

# Diamond cut machine WR DCM3

## Electrical Drawings

|                        |            |                                       |           |             |                       |            |                  |
|------------------------|------------|---------------------------------------|-----------|-------------|-----------------------|------------|------------------|
| +A(x)<br>CONTROL PANEL | Location : | Control for Diamond cut Wheel machine |           | Function :  | ELECTRICAL DEPARTMENT |            |                  |
|                        |            |                                       |           |             | Rev. date             | 25-06-2020 |                  |
|                        |            |                                       |           |             | REV                   | 5          |                  |
|                        | Document : | WheelRestore-UK-Rev5.vsd              | Order no: | Reference : | Date :                | 25-06-2020 | Page : 1 Of : 18 |

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## TABLE OG CONTENT DRAWINGS

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| 2       | TABLE OF CONTENT |
| 3       | PANEL LAYOUT     |
| 4       | MAIN CIRCUITS    |
| 5       | MAIN CIRCUITS    |
| 6       | SAFETY CIRCUIT   |
| 7       | SAFETY CIRCUIT   |
| 8       | SAFETY CIRCUIT   |
| 9       | SERVO SYSTEM     |
| 10      | SERVO SYSTEM     |
| 11      | SERVO SYSTEM     |
| 12      | SERVO SYSTEM     |
| 13      | SERVO SYSTEM     |
| 14      | SERVO SYSTEM     |
| 15      | SERVO SYSTEM     |
| 16      | SERVO SYSTEM     |
| 17      | SERVO SYSTEM     |

## COLOR CODES

| WIRE COLOR   | DESCRIPTION      |
|--------------|------------------|
| VIOLET       | + 24V DC         |
| DARK BLUE    | - 24V DC         |
| WHITE        | ANALOUGE SIGNAL  |
| BLACK        | POWER PHASES     |
| BLUE         | NEUTRAL          |
| YELLOW/GREEN | PROTECTIVE EARTH |

## TABLE OF CONTENT SYMBOLS

[illegible] $+A(x)$ 

CONTROL PANEL

|            |
|------------|
| Location : |
|------------|

|                                       |  |
|---------------------------------------|--|
| Location :                            |  |
| Control for Diamond cut Wheel machine |  |

|            |
|------------|
| Function : |
|------------|

TABLE OF CONTENTS AND SYMBOLS

ELECTRICAL DEPARTMENT

|           |            |
|-----------|------------|
| Rev. date | 25-06-2020 |
|-----------|------------|

|     |   |
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| REV | 5 |
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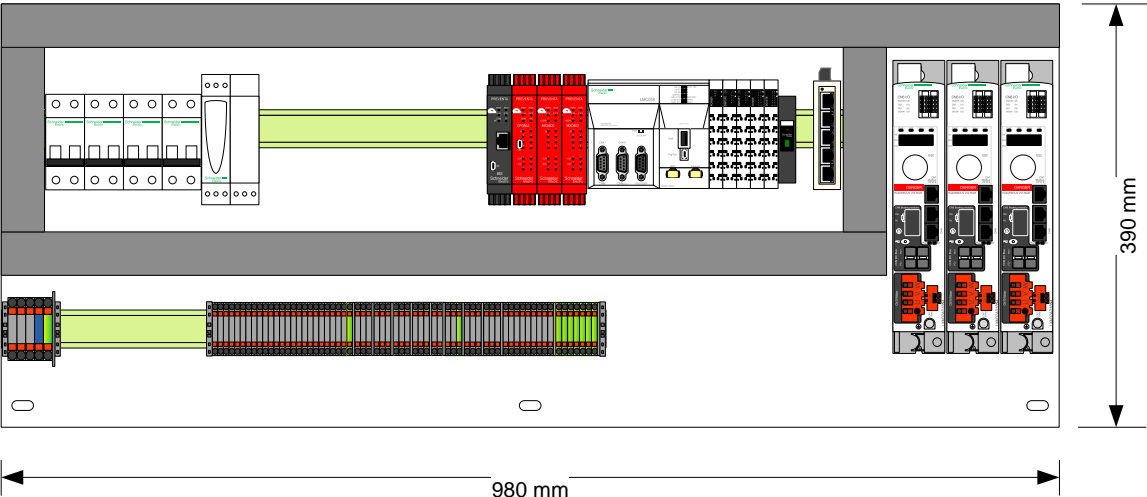
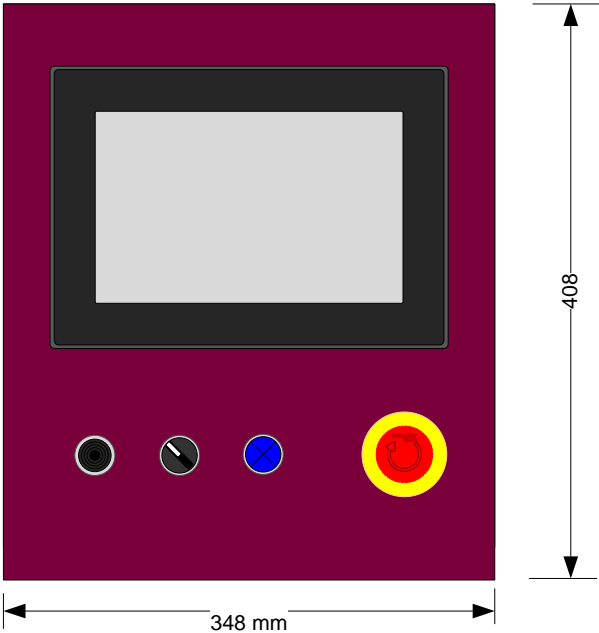


