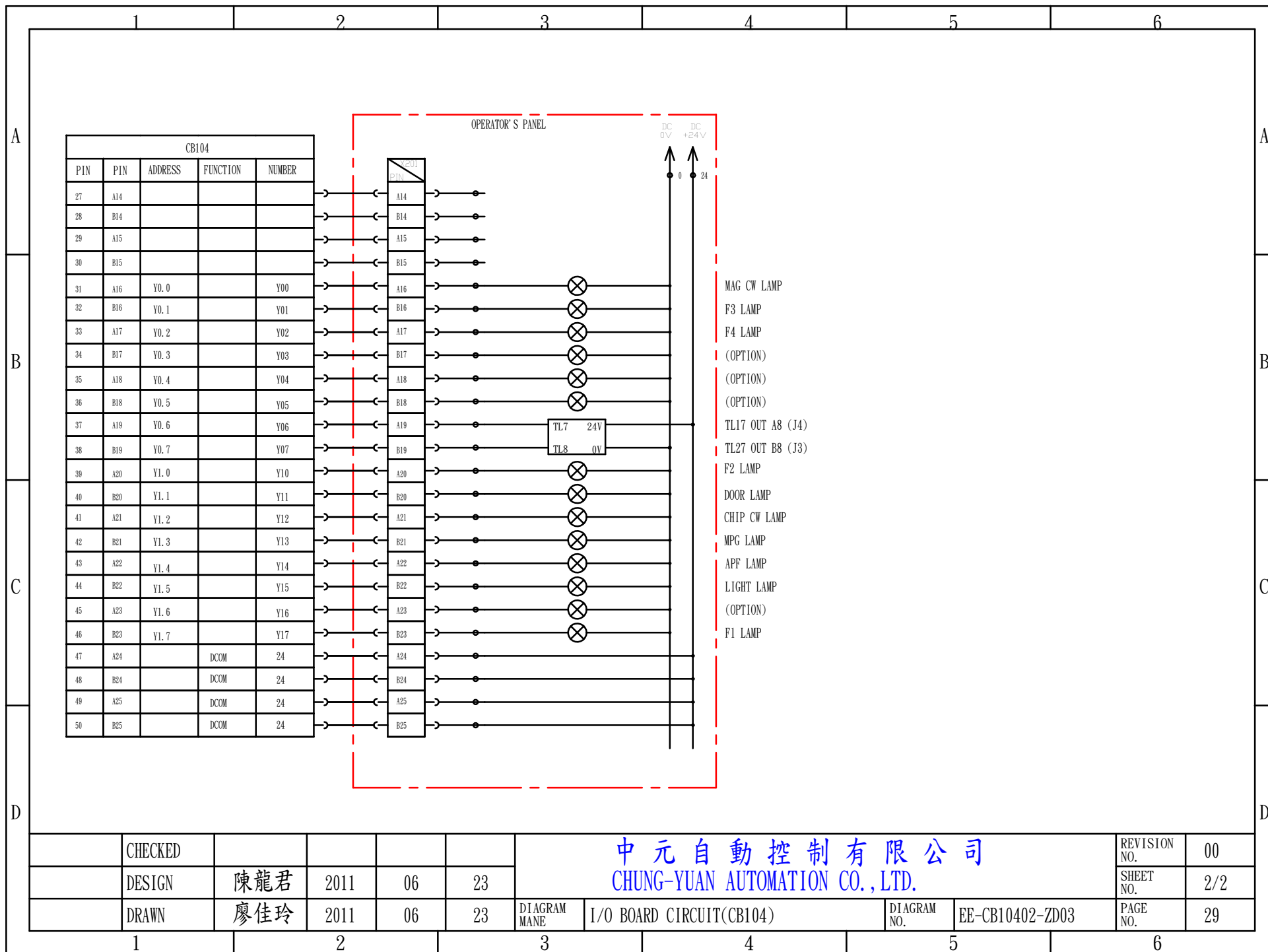
試運轉燈

自動斷電燈

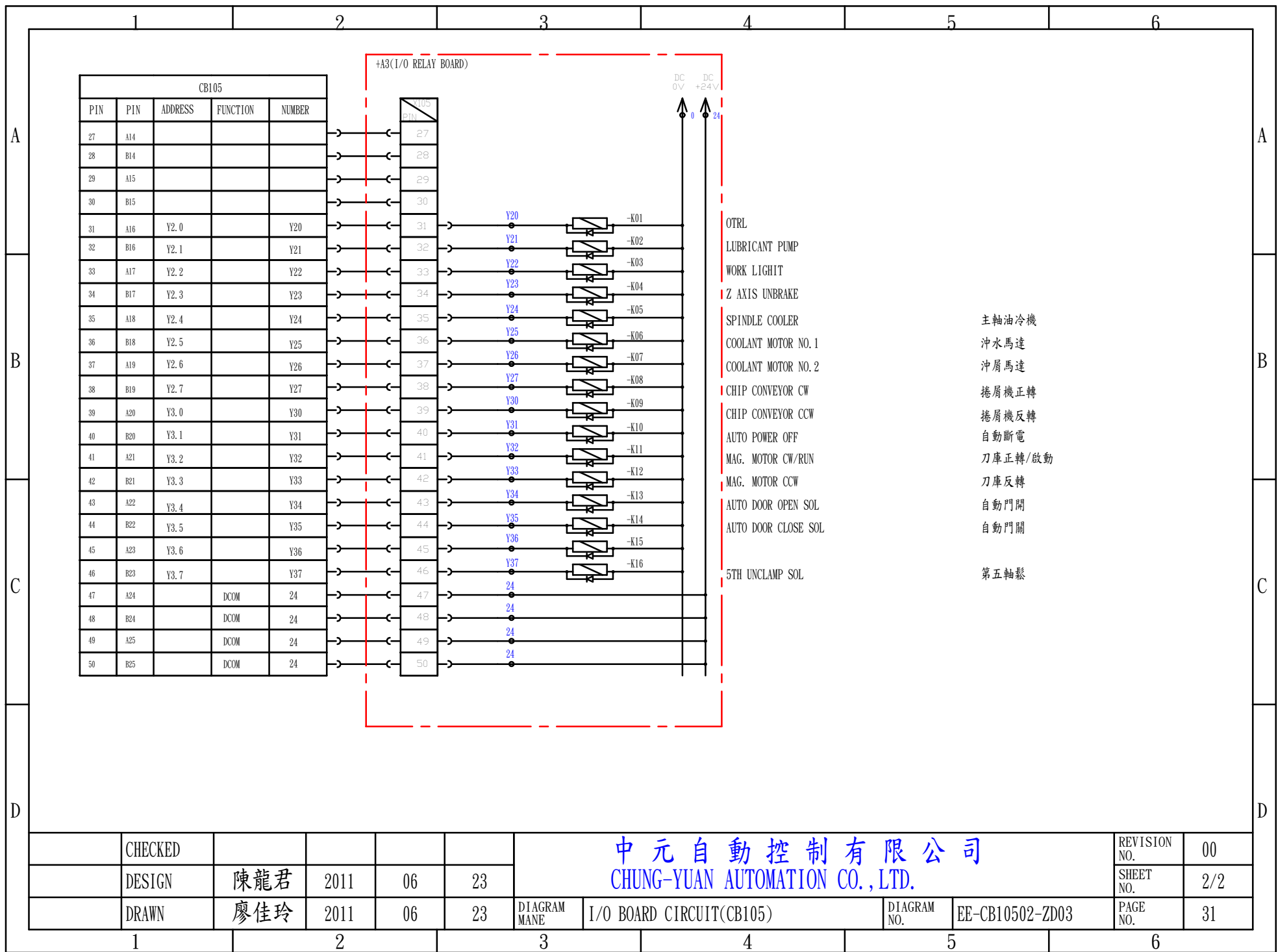
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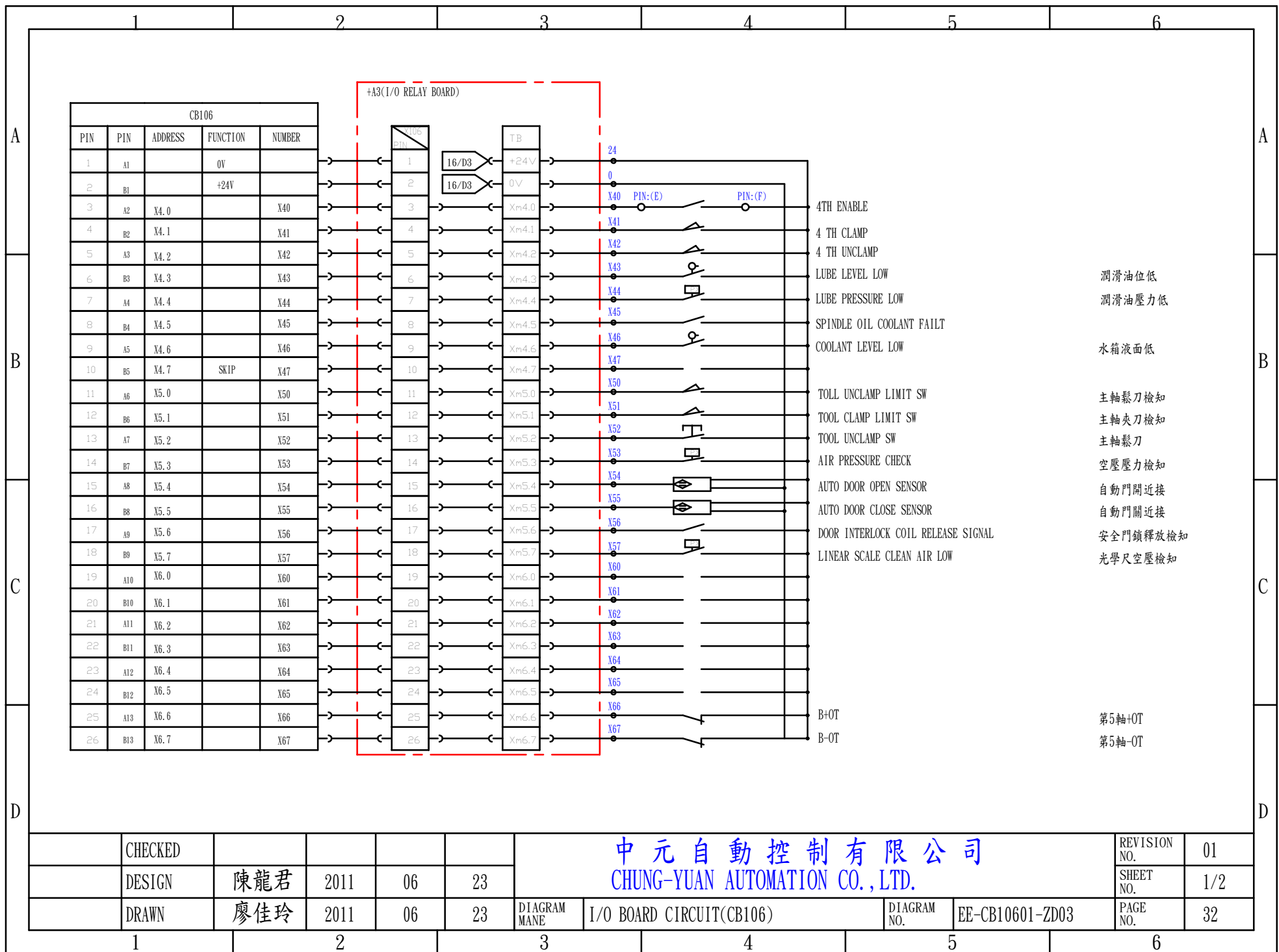
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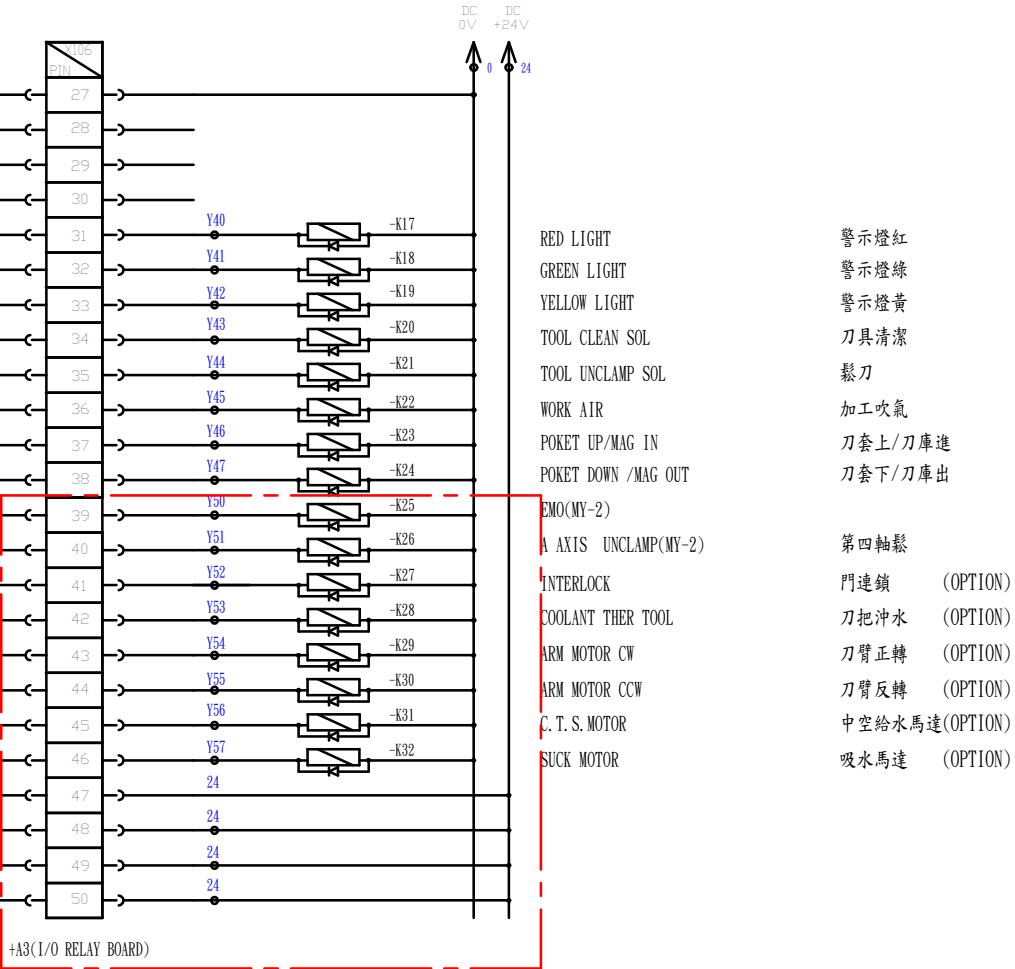




