



Check list: Safety relays PNOZclassic – PNOZsigma

pilz

Application examples showing terminal comparisons for replacing safety relays from the PNOZclassic product range with PNOZsigma

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Pilz is a solution supplier for all automation functions. Including standard control functions. Developments from Pilz protect man, machine and the environment. That's why all our experience and knowledge goes into individual products as well as consistently sophisticated system solutions.

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Appropriate services relating to individual components and independent generic services guarantee that our customers obtain customised automation solutions, all from one source.

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Technical support is available from Pilz round the clock. This service is provided free of charge beyond standard business hours.

You can reach our international hotline on:

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Exclusion of liability

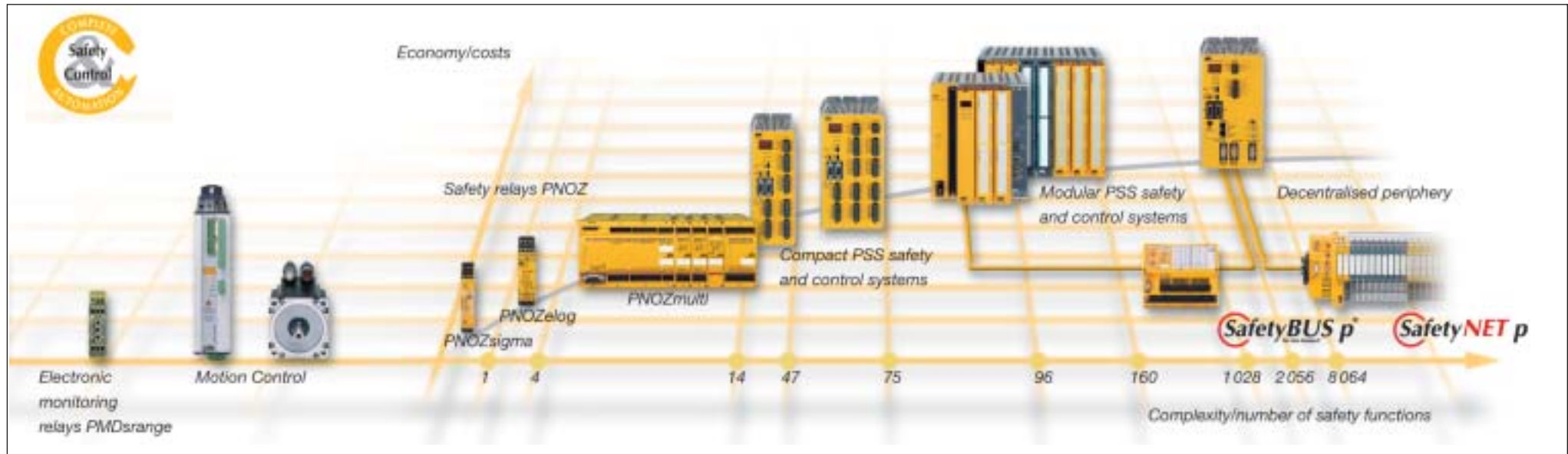
We have taken great care in compiling our check list. All statements are made in accordance with the current status of technology and to the best of our knowledge and belief. However, we cannot except liability for the accuracy and entirety of the information provided, except in the case of gross negligence. In particular it should be noted that statements do not have the legal quality of assurances or assured properties. We are grateful for any feedback on the contents.

February 2008

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Safe Automation

Solution supplier for safety and standard



Solution supplier for safety and standard

Pilz can offer a universal concept for solutions that can be applied right across industry – safety-related or standard control functions – plant or machine – centralised or decentralised – single product or total solution: With Pilz you will definitely find a solution for your automation function.

- For electrical safety such as voltage or true power monitoring, electronic PMDsrage monitoring relays provide the optimum solution.
- Pilz Motion Control (PMC) represents a

flexible, modular and expandable automation system for complex motion and control functions. This automation system manages all the movements of a large number of physically separate servo axes within a plant.

- For monitoring E-STOPS, safety gates, light curtains/light barriers, two-hand control and many other functions, we recommend Pilz safe control technology in terms of functional safety. Standard control functions are included.

- For simple plant and machinery with up to 4 safety functions, use the safety

relays PNOZ X, PNOZsigma and PNOZelog.

- To cover 4 to 14 safety functions, the modular safety system PNOZmulti is the most economical solution.
- On complex machinery or distributed plants, PSS programmable safety and control systems can be used with decentralised networking via SafetyBUS p and SafetyNET p.

Enjoy the benefits of approved, coordinated, complete solutions. Our portfolio is being extended to include control and signal devices such as E-STOP pushbuttons,

compatible sensor technology such as safety switches, light curtains/light grids and safe camera systems as well as operator terminals for diagnostics and visualisation. A wide range of services round off our business activities.

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Comparison chart

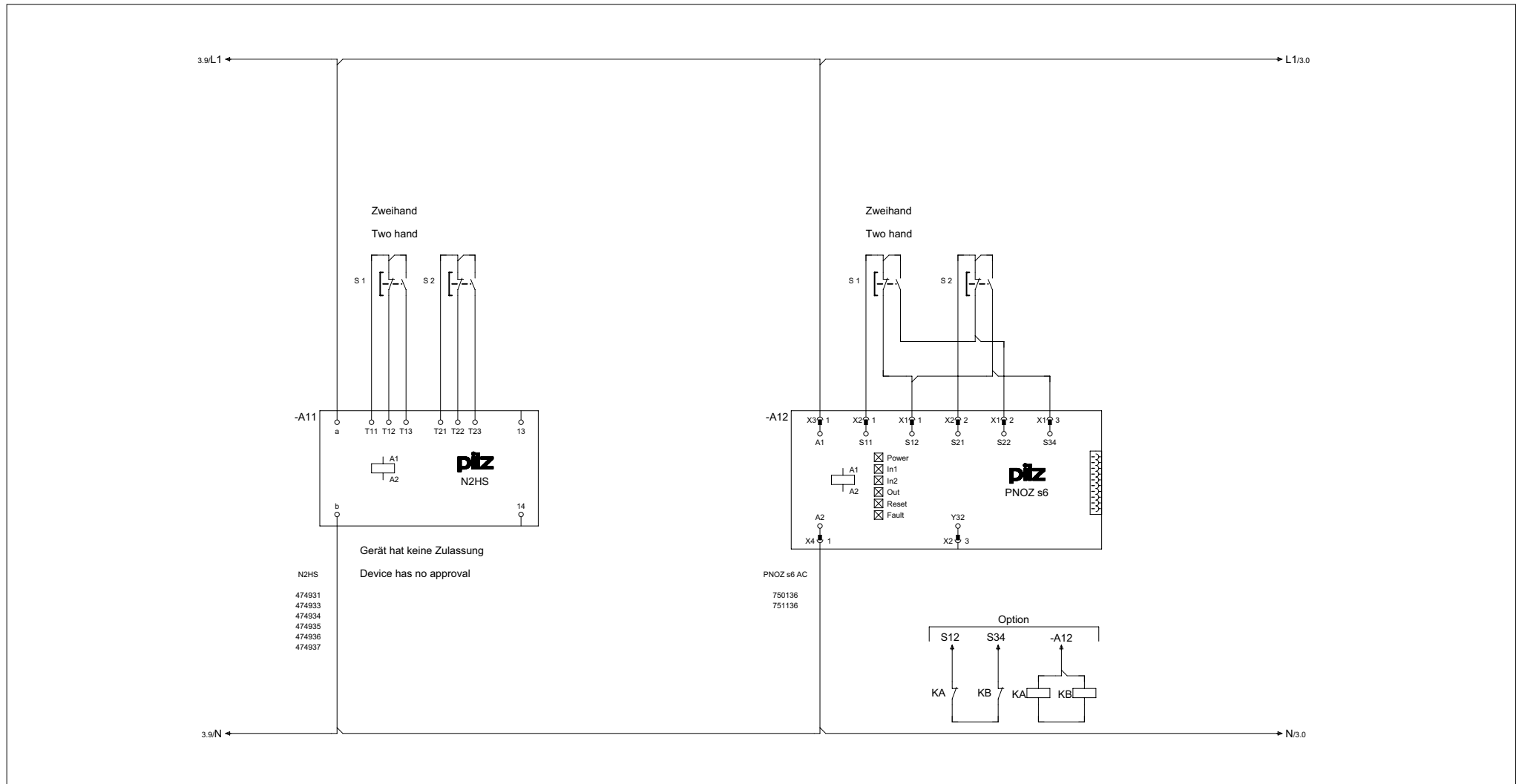
On 1. February 2009 the PNOZclassic-range will be discontinued for reasons of availability of spare parts and the technical progress. PNOZclassic devices may be replaced by the latest generation of PNOZsigma safety relays. PNOZsigma provides maximum functionality in minimum width. Online information on PNOZsigma is available from www.pilz.com, webcode 0994.

