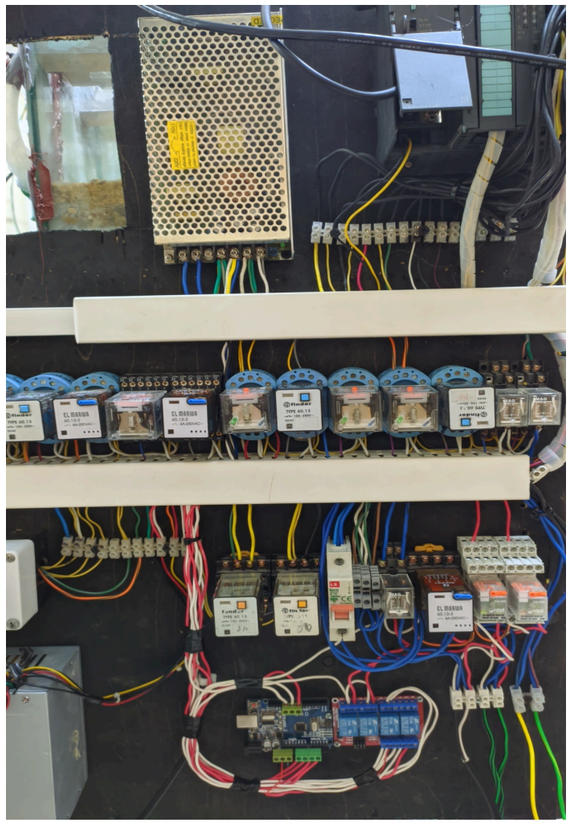
Tanta University , faculty of engineering
Computers & Control Engineering Department

DATAM

Supervision of — Assoc. Prof. Dr\ Mohammad Arafa Al-Badry

Project name — Water Treatment Plant Automation using PLC and SCADA



Place of installation / — Tanta university, Computers & Control Engineering Department

Implemenation of /

Mohamed Adel Darwish
Abanoub Ashraf Labib
Abdallah Mohamed Abd El-Razik
Tasbih Ahmed Attia
Mostafa Esmail Arafat

Potential color definition legend

L	
N	
+24V	
+12V	
0-5V	
0V	

Power source / — 220VAC , 50HZ L,N

Control voltage / — 220VAC , 50HZ / 24Vdc , 12Vdc , 5Vdc / 2 power supplies

Last EPLAN version used / — 2.9.4

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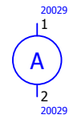
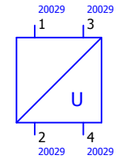
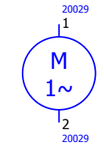
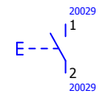
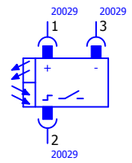
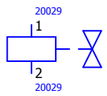
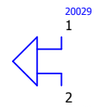
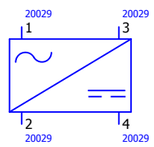
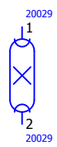
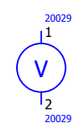
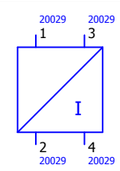
Number of pages — 10

