

## Check list: Electronic monitoring relays

List of discontinued monitoring relays in direct comparison with replacements from the product ranges PMDsigma and PMDsrange, including application examples



# Pilz - Complete automation



## Total customer proximity

Pilz has a tradition as a family-run company stretching back over 60 years. Real proximity to customers is visible in all areas, instilling confidence through individual consultation, total flexibility and reliable service. Worldwide, round the clock, in 26 subsidiaries and branch offices.

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Our customer proximity is the basis for our innovative strength. We are always oriented towards current market requirements, which is why we can offer innovative automation solutions in every case. Market leadership in safe automation secures our leadership in research and technology. Customer proximity and innovation belong together and are mutually dependent.

## Overall solutions

Pilz is your solution supplier for all automation functions. Including standard control functions. Pilz developments protect man, machine and the environment. Our automation solutions incorporate our knowledge and experience from the stringent demands of safety technology, as well as the sum of our knowledge gained from over 60 years' experience of general automation technology.

All our experience and knowledge go into individual products and sophisticated system solutions.

- ▶ Sensor technology
- ▶ Control technology
- ▶ Networks
- ▶ Drive technology
- ▶ Operator and visualisation systems
- ▶ Software
- ▶ Automation system PSS 4000
- ▶ Consulting and engineering
- ▶ Training

## the spirit of safety

With their knowledge, enthusiasm, creativity and courage to take the unconventional route, our staff have made us what we are today: one of the leading brands in automation technology.

More than 1 400 staff, each one of them an ambassador for safety, make sure that your company's most valuable asset – your staff – can work safely and free from injury.

## Exclusion of liability

Our checklist has been compiled with great care. It contains information about our company and our products. All statements are made in accordance with the current status of technology and to the best of our knowledge and belief. While every effort has been made to ensure the information provided is accurate, we cannot accept liability for the accuracy and entirety of the information provided, except in the case of gross negligence. In particular, all information on applicable standards, safety-related classifications and time characteristics should be viewed as provisional. Information in this catalogue does not have the legal quality of assurances or assured properties. We are grateful for any feedback on the contents of this operating manual.

April 2011

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Comparison chart for electronic monitoring relays	1.0
Comparison chart	1.1
Application examples	2.0
Application examples	2.1
Service	3.0
Technical offices in Germany, technical support	3.1

# Check List for Electronic Monitoring Relays

Contents	Page
<b>Check list for electronic monitoring relays</b>	
Check list	1.1-2

1.1

# Check List for Electronic Monitoring Relays

## Check list

This check list makes it easier for users to convert from discontinued electronic monitoring relays to the product ranges PMDsigma and PMDsrange.

The list below serves purely as a recommendation. You will need to check the listed types and ensure that they are suitable for use in a specific application. We will be happy to advise you with regard to an alternative solution for your application. In this case please contact Technical Support. Please refer to our country-specific hotline addresses in the Service chapter.

### **Electronic monitoring relays PMD**

On electronic monitoring relays, electrical safety is the focus. They reduce the number of hazardous situations for man and machine and increase the service life of plant and machinery. Save costs and guarantee an efficient production cycle.

PMDsigma is the new generation of electronic monitoring relays. Unit parameter settings are simply and conveniently menu-driven via display and encoder with key function (turn and push). The configuration is stored on a chip card.

PMD s10 – the true power converter for single and three-phase electrical machinery, trip device for undervoltage and overvoltage.

PMD s20 - the insulation monitor monitors the insulation resistance of unearthed AC/DC systems (IT systems).

PMDsrange units in 22.5 mm slimline housing cover the widest range of functions. In addition to current, voltage and insulation monitors, the range also includes relays for true power, phase sequence and thermistor monitoring.

Online information on PMD is available at [www.pilz.com](http://www.pilz.com), webcode 0224

1.1

# Check List for Electronic Monitoring Relays

## Check list

Function	Discontinued unit	Replacement PMDsrange	Replacement PMDsigma
True power monitoring	P1WP	S1WP	PMD s10
	P1WPF	S1WP	PMD s10
	P1W03	S1WP	PMD s10
	P1W4	S1WP	PMD s10
	P1WP3	S1WP	PMD s10
	P1W	S1WP	PMD s10
	P1WU	S1WP	PMD s10
	P1WM	S1WP	PMD s10
	P1FI-2NK/DA	S1WP	PMD s10
	P1FI-2NK/DR	S1WP	PMD s10
	P1FI-2NK/AA	S1WP	PMD s10
Current monitoring	P1IK	S1IM	
	Z1IZ	S1IM	
	PIZ3		
	P1I-1NB	S1IM	
Single-phase voltage monitoring	P1UK/r	S1UM UP	
	Z1UZ	S1UM	
	P1U-1NB/Z	S1UM	
	P1U-1NB	S1UM	
	P1UK	S1UK, S1UM UP	
Three-phase voltage monitoring	P1U3U	S3UM	
	P1U3	S3UM	
	P1U3E	S3UM	
Phase sequence monitoring	P1PN	S1PN	
	P1P-1SK	S1PN	
	NPR	S1PN	
	SPR	S1PN	
Insulation monitoring	P1E-1SK	S1EN	PMD s20
	P1E-2NK	S1EN	PMD s20
	P1EG	S1EN	PMD s20
	P1E-1NK	S1EN	PMD s20

1.1

# Check List for Electronic Monitoring Relays

## Check list

Function	Discontinued unit	Replacement PMD <sub>s</sub> range	Replacement PMD <sub>sigma</sub>
Standstill monitoring	SW	S1SW P	
Thermistor monitoring	P1M-1SK	S1MS	
	P1M-1NK	S1MN	
	P1MS	1-8 x S1MN	
	P1M-1SO	S1MO	
	P1MO	S1MO	
	Z1MS	S1MS	
	Z1MN	S1MN	
	Z1MO	S1MO	
	Z1M2	2x S1MN	
	P1M-2NK	S1MO	
Full motor protection relay	P1MV	S1PN + S1MO	
Analogue monitoring	P1K		
	P1KU		

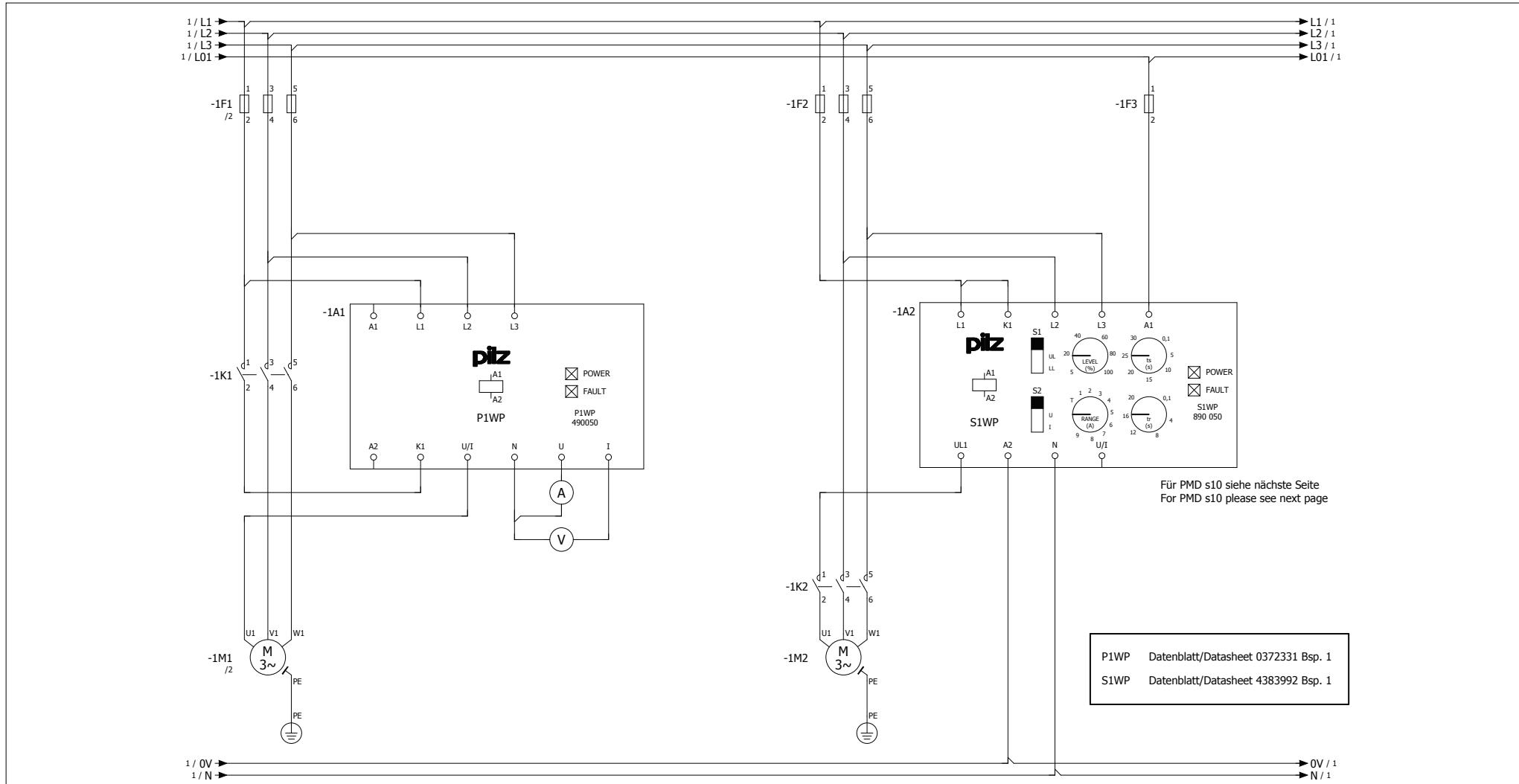
1.1

Contents	Page
<b>Application examples</b>	
<b>True power monitoring</b>	
P1WP – S1WP	2.1-3
P1WP – PMD s10	2.1-4
P1WPF – S1WP	2.1-5
P1WPF – PMD s10	2.1-6
P1W03 – S1WP	2.1-7
P1W03 – PMD s10	2.1-8
P1W4 – S1WP	2.1-9
P1W4 – PMD s10	2.1-10
P1WP3 – S1WP	2.1-11
P1WP3 – PMD s10	2.1-12
P1W – S1WP	2.1-13
P1W – PMD s10	2.1-14
P1WU/P1WM – S1WP	2.1-15
P1WU/P1WM – PMD s10	2.1-16
P1FI-2NK/DA – S1WP	2.1-17
P1FI-2NK/DR – S1WP	2.1-18
P1FI-2NK/AA – S1WP	2.1-19
<b>Current monitoring</b>	
P1IK – S1IM	2.1-20
Z1IZ – S1IM	2.1-21
PIZ3	2.1-22
P1I-1NB – S1IM	2.1-23
<b>Single-phase voltage monitoring</b>	
P1UK/r – S1UM UP	2.1-23
Z1UZ – S1UM	2.1-24
P1U-1NB/Z – S1UM	2.1-25
P1U-1NB – S1UM	2.1-26
P1UK – S1UK/S1UM UP	2.1-27

Contents	Page
<b>Three-phase voltage monitoring</b>	
P1U3U – S3UM	2.1-28
P1U3 – S3UM	2.1-29
P1U3E – S3UM	2.1-30
<b>Phase sequence monitoring</b>	
P1PN – S1PN	2.1-31
P1P-1SK – S1PN	2.1-32
NPR – S1PN	2.1-33
SPR – S1PN	2.1-34
<b>Insulation monitoring</b>	
P1E-1SK – S1EN	2.1-35
P1E-2NK – S1EN	2.1-36
P1EG – S1EN	2.1-37
P1E-1NK – S1EN	2.1-38
<b>Standstill monitoring</b>	
SW – S1SW P	2.1-39
P1M-1SK – S1MS	2.1-40
P1M-1NK – S1MN	2.1-41
P1MS – S1MN	2.1-42
P1M-1SO – S1MO	2.1-44
P1MO – S1MO	2.1-45
Z1MS – S1MS	2.1-46
Z1MN – S1MN	2.1-47
Z1MO – S1MO	2.1-48
Z1M2 – S1MN	2.1-49
P1M-2NK – S1MO	2.1-51
<b>Full motor protection relay</b>	
P1MV – S1PN and S1MO	2.1-53
<b>Analogue monitoring</b>	
P1K	2.1-55
P1KU	2.1-56