The following list is a recommendation of replacement types from the PNOZsigma-range for discontinued types from the PNOZclassic-range. It is necessary to check and ensure that the listed replacement types suit the application, and that they can be used. We are happy to advise you on an alternative solution for your application:
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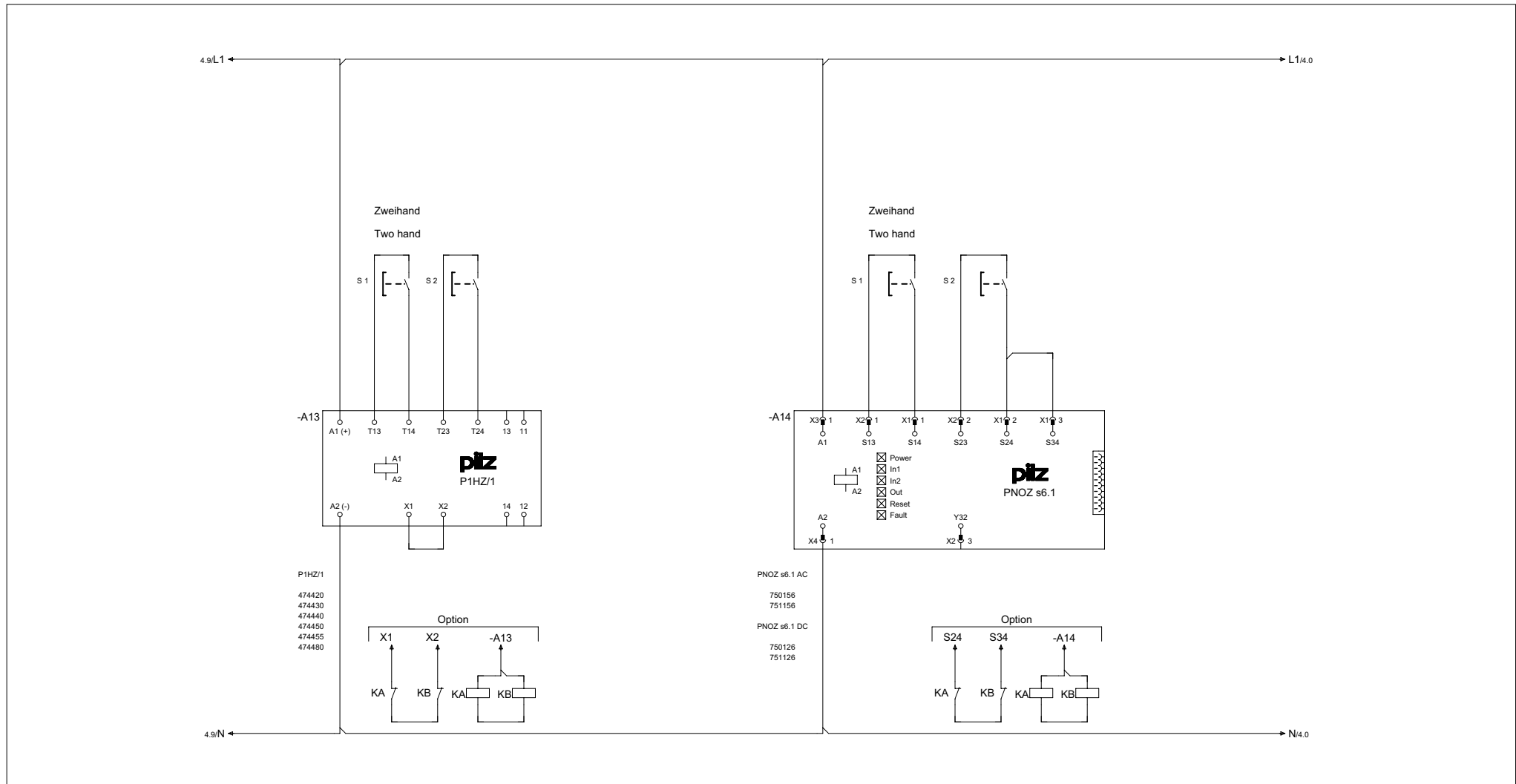
PNOZclassic Discontinued type	Supply voltage	Replacement type PNOZsigma	+ Required expansion device PNOZsigma
N2HS	48 - 240 V AC	PNOZ s6 ac	
P1HZ 1	48 - 240 V AC	PNOZ s6.1 ac	
P1HZ 1	24 V DC	PNOZ s6.1	
P1HZ 2	48 - 240 V AC	PNOZ s6.1 ac	
P1HZ 2	24 V DC	PNOZ s6.1	
P2HZ 5	24 V DC	PNOZ s6	
P2HZ 5	48 - 240 V DC	PNOZ s6 ac	
P2HZ 6	24 V DC	PNOZ s6 ac	
P2HZ 6	110 V AC	PNOZ s6 ac	
P2HZ 6	230 V AC	PNOZ s6 ac	
PNOZ 1	48 - 240 V AC	PNOZ s4 ac	
PNOZ 1	24 V DC	PNOZ s4	
PNOZ 2	48 - 240 V DC	PNOZ s4 ac	
PNOZ 3	24 V DC	PNOZ s4	PNOZ s7 or PNOZ s9
PNOZ 3	48 - 240 V AC	PNOZ s4 ac	PNOZ s7 or PNOZ s9
PNOZ 4	24 V DC	PNOZ s4	
PNOZ 5	48 - 240 V AC	PNOZ s4 ac	
PNOZ 5	24 V DC 2S	PNOZ s1	
PNOZ 6	48 V AC	PNOZ s4	PNOZ s9
PNOZ 6	24 V DC	PNOZ s4	PNOZ s9
PNOZ 8	24 V DC	PNOZ s4	
PNOZ 8	48 - 240 V AC	PNOZ s4 ac	
PNOZ 9	24 V DC	PNOZ s1	
PNOZ 9	48 - 240 V AC	PNOZ s4 ac	
PNOZ V (3s)	24 V DC	PNOZ s5	
PNOZ V (30 s)	24 V DC	PNOZ s5	
PNOZ V (300 s)	24 V DC	PNOZ s5	
PST 1	48 - 230 V AC	PNOZ s4 ac	
PST 1	24 V DC	PNOZ s3	
PST 3	24 V DC	PNOZ s4	
PST 3	48 - 230 V AC	PNOZ s4 ac	

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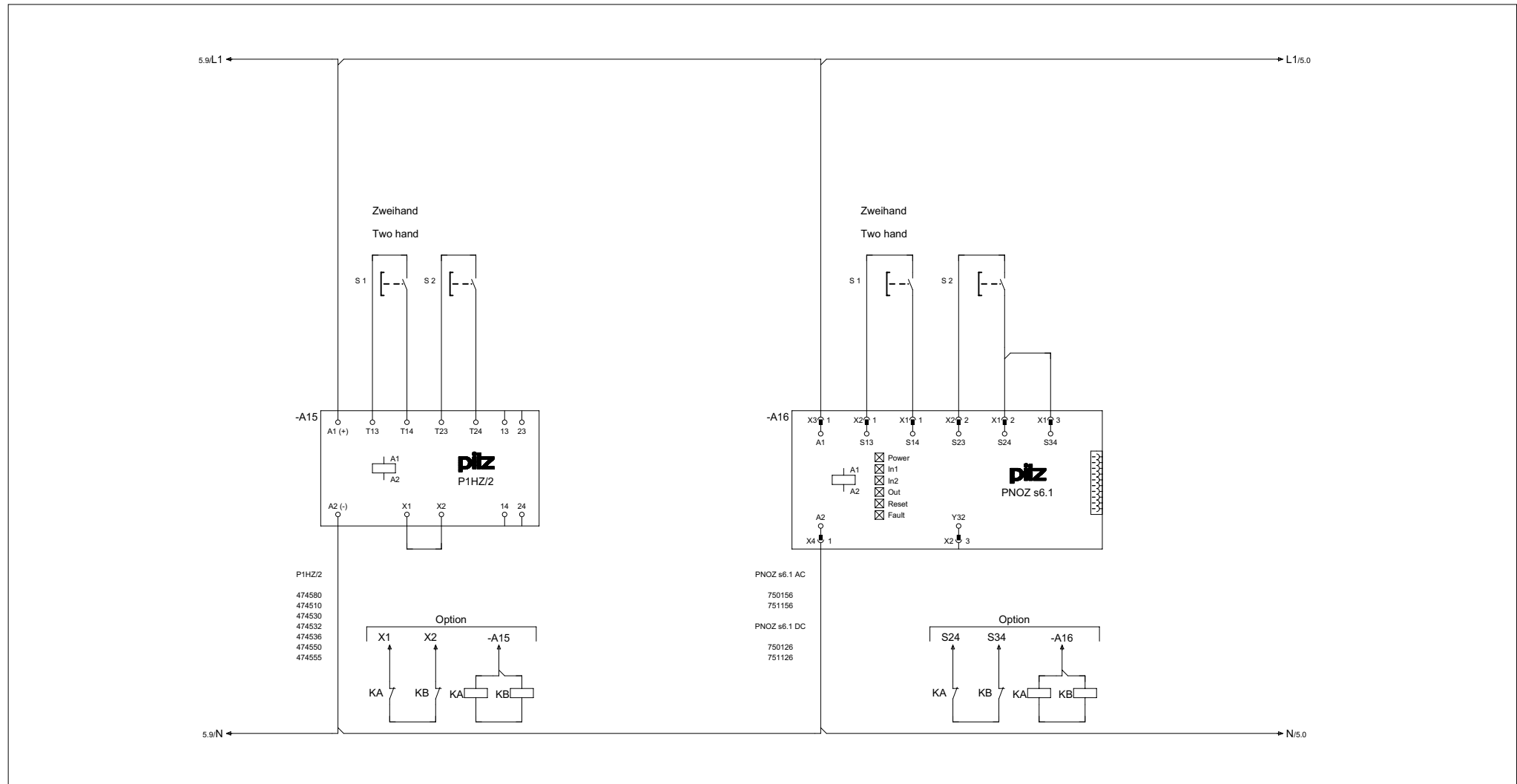
N2HS (48 - 240 V AC) – PNOZ s6



