

Operating manual

Version: 2.1

No.: 9010041B01M

Safety evaluation unit

4621273E, 4621213E

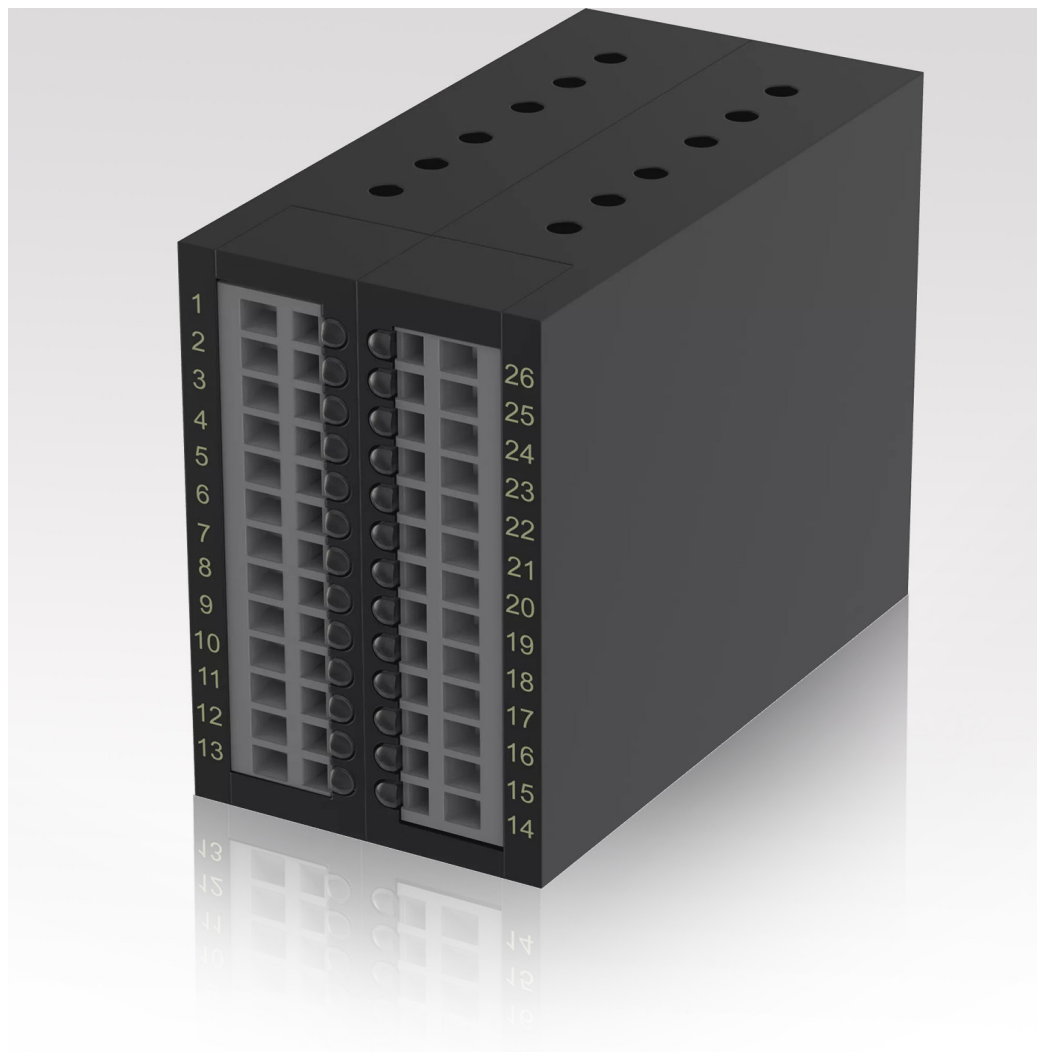


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1. User information

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Validity This Operating manual generally applies to the product Safety evaluation unit listed on the title page and must be appended to the product documents of the downstream machine. Other variants are possible and are also listed in case of deviating specifications. Depending on the customer's wishes or special versions, individual components may be missing or deviate from the standard. Some drawings and figures in this Operating manual are for illustrative purposes only. Deviations from the original part are therefore possible and desired for reasons of a better representation.

The publisher has tried to make this Operating manual as accurate and up-to-date as possible. We are constantly working on developing our products further. We reserve the right to make changes to the scope of delivery in terms of shape, equipment and technology. No claims can be derived from the information, figures and descriptions in this documentation.

This Operating manual is a translation of the original Operating manual. For more information, we are at your disposal.

1.1 General

This document makes it possible to safely work and handle to the product properly Safety evaluation unit. Read through this Operating manual carefully before commissioning and observe the relevant health and safety and accident prevention regulations. Also observe all warnings to avoid hazards for personnel, the environment or the product.

Make this Operating manual and other information about the product (e.g. data sheets) available to the person who is installing, maintaining or repairing the product. When passing on or selling the product, this Operating manual must be enclosed with the product because it is part of the product. Therefore, keep this Operating manual safe for the entire service life of the product and readily accessible in a legible condition.

