

Safety controller unit

For 2 to 16 safety sensors

470111B1 /
470115B1

- + PL_d in acc. with EN ISO 13849-1/SIL_{CL} 2 in acc. with EN IEC 62061
- + Two safety outputs and external contactor monitoring
- + For sensors with 2-N.O. system
- + Connection via codable pluggable 4-pin screwless terminals
- + Optional double terminals or screw terminals available
- + Thin design
- + Up to 16 sensors can be connected via an external interface
- + LED status display
- + Automatic start or manual start via start push button



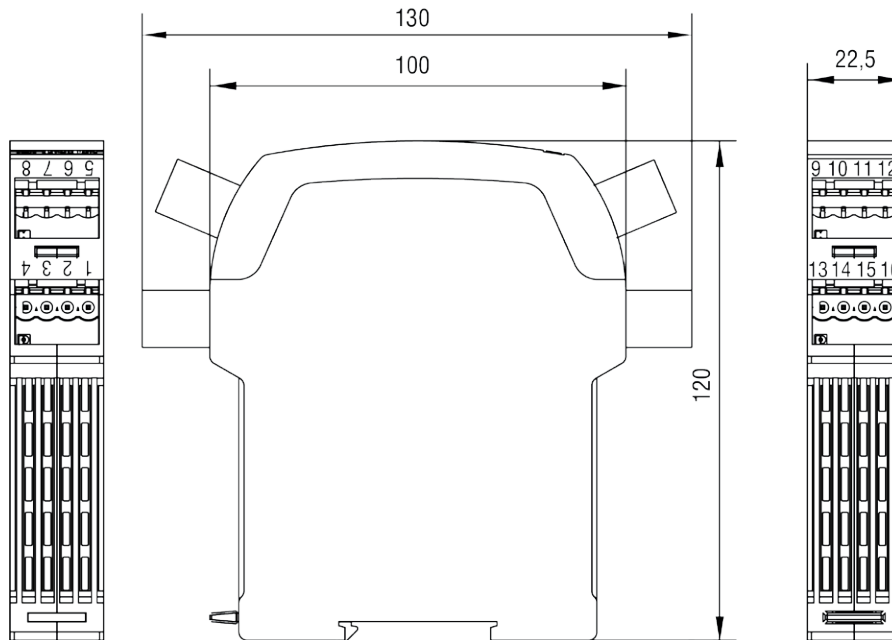
Use

Types 470111B1 and 470115B1 are used for evaluating the signals from safety sensors. All elobau sensors with a 2-N.O. system can be connected to the unit. This unit can be used in any machine safety application requiring SIL 2, PL d.

Variants

Types 470111B1 and 470115B1 differ in respect to their operating voltages of 24 V DC or 100–240 V AC. Available with optional double terminals or screw terminals.

Mechanical assembly



Installation dimensions

Housing	120 x 100 x 22.5 mm (without terminals)
	120 x 130 x 22.5 mm (with terminals)
Installation	On DIN rail TH35 acc. to DIN EN 60715

Key mechanical data

Technology	Control unit for 2-16 2-N.O. sensors*
Material	PA (polyamide), PC (polycarbonate)
Weight	470111B1: approx. 150 g
	470115B1: approx. 240 g
Operating temperature range	0°C to +55°C
Storage temperature	-25°C to +85°C
Housing protection class	IP30 DIN EN 60529
Color	Black

* 2 sensors can be directly connected, and up to 16 with an additional interface

Approvals and safety-relevant technical specifications

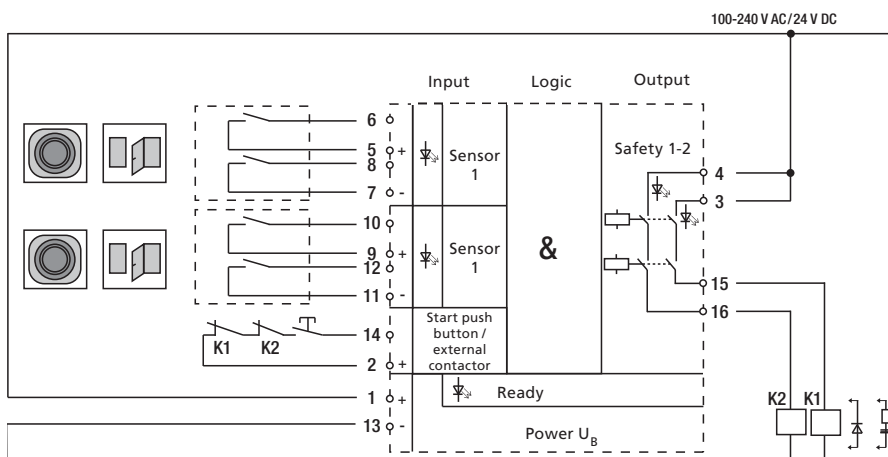
Safety-relevant technical specifications	SIL _{CL} 2 (EN IEC 62061)
	PL _d (EN ISO 13849-1)
	Category 3 (EN ISO 13849-1)
	PFH _D 470111B1: 1.85e ⁻⁸ 1/h (EN IEC 62061)
	PFH _D 470115B1: 3.05e ⁻⁸ 1/h (EN IEC 62061)
	Service life: 20 years
Approvals	TÜV/ETL (470111B1 only)