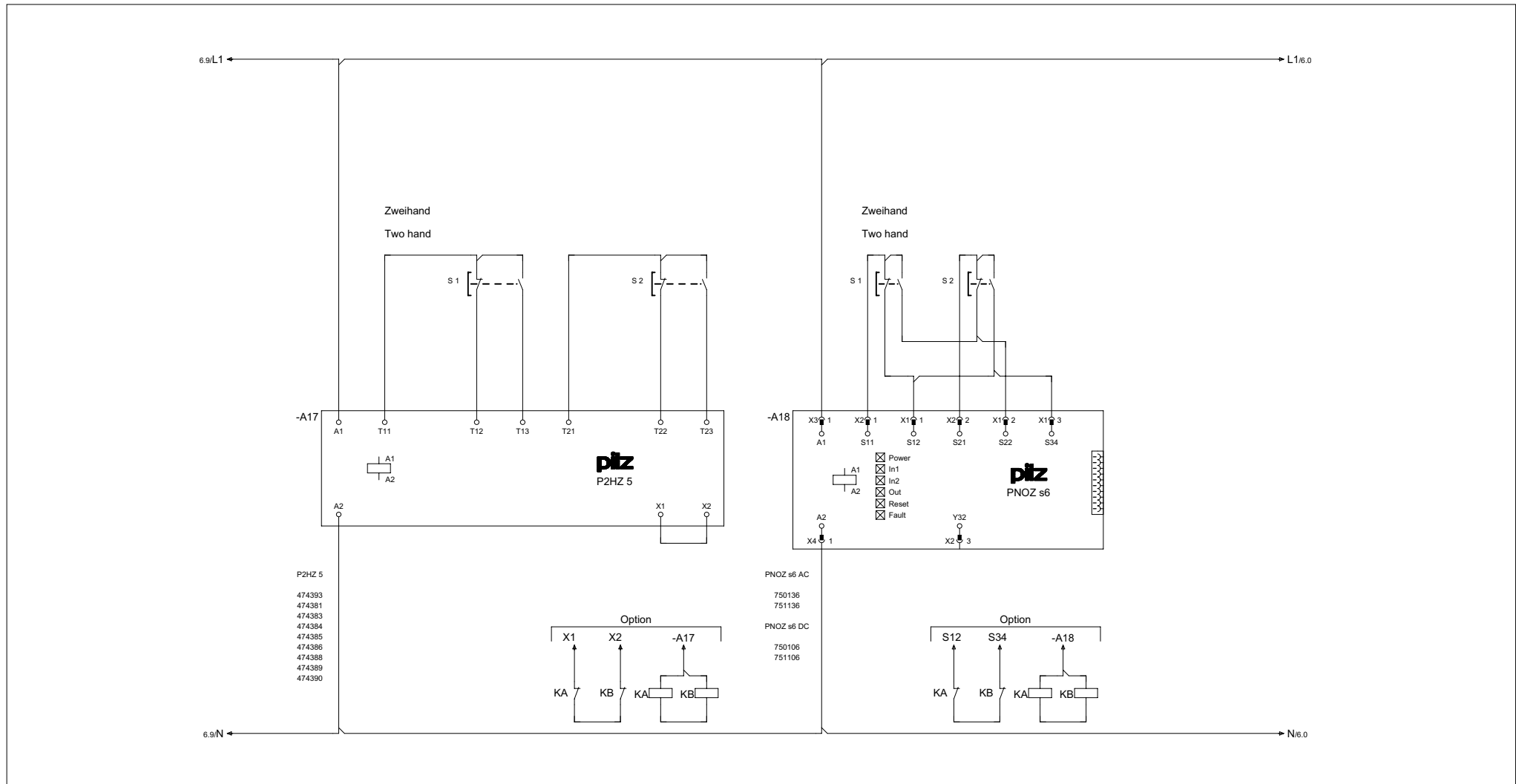
P1HZ 1 (48 - 240 V AC; 24 V DC) – PNOZ s6.1



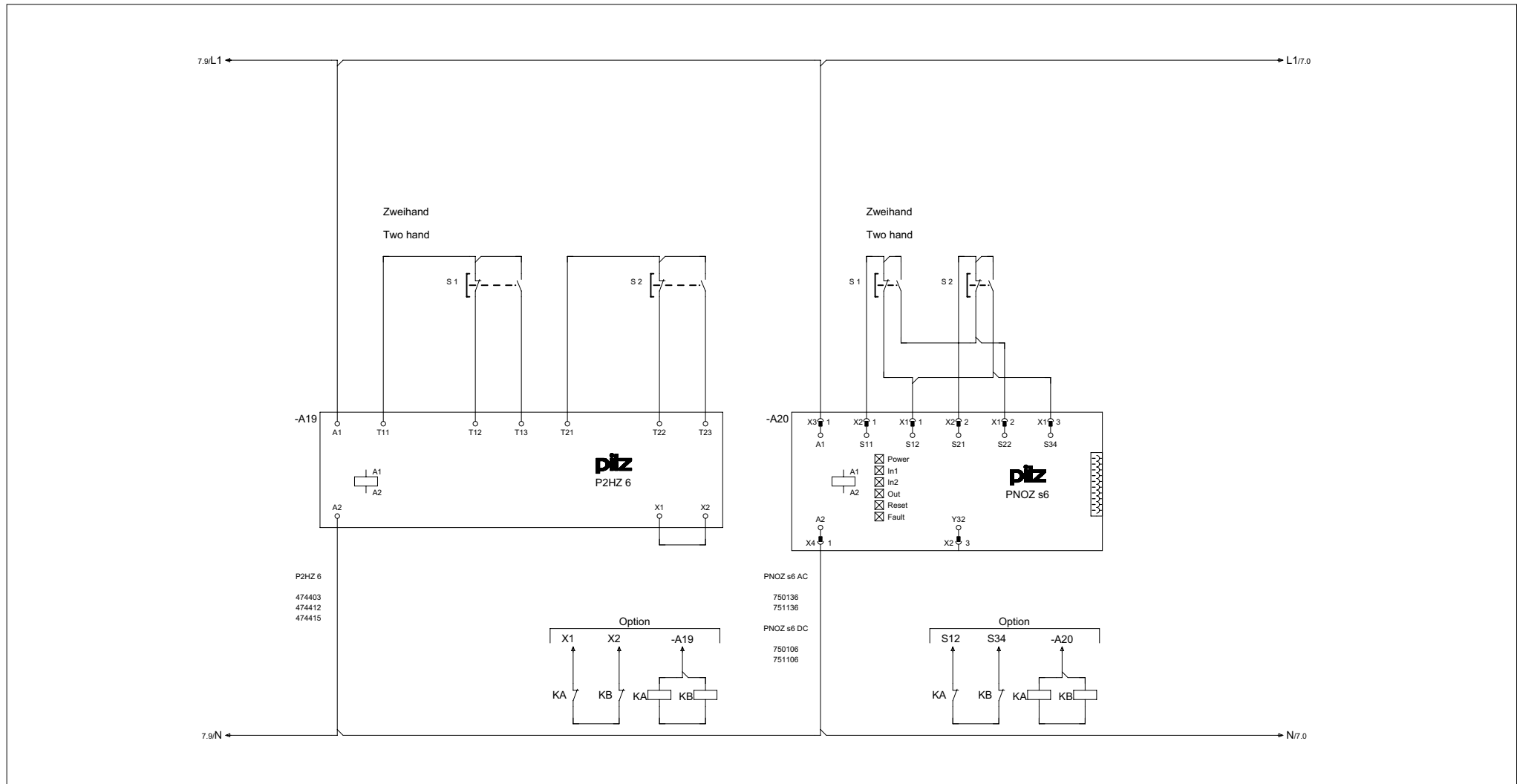
P1HZ 2 (48 - 240 V AC; 24 V DC) – PNOZ s6.1