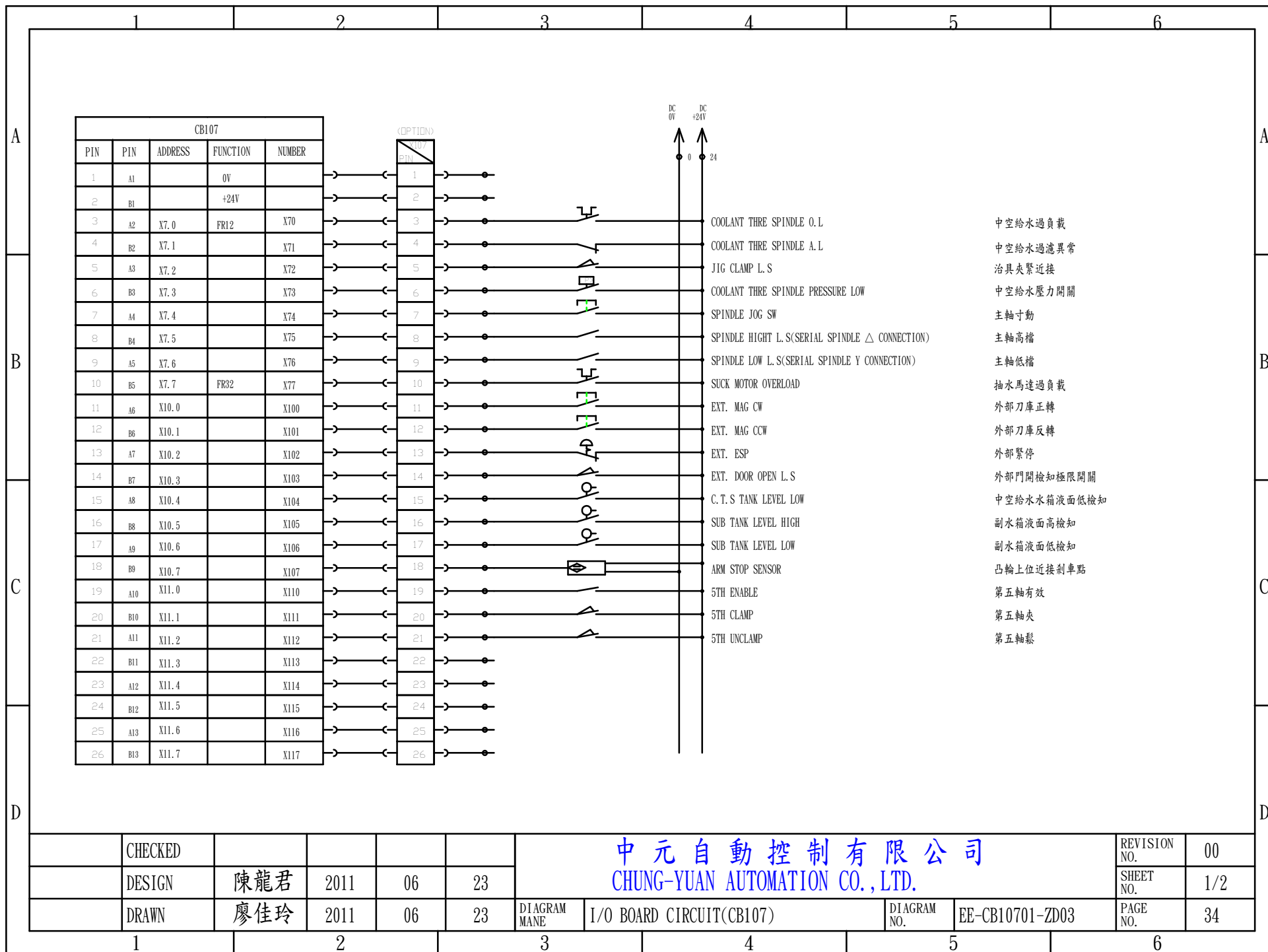




| CB106 |     |         |          |        |
|-------|-----|---------|----------|--------|
| PIN   | PIN | ADDRESS | FUNCTION | NUMBER |
| 27    | A14 |         | COM4     | 0      |
| 28    | B14 |         |          |        |
| 29    | A15 |         |          |        |
| 30    | B15 |         |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

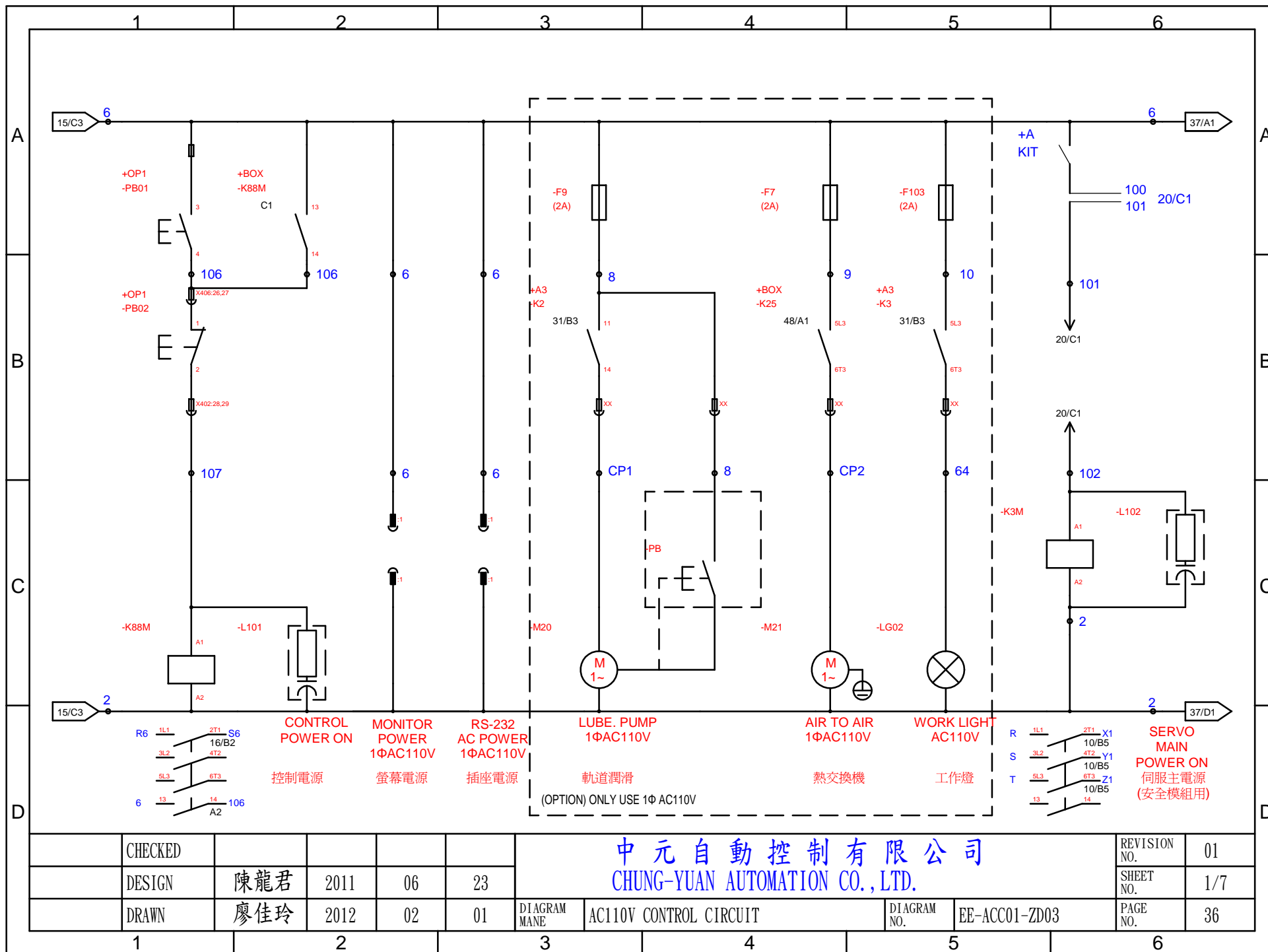


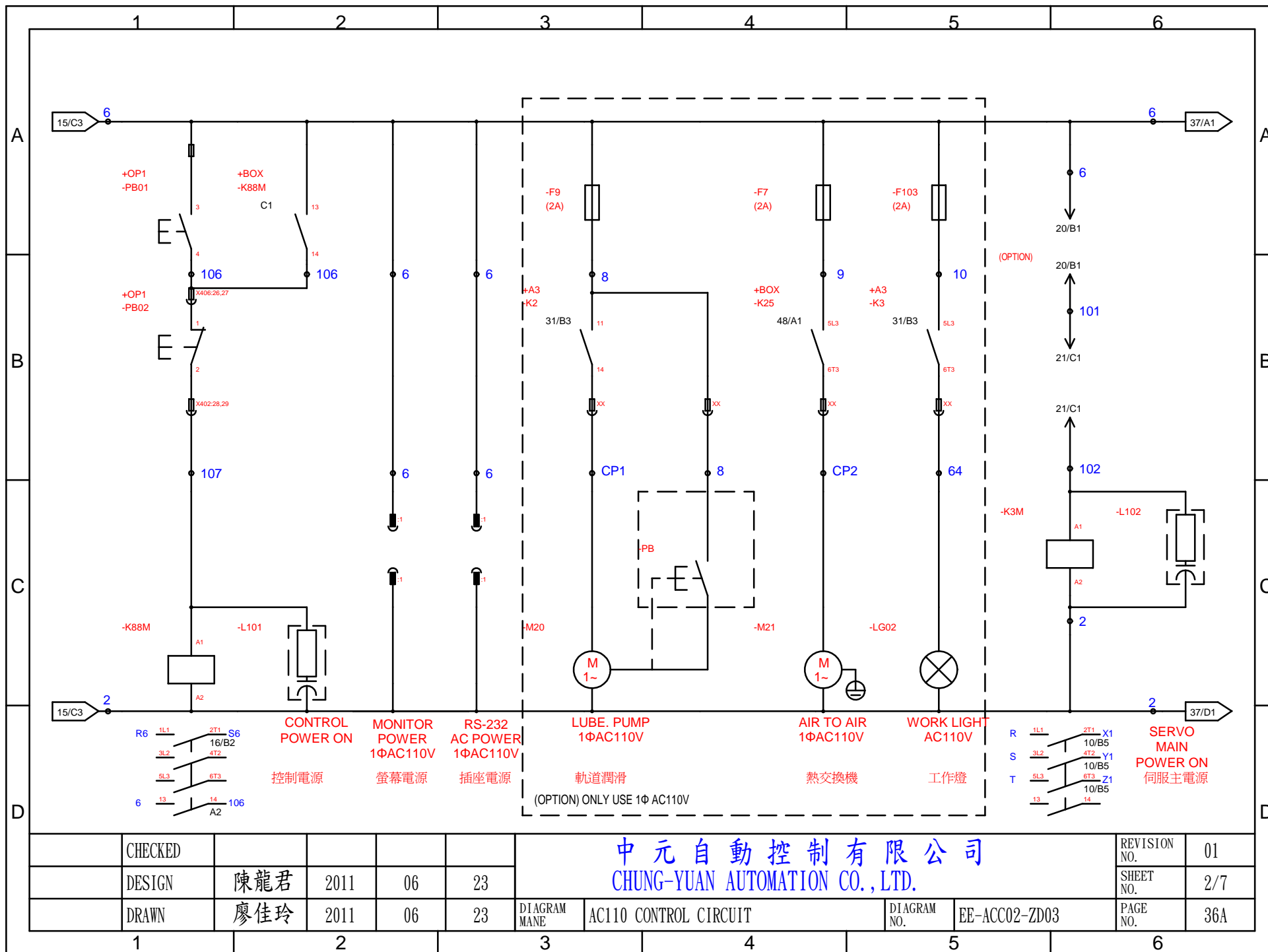
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| DESIGN  | 陳龍君 | 2011 | 06 | 23 |              |   |             |                 | SHEET NO.    | 2/2 |
| DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM MANE | I/O BOARD CIRCUIT(CB106)                      | DIAGRAM NO. | EE-CB10602-ZD03 | PAGE NO.     | 33  |

