

Test Project

Module D – Fault finding

Industrial Control

Competitor name : _____

Country/region : _____

Station : _____

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Independent Test Project Validator: Guillaume Menth

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Introduction

The Competitor must find five electrical faults in a simulated machine.

It is an industrial coffee roaster.

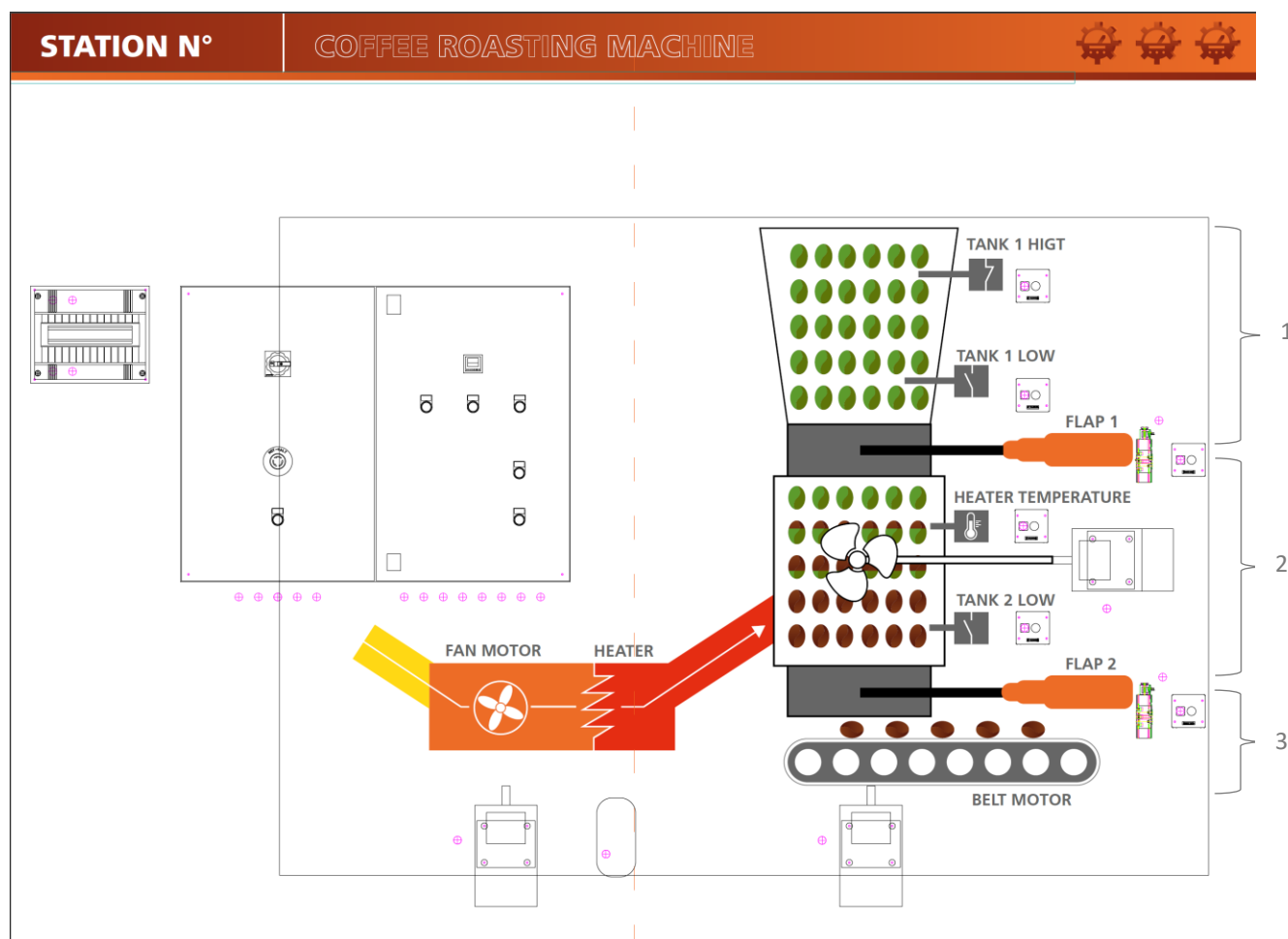


Figure 1

The coffee arrives green in a preheating chamber. [1]

Then the coffee is roasted in the roasting chamber with air heated to more than 250°C. [2]

Finally, the coffee is unloaded onto a conveyor. [3]

Description of project and tasks

The Competitor is required to find 5 introduced faults within a **control circuit only**.

- Using a multi-meter, the Competitor must test the panel and identify the faults on the form provided.
- The Competitor must identify the **type of fault** (SC/OC) and **fault location**.
- All faults must be identified with fault number on the document(s) provided.
- A Competitor **cannot return** a previous fault (only one test per fault).
- Only one fault at a time is introduced for each test.

This Test Project: "Module D" and to be completed in **one hour**:

One hour of work at **C4**

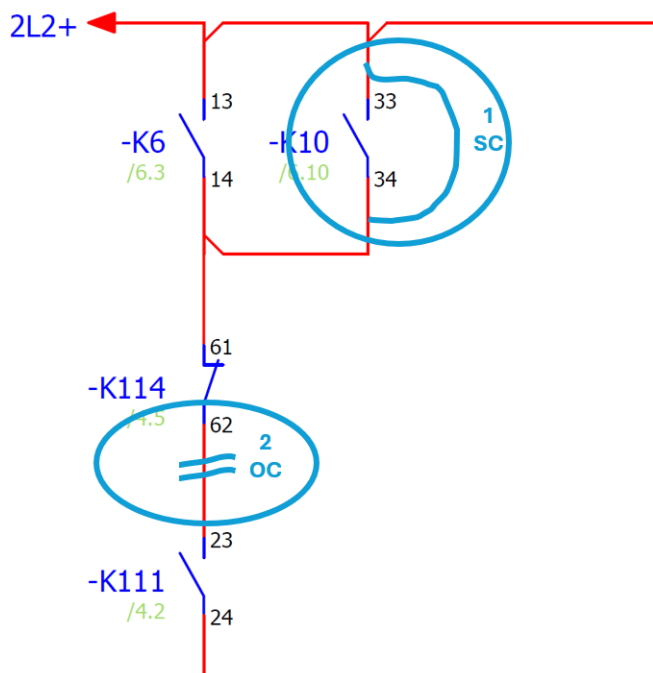
Marking days:

C4: Fault finding

Instructions to the Competitor

Competitors must try all the faults once, and after that can't request to introduce/remark again any of the faults.

Put a **circle** around the **fault** with the fault **number** and describe the **type** of fault SC or OC :