If you do not understand this Operating manual or parts of it, please ask us.

1.2 Representation conventions



Information!

Refers to effective and practical use of the product.

Text/image reference

(1) Item number: Refers to an item number in a figure.

Lists

Numbered and non-numbered lists are represented as follows:

1. User information

1. Numbered list
2. Numbered list
- List, level 1
 - List, level 2
 - List, level 2

Handling instructions Handling instructions in chronological order for operating the machine are represented as follows:

Action task

1. Action step: Prompts an action.
Interim result: To check an action step.
2. Action step: Prompts an action.
Interim result: To check an action step.
3. Action step: Prompts an action.

✓ **Result of action**

Individual handling instructions, without a chronological order, are represented as follows:

- ▶ Unordered action step

1.3 Functional principle

The Safety evaluation unit monitors connected sensors that are equipped with a NO contact and NC contact. The switching sequence of the contacts does not matter.

The Safety evaluation unit switches a safety output in accordance with the operating statuses of the connected sensors and the connected external contactors.

In the following situations, the Safety evaluation unit switches off the safety output:

- The sensors are correctly actuated.
- The feedback contacts of the external contactors are closed.

In the following situations, the safety evaluation unit switches off the safety output:

- An NO contact of a connected sensor is open.
- An NC contact of a connected sensor is closed.
- A fault is pending (the safety evaluation unit or a connected sensor is defective).

1.3.1 Intended use

The safety evaluation unit is part of the overall system or machine and is for the purpose of assuming safety-related functions. In order to do so, the system monitors signals from magnetic safety sensors. This means that the output is opened or closed depending on the status of the safety sensors.

The product must be used only in accordance with the descriptions below for protection against dangers.

Observe all applicable health and safety conditions, laws and directives of the respective machine. There are no known residual risks, if all of the information contained in this operating manual is complied with.

Every non-intended use and all activities performed that are not described in this manual represent a prohibited, incorrect use outside the legal limits of liability of the manufacturer.

1.3.2 Foreseeable misuse

The following operating conditions are classified as misuse:

- Use in potentially explosive areas,
- use in aeronautical and aerospace applications, nuclear and military applications,
- operation without fuse,
- non-compliance with the technical data.

Operation contrary to the intended use will void the warranty.

WARNING!

**Warning against misuse!**

In case of incorrect or unintended use or manipulation, the use of this product does not exclude risks to persons or damage to machine and/or system components.

- ▶ Make sure that no current or voltage peaks that are higher than the electrical specifications of this product are caused by any external components. Current or voltage peaks are produced, for example, by capacitive or inductive loads.
 - ▶ Please also observe the information stipulated in EN ISO 14119.
-

1.4 Warranty and liability

**Information**

This product has a warranty of 24 months beginning at the time of transfer of risk. The general terms and conditions of the manufacturer apply to the warranty and liability.

Defects in the form of material or manufacturing defects that occur during this warranty period shall be rectified free of charge either by repair or replacement.

If a warranty is provided, the warranty period is not extended.

We reserve the right to charge for costs resulting from unjustified claims, e.g. installation or operating errors.

1. User information

Liability exclusion The manufacturer excludes warranty and liability claims for personal injury and property damage if they are caused by one or more of the following causes:

- Non-compliance with this manual,
- improper use,
- unauthorised repairs, conversions and modifications that are not described in this Operating manual,
- deliberate damage or improper handling,
- use of spare parts or accessories that have not been approved by the manufacturer.

The warranty does not apply in the event of third-party interference or dismantling by a third party without our prior consent. To the extent permitted by law, other claims for compensation are excluded.

1.5 Approvals

The following approvals have been granted for the product:



TÜV NORD



[AUXILIARY
DEVICE]
E334998

1.6 Manufacturer

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1.7 Abbreviations

The following abbreviations are used in this document:

AWG	American Wire Gauge
BTR	Ready for operation, the LED that provides information about the operational readiness of the SAE
Cu	Copper
EDM	External Device Monitoring
HFT	Hardware Fault Tolerance in accordance with IEC 61508
PFH _D	Probability Failure per Hour
PL	Performance Level in accordance with ISO 13849
SAE	Safety evaluation unit
SA	Safety output
SE	Safety input
SIL CL	Safety Integrity Level claimed in accordance with IEC 62061
UL248	United Laboratories
üNHN	Above normal height zero (height above sea level)

Tabelle 1

1.8 Variants and type code

The following combinations for various system features are possible:

- 4621273E
- 4621213E

The 6th position of the article number describes the type of operating voltage. More information can be found in chapter 4.2.6 Terminal connections, page 14.

2. Safety instructions

2.1 General labelling of hazards and information

The severity of the hazard and its consequences are classified in the manual with the following signal words and colours.

GEFAHR!



Here is a brief description of the type and source of danger.

If the safety instruction “DANGER” appears, there is a high risk of danger. The occurrence of the mentioned hazard results in irreversible personal injury or death.

- ▶ Listing of all measures which must be taken to prevent the consequences.
-

2. Safety instructions



WARNING!