Symbol overview

IEC_symbol

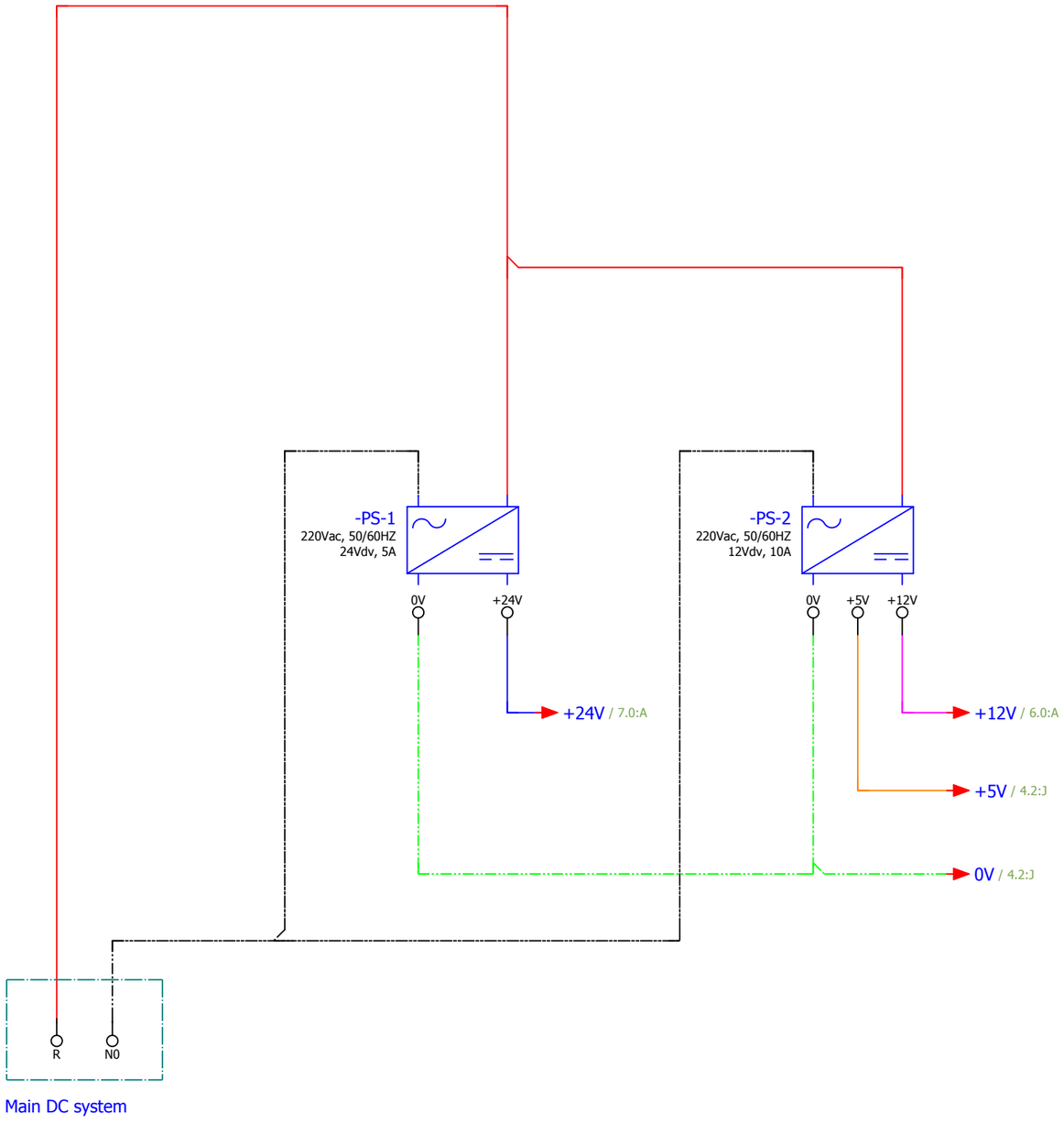
F25_001

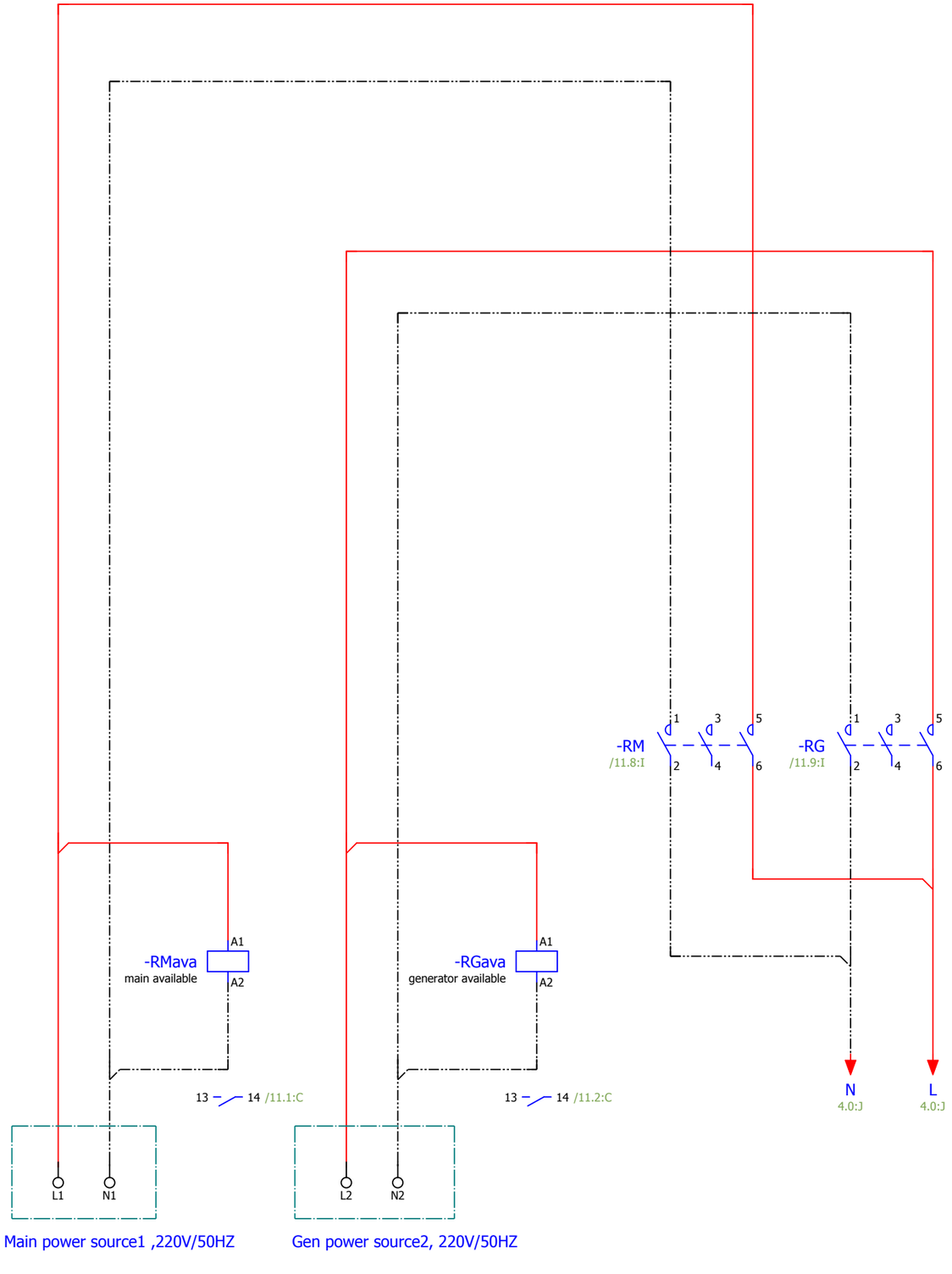
1 S NO contact NO auxiliary contact		93 PA Measuring instrument, with current display, ampmeter Measuring instrument, 2 connection points		1151 TISPQ Measuring transducer, ideal voltage source Measuring transducer, variable	
20 K Electromechanical operating device, general / relay coil, general Coil for power contactor		98 FA1 Circuit breaker, single-pole Circuit breaker		1204 M2AIR AC motor, ventilator / fan Single-coil motor without PE	
35 SSD Pressure switch, NO contact Pushbutton, NO contact		138 SSLRX Photoelectric switch, NO contact, with plug-in connection Light barrier, NO contact with power supply		1352 X2_2 Terminal with 2 connection points (1 x graphical line) Terminal, general, with saddle jumper, 2 connection points	
36 SOD Pressure switch, NC contact Pushbutton, NC contact		169 SSNOT1 Emergency stop switch / Emergency stop pushbutton, NO contact Pushbutton, NO contact		1411 X1_B Terminal with one connection point and 2 saddle jumper connections Terminal, general, with saddle jumper, 1 connection point	
45 Y1 Solenoid valve, general Valve, single		170 SONOT1 Emergency stop switch / Emergency stop pushbutton, NC contact Pushbutton, NC contact		1413 X2_NB Terminal with 2 connection points without saddle jumper connections Terminal, general, 2 connection points	
46 H Lamp / indicator light, general Lamp, single		283 HSI Siren Signal device, acoustic, single			
56 G22 Rectifier, single-phase Rectifier, variable		313 EH2 Fluorescent lamp without PE Light, 2 connection points			
92 PV Measuring instrument, with voltage display / voltmeter Measuring instrument, 2 connection points		1150 TISTQ Measuring transducer, ideal current source Measuring transducer, variable			