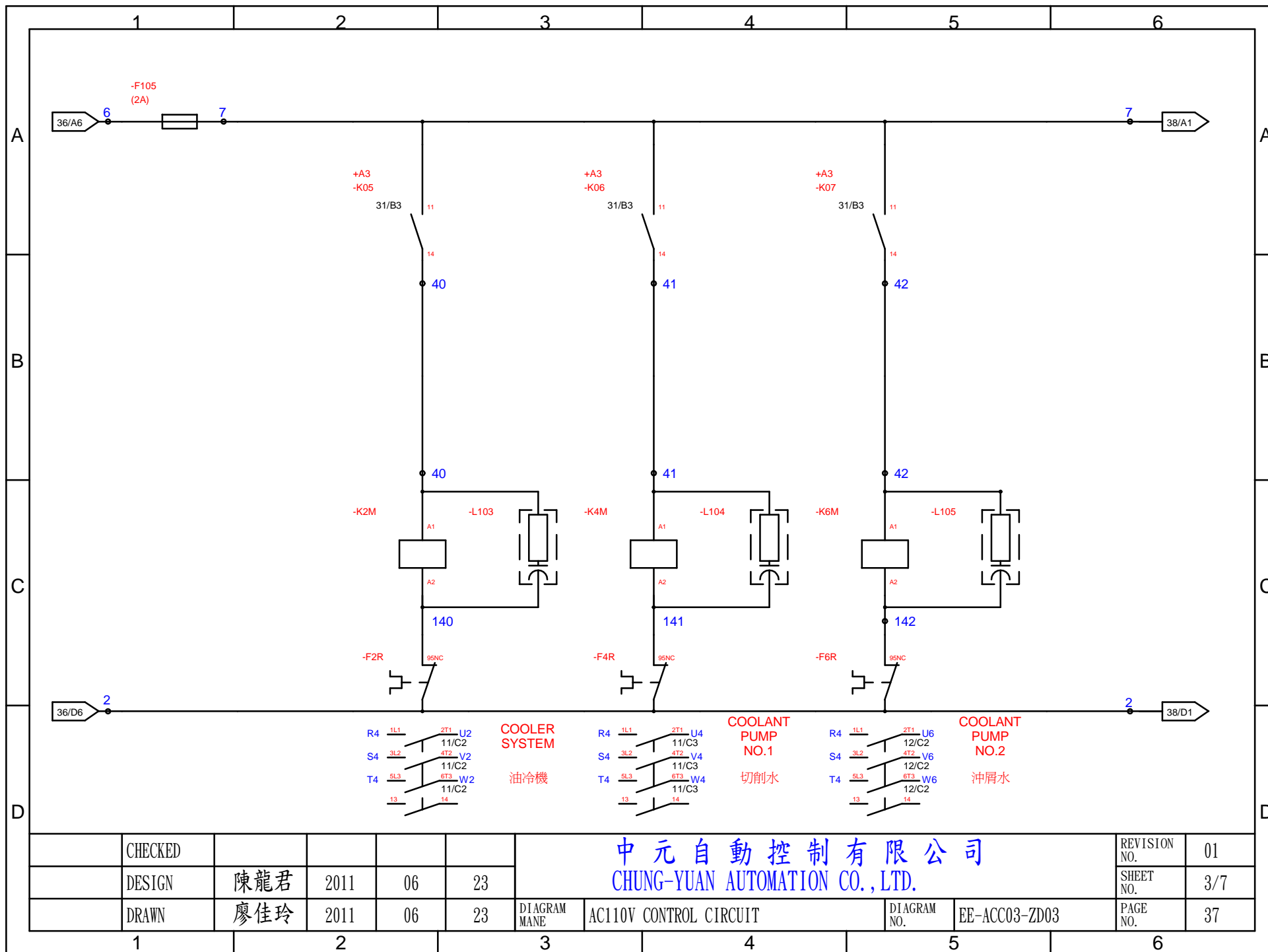


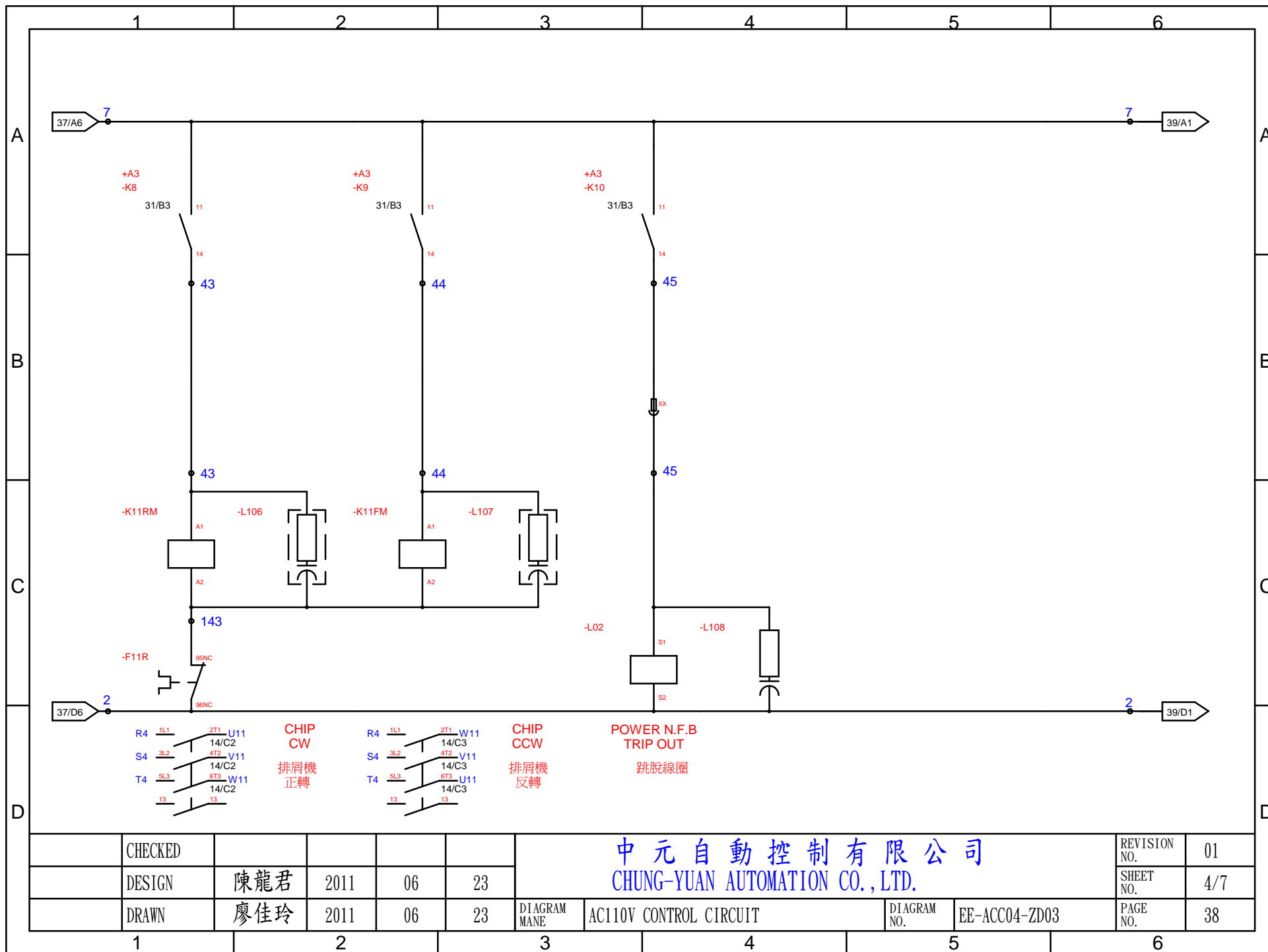












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DIAGRAM  
MANE

中元自動控制有限公司  
CHUNG-YUAN AUTOMATION CO., LTD.

AC110V CONTROL CIRCUIT

DIAGRAM  
NO.

EE-ACC04-ZD03

REVISION  
NO.

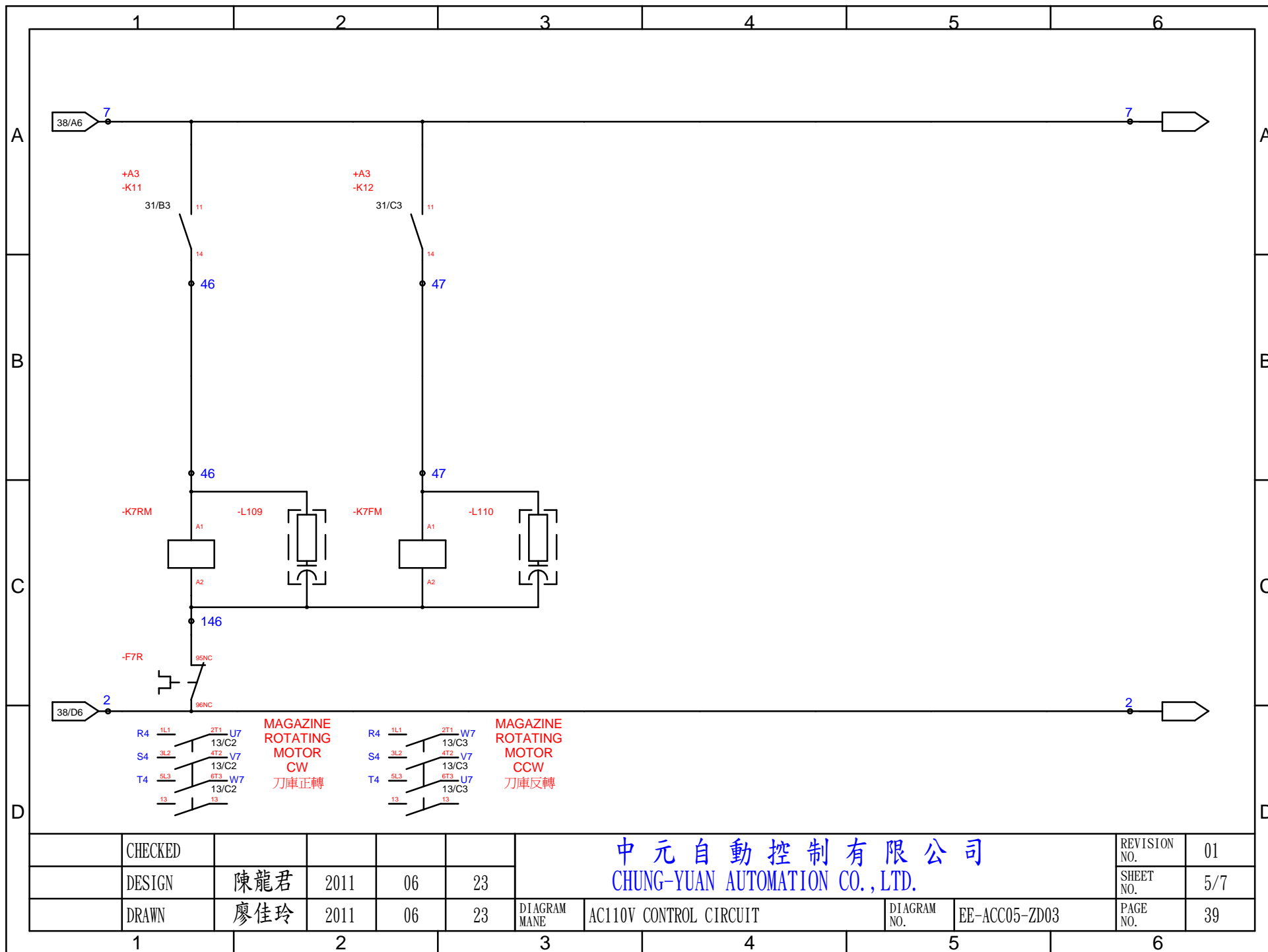
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DIAGRAM  
NAME

AC110V CONTROL CIRCUIT

DIAGRAM  
NO.

EE-ACC05-ZD03

REVISION  
NO.