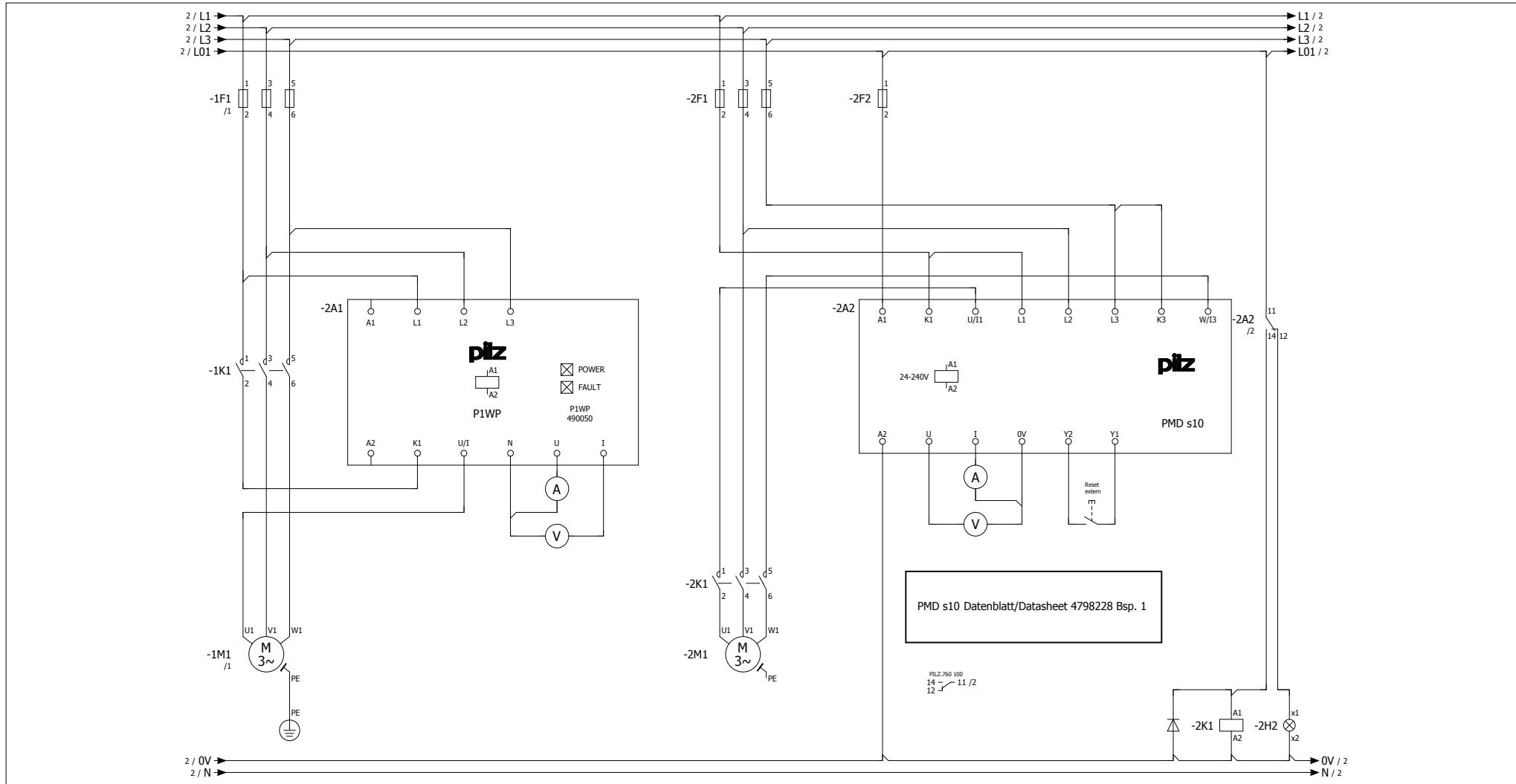
# Application Examples

## P1WP – S1WP



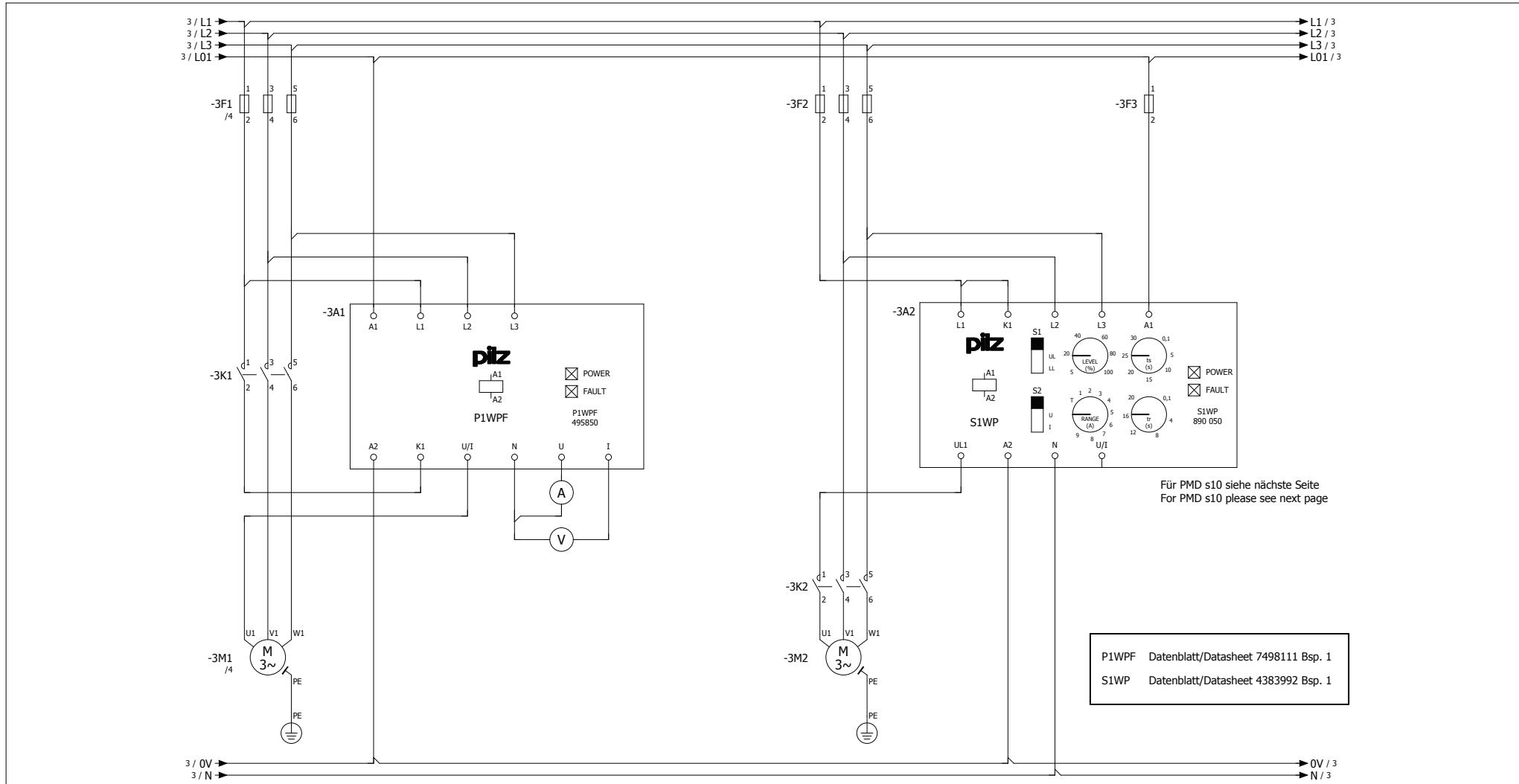
# Application Examples

## P1WP – PMD s10



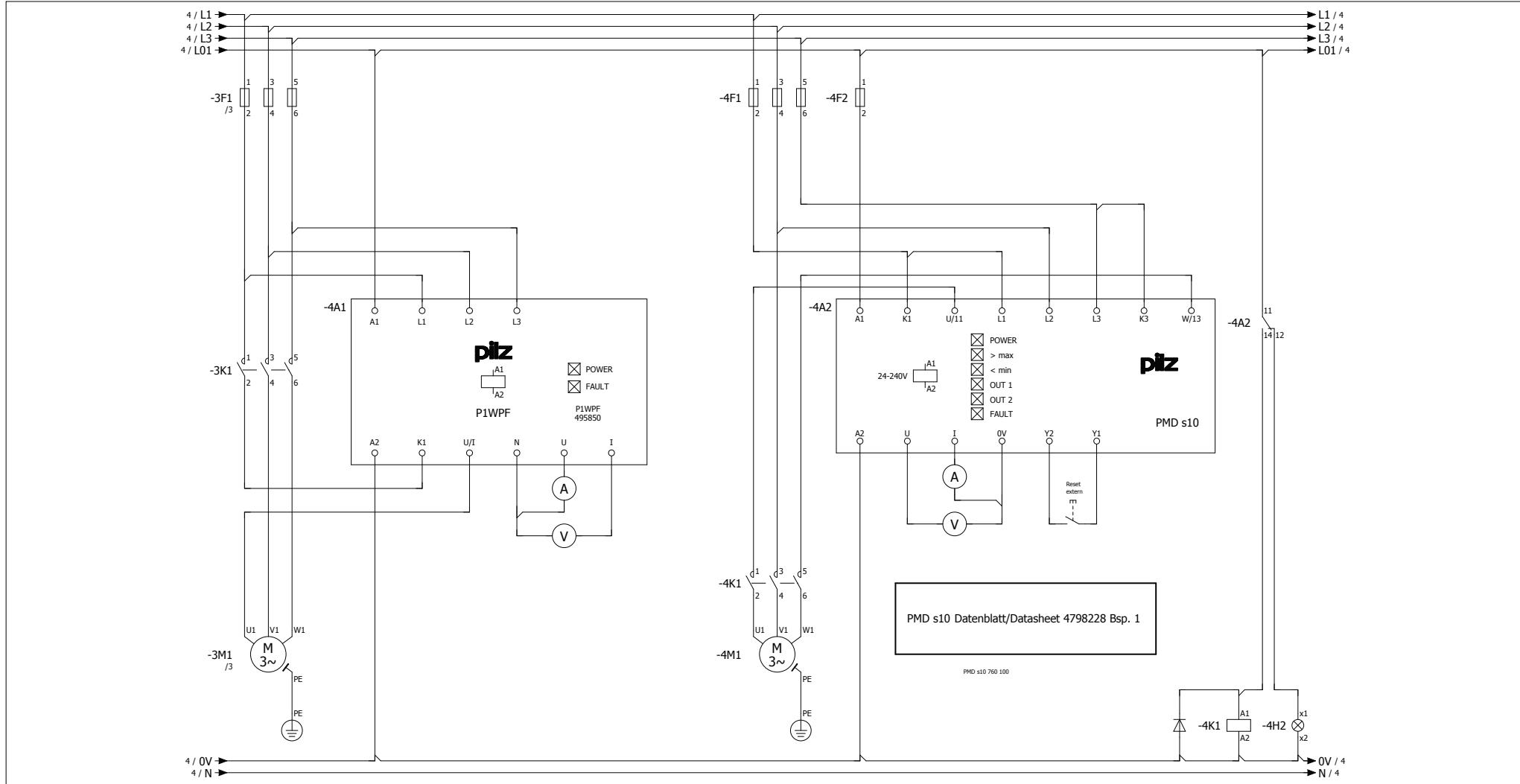
# Application Examples

## P1WPF – S1WP



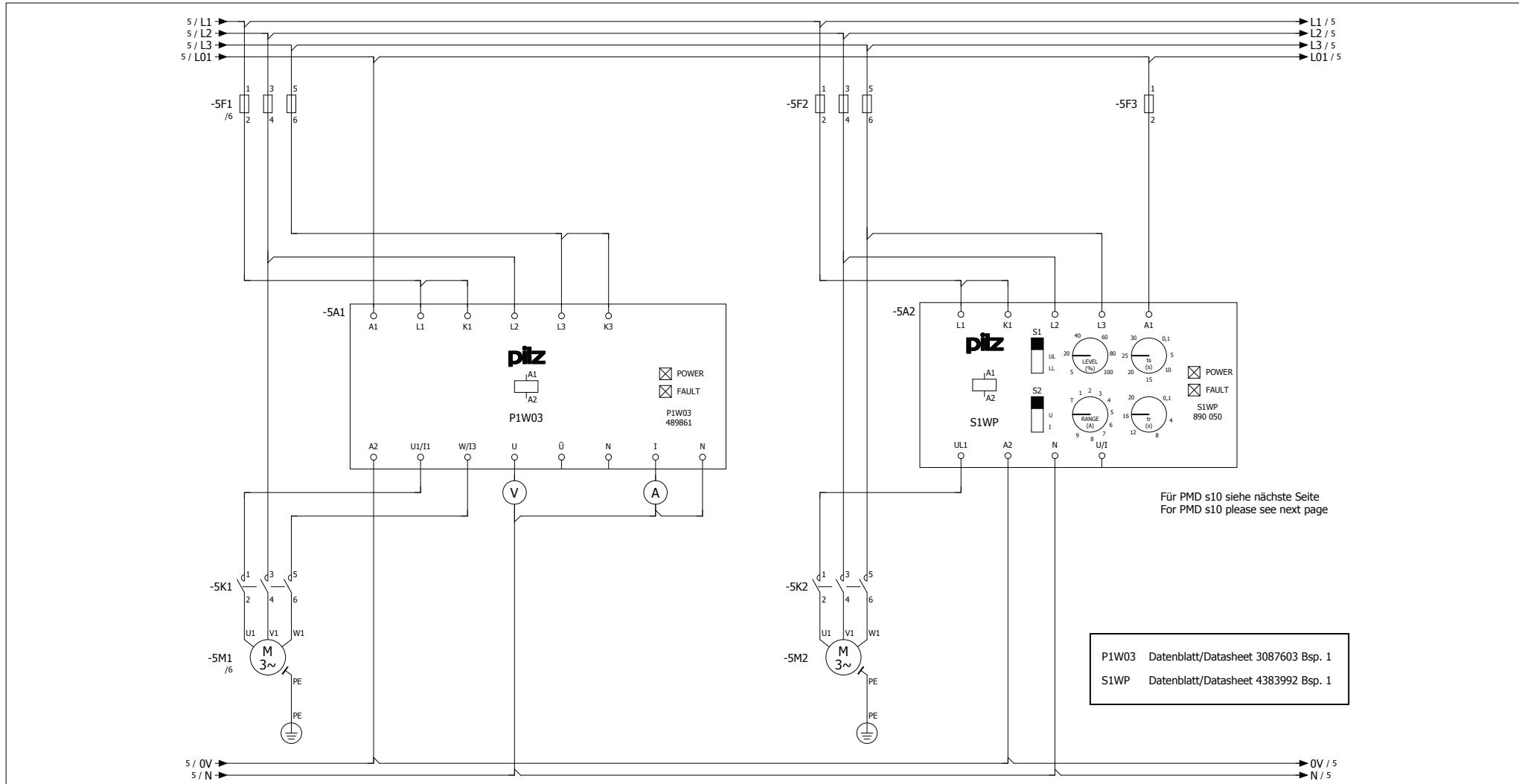
# Application Examples

## P1WPF – PMD s10



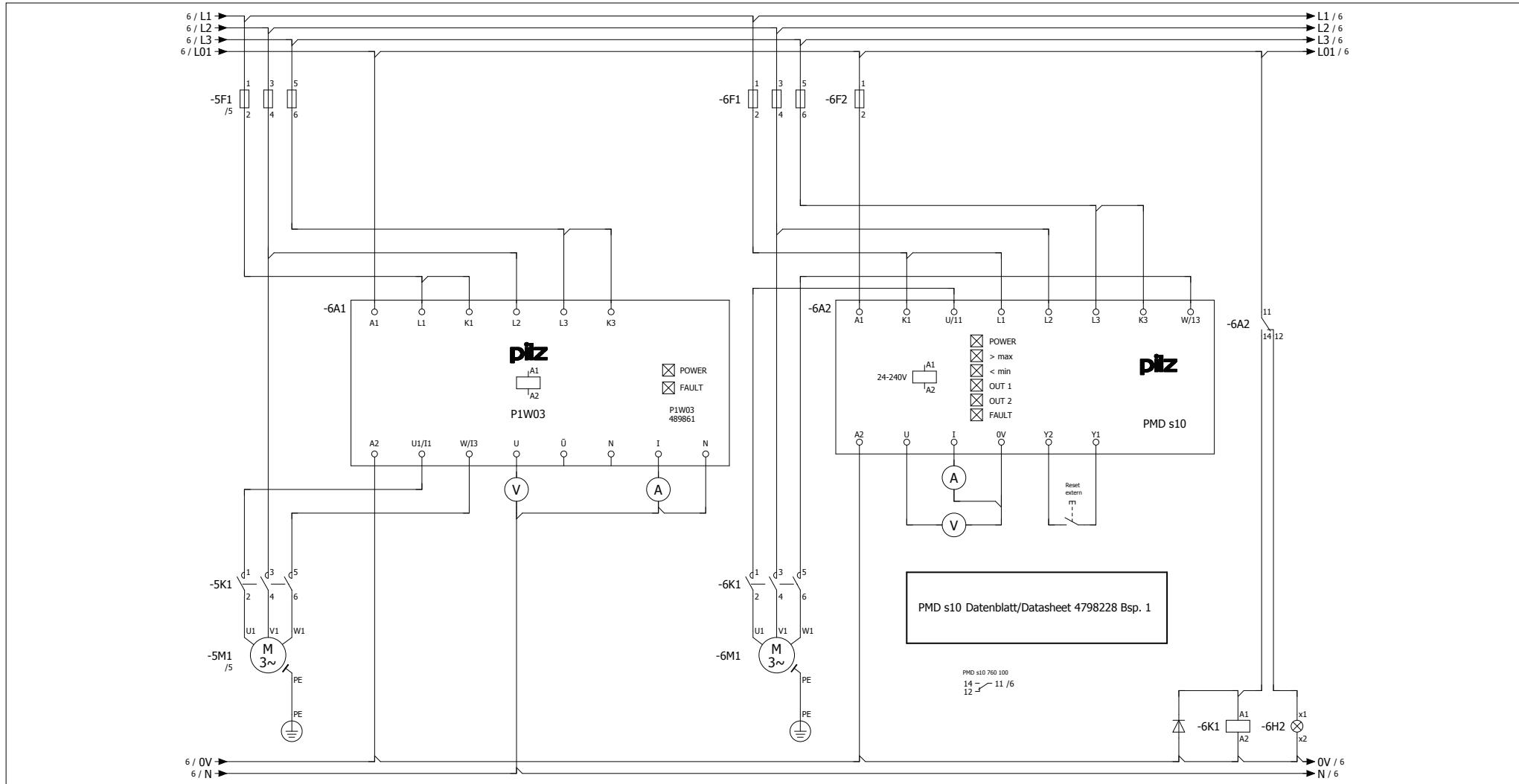
# Application Examples

## P1W03 – S1WP



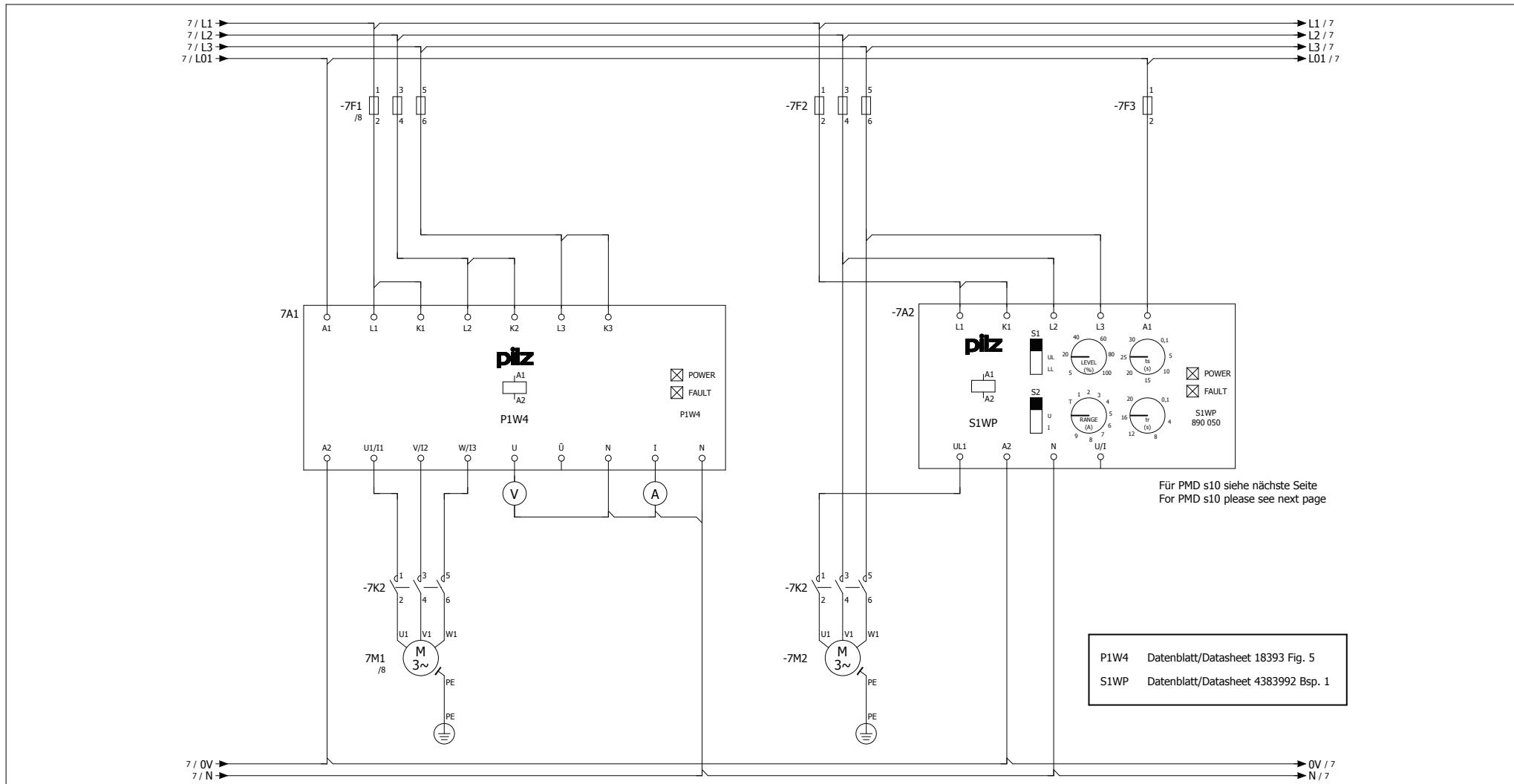
# Application Examples

## P1W03 – PMD s10



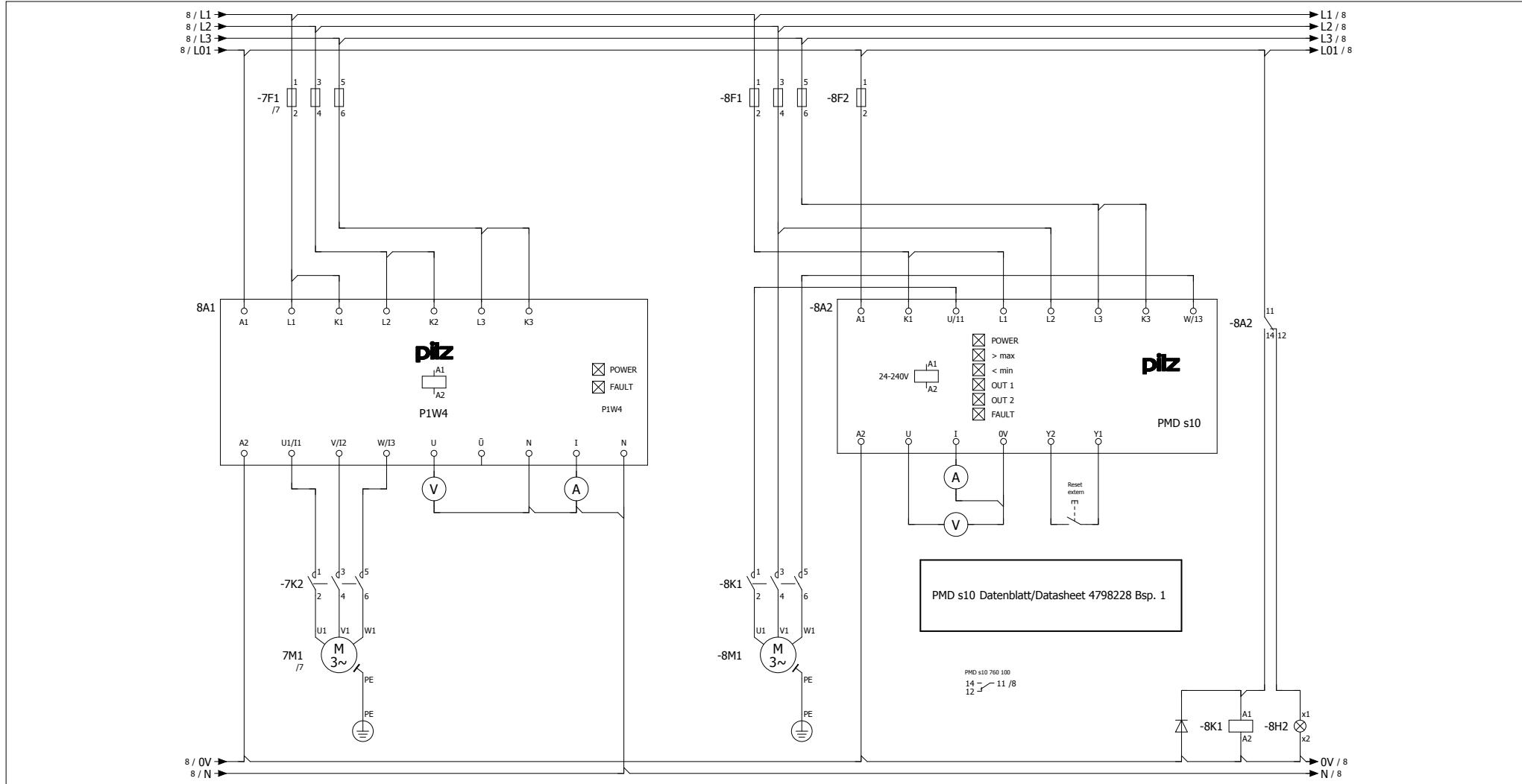
# Application Examples

## P1W4 – S1WP



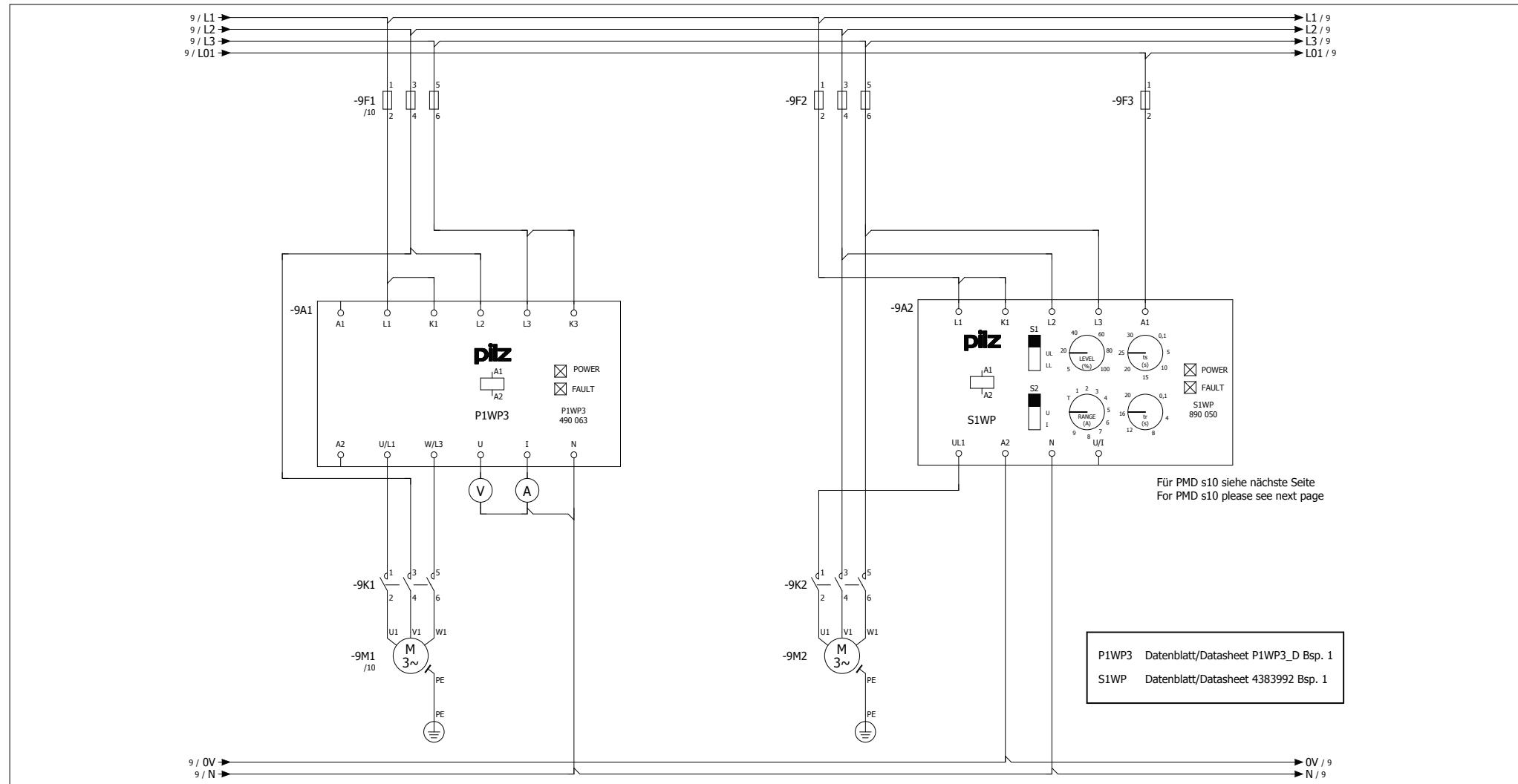
# Application Examples

## P1W4 – PMD s10



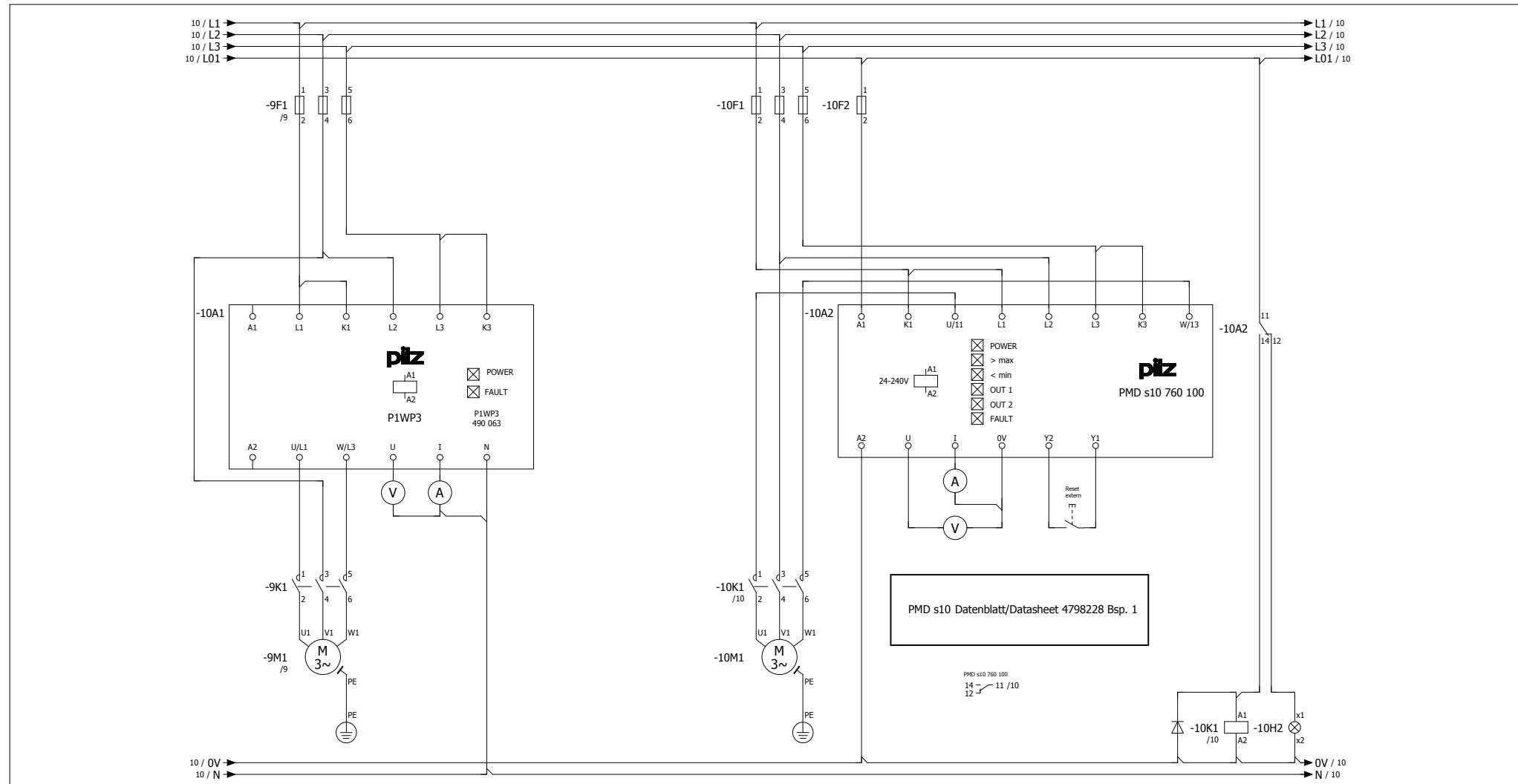