Project Name / Location Graduation project / Tanta university	Project description Water Treatment Plant Automation using PLC and SCADA	Supervision of / Assoc. Prof. Dr\ Mohammad Arafa Al-Badry	Mohamed Adel Darwish Abanoub Ashraf Labib Abdallah Mohamed Abd El-Razik Tasbih Ahmed Attia Mostafa Esmail Arafat	Page number 2 /10 Scale 1 : 1 Page Name Symbol overview

Legend

EMG : emergency switch S1 : stop push button S2 : start push button P.S : power supply	Ph.cell : photoelectric cell RQ0.0/Q1.7 : plc output card relays RTD : resistance temperature detector TPDT : tripple path, double through	DPDT : double path, double through 1PDT: one path, double through LEV : level sensor





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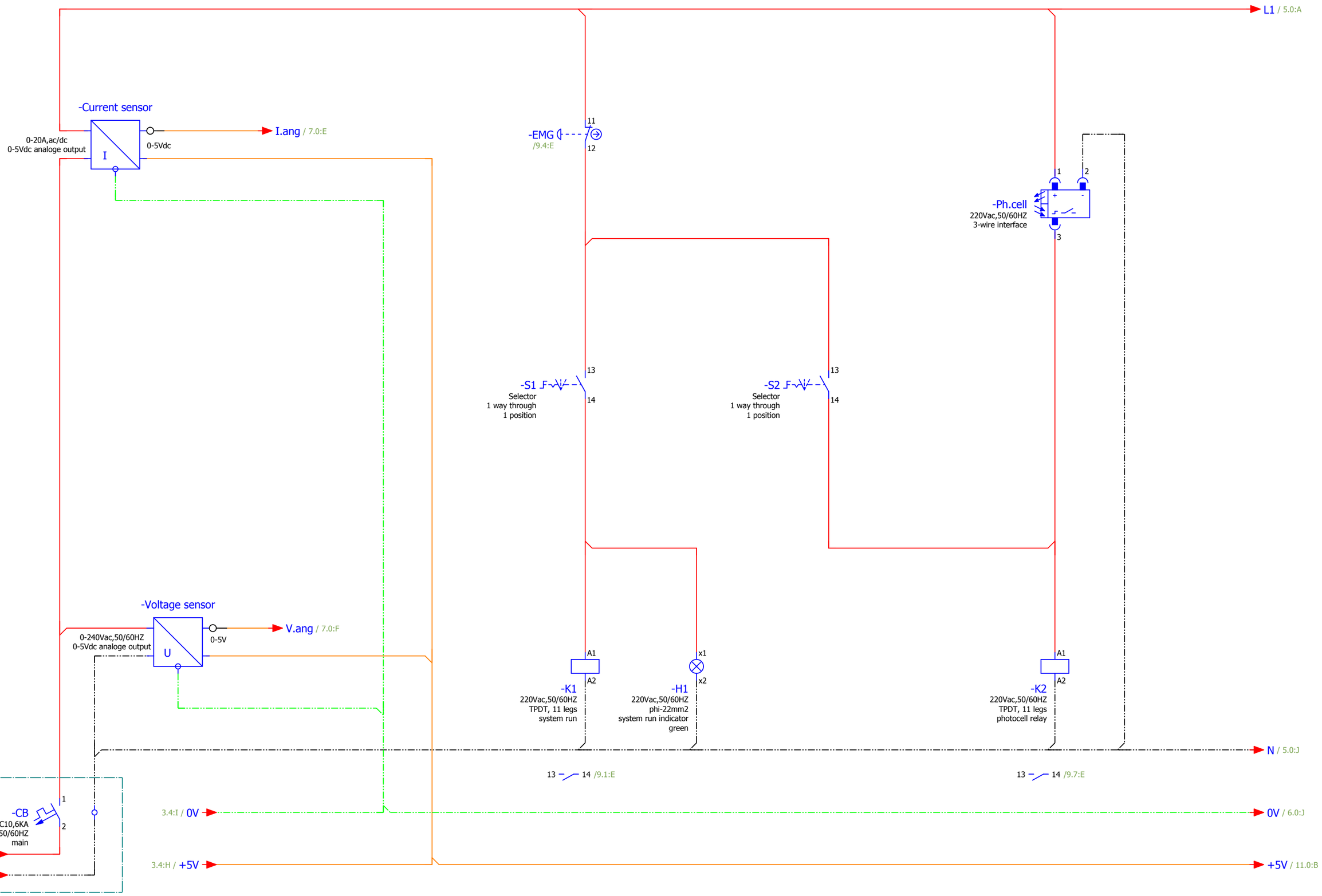

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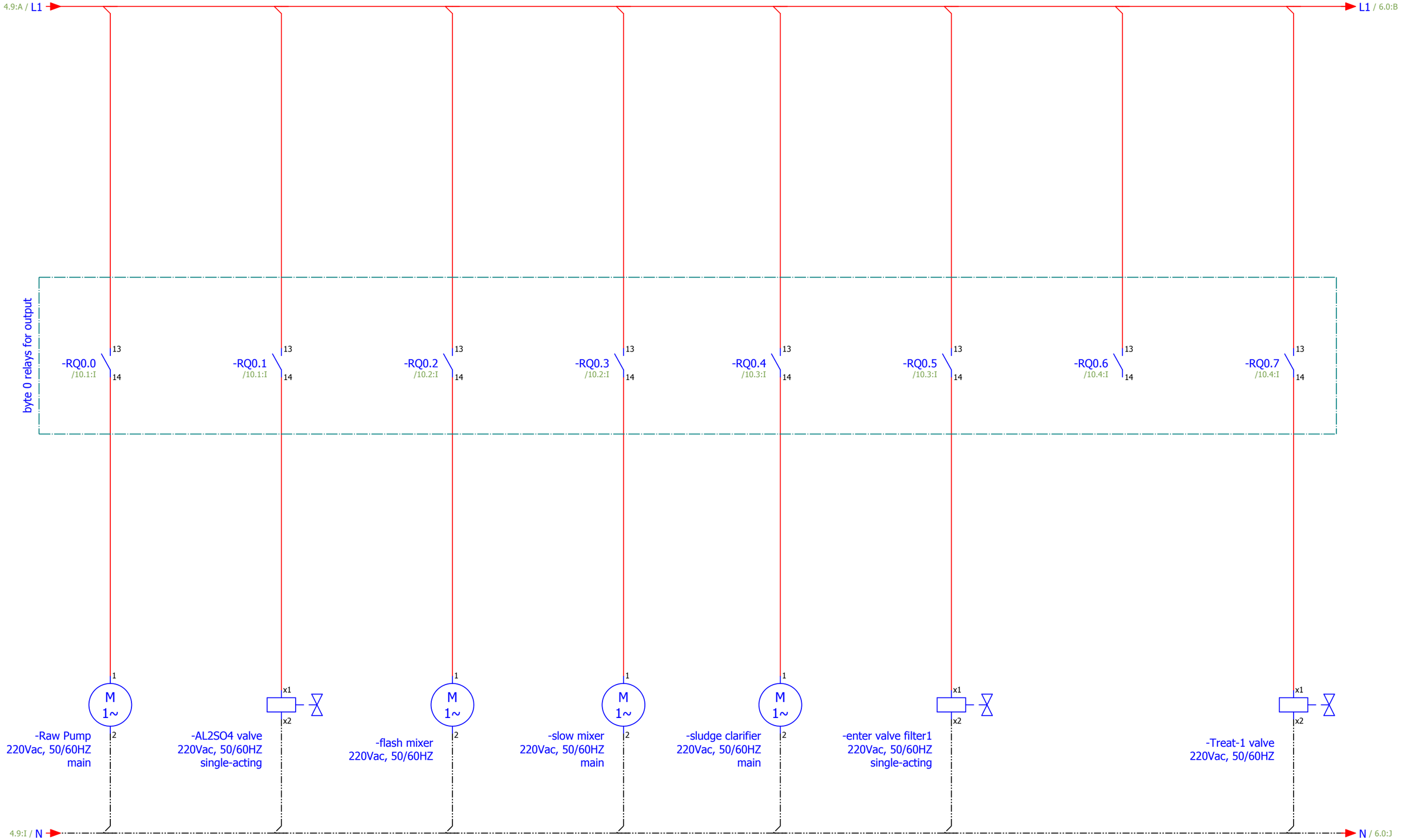