Here is a brief description of the type and source of danger.

If the safety instruction “WARNING” appears, there is a medium risk of danger. The occurrence of the mentioned hazard may result in irreversible personal injury or death.

- ▶ Listing of all measures which must be taken to prevent the consequences.
-



VORSICHT!

Here is a brief description of the type and source of danger.

If the safety instruction “CAUTION” appears, there is a low risk of danger. The occurrence of the mentioned hazard may result in reversible minor personal injuries.

- ▶ Listing of all measures which must be taken to prevent the consequences.
-



ACHTUNG!

Here is a brief description of the type and source of danger.

If the following safety instruction “ATTENTION” appears, there is a situation which may potentially result in property damage.

- ▶ Listing of all measures which must be taken to prevent the consequences.
-

2.2 Definition of personnel groups

Operator / contractor

The operator of the downstream machine is responsible for training personnel to work in a safety-conscious manner at regular intervals and to ensure the personnel are appropriately qualified for the necessary work.

The operator is obligated to only allow personnel to work on the machine, system, assembly or with the software who:

- Have been trained in the procedures and operation.
- Are familiar with the regulations on health and safety and accident prevention.
- Have read and understood the content of the Operating manual in order to prevent hazards for personnel or the product.

Qualification of the personnel

Only specially trained, authorised specialised personnel may assemble and install the product as well as perform any other work. The specialist personnel must have read and understood the Operating manual. It is recommended that the specialist personnel are trained by elobau.

2.3 Conformity



The product Safety evaluation unit conforms to the state of the art plus the applicable safety conditions at the time of bringing into circulation within the scope of its intended use. From a design point of view, foreseeable misuse cannot be avoided without limiting the intended functionality.

Ensure that all applicable European directives and national laws/directives are observed. The declaration of conformity can be found in the Appendix under 8. EU Declaration of Conformity, page 23.

2.4 Changes, modification measures

Any unauthorised change or conversion is expressly forbidden.

2.5 Warning against misuse

In case of incorrect or unintended use or manipulation, the use of the safety evaluation unit does not exclude risks to persons or damage to machine and/or system components.

- Please observe the information stipulated in ISO 14119.
- Make sure that no current or voltage peaks that are higher than the electrical specifications of the safety evaluation unit are caused by any external components. Current or voltage peaks are produced, for example, by capacitive or inductive loads.
- Exceeding the electrical specifications of the safety evaluation unit (e.g. in the event of defective wiring or short circuits) can damage the system irreparably. Non-compliance can result in reduced service life.

3. Transport and storage

During transport and storage, protect the product against heat, moisture, chemicals and impacts. Do not exceed the permissible storage temperature of -25°C to +70°C.

More information on the ambient conditions can be found in chapter 4. Product-specific information, page 10.