# Application Examples

## P1WP3 – S1WP



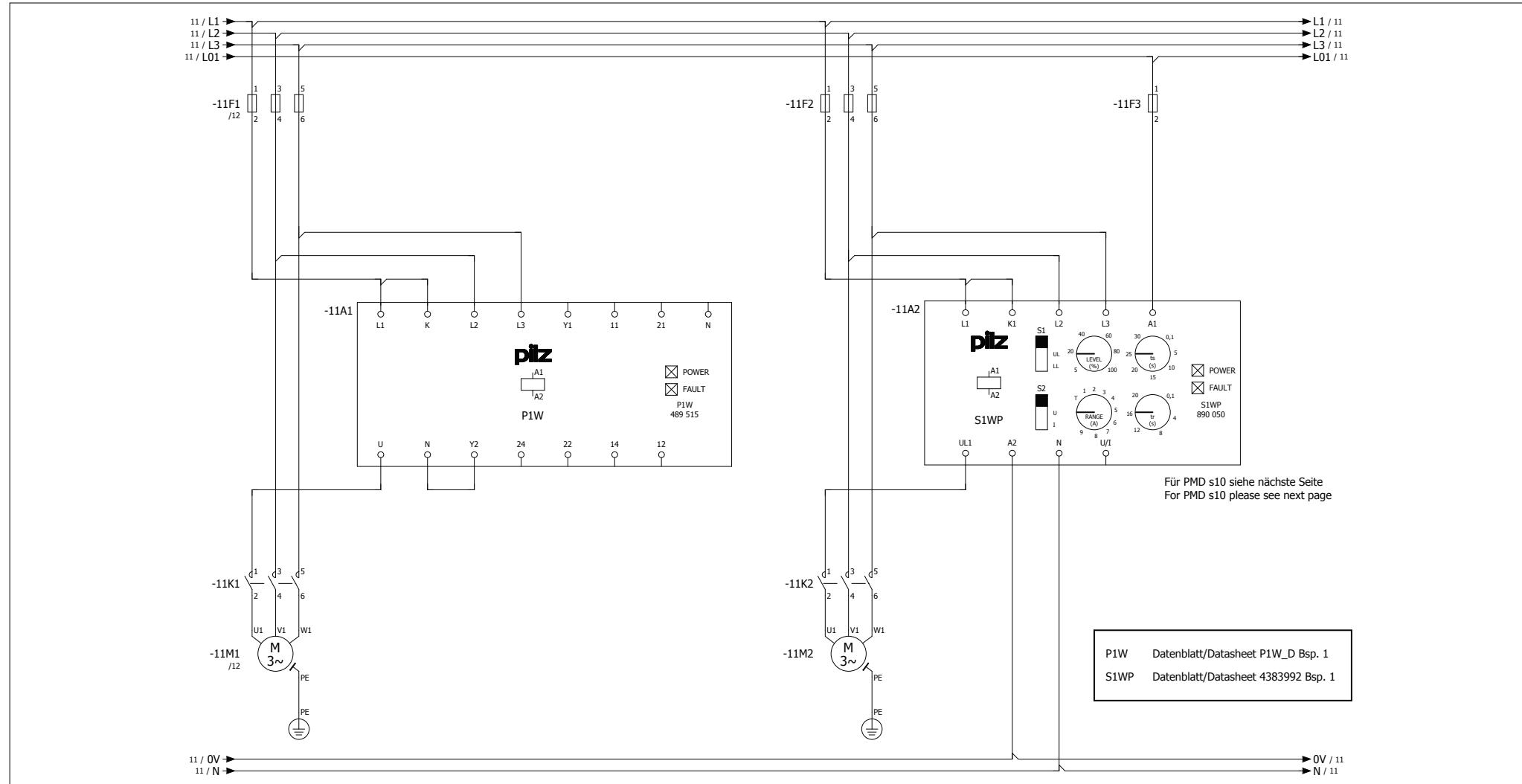
# Application Examples

## P1WP3 – PMD s10



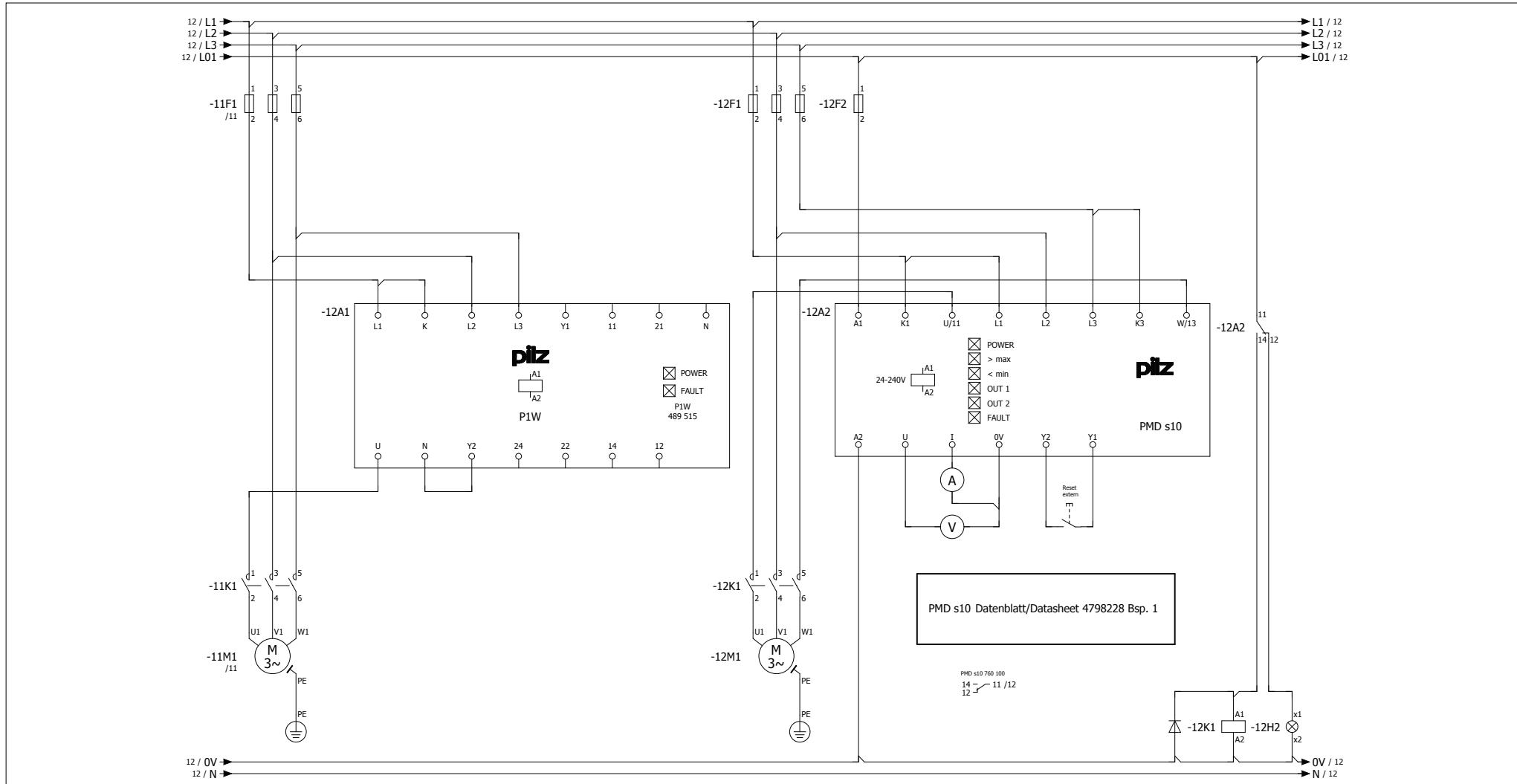
# Application Examples

## P1W – S1WP



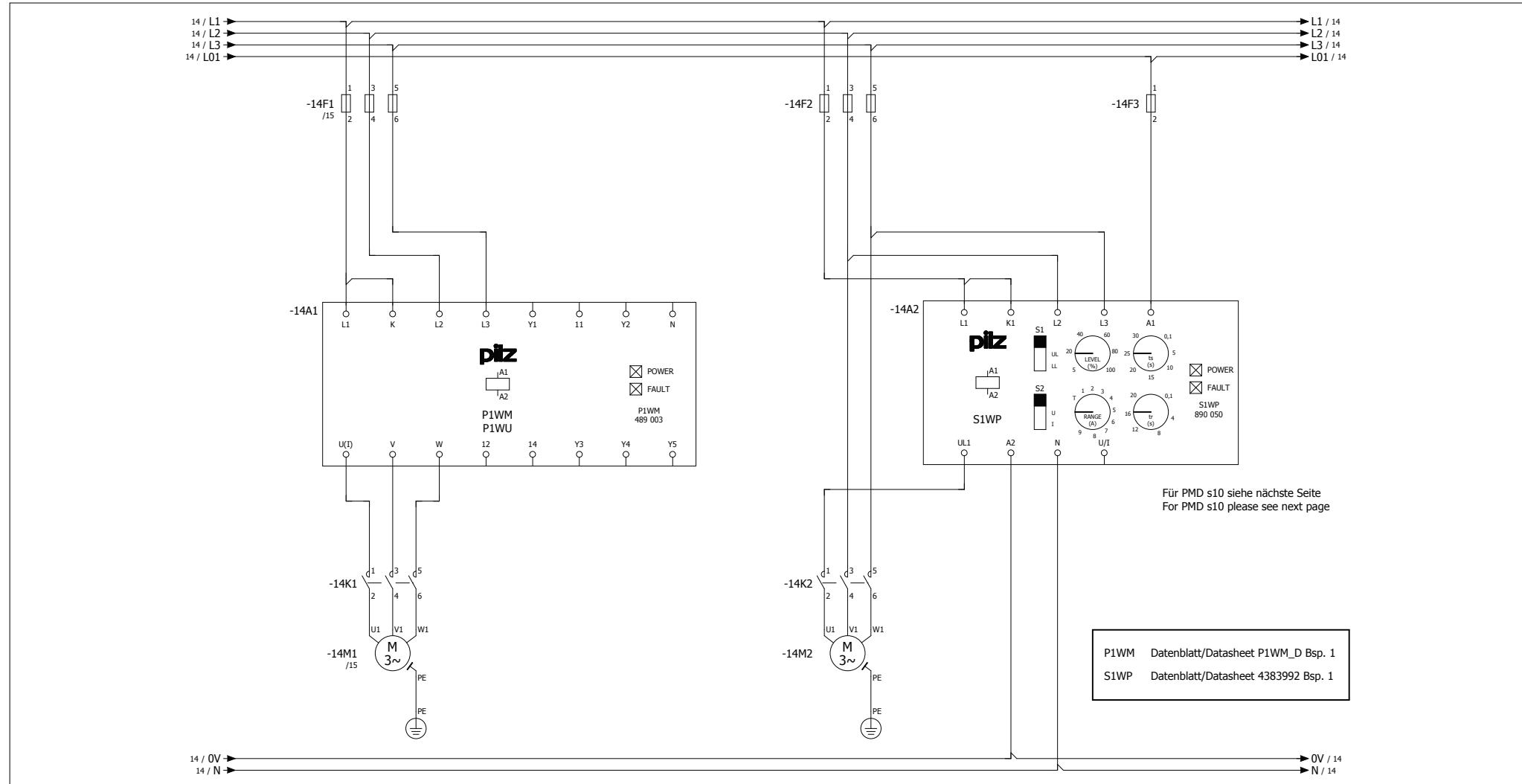
# Application Examples

## P1W – PMD s10



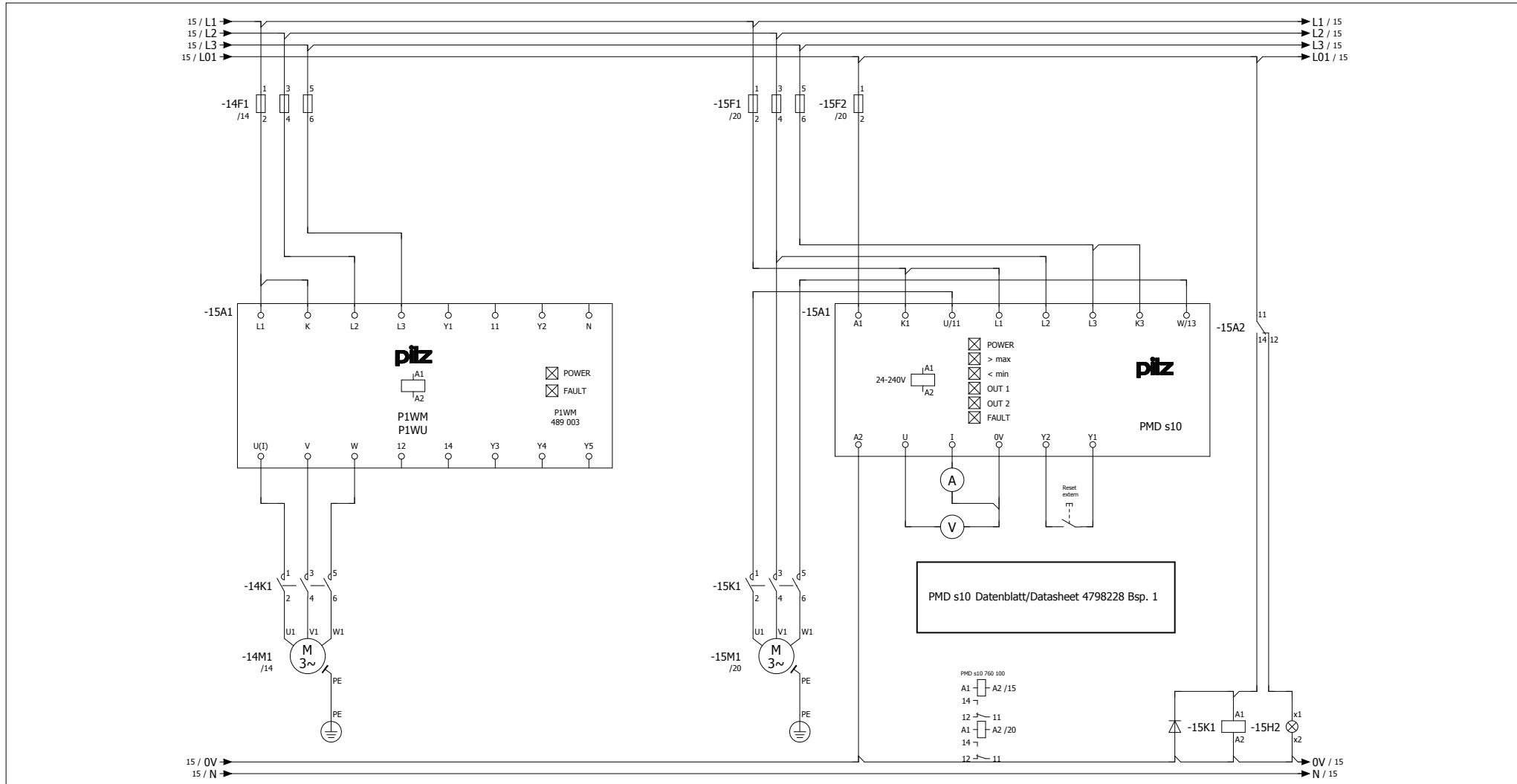
# Application Examples

## P1WU/P1WM – S1WP



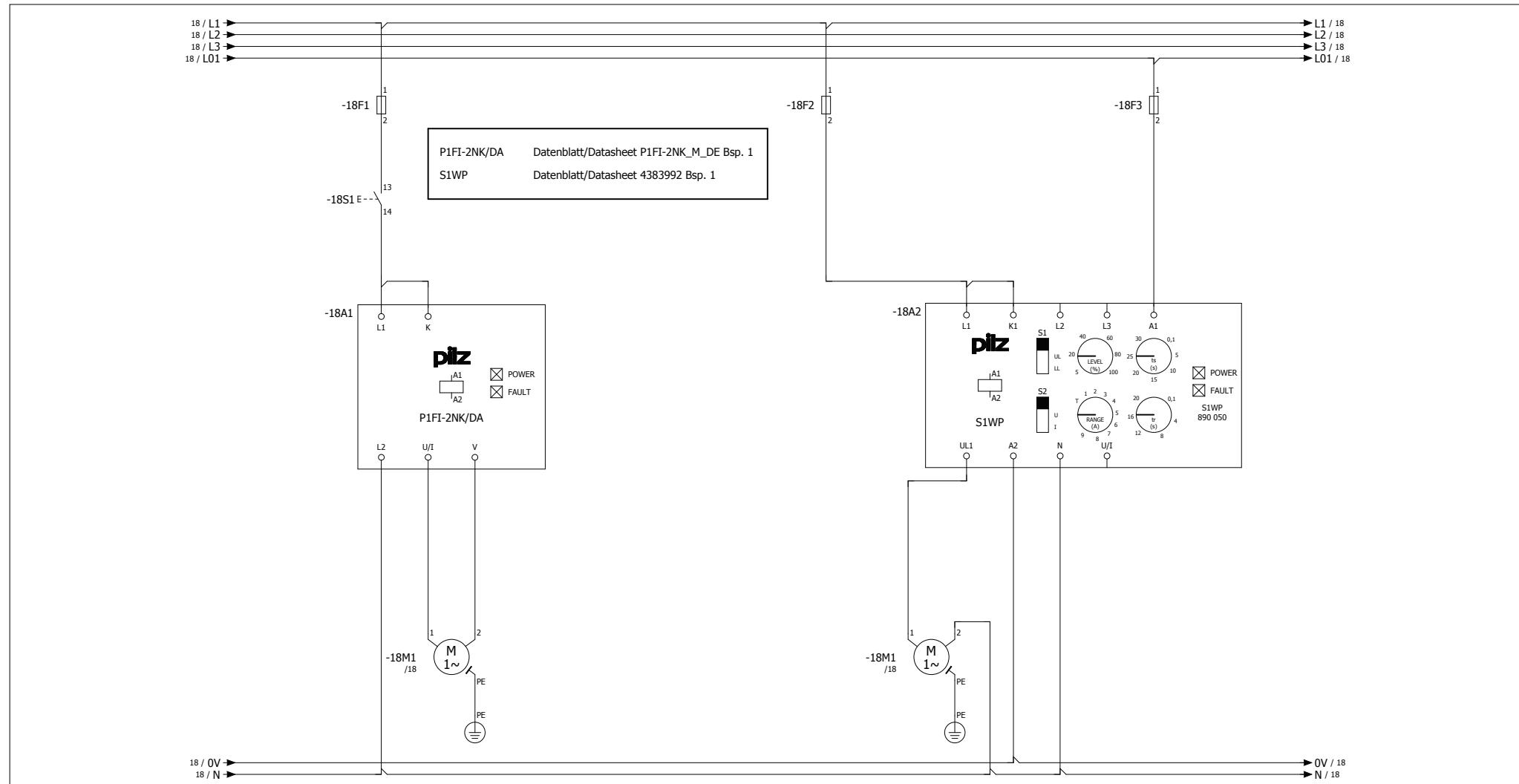
# Application Examples

## P1WU/P1WM – PMD s10



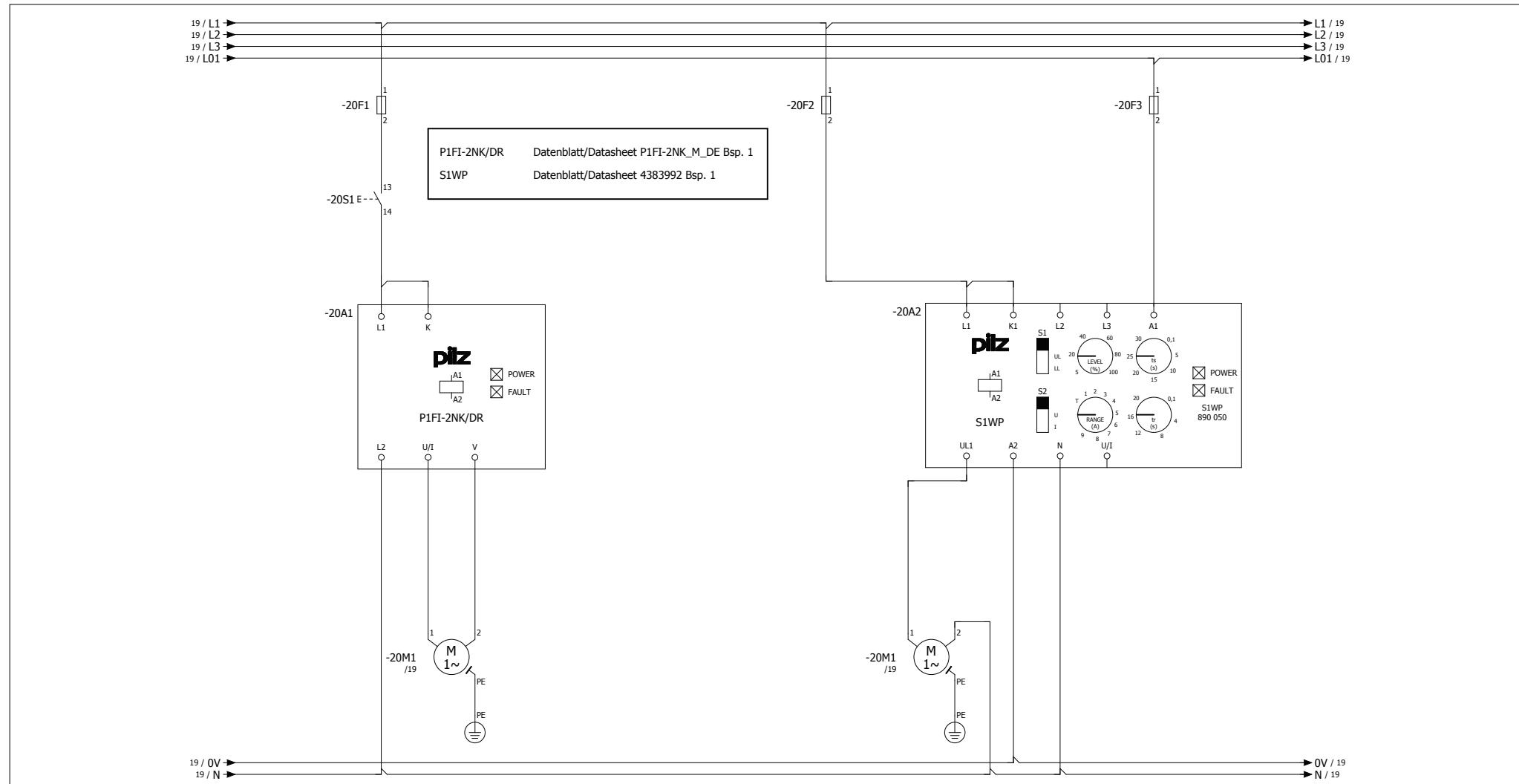
# Application Examples

## P1FI-2NK/DA – S1WP



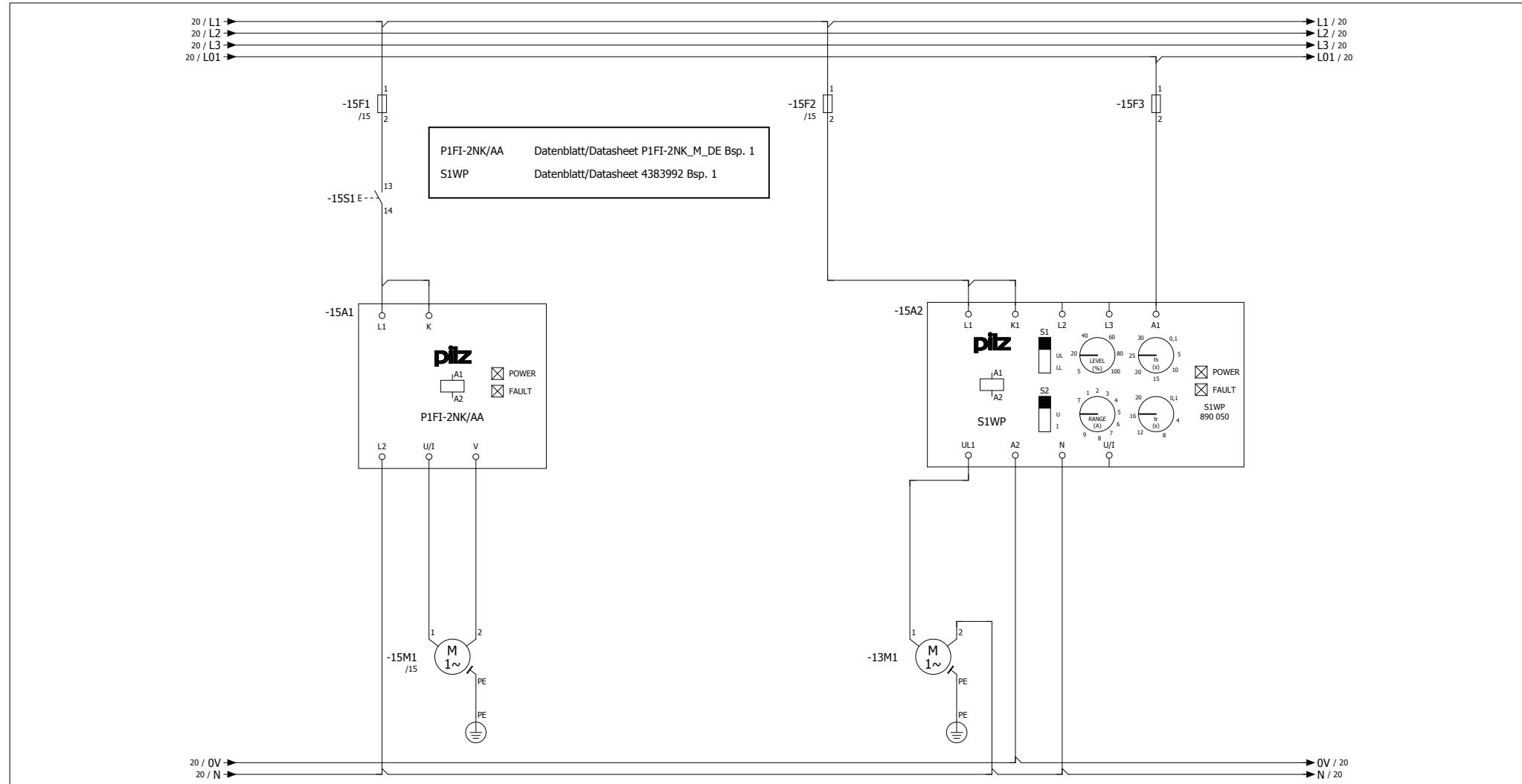