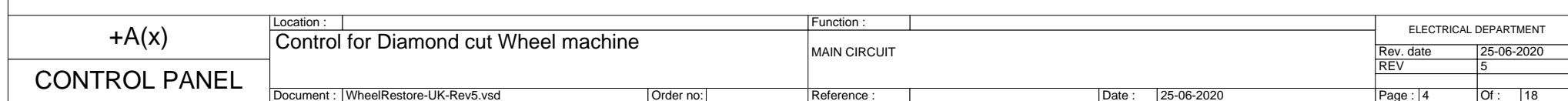
PLATE LAYOUT



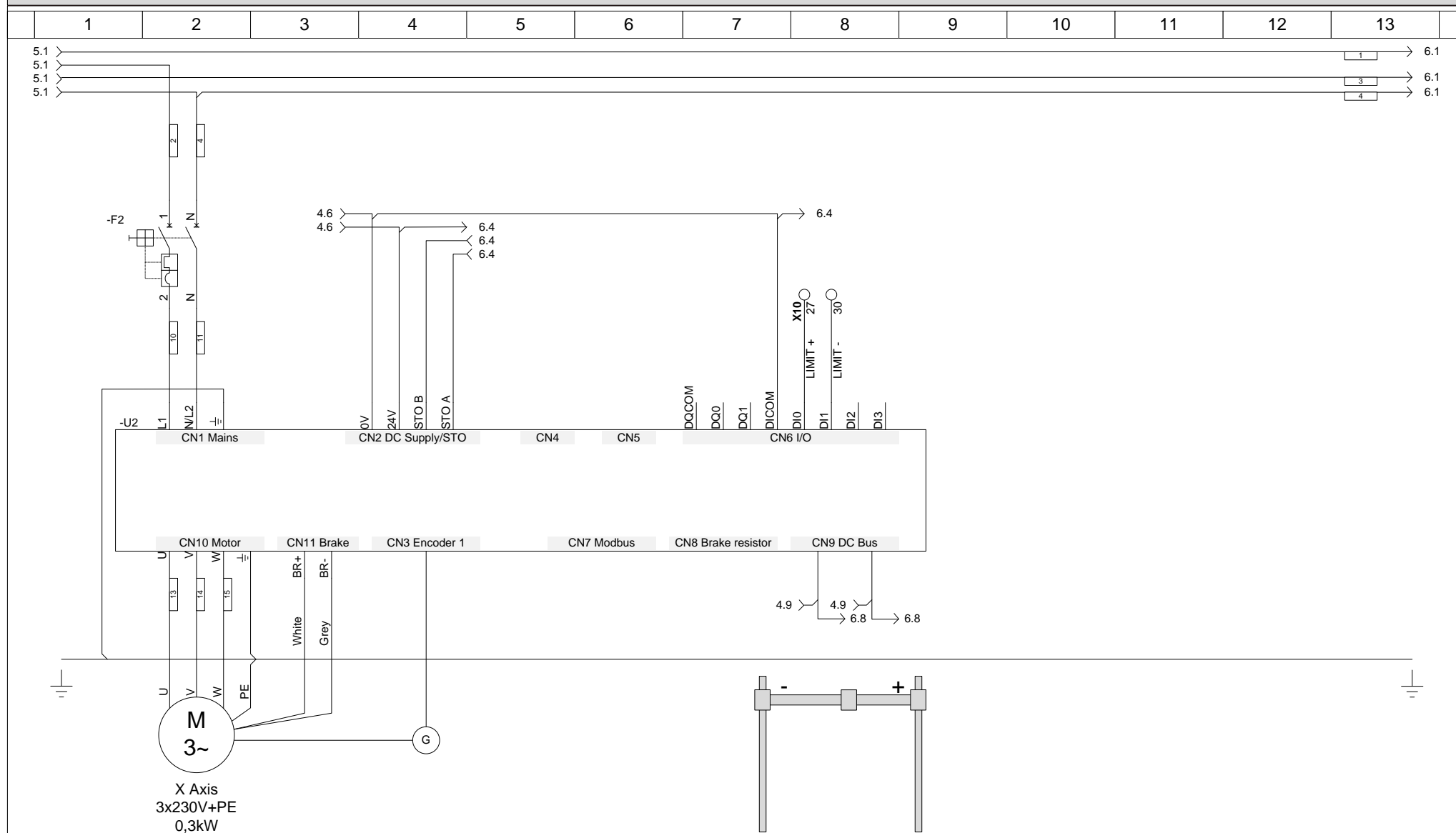
FRONT LAYOUT

|                                     |            |                                       |              |                       |            |        |   |         |
|-------------------------------------|------------|---------------------------------------|--------------|-----------------------|------------|--------|---|---------|
| +A(x)<br>CONTROL PANEL              | Location : | Control for Diamond cut Wheel machine | Function :   | ELECTRICAL DEPARTMENT |            |        |   |         |
|                                     |            |                                       | PANEL LAYOUT | Rev. date             | 25-06-2020 |        |   |         |
|                                     |            |                                       |              | REV                   | 5          |        |   |         |
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**WHEELRESTORE**