4. Product-specific information

4. Product-specific information

4.1 Mechanical data (mechanical design)

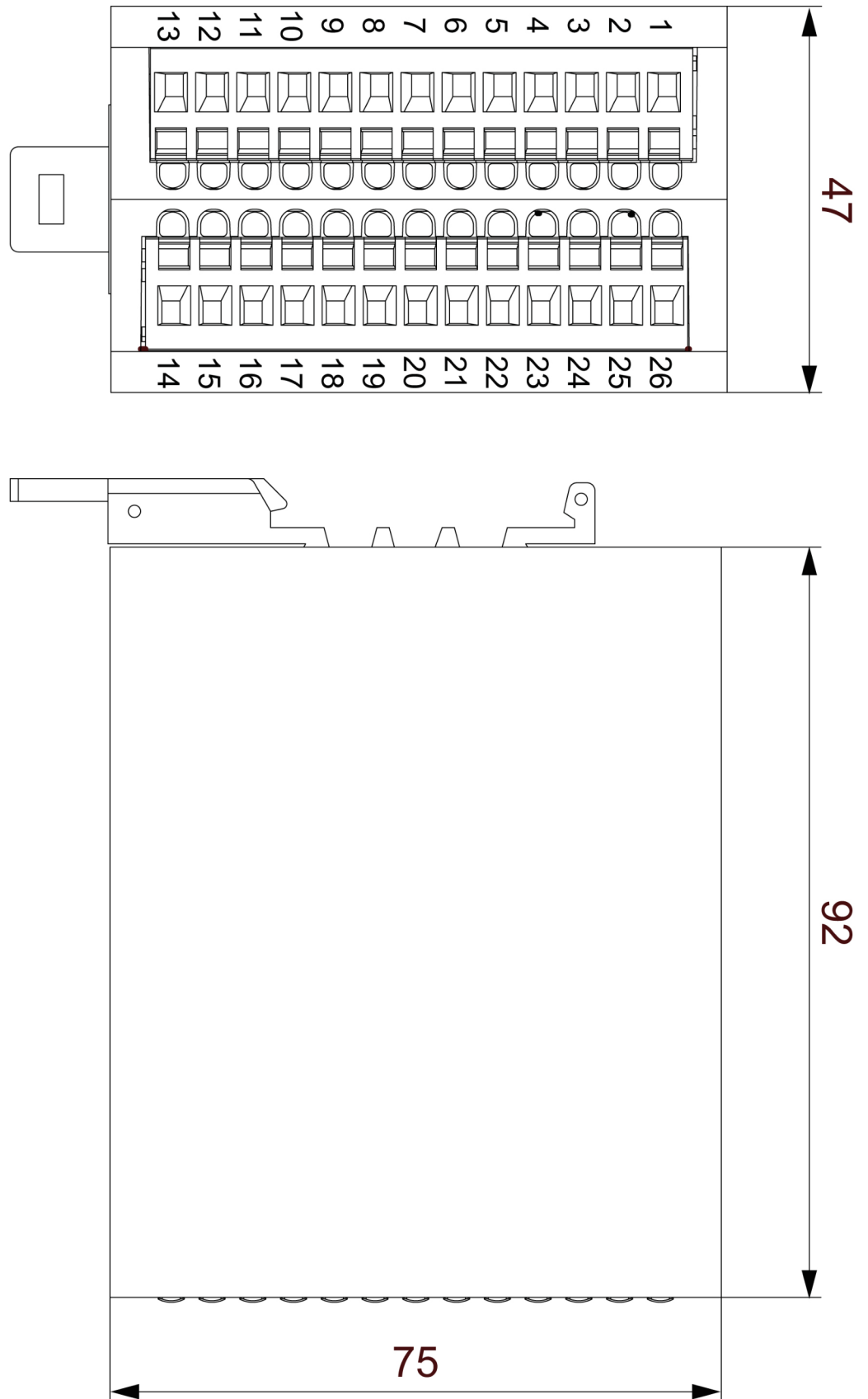


Abbildung 1

4.2 Electrical data

4.2.1 Electrical parameters	Unit	Value 4621273E	Value 4621213E
Min. switching voltage on DC safety output	V DC	10	
Max. switching voltage on DC safety output	V DC	30	
Max. switching voltage on DC control output	V DC	30	
Min. switching voltage on AC safety output	V AC	10	
Max. switching voltage on AC safety output	V AC	250	
Max. switching voltage on AC control output	V AC	250	
Min. switching current on safety output	A	0.01	
Max. switching current on safety output	A	4	
Max. switching current on control output	A	3	
Min. switching capacity on safety output W	W	0.1	
Max. switching capacity on safety output W	W	120	
Max. switching capacity on control output W	W	90	
Min. switching capacity on safety output VA	VA	0.1	
Max. switching capacity on safety output VA	VA	1000	
Max. switching capacity on control output VA	VA	750	
Sensor system		NO / NC	
Max. voltage on safety input in case of fault		N/A	60 V DC / 25 V AC
Max. switch on system reaction time	ms	100	
Switch on reaction time when max. U_B applied	ms	450	
Switch on operating time	s	10	
Max. switching frequency	Hz	0.1	
Number of safety output relays		1	
Number of control output relays		1	
Number of redundant safety inputs		4	
Stop category 0		✓	
EDM input		✓	
Usage category		AC-15: 230 V AC/1 A DC-13: 24 V DC/1.2 A	
Max. number of switching operations at 0.5 A switching current (ohmic load) on control output		3.7×10^5	
Max. number of switching operations at 3 A switching current (ohmic load) on control output		1.8×10^5	
Max. number of switching operations at 0.5 A switching current (ohmic load) on safety output		3.7×10^5	

4. Product-specific information

4.2.1 Electrical parameters	Unit	Value	
		4621273E	4621213E
Max. number of switching operations at 4 A switching current (ohmic load) on safety output		1.8 x 10 ⁵	
Overvoltage category		III	
Pollution degree		2	
Min. operating voltage DC	V DC	21.6	
Max. operating voltage DC	V DC	26.4	
Min. operating voltage AC	V AC	21.6	–
Max. operating voltage AC	V AC	26.4	–
Fuse for operating voltage, fast-acting		1A	
Safety output fuse, slow-acting		4 A	
Control output fuse, slow-acting		3 A	
Max. current consumption	mA	200	295
Max. power consumption W	W	5.28	7.79
Max. power consumption VA	VA	5.28	
Cross-circuit detection		✓	
LED display		✓	

Tabelle 2

4.2.2 Parameters for UL approval

Cat. no.	Input	Output to Sensor	Safety output	Control output
4621273E	24 V AC/V DC, 200 mA ⁽¹⁾	Max. 12 V DC	Max. 4 A max. 250 V AC /24 V DC	Max. 3 A max. 250 V AC /
4621213E	24 V DC, 295 mA ⁽¹⁾	Max. 26.4 V DC	Pilot duty, 30 V DC 2 A resistive	30 V DC General purpose

Tabelle 3

⁽¹⁾ An external UL248 fuse with max. 1 A is required that is suitable for the respective voltage.