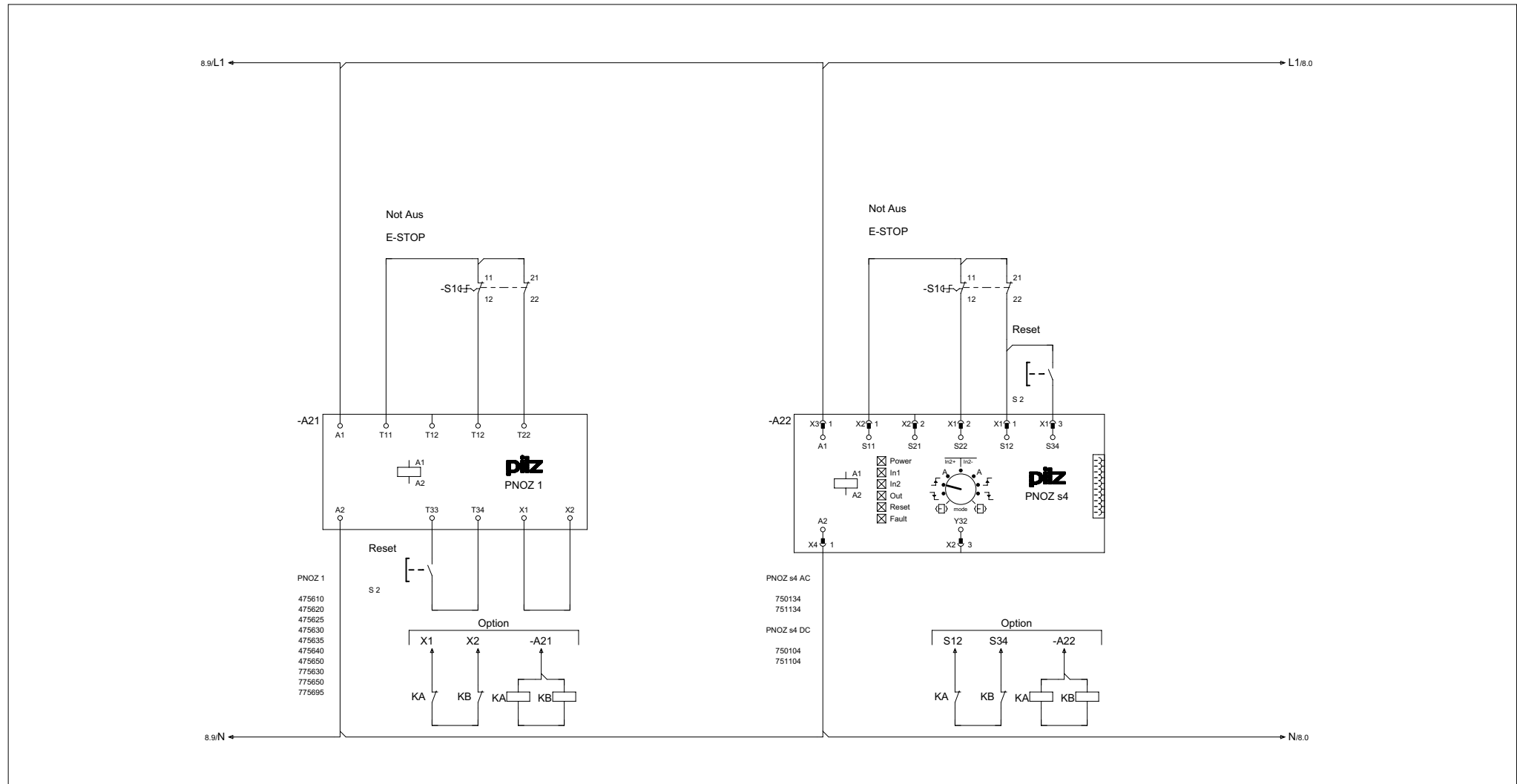
P2HZ 5 (24 V DC; 48 - 240 V DC) – PNOZ s6



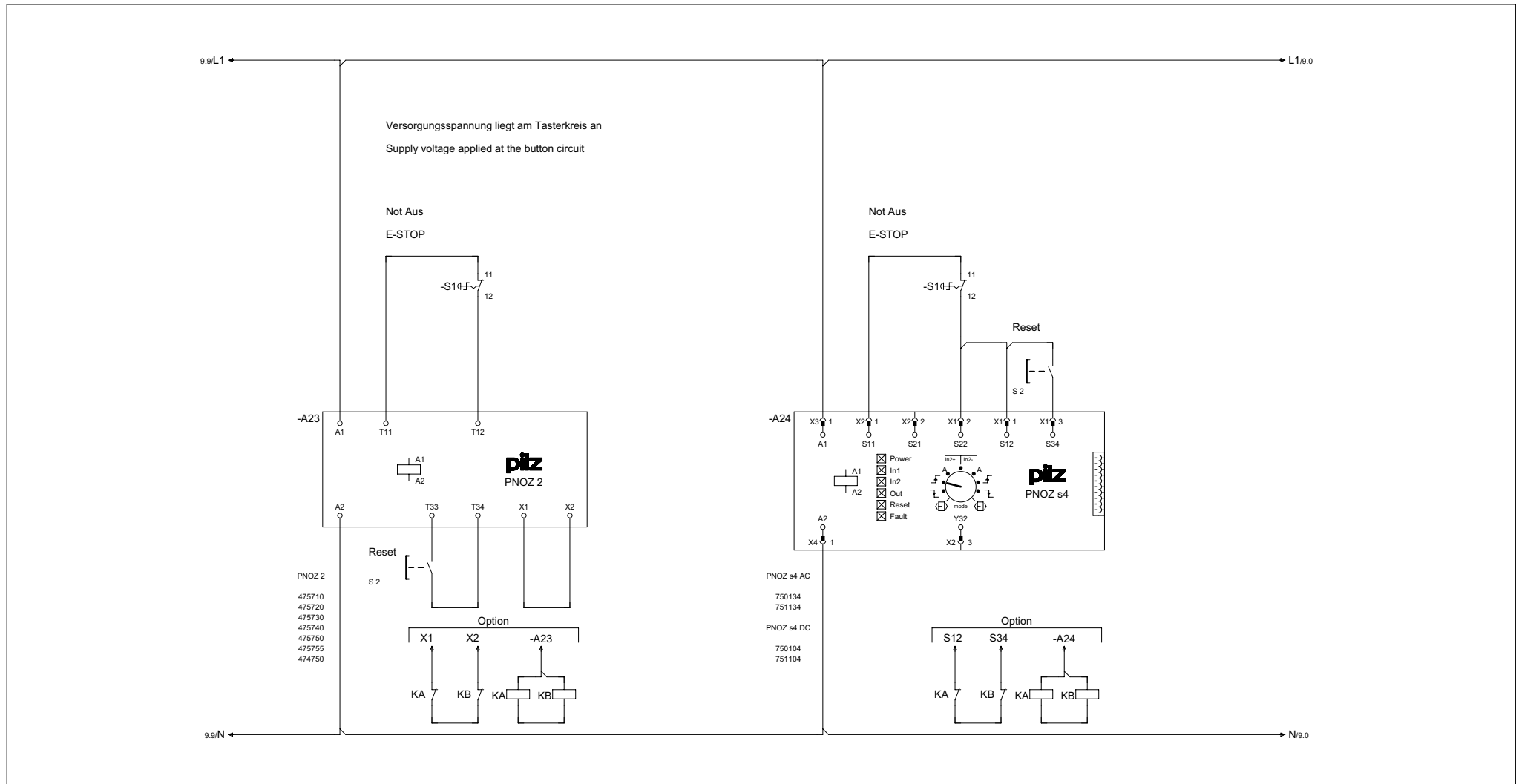
P2HZ 6 (24 V DC; 110 V AC; 230 V AC) – PNOZ s6



