



FlexLink®

AGS Control box

5113449-01

User documentation

Control box

Power supply

Main

Voltage:	400 V _{AC}
Phases:	3
Frequency:	50 Hz
Current:	6 A
Short-circuit capacity	10 kA

Controls

Fieldbus interface/cables	Application dependent
Physical space	150 x 220 mm (H x W)

Control method

Control objects (see sheet 312):

- Contactor K31203, 24V_{DC}-coil, Power consumption 4.5 W
- Contactor K31204, 24V_{DC}-coil, Power consumption 4.5 W

Each contactor has one control wire connected. One 0V_{DC}-wire is connected to one contactor and bridged over to the second. Totally three wires shall be connected to the communication device selected by the integrator.

Hardwired control

Equipment:

- 3 feed-through terminals 2.5 mm²

Connect wires Q44002, Q44005 and 200L- to terminals.

Fieldbus control

Equipment:

- Fieldbus interface with two digital inputs. (Digital inputs for feedback functionality)

Connect wires Q44002, Q44005 and 200L- to output module terminals.

Control box

CE marking location

The CE marking is located on the outside of the door, in the upper left corner.

Electricians

Electricians must have:

- Experience from similar installations
- Sufficient knowledge to work from drawings and wiring diagrams
- Knowledge of local safety regulations for electrical power and automation
- Knowledge in english language

To avoid risks, only experienced personnel with technical knowledge and experience may perform repair work on the machine's electronics components.

Application of usage

The Control box is to be used for controlling FlexLink Guide units without or in combination with FlexLink Junction boxes.

The Control box should not be used for any other purpose than controlling FlexLink Guide rails.

Safety

The voltage in the control box is 400V for Europe or 480V for US. Ensure that the control box is closed and locked after working in the control box.

The control box door can only be opened using a tool.

- Only authorised personnel may open electrical units.
- Incorrect use of the equipment can cause personal injury.
- Do not stand or climb on the equipment.
- Only use recommended spare parts.
- Before working in the control box, the main switch must be turned off and locked.

Assembly

The box is equipped with two aluminium beams on the backside to facilitate mechanical assembly.

Installation

The incoming power supply should be connected to the main switch, Q30102. Protective earth should be connected to PE terminal.

Electrical supply data, Europe-versions:

Voltage: 400 VAC
Phases: 3
Frequency: 50 Hz
Current: 6 A
Short-circuit capacity: 10 kA

Electrical supply data, US-versions:

Voltage: 460-480 VAC
Phases: 3
Frequency: 60 Hz
Current: 4 A
Short-circuit capacity: 200 kA

Note: Additional 24V_{DC} power supply is necessary for "automatic setting" versions (Type 2). Reference to electrical documentation for 24V_{DC} and fieldbus connection.

Connect the Guide unit's included cable to connector X31103 or X31104.

Instruction for use

Note: Applicable for Control box, Type 1 (Manual setting).

The 3-position switch on the door is used for manually adjusting the Guide units' track width (distance between guide rails).

Turn left: Runs guide rails inwards
0-position: 0
Right position: Runs guide rails outwards

The motors are not automatically interlocked and stopped when reaching end-position.