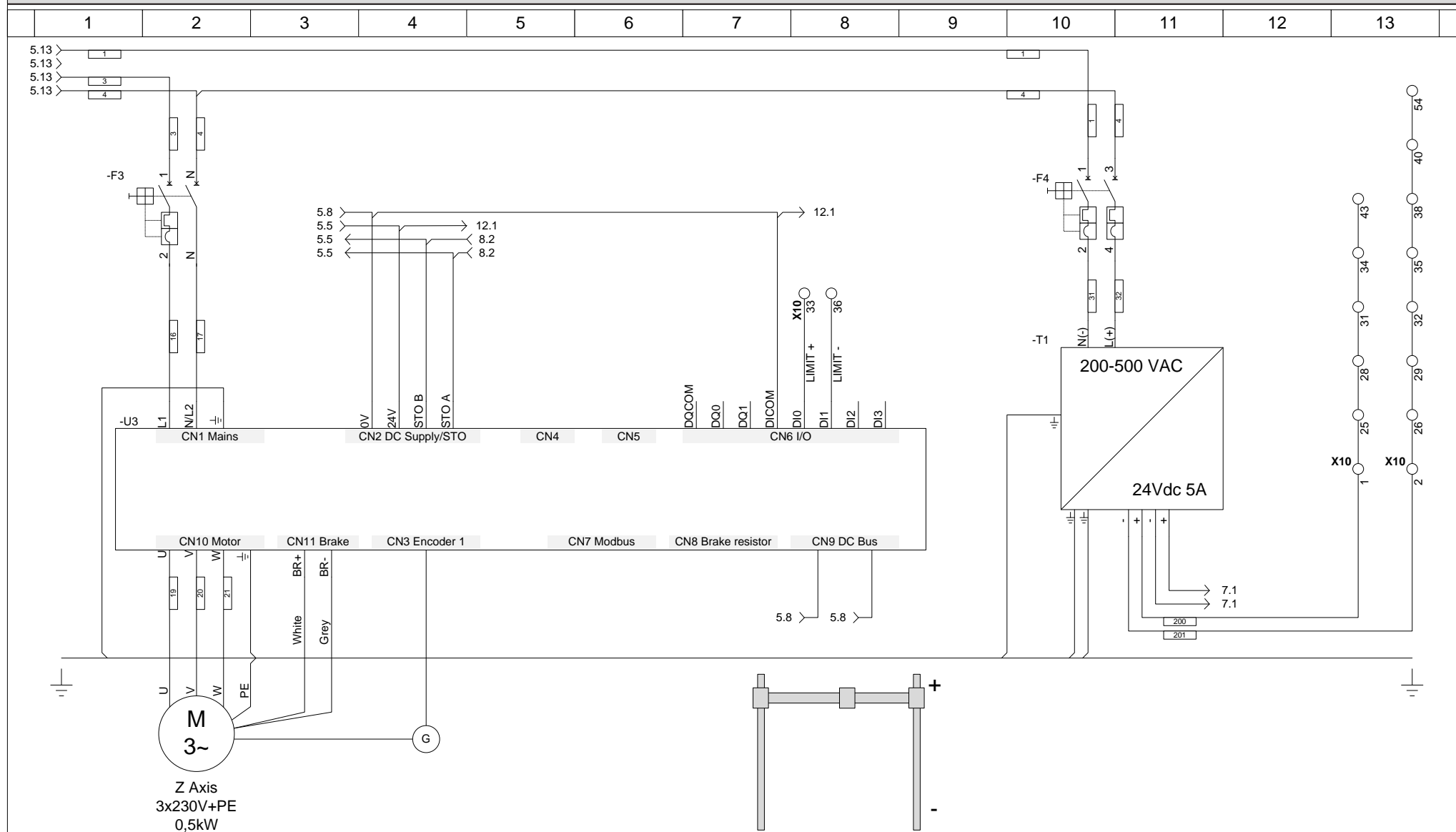


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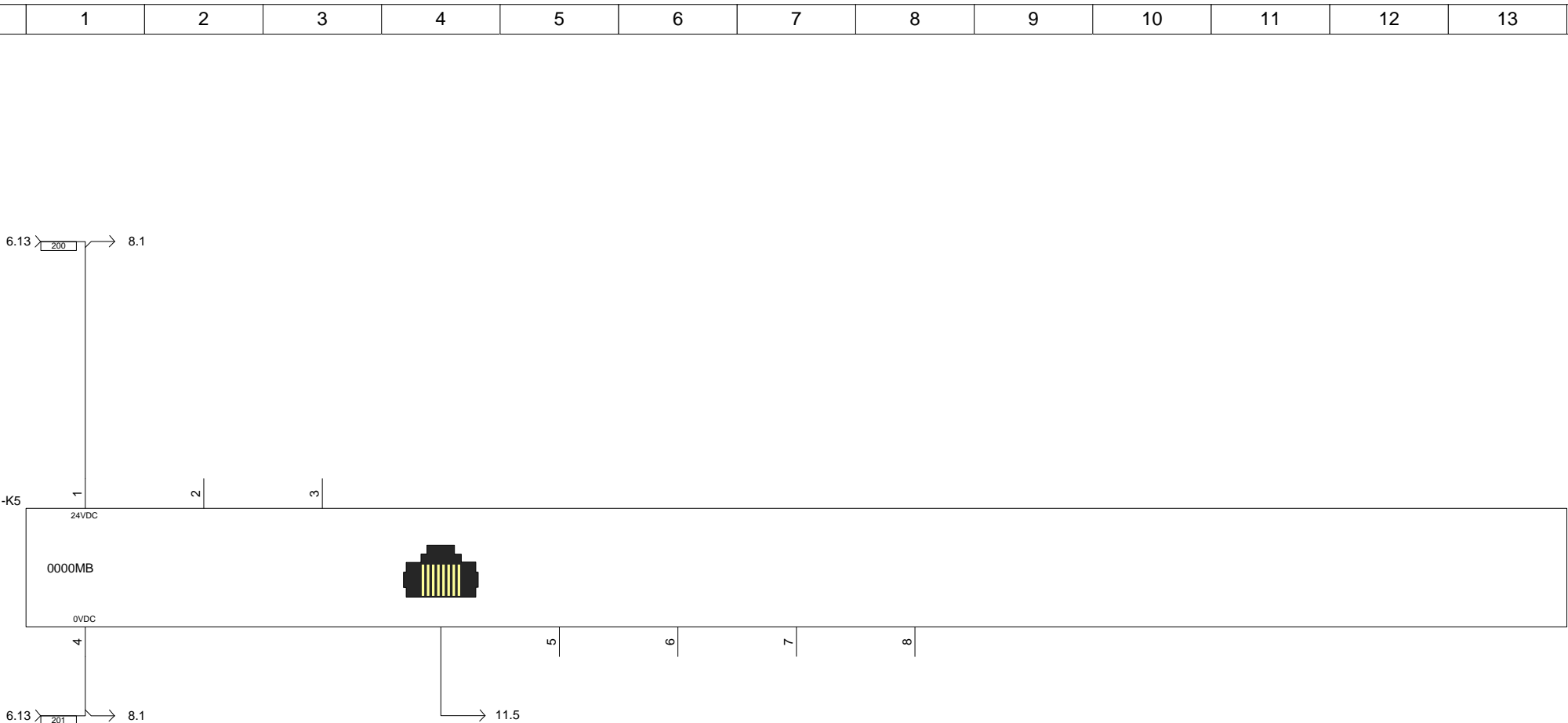
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|----------------------------|------------|--------------------------|---------------------------------------|-----------|------------|-------------|--------------|--------|-----------------------|--|------------|---|------|----|
| +A(x)<br><br>CONTROL PANEL | Location : |                          | Control for Diamond cut Wheel machine |           | Function : |             | MAIN CIRCUIT |        | ELECTRICAL DEPARTMENT |  |            |   |      |    |
|                            |            |                          |                                       |           |            |             |              |        | Rev. date             |  | 25-06-2020 |   |      |    |
|                            |            |                          |                                       |           |            |             |              |        | REV                   |  | 5          |   |      |    |
|                            |            |                          |                                       |           |            |             |              |        |                       |  |            |   |      |    |
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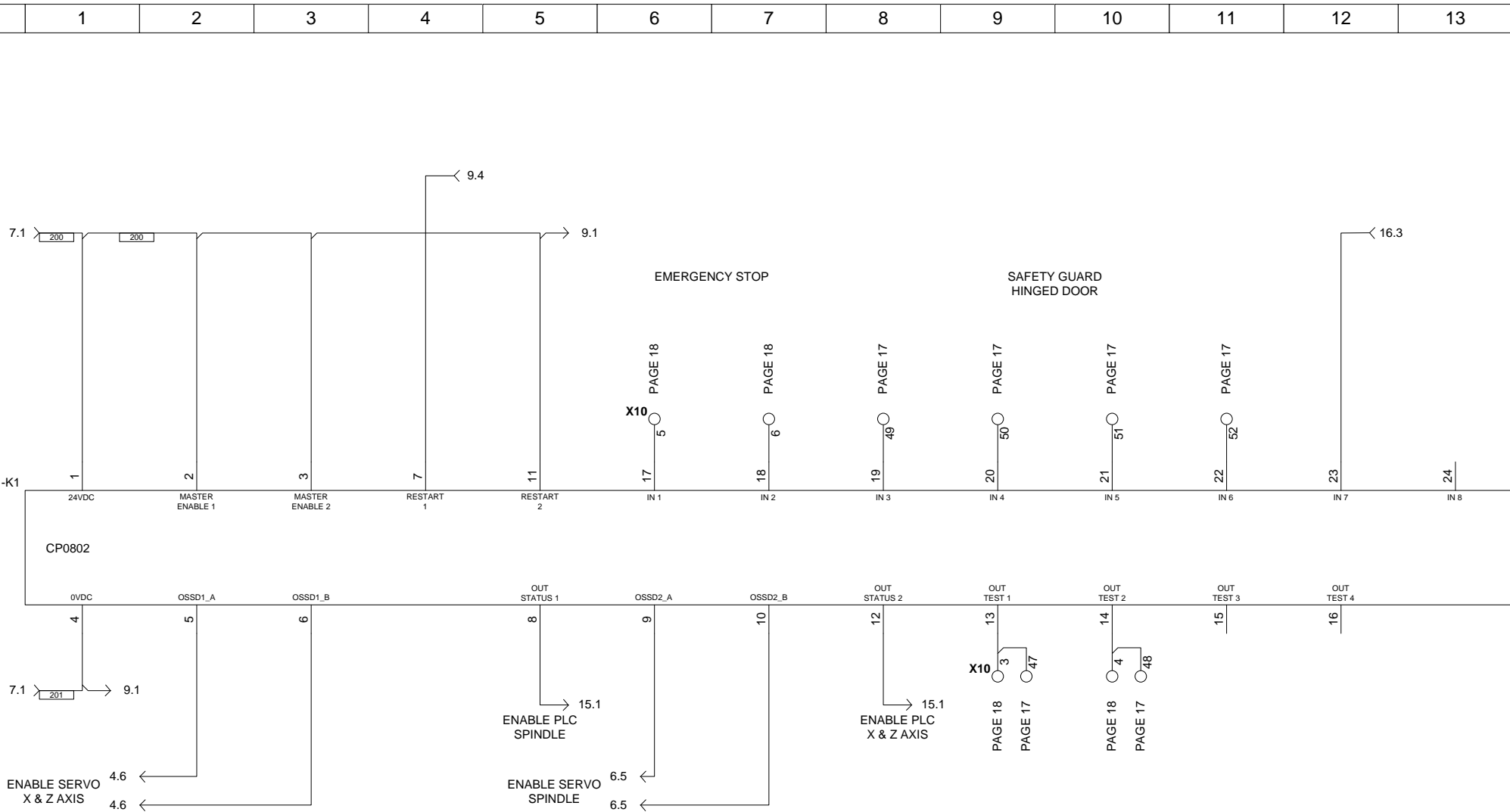
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|----------------------------|---------------------------------------|--|--------------------------|--|--------------|--|--------|--|-----------------------|--|------------|--|---------|--|
| +A(x)<br><br>CONTROL PANEL | Location :                            |  |                          |  | Function :   |  |        |  | ELECTRICAL DEPARTMENT |  |            |  |         |  |
|                            | Control for Diamond cut Wheel machine |  |                          |  | MAIN CIRCUIT |  |        |  | Rev. date             |  | 25-06-2020 |  |         |  |
|                            |                                       |  |                          |  |              |  |        |  | REV                   |  | 5          |  |         |  |
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|----------------------------|---------------------------------------|--|--------------------------|--|----------------|--|-------------|--|-----------------------|--------|------------|--------|---|------|
| +A(x)<br><br>CONTROL PANEL | Location :                            |  |                          |  | Function :     |  |             |  | ELECTRICAL DEPARTMENT |        |            |        |   |      |
|                            | Control for Diamond cut Wheel machine |  |                          |  | SAFETY CIRCUIT |  |             |  | Rev. date             |        | 25-06-2020 |        |   |      |
|                            |                                       |  |                          |  |                |  |             |  | REV                   |        | 5          |        |   |      |
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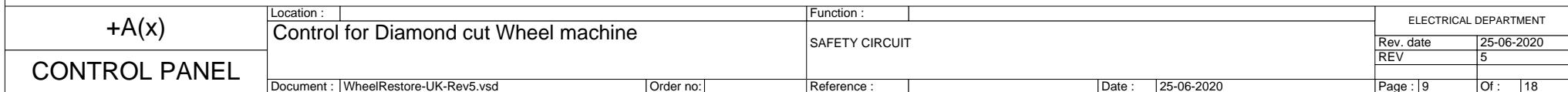
# WR-DCM3



