



## 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

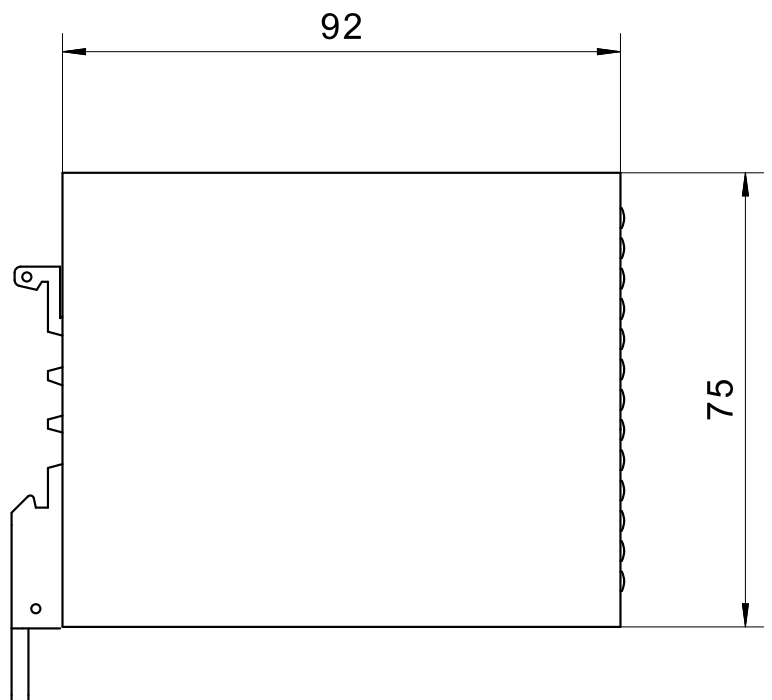
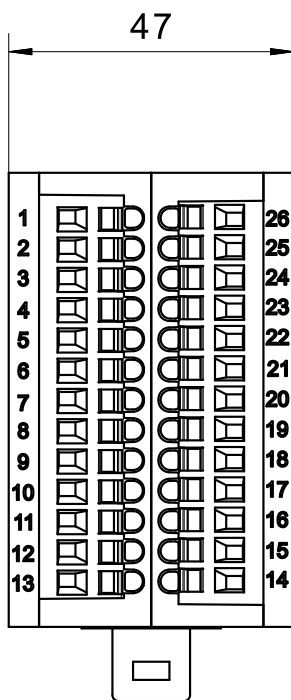
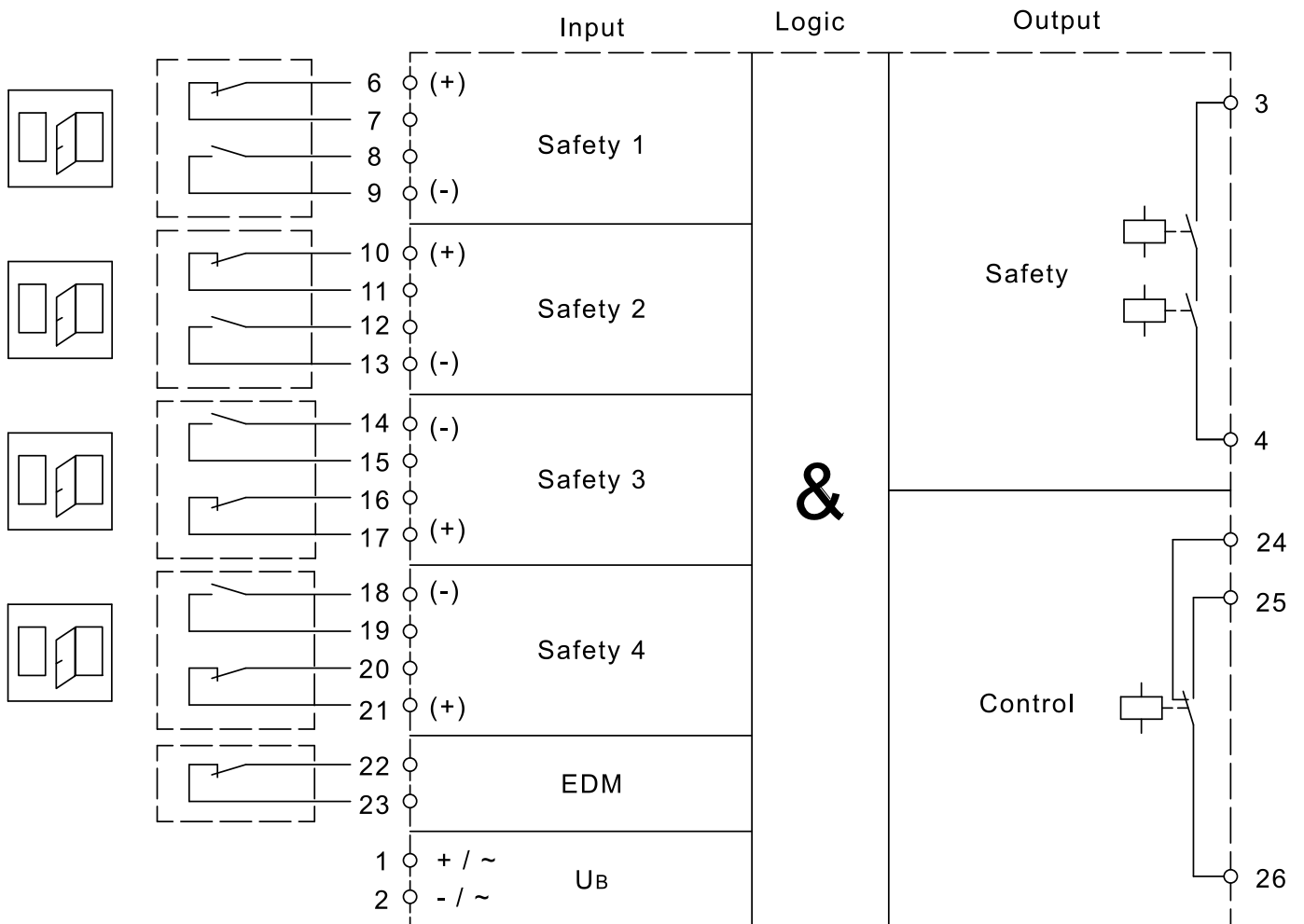


IMAGE 2/2

### 4621273E - example for PLe wiring



## Article characteristics

Attribute	4621273E	4621213E	ED4621213E	ED4621273E
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	250 mA		-
Power consumption	5.28 W	6.6 W		-
Cross-short detection	yes			-

Attribute	4621273E	4621213E	ED4621213E	ED4621273E
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 <sup>-10</sup> 1/h	5,82 x 10 <sup>-10</sup> 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		-	
Housing colour	schwarz		-	
Protection class	IP20 DIN EN 60529		-	

Attribute	4621273E	4621213E	ED4621213E	ED4621273E
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		-	