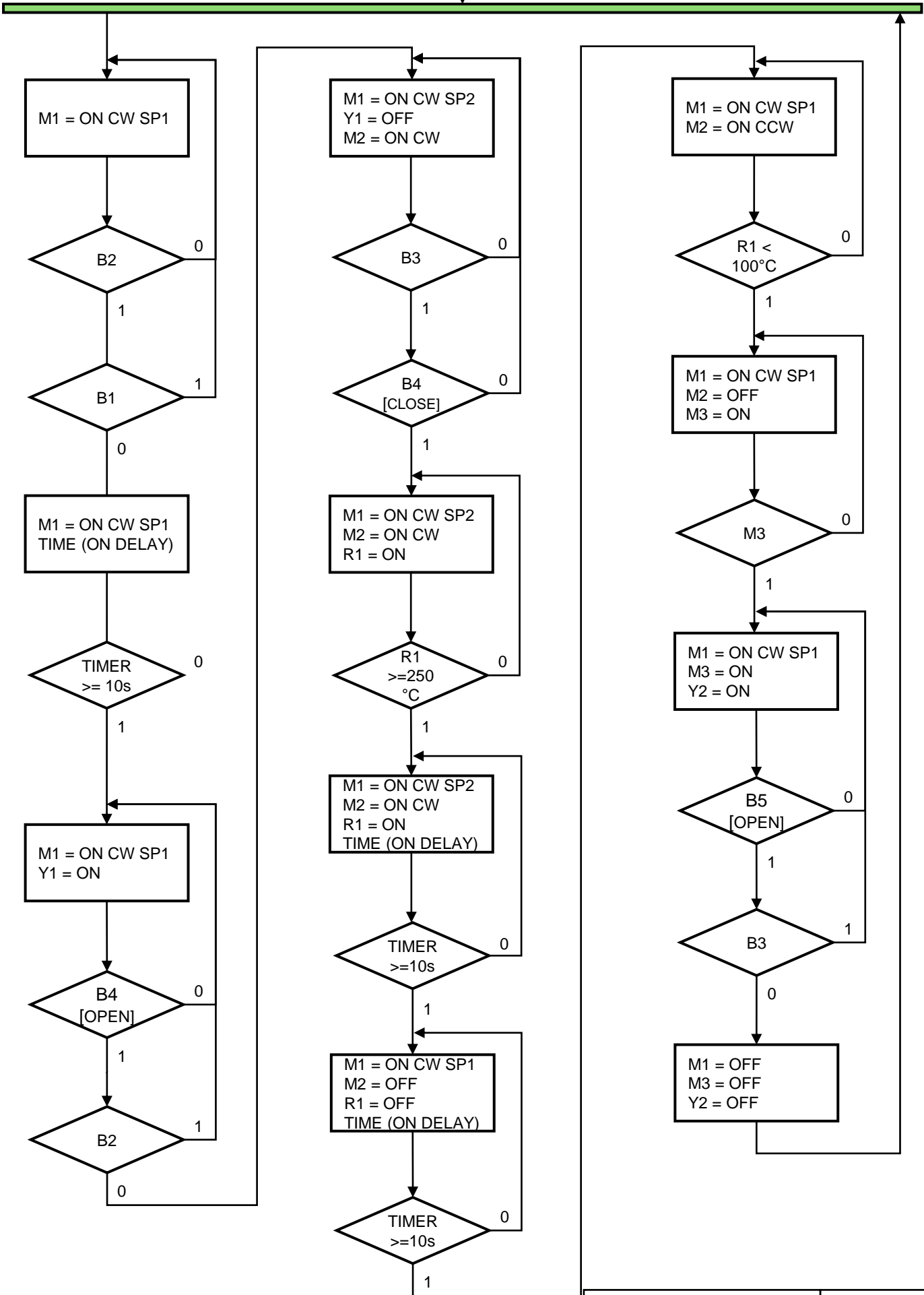
Function description

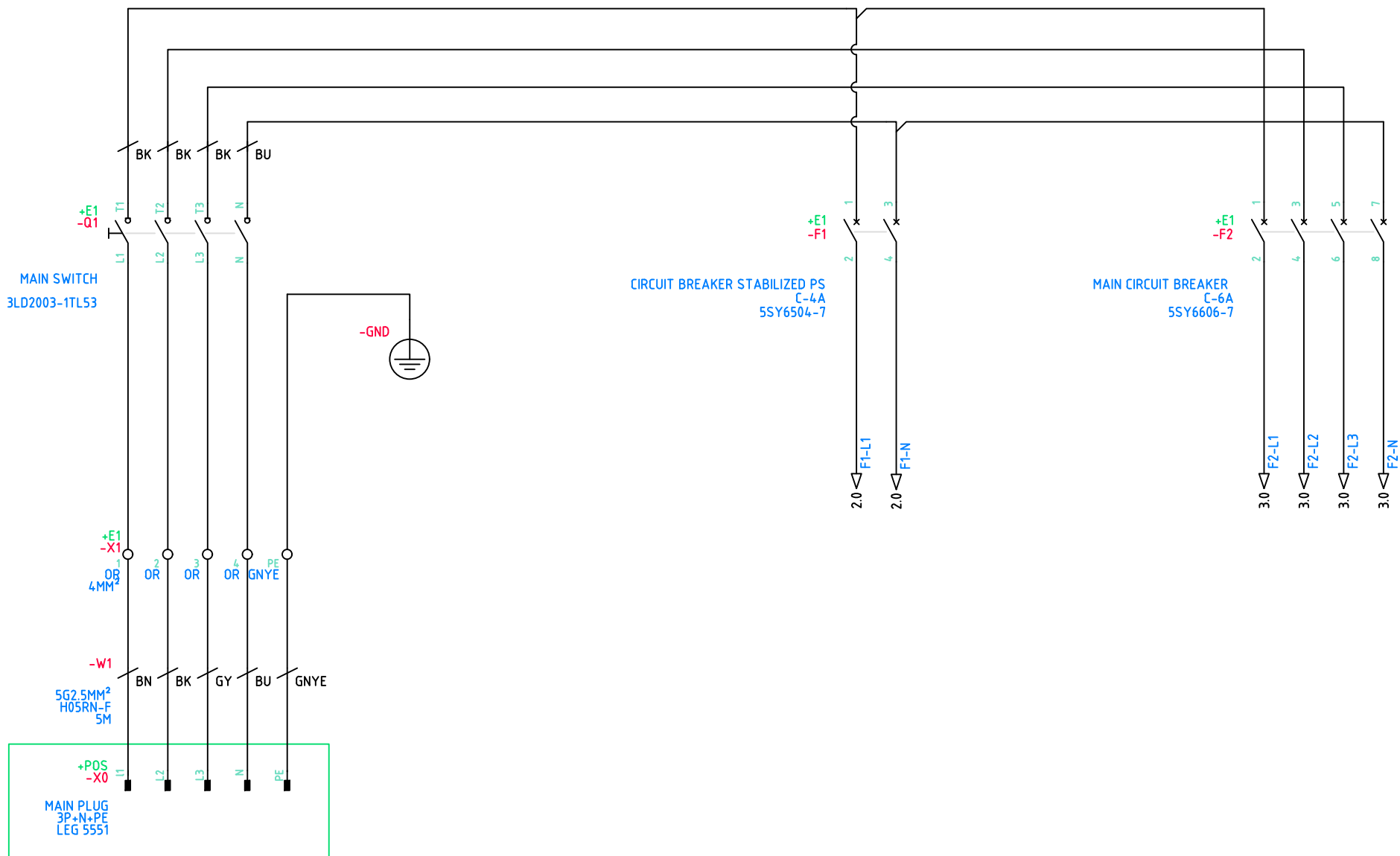
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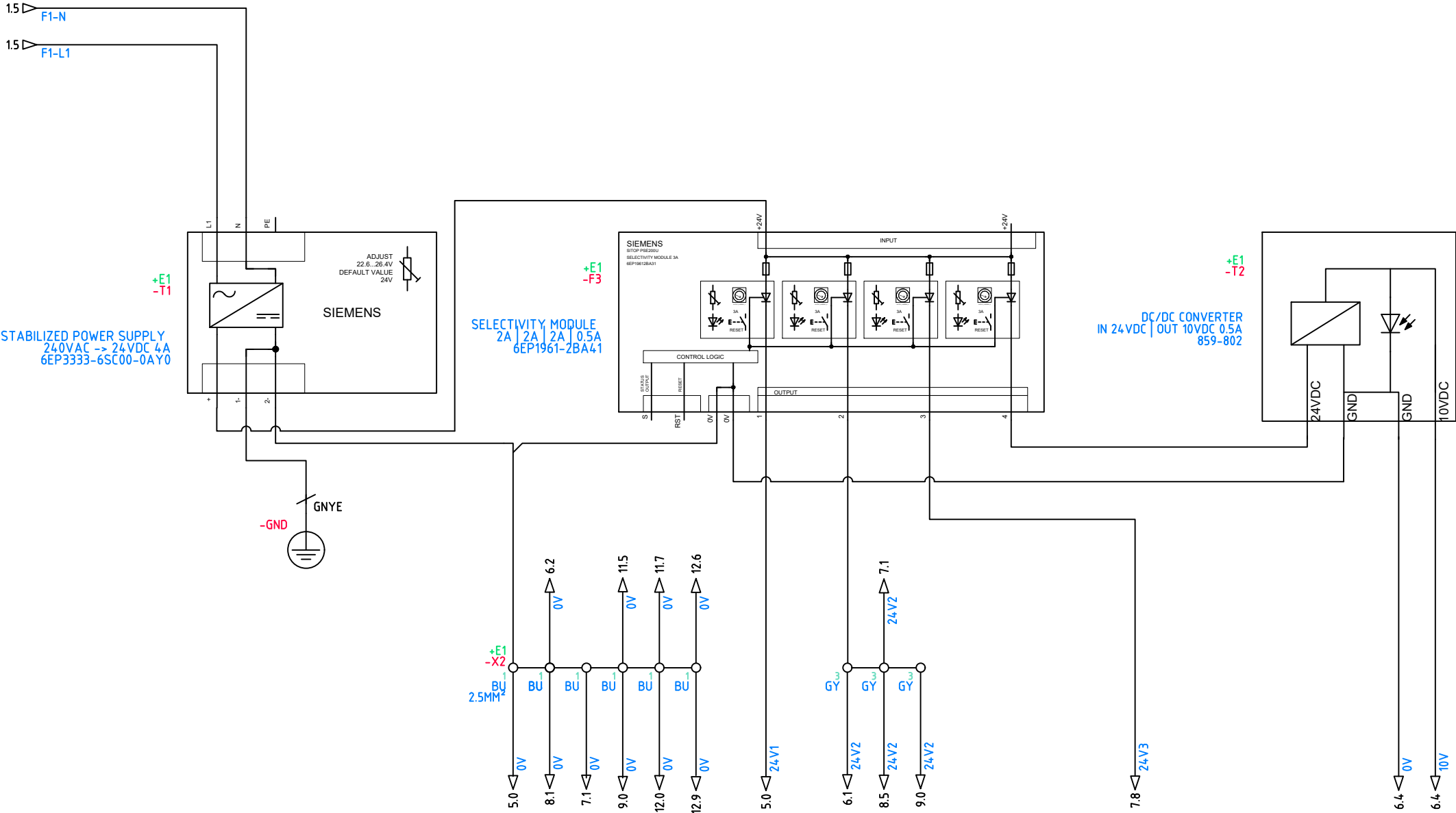
Circuit diagram