“Only Cu” connection cables and temperature class 60/75

4.2.3 Ambient conditions	Unit	Value 4621273E	Value 4621213E
Single device protection class		IP20	
Protection class of single device in installation space		IP54	
Min. operating temperature	°C	0	
Max. operating temperature	°C	55	
Min. storage temperature	°C	-25	
Max. storage temperature	°C	70	
Shock-resistance		30 g / 11 ms	
Continuous shock-resistance		10 g / 16 ms	
Vibration/ vibration resistance		10 to 55 Hz; 0.5 mm; 5 g	10 to 55 Hz; 0.3 mm; 1 g
Relative humidity (condensation not permitted)	%	5 to 85	
Air pressure (depending on altitude - application height max. 2000 above sea level)	hPa	860 to 1060	
Temperature change rate (Δt_{\max})	K/min	0.5	

Tabelle 4

4.2.4 Material information	Value 4621273E	Value 4621213E
Housing material PBT GF30	✓	
Housing colour: matt black	✓	

Tabelle 5

4.2.5 Connection	Unit	Value 4621273E	Value 4621213E
Spring terminals		✓	
Min. connection cross section (rigid lines/flexible lines/flexible lines with ferrule)	mm ² / AWG	0.14 / 28	
Max. connection cross section (rigid lines/flexible lines)	mm ² / AWG	2.5 / 14	
Max. connection cross section (flexible lines with ferrule)	mm ²	1.5	
Max. number of conductor connection cycles		10	

Tabelle 6

4. Product-specific information

4.2.6 Terminal connections

Components	Terminal	Meaning
Safety input 1	6-9	Connection options: Sensors with normally open/normally closed contact system
Safety input 2	10-13	
Safety input 3	14-17	
Safety input 4	18-21	
Safety output	3-4	Switching dependent on: <ul style="list-style-type: none">• Safety input 1-4• EDM input
EDM	22-23	Monitoring of external contactors. If no external contactors are used, this input must be bridged!
Control output	24-26	Not suitable for safety functions! Switching dependent on: <ul style="list-style-type: none">• Safety input 1-4• EDM input
Operating voltage	1-2	24 V AC/DC (4621273E) 24 V DC (4621213E)

Tabelle 7



Information

Complete protective insulation in accordance with DIN EN 61140 is provided if the Safety evaluation unit is installed in a switch cabinet for operation.

WARNUNG!



Danger due to incorrect or bypassed fuses!

Incorrect installation of connections may result in irreversible personal injury or death.

- ▶ Never bypass or repair any fuses.
 - ▶ Observe the specified fuse values (See “Electrical data” on page 11).
-

4.2.7 Safety-relevant parameters	Value 4621273E	Value 4621213E
PL according to EN ISO 13849-1	e	
SIL CL according to IEC 62061	3	
PFH _D	5.77 x10 ⁻¹⁰	5.81 x10 ⁻¹⁰
Service life (in years)	20	
Category according to EN ISO 13849-1	4	
Hardware fault tolerance (HFT)	1	
Max. switch off system reaction time	5	

Tabelle 8

ACHTUNG!**Warning of voltage and current spikes!**

When connecting this product to external components, voltage and current spikes may occur. Damage to machines and/or system parts therefore cannot be ruled out.

- ▶ Make sure that no current or voltage peaks that are higher than the electrical specifications of this product are caused by any external components. Current or voltage peaks are produced, for example, by capacitive or inductive loads.
- ▶ Avoid faulty wiring or short-circuits.
- ▶ Please also observe the information stipulated in EN ISO 14119.