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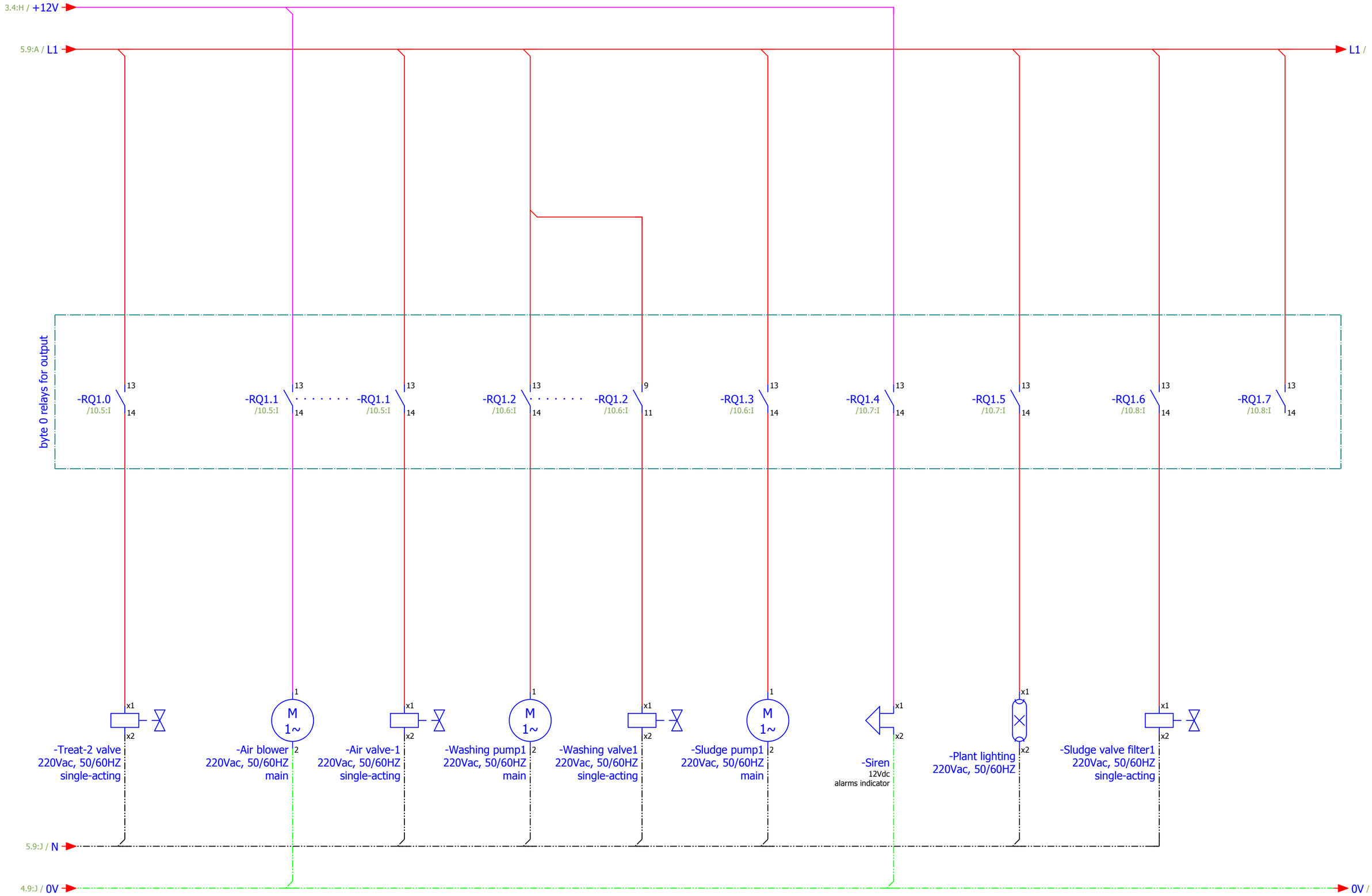