|                                     |            |                                       |                |                       |            |            |    |
|-------------------------------------|------------|---------------------------------------|----------------|-----------------------|------------|------------|----|
| +A(x)<br>CONTROL PANEL              | Location : | Control for Diamond cut Wheel machine | Function :     | ELECTRICAL DEPARTMENT |            |            |    |
|                                     |            |                                       | SAFETY CIRCUIT |                       | Rev. date  | 25-06-2020 |    |
|                                     |            |                                       |                | REV                   | 5          |            |    |
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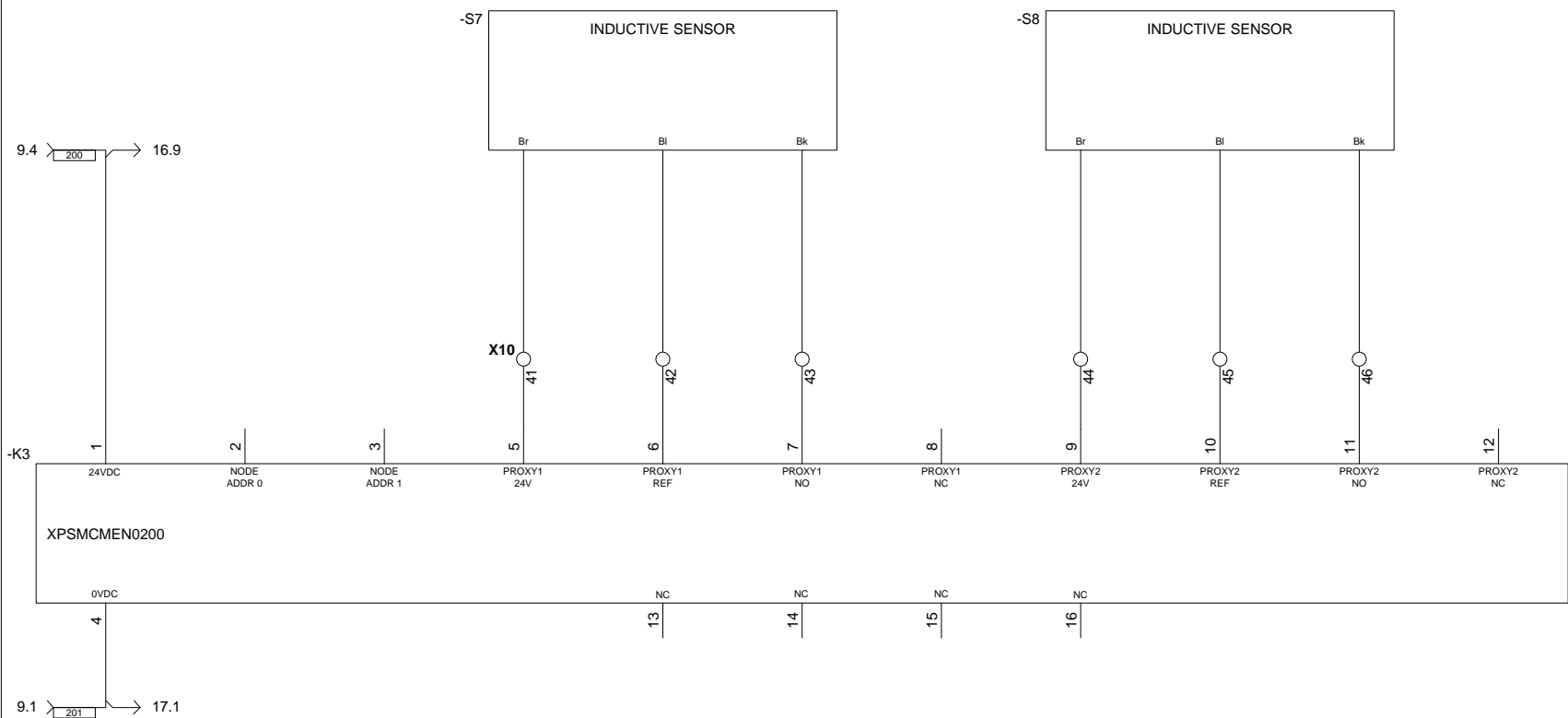
**WHEELRESTORE**