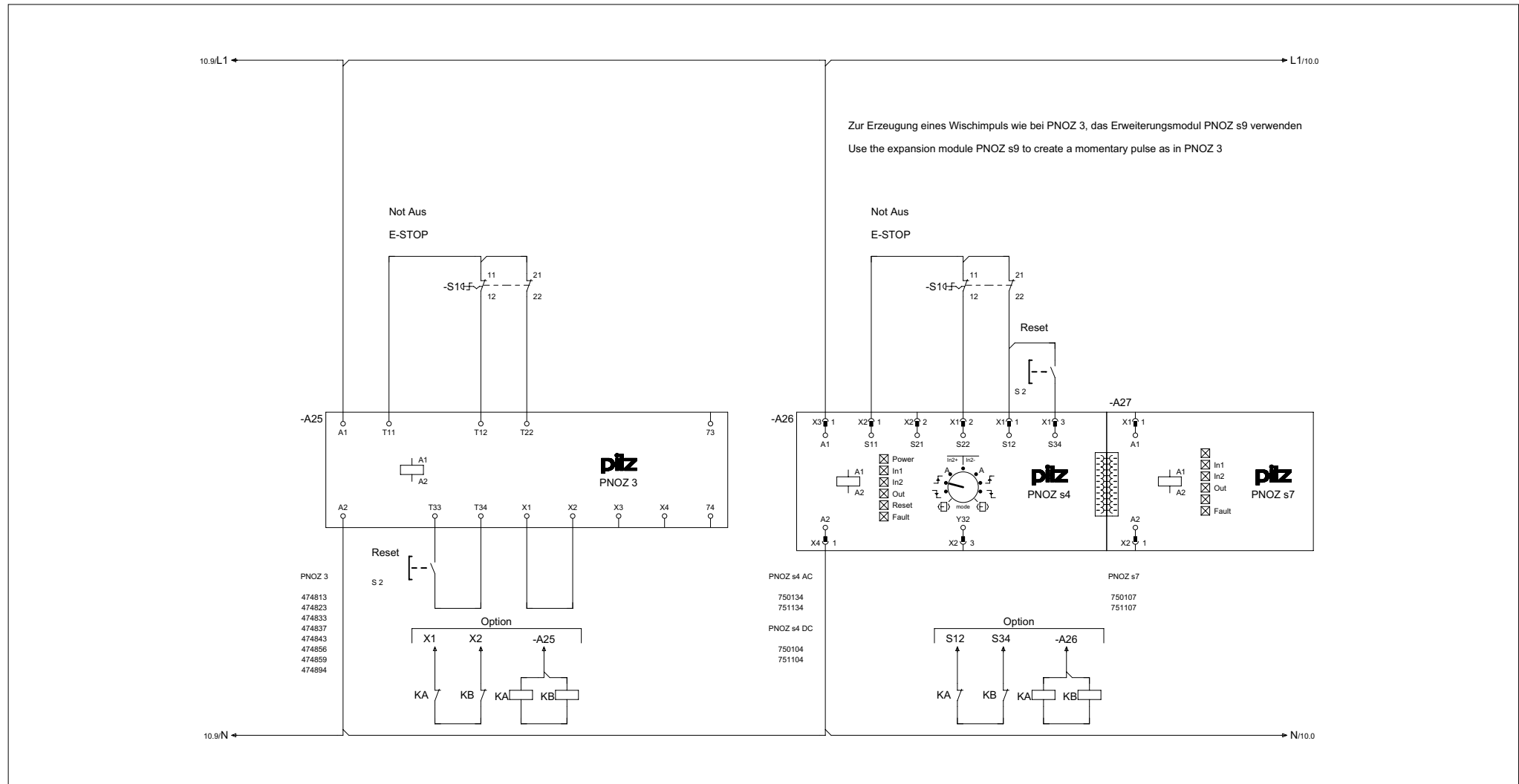
PNOZ 1 (48 - 240 V AC; 24 V DC) – PNOZ s4