# Application Examples

## P1FI-2NK/DR – S1WP



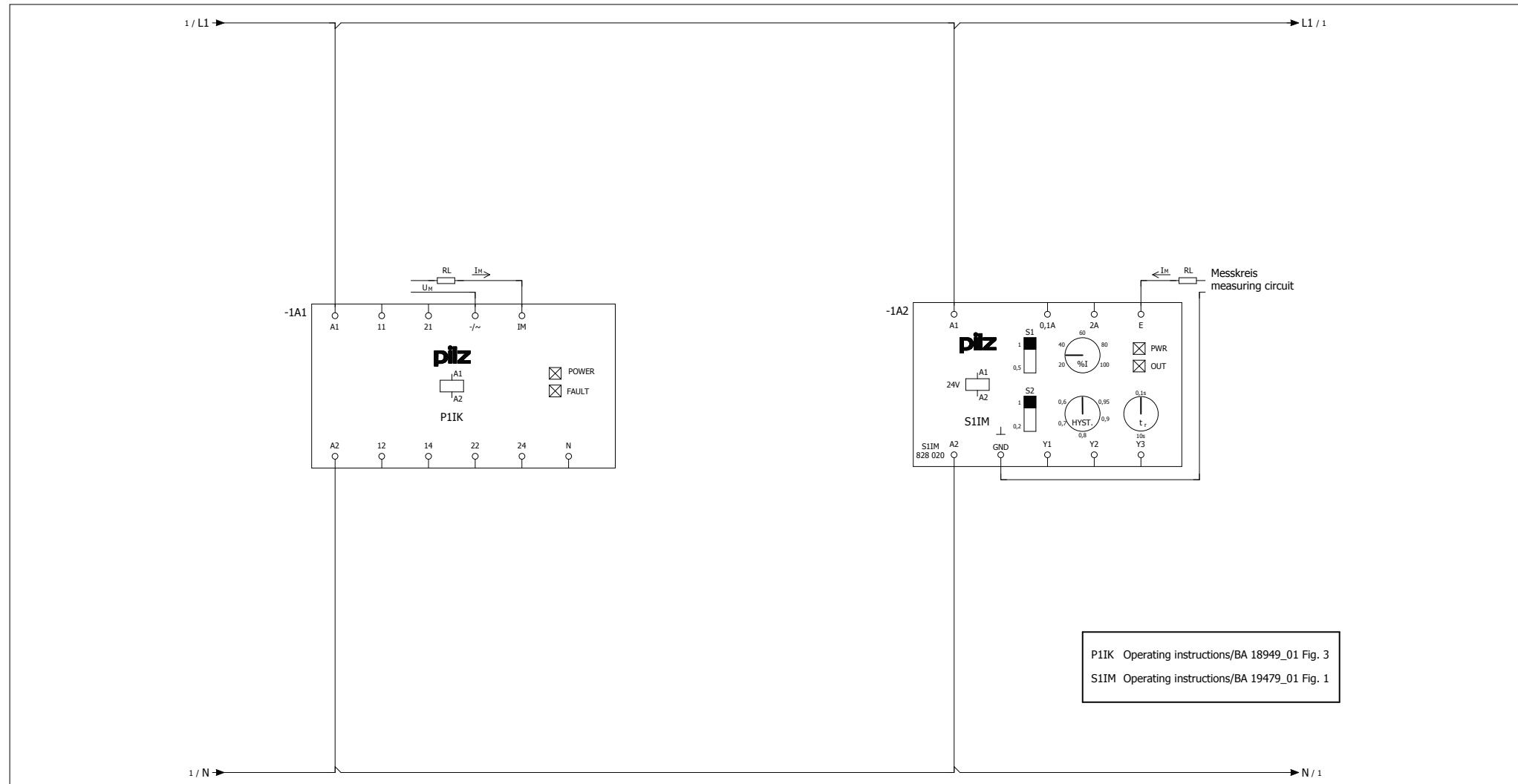
# Application Examples

## P1FI-2NK/AA – S1WP



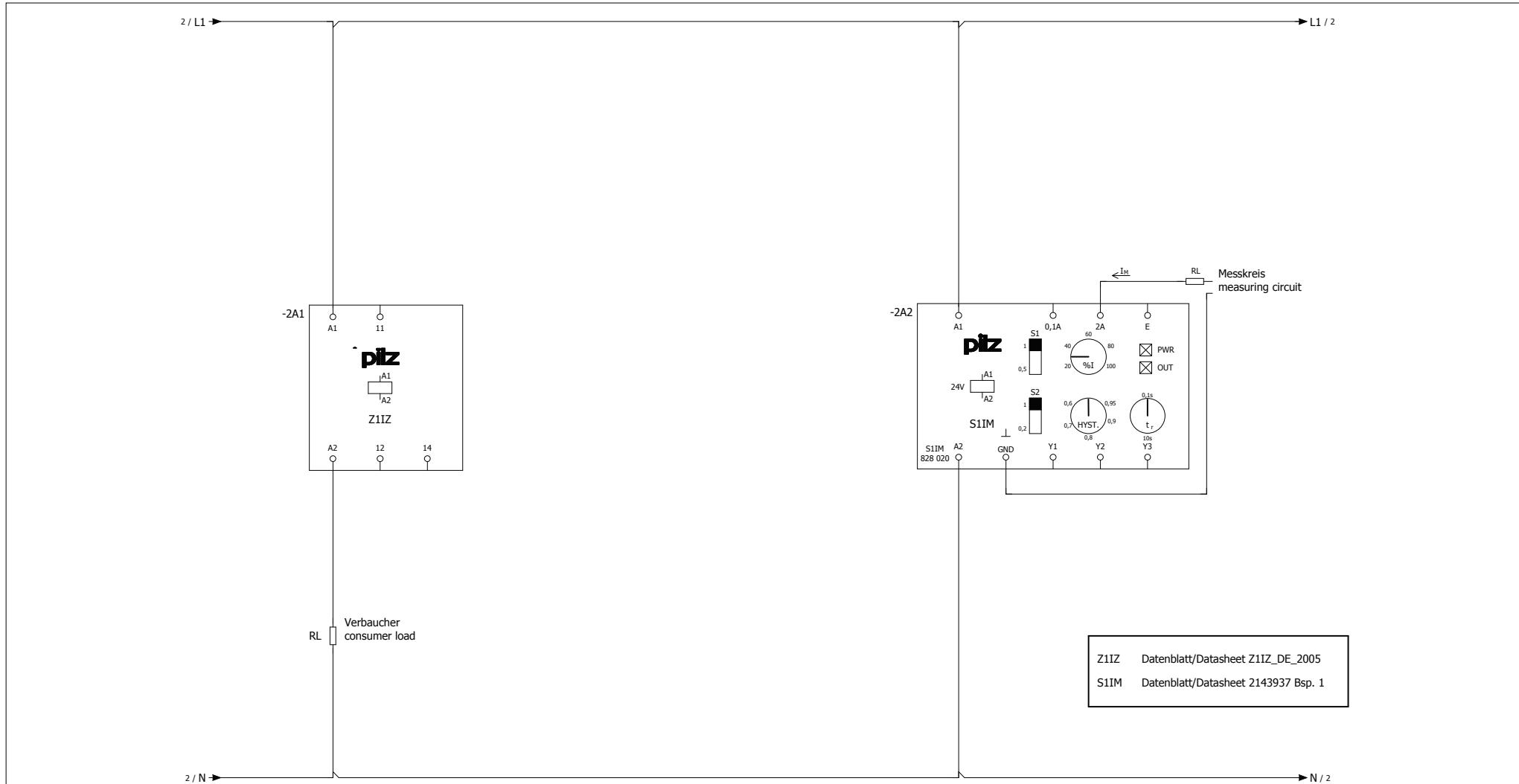
# Application Examples

## P1IK – S1IM



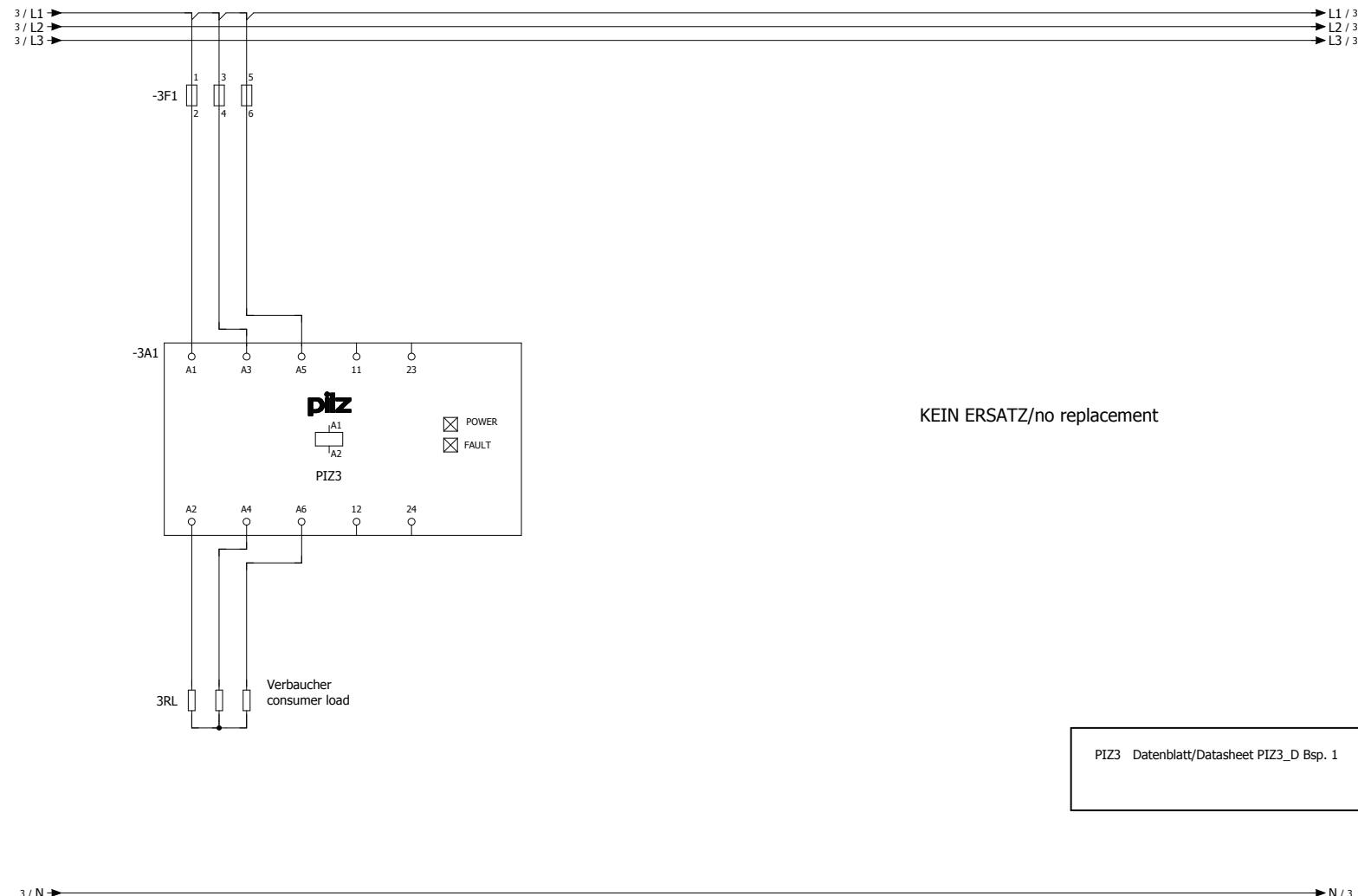
# Application Examples

## Z1IZ – S1IM

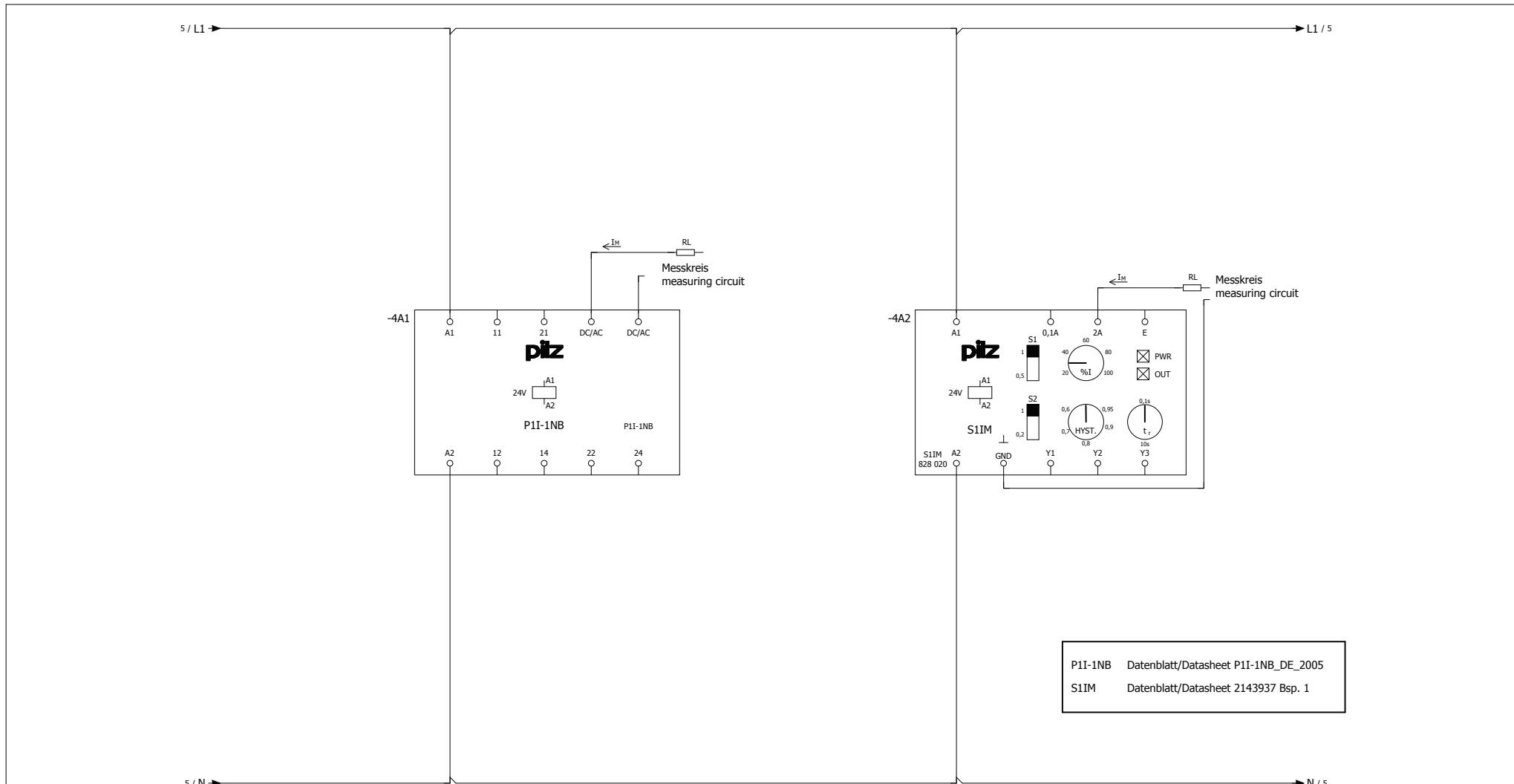


# Application Examples

## PIZ3



P1I-1NB – S1IM



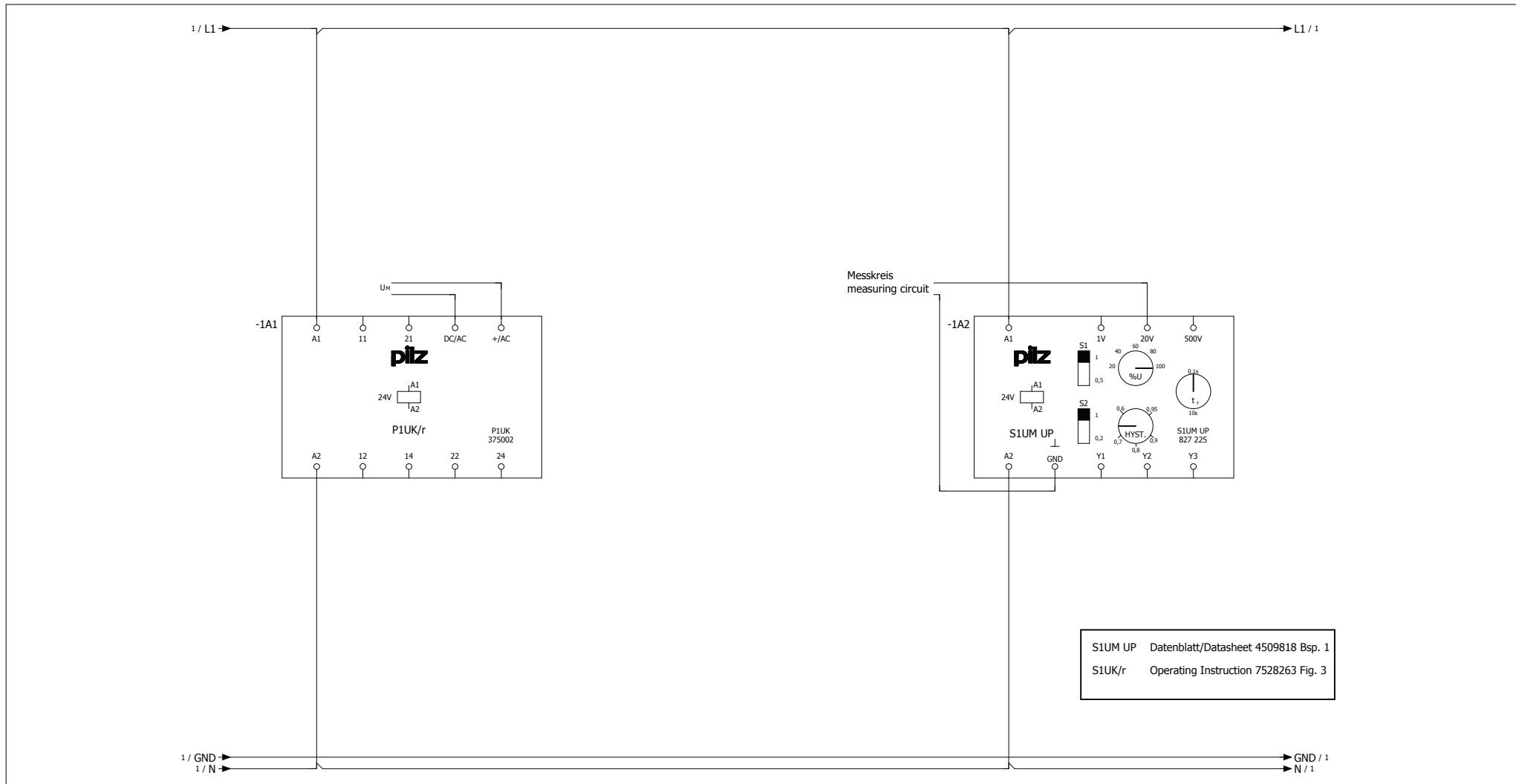
Pilz GmbH & Co. KG, Felix-Wankel-Straße 2, 73760 Ostfildern, Germany, Telephone: +49 711 3409-0, Telefax: +49 711 3409-133, E-Mail: pilz.gmbh@pilz.de

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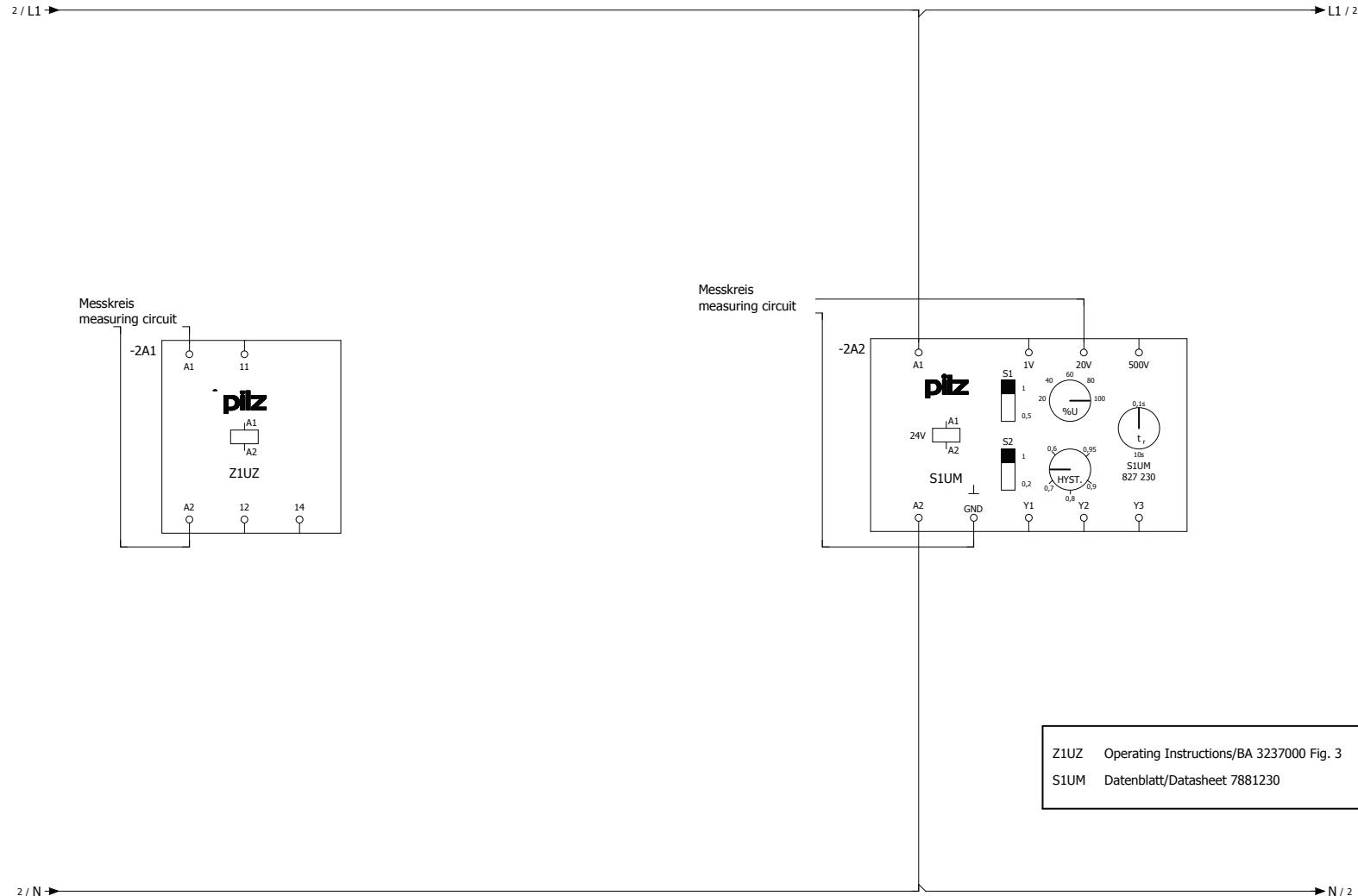
# Application Examples