# WR-DCM3



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|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |  |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|

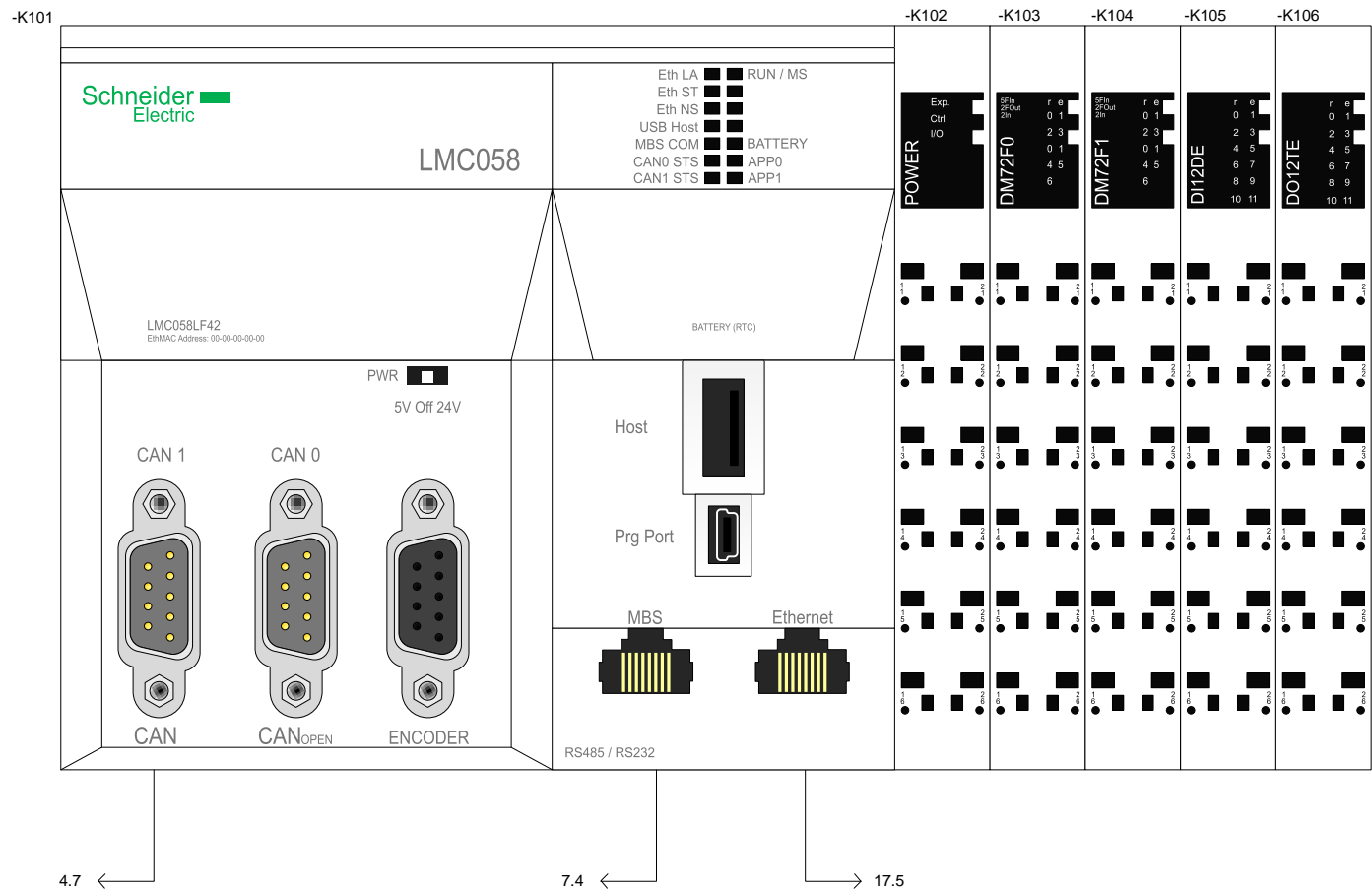


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|------------------------|------------|---------------------------------------|--|-----------|--|-------------|----------------|--------|------------|--|-----------------------|------------|---------|
| +A(x)<br>CONTROL PANEL | Location : | Control for Diamond cut Wheel machine |  |           |  | Function :  | SAFETY CIRCUIT |        |            |  | ELECTRICAL DEPARTMENT |            |         |
|                        |            |                                       |  |           |  |             |                |        |            |  | Rev. date             | 25-06-2020 |         |
|                        |            |                                       |  |           |  |             |                |        |            |  | REV                   | 5          |         |
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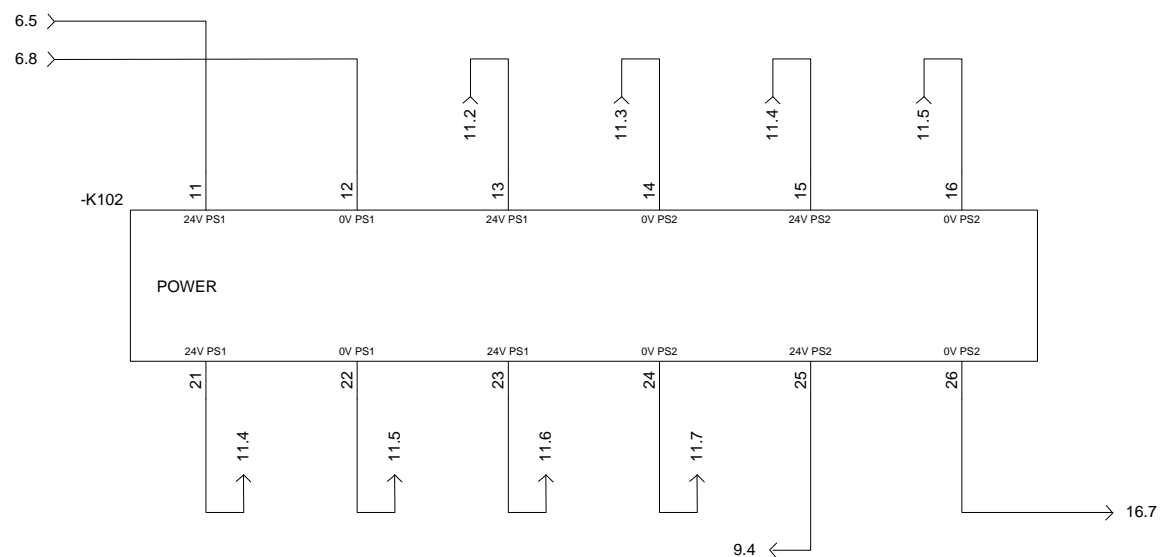


