



**FlexLink<sup>®</sup>**

# AGS Control box

5113449-01

User documentation

# Control box

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## Power supply

### Main

Voltage:	400 V <sub>AC</sub>
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<sub>DC</sub>-coil, Power consumption 4.5 W
- Contactor K31204, 24V<sub>DC</sub>-coil, Power consumption 4.5 W

Each contactor has one control wire connected. One 0V<sub>DC</sub>-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 mm<sup>2</sup>

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

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## 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<sub>DC</sub> power supply is necessary for "automatic setting" versions (Type 2). Reference to electrical documentation for 24V<sub>DC</sub> 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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**FlexLink Components AB**  
**SE-41550 Göteborg**  
**Sweden**

declares that the following product(s) is in line with the essential requirements of the below directive(s)

- **AGS Control box 5113449**

**Corresponding EC directives:**

Low Voltage Directive 2006/95/EC

According to 2004/108/EC Electromagnetic Compatibility Directive (EMC), the listed device is not independently operable product, but intended as part of a given fixed installation. Compliance of the directive requires the correct installation of the product, the observance of specific installation notes and product documentation.

FlexLink Components AB

A handwritten signature in blue ink, appearing to read 'Svante Anderholm'.

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Svante Anderholm  
Chief Operating Officer

Flexlink Components AB

A handwritten signature in blue ink, appearing to read 'Anders Jonsson'.

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Anders Jonsson  
Responsible Technical file

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Layouts

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102 layout interior

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310 Zone supply  
311 Branch supply  
312 Contactors

External connections

510 Zone supply  
511 Branch supply

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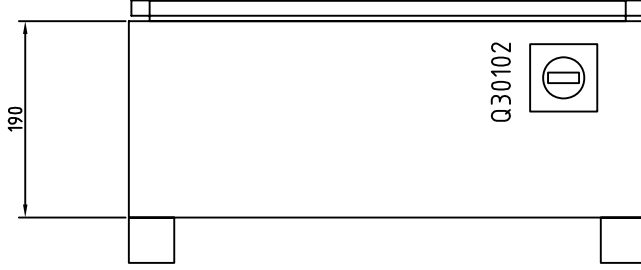
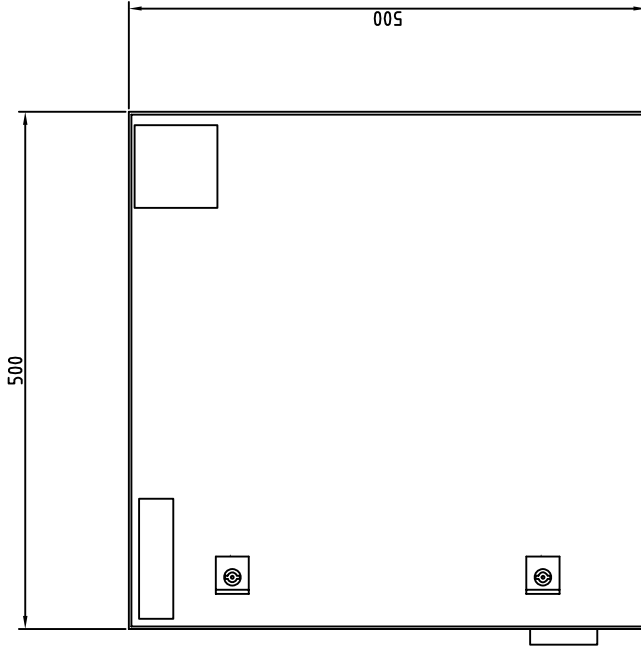
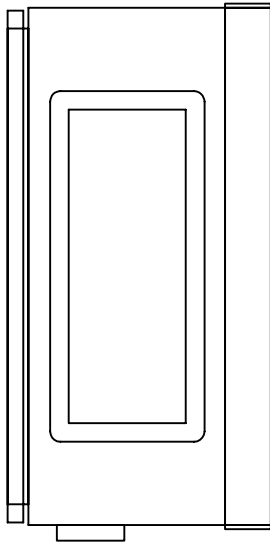
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Nr.	Date	Sign	Change		Department PSD/PDM Customer - Drawn F.JN Appr.	Project No. 9220213 Date 2010-04-28	Name Index -	Drawing No. 5113449	
								Sheet 100	Next 101