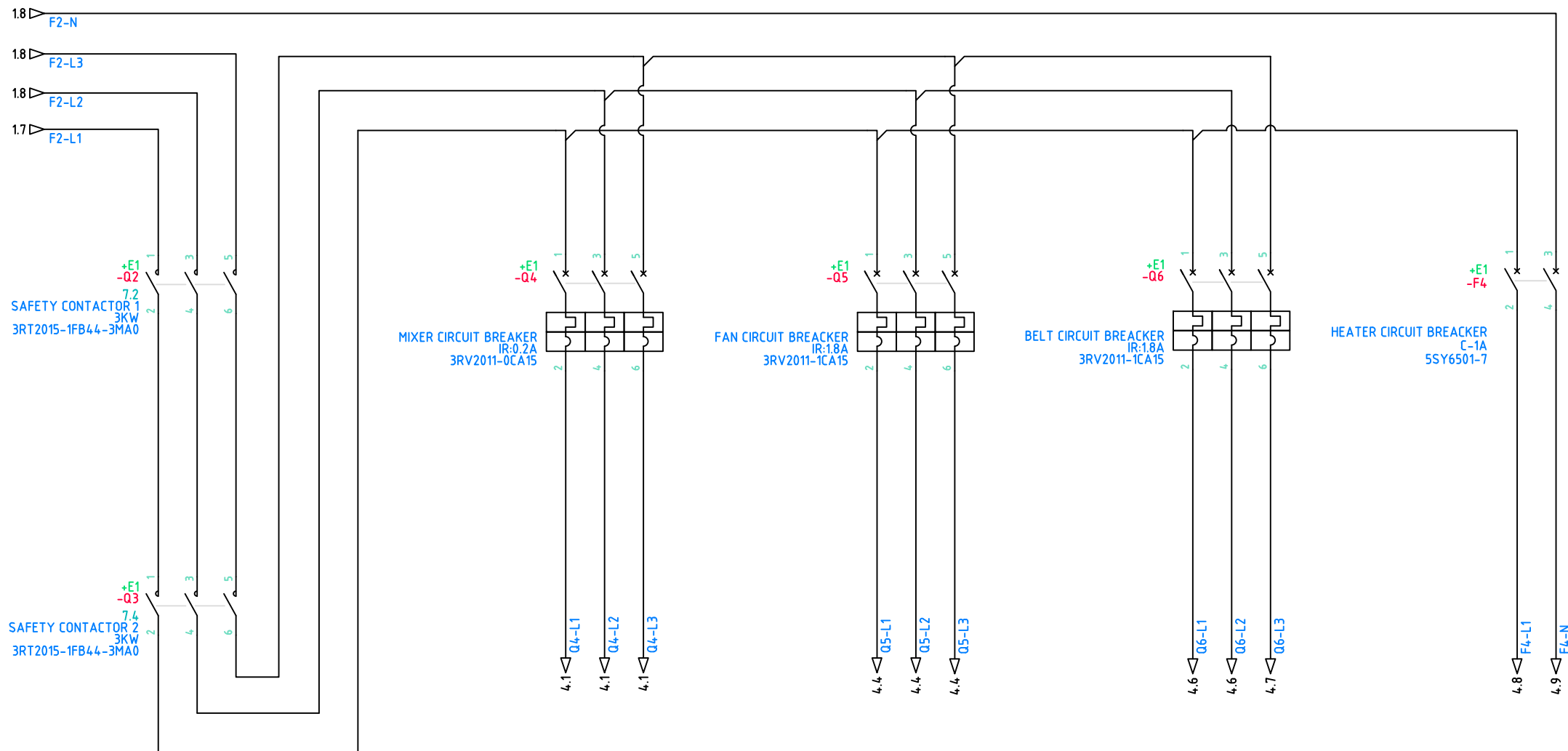
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AUTOMATIC
MODE [K100]