01

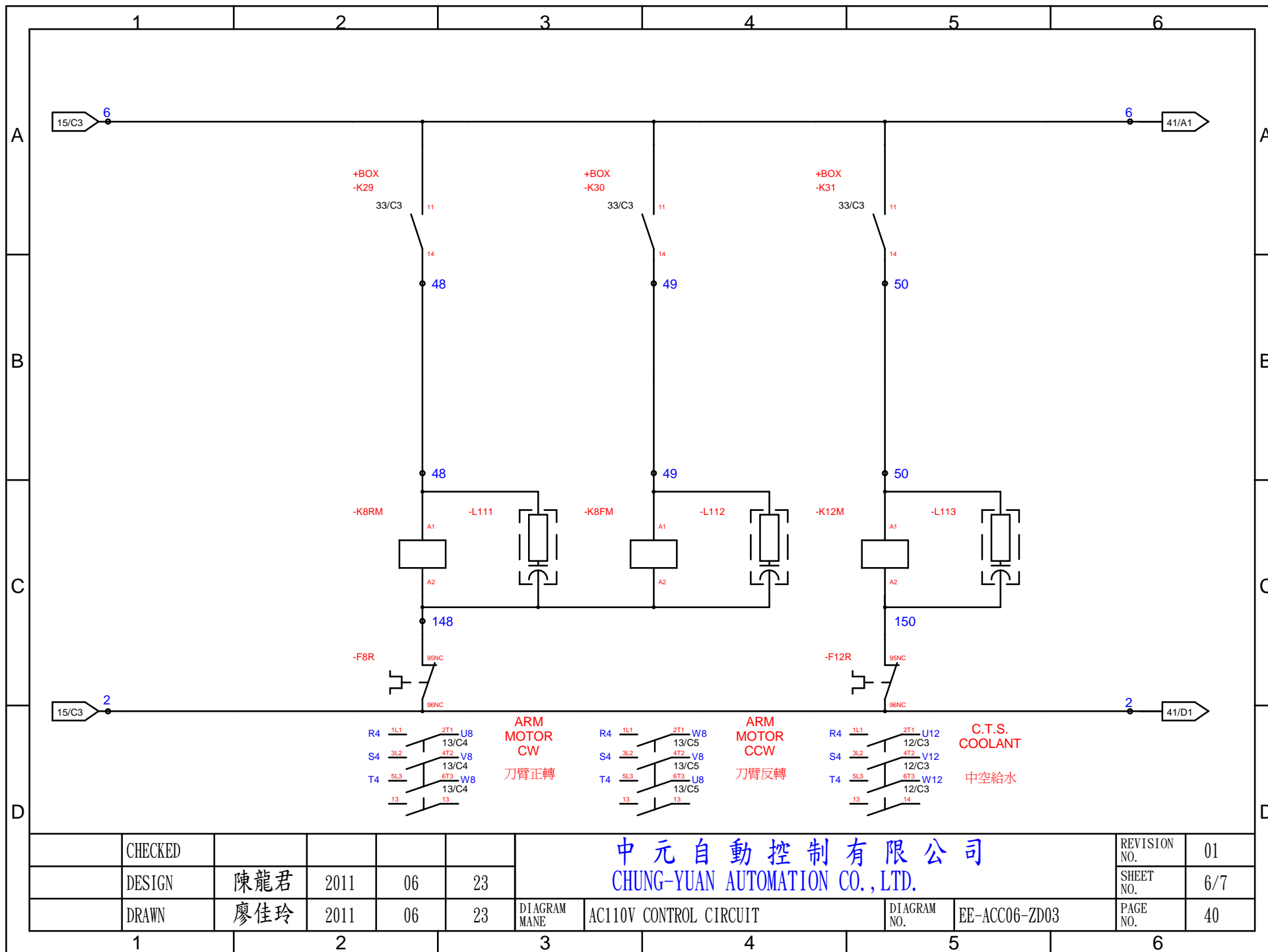
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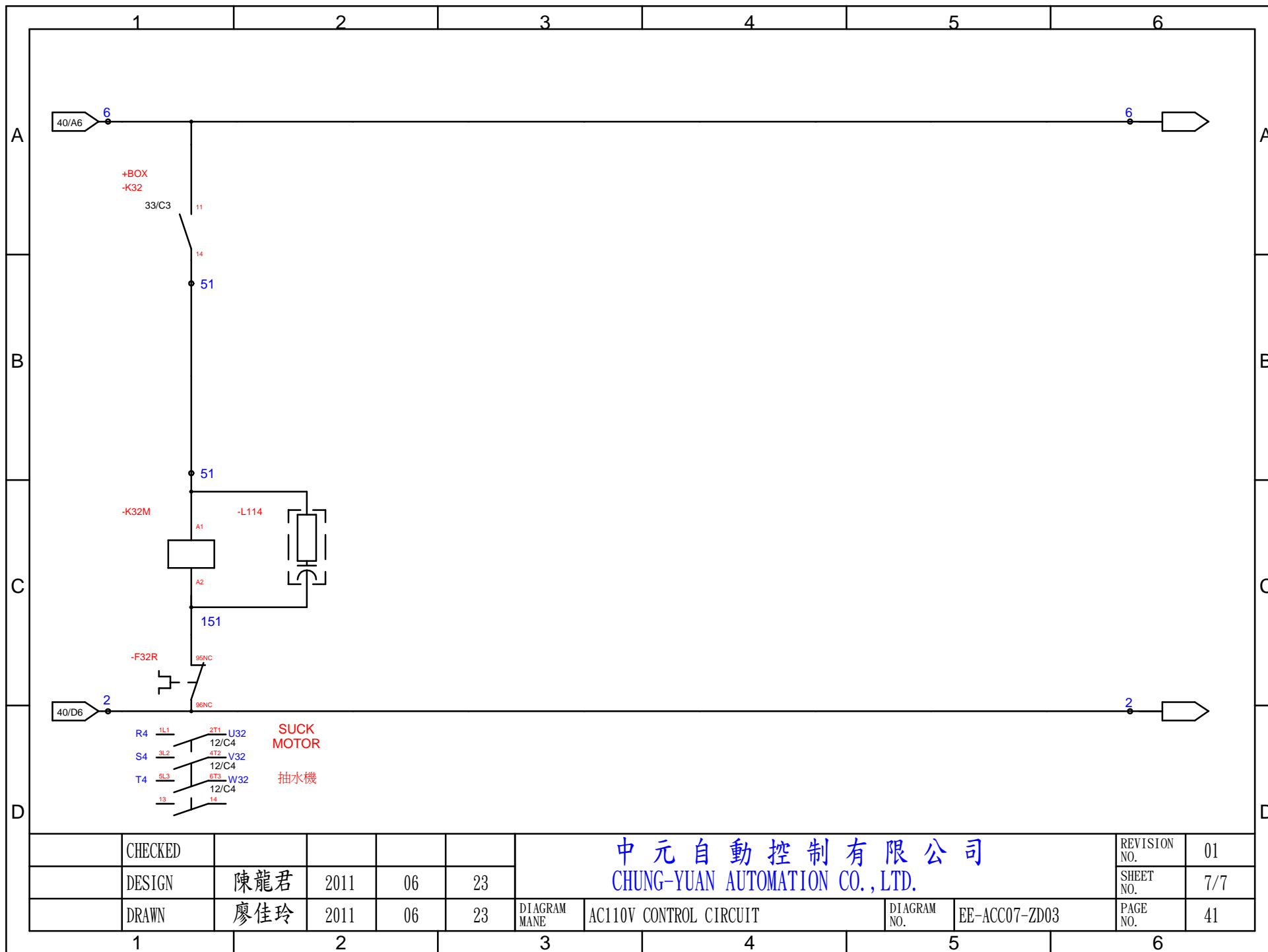
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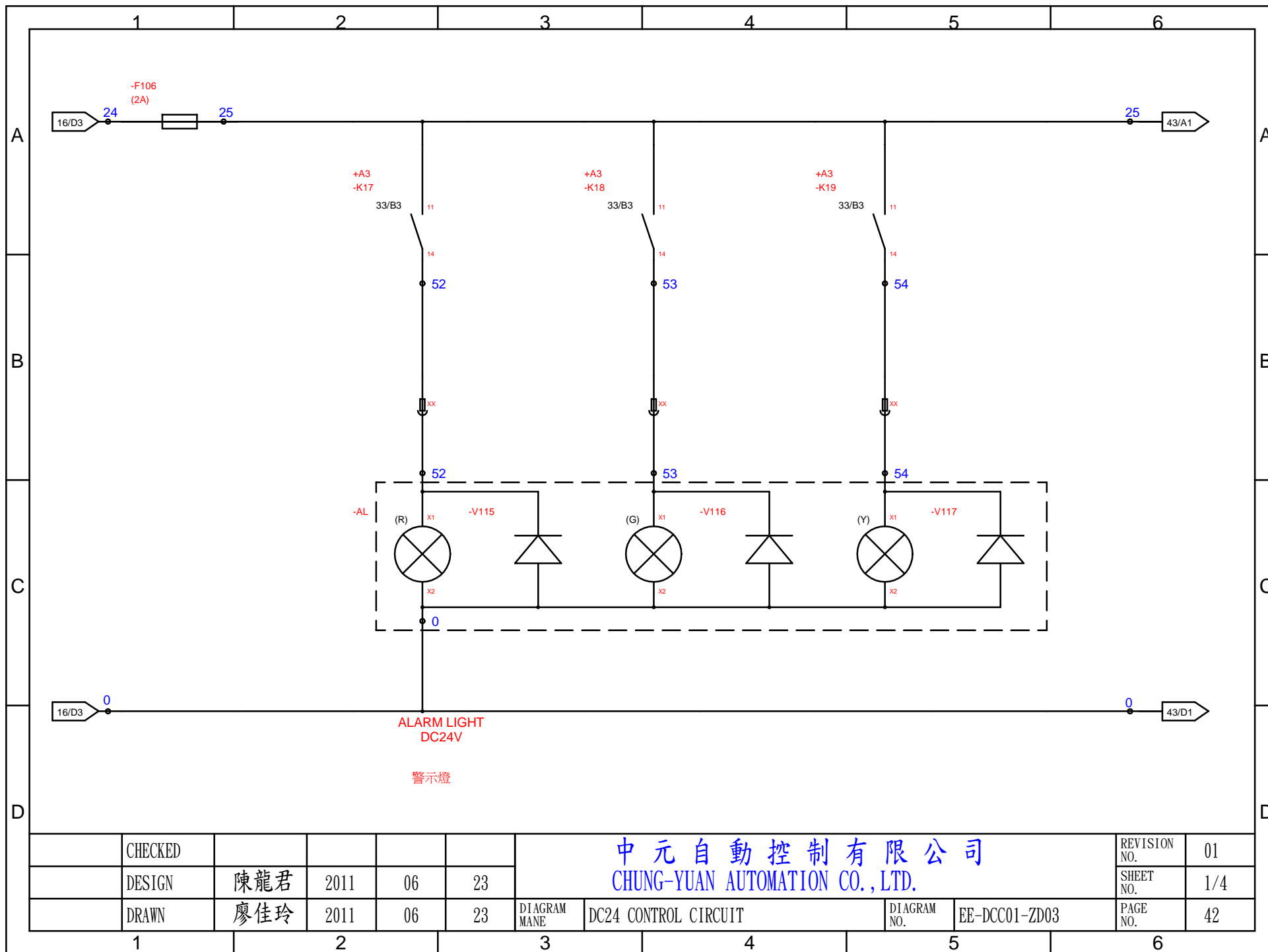
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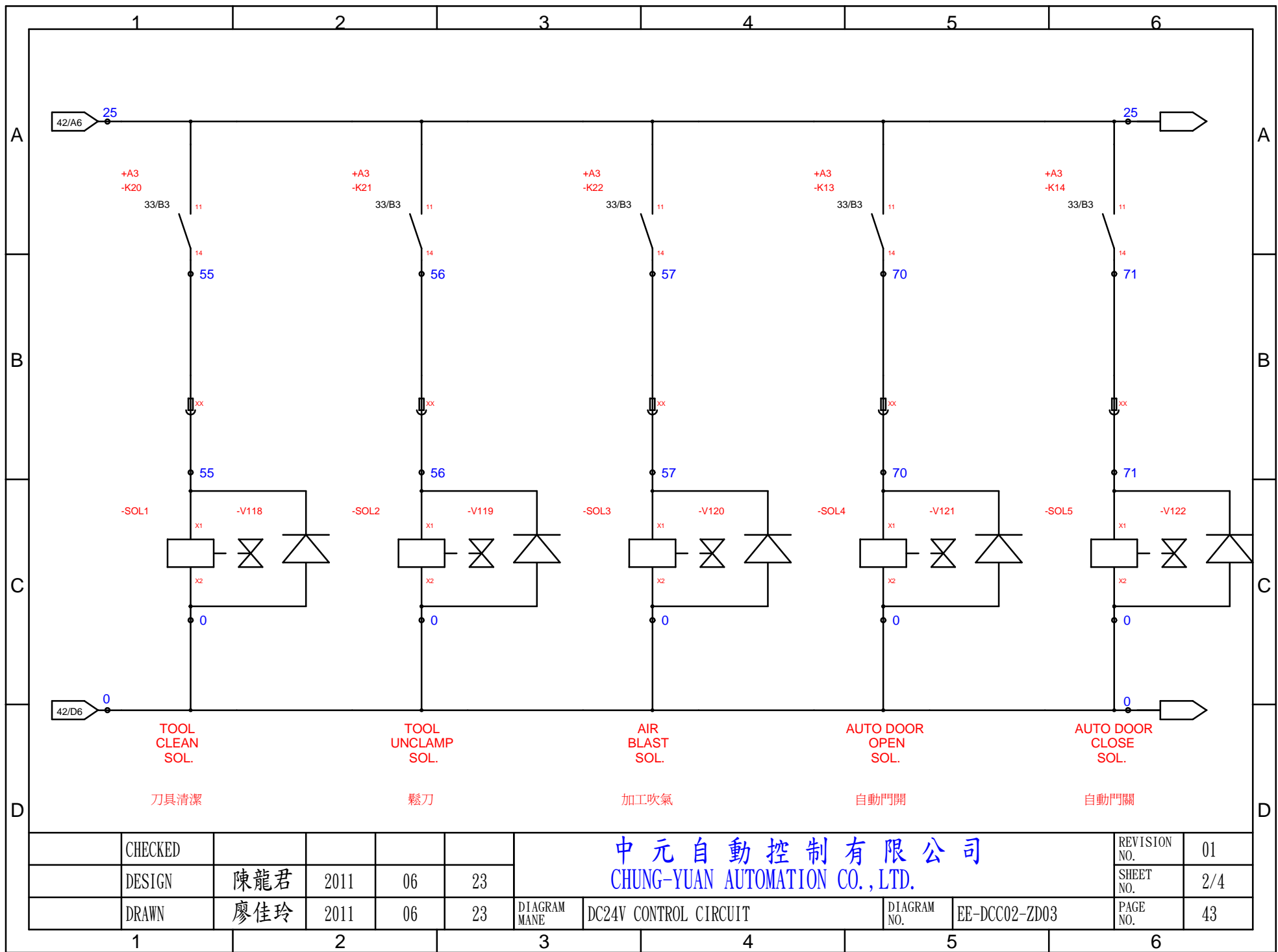
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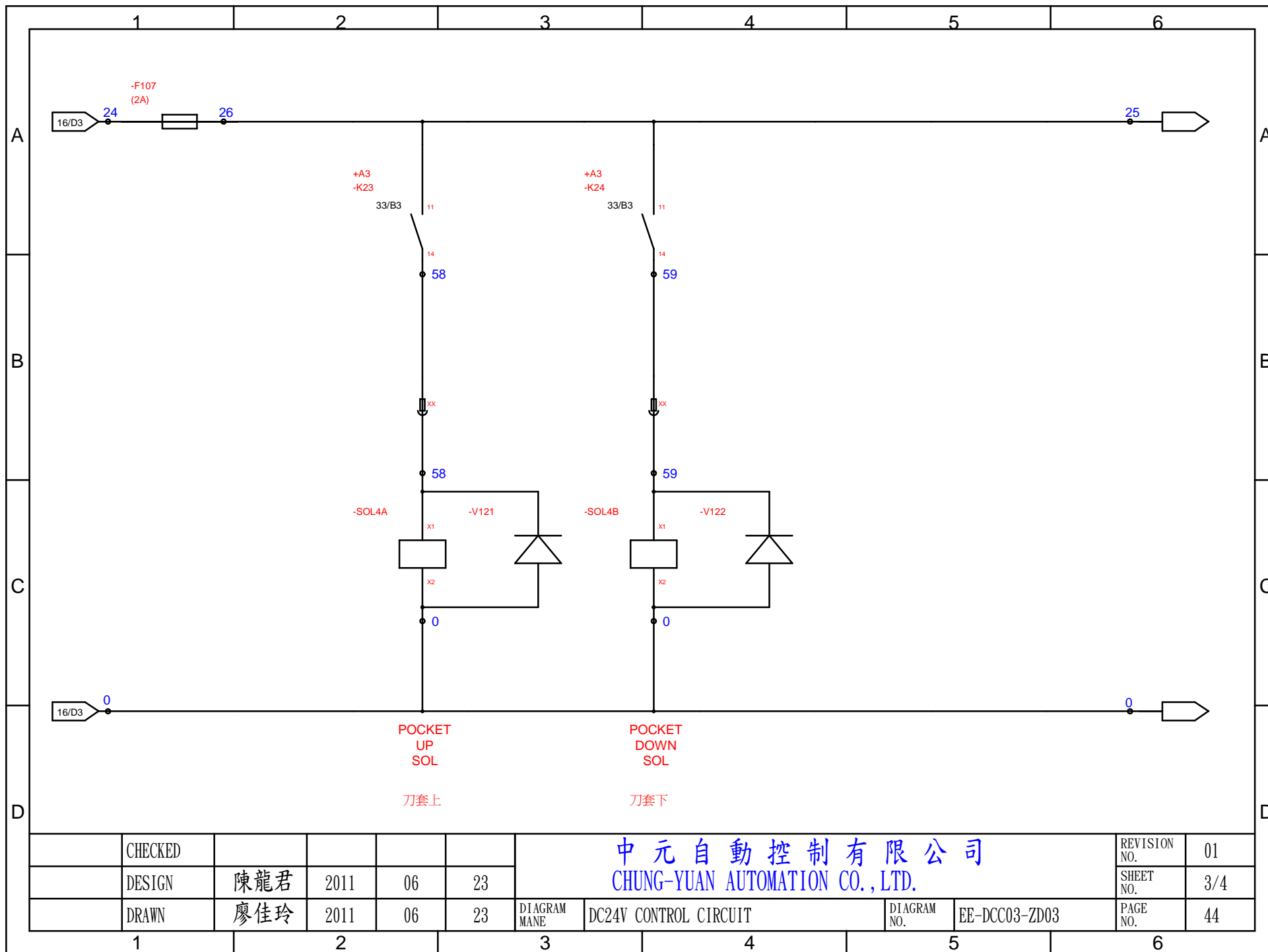