## P1UK/r – S1UM UP



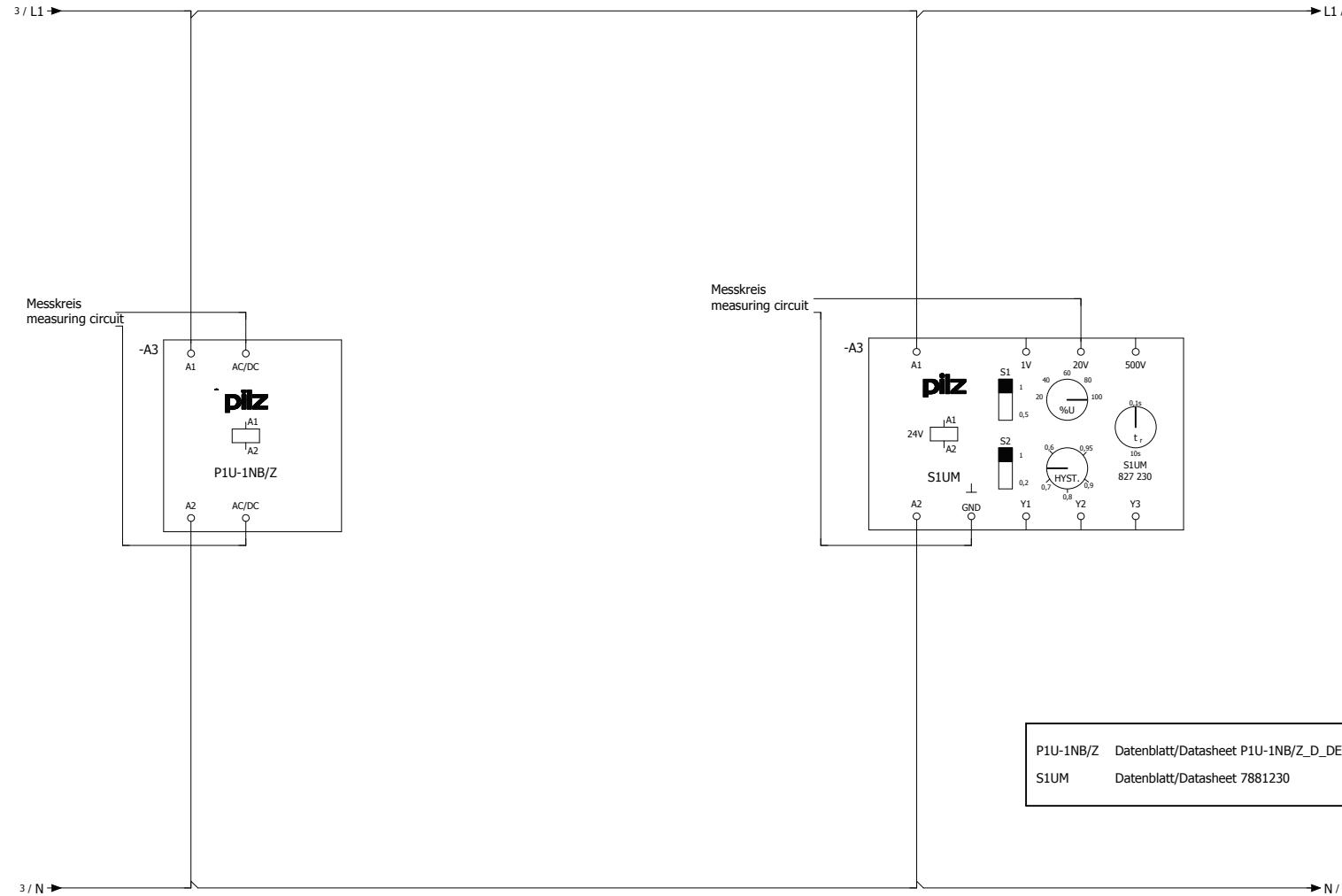
# Application Examples

## Z1UZ – S1UM



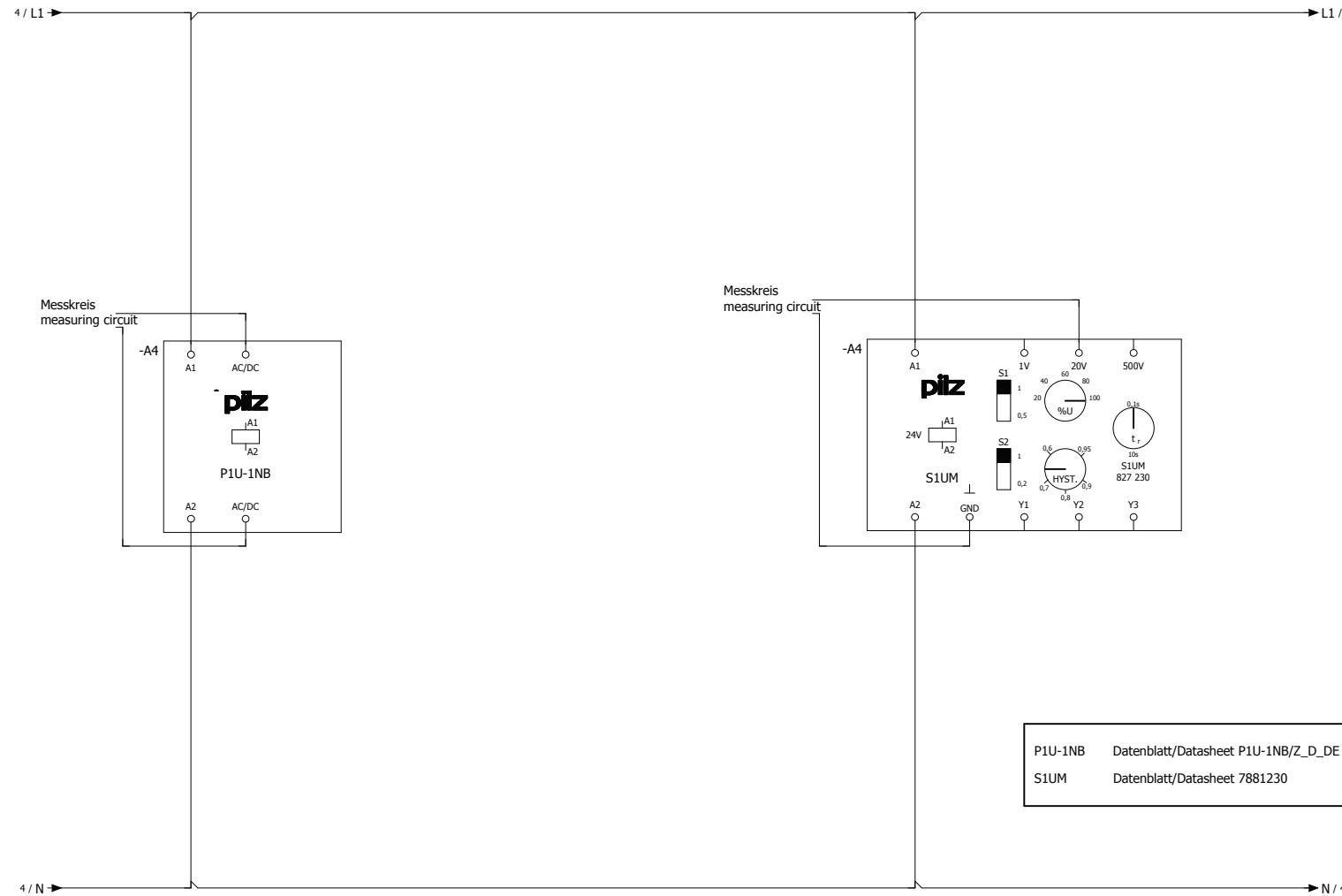
# Application Examples

## P1U-1NB/Z – S1UM



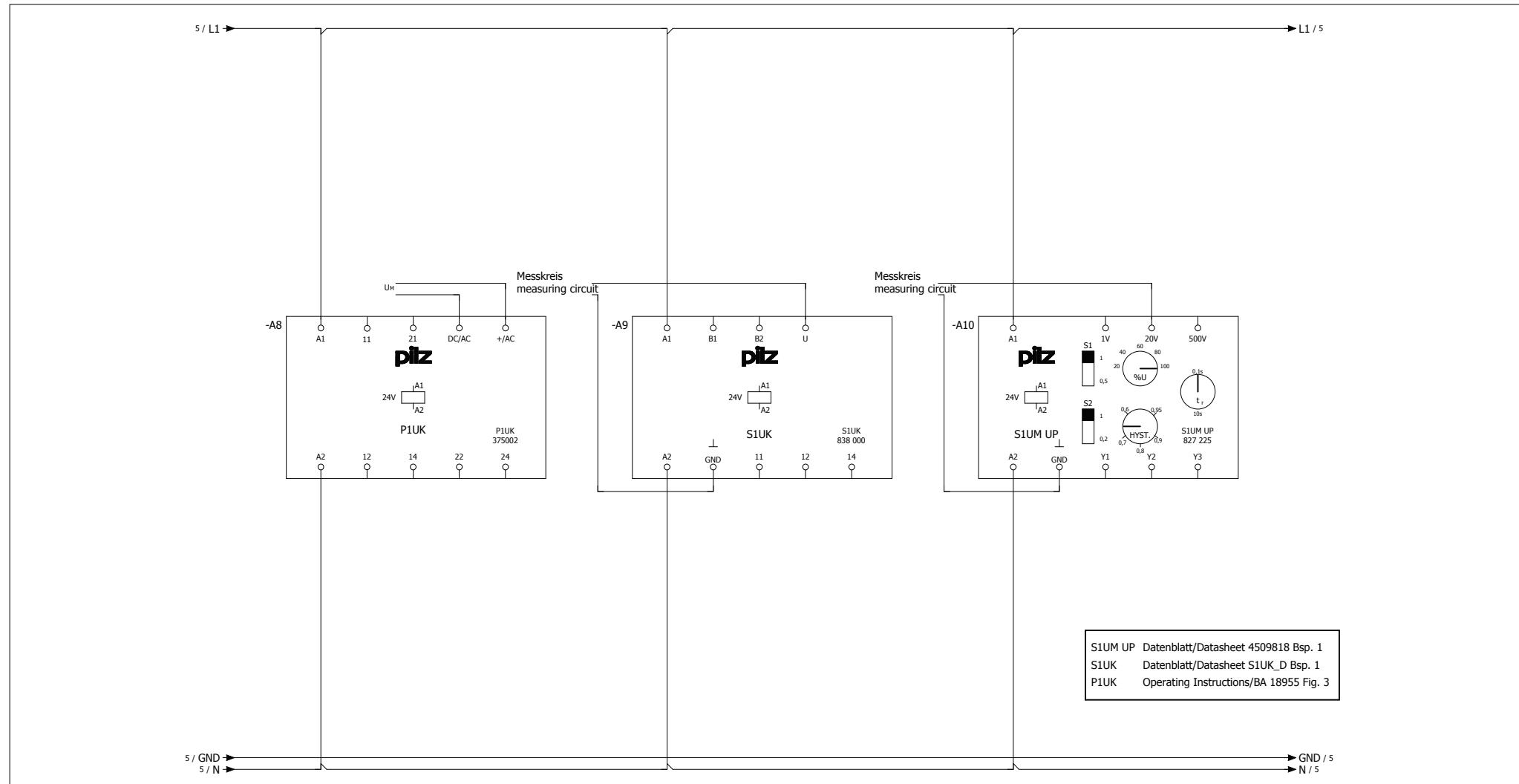
# Application Examples

## P1U-1NB – S1UM



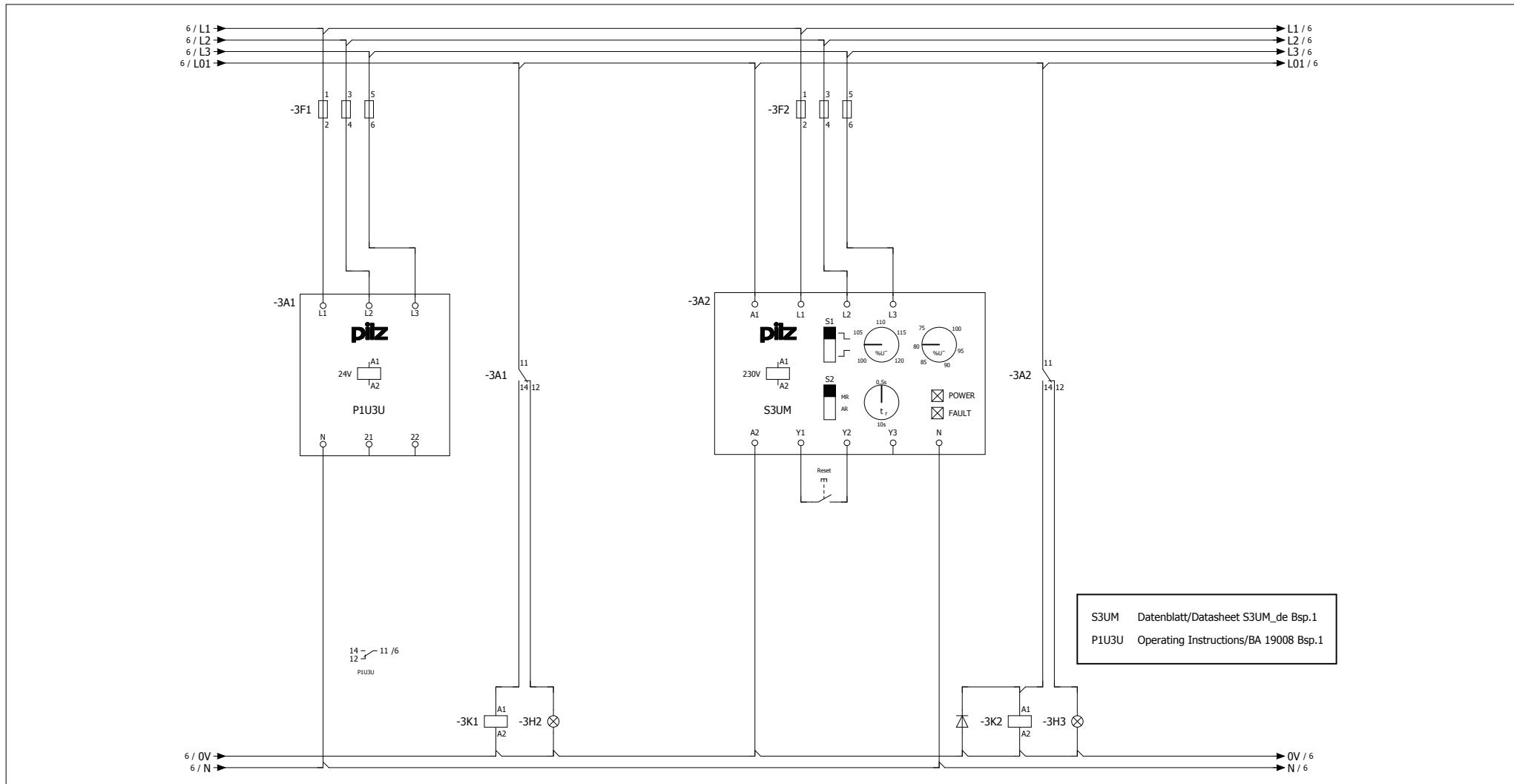
# Application Examples

## P1UK – S1UK, S1UM UP



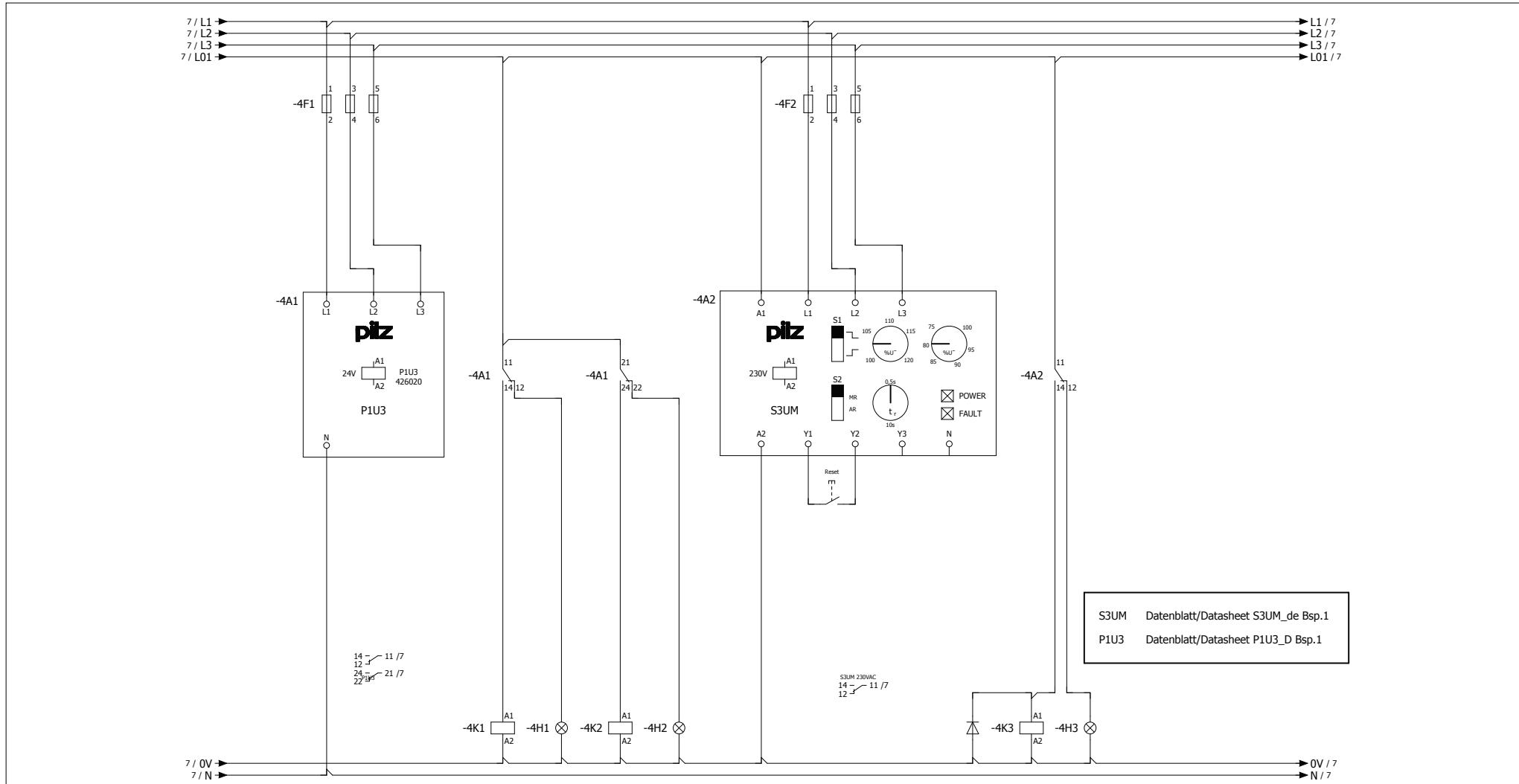
# Application Examples

## P1U3U – S3UM



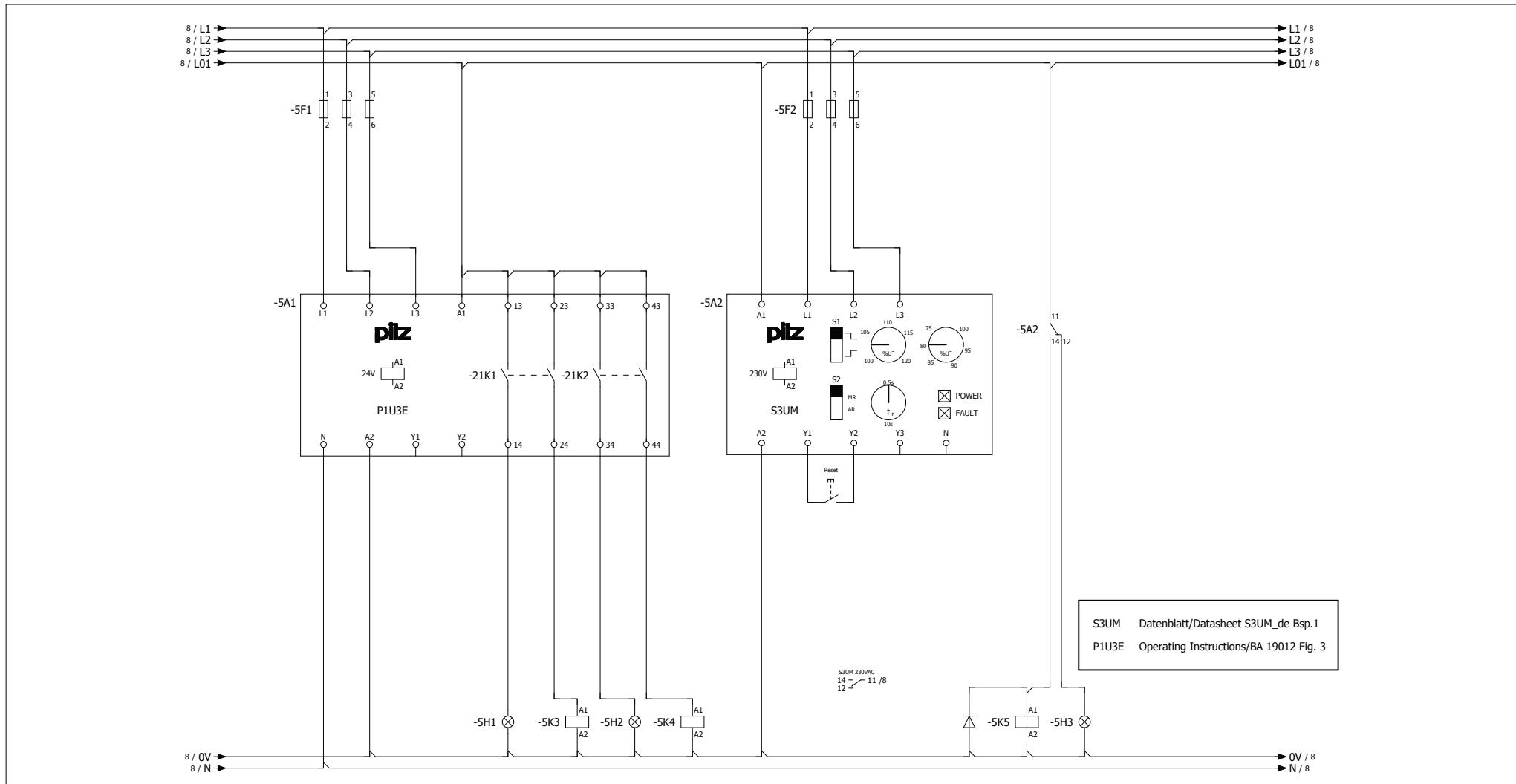
# Application Examples

## P1U3 – S3UM



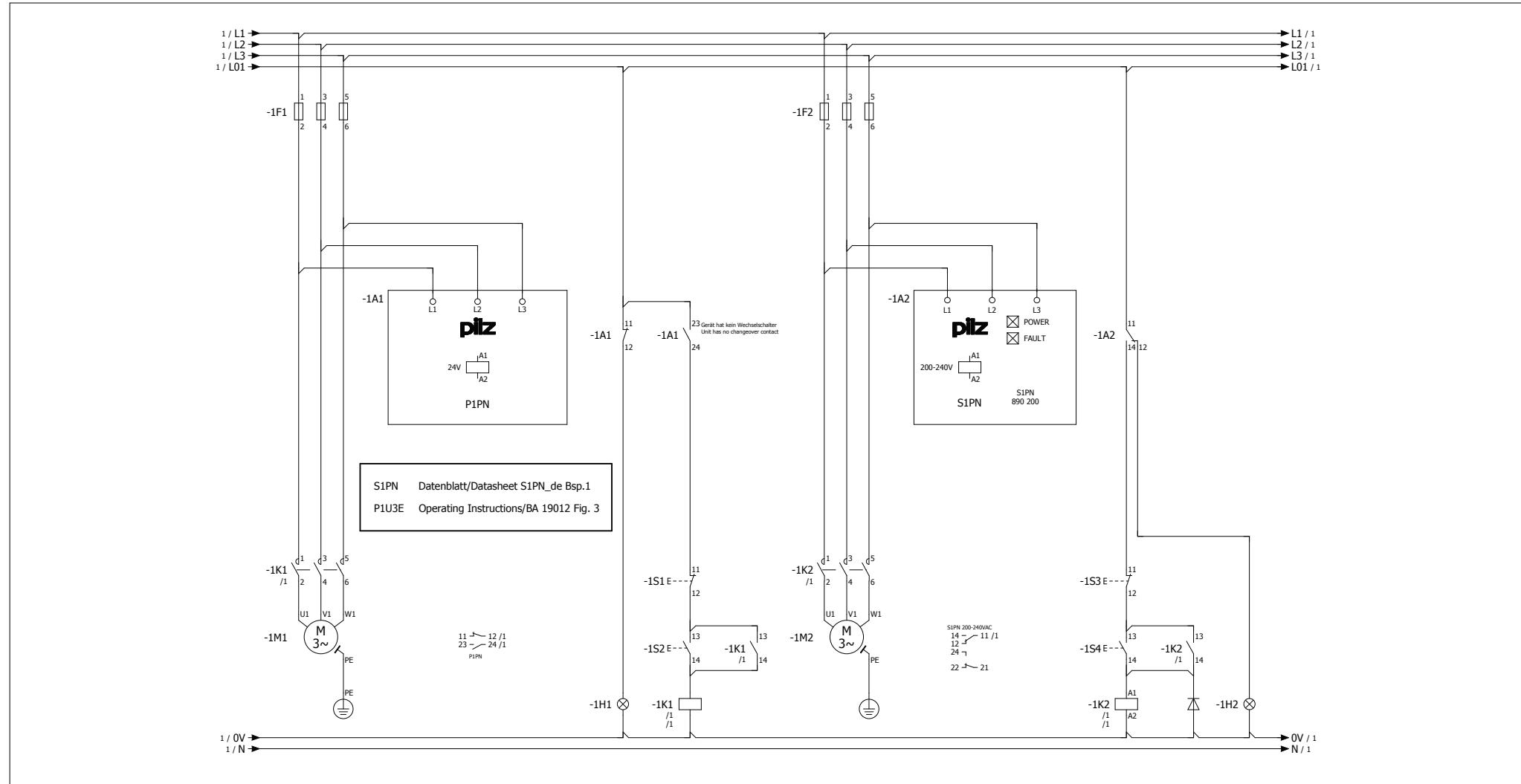
# Application Examples

## P1U3E – S3UM



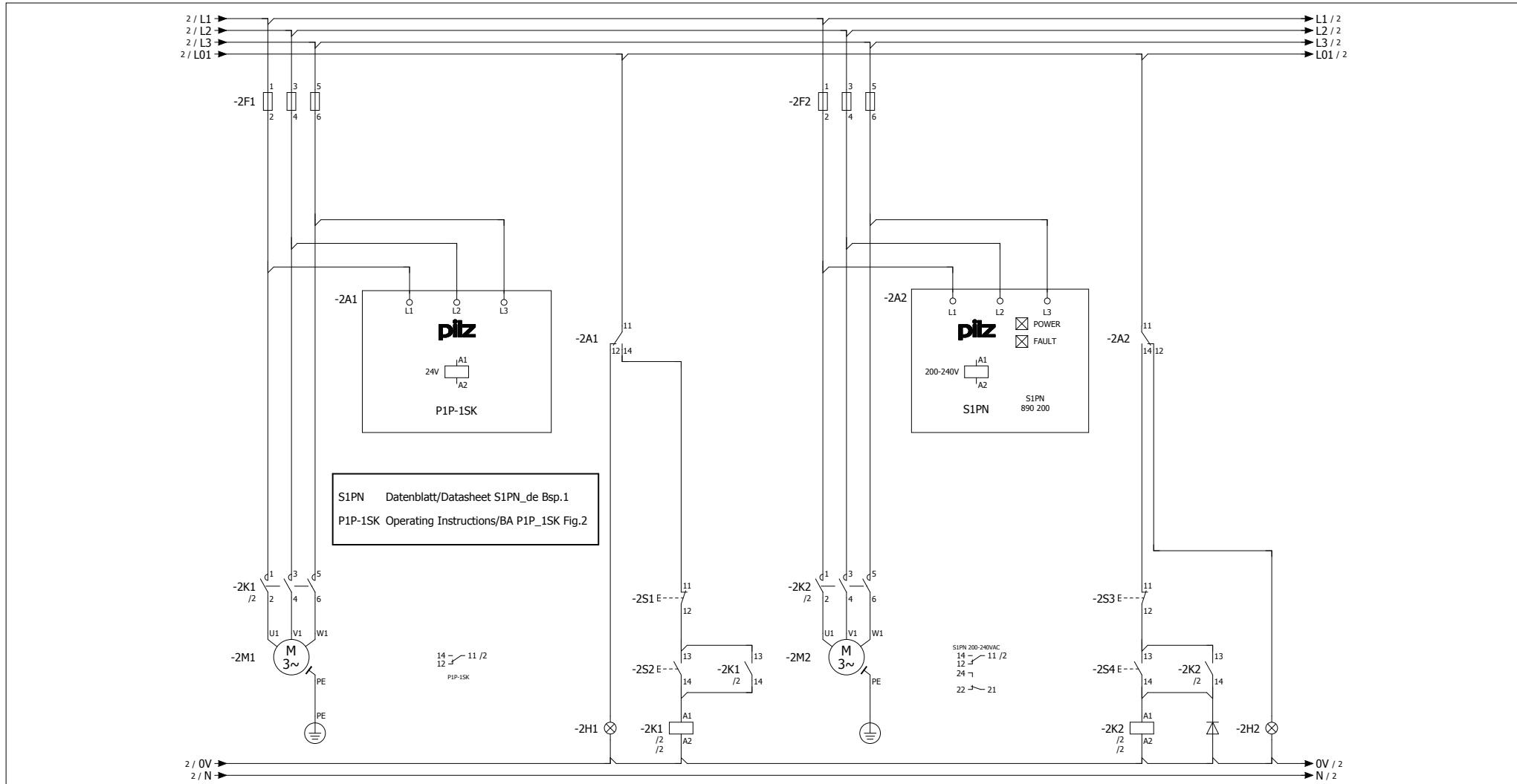
# Application Examples

## P1PN – S1PN



# Application Examples

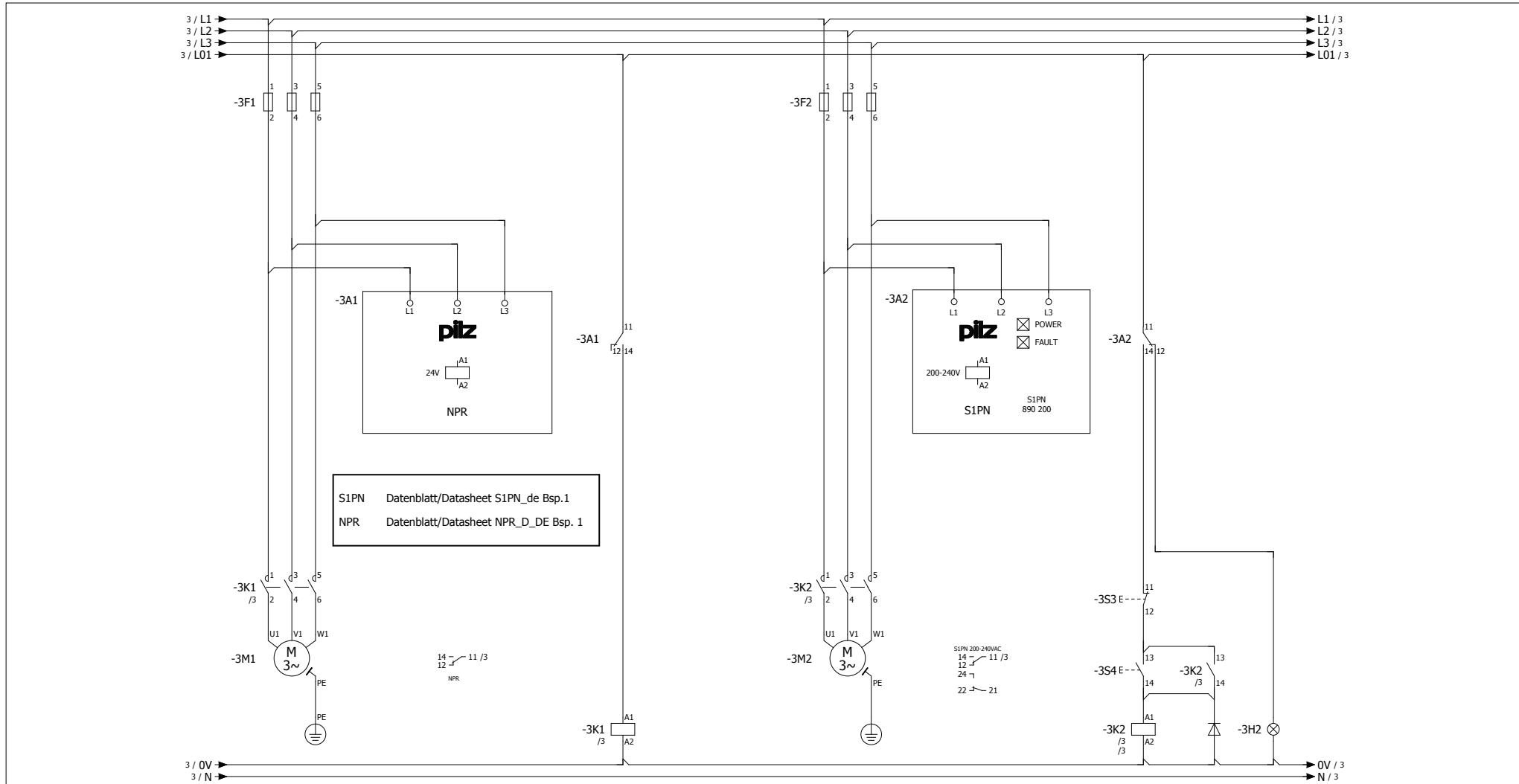
## P1P-1SK – S1PN



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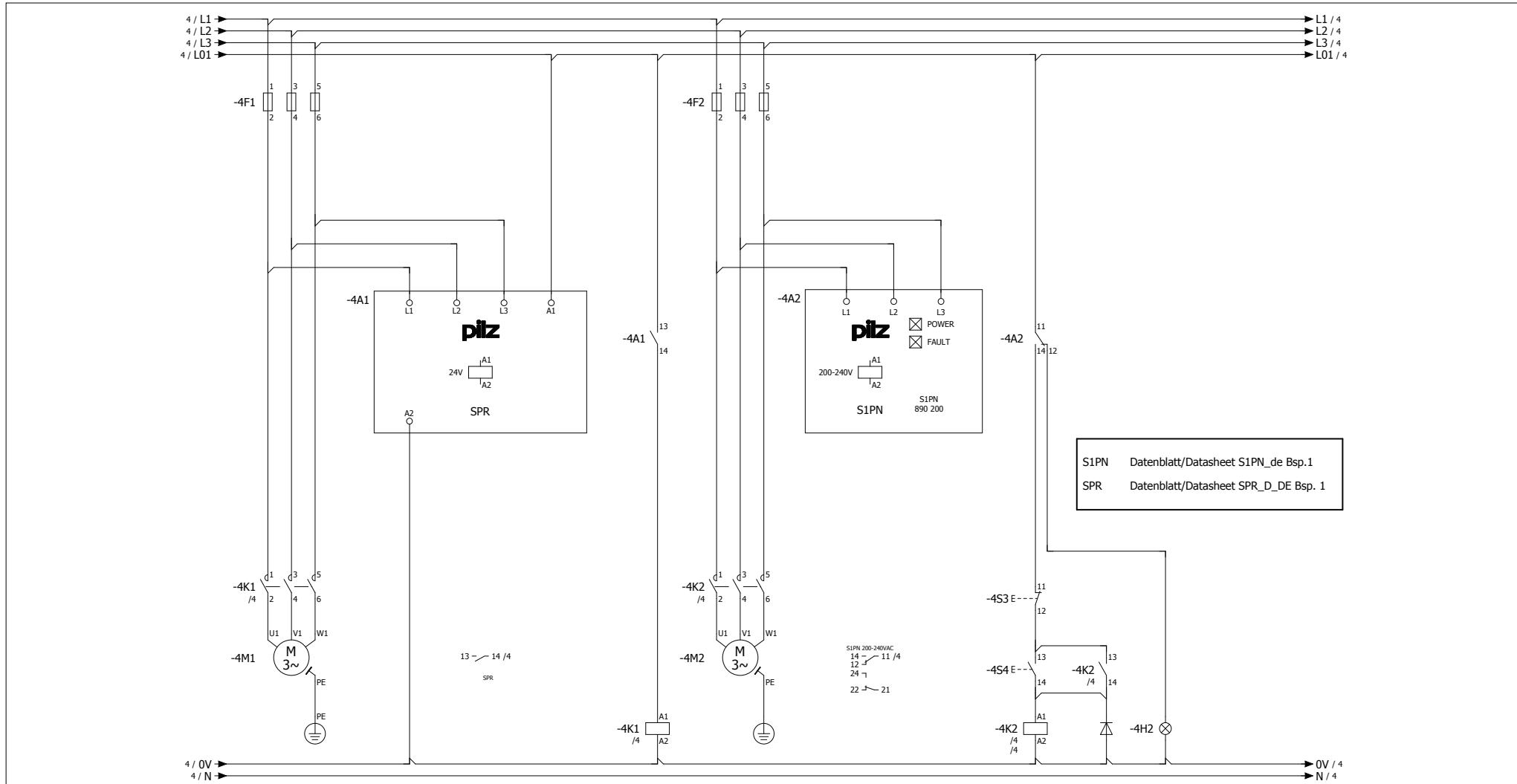
# Application Examples