0

1

2

3

4

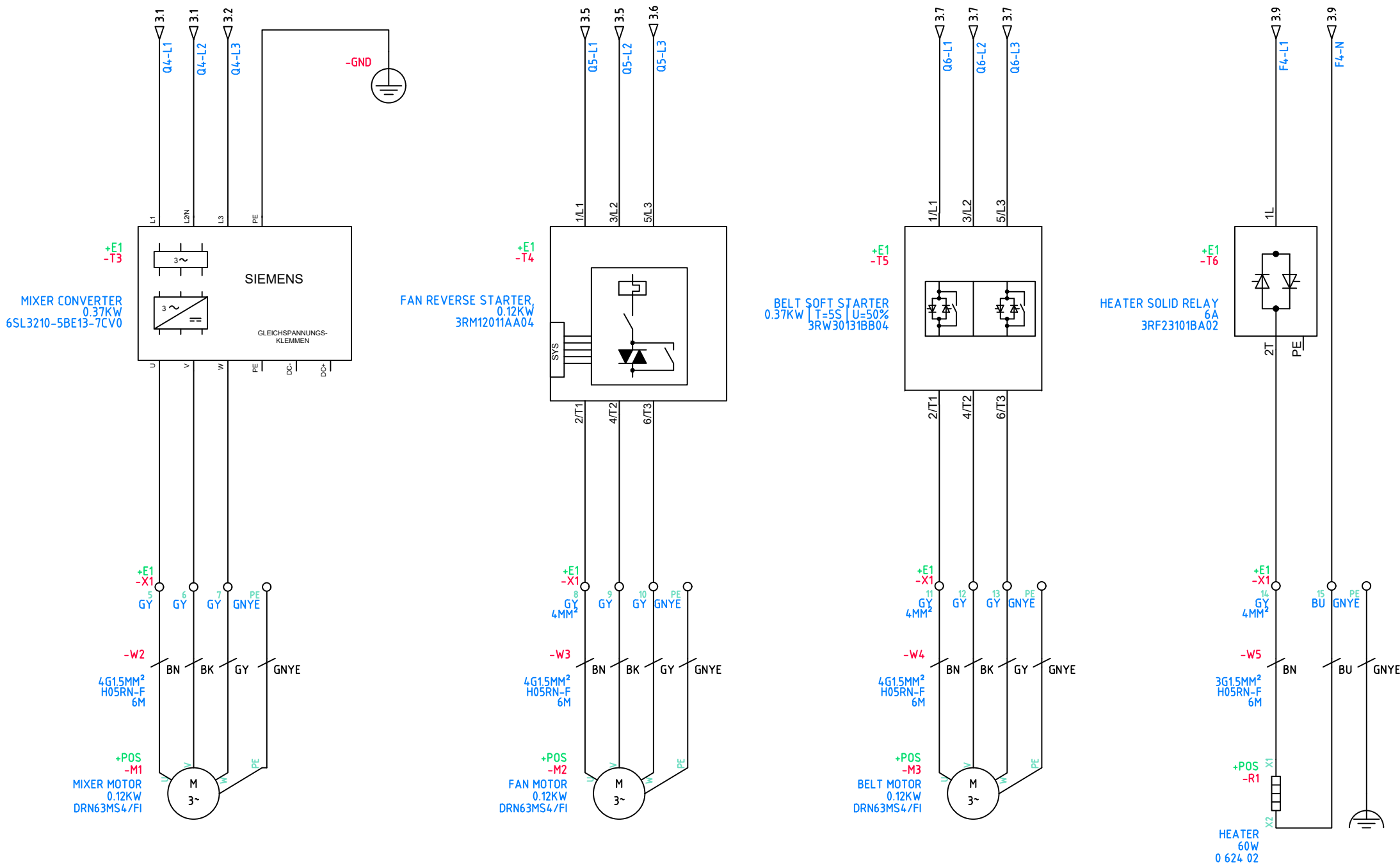
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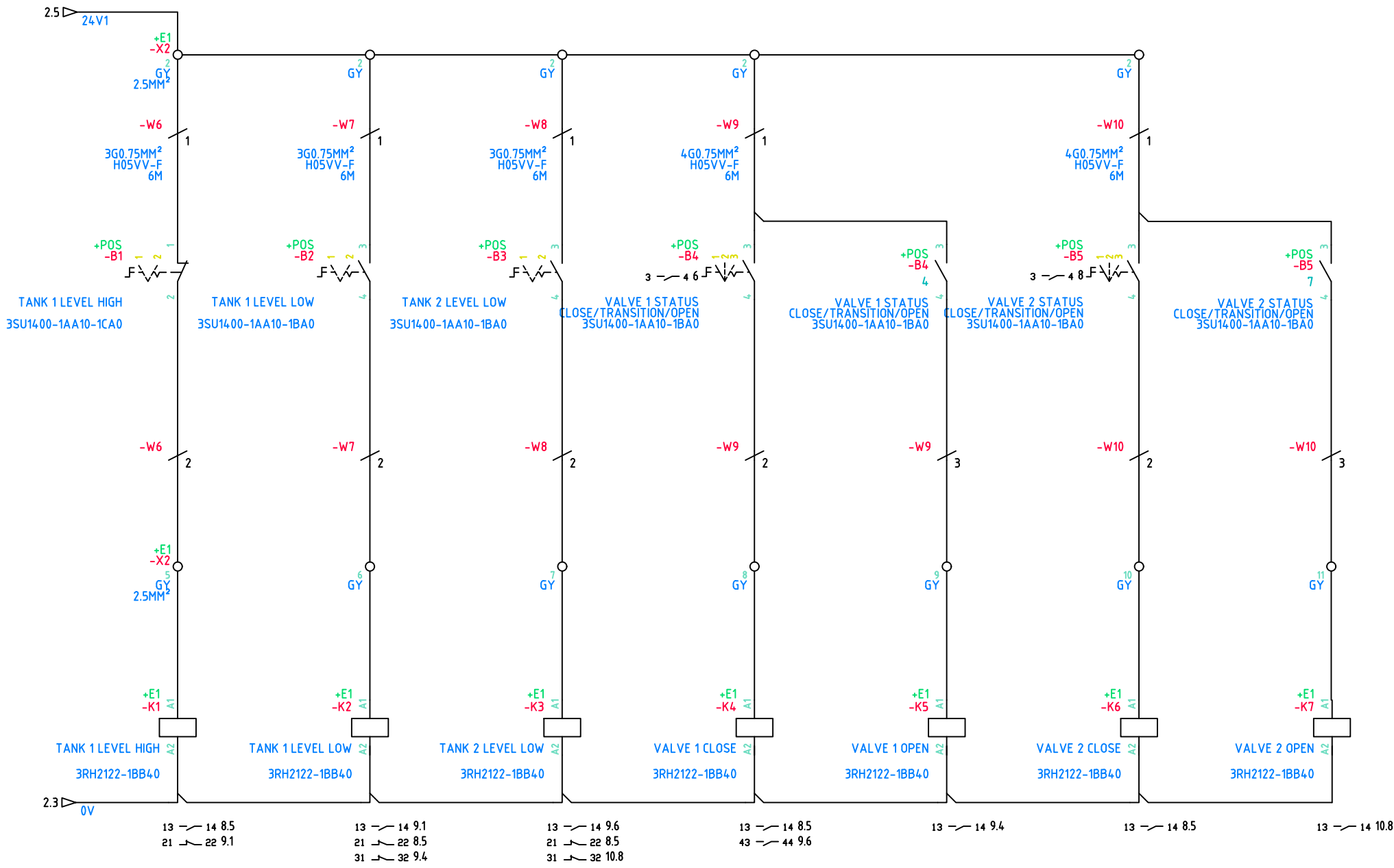
