



FX3-CPU230002

Flexi Soft

SAFETY CONTROLLERS

SICK
Sensor Intelligence.

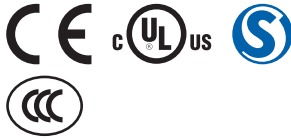


Ordering information

Number of EFI interfaces	Flexi Link	Automatic Configuration Recovery (ACR)	Type	Part no.
2	✓	✓	FX3-CPU230002	1058999

The system plug has to be ordered separately. For details, see "Accessories".

Other models and accessories → www.sick.com/Flexi_Soft



Detailed technical data

Features

Module	Main module
Configuration method	Via software (Flexi Soft Designer)
Note	The system plug has to be ordered separately. For details, see "Accessories".
Items supplied	Main module without system plug Terminal plug spring for EFI interface Safety instruction Operating instructions for download

Safety-related parameters

Safety integrity level	SIL3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	1.69 x 10 ⁻⁹ (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)

Functions

Safe SICK device communication	✓
Safe networking	
Flexi Link	✓
Automatic Configuration Recovery (ACR)	✓

Interfaces

System connection	System plug ¹⁾
Number of EFI interfaces	2
Connection type	Plug-in spring terminals
Configuration and diagnostics interface	RS-232 (M8 female connector, 4-pin)

¹⁾ The system plug has to be ordered separately. For details, see "Accessories".

Electrical data

Protection class	III (EN 61140)
Type of voltage supply	PELV or SELV ¹⁾
Supply voltage V_s	24 V DC (16.8 V DC ... 30 V DC)
Internal power consumption	≤ 2.5 W
Overvoltage category	II (EN 61131-2)
Switch-on time	≤ 18 s

¹⁾ The current of the power supply that powers the main unit must be limited to a maximum of 4 A, either through the power supply itself or a fuse.

Mechanical data

Dimensions (W x H x D)	22.5 mm x 96.5 mm x 120.6 mm
Weight	119 g (± 5 %)

Ambient data

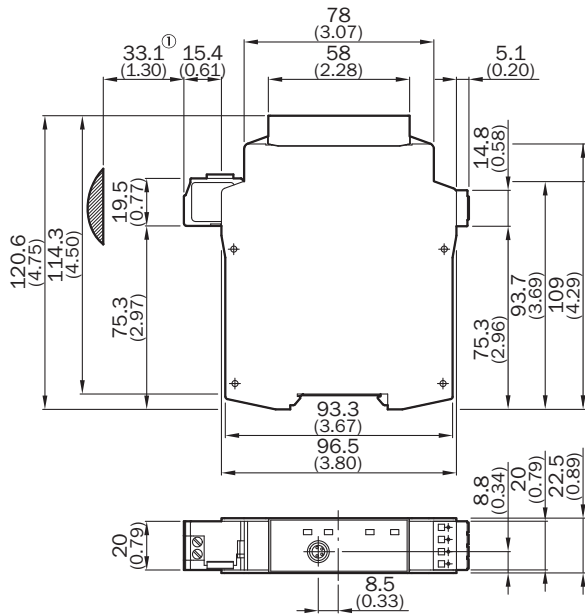
Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	-25 °C ... +55 °C
Storage temperature	-25 °C ... +70 °C
Air humidity	≤ 95 %, Non-condensing

Classifications

eCl@ss 5.0	27243001
eCl@ss 5.1.4	27243101
eCl@ss 6.0	27243101
eCl@ss 6.2	27243101
eCl@ss 7.0	27243101
eCl@ss 8.0	27243101
eCl@ss 8.1	27243101
eCl@ss 9.0	27243101
eCl@ss 10.0	27243101
eCl@ss 11.0	27243101
eCl@ss 12.0	27243101
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
UNSPSC 16.0901	32151705

Dimensional drawing (Dimensions in mm (inch))




FX3-CPU1, FX3-CPU2





① Approximate connector range

Recommended accessories

Other models and accessories → www.sick.com/Flexi_Soft

Brief description	Type	Part no.
Plug connectors and cables		
 <p>For FX3-CPU2 and FX3-CPU3, System plug: Voltage supply of the Flexi Soft system, storage of system configuration (including EFI-compatible devices), and automatic configuration of connected EFI-compatible safety sensors (automatic configuration recovery)</p>	FX3-MPL100001	1047162
Others		
 <ul style="list-style-type: none"> Sub product family: SIM1000 FX Product category: Programmable devices Supported products: 2D and 3D LiDAR sensors, pico- und midiCam series, incremental and absolute encoders, Image-based code readers, Fixed mount barcode scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors, Flexi Soft main module Processor: Dual-core ARM Cortex-A9 CPU with NEON accelerator Toolkit: SICK algorithm API Further functions: FPGA for I/O handling Connections: Terminal block 1-4, Ethernet, FLEXBUS+ Enclosure rating: IP20 	SIM1000-0POB110	1097817
 <p>Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m</p>		On request
<p>Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 10 m</p>		On request

	Brief description	Type	Part no.
Safety switching amplifier			
	<ul style="list-style-type: none"> • Applications: Output expansion module for OSSDs • Compatible sensor types: Safety sensors with OSSDs • Connection type: Front connector with spring terminals • Restart interlock: no • External device monitoring (EDM): Via path • Outputs: 2 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe) • Housing width: 18 mm 	RLY3-OSSD100	1085343
	<ul style="list-style-type: none"> • Applications: Output expansion module for OSSDs • Compatible sensor types: Safety sensors with OSSDs • Connection type: Front connector with spring terminals • Restart interlock: no • External device monitoring (EDM): Via path • Outputs: 4 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe), 1 signaling current path (not safe) • Housing width: 28 mm 	RLY3-OSSD400	1099971

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com