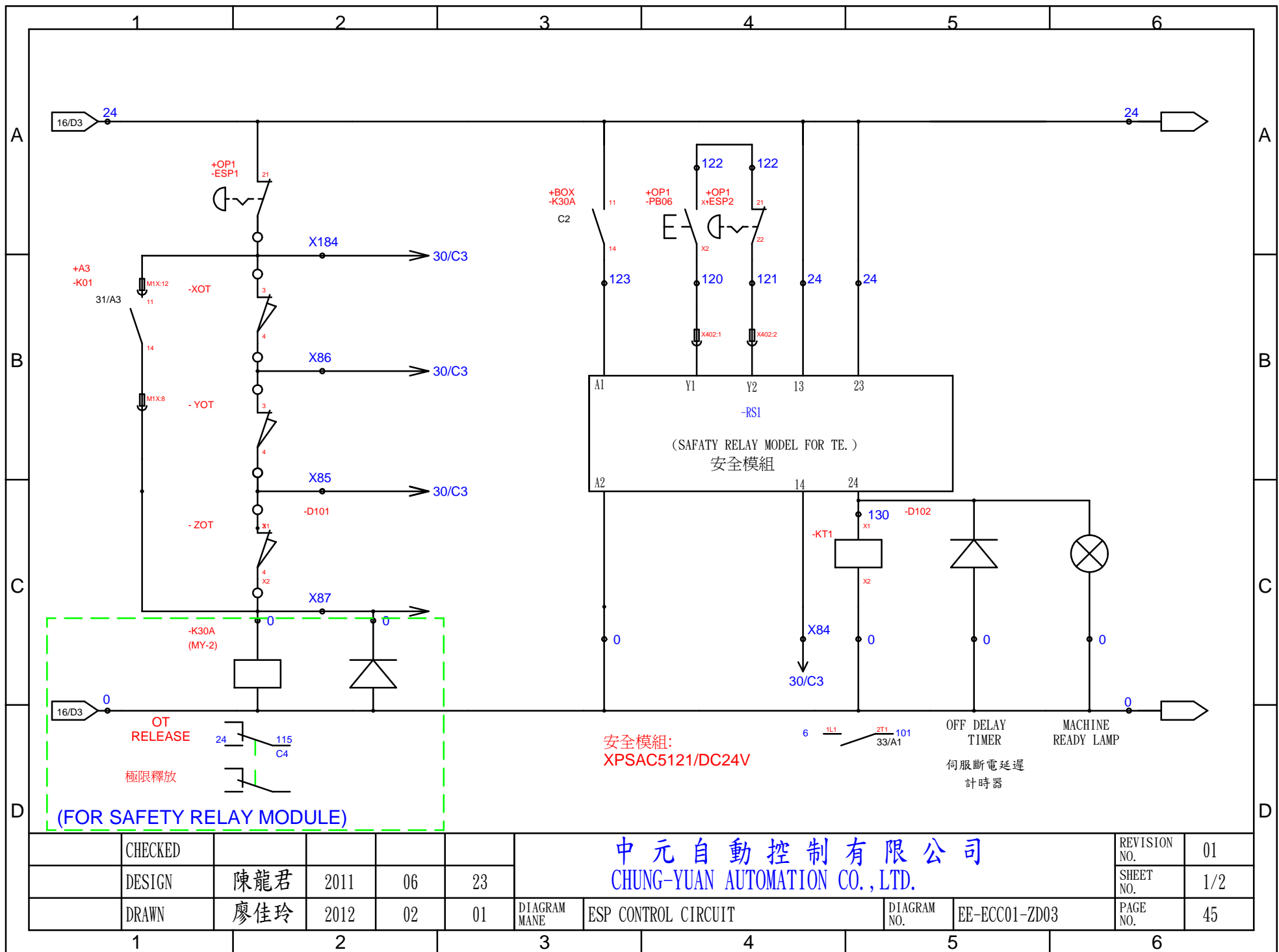




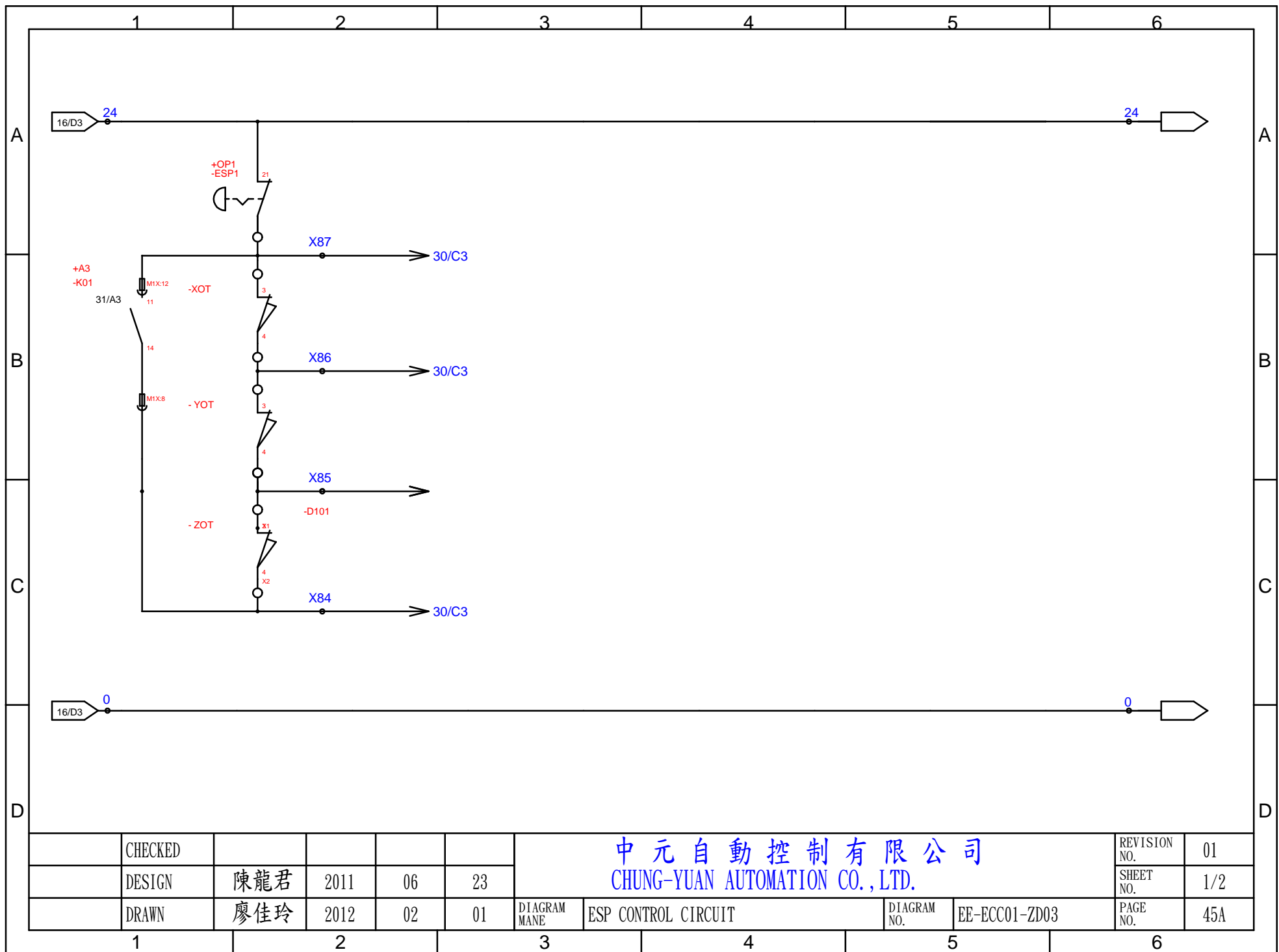








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|  | DESIGN  | 陳龍君 | 2011 | 06 | 23 |  |                     |             | SHEET NO.     | 1/2         |
|  | DRAWN   | 廖佳玲 | 2012 | 02 | 01 | DIAGRAM MANE                                 | ESP CONTROL CIRCUIT | DIAGRAM NO. | EE-ECC01-ZD03 | PAGE NO. 45 |



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01

DIAGRAM  
MANE

ESP CONTROL CIRCUIT

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CHUNG-YUAN AUTOMATION CO., LTD.

DIAGRAM  
NO.