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Nr.	Date	Sign	Change

<b>FlexLink®</b>		Department PSD/PDM	Drawing No.
		Customer -	5113449
Drawn F.JN	Project No. 9220213	Name Layout exterior	
Appr. -	Date 2010-04-28		Sheet 101
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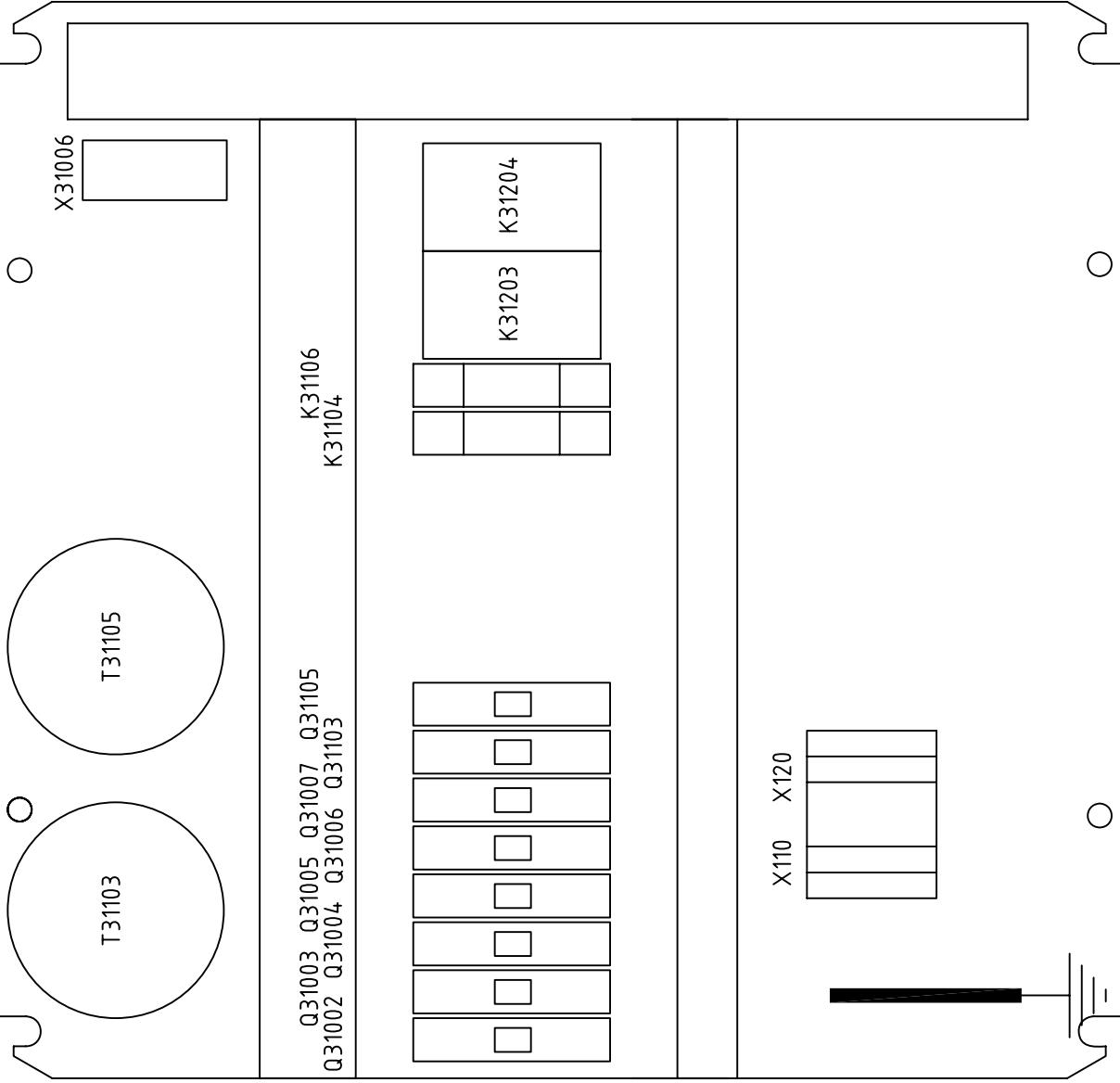
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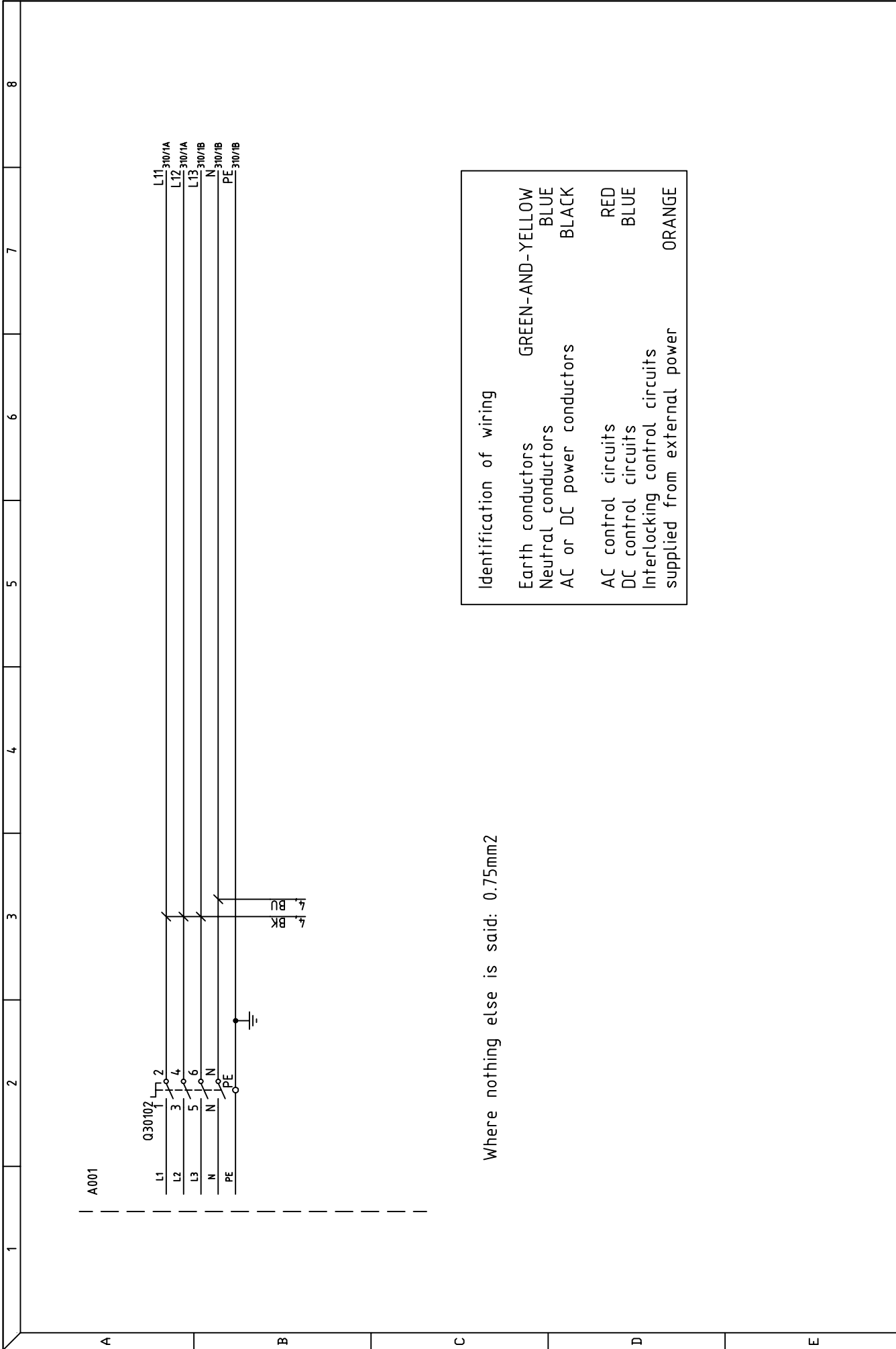