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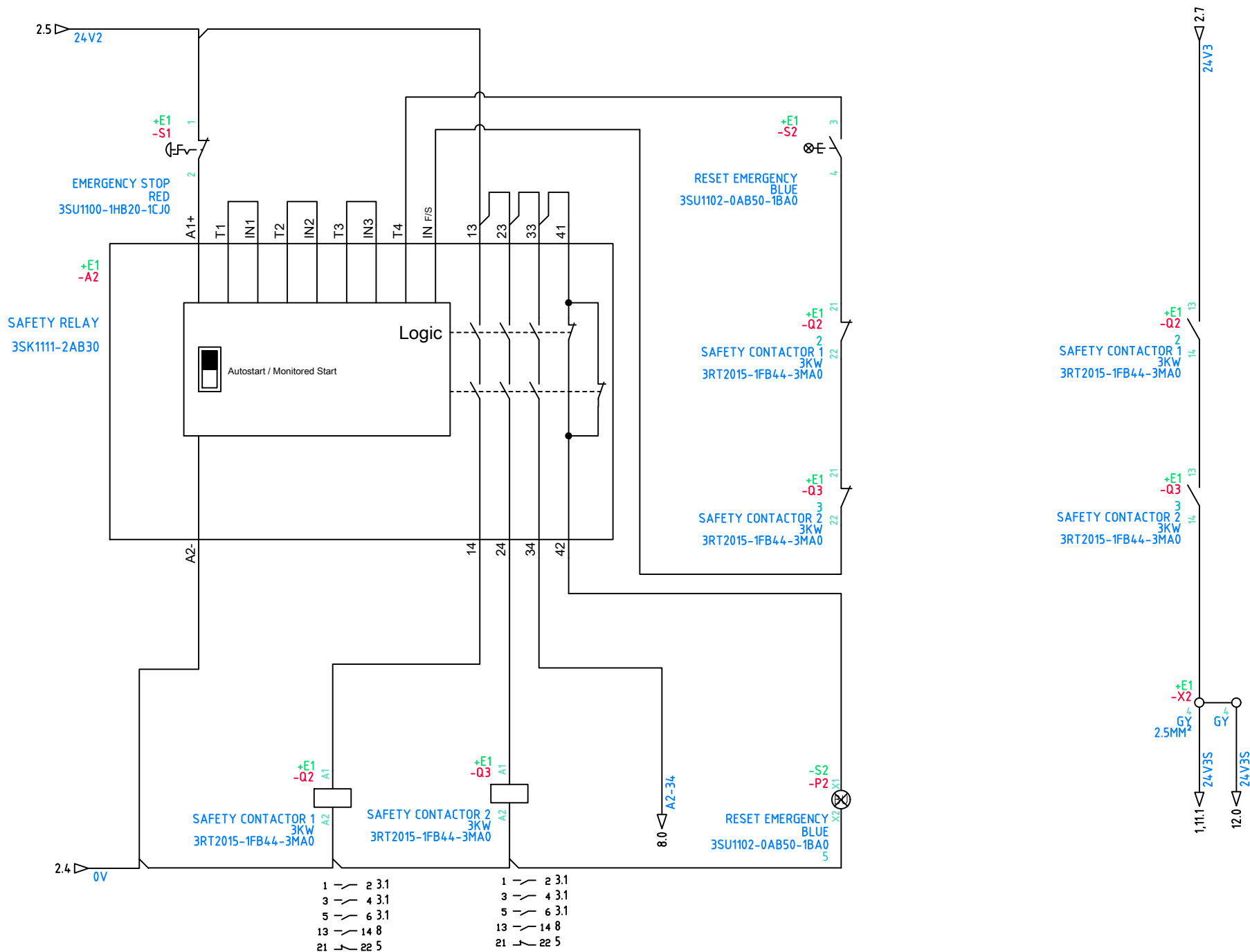
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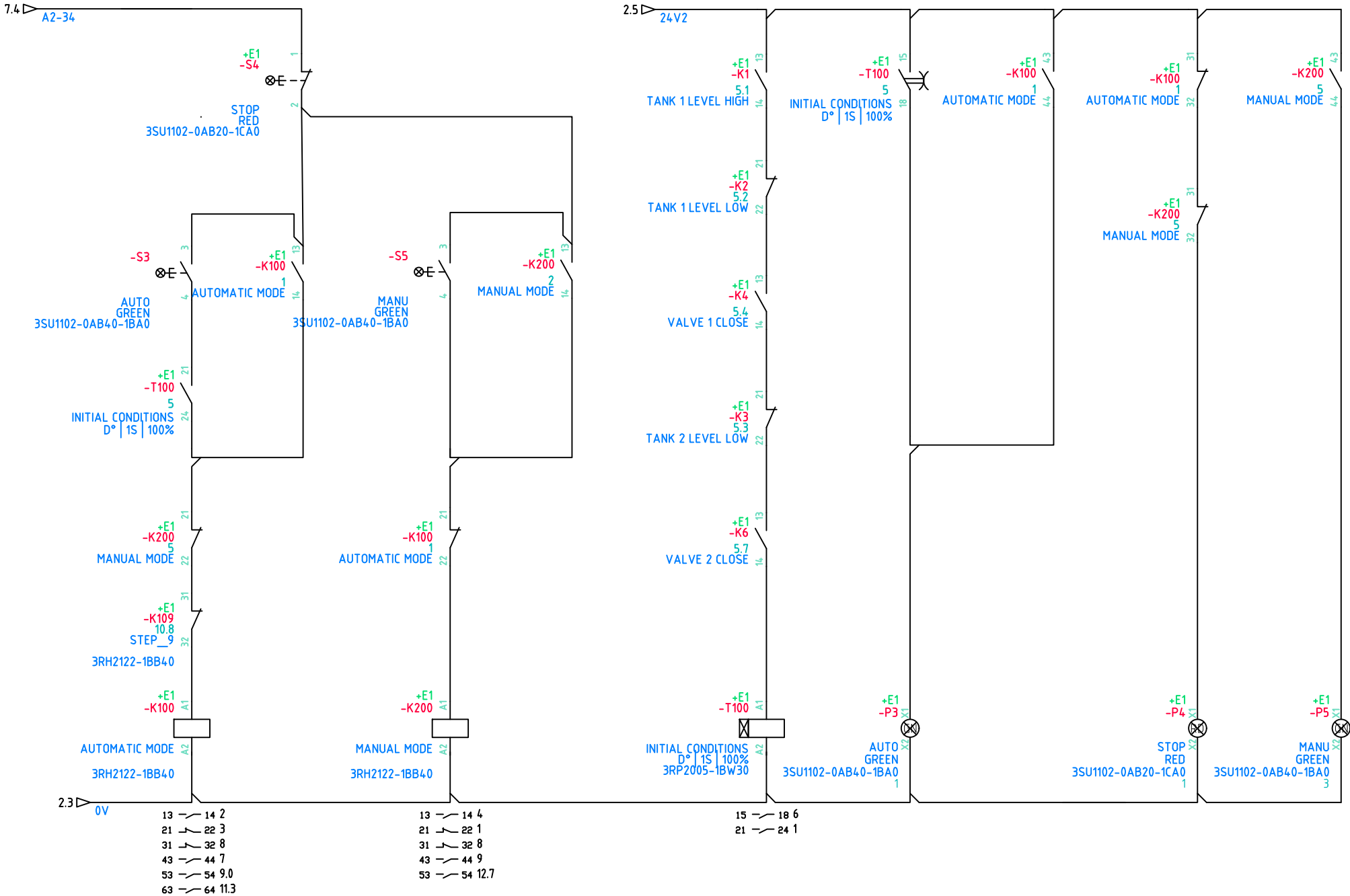