4. Product-specific information

4.3 Circuit diagram 4621273E

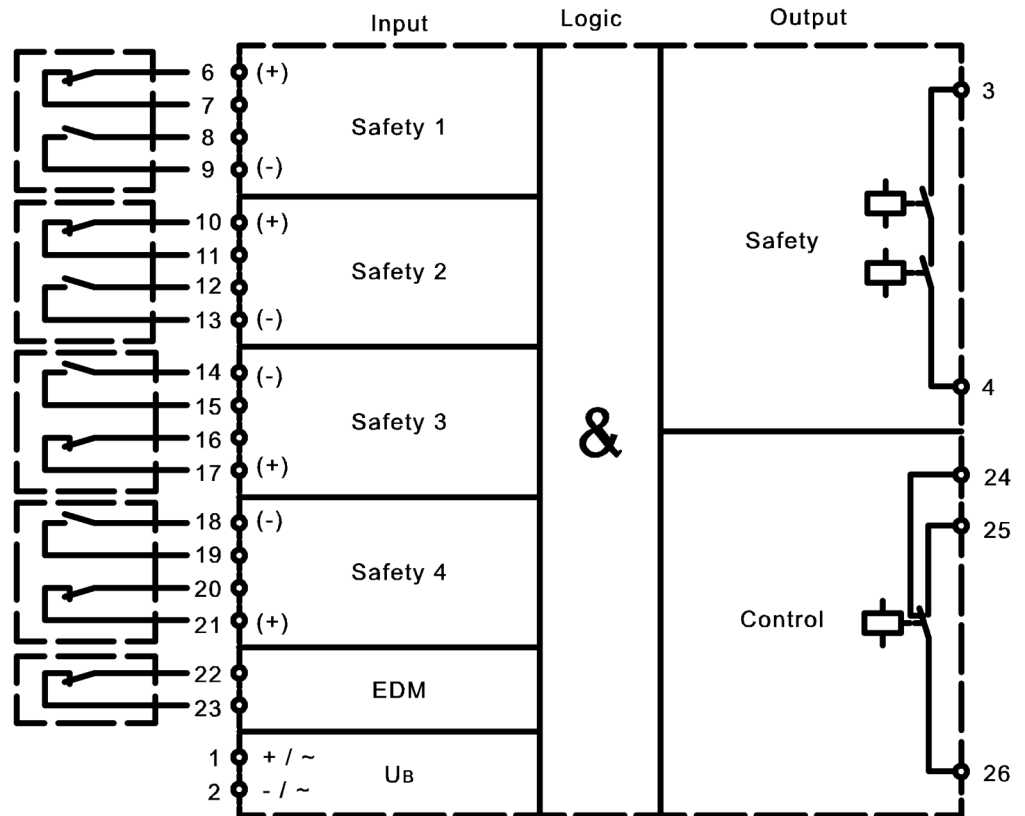


Abbildung 2

4.4 Circuit diagram 4621213E

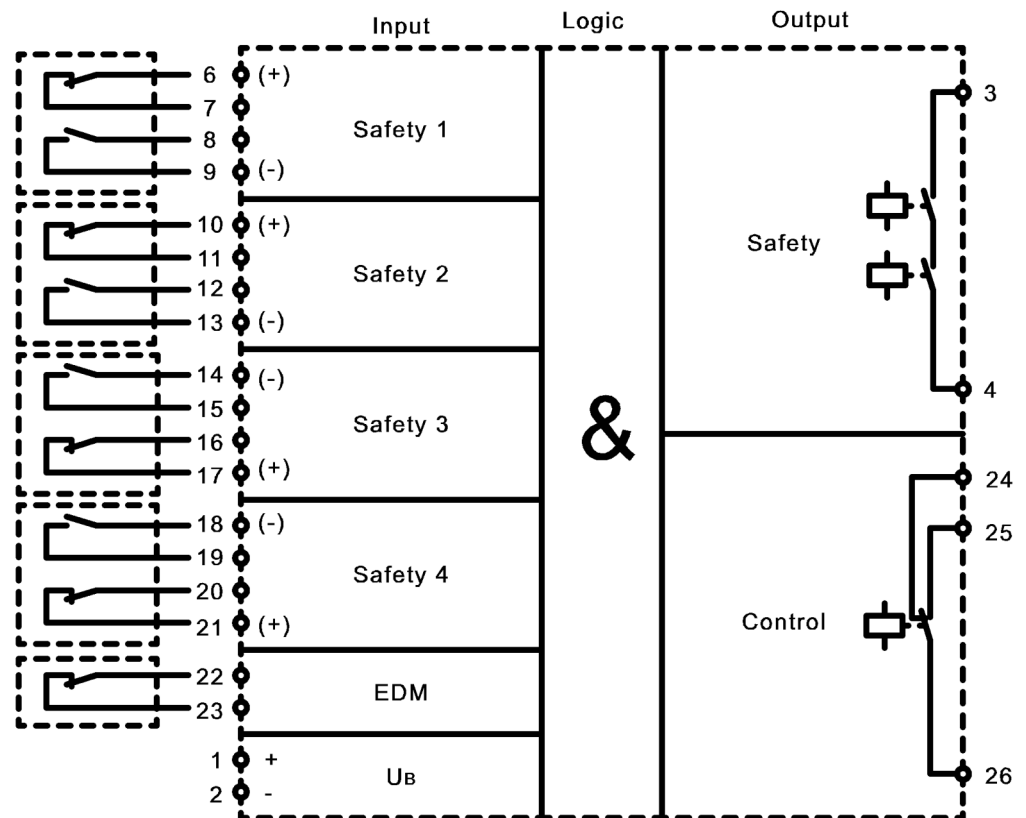


Abbildung 3

5. Set up, installation, putting into service

5.1 Installation



WARNUNG!

Danger due to electrocution!

Incorrect installation of connections may result in irreversible personal injury or death.

- ▶ The Safety evaluation unit may only be installed by specially trained, authorised personnel.
 - ▶ Only use the Safety evaluation unit if it is not damaged.
 - ▶ Avoid hitting the housing. If possible, protect housing using additional measures (enclosure).
-

5.1.1 Control output

The control output (terminals 24 to 26) indicate the status of the safety outputs:

- When the safety output is switched through, contacts 25 and 26 are closed.
- When the safety output is switched off, contacts 24 and 26 are closed.

Make sure that the control output is only used for indicating the operating status of the safety evaluation unit.

5.1.2 Mounting position



ACHTUNG!

Danger due to errors during electrical connection!

Electronic components can be destroyed, thereby resulting in malfunctioning of the machine, and hence, injuries to personnel or property damage.