## NPR – S1PN



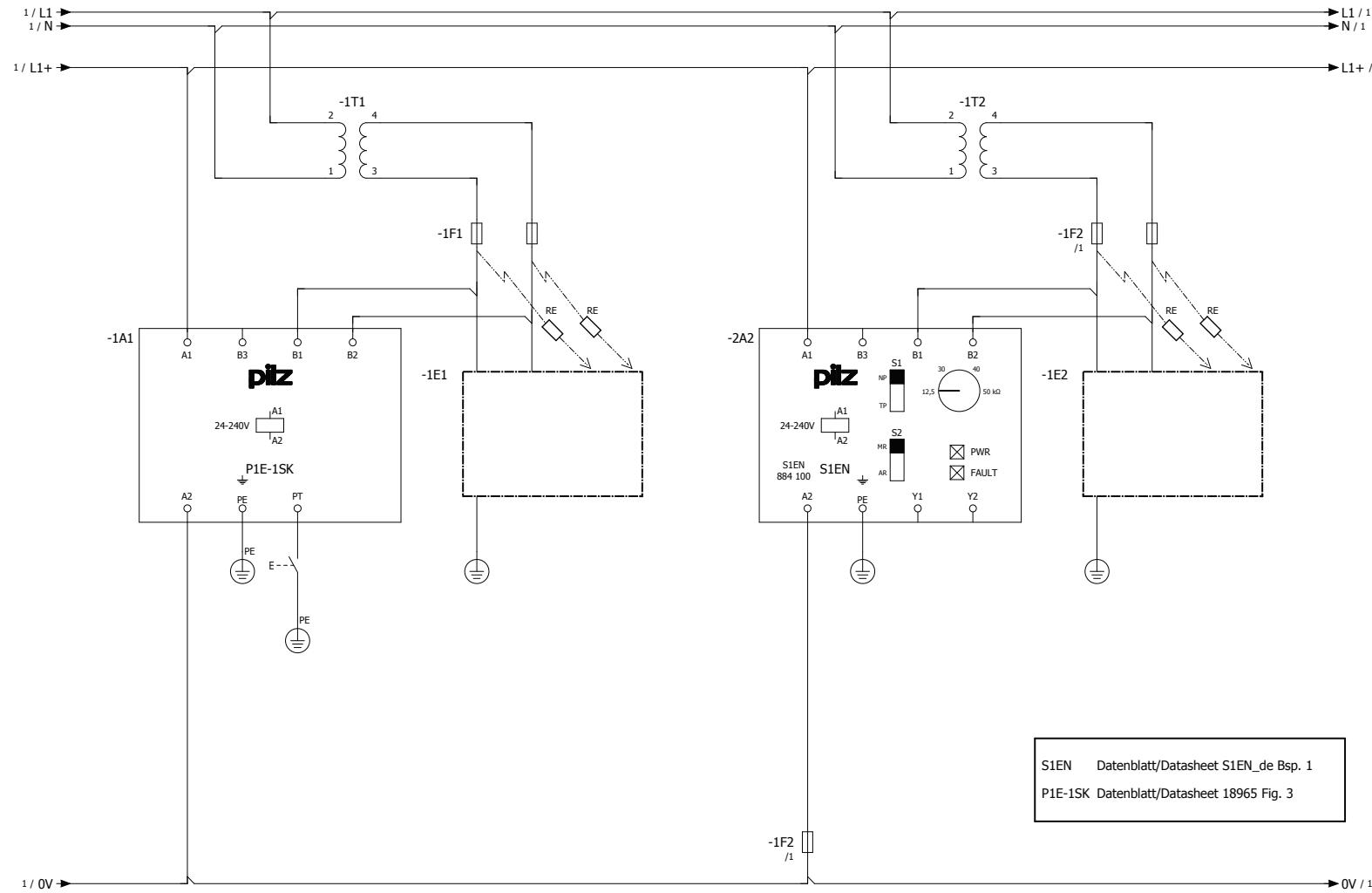
# Application Examples

## SPR – S1PN



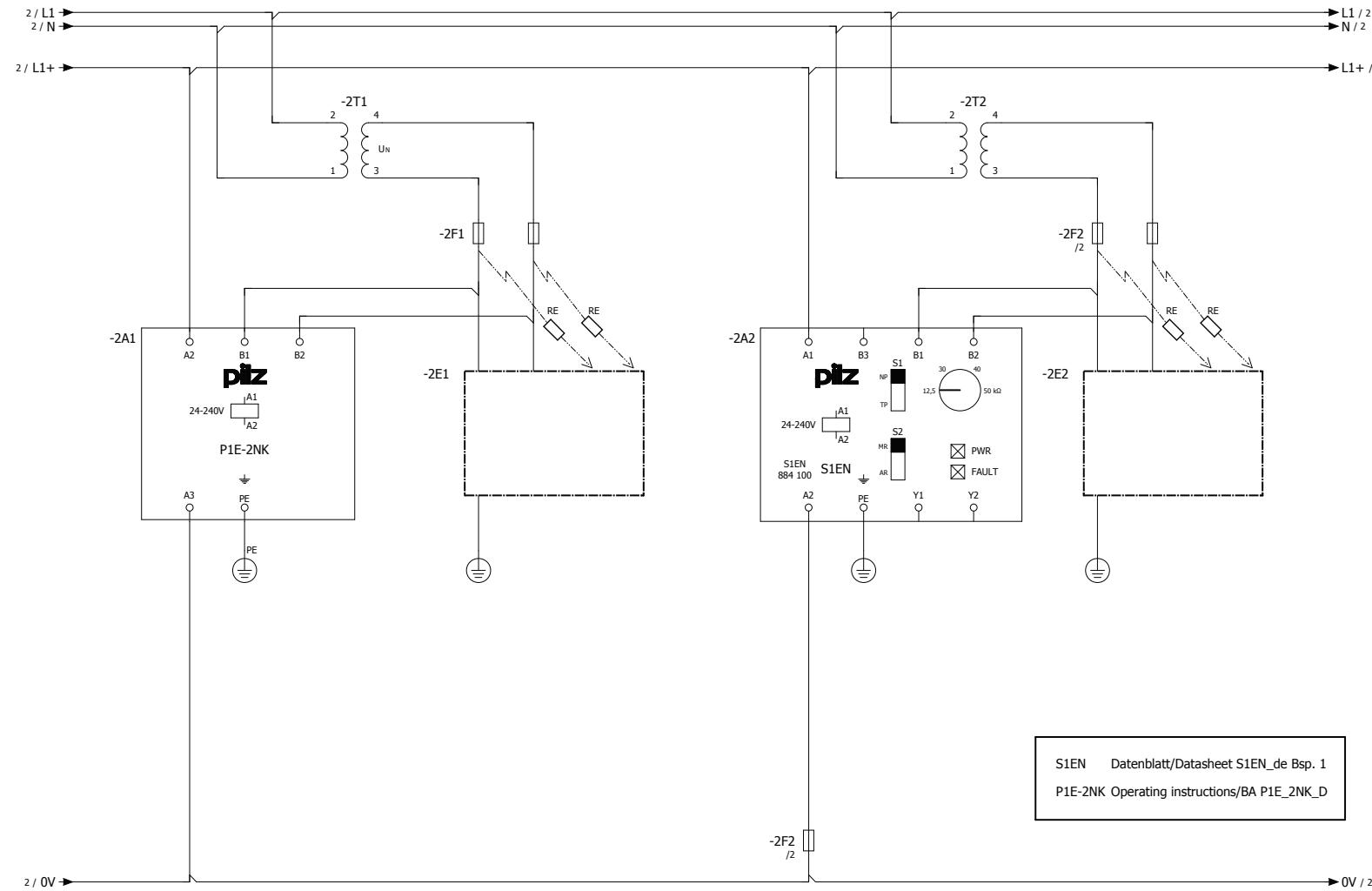
# Application Examples

## P1E-1SK – S1EN



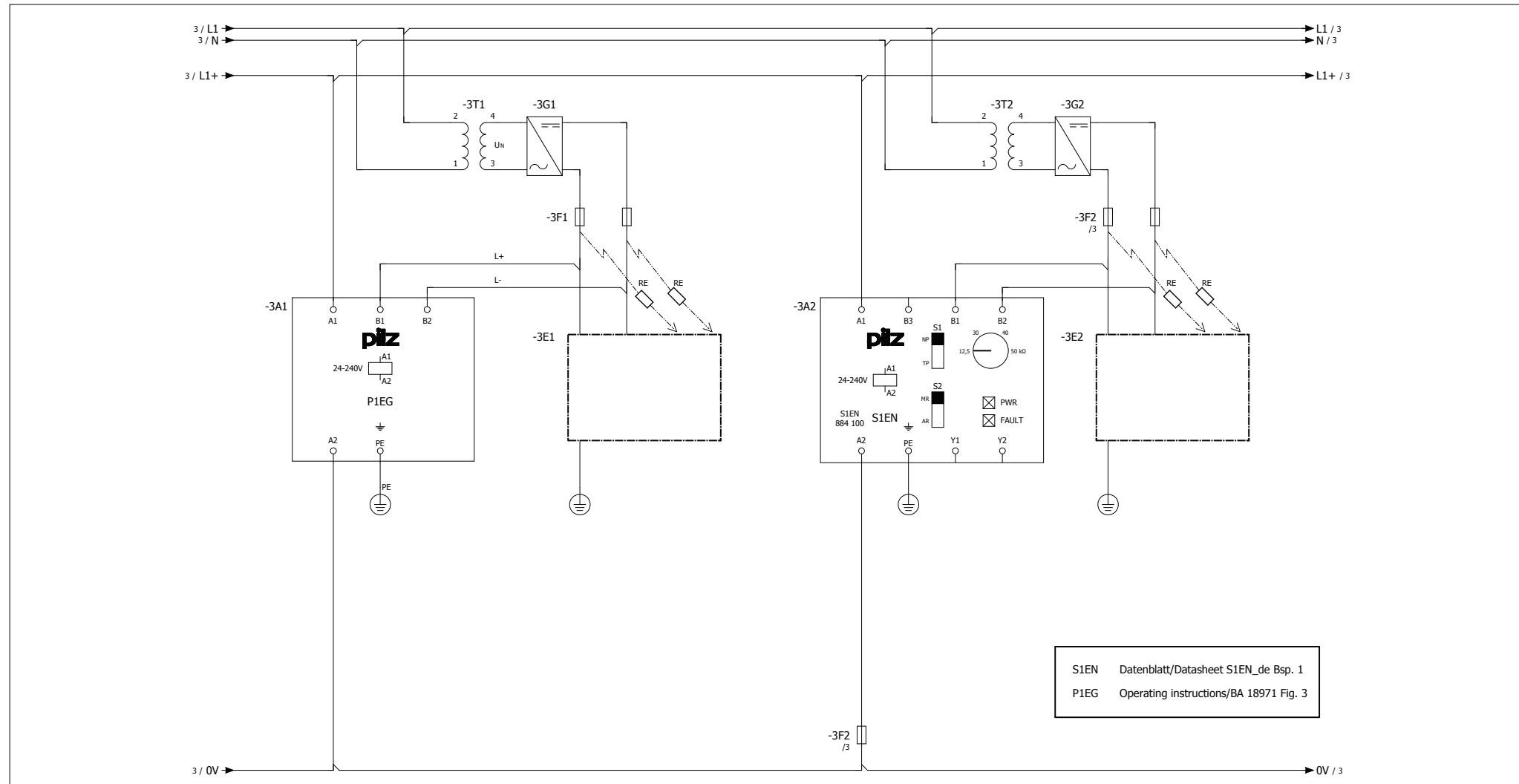
# Application Examples

## P1E-2NK – S1EN



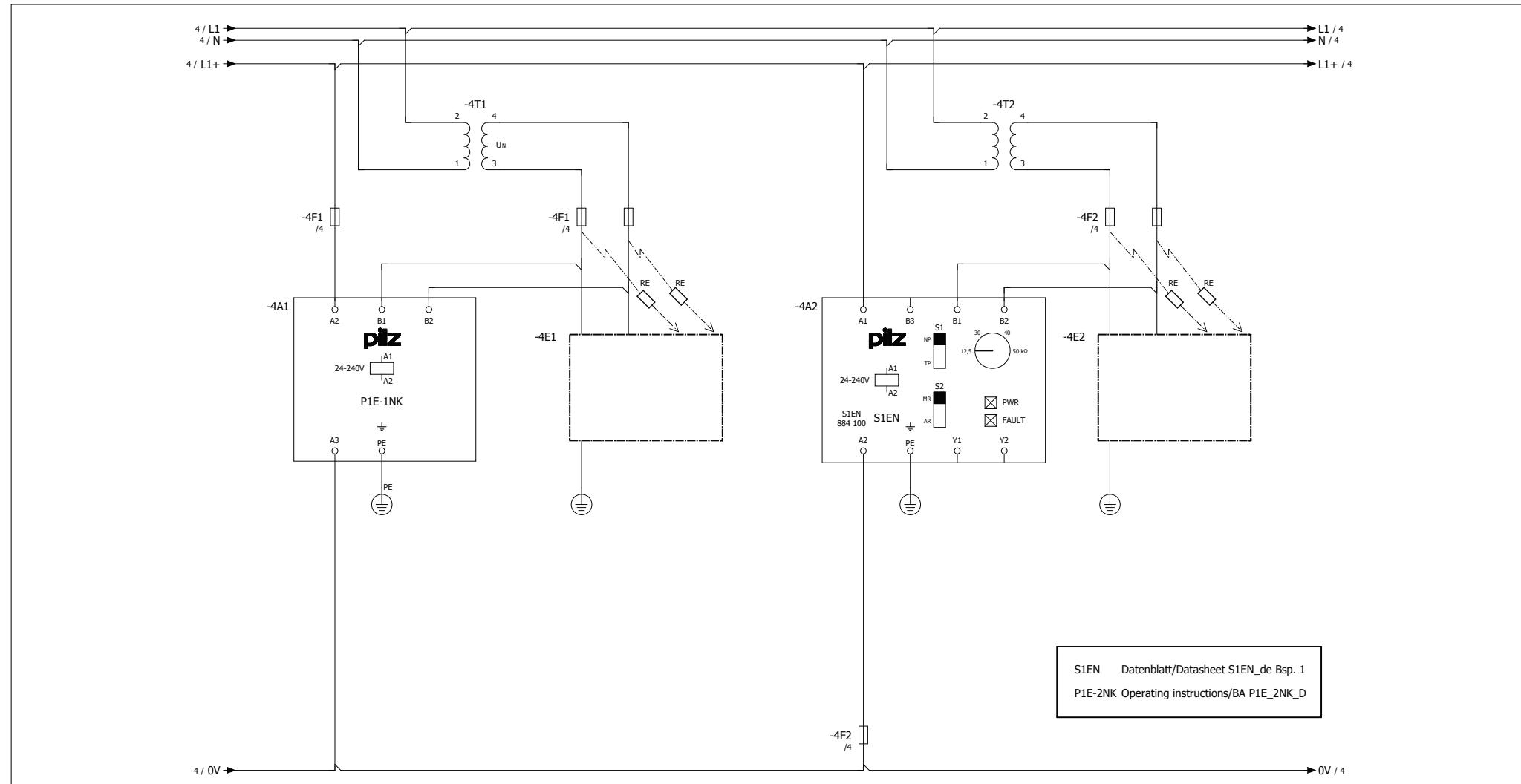
# Application Examples

## P1EG – S1EN



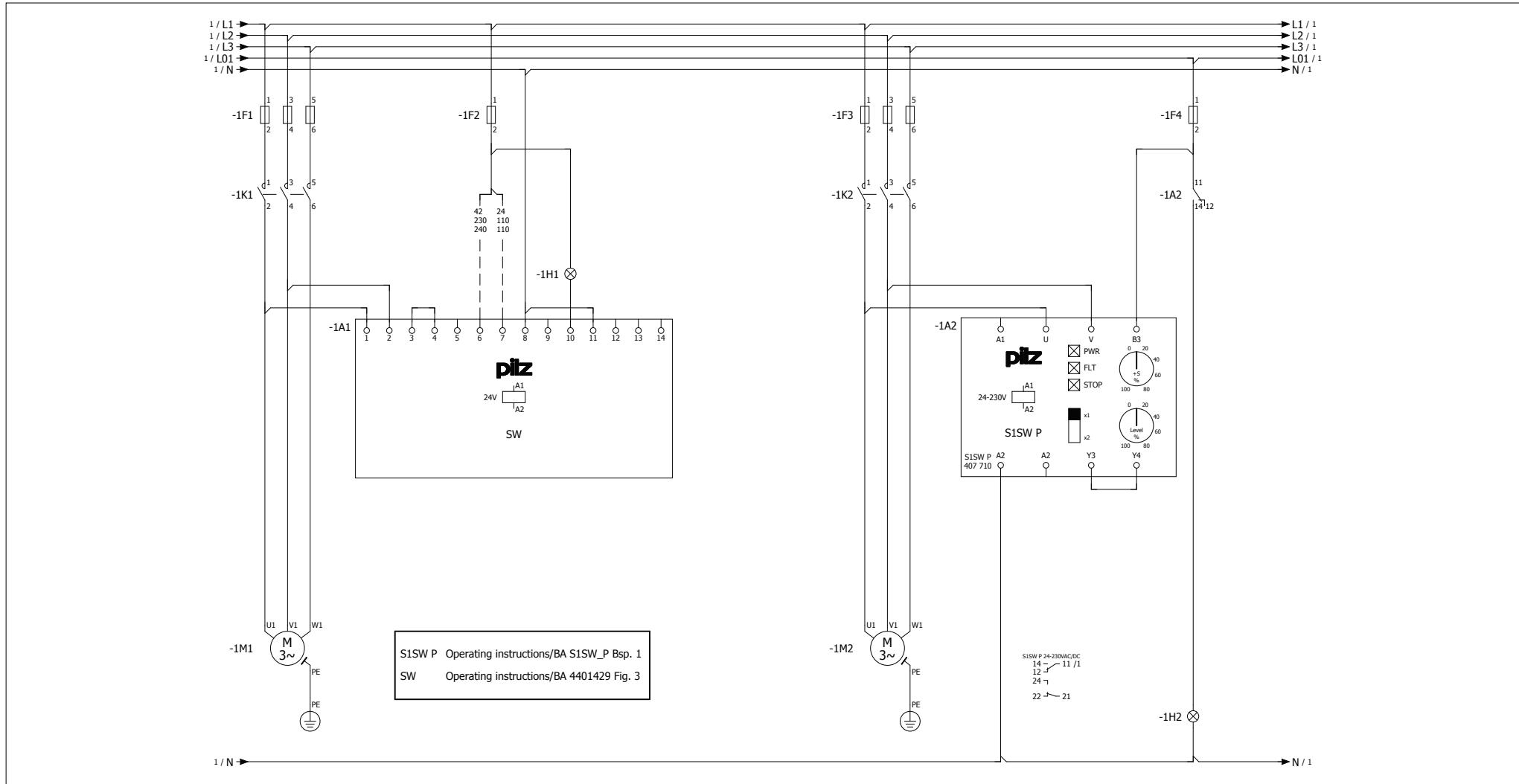
# Application Examples

## P1E-1NK – S1EN



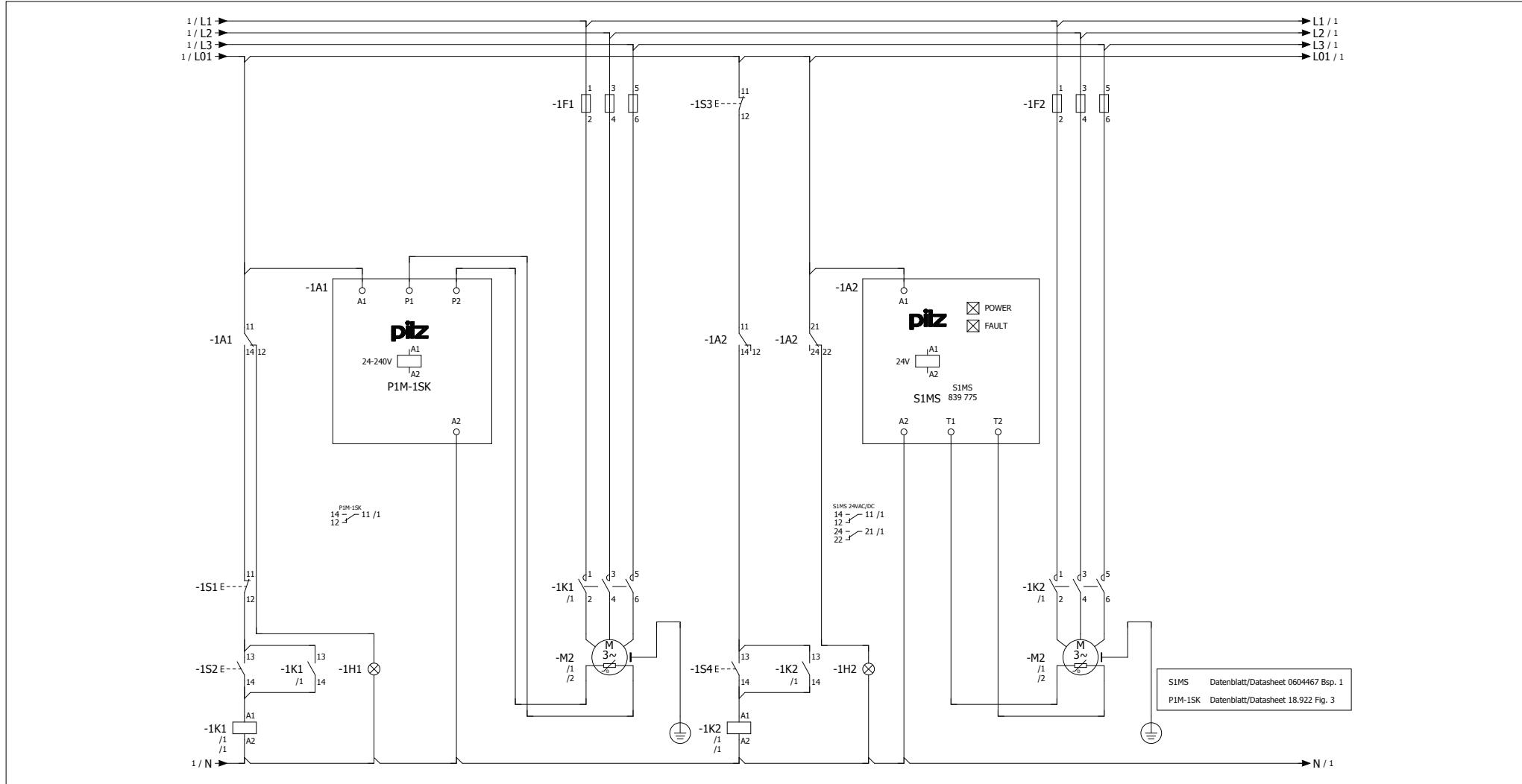
# Application Examples

## SW – S1SW P



# Application Examples

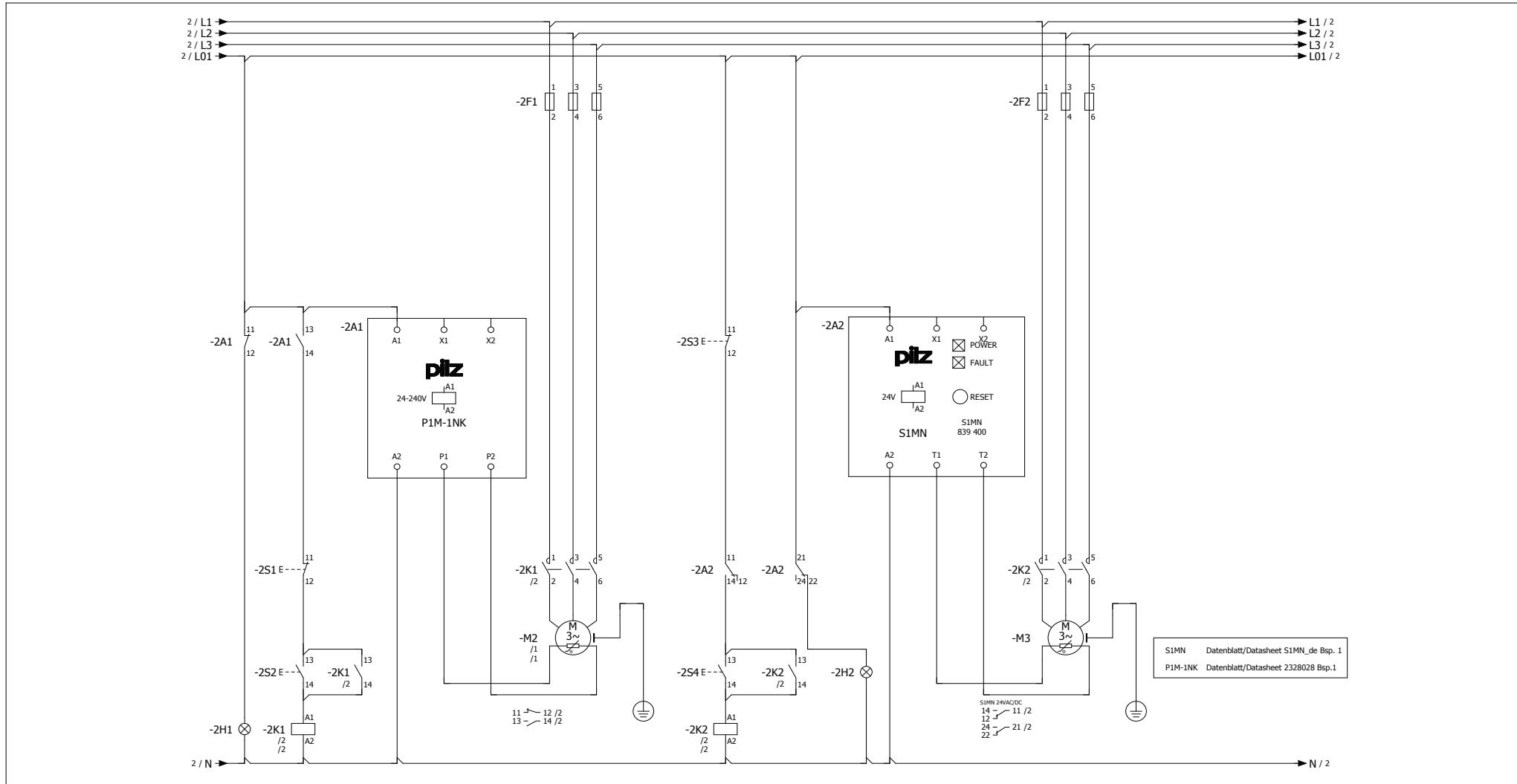
## P1M-1SK – S1MS



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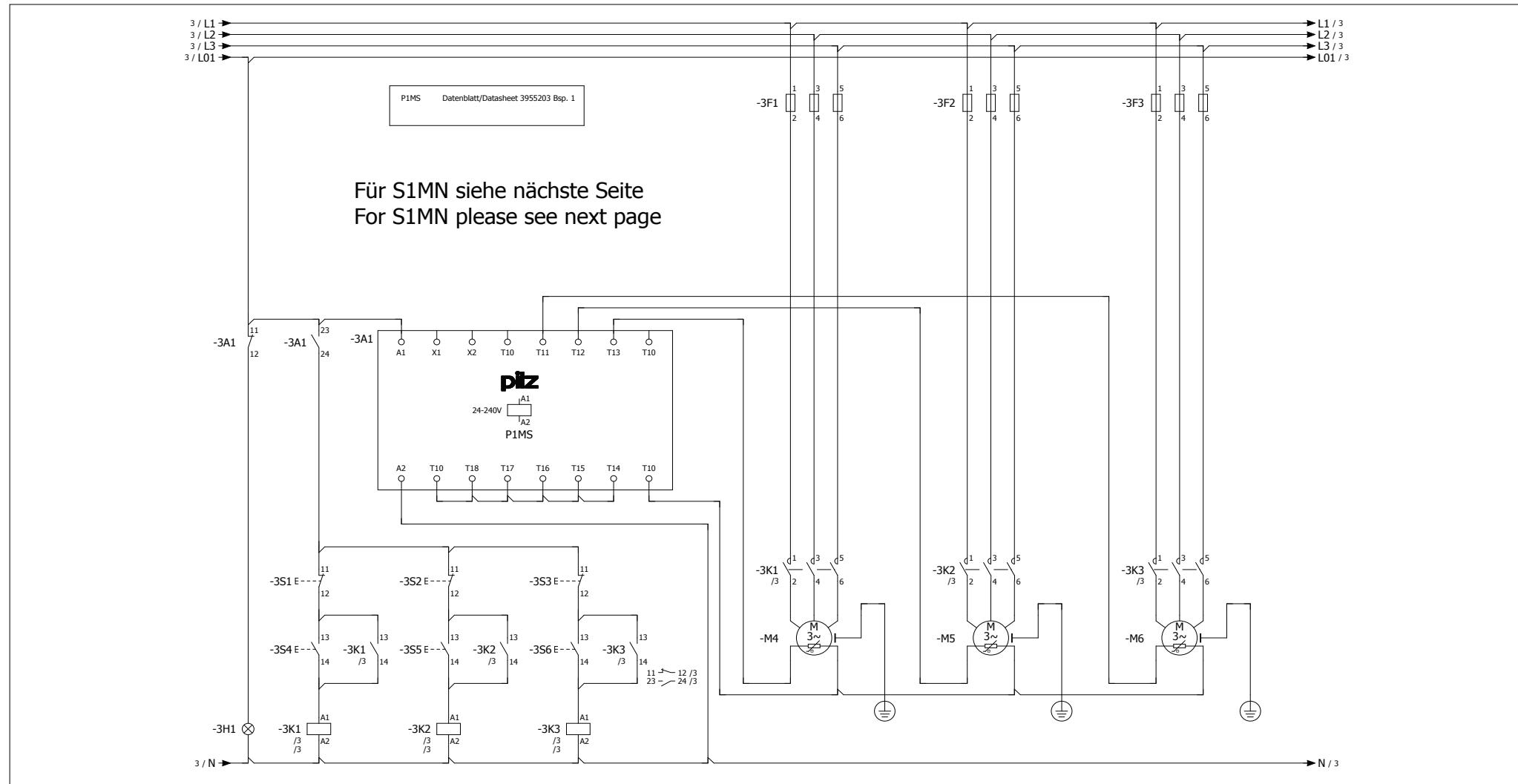
# Application Examples

