

EKS2-E-PN-M-H1-170904 (Order no. 170904)

Evaluation unit EKS2

- ▶ Evaluation unit of the Electronic-Key-System EKS2
- ▶ Suitable for selection of operation mode with safety level PL e
- ▶ 1-of-n safety outputs
- ▶ PROFINET connection with integrated RT switch
- ▶ Connection for read unit
- ▶ Mounting in panel or control cabinet
- ▶ LED indicator



PROFINET for easy integration into the network

PROFINET is used to send the data to the control system. With the integrated PROFINET RT switch, the EKS2 evaluation unit can be easily integrated into the existing control environment.

1-of-n safety outputs for the highest safety level PL e

The 1-of-n safety outputs are directly connected to a safe control system and evaluated there. This allows for the selection of a safe operating mode on the highest safety level, PL e. The device has dedicated short circuit monitoring.

Mounting

The evaluation unit can be installed either in the panel or in the control cabinet. An optional mounting rail adapter is available for mounting in the control cabinet.

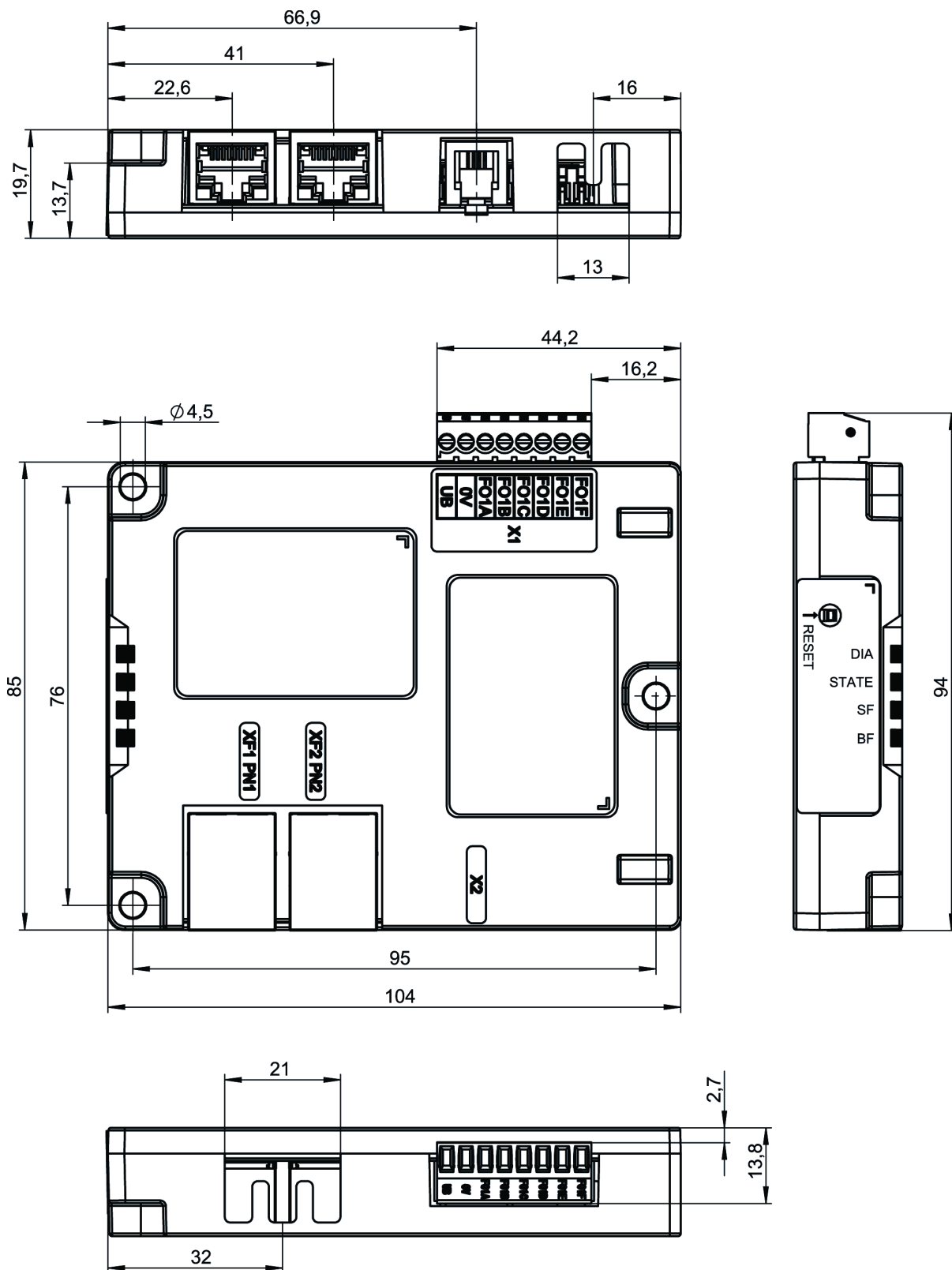
Accessories included

- ▶ Plug-in screw terminals

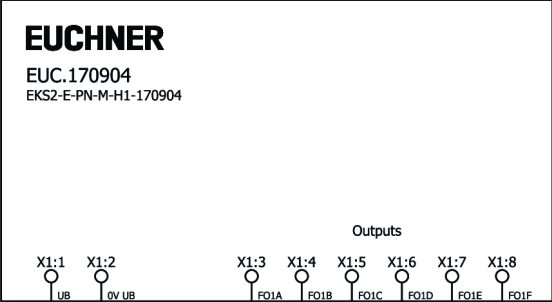
Accessories required (not included)

- ▶ Assembly screws
- ▶ Connecting cable for connecting the read unit to the evaluation unit

Dimensional drawings



Connection examples



Technical data

Electrical connection values

Connection cross section	
X1 (screw terminal, 8-pole)	0.05 ... 1.5 mm ²
Operating voltage DC	
U _B	24 V DC -15% ... +20% regulated, residual ripple<5%, PELV
EMC protection requirements	
	EN 61000-6-2, EN 61000-6-4
Current consumption	
without load	max. 150 mA
Safety outputs FO1X	
Output type	
	Semiconductor outputs, p-switching, short circuit-proof
Output voltage	
LOW U(FO1X)	0 ... 1 V DC