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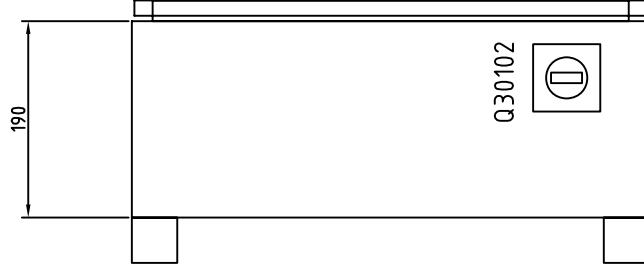
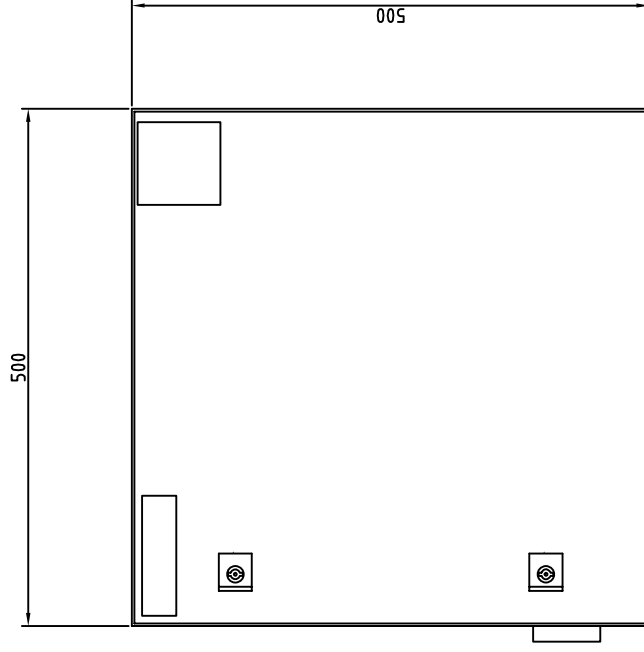
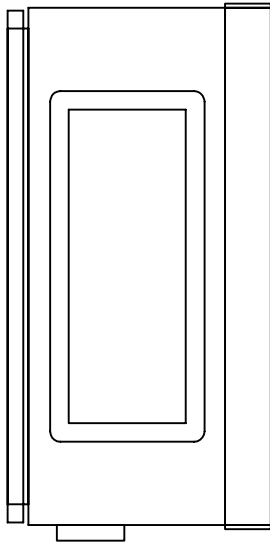
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Q30102