|   |   |   |   |   |   |   |   |   |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|



|                        |            |                                       |           |  |             |            |            |            |        |    |                       |            |
|------------------------|------------|---------------------------------------|-----------|--|-------------|------------|------------|------------|--------|----|-----------------------|------------|
| +A(x)<br>CONTROL PANEL | Location : | Control for Diamond cut Wheel machine |           |  |             | Function : | CONTROLLER |            |        |    | ELECTRICAL DEPARTMENT |            |
|                        |            |                                       |           |  |             |            |            |            |        |    | Rev. date             | 25-06-2020 |
|                        |            |                                       |           |  |             |            |            |            |        |    | REV                   | 5          |
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|                            |            |                          |                                       |  |             |  |               |            |                       |            |      |    |
|----------------------------|------------|--------------------------|---------------------------------------|--|-------------|--|---------------|------------|-----------------------|------------|------|----|
| +A(x)<br><br>CONTROL PANEL | Location : |                          | Control for Diamond cut Wheel machine |  | Function :  |  | I/O TERMINALS |            | ELECTRICAL DEPARTMENT |            |      |    |
|                            |            |                          |                                       |  |             |  |               |            | Rev. date             | 25-06-2020 |      |    |
|                            |            |                          |                                       |  |             |  |               |            | REV                   | 5          |      |    |
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Pinout diagram for DM72F0:

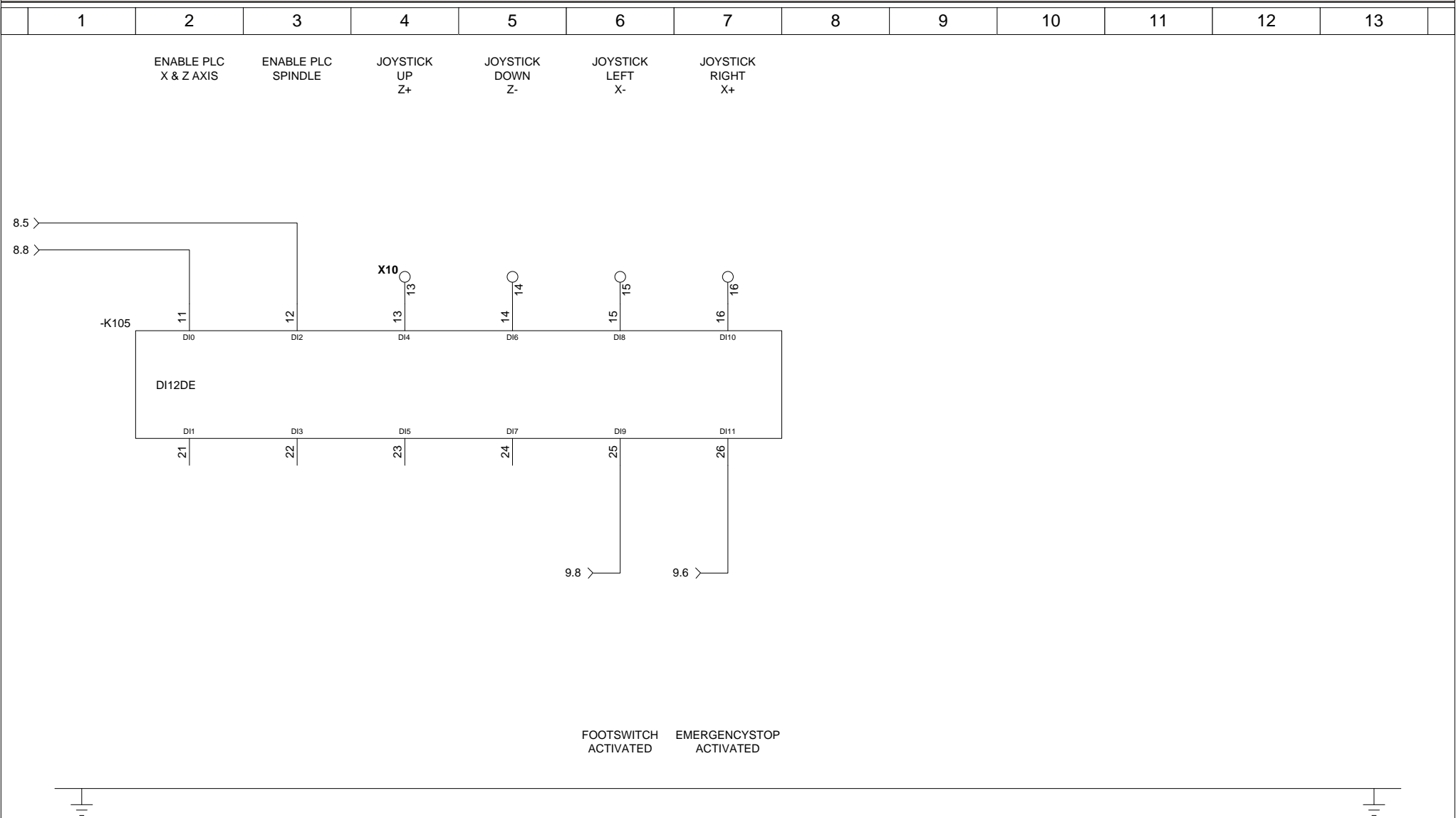
| Pin Number | Function |
|------------|----------|
| 11         | D10      |
| 12         | D12      |
| 13         | DQ0      |
| 14         | 0V       |
| 15         | D14      |
| 16         | D16      |
| 21         | D11      |
| 22         | D13      |
| 23         | DQ1      |
| 24         | 0V       |
| 25         | D15      |
| 26         | 0V       |

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Pinout diagram for DM72F1 showing pin numbers and signal names:

| Pin Number | Signal Name |
|------------|-------------|
| 11         | DIO         |
| 12         | DI2         |
| 13         | DQ0         |
| 14         | 0V          |
| 15         | DI4         |
| 16         | DI6         |
| 21         | DI1         |
| 22         | DI3         |
| 23         | DQ1         |
| 24         | 0V          |
| 25         | DI5         |
| 26         | 0V          |