HIGH U(FO1X)	U _B -1.5V ... U _B V DC (Values at a switching current of 50 mA without taking into account the cable lengths.)
Utilization category	
DC-13	DC-13 24 V 50 mA (Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.)
Off-state current I _r	
	max. 0.25 mA
Switching current	
per safety output	1 ... 50 mA

Mechanical values and environment

Connection type	
according to IEC 61076-3-117, variant 14, screened, Profinet I/O cable, at least cat. 5e	RJ45 (XF2 (The document PROFINET 'Cabling and Interconnection Technology' from the PNO aids in the correct selection of cables.))
according to IEC 61076-3-117, variant 14, screened, Profinet I/O cable, at least cat. 5e	RJ45 (XF1 (The document PROFINET 'Cabling and Interconnection Technology' from the PNO aids in the correct selection of cables.))
Cable length	
	max. 100 m

Mounting type	Screws (Alternatively plug-in with additional mounting rail adapter)
Degree of protection	IP20
Ambient temperature	-20 ... +55 °C
Material	
	Housing PA66 GF40
Read unit interface	
Connection type	Male plug
Cable length	max. 50 m
Number of pins	5
Insertion cycles	10

Characteristic values according to EN ISO 13849-1 and EN IEC 62061

	PL	Maximum SIL	PFH _D	Category	Mission time
Safe switching and monitoring of the selected operating mode	PL e	3	6.44x10 ⁻⁹	3	20 y

Miscellaneous

Component	Operation only with UL Class 2 power supply or equivalent measures
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Interface

Bus data protocol	PROFINET
Data rate	10/100 Mbit/s
Date interface	Ethernet (IEEE 802.3)

Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/170904/?#downloads-tab>







Ordering data

Ordernumber	170904
Item designation	EKS2-E-PN-M-H1-170904
Gross weight	0,149kg
Customs tariff number	85365019000
ECLASS	27-39-90-90 Property, access monitor (other, unspecified)