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Appr.		Date	2010-04-28
Name		Layout interior	
Drawing No.		5113449	
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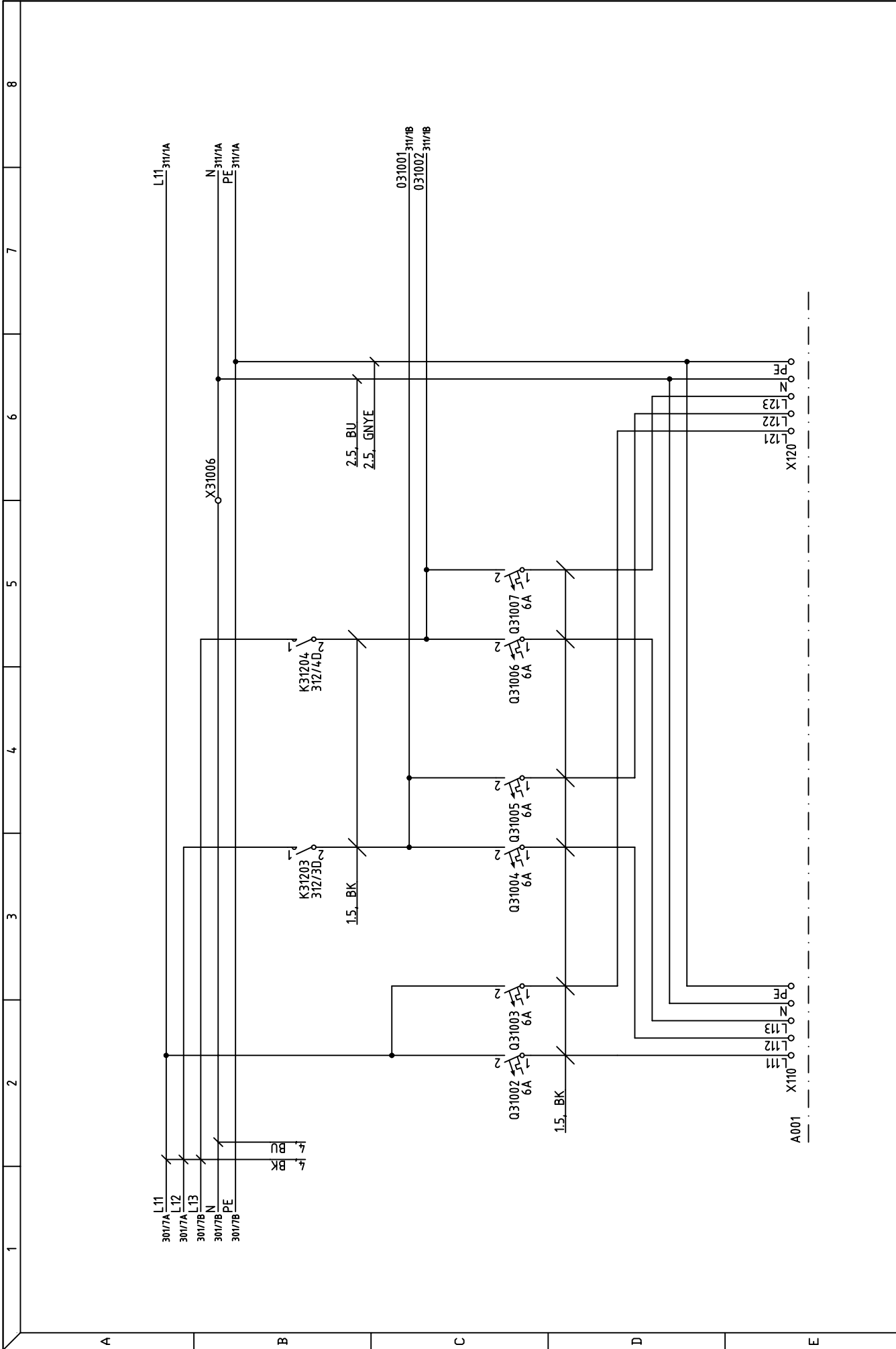
Identification of wiring