EE-ECC01-ZD03

REVISION  
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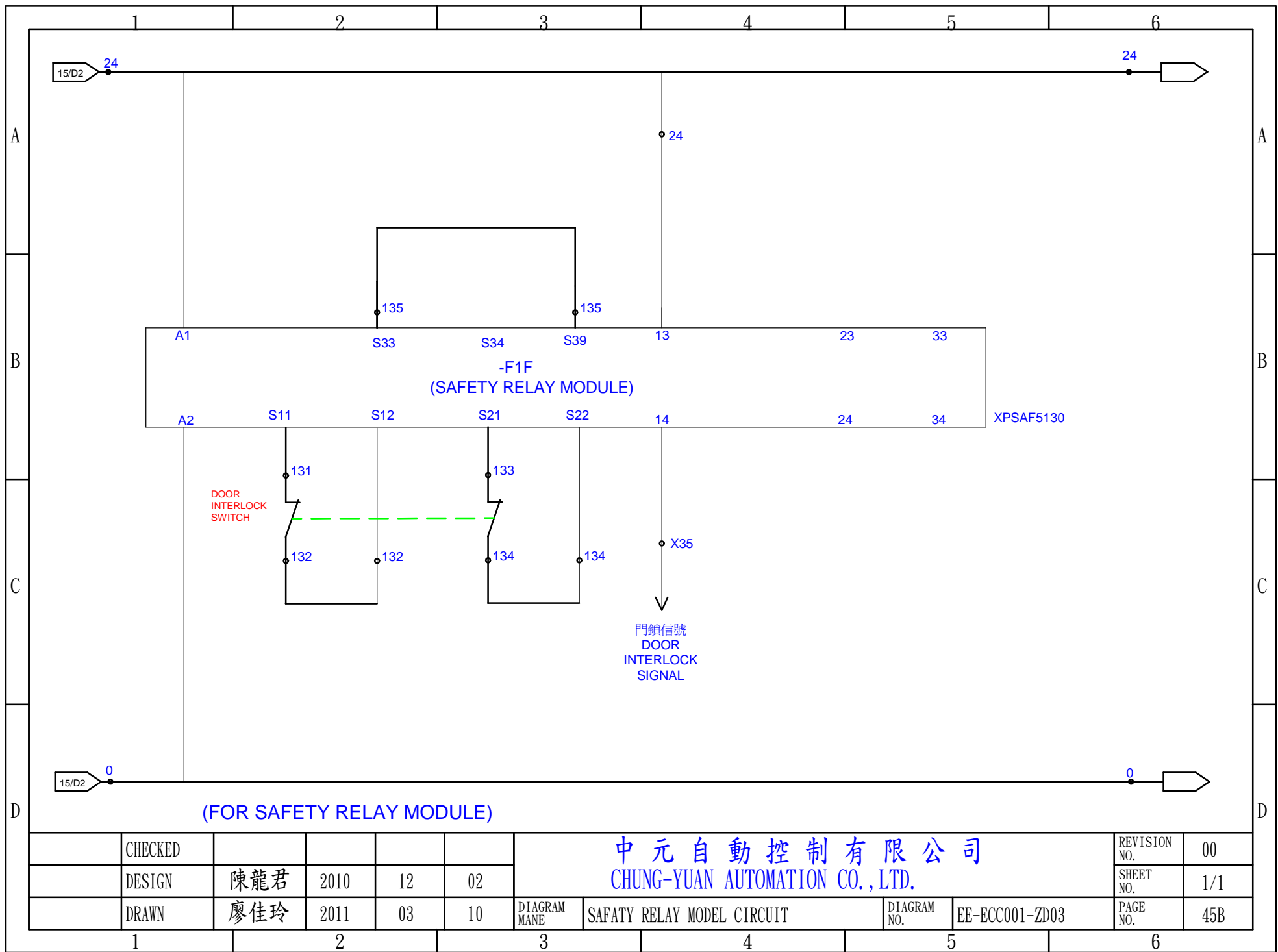
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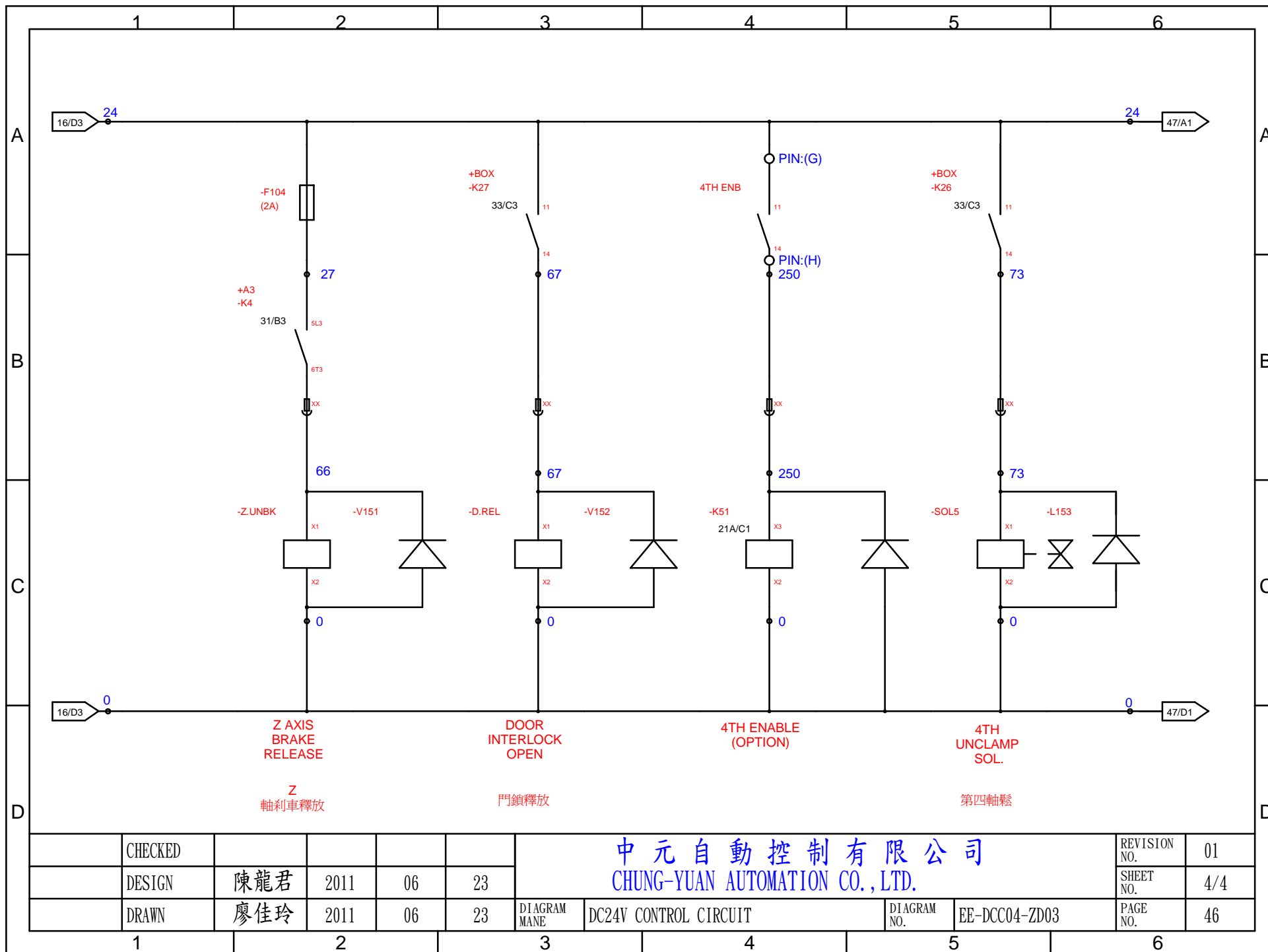
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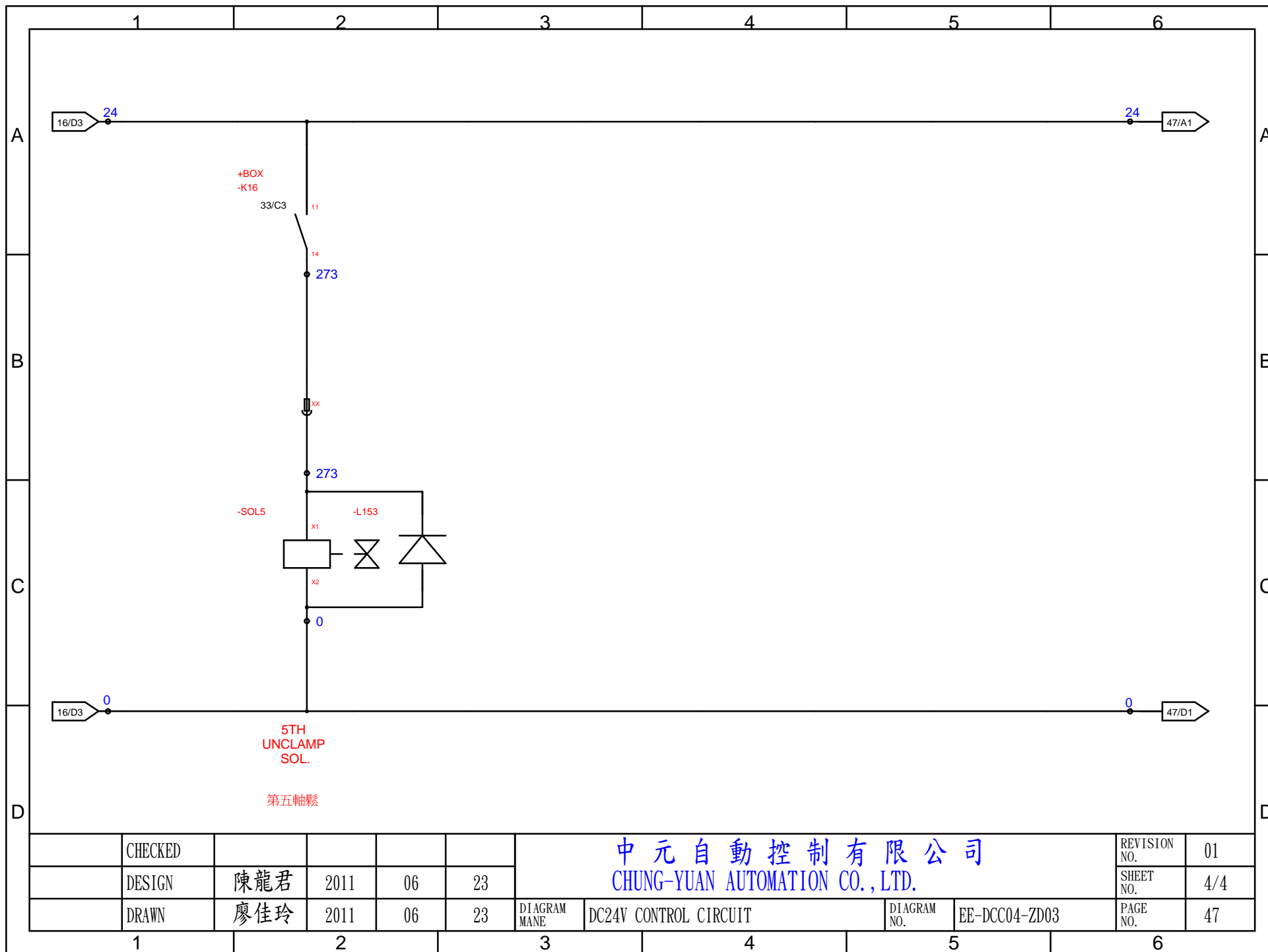
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45A

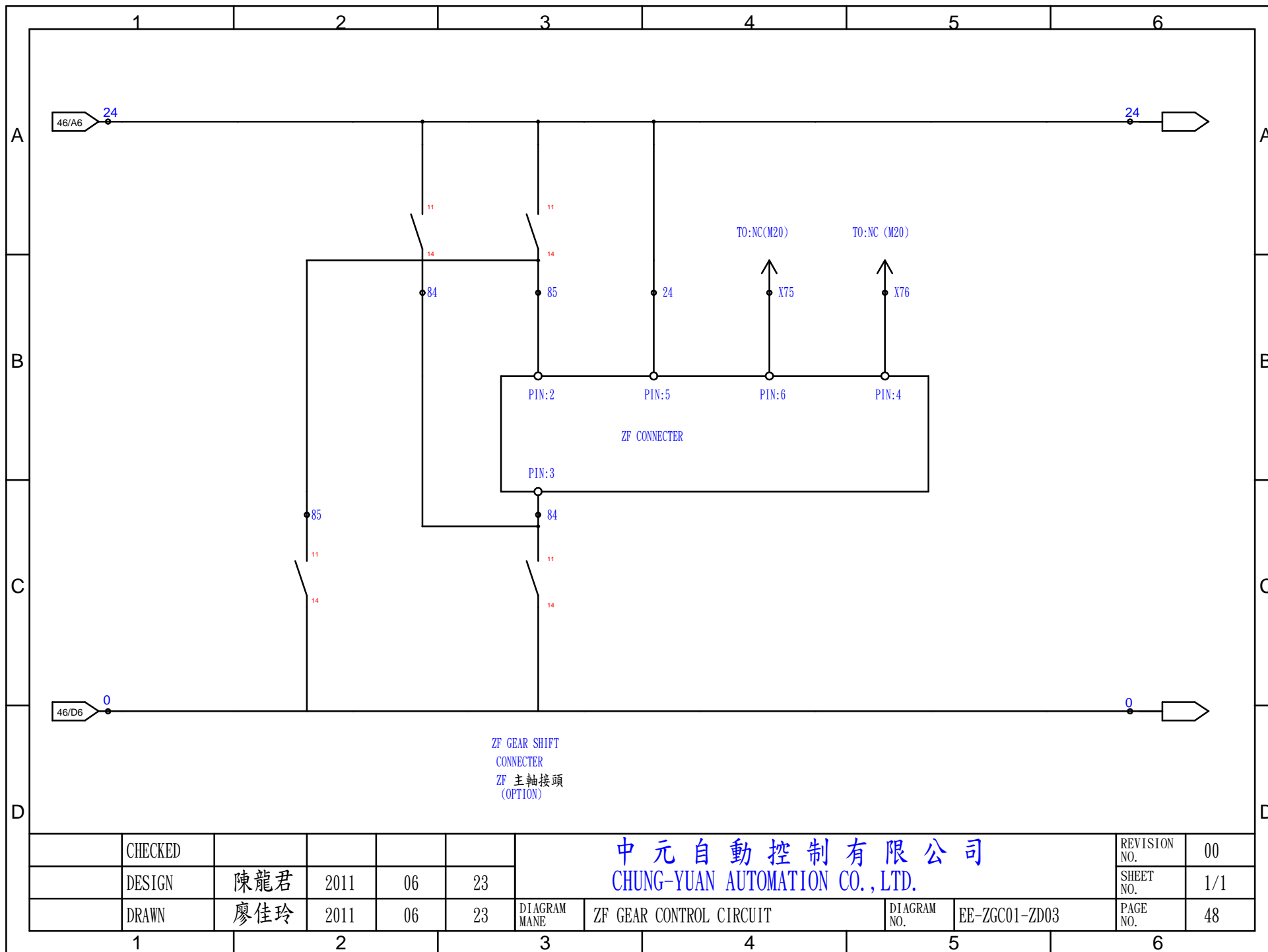


|  |         |     |      |    |    |   |                            |             |                |              |
|--|---------|-----|------|----|----|---|----------------------------|-------------|----------------|--------------|
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|  | DESIGN  | 陳龍君 | 2010 | 12 | 02 |   |                            |             | SHEET NO.      | 1/1          |
|  | DRAWN   | 廖佳玲 | 2011 | 03 | 10 | DIAGRAM MANE                                  | SAFETY RELAY MODEL CIRCUIT | DIAGRAM NO. | EE-ECC001-ZD03 | PAGE NO. 45B |