- ▶ Please find and comply with the electrical data in the respective data sheet.
 - ▶ Signal path of the output signal is generally depicted on the data sheet or is made available by elobau on request.
 - ▶ Please pay attention to temperature drift.
-

Installation of the Safety evaluation unit is only permitted in a voltage-free state.

5. Set up, installation, putting into service

Installing the Safety evaluation unit

- ▶ Only install in an installation space protected from dust and moisture.
- ▶ Limit line lengths for connections to a max. of 30 m.
- ▶ Snap the safety evaluation unit onto a mounting rail (DIN EN 60715 TH35) in the switch cabinet.
- ▶ Ensure that the ventilation holes (in/on the housing) are kept clear.

A gap of 40 mm is recommended. Falling below this can causes faults at high ambient temperatures.

✓ ***The Safety evaluation unit is fixed in place.***

5.2 Electrical connection

Electrical connection is only permitted in a voltage-free state. Make sure that the details described in the technical specifications are always complied with.

When connecting the sensor, the sensor power supply voltage (+) and (-) terminals identified in the technical specifications are to be used.

Connect the Safety evaluation unit as per the technical data

(See “Product-specific information” on page 10).

1. Ensure that the prescribed fuses are used.
2. If the safety input remains free: Ensure that the contact makers of this safety input are bridged.

✓ ***Safety evaluation unit connected.***

5.3 Putting into service



WARNING!

Danger due to electrocution!

Incorrect commissioning of connections may result in irreversible personal injury or death.

- ▶ The Safety evaluation unit may only be put into operation by specially trained, authorised personnel.
 - ▶ Only use the Safety evaluation unit if it is not damaged.
-

Putting the Safety evaluation unit into operation

1. Actuate the safety sensors.
2. Apply the operating voltage.

✓ ***The safety evaluation unit is ready for operation and switches through the safety output.***

**Information**

Note that the EDM input must be bridged if no external contactors are used.

WARNUNG!

**Danger due to lack of complete validation!**

When installing the safety evaluation unit, the “normally-closed” and “normally-open” contacts could be mixed up. Commissioning the system without a legally prescribed complete validation may then result in personal injury, property damage or environmental damage.

- ▶ Check that the normally-closed and normally-open connections are correct.
 - ▶ Before commissioning the system, always carry out a comprehensive complete validation of the system.
-

6. Operation / control

6.1 LED displays

LED	Operational readiness	Safety input 1	Safety input 2	Safety input 3	Safety input 4	Safety output	
Position	Terminal 2	Terminal 8	Terminal 12	Terminal 15	Terminal 19	Terminal 24	Terminal 25
LED display	1x green					1x red	1x green
LED off	SAE not ready for operation	Safety input not actuated				Safety output closed	Safety output not closed
LED flashes	An error has been detected	Safety input half actuated (See “Error messages, troubleshooting” on page 20)				—	—
LED lights up	SAE ready for operation	Safety input actuated				Safety output not closed	Safety output closed

Tabelle 9

Operating time The operating time is the maximum time permitted on a sensor between actuation of both sensor contacts.

Safe condition The safety output is opened / with high resistance.

6. Operation / control

6.2 Error messages, troubleshooting

Signalling of the individual error




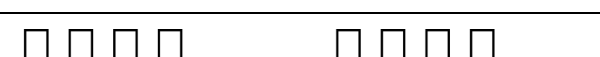
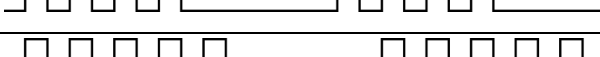
Detected error	Flash code of the ready for operation LED	Display
EDM input error		1 flash pulse
Operating time error		2 flash pulses
Internal overvoltage or undervoltage		3 flash pulses
Temperature in the device outside of the permitted range		4 flash pulses
Internal device error		5 flash pulses

Tabelle 10

LEDs for error, except operating time error

LED BTR	LED SE1	LED SE2	LED SE3	LED SE4	LED SA red	LED SA green
Flash code for detected error	off	off	off	off	on	off

Tabelle 11

LEDs for operating time error

Operating time error	LED BTR	LED SE1	LED SE2	LED SE3	LED SE4	LED SA red	LED SA green
Operating time error SE1	Flash code for operating time error	Flashing	off	off	off	on	off
Operating time error SE2	Flash code for operating time error	off	Flashing	off	off	on	off
Operating time error SE3	Flash code for operating time error	off	off	Flashing	off	on	off
Operating time error SE4	Flash code for operating time error	off	off	off	Flashing	on	off

Tabelle 12



Information

Not all errors are indicated externally by a flash code.

Restoration of operational readiness

If the safety output has been opened by a triggered sensor contact, for example.

Restore operational readiness.

1. Ensure that the connected, external contactor has dropped.
2. Ensure that the normally-open contact of the corresponding sensor is open and the normally-closed contact is closed.
3. Close the contact on the corresponding sensor normally-closed contact input.
4. Open the contact on the corresponding sensor normally-open contact input within the operating time.