## P1M-1NK – S1MN



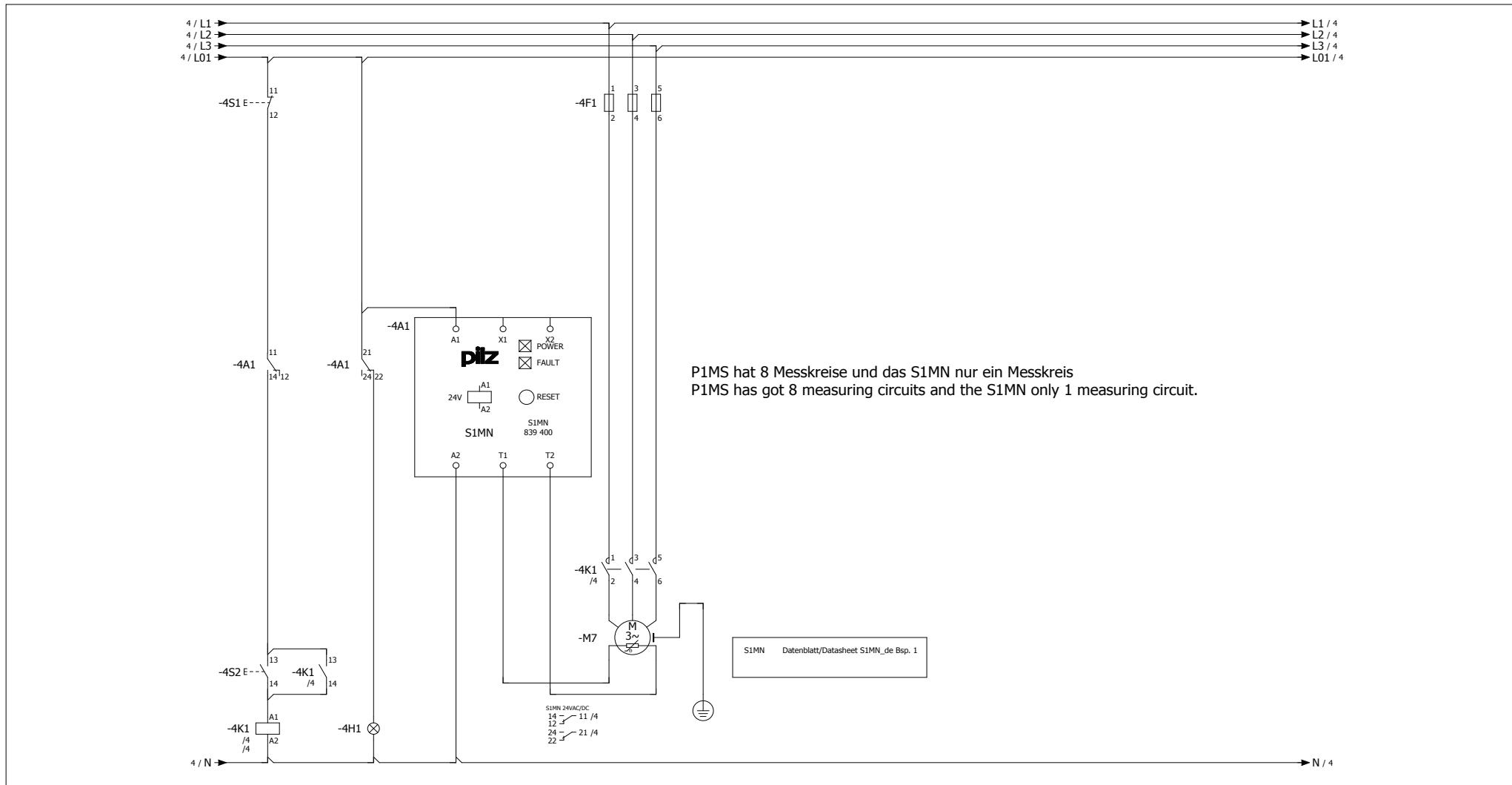
# Application Examples

## P1MS – S1MN



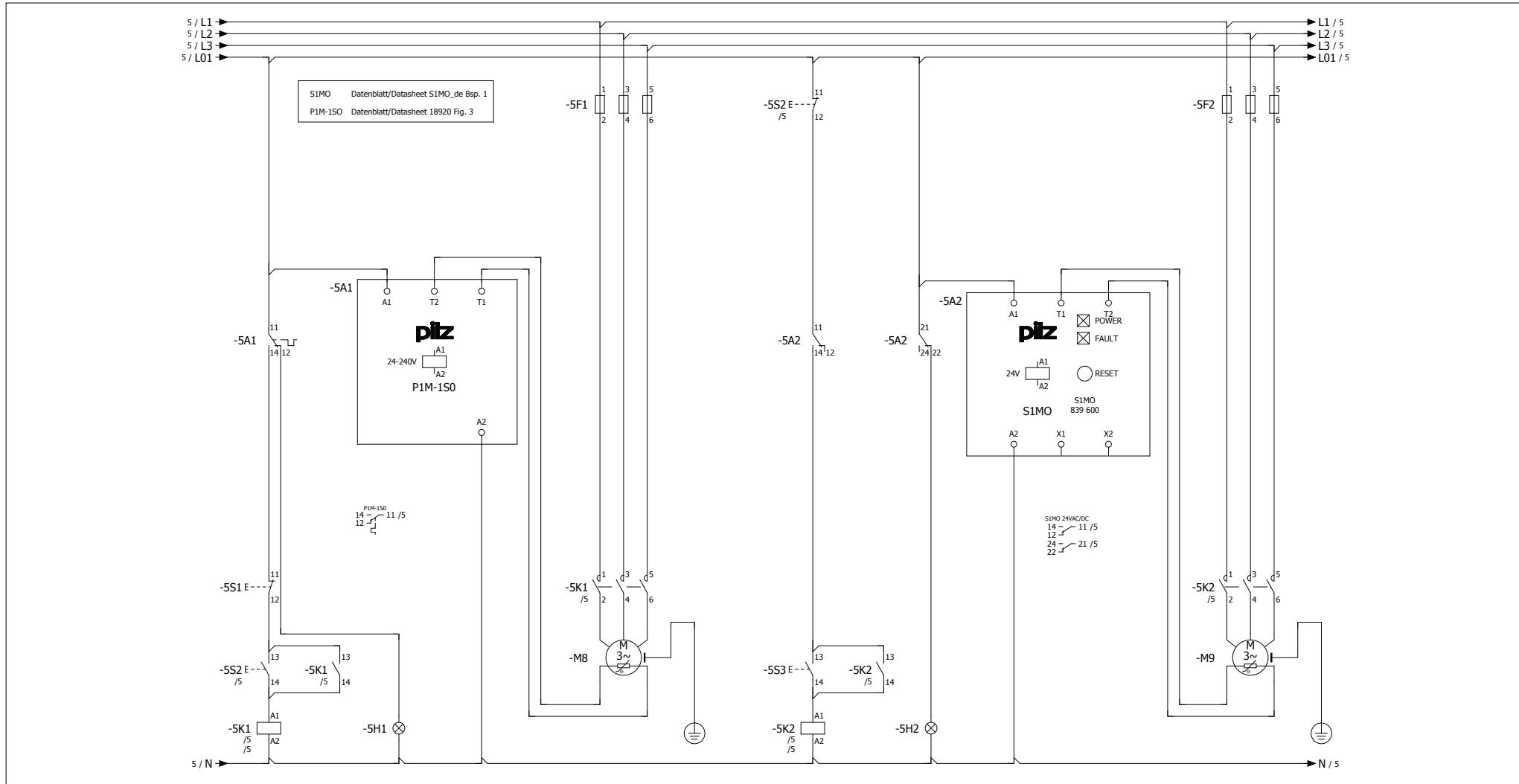
# Application Examples

## P1MS – S1MN



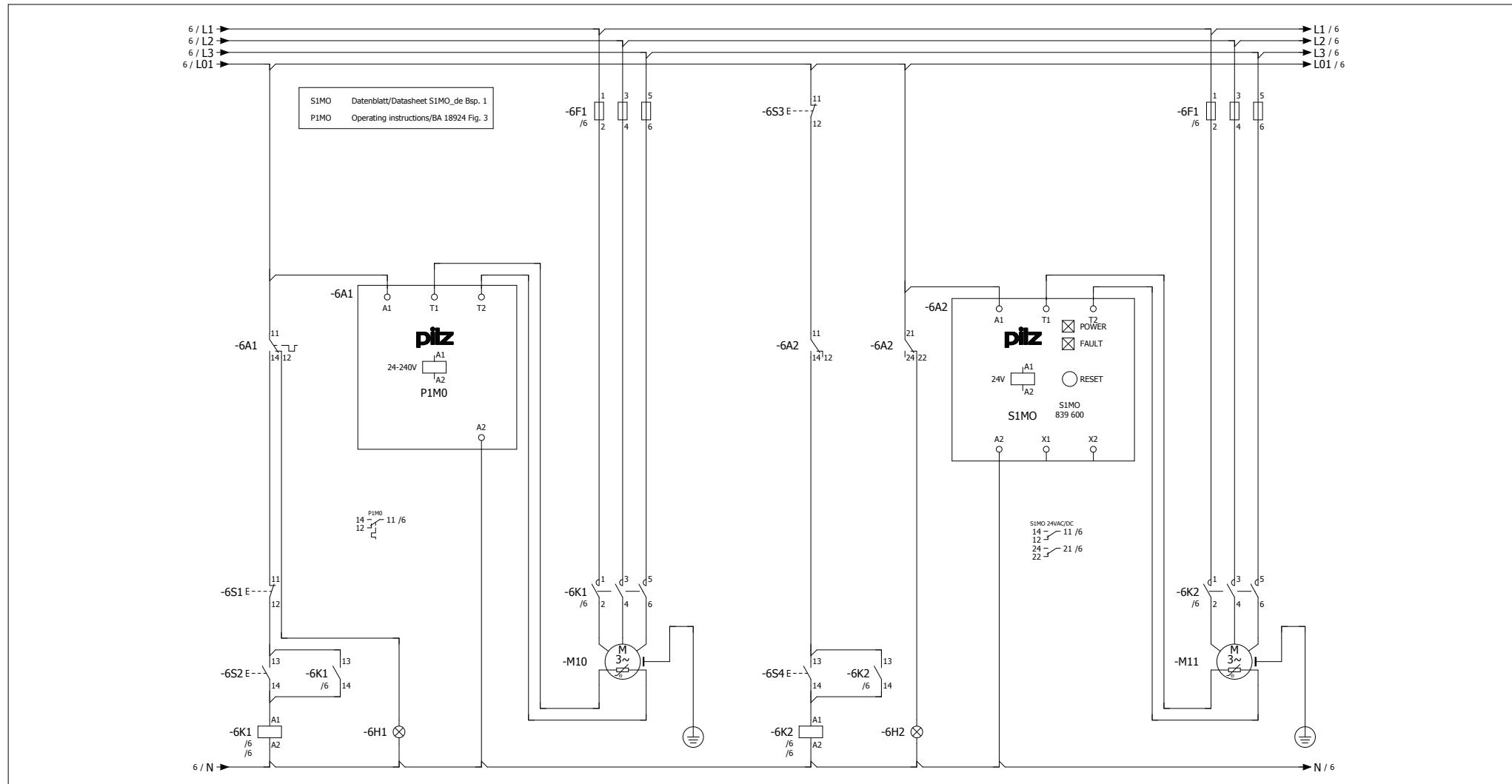
# Application Examples

## P1M-1SO – S1MO



## Application Examples

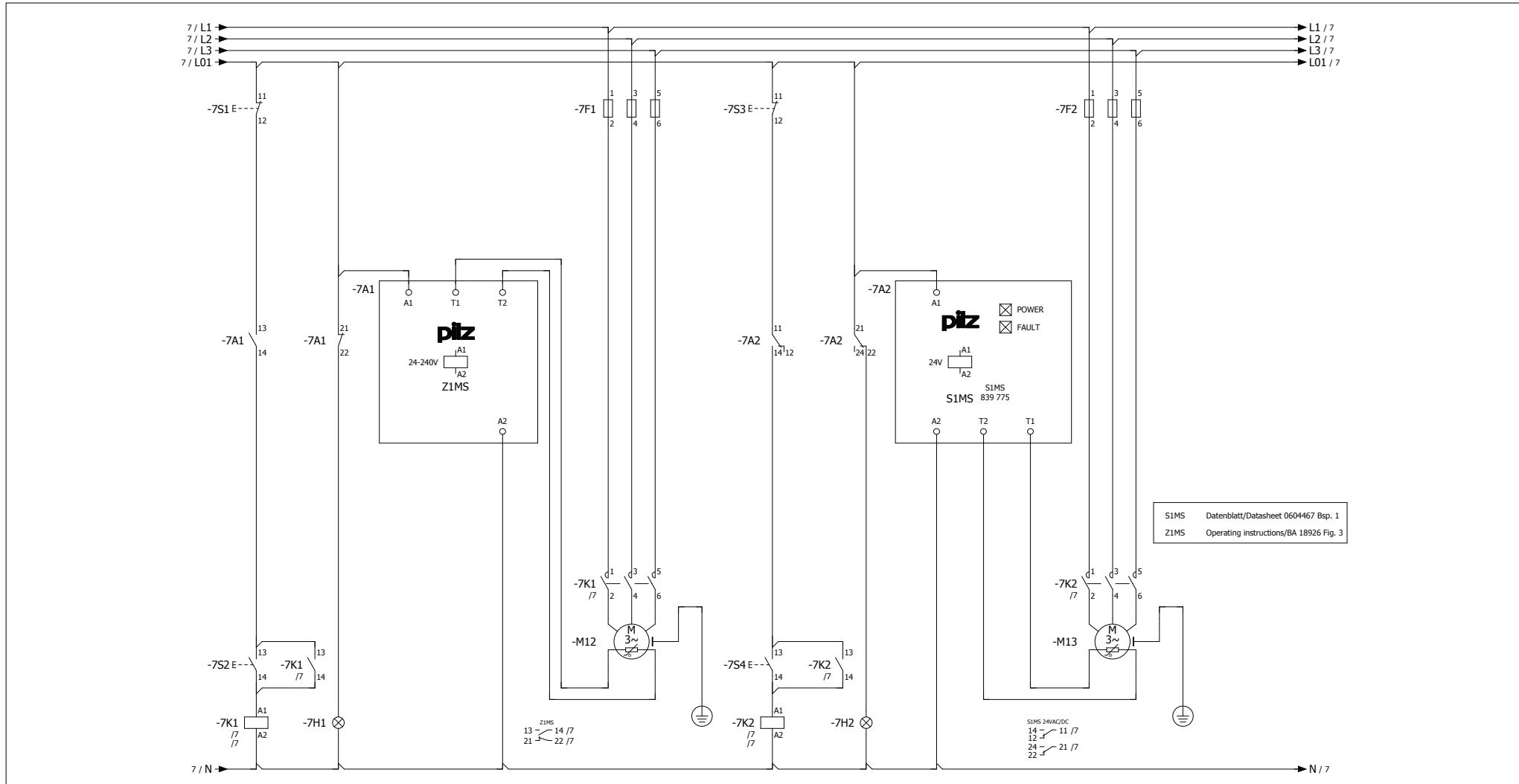
P1MO – S1MO



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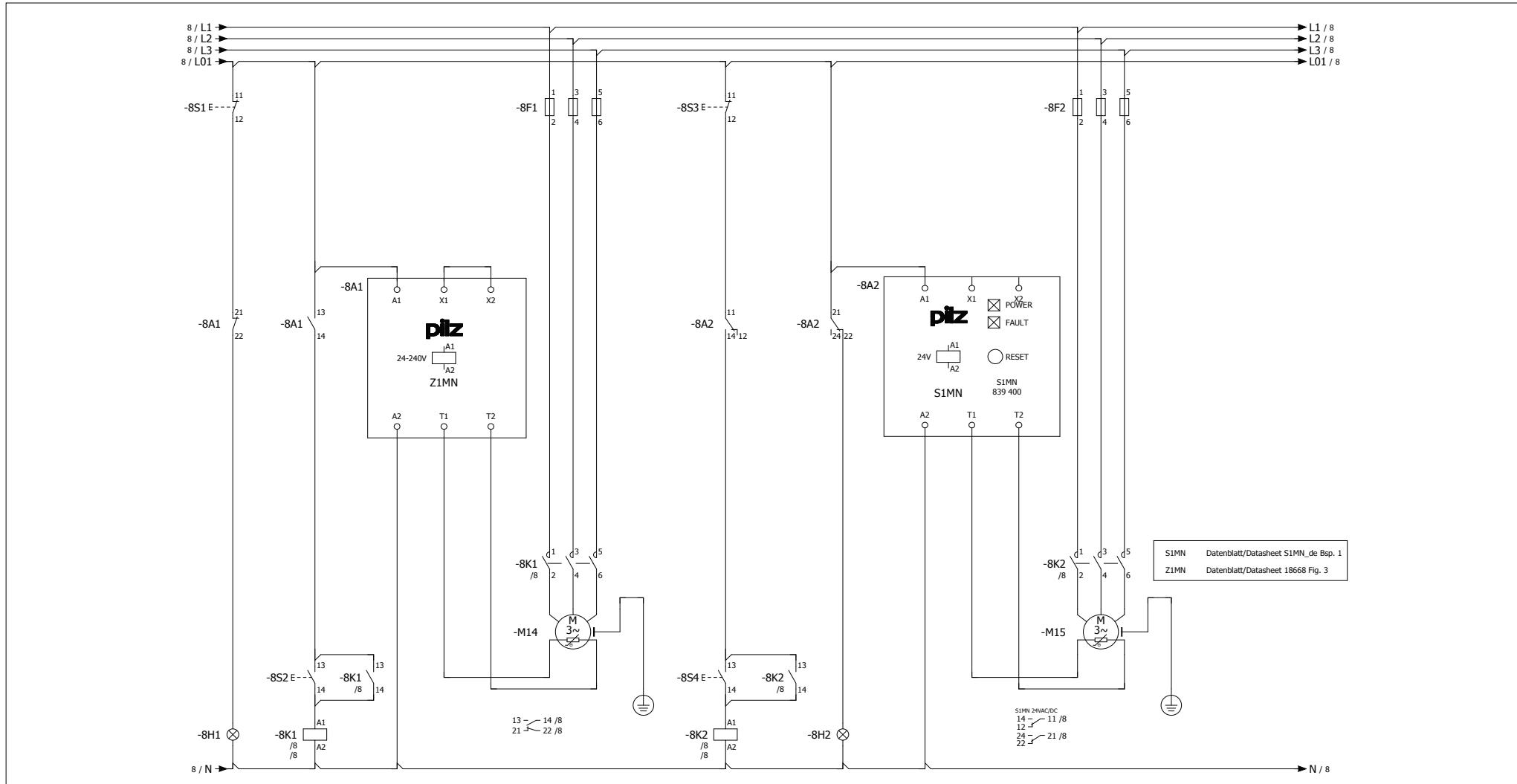
# Application Examples

