



Safety relay 46212

The compact design of the 4621273E safety evaluation unit allows it to be used even in applications with limited space.

A potential-free safety output in SIL3/PLe up to 4A and a control output with change-over contacts up to 3A are available. A maximum of 4 sensors with normally open/ normally closed contacts can be connected. Input expansion units (interfaces) can't be used. Due to the 24V AC and DC supply voltage, the unit can be used for a wide range of applications.

The 4621273E can be used as a pin-compatible replacement for

462121E1
462121E1U (Note: different operating time)
462121E101

462121E1U1 (Note: different operating time)
462121E104
462124E1 (Note: different operating voltage AC 230 V)
462124E1U (Note: different operating voltage AC 230 V and different operating time)
462121H1
462121H1U (Note: different operating time)
462121H5
462121H5U (Note: different operating time)

Circuit examples are available on request from elobau.

Technical specifications

- PLe/SIL3/Cat.4
- Supply voltage 24V AC and DC
- Connection for 4 sensors normally open/ normally closed
- Monitoring of connected contactors (EDM)
- Very compact design
- 1 relay safety output potential-free SIL3/PLe/Kat.4
- 1 control output changeover contact potential-free
- LEDs for status and error indication

Technical drawing

IMAGE 1/2

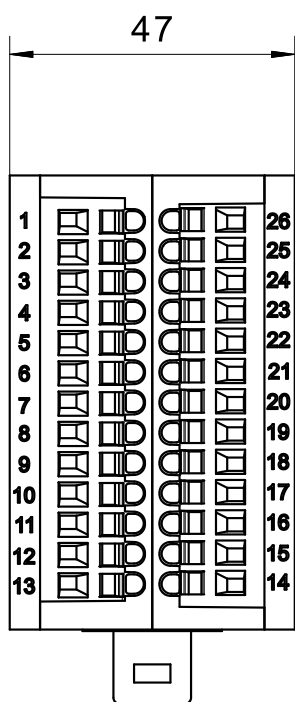
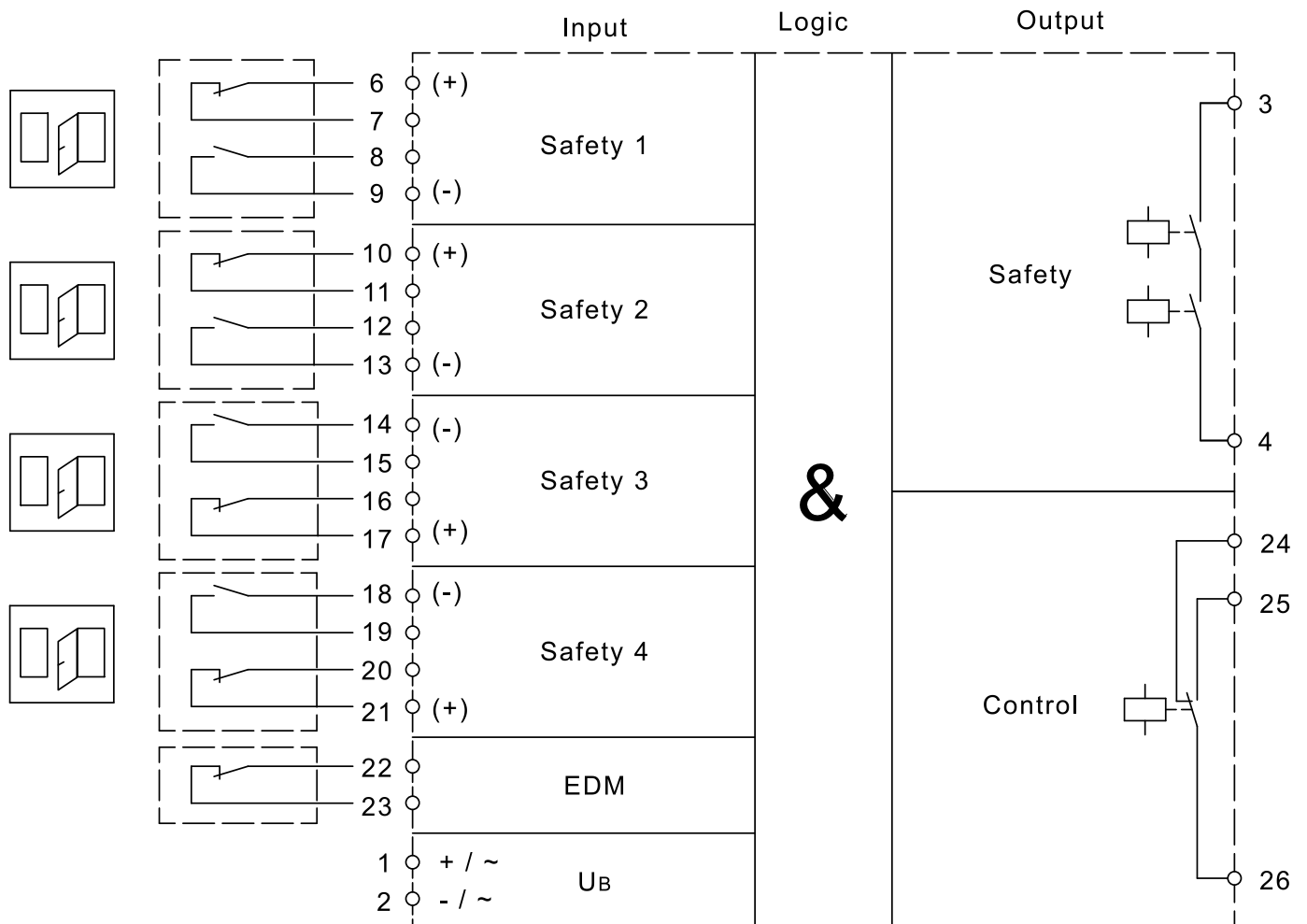