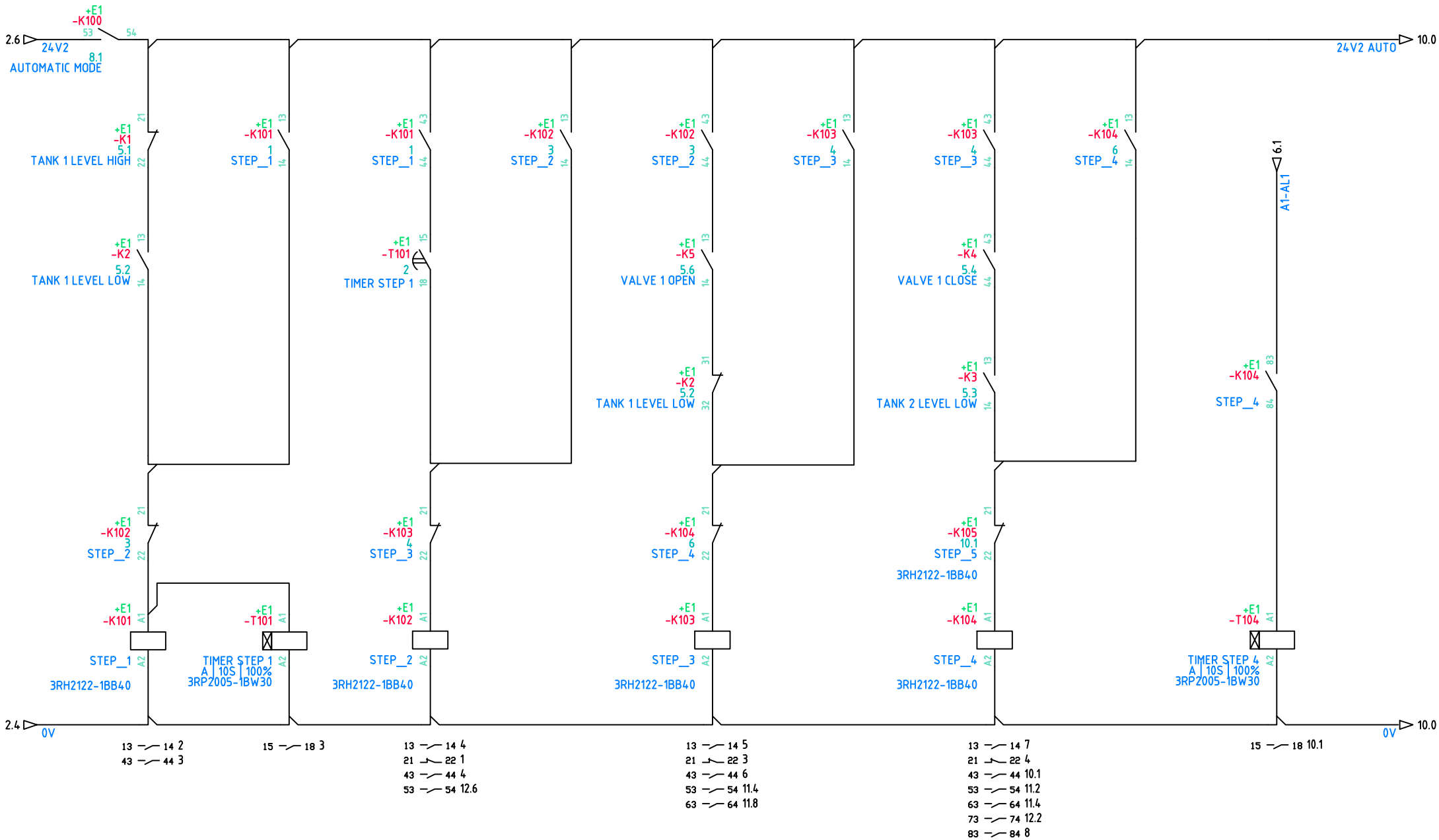


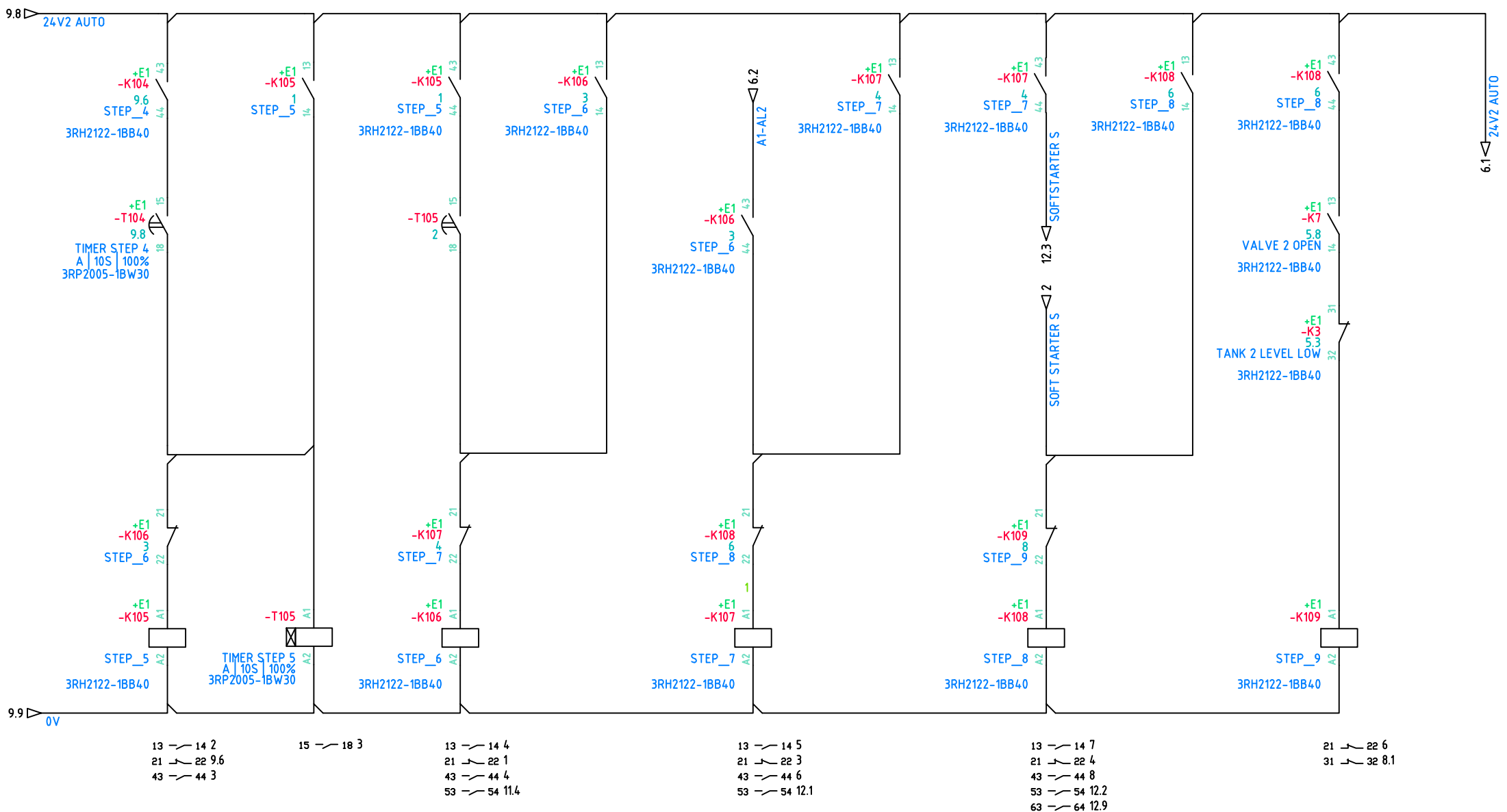


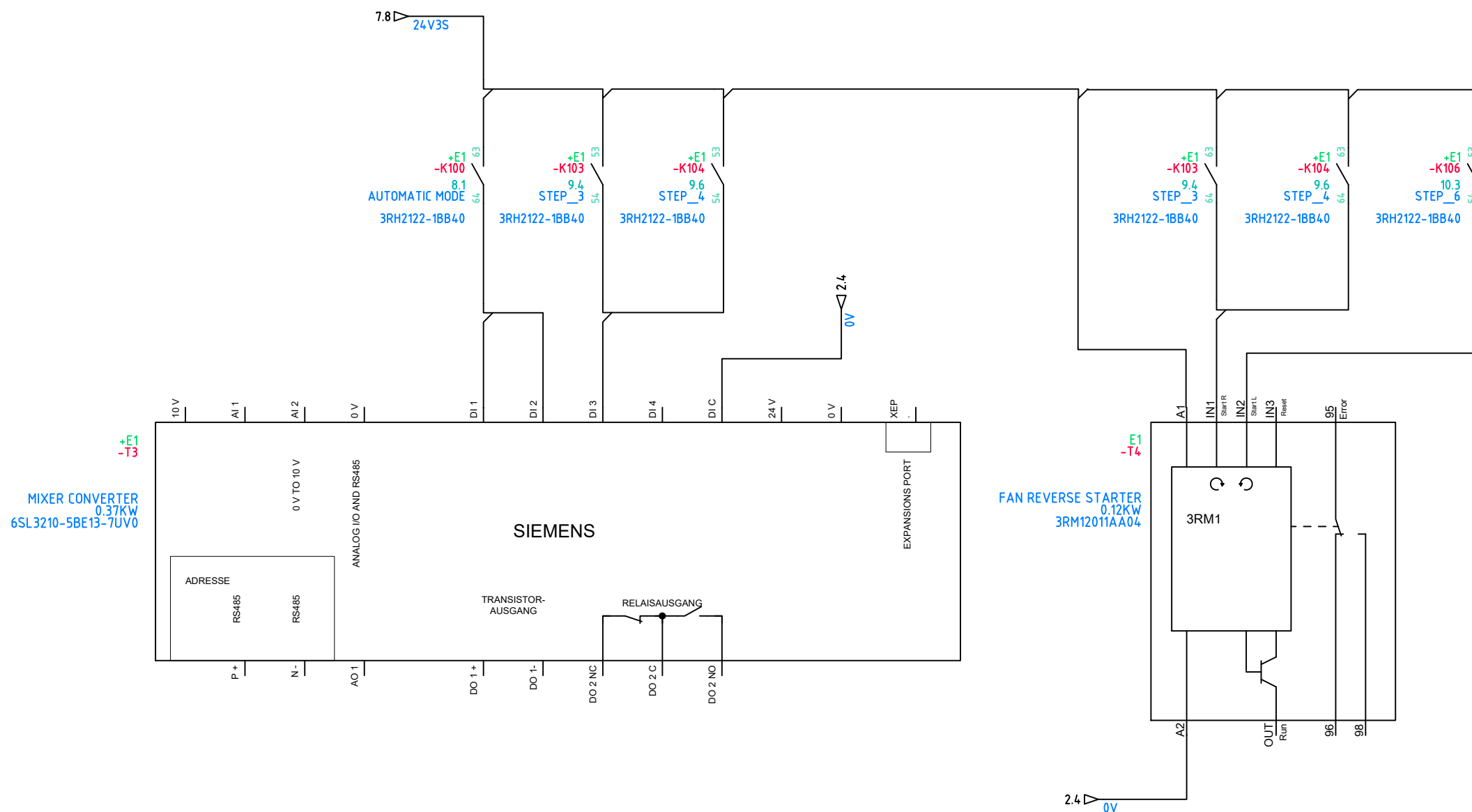
SP = 250