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

Where nothing else is said: 0.75mm<sup>2</sup>

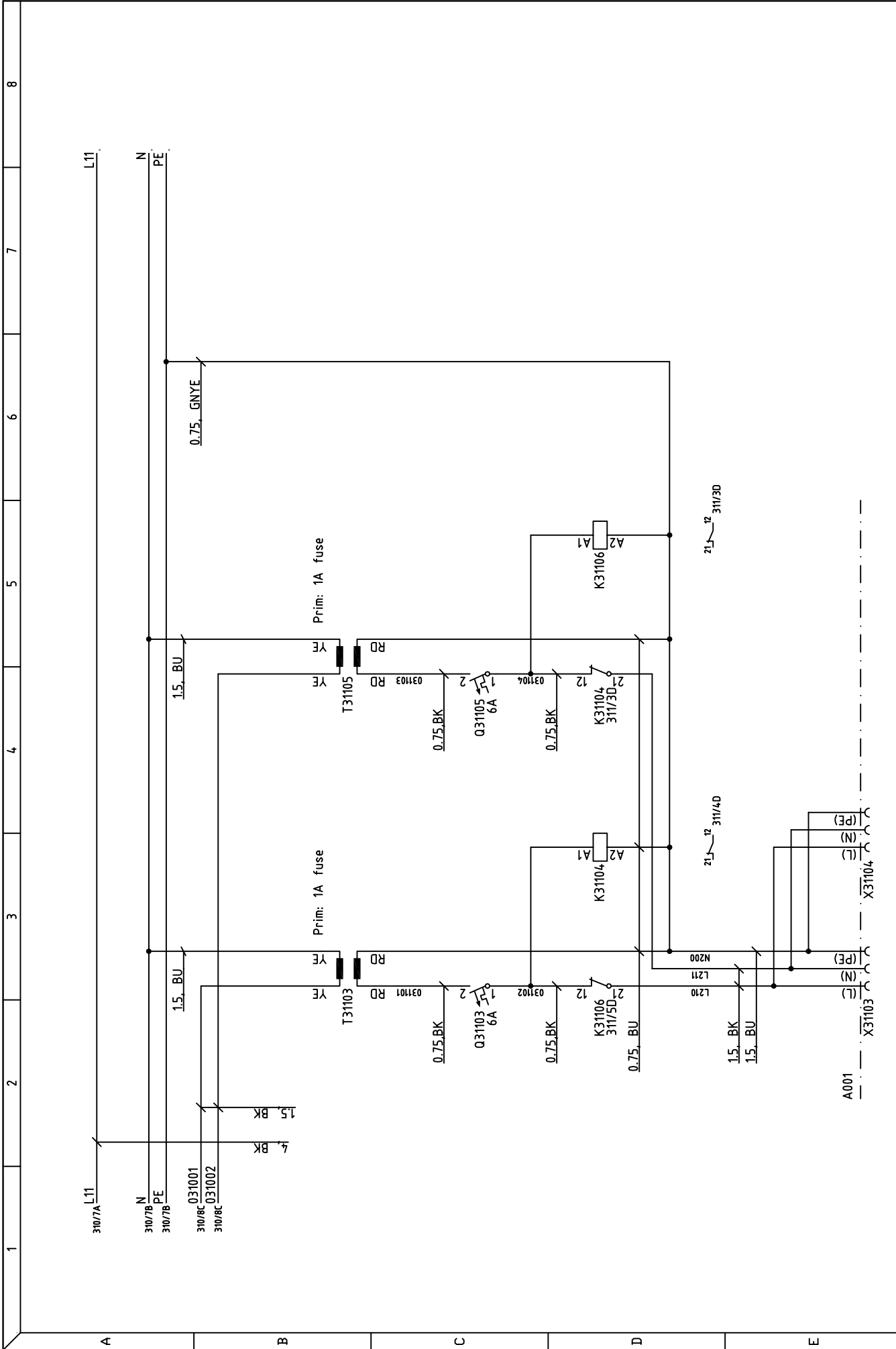
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				Drawn	F.J.N	Project No. 9220213
				Appr.		Date 2010-04-28
						Name Incoming supply