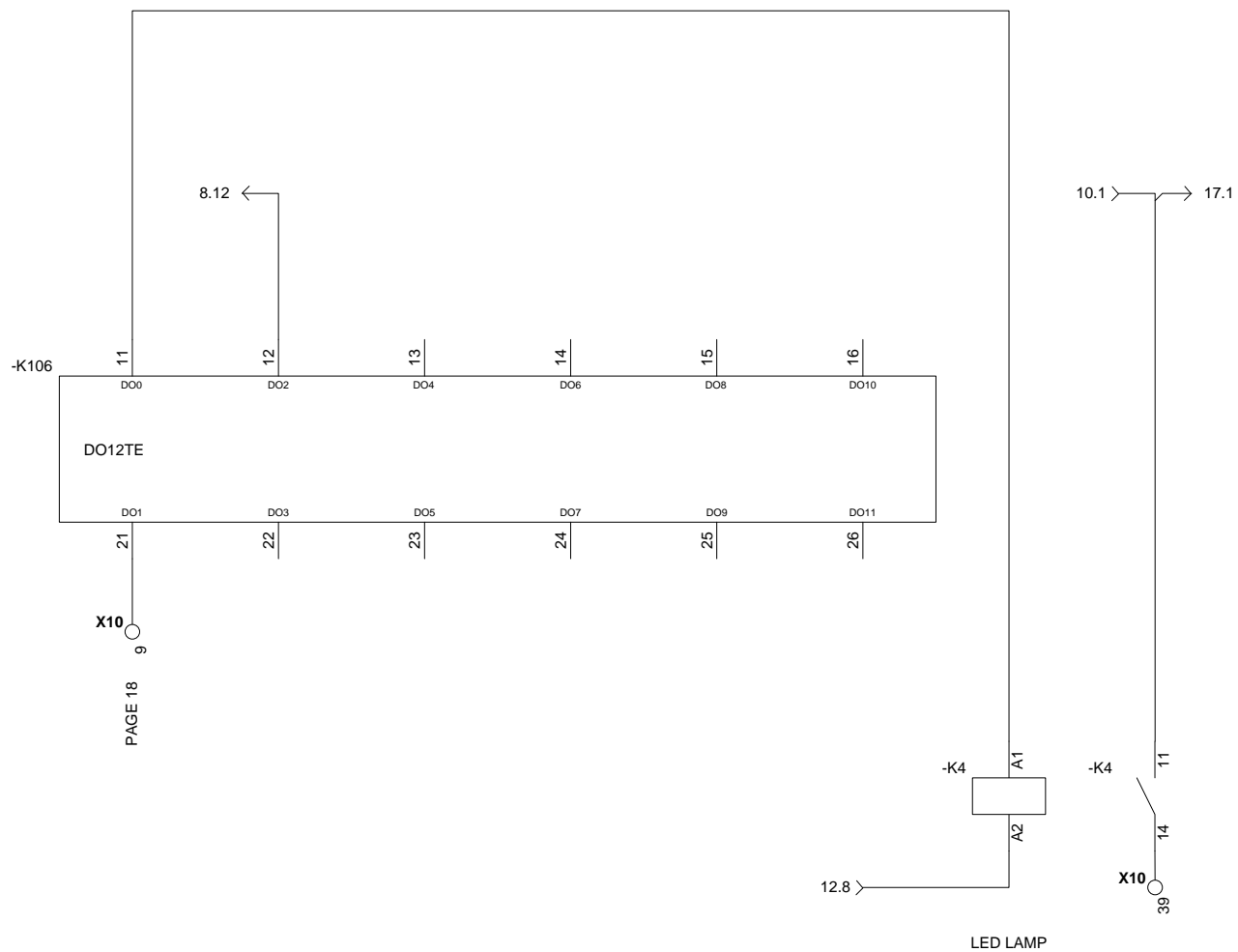
# WR-DCM3



FOOTSWITCH ACTIVATED      EMERGENCYSTOP ACTIVATED

|                            |            |                                       |           |  |               |                       |            |                   |
|----------------------------|------------|---------------------------------------|-----------|--|---------------|-----------------------|------------|-------------------|
| +A(x)<br><br>CONTROL PANEL | Location : | Control for Diamond cut Wheel machine |           |  | Function :    | ELECTRICAL DEPARTMENT |            |                   |
|                            |            |                                       |           |  | I/O TERMINALS | Rev. date             | 25-06-2020 |                   |
|                            |            |                                       |           |  |               | REV                   | 5          |                   |
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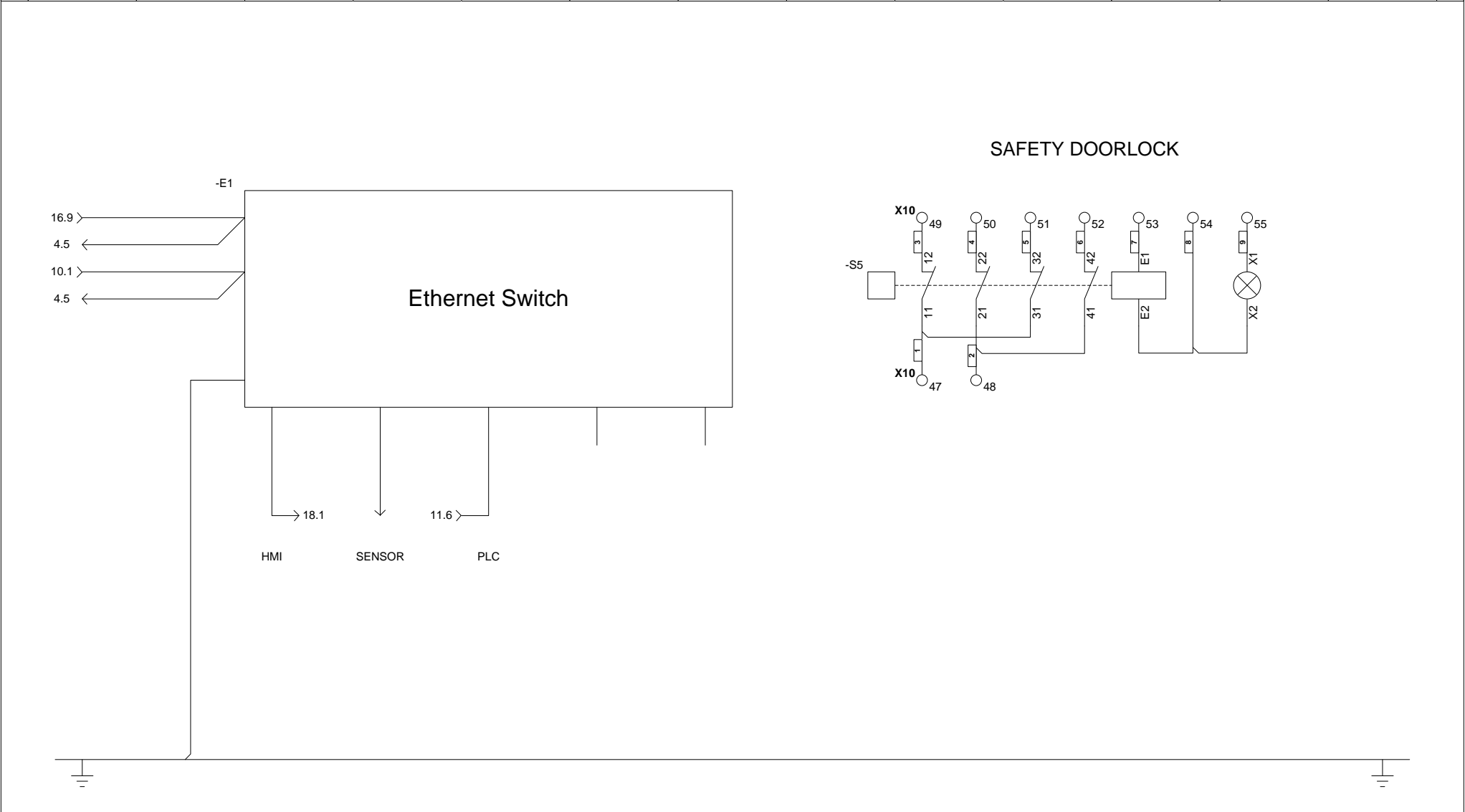
|  |   |   |   |   |   |   |   |   |   |    |    |    |    |  |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |  |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|