PNOZ 2 (48 - 240 V DC) – PNOZ s4



PNOZ 3 (24 V DC; 48 - 240 V AC) – PNOZ s4 and expander module PNOZ s7

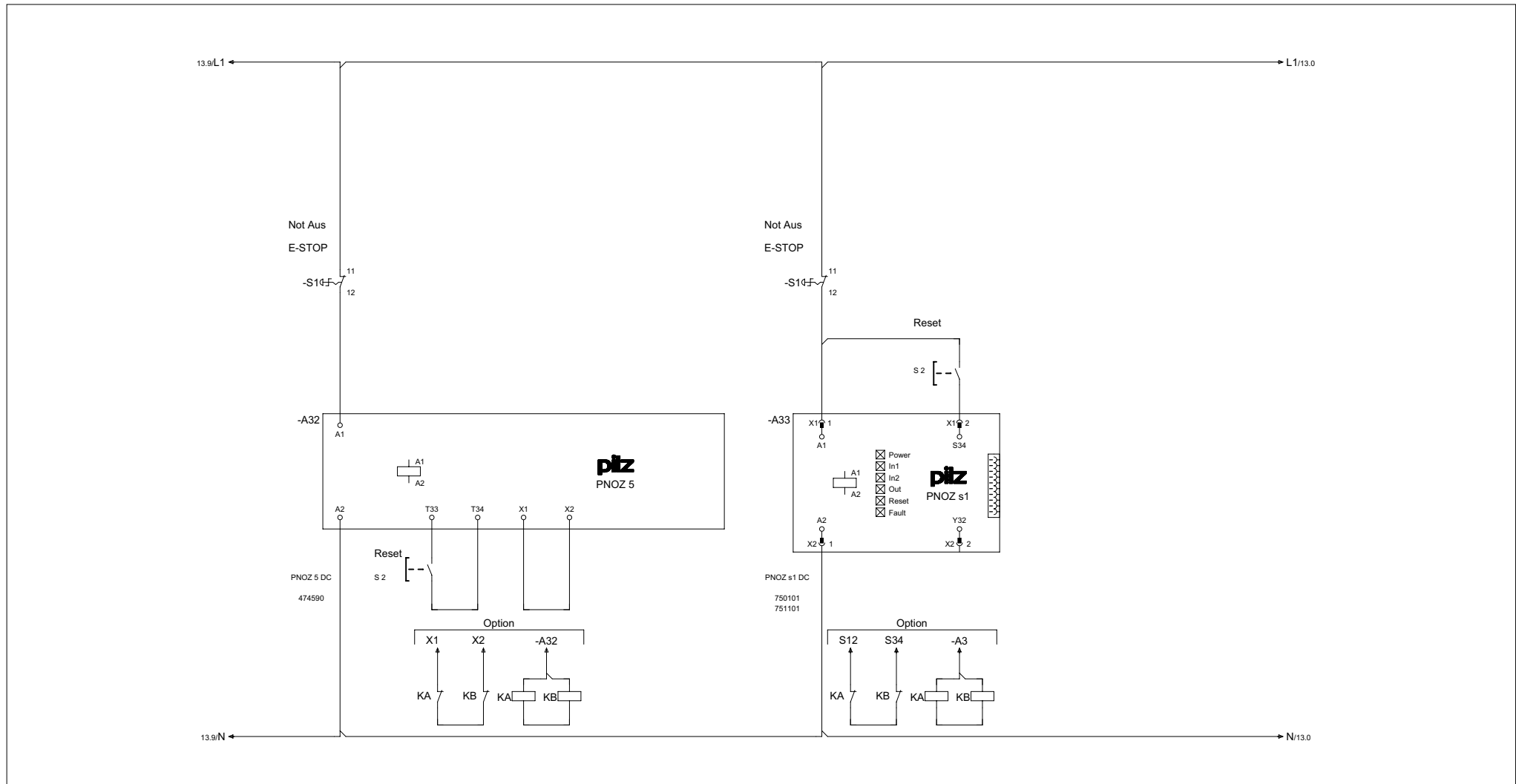




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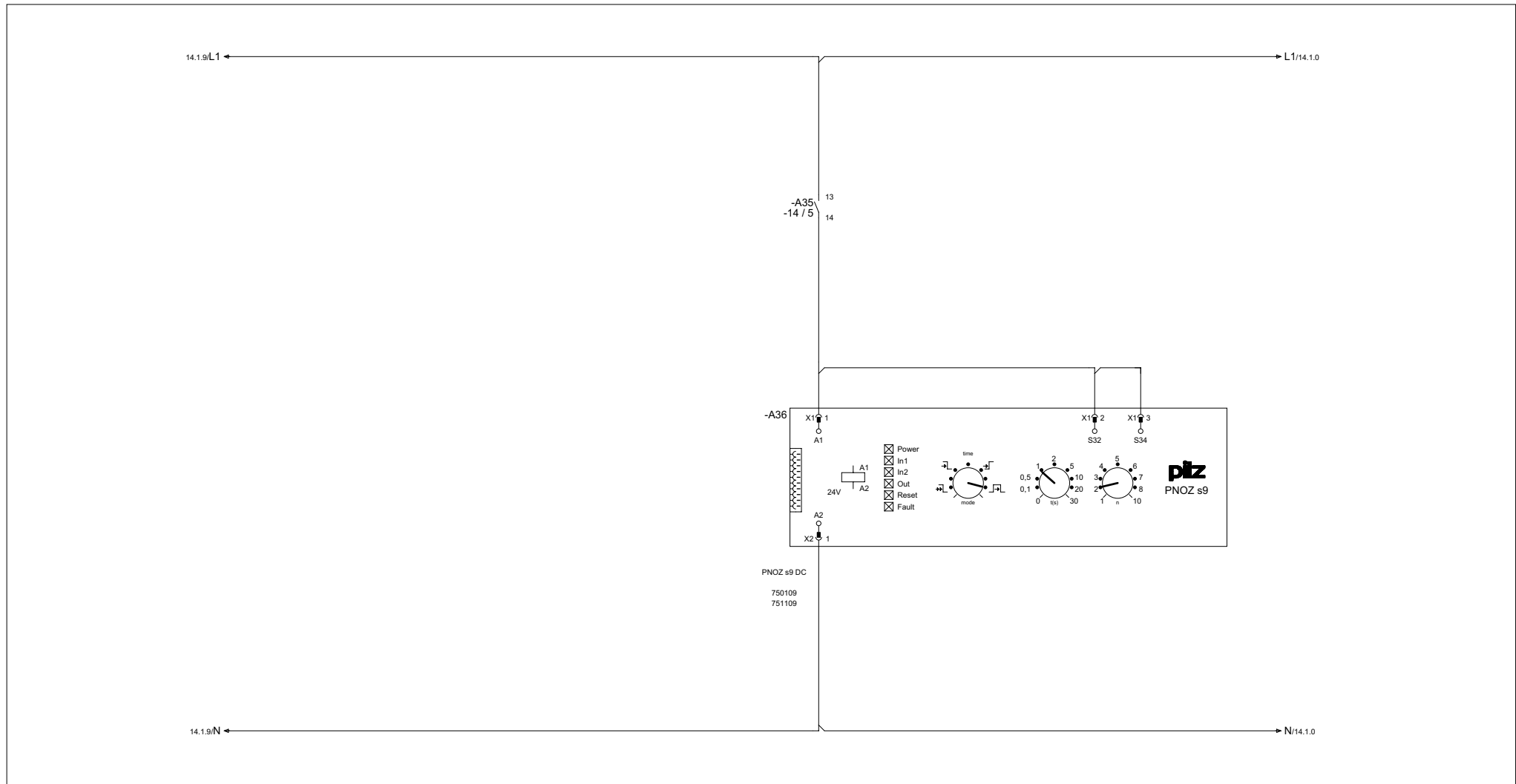
PNOZ 5 (24 V DC) – PNOZ s1



2.1



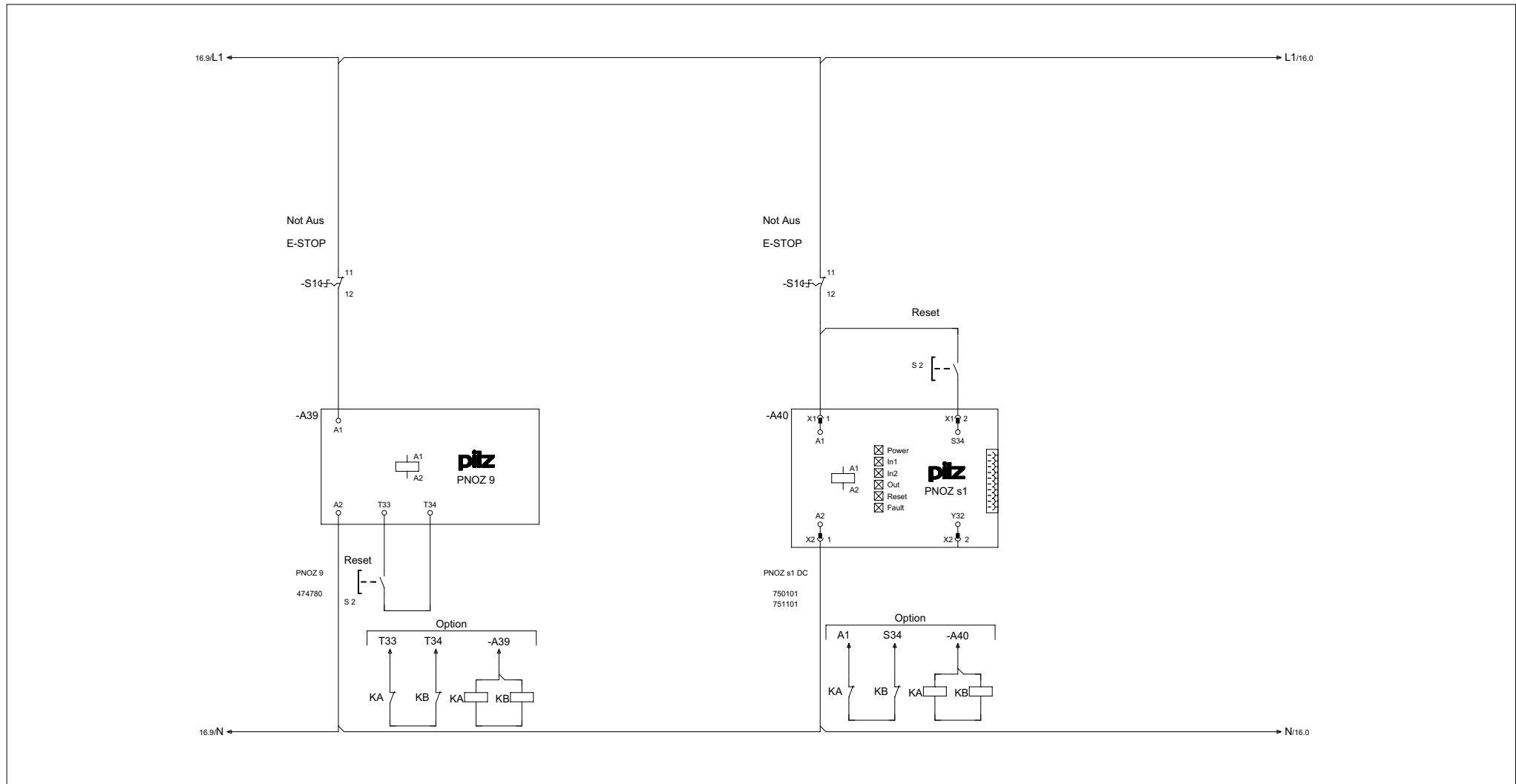
PNOZ 6 (48 V AC; 24 V DC) – PNOZ s4 and expander module PNOZ s9