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Department		PSD/PDM	
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Drawn	F.J.N	Project No.	9220213
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Name		Zone	supply
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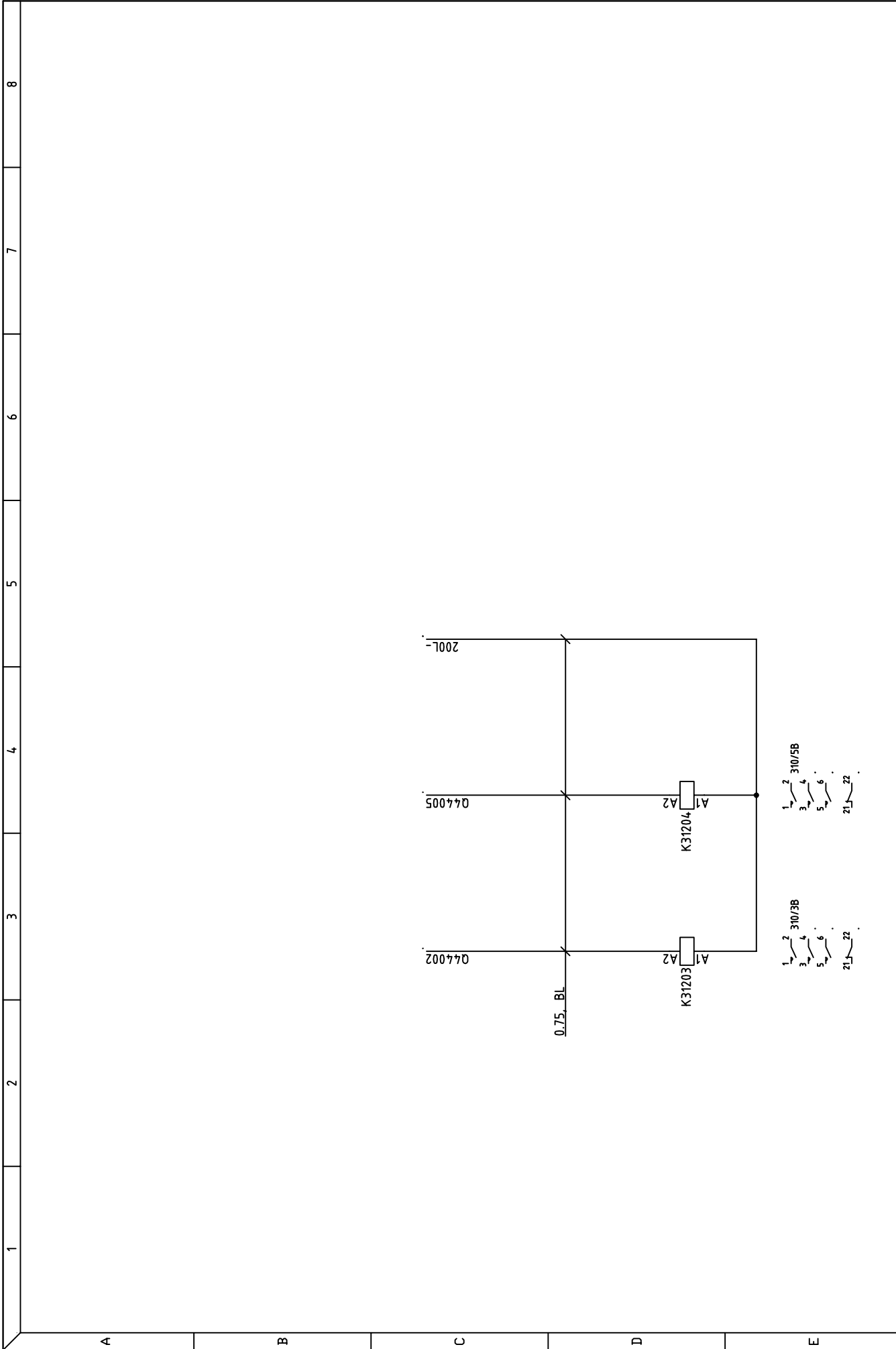