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Nr.	Date	Sign	Change		Department	PSD/PDM	Drawing No.				
					Customer	-	5113449				
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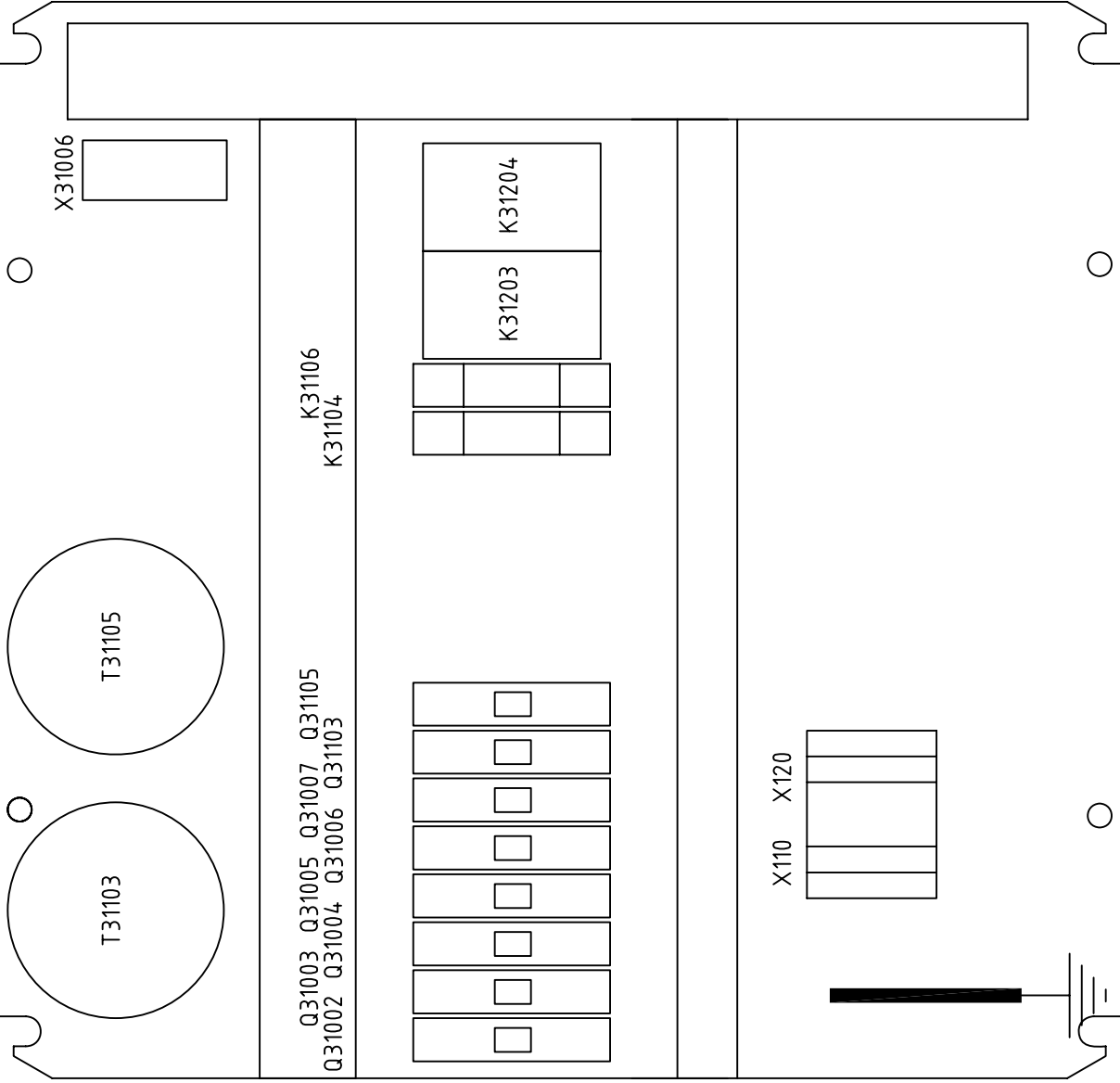
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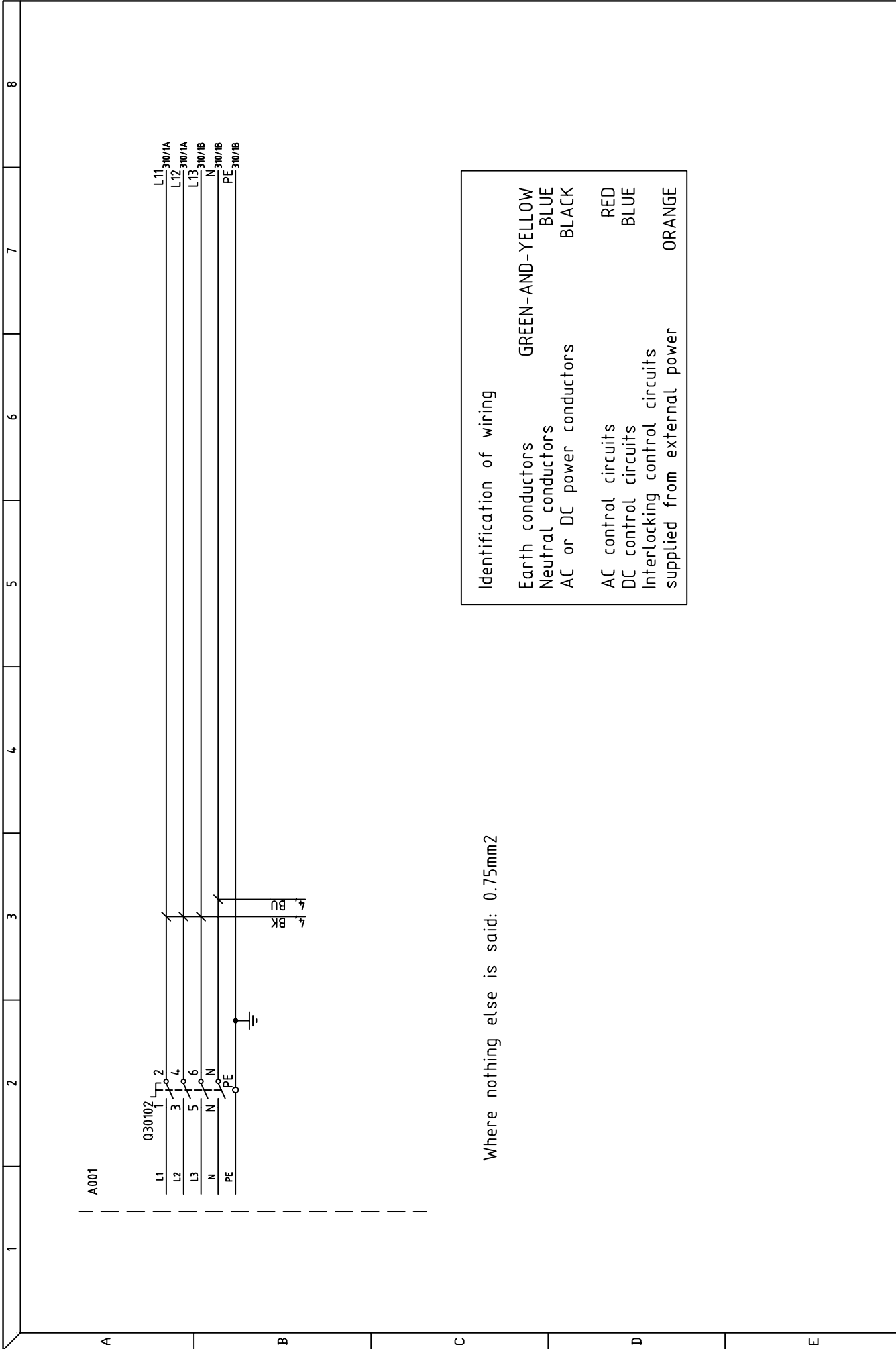
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		Layout interior	