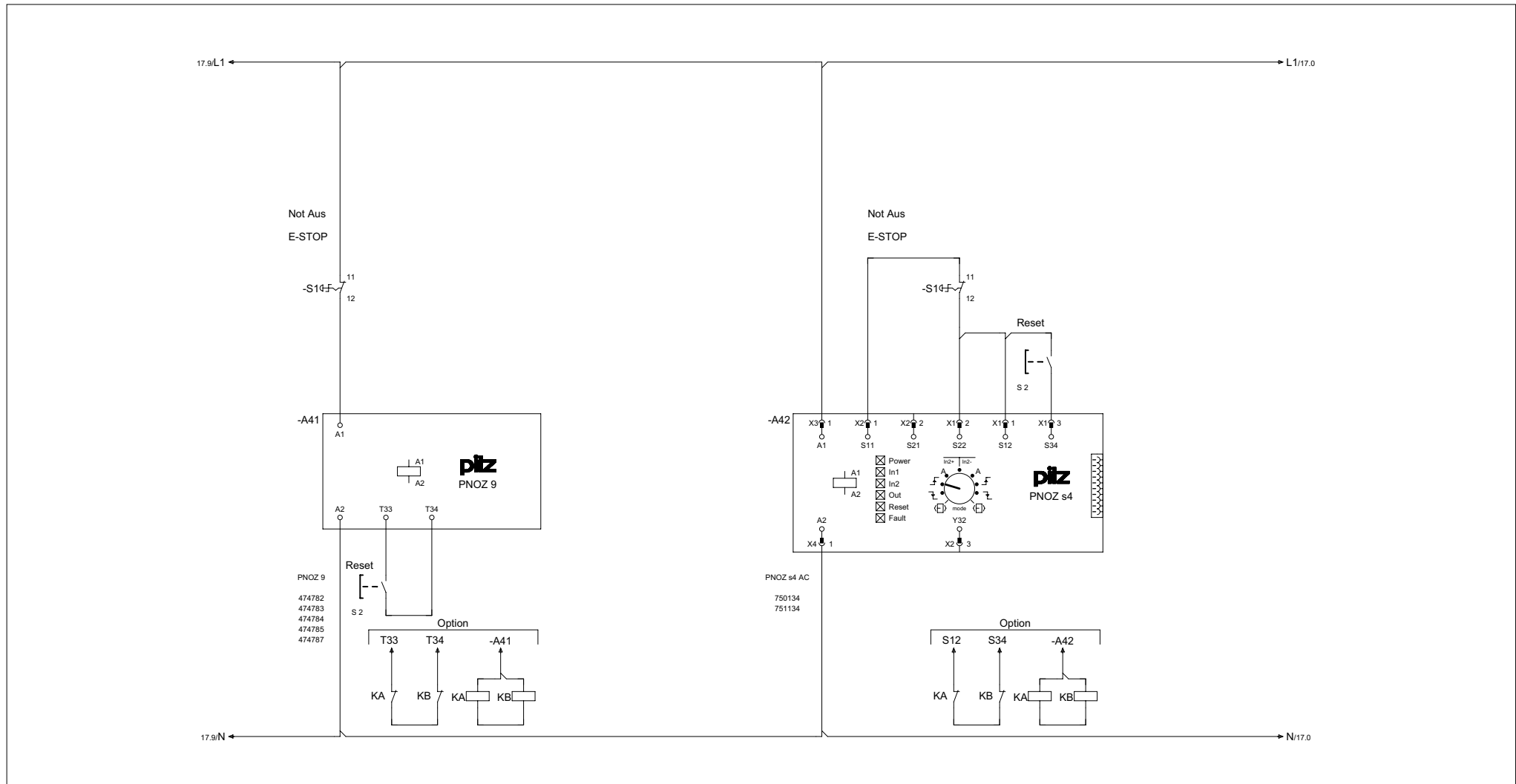
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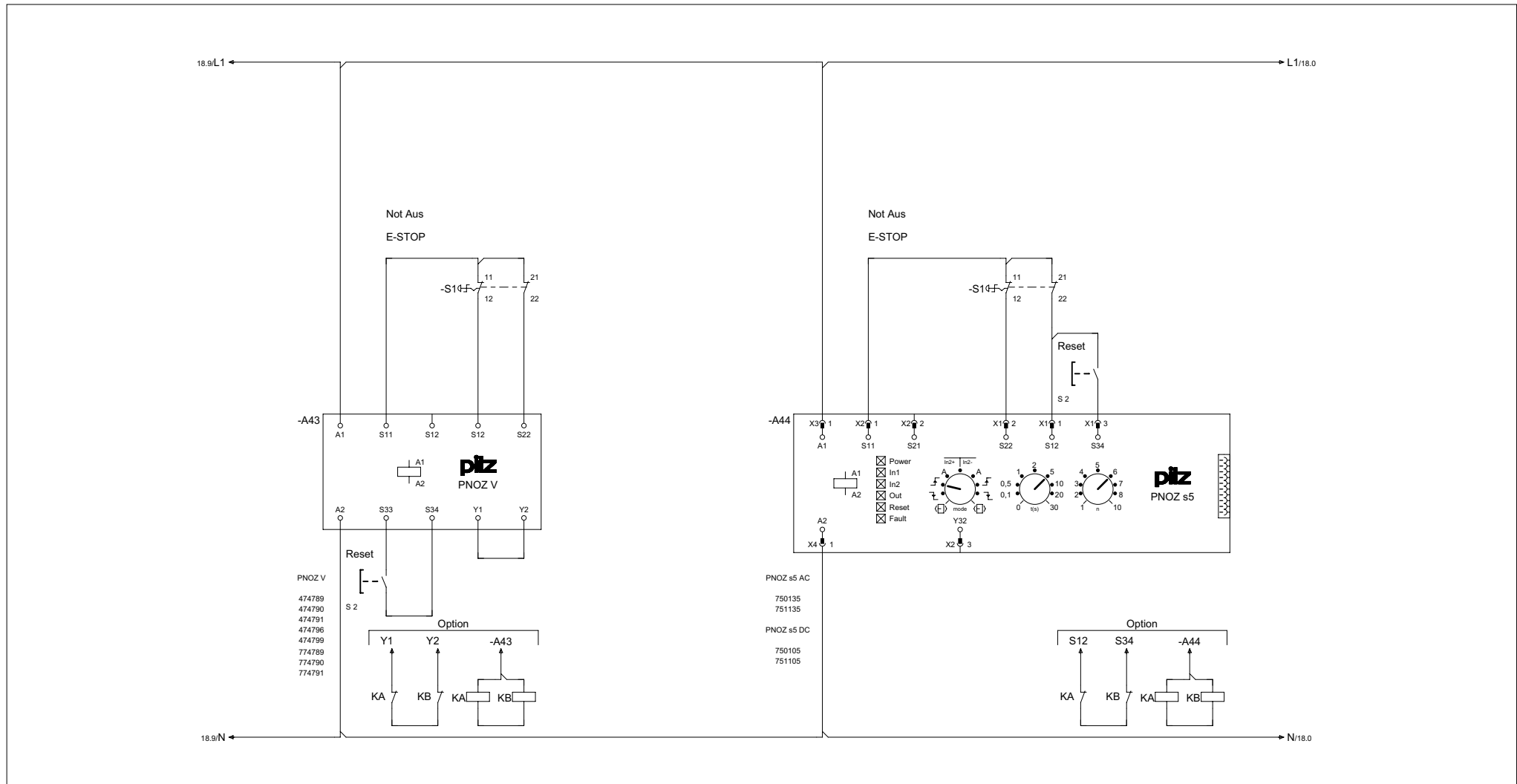
PNOZ 9 (24 V DC) – PNOZ s1