IMAGE 2/2

4621273E - example for PLe wiring



Article characteristics

| Attribute | 4621273E |
|--|---------------|
| Max. switching voltage at safety output | 30 V DC |
| Max. switching voltage at control output | 30 V DC |
| Max. switching voltage at safety output | 250 V AC |
| Max. switching voltage at control output | 250 V AC |
| Max. switching current at safety output | 4 A |
| Max. switching current at control output | 3 A |
| Max. switching power at safety output | 120 W |
| Max. switching power at control output | 90 W |
| Max. switching power at safety output | 1000 VA |
| Max. switching power at control output | 750 VA |
| Number of relay safety outputs | 1 |
| Number of relay control outputs | 1 |
| Number of redundant safety inputs | 4 |
| Stop category 0 (STO) nach IEC 61800-5-2 | yes |
| Stop category 1 (SS1) nach IEC 61800-5-2 | no |
| EDM/start input | yes |
| Start function | automatic |
| Utilization category | AC-15 / DC-13 |
| Operating voltage min. | 21.6 V DC |
| Operating voltage max. | 26.4 V DC |
| Operating voltage min. | 21.6 V AC |
| Operating voltage max. | 26.4 V AC |
| Current consumption | 200 mA |
| Power consumption | 5.28 W |

Article characteristics

| Attribute | 4621273E |
|--|------------------------------|
| Cross-short detection | yes |
| LED display | Yes |
| Operating time | 10000 ms |
| Min. switching voltage at safety output | 10 V DC |
| Min. switching voltage at safety output | 10 V AC |
| Min. switching current at safety output | 0.01 A |
| Min. switching power at safety output | 0.1 W |
| Min. switching power at safety output | 0.1 VA |
| Turn-on delay (ton) | 100 ms |
| Turn-off delay (toff) | 50 ms |
| Max no operating cycles at 0.5A switching current (ohmic load) | 370000 |
| Max no operating cycles at 3A switching current (ohmic load) | 180000 |
| Overvoltage category | III |
| Fuse operating voltage | 1A fast |
| Fuse safety output | 4A slow blow |
| Internal electronic fuse | no |
| Contact form | NO/NC |
| Power consumption | 5.28 VA |
| PL acc. to EN ISO 13849-1 | e |
| SIL acc. to IEC 61508 | 3 |
| SIL CL acc. to IEC 62061 | 3 |
| PFHD according to IEC 61508 | 5,77 x 10 ⁻¹⁰ 1/h |
| Category acc. to EN ISO 13849-1 | 4 |
| Mission time in years | 20 a |
| Hardware fault tolerance (HFT) according to IEC 61508 | 1 |
| Dimensions | 75 x 47 x 92 mm (H/B/T) |
| Housing material | PBT GF30 |

Article characteristics

| Attribute | 4621273E |
|--------------------------------------|---|
| Housing colour | schwarz |
| Protection class | IP20 DIN EN 60529 |
| Protection class, installation space | IP54 DIN EN 60529 |
| Operating temperature min. | 0 °C |
| Max. operating temperature | 55 °C |
| Min. storage temperature | -25 °C |
| Max. storage temperature | 70 °C |
| Shock resistance (Norm) | 30 g / 11 ms |
| Continuous shock resistance (Norm) | 10 g / 16 ms |
| Vibration resistance (Norm) | 10...55 Hz; 0.5mm; 5g |
| Relative humidity | 5 - 85 % |
| Air pressure | 860 - 1060 hPa |
| Delta tmax | 0.5 °C/min |
| Mounting type | Mounting rail |
| Weight | 250 g |
| Installation | arbitrary |
| Spring-type terminals | yes |
| Pluggable connection terminals | no |
| Min. connection cross section | 0.14 mm² |
| Max. connection cross section | 2.5 mm² |
| Certified in accordance with | EN ISO 13849-1 IEC 61508 IEC 62061 UL 508 |
| CE label | yes |