Accessories


Connection material

Connecting cable for connecting the read unit to the evaluation unit EKS2

	173577 C-RJ9-04x015PU0,50-RJ9-173577	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 0.5 m
	173580 C-RJ9-04x015PU10,0-RJ9-173580	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 10 m
	173579 C-RJ9-04x015PU05,0-RJ9-173579	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 5 m
	173578 C-RJ9-04x015PU02,0-RJ9-173578	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 2 m
	173582 C-RJ9-04x015PU15,0-RJ9-173582	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 15 m
	173583 C-RJ9-04x015PU20,0-RJ9-173583	<ul style="list-style-type: none"> ▶ RJ9 plug ▶ PUR cable ▶ Suitable for drag chain ▶ Cable length 20 m


EKS2

EKS2 Programming Station

	172018 EKS2-P-USB-N-I1B0-C1-172018	<ul style="list-style-type: none"> ▶ For reading and writing EKS and EKS2 Electronic-Keys ▶ Connection to standard PC via the USB-C interface ▶ LED indicator
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EKS2 read unit

Read unit EKS2 with holding clip

	170915 EKS2-R-I1A1-B1-170915	<ul style="list-style-type: none"> ▶ Read unit for the Electronic-Key-System EKS2 ▶ Suitable for installation in standard mounting hole \varnothing 22.5 mm ▶ Degree of protection IP65/IP67/IP69/IP69K ▶ LED indicator ▶ With holding clip for the Electronic-Key ▶ Cable exit bottom
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173728
EKS2-R-I1A3-B1-173728

- ▶ Read unit for the Electronic-Key-System EKS2
- ▶ Suitable for installation in standard mounting hole \varnothing 22.5 mm
- ▶ Degree of protection IP65/IP67/IP69/IP69K
- ▶ LED indicator
- ▶ With holding clip for the Electronic-Key
- ▶ Cable exit top



173727
EKS2-R-I1A2-B1-173727

- ▶ Read unit for the Electronic-Key-System EKS2
- ▶ Suitable for installation in standard mounting hole \varnothing 22.5 mm
- ▶ Degree of protection IP65/IP67/IP69/IP69K
- ▶ LED indicator
- ▶ With holding clip for the Electronic-Key
- ▶ Cable exit left



173729
EKS2-R-I1A4-B1-173729

- ▶ Read unit for the Electronic-Key-System EKS2
- ▶ Suitable for installation in standard mounting hole \varnothing 22.5 mm
- ▶ Degree of protection IP65/IP67/IP69/IP69K
- ▶ LED indicator
- ▶ With holding clip for the Electronic-Key
- ▶ Cable exit right

Read unit EKS2 without holding clip



170919
EKS2-R-I1B1-B1-170919

- ▶ Read unit for the Electronic-Key-System EKS2
- ▶ Suitable for installation in standard mounting hole \varnothing 22.5 mm
- ▶ Degree of protection IP65/IP67/IP69/IP69K
- ▶ LED indicator
- ▶ Without holding clip for the key
- ▶ Any installation position

Electronic-Key

EKS2 Electronic-Key



168432
EKS2-K-K-B-D2-RD-168432

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color red



168437
EKS2-K-K-B-D2-WH-168437

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color white



168434
EKS2-K-K-B-D2-BU-168434

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color blue



168438
EKS2-K-K-B-D2-OG-168438

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color orange



168435
EKS2-K-K-B-D2-GN-168435

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color: green



168436
EKS2-K-K-B-D2-YE-168436

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color yellow



168433
EKS2-K-K-B-D2-BK-168433

- ▶ Electronic-Key for the Electronic-Key-System EKS2
- ▶ Security provided by MIFARE DESfire® transponder with AES encryption
- ▶ Color black

Mounting accessories

Mounting rail adapter for evaluation unit EKS2



169829
AM-SET-PS-169829

- ▶ For mounting the evaluation unit EKS2 in the control cabinet
- ▶ Suitable for DIN mounting rail TS35 35 mm