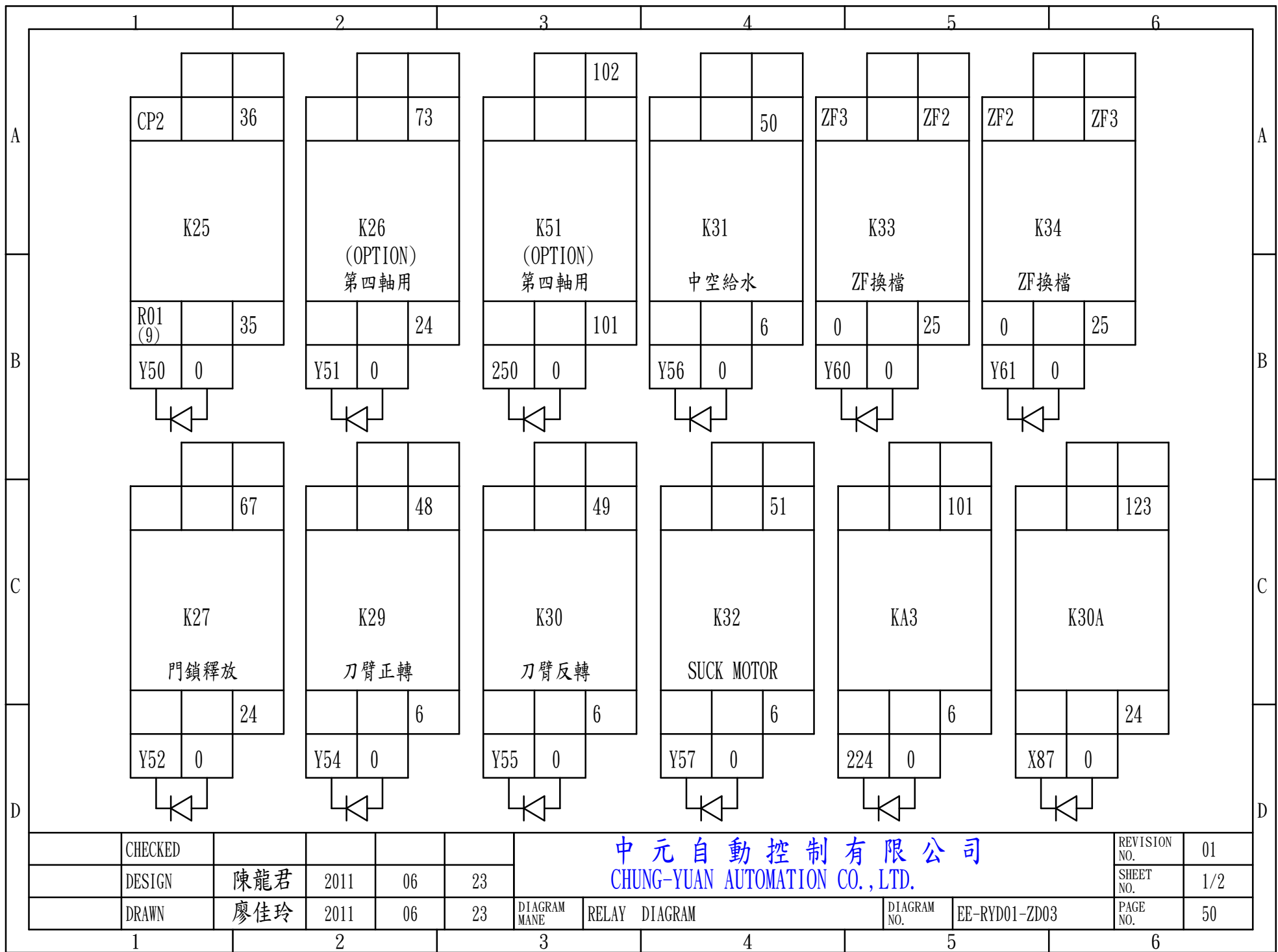






|  |         |     |      |    |    |   |                         |             |               |              |     |
|--|---------|-----|------|----|----|---|-------------------------|-------------|---------------|--------------|-----|
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|  | DESIGN  | 陳龍君 | 2011 | 06 | 23 |   |                         |             |               | SHEET NO.    | 1/1 |
|  | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM MANE                                  | ZF GEAR CONTROL CIRCUIT | DIAGRAM NO. | EE-ZGC01-ZD03 | PAGE NO.     | 48  |





|      |   |     |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
|------|---|-----|------|----|----|---------------------------------|---------------|-------------|---------------|----------|----|------|--|--|--|--|----|-----|--|--|---|
| 1    | 2   | 3   | 4    | 5  | 6  |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| A    |   |     |      |    |    | A                               |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| B    | <table><tr><td>0</td><td>6</td><td>130</td></tr><tr><td>A1</td><td colspan="2">B1</td></tr><tr><td colspan="3">-KIT</td></tr><tr><td colspan="2"></td><td>B2</td></tr><tr><td>100</td><td></td><td></td></tr></table> |     |      |    |    | 0                               | 6             | 130         | A1            | B1       |    | -KIT |  |  |  |  | B2 | 100 |  |  | B |
| 0    | 6   | 130 |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| A1   | B1  |     |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| -KIT |   |     |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
|      |   | B2  |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| 100  |   |     |      |    |    |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| C    |   |     |      |    |    | C                               |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
| D    |   |     |      |    |    | D                               |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |
|      | CHECKED   |     |      |    |    | 中元自動控制有限公司                      |               |             | REVISION NO.  | 01       |    |      |  |  |  |  |    |     |  |  |   |
|      | DESIGN  | 陳龍君 | 2011 | 06 | 23 | CHUNG-YUAN AUTOMATION CO., LTD. |               |             | SHEET NO.     | 2/2      |    |      |  |  |  |  |    |     |  |  |   |
|      | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM MANE                    | RELAY DIAGRAM | DIAGRAM NO. | EE-RYD02-ZD03 | PAGE NO. | 51 |      |  |  |  |  |    |     |  |  |   |
| 1    | 2   | 3   | 4    | 5  | 6  |                                 |               |             |               |          |    |      |  |  |  |  |    |     |  |  |   |

# LINEAR SCALE INTERFACE

CNC

JF101 to JF104  
(PCR-EV20MDT)

|    |       |    |     |
|----|-------|----|-----|
| 1  | PCA   | 11 |     |
| 2  | *PCA  | 12 | 0V  |
| 3  | PCB   | 13 |     |
| 4  | *PCB  | 14 | 0V  |
| 5  | PCZ   | 15 |     |
| 6  | *PCZ  | 16 | 0V  |
| 7  | (+6V) | 17 |     |
| 8  | (REQ) | 18 | +5V |
| 9  | +5V   | 19 |     |
| 10 |       | 20 | +5V |

Linear scale

+6V and REQ are for separate  
absolute pulse coders

CABLE WIRING

CP11A (DC IN) 光學尺模組電源

|       |       |   |          |
|-------|-------|---|----------|
| 1     | 2     | 3 | 腳位<br>用途 |
| +24V  | 0V    |   |          |
| ↓ 24  | ↓ 0   |   |          |
| 16/D3 | 16/D3 |   |          |

光學尺接線

JF101(X), JF102(Z)

| 腳位           | 名稱  |
|--------------|-----|
| 1            | PA  |
| 2            | *PA |
| 3            | PB  |
| 4            | *PB |
| 5            | PZ  |
| 6            | *PZ |
| 9, 18<br>20  | +5V |
| 12, 14<br>16 | 0V  |

光學尺腳位

| 腳位 | 線色 | 功能       |
|----|----|----------|
|    | 綠  | Ua1      |
|    | 黃  | Ua1      |
|    | 藍  | Ua2      |
|    | 紅  | Ua2      |
|    | 灰  | Ua0      |
|    | 粉紅 | Ua0      |
|    | 棕  | 5V<br>UP |
|    | 白  | 0V<br>UP |

SHIELD

中元自動控制有限公司  
CHUNG-YUAN AUTOMATION CO., LTD.

|                 |     |
|-----------------|-----|
| REVISION<br>NO. | 01  |
| SHEET<br>NO.    | 1/1 |
| PAGE<br>NO.     | 52  |

1

2

3

4

5

6

# 手輪金屬接頭腳位圖

2005/05/03

Ver.02

| 薄膜式面板 TB6 | 薄膜式面板 CN14                     | 金屬接頭 | 手輪 TB1       | 彈簧線線色1     | 彈簧線線色2 | 線碼  |
|-----------|--------------------------------|------|--------------|------------|--------|-----|
|           | HX                             | 1    | X            | 白黑1        | 棕 紅    | X06 |
|           | HY                             | 2    | Y(Z)車床       | 白黑2        | 橘 橙    | X07 |
|           | HZ                             | 3    | Z            | 白黑3        | 淺藍 黃   | X10 |
|           | H4                             | 4    | 4            | 白黑4        | 藍 綠    | X11 |
|           | H×10                           | 5    | ×10          | 白黑長        | 藍黑 藍   | X12 |
|           | H×100                          | 6    | ×100         | 白紅1        | 橘黑 紫   | X13 |
|           | +24V                           | 7    | COM1<br>COM2 | 白紅2<br>白紅3 | 紫 淺紫 黑 | 24  |
|           | H5V(FANUC)<br>H12V(MITSUBISHI) | 8    | +5V<br>+12V  | 白紅4        | 紅 黑/白  | H5V |
|           | H0V                            | 9    | 0V           | 白紅長        | 黑 紅/白  | H0V |
|           | HA                             | 10   | A            | 黃黑1        | 黃 灰    | HA  |
|           | HB                             | 11   | B            | 黃黑2        | 白 白    | HB  |
|           | MPG.L                          | 12   | L+           | 黃黑3        | 紅黑 棕   | Y13 |
|           | 0V                             | 13   | L-           | 黃黑4        | 粉紅 粉紅  | 0   |
|           | H5                             | 14   | 5            | 黃黑長        |        | X23 |

|  |         |     |      |    |    |   |                       |  |  |                |               |             |    |
|--|---------|-----|------|----|----|---|-----------------------|--|--|----------------|---------------|-------------|----|
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|  | DESIGN  | 陳龍君 | 2011 | 06 | 23 |   |                       |  |  |                |               |             |    |
|  | DRAWN   | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM<br>MANE                               | MPG CONNECTOR DIAGRAM |  |  | DIAGRAM<br>NO. | EE-MPG01-ZD03 | PAGE<br>NO. | 53 |