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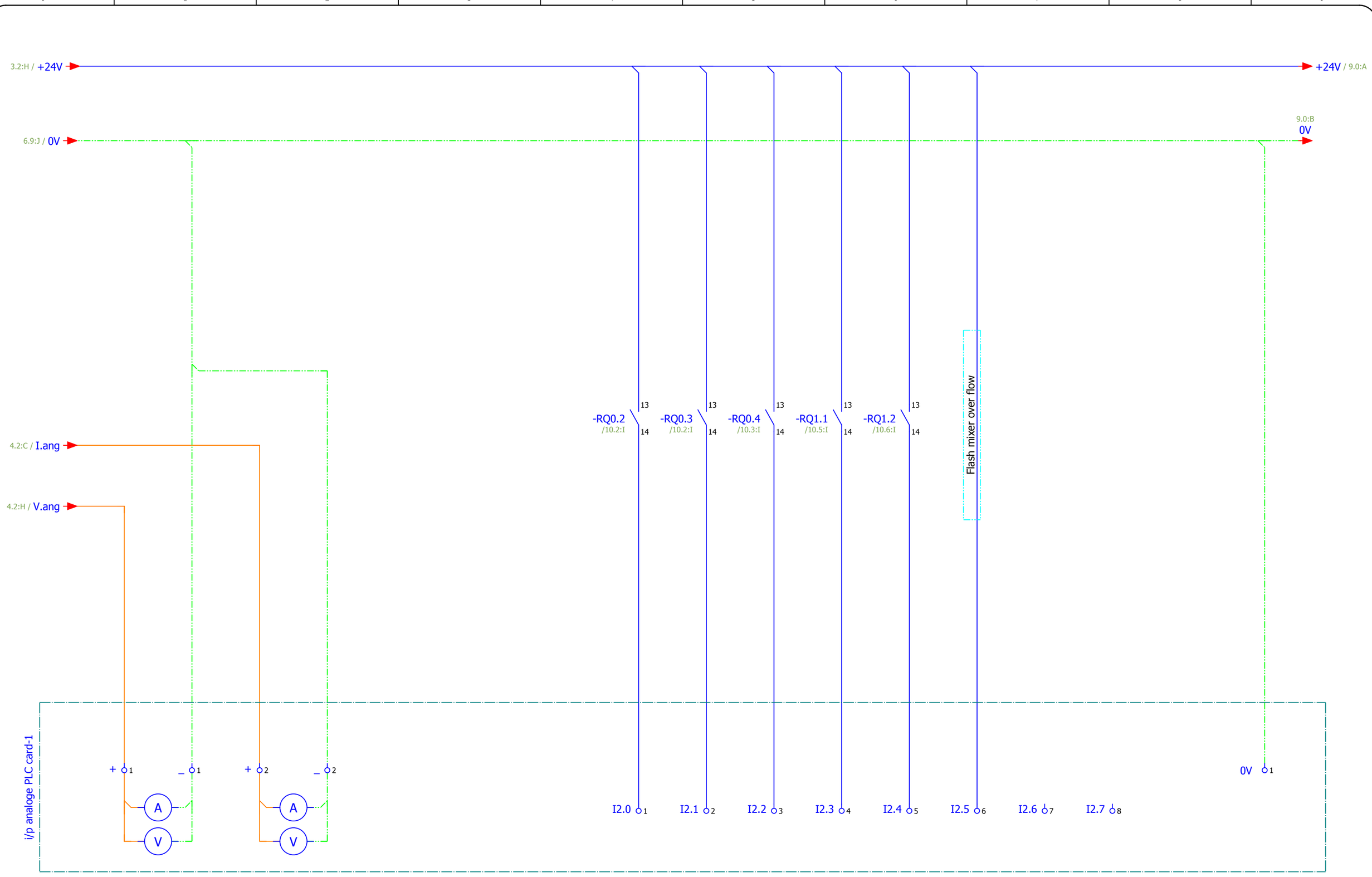