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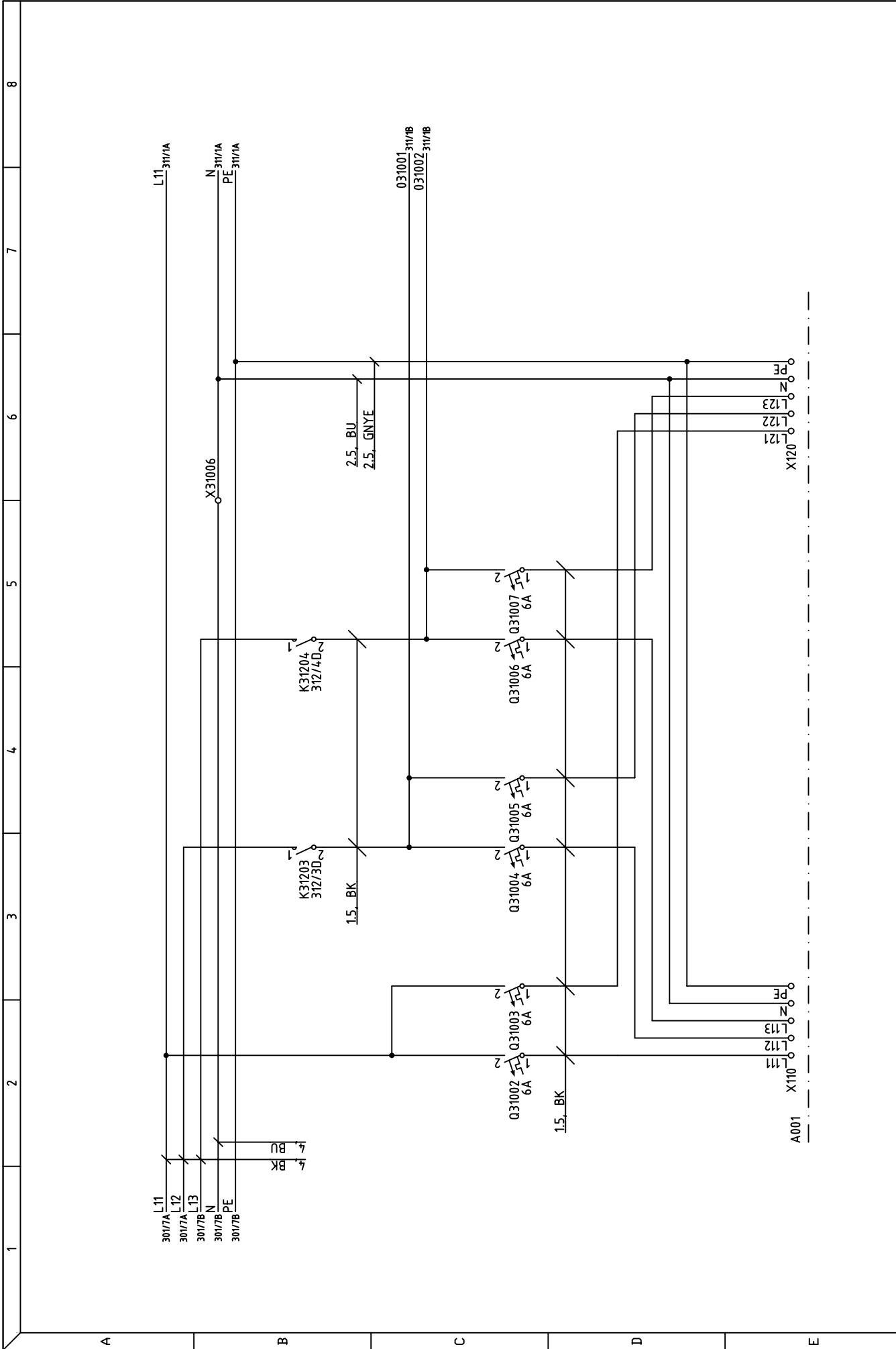