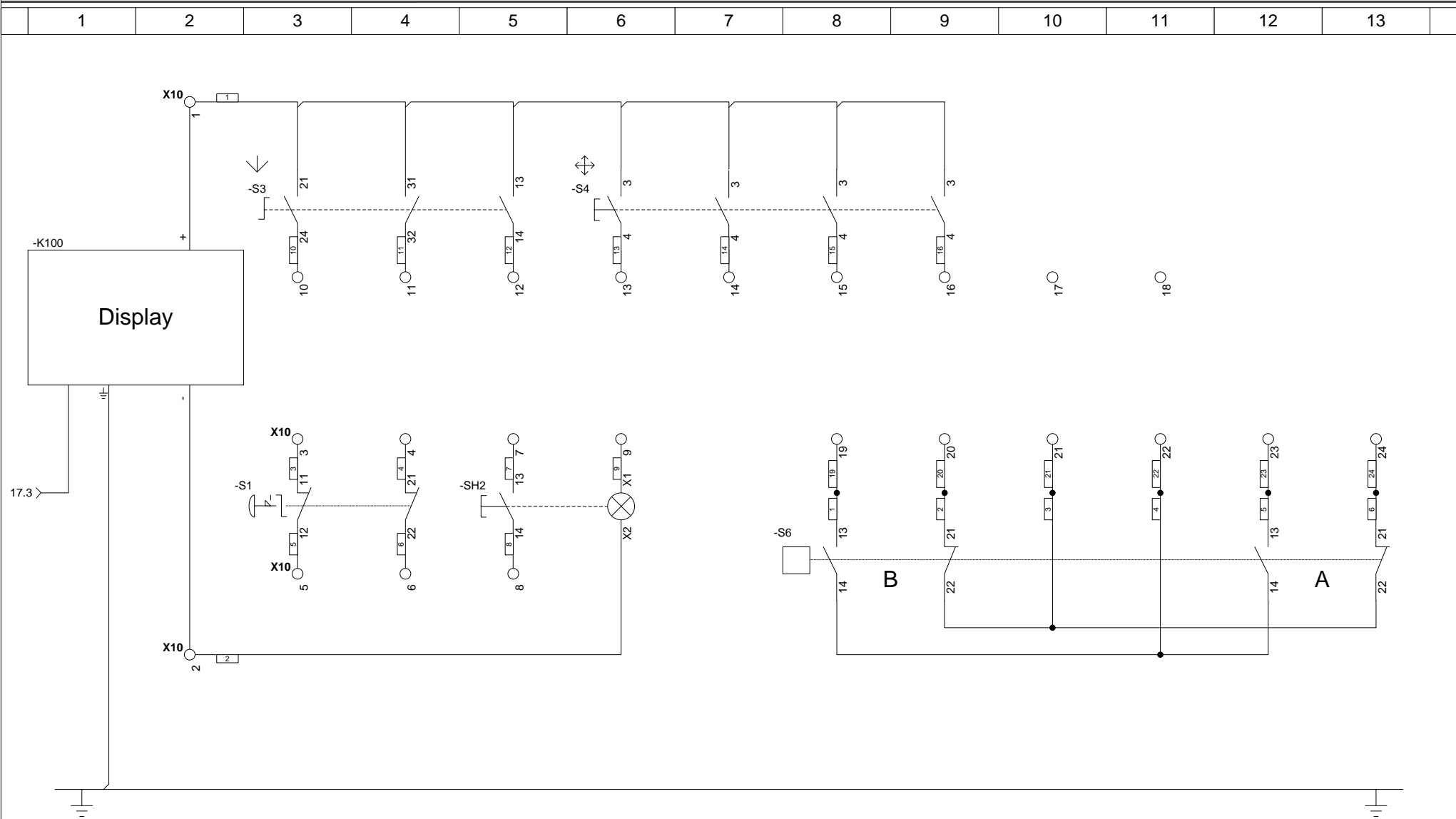
|                        |            |                                       |               |                       |            |            |        |    |
|------------------------|------------|---------------------------------------|---------------|-----------------------|------------|------------|--------|----|
| +A(x)<br>CONTROL PANEL | Location : | Control for Diamond cut Wheel machine | Function :    | ELECTRICAL DEPARTMENT |            |            |        |    |
|                        |            |                                       | I/O TERMINALS | Rev. date             | 25-06-2020 |            | REV    | 5  |
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|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |  |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|--|



|               |                                       |  |                 |  |                       |            |  |           |
|---------------|---------------------------------------|--|-----------------|--|-----------------------|------------|--|-----------|
| +A(x)         | Location :                            |  | Function :      |  | ELECTRICAL DEPARTMENT |            |  |           |
|               | Control for Diamond cut Wheel machine |  | ETHERNET SWITCH |  | Rev. date             | 25-06-2020 |  |           |
| CONTROL PANEL |                                       |  |                 |  | REV                   | 5          |  |           |
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|                        |                                       |             |                       |                   |
|------------------------|---------------------------------------|-------------|-----------------------|-------------------|
| +A(x)<br>CONTROL PANEL | Location :                            | Function :  | ELECTRICAL DEPARTMENT |                   |
|                        | Control for Diamond cut Wheel machine | HMI DISPLAY | Rev. date             | 25-06-2020        |
|                        |                                       |             | REV                   | 5                 |
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