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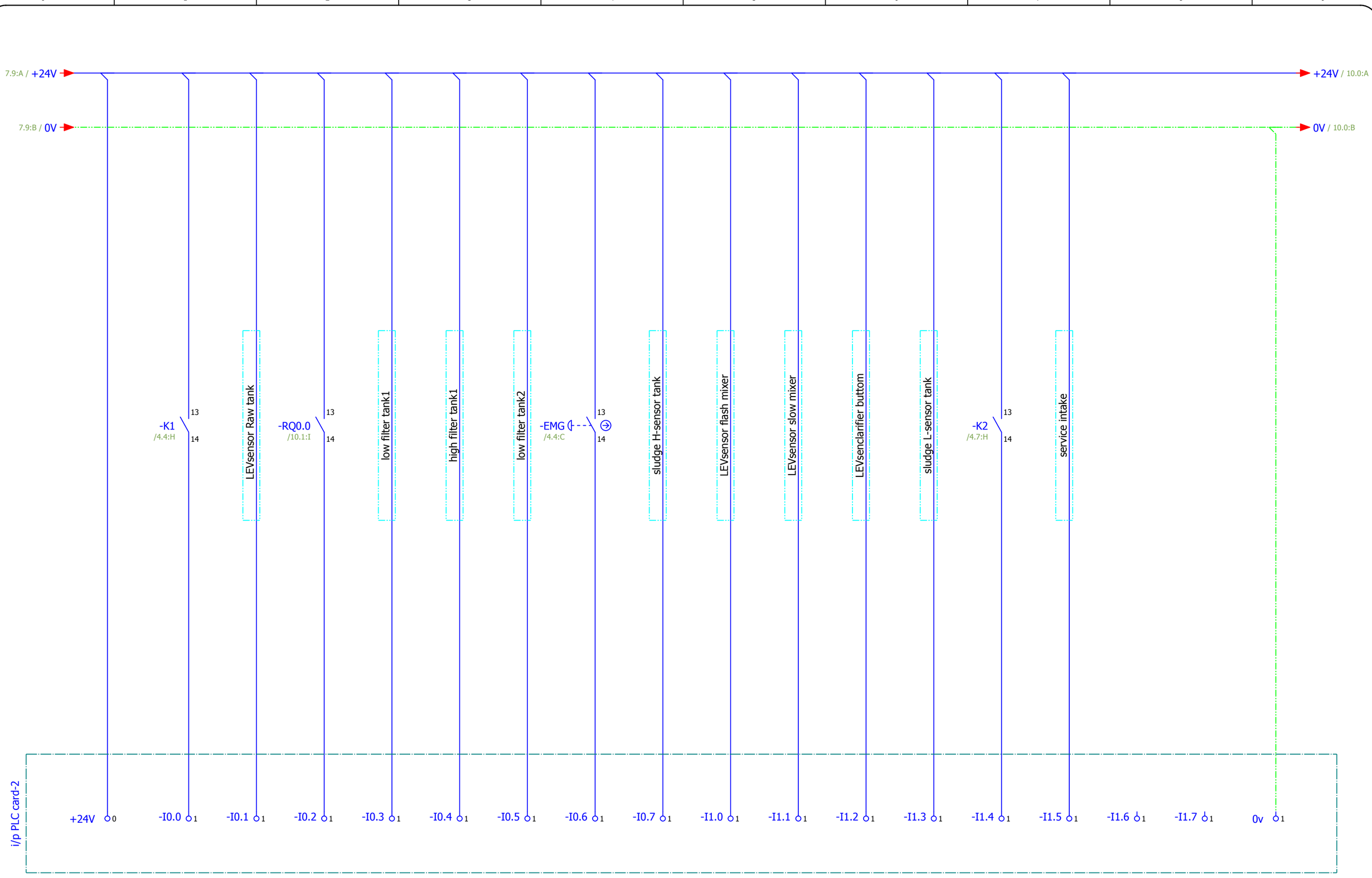

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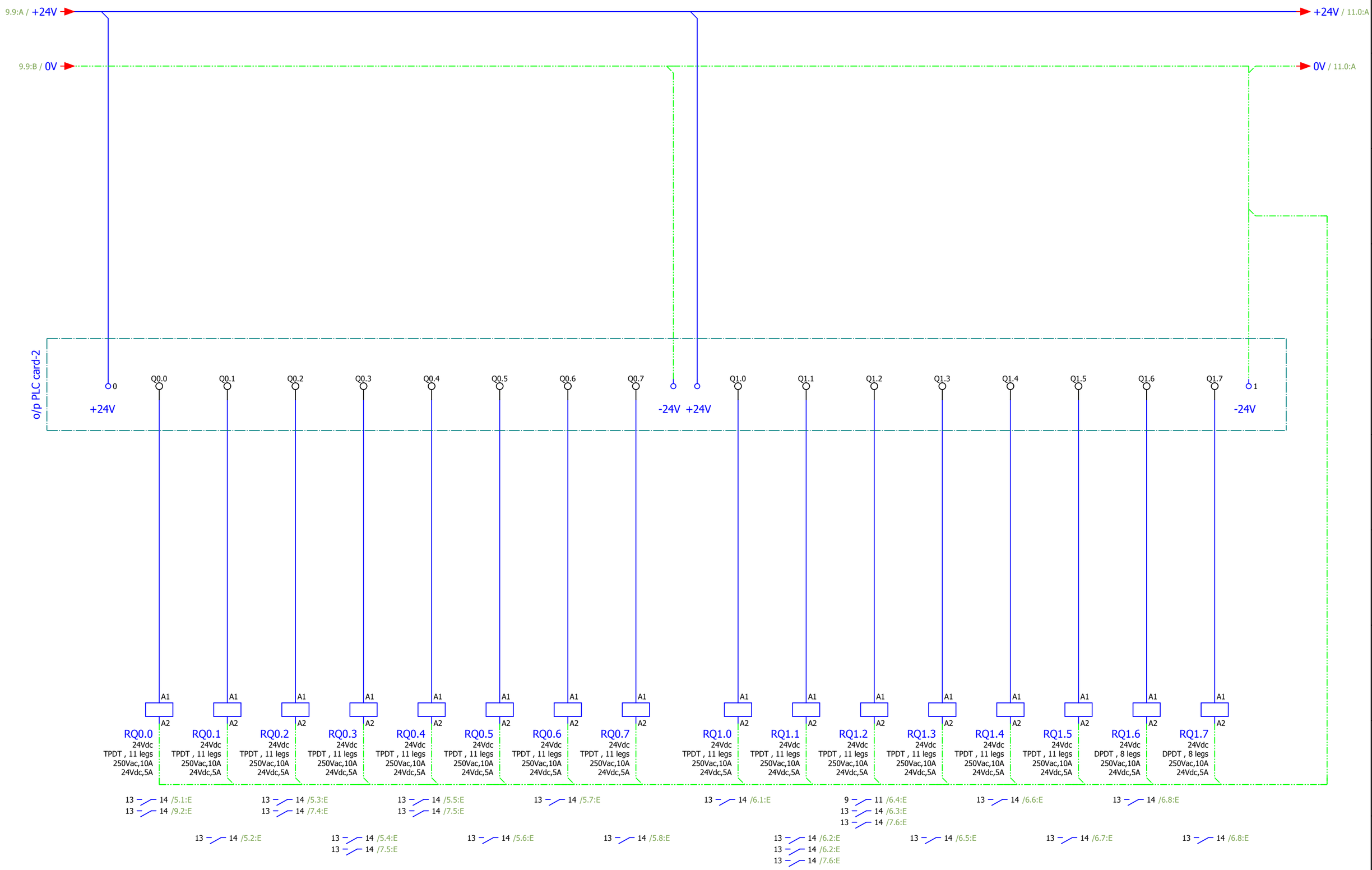