The safety evaluation unit carries out an internal test. The safety evaluation unit checks whether the connected, external contactor has dropped. After the test has been completed successfully, the safety evaluation unit switches the safety output through.

✓ **The safety evaluation unit is ready for operation.**

Does the safety output remain open?

- ▶ Check the connections at the inputs and outputs!
 - operating voltage
 - connected sensors
 - connected contactor

Are the connections at the inputs and outputs OK?

- ▶ Replace the safety evaluation unit.

7. Maintenance and servicing

The Safety evaluation unit itself is maintenance-free. The Safety evaluation unit must be replaced when reaching the max. switching cycles or the max. safe service life of 20 years. (See chapter 4.2.7 Safety-relevant parameters, page 15)

Each safety circuit must be tested by specially trained, authorised personnel in accordance with national regulations within the time limits specified therein.

(Recommendation: If there is no national standard, perform the function test pursuant to EN ISO 14119 depending on the respective application.)

VORSICHT!

Danger due to opening the evaluation unit.

Machine malfunctions can result in injuries to persons or property damage.

- ▶ Do not open the evaluation unit.
 - ▶ Do not modify the electronics or mechanical components.
-



7. Maintenance and servicing

7.1 Decommissioning

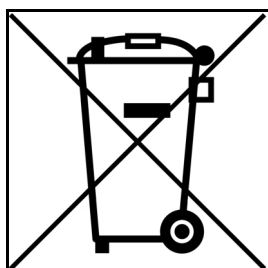
- ▶ Only dismantle the Safety evaluation unit when it is deenergised.
- ✓ ***Safety evaluation unit is out of operation.***

7.2 Dismantling

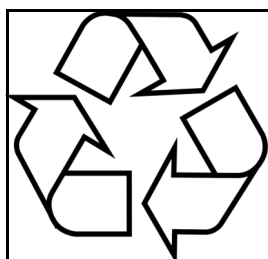
Dismantling the Safety evaluation unit

1. Ensure a voltage-free state.
 2. Undo the electrical lines.
 3. Unscrew and remove screws.
- ✓ ***Safety evaluation unit is dismantled.***

7.3 Disposal



The symbol means that a product must be collected separately from other waste when it reaches the end of its service life in accordance with directive 2012/19/EU. For more information, please contact elobau or your dealer on site.



Dispose of packaging and used parts in accordance with the relevant national regulations. Do not dispose of the Safety evaluation unit with domestic waste; e.g. dispose of at the collection centre of a waste management utility.

Abbildung 4

8. EU Declaration of Conformity

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EU-Konformitätserklärung

EC Declaration of Conformity



Hiermit erklären wir, dass das nachfolgend aufgeführte Produkt aufgrund der Konzipierung und Bauart den Sicherheits- und Gesundheitsanforderungen der unten genannten EU-Richtlinien entspricht.

Hereby we officially validate that the below listed component comply with the requirements of the following European Directive because of their design and construction:

Bezeichnung des Produkts:

Name of part:

Sicherheitsauswerteeinheit

Safety Control Unit

Beschreibung des Produkts:

Description of part:

Logikeinheit zur Ausführung einer Sicherheitsfunktion, im Rahmen der Überwachung von angeschlossenen berührungslos wirkenden Sicherheitssensoren

Logic unit for performing a safety function, as part of the monitoring of connected non-contact safety sensors

elobau Artikel-Nr.:

elobau item no.:

4621273E

4621213E

einschlägige EU-Richtlinien:

Relevant EC-Directives

Maschinenrichtlinie 2006/42/EG

EMV-Richtlinie 2014/30/EU

RoHS-Richtlinie 2011/65/EU

Machinery Directive 2006/42/EC

EMC Directive 2014/30/EC

RoHS Directive 2011/65/EC

harmonisierte Standards:

harmonized standards:

EN 62061:2005 + Cor.:2010 + A 1:2013 + A2:2015

EN ISO 13849-1:2015

EN ISO 13849-2:2012

EN ISO 20607:2019

EN 61326-1:2013

EN 61000-6-2:2005 / Cor.:2006

EN IEC 61000-6-3:2007+A1:2011

EN IEC 63000:2018

nicht harmonisierte Standards:

not harmonized standards:

EN 61326-3-1:2017

EN IEC 61000-6-3:2021

EN IEC 61000-6-2:2019

Änderungsindex: H

Modification Index:

998H0001K0016

8. EU Declaration of Conformity

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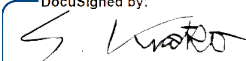
Die Übereinstimmung eines Baumusters mit der oben benannten Richtlinie wurde bescheinigt durch:

The consistency of a model with the above-named Directive has been certified by:

**Name und Anschrift
benannte Stelle:** TÜV Nord CERT GmbH
name and address AM TÜV 1
notified body: 45307 Essen

**Nummerierung der
Bescheinigung:** 4420514128305
Certification number:

Leutkirch, den 04.04.2023

DocuSigned by:


Sandrina Kratzer
CE-Beauftragte / EC authorized Representative
Dokumentation-Bevollmächtigte / Documentation Representative