Where nothing else is said: 0.75mm²

Identification of wiring	
Earth conductors	GREEN-AND-YELLOW
Neutral conductors	BLUE
AC or DC power conductors	BLACK
AC control circuits	RED
DC control circuits	BLUE
Interlocking control circuits	
supplied from external power	ORANGE

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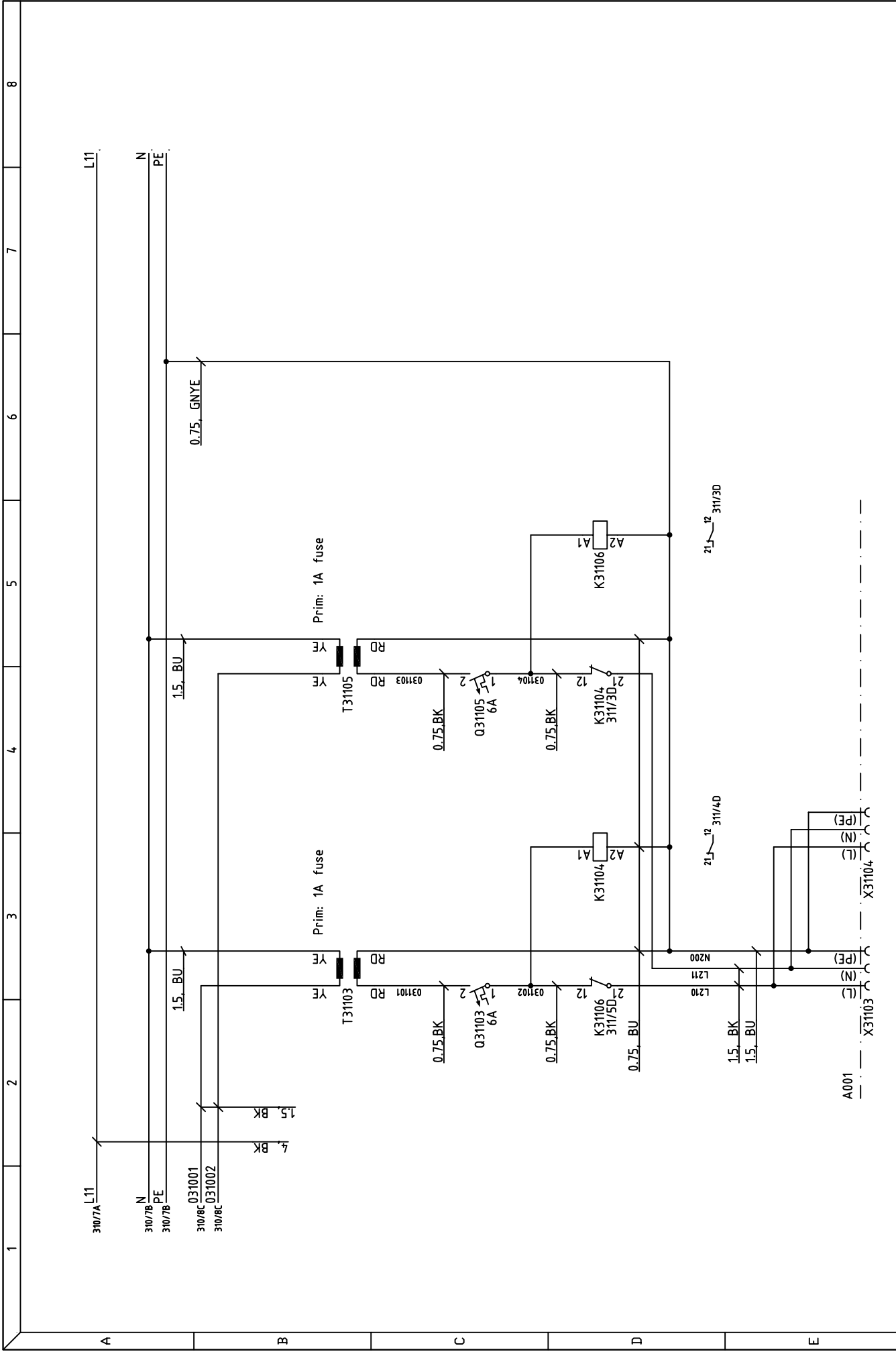
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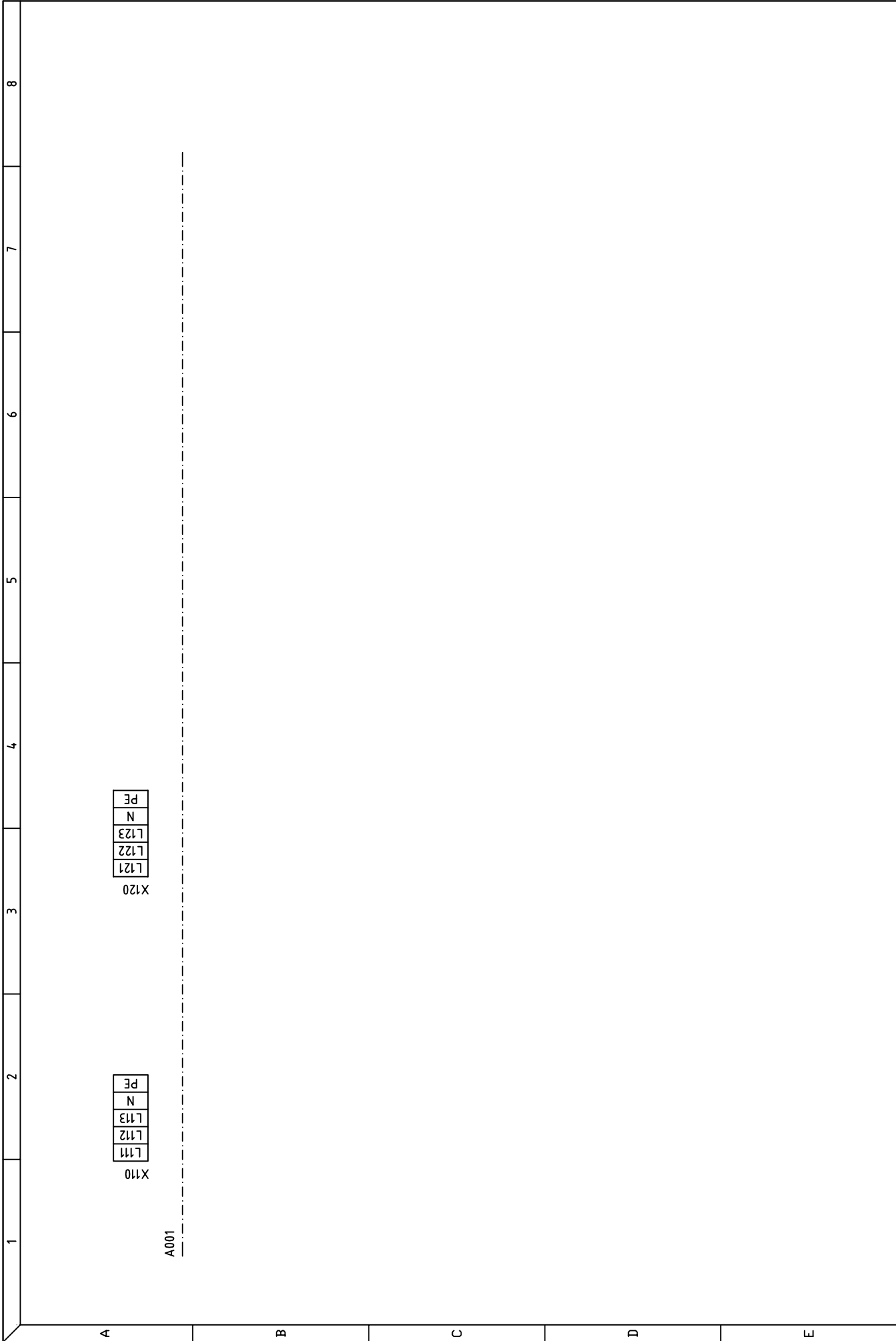