|    | 1  | 2               | 3             | 4             | 5  | 6   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|----|--|-----------------|---------------|---------------|----|---|--|----------------|----------|------|-----|-----------------|---|---------------|-----|-----------------|--------|-----|------|-------|-------|-----------|-----|----|-------|-----|------|----|----|-------------|---------------|----------------|----|----|-----|----------------|-------|-----|-----|----------------|-------|-----|----|------------------|-------|-----|
| A  | 臻賞刀庫   |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
| B  | <table><tr><th colspan="4">凸輪式德士 II 型電路接點<br/>CAM II type terminal description</th></tr><tr><th>N0</th><th>功 能<br/>FUNCTION</th><th>備 註<br/>REMARK</th><th>線 號<br/>SYMBOL</th></tr><tr><td>1</td><td>DC24V</td><td>白 (1)</td><td>24</td></tr><tr><td>2</td><td>DC24V</td><td>棕 (1)</td><td>0</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td>刀套上 POKET UP</td><td>藍 (3)</td><td>X81</td></tr><tr><td>10</td><td>刀套下 POKET DOWN</td><td>藍 (4)</td><td>X80</td></tr><tr><td>7</td><td>刀庫計數 MAG COUNTER</td><td>黑 (5)</td><td>X82</td></tr></table> |                 |               |               |    |   | 凸輪式德士 II 型電路接點<br>CAM II type terminal description |                |          |      | N0  | 功 能<br>FUNCTION | 備 註<br>REMARK                                 | 線 號<br>SYMBOL | 1   | DC24V           | 白 (1)  | 24  | 2    | DC24V | 棕 (1) | 0         |     |    |       |     |      |    |    |             |               |                |    |    | 9   | 刀套上 POKET UP   | 藍 (3) | X81 | 10  | 刀套下 POKET DOWN | 藍 (4) | X80 | 7  | 刀庫計數 MAG COUNTER | 黑 (5) | X82 |
|    | 凸輪式德士 II 型電路接點<br>CAM II type terminal description   |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | N0   | 功 能<br>FUNCTION | 備 註<br>REMARK | 線 號<br>SYMBOL |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 1  | DC24V           | 白 (1)         | 24            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 2  | DC24V           | 棕 (1)         | 0             |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    |  |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    |  |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    |  |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 9  | 刀套上 POKET UP    | 藍 (3)         | X81           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 10   | 刀套下 POKET DOWN  | 藍 (4)         | X80           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
| 7  | 刀庫計數 MAG COUNTER   | 黑 (5)           | X82           |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
| C  | <table><tr><td>3</td><td>剎車點 ARM STOP</td><td>紅 (6)</td><td>X107</td></tr><tr><td>4</td><td>扣刀點 ARM CLAMP</td><td>黃 (7)</td><td>X95</td></tr><tr><td>5</td><td>原點 ARM ORIGINAL</td><td>綠 (8)</td><td>X96</td></tr><tr><td>8</td><td>1 號刀</td><td>黑 (9)</td><td>X83</td></tr><tr><td>6</td><td>預留</td><td></td><td>X30</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>MU1</td><td>刀庫馬達 MAG MOTOR</td><td></td><td>U7</td></tr><tr><td>MV1</td><td>刀庫馬達 MAG MOTOR</td><td></td><td>V7</td></tr><tr><td>MW1</td><td>刀庫馬達 MAG MOTOR</td><td></td><td>W7</td></tr><tr><td>PE</td><td>地線 PE</td><td></td><td>PE</td></tr></table>                         |                 |               |               |    |   | 3  | 剎車點 ARM STOP   | 紅 (6)    | X107 | 4   | 扣刀點 ARM CLAMP   | 黃 (7)   | X95           | 5   | 原點 ARM ORIGINAL | 綠 (8)  | X96 | 8    | 1 號刀  | 黑 (9) | X83       | 6   | 預留 |       | X30 |      |    |    |             | MU1           | 刀庫馬達 MAG MOTOR |    | U7 | MV1 | 刀庫馬達 MAG MOTOR |       | V7  | MW1 | 刀庫馬達 MAG MOTOR |       | W7  | PE | 地線 PE            |       | PE  |
|    | 3  | 剎車點 ARM STOP    | 紅 (6)         | X107          |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 4  | 扣刀點 ARM CLAMP   | 黃 (7)         | X95           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 5  | 原點 ARM ORIGINAL | 綠 (8)         | X96           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 8  | 1 號刀            | 黑 (9)         | X83           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 6  | 預留              |               | X30           |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    |  |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | MU1  | 刀庫馬達 MAG MOTOR  |               | U7            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | MV1  | 刀庫馬達 MAG MOTOR  |               | V7            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | MW1  | 刀庫馬達 MAG MOTOR  |               | W7            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
| PE | 地線 PE  |                 | PE            |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
| D  | <table><tr><td>AU2</td><td>凸輪馬達 ARM MOTOR</td><td></td><td>U8</td></tr><tr><td>AV2</td><td>凸輪馬達 ARM MOTOR</td><td></td><td>V8</td></tr><tr><td>AW2</td><td>凸輪馬達 ARM MOTOR</td><td></td><td>W8</td></tr><tr><td></td><td></td><td></td><td></td></tr></table>   |                 |               |               |    |   | AU2  | 凸輪馬達 ARM MOTOR |          | U8   | AV2 | 凸輪馬達 ARM MOTOR  |   | V8            | AW2 | 凸輪馬達 ARM MOTOR  |        | W8  |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | AU2  | 凸輪馬達 ARM MOTOR  |               | U8            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | AV2  | 凸輪馬達 ARM MOTOR  |               | V8            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | AW2  | 凸輪馬達 ARM MOTOR  |               | W8            |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    |  |                 |               |               |    |   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | <table><tr><td></td><td>CHECKED</td><td></td><td></td><td></td><td></td><td rowspan="3">中元自動控制有限公司<br/>CHUNG-YUAN AUTOMATION CO., LTD.</td><td>REVISION NO.</td><td>00</td></tr><tr><td></td><td>DESIGN</td><td>陳龍君</td><td>2011</td><td>06</td><td>23</td><td>SHEET NO.</td><td>1/2</td></tr><tr><td></td><td>DRAWN</td><td>廖佳玲</td><td>2011</td><td>06</td><td>23</td><td>DIAGRAM NO.</td><td>EE-ATD01-ZD03</td><td>PAGE NO.</td><td>51</td></tr></table>  |                 |               |               |    |   |  | CHECKED        |          |      |     |                 | 中元自動控制有限公司<br>CHUNG-YUAN AUTOMATION CO., LTD. | REVISION NO.  | 00  |                 | DESIGN | 陳龍君 | 2011 | 06    | 23    | SHEET NO. | 1/2 |    | DRAWN | 廖佳玲 | 2011 | 06 | 23 | DIAGRAM NO. | EE-ATD01-ZD03 | PAGE NO.       | 51 |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | CHECKED  |                 |               |               |    | 中元自動控制有限公司<br>CHUNG-YUAN AUTOMATION CO., LTD. | REVISION NO.                                       | 00             |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | DESIGN   | 陳龍君             | 2011          | 06            | 23 |   | SHEET NO.  | 1/2            |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | DRAWN  | 廖佳玲             | 2011          | 06            | 23 |   | DIAGRAM NO.  | EE-ATD01-ZD03  | PAGE NO. | 51   |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |
|    | 1  | 2               | 3             | 4             | 5  | 6   |  |                |          |      |     |                 |   |               |     |                 |        |     |      |       |       |           |     |    |       |     |      |    |    |             |               |                |    |    |     |                |       |     |     |                |       |     |    |                  |       |     |

| 1 | 2   | 3                      | 4                        | 5              | 6               |
|---|---|------------------------|--------------------------|----------------|-----------------|
| A | 得大刀庫  |                        |                          |                |                 |
|   | 凸輪式德士II型電路接點<br>CAMII type terminal description |                        |                          |                |                 |
|   | N0  | 功 能<br>FUNCTION        | 備 註<br>REMARK            | 線 號<br>SYMBOL  |                 |
|   | 24  | DC24V                  |                          | 24             |                 |
|   | 24  | DC24V                  |                          | 24             |                 |
| B | 0   | 0V                     |                          | 0              |                 |
|   | 0   | 0V                     |                          | 0              |                 |
|   | 1   | 刀套上 POKET UP           |                          | X80            |                 |
|   | 2   | 刀套下 POKET DOWN         |                          | X81            |                 |
|   | 3   | MAG. MOTOR POSITIONING |                          |                |                 |
|   | 4   | 剎車點 ARM STOP           |                          | X107           |                 |
|   | 5   | 扣刀點 ARM CLAMP          |                          | X95            |                 |
|   | 6   | 原點 ARM ORIGINAL        |                          | X96            |                 |
|   | 7   | 1 號刀                   |                          | X83            |                 |
|   | 8   | MAG. MOTOR BRAKING     |                          | X82            |                 |
| C | 9   |                        |                          | X30            |                 |
|   |   |                        |                          |                |                 |
|   | U1  | 刀庫馬達 MAG MOTOR         |                          | U7             |                 |
|   | V1  | 刀庫馬達 MAG MOTOR         |                          | V7             |                 |
|   | W1  | 刀庫馬達 MAG MOTOR         |                          | W7             |                 |
|   | PE  | 地線 PE                  |                          | PE             |                 |
|   | U2  | 凸輪馬達 ARM MOTOR         |                          | U8             |                 |
|   | V2  | 凸輪馬達 ARM MOTOR         |                          | V8             |                 |
|   | W2  | 凸輪馬達 ARM MOTOR         |                          | W8             |                 |
|   |   |                        |                          |                |                 |
| D | 中元自動控制有限公司<br>CHUNG-YUAN AUTOMATION CO., LTD.   |                        |                          |                |                 |
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|   | DRAWN   | 廖佳玲                    | 2011                     | 06             | 23              |
| 1 | 2   | 3                      | 4                        | 5              | 6               |
|   |   | DIAGRAM<br>MANE        | ATC TERMINAL DESCRIPTION | DIAGRAM<br>NO. | EE-ATD01-ZD03   |
|   |   |                        |                          |                | PAGE NO. 54A    |



## 4 TH AXIS CONNECTORS

## FEEDBACK (MS3106A20-29SW)

| Symbo | AMP 側 Pin NO.<br>(PCR-20FA) | 絕緣體色    | 第四軸側Pin NO. | 馬達側 Pin NO.<br>(JNDS10L2) |
|-------|-----------------------------|---------|-------------|---------------------------|
| RD    | 5                           | 黃/紅1(黑) | F           | 6                         |
| *RD   | 6                           | 黃/紅2(白) | G           | 5                         |
| 5V    | 9                           | 黃/紅3(赤) | J           | 8                         |
| 5V    | 20                          | 黃/紅4(綠) | K           | 9                         |
| 0V    | 12                          | 白/紅1(黃) | N           | 7                         |
| 0V    | 14                          | 白/紅2(茶) | T           | 10                        |
| 6V    | 7                           | 白/紅3(青) | R           | 4                         |
|       | 16                          | 隔離網     | H           | 3                         |

## POWER AND SIGNAL (MS25043-28D)

| Signal name | Pin NO. | Symbo |
|-------------|---------|-------|
| U           | J       | UA    |
| V           | K       | VA    |
| W           | L       | WA    |
| E           | M       | PE    |
| COM         | A       | 24    |
| CLAMP       | B       | X41   |
| UNCLAMP     | C       | X42   |
| +24V        | R       | 24    |
| HOME        | S       | X93   |
| SOL         | N       | 73    |
| COM         | P       | 0     |
| 4TH. EN1    | E       | X40   |
| 4TH. EN1    | F       | 24    |
| 4TH. EN2    | G       | 25    |
| 4TH. EN2    | H       | 250   |

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DESIGN

陳龍君

2011

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23

中元自動控制有限公司  
CHUNG-YUAN AUTOMATION CO., LTD.

DIAGRAM  
MANE

4 TH AXIS CONNECTORS

DIAGRAM  
NO.

EE-4AC01-ZD03

REVISION  
NO.

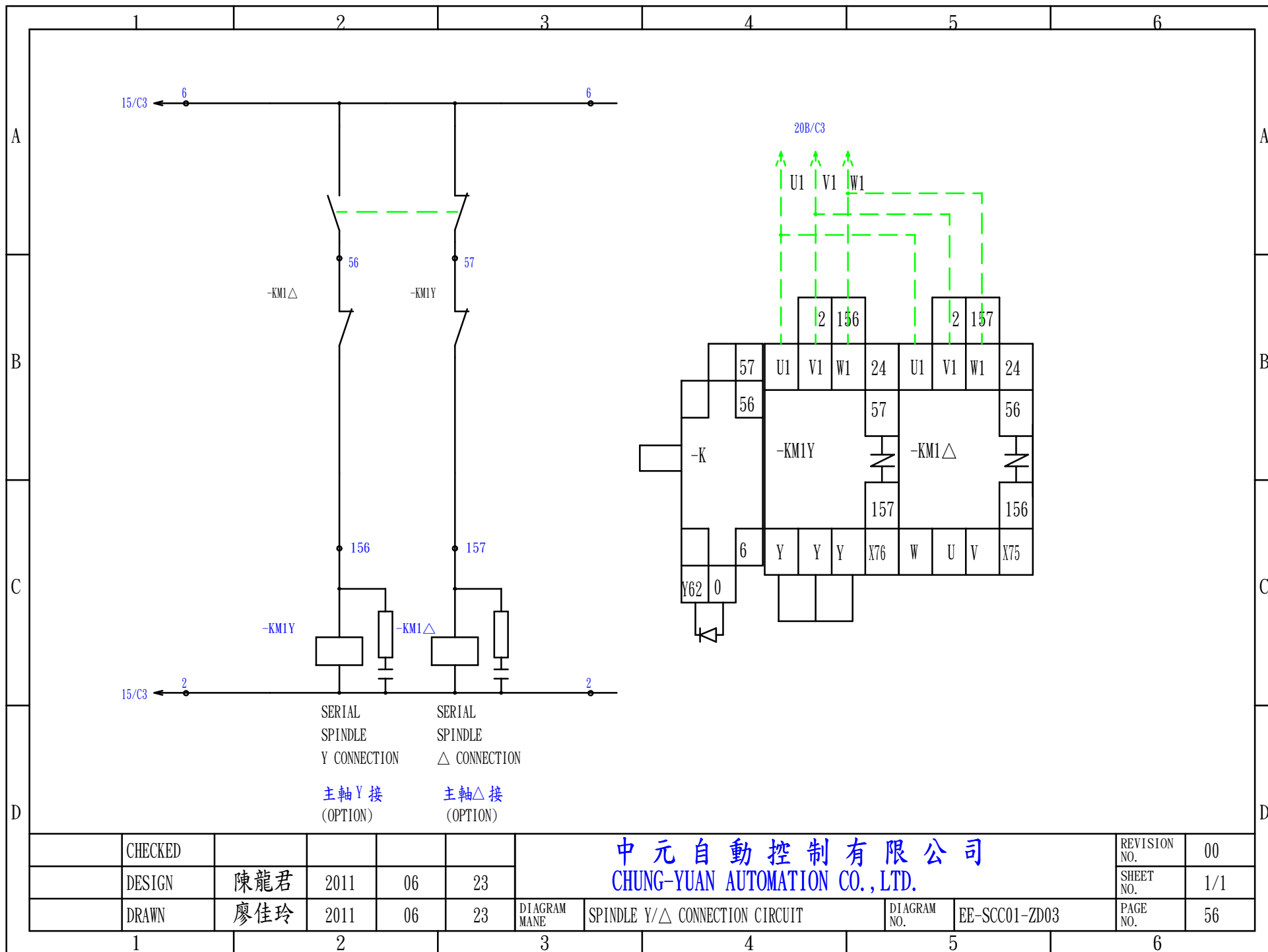
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|   |         |     |      |    |    |   |  |  |              |     |
|---|---------|-----|------|----|----|---|--|--|--------------|-----|
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