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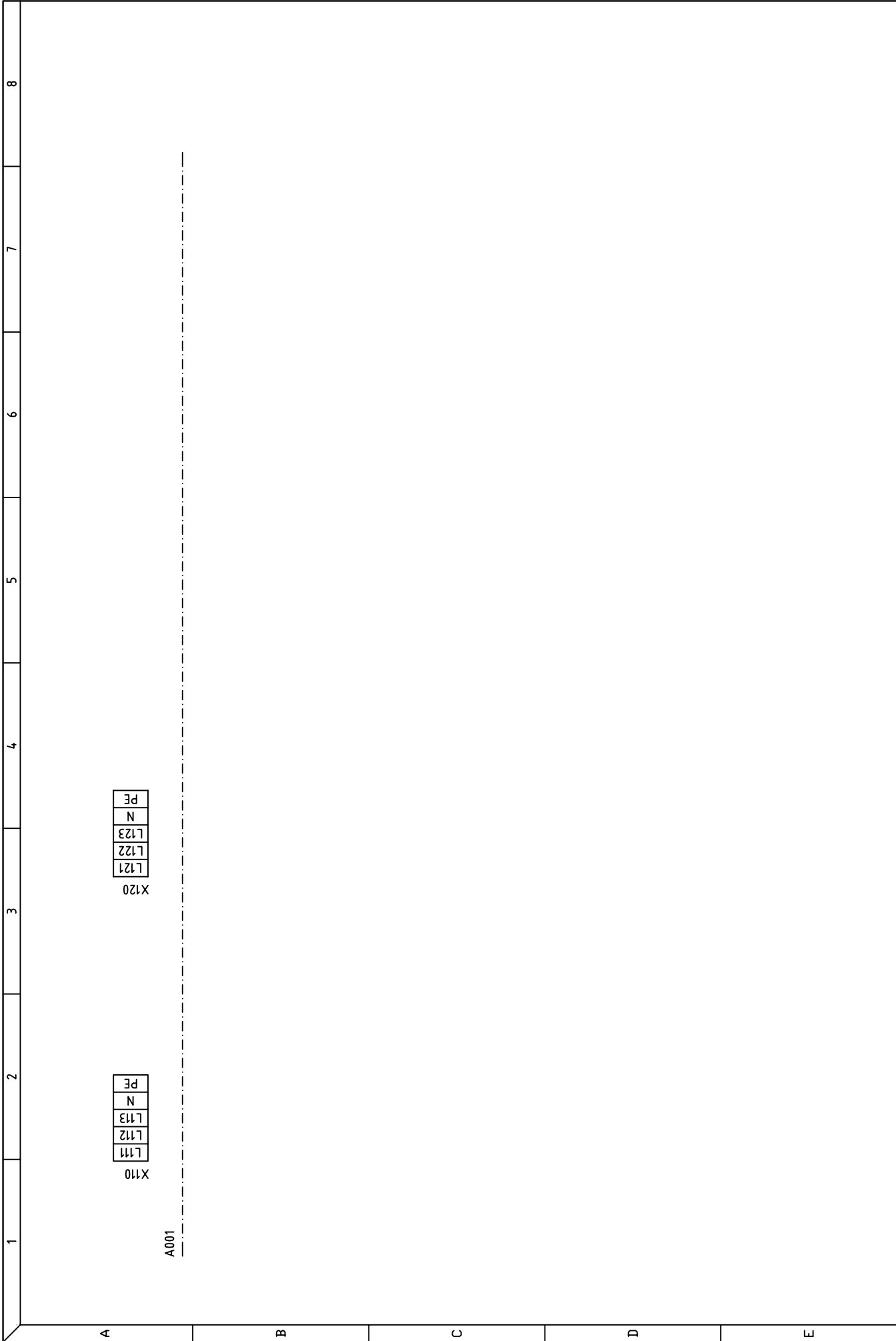
  