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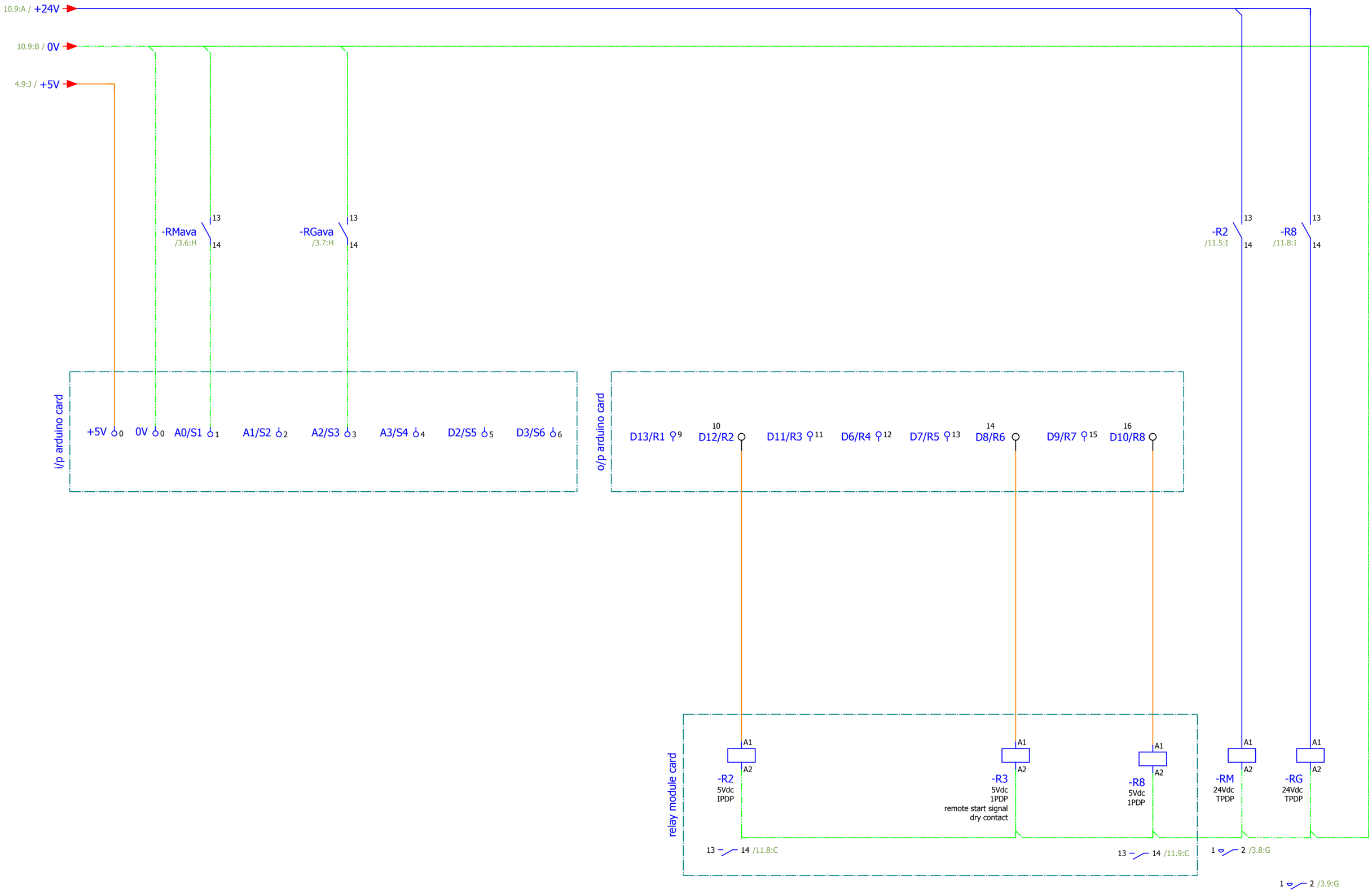

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