Key electrical data

	470111B1	470115B1
Operating voltage	24 V DC ±10%	100–240 V AC
Current consumption	Max. 120 mA	Max. 40 mA
Status indication	3x LED	
Monitoring	External contactor/start push button	
Operating time	3 s	

	Safety output 1+2
Switching voltage	250 V AC / 30 V DC
Switching current	3 A
Switching power	750 VA / 90 W

Wiring



Circuit diagram in de-energized state. Sensors not actuated.

The relevant corresponding technical documents will be supplied with the product.

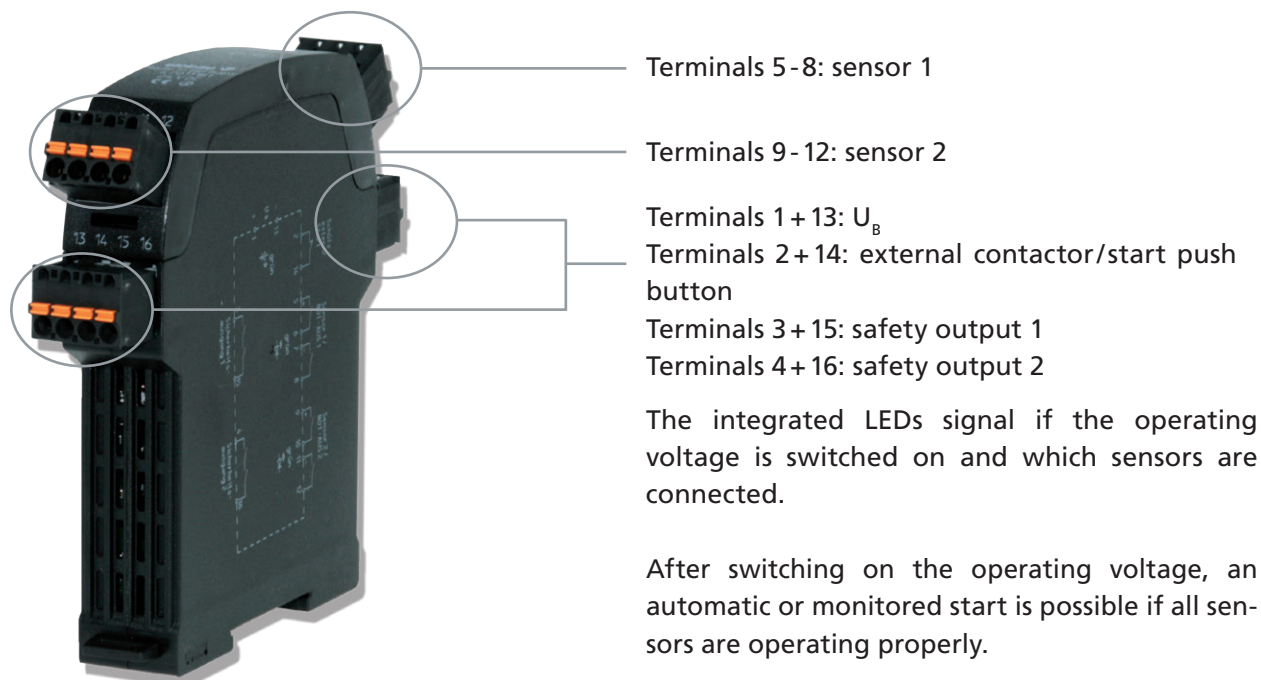
Certain product descriptions can be similar therefore please ensure that you have the latest version of documentation for your specific product prior to any use. elobau reserves the right to change technical data and documentation without notice.

Connection type

Connection terminal	0.2-2.5 mm ²
Double terminal (optional)	0.2-1.5 mm ²
Screw terminal (optional)	0.2-2.5 mm ²



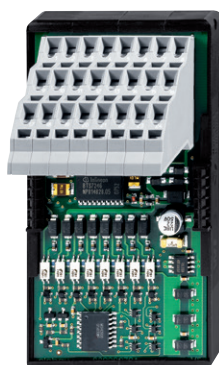
The pluggable screwless terminals can be coded via coding pins. If the device is then exchanged, the plug connections cannot be confused during installation. Optionally, double terminals or screw terminals are also available (see adjacent figure).



Two sensors can be connected directly to the control unit. When using the following elobau interfaces, the monitoring can be extended to up to 16 sensors:

363V99

363.97



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Specifications of your safety controller unit

Version

- 470111B1 ($U_B = 24 \text{ V DC}$)
- 470115B1 ($U_B = 100 - 240 \text{ V AC}$)

Terminals

- Standard
- Double terminals*
- Screw terminals*

* Additional costs accrue