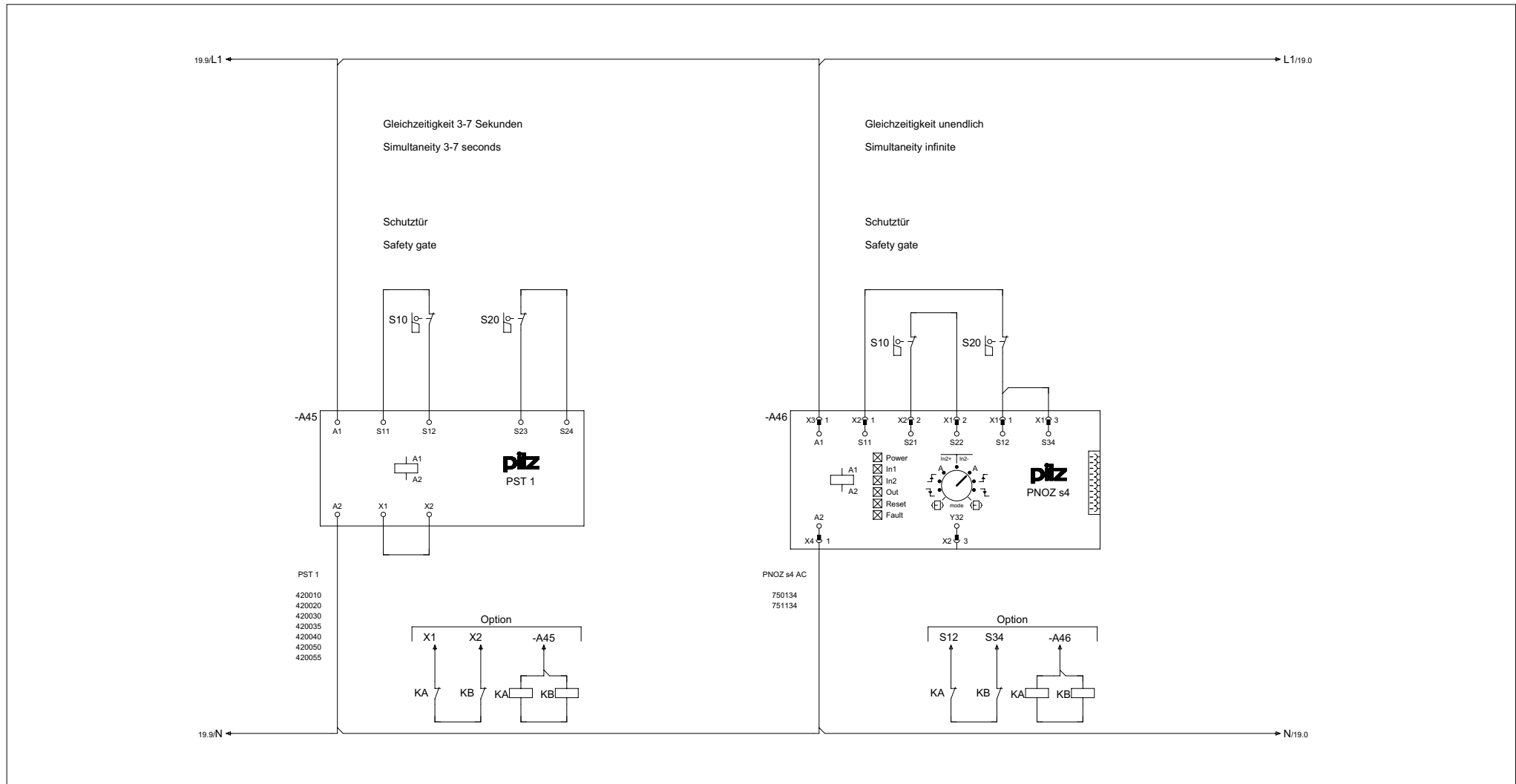
PNOZ 9 (48 - 240 V AC) – PNOZ s4



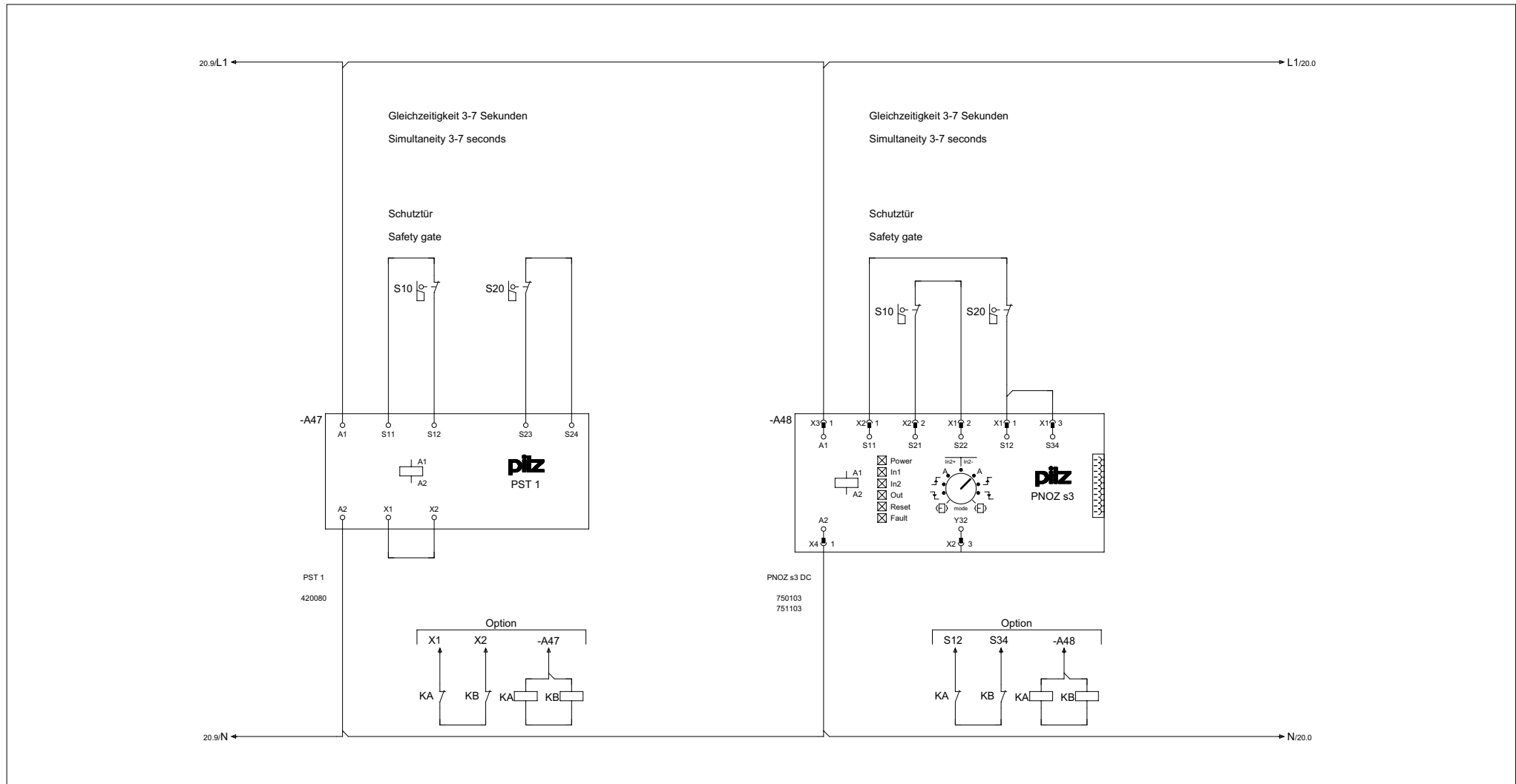
PNOZ V (24 V DC) – PNOZ s5



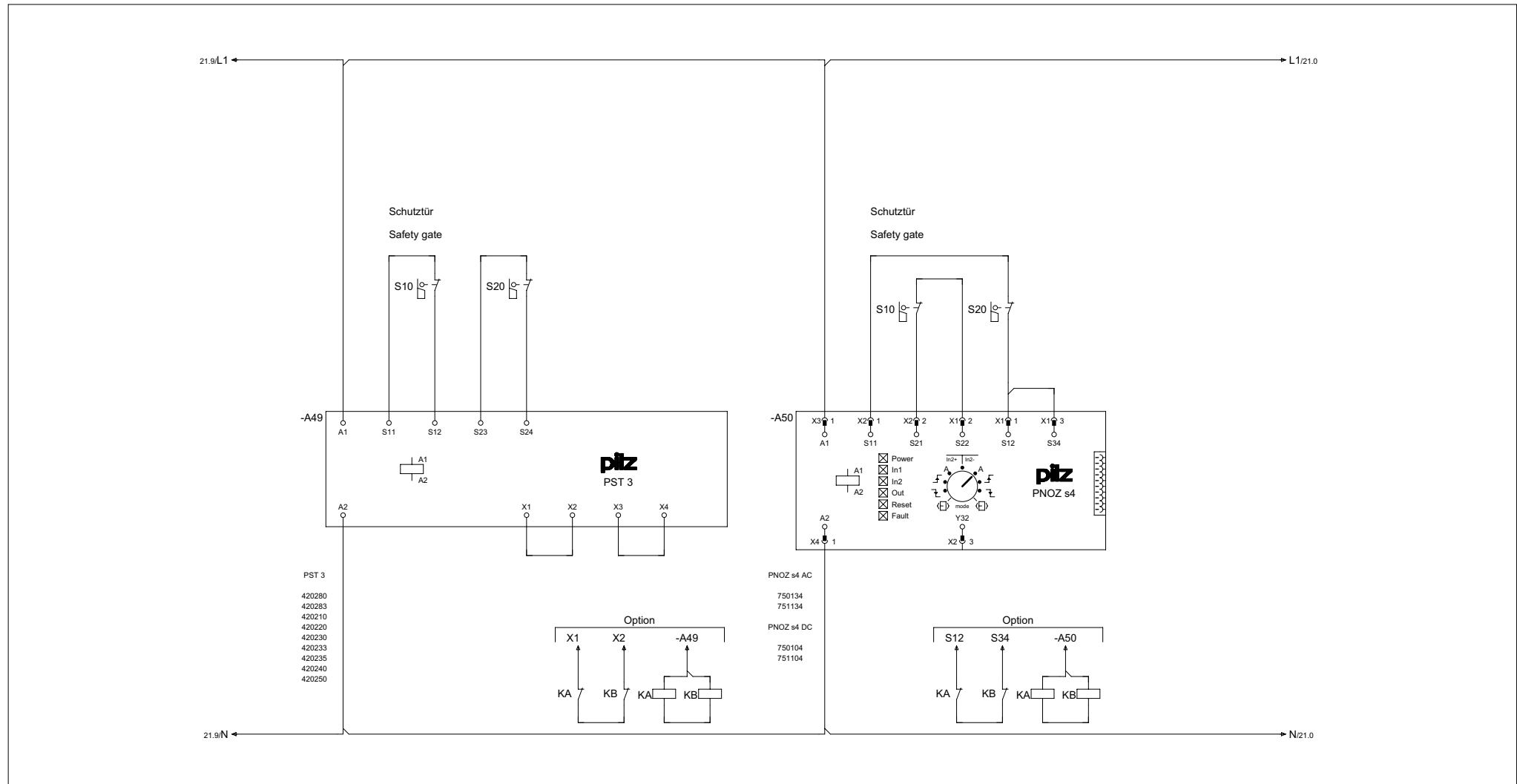
PST 1 (48 - 230 V AC) – PNOZ s4



PST 1 (24 V DC) – PNOZ s3



PST 3 (24 V DC; 48 - 240 V AC) – PNOZ s4



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Please refer to our homepage for further details or contact our headquarters.

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