## Z1MS – S1MS



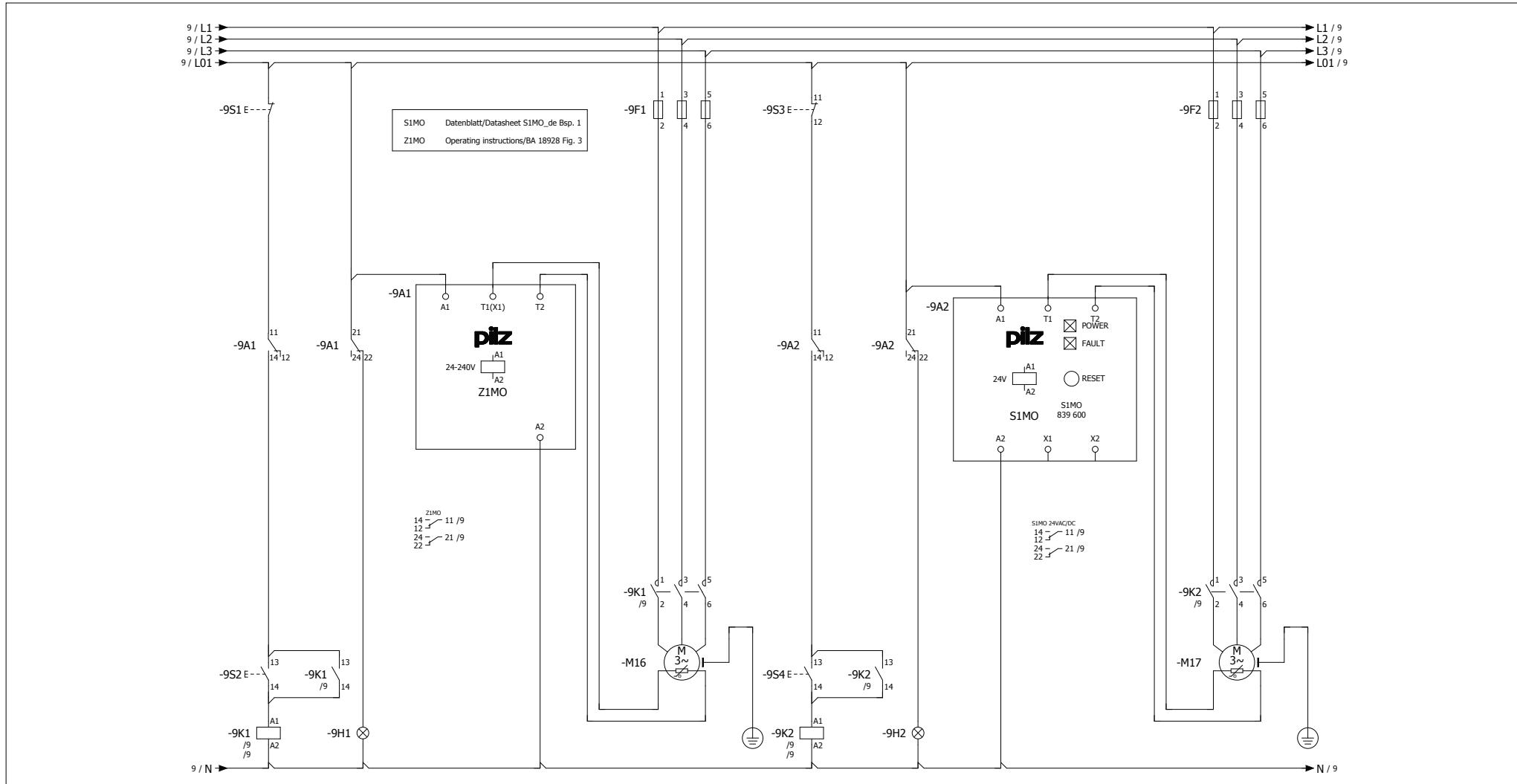
# Application Examples

## Z1MN – S1MN



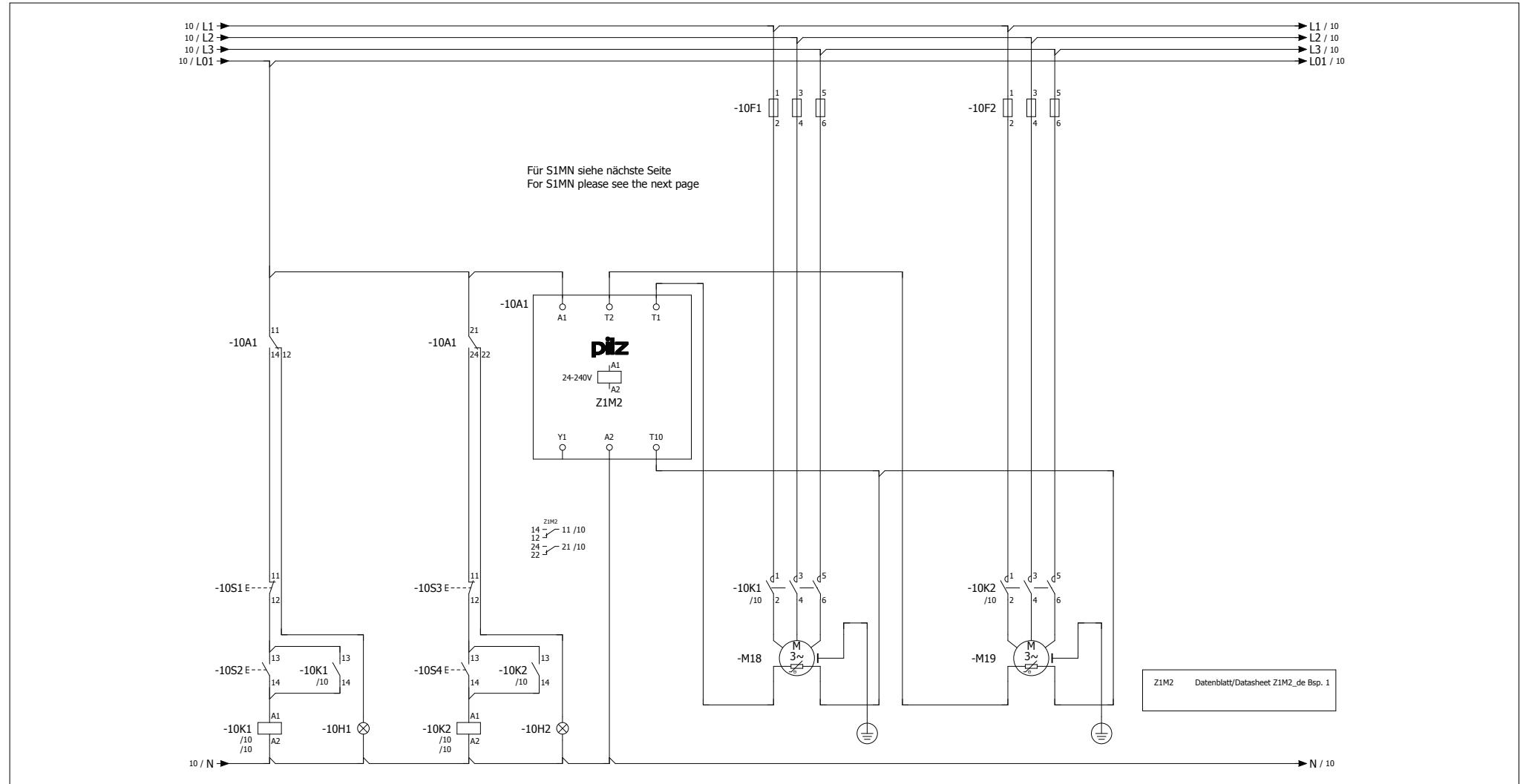
# Application Examples

## Z1MO – S1MO



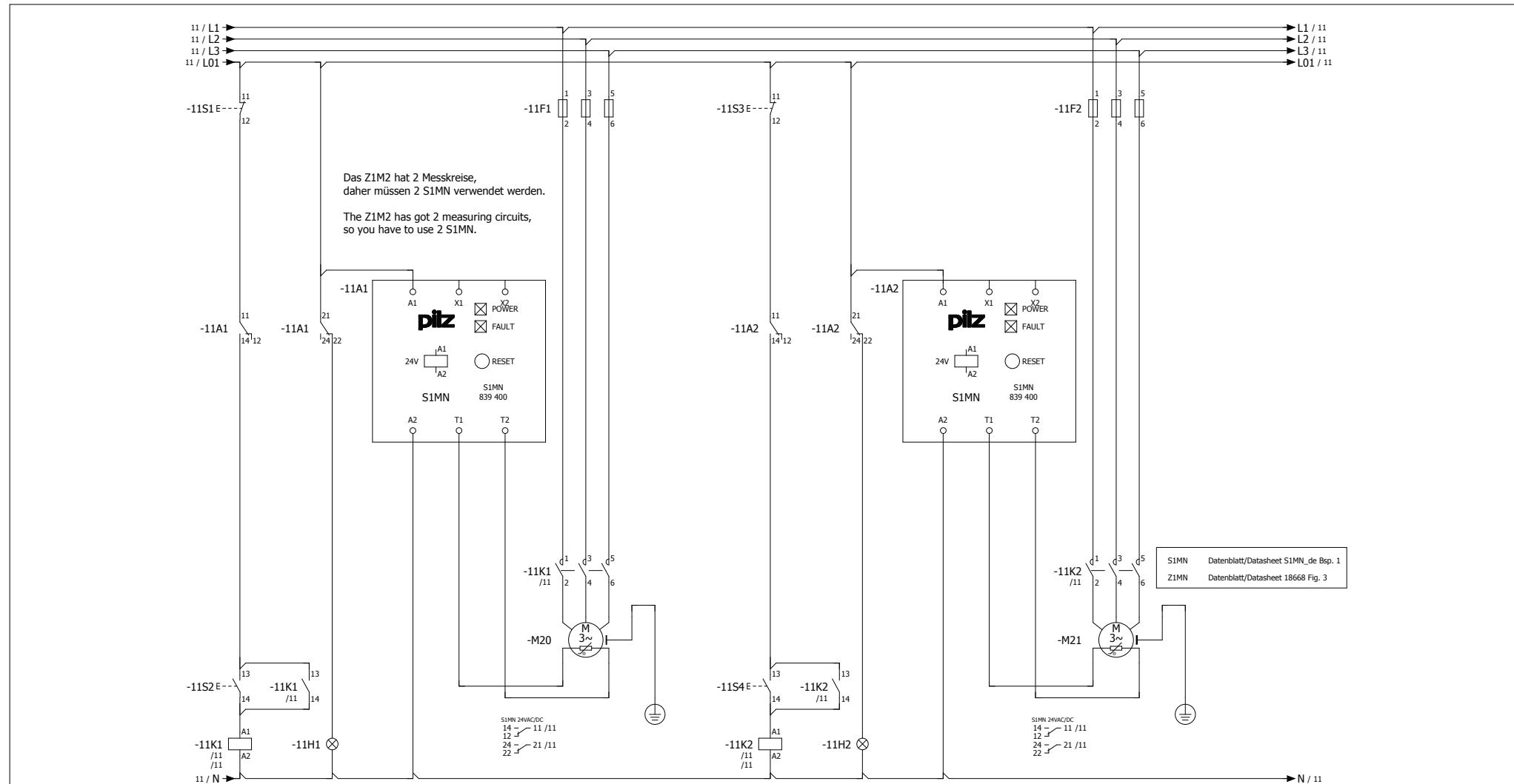
# Application Examples

## Z1M2 – S1MN



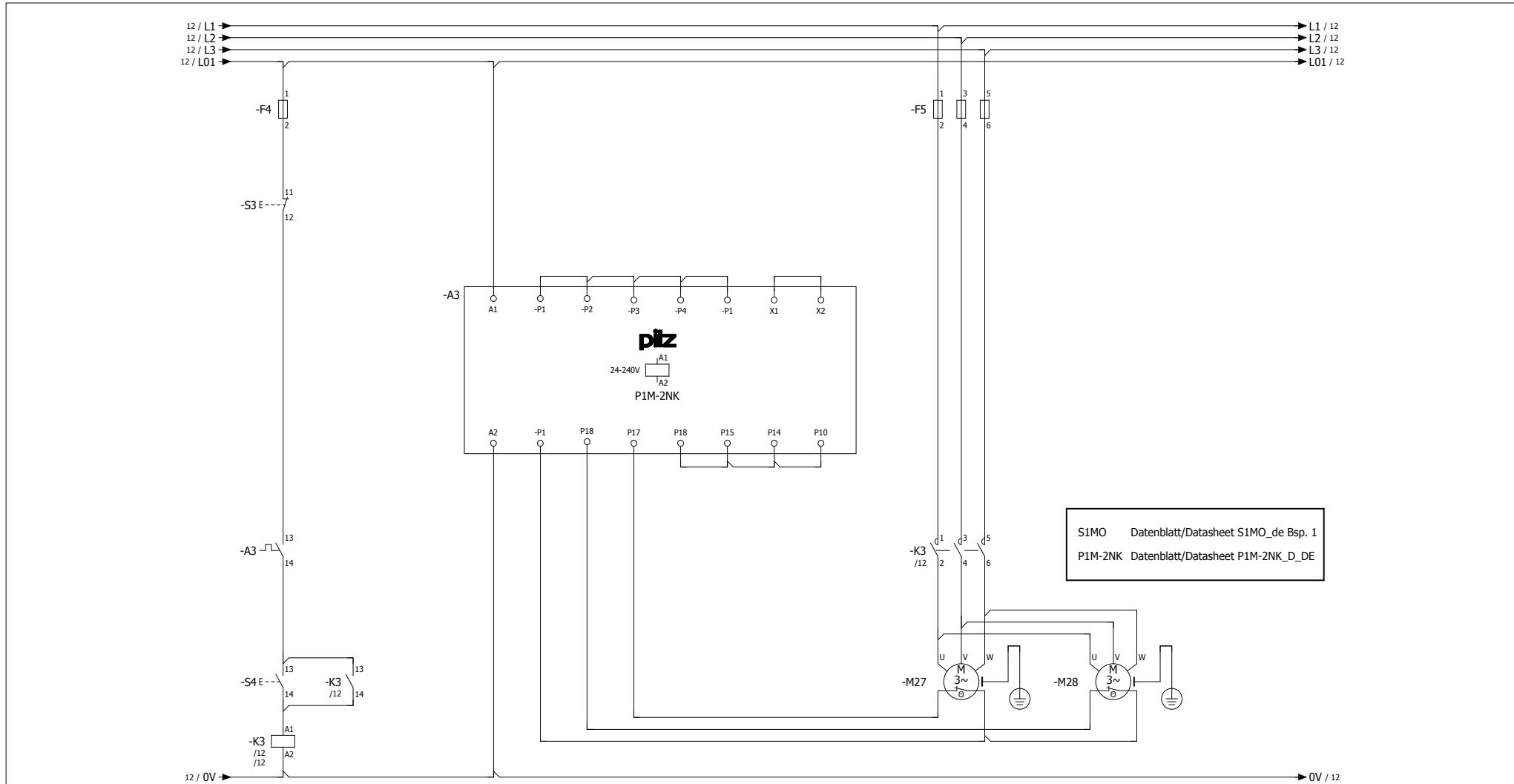
# Application Examples

## Z1M2 – S1MN



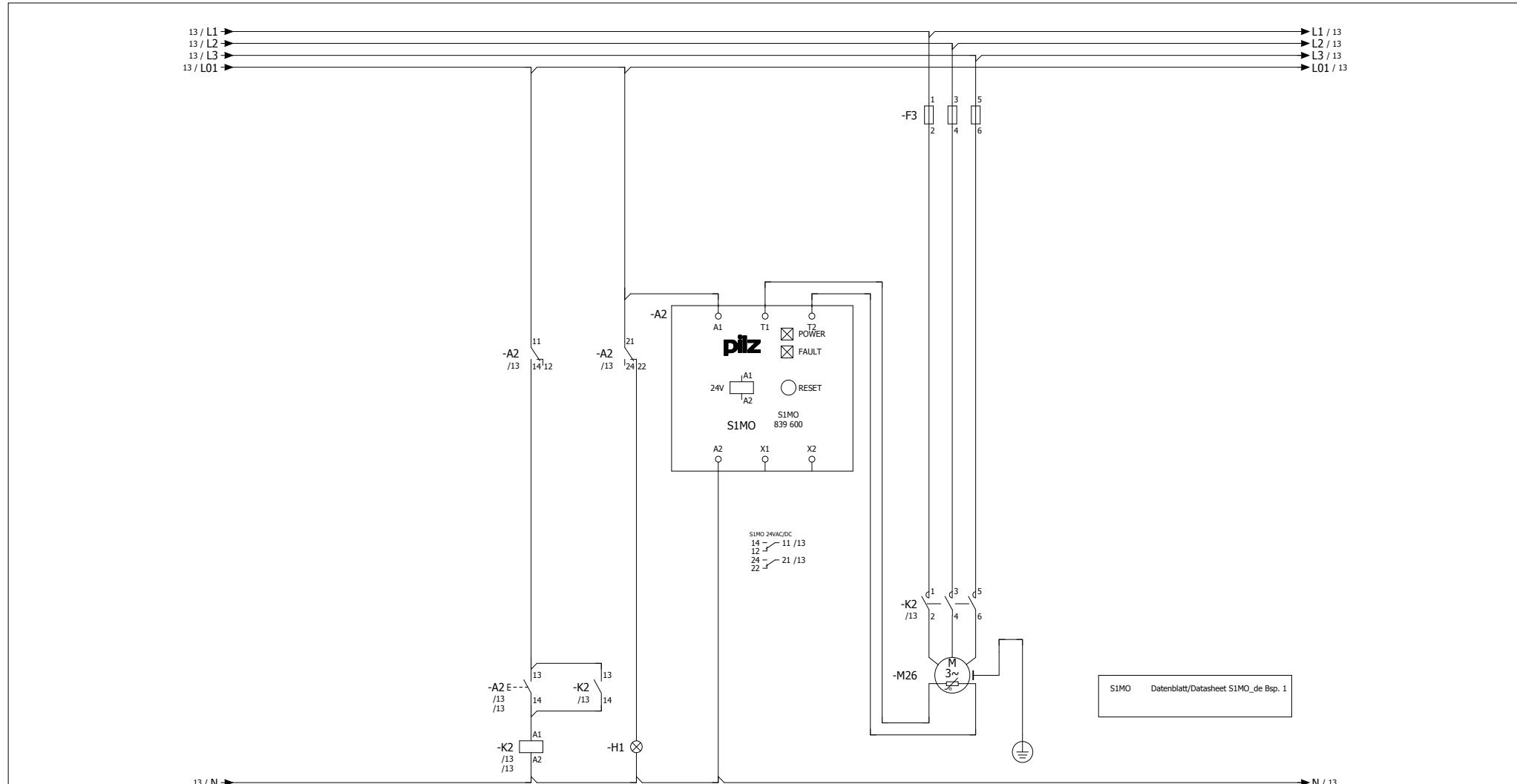
# Application Examples

## P1M-2NK – S1MO



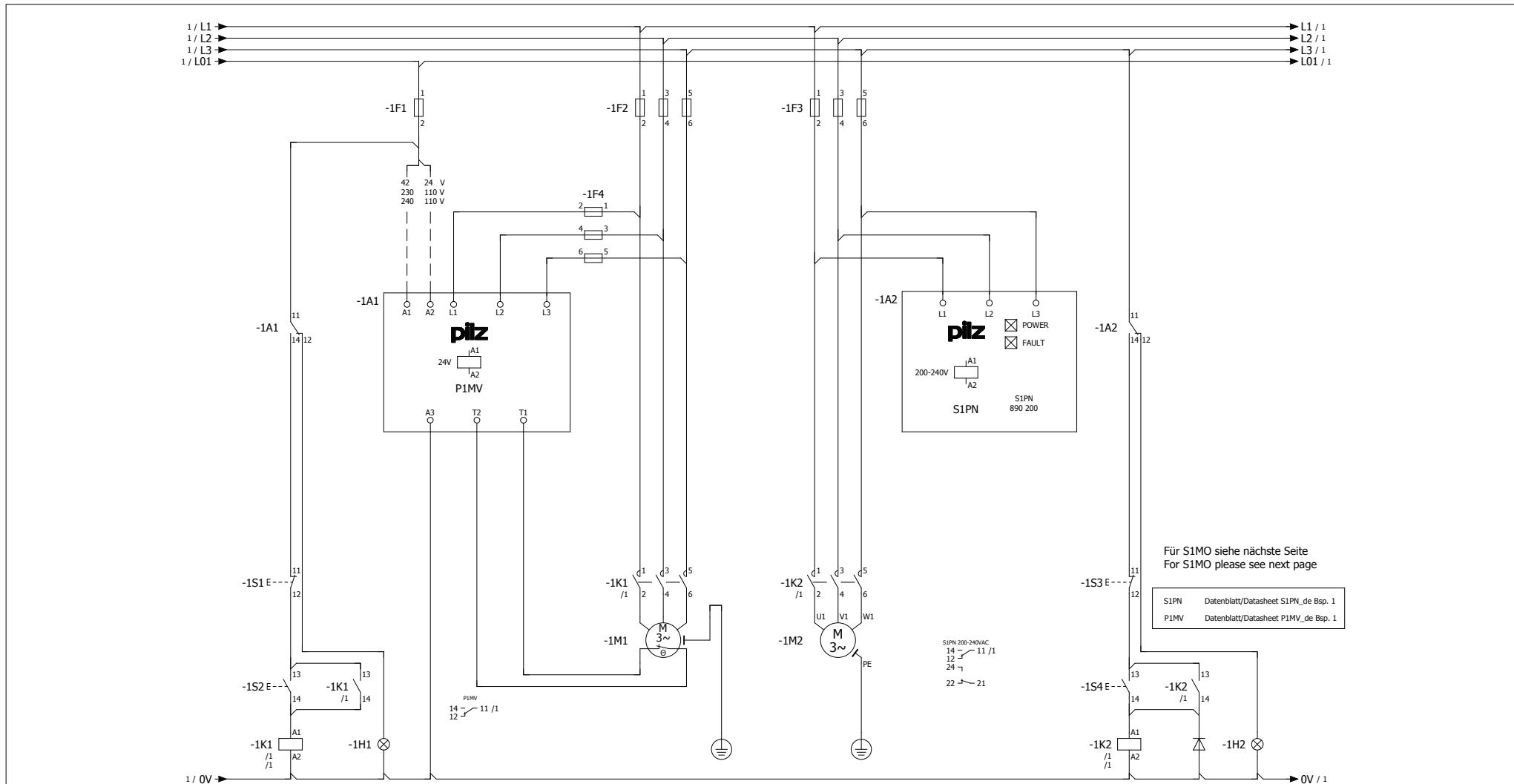
# Application Examples

## P1M-2NK – S1MO



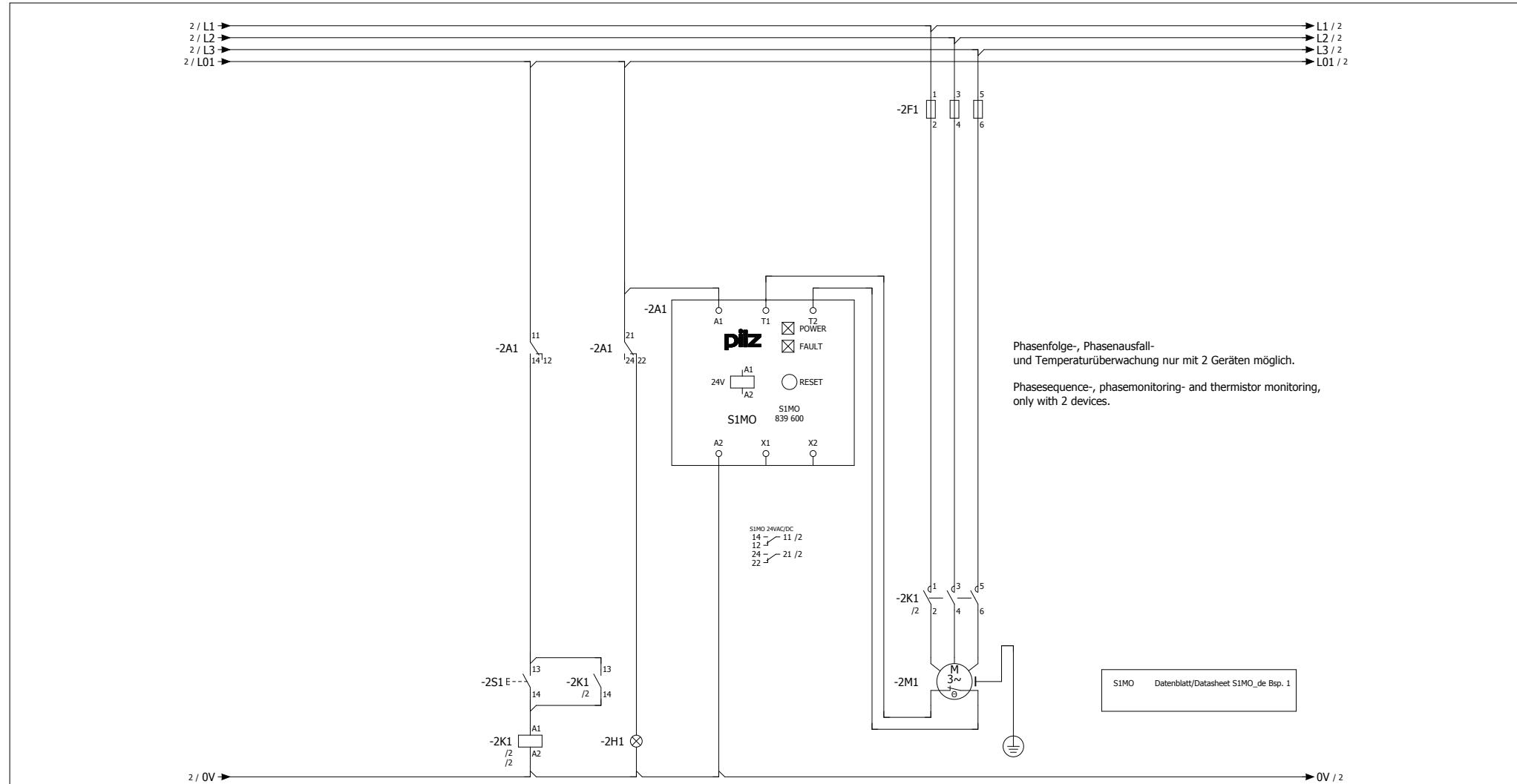
# Application Examples

## P1MV – S1PN and S1MO



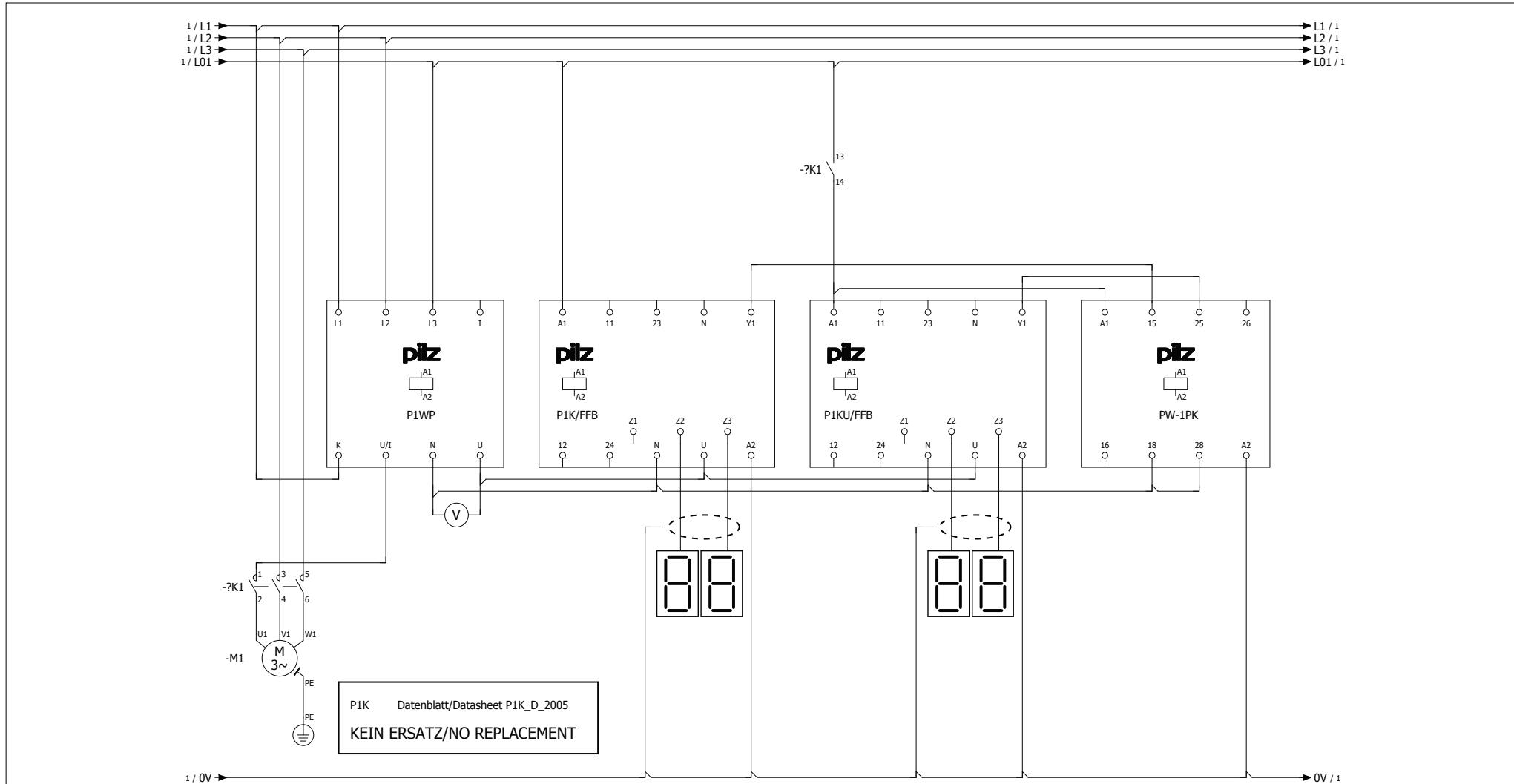
# Application Examples

## P1MV – S1PN and S1MO



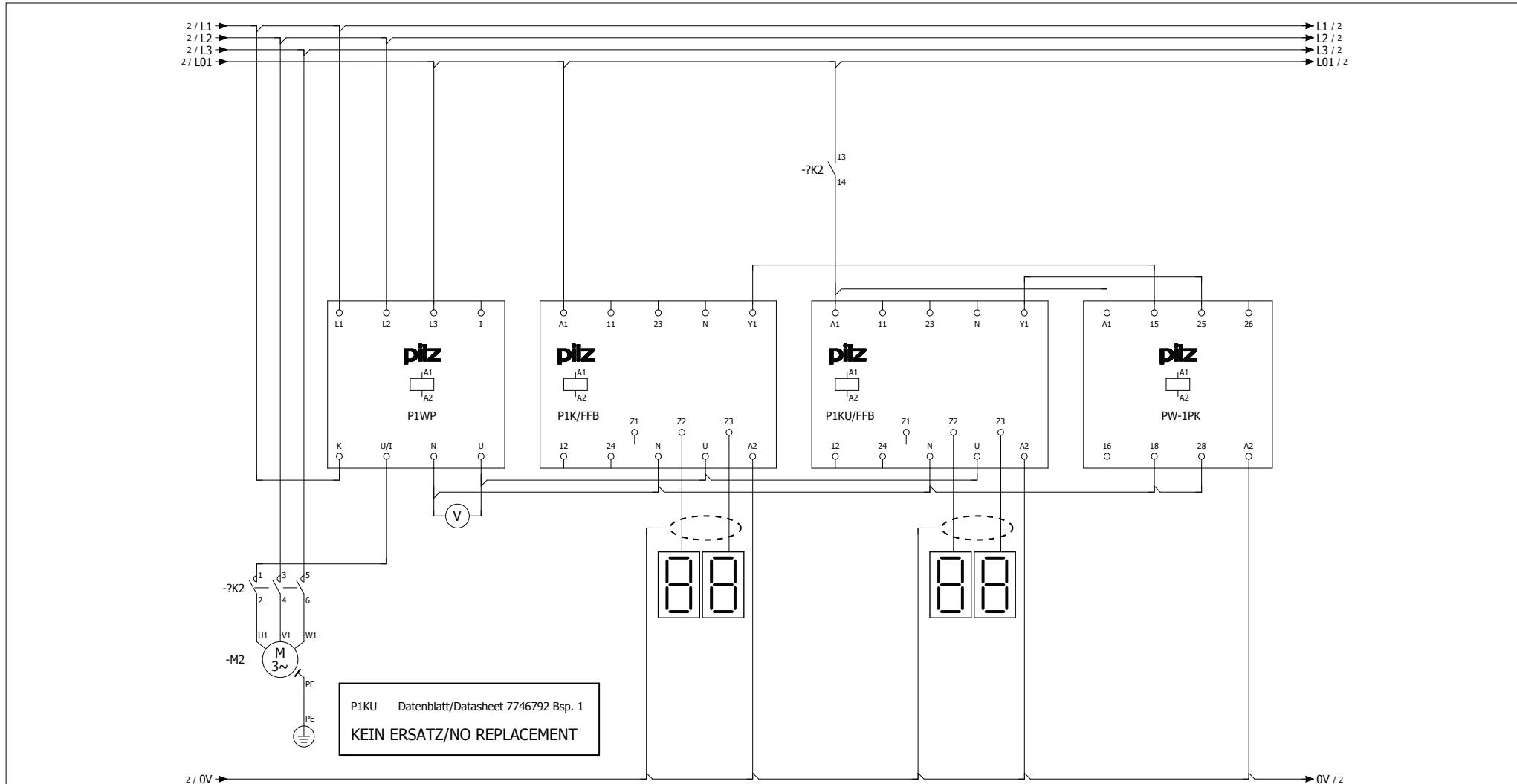
# Application Examples

## P1K



# Application Examples

## P1KU



Contents	Page
<b>Service</b>	
Adresses	Technical offices in Germany
Support	Technical support

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## Support

### Technical support

#### Technical help round the clock!

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

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