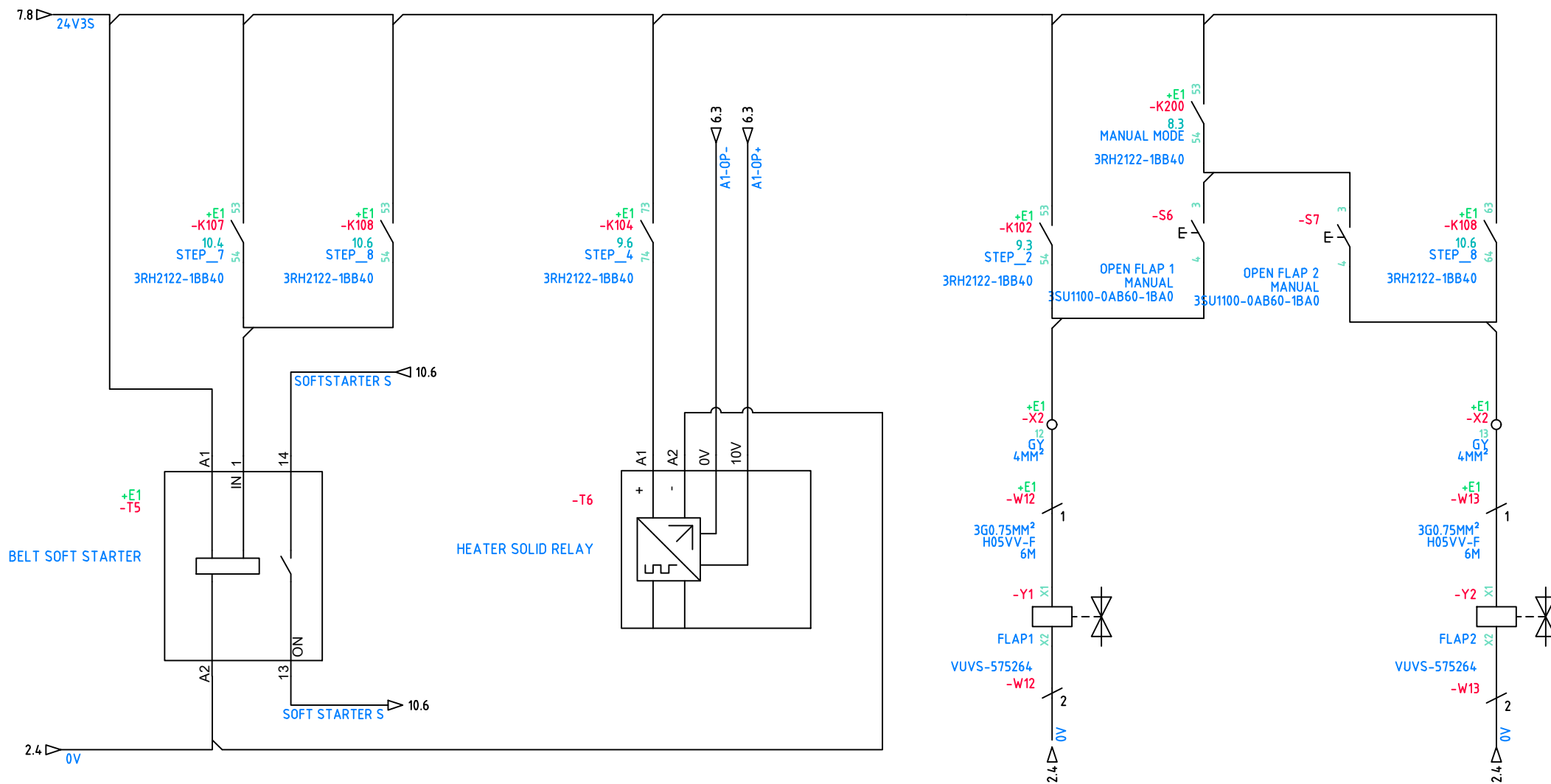


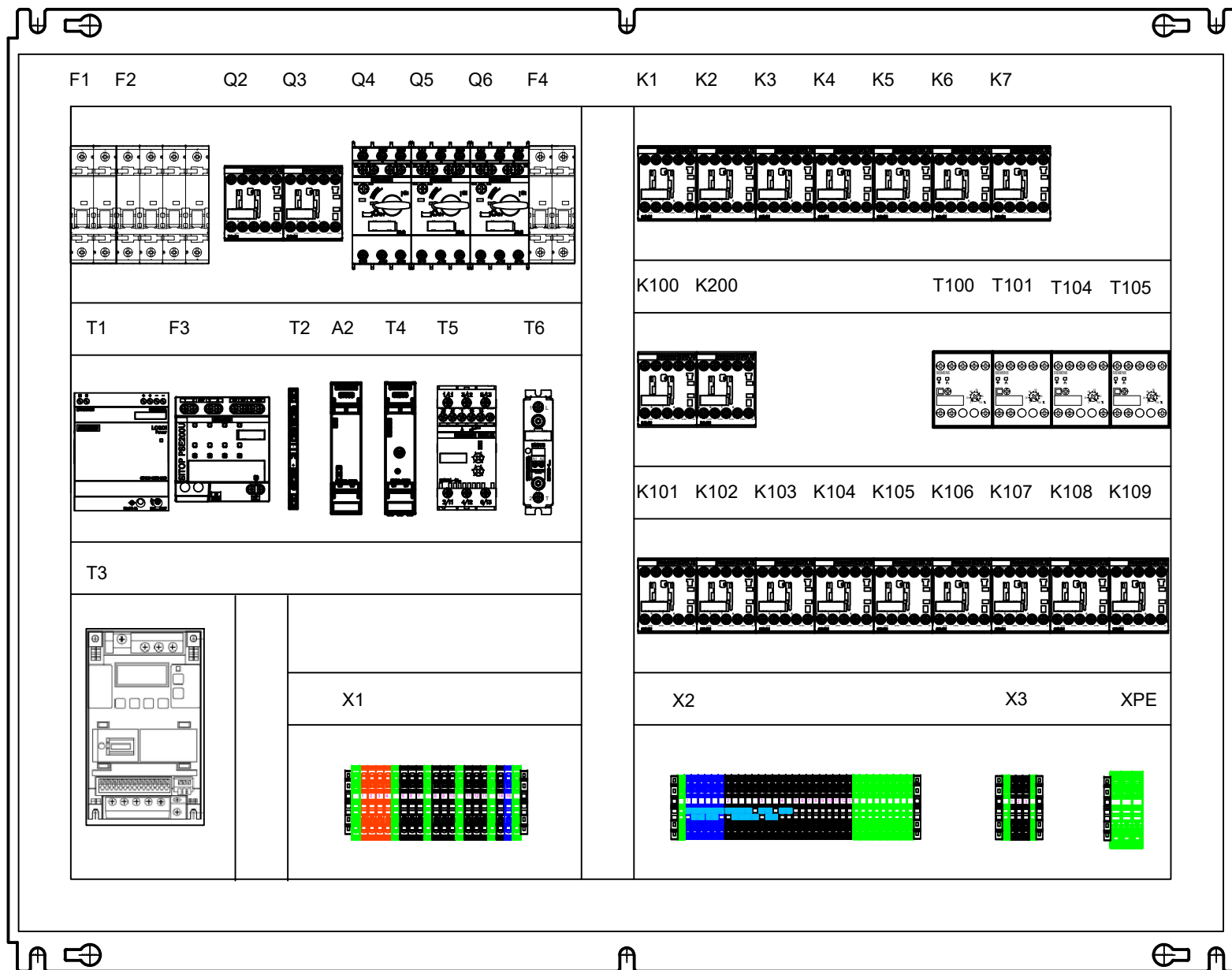




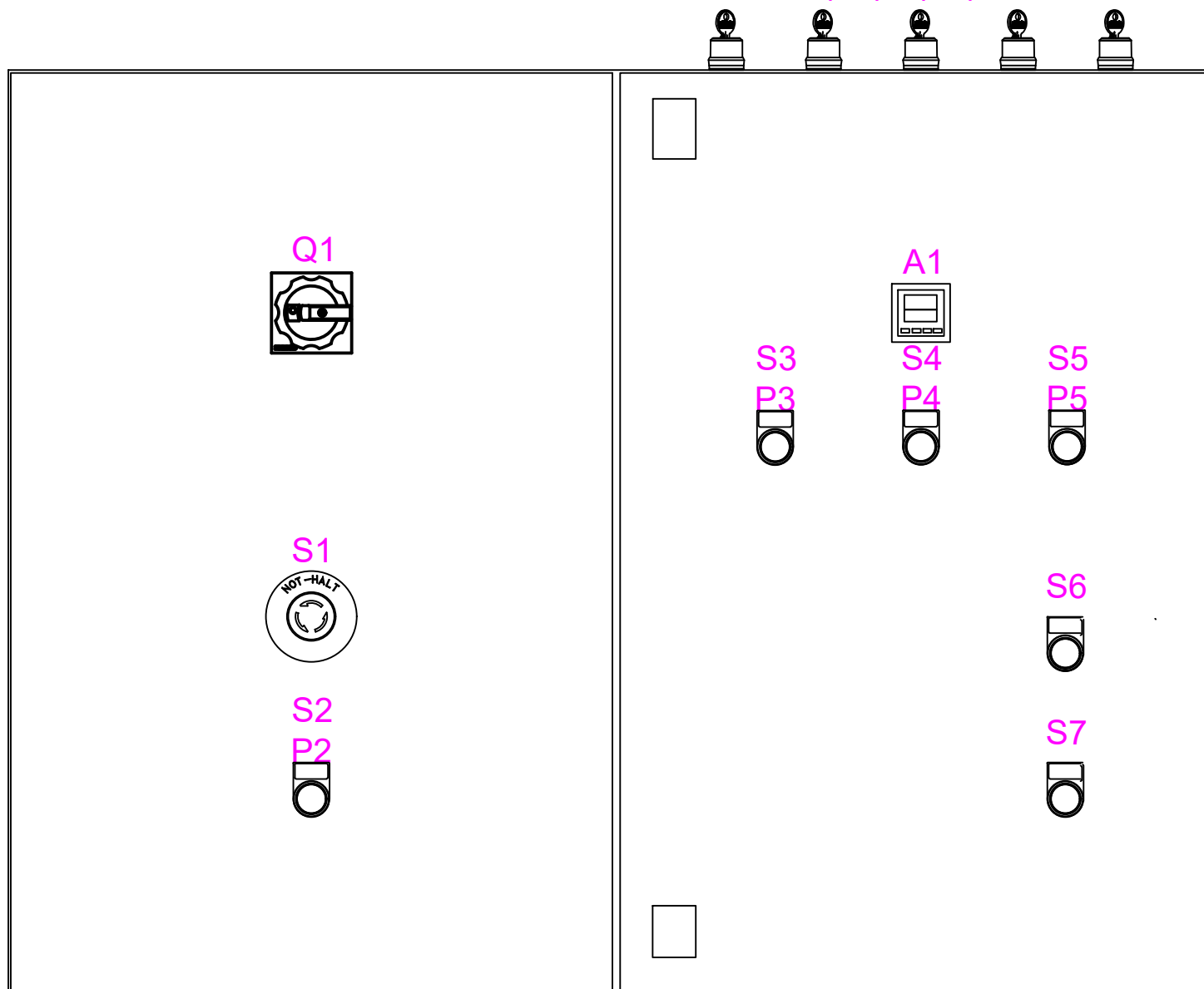




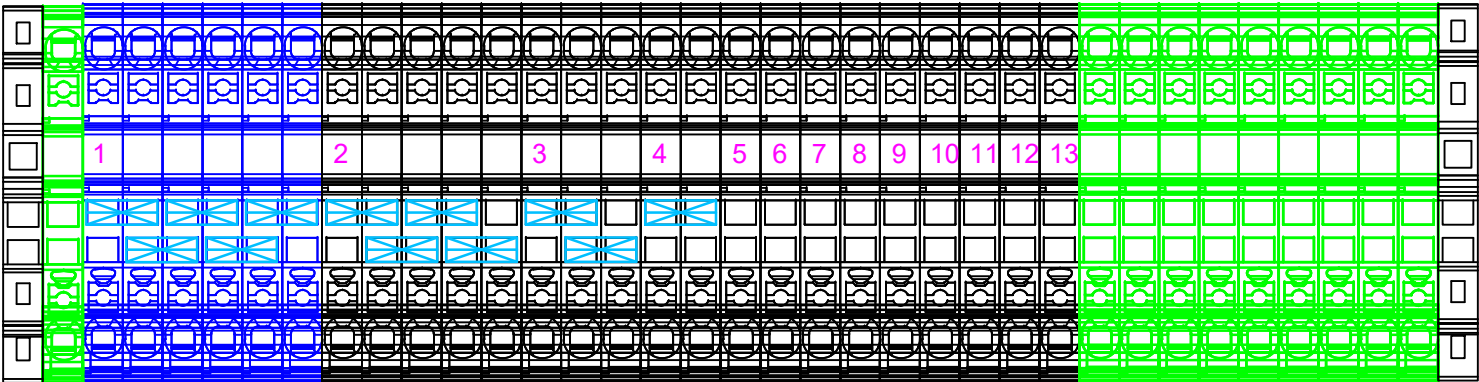