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310/78 L11
 310/78 N
 310/78 PE
 031001
 310/8C 031002
 310/8C
 1.5 BK
 4 BK

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X120
PE
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L123
L122
L121

X110
PE
N
L113
L112
L111

A001

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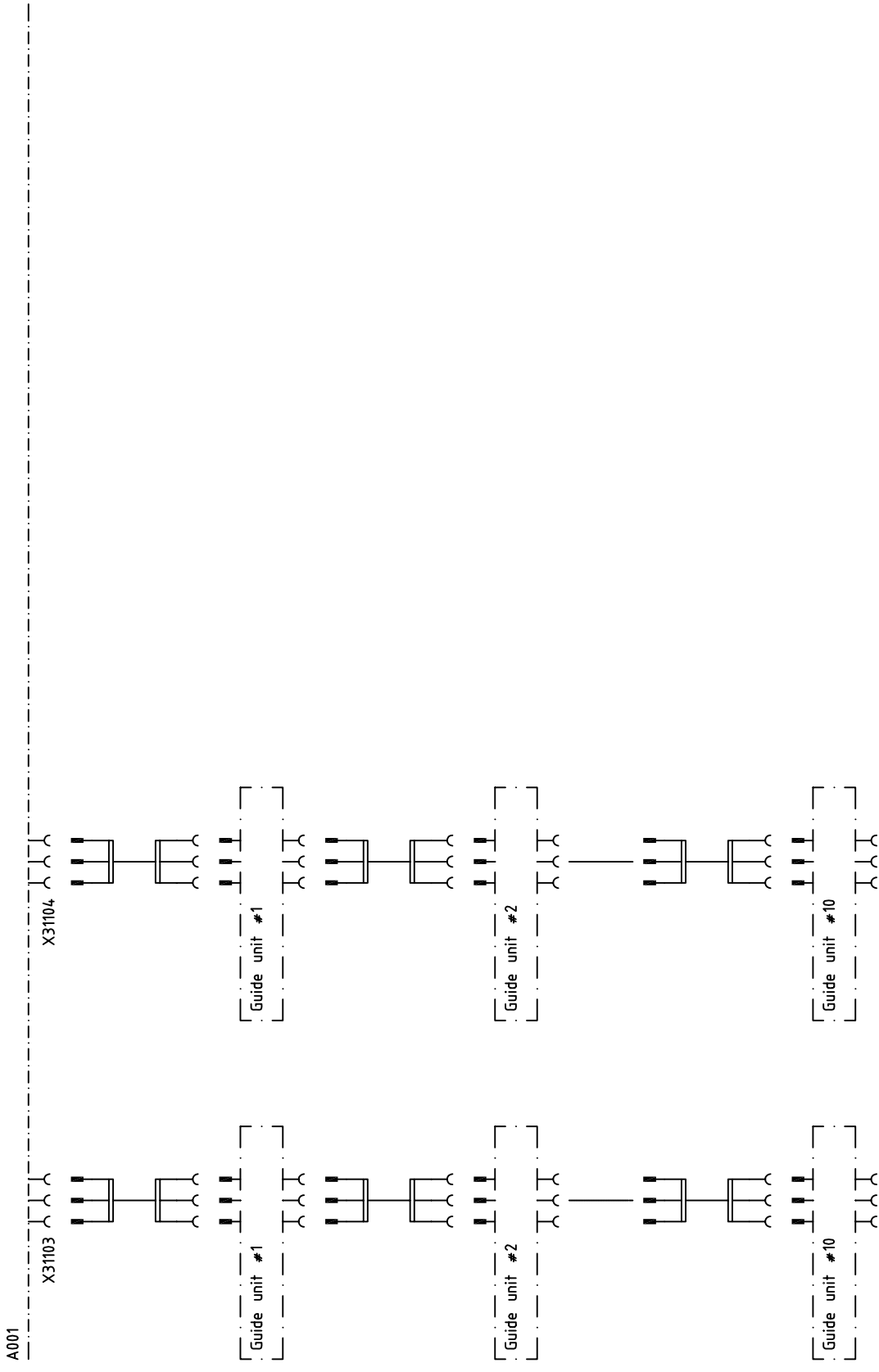
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Spare parts list Control box 5113449

Pos	Des	Name	Manufacturer	Manufacturer item nr	Qty	Comment
Q31002	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31003	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31004	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31005	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31006	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31007	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31103	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
Q31105	Miniature circuit breaker		Merlin Gerin	C60N 1P C6A		
T31103	Transformer		FlexLink	5058593		
T31103	Fuse		Littelfuse	1A, 5x20mm		
T31105	Transformer		FlexLink	5058593		
T31105	Fuse		Littelfuse	1A, 5x20mm		
K31203	Contact		Moeller Electric	276845		
K31204	Contact		Moeller Electric	276845		
K31104	Relay		Finder	40.51.8.024		
K31104	Relay socket		Finder	95.05.SMA		
K31106	Relay		Finder	40.51.8.024		
K31106	Relay socket		Finder	95.05.SMA		
X31103	Connector		Wieland	96.031.1053.1		
X31104	Connector		Wieland	96.031.1053.1		