<b>FlexLink®</b>		Department PSD/PDM	Drawing No. 5113449
		Customer -	
Drawn F.JN	Project No. 9220213	Name Branch supply	
Appr.	Date 2010-04-28		Sheet 311 Next 312



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Nr.	Date	Sign	Change		Department	PSD/PDM	Drawing No.
					Customer	-	5113449
					Drawn	F.JIN	Project No. 9220213
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						Name Contactors	



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						Name Zone supply	Next 511

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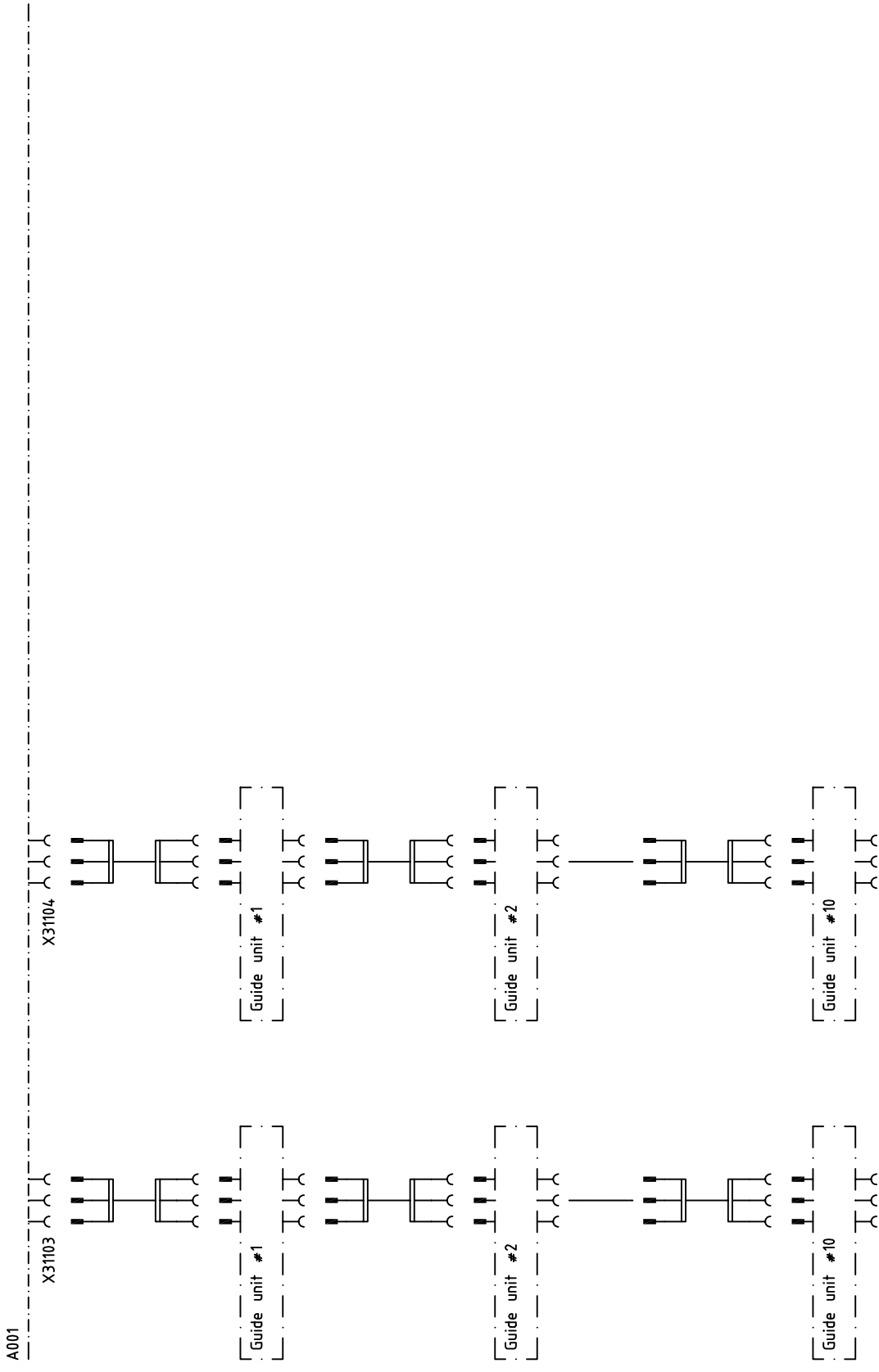
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					Customer	-	-	5113449				
					Drawn	FJN	Project No.	9220213	Name	Branch supply		
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**Spare parts list Control box 5113449**

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			