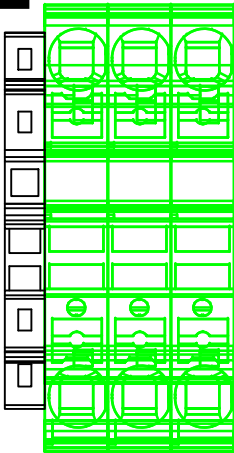
FAULT 1 | 2 | 3 | 4 | 5



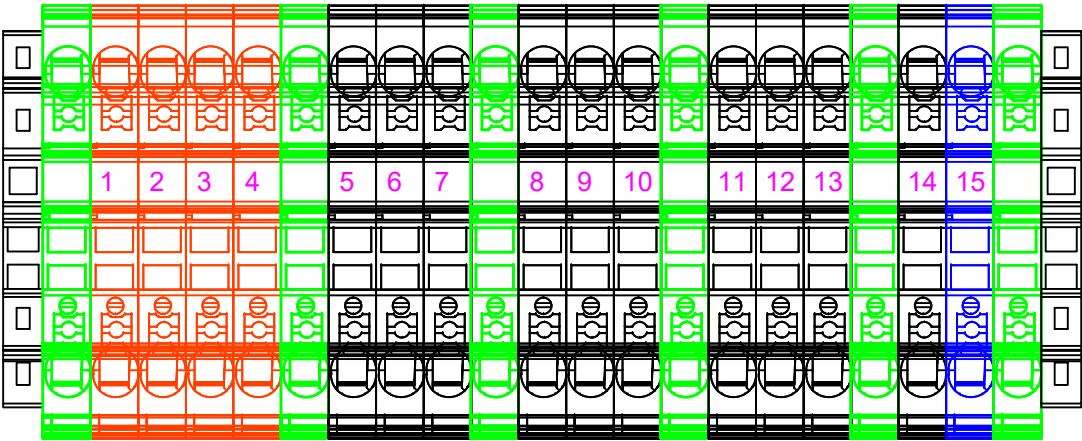
X2



XPE



X1



X3

