



SICK Sensor Intelligence.

SAFETY CONTROLLERS

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#### Ordering information

Number of EFI interfaces	Protective coating	Туре	Part no.
0	1	FX3-CPU000010	1050615

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

Protective coating for more challenging ambient conditions (e.g., resistance to sulfur).

Other models and accessories -> www.sick.com/Flexi\_Soft



#### Detailed technical data

#### Features

Module	Main module
Configuration method	Via software (Flexi Soft Designer, Safe EFI-pro System: Safety Designer)
Note	The system plug has to be ordered separately. For details, see "Accessories".
Specialty	Protective coating for more challenging ambient conditions (e.g., resistance to sulfur).
Items supplied	Main module without system plug Safety instruction Operating instructions for download

#### Safety-related parameters

Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH <sub>D</sub> (mean probability of a dangerous fail- ure per hour)	1.07 x 10 <sup>-9</sup> (EN ISO 13849)
T <sub>M</sub> (mission time)	20 years (EN ISO 13849)
Interfaces	
System connection	System plug <sup>1)</sup>
Number of EFI interfaces	0

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)

<sup>1)</sup> 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.

SAFETY CONTROLLERS

Supply voltage V <sub>S</sub>	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

<sup>1)</sup> 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	111 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
Single gas resistance (sulfur dioxide)	25 ppm, 21 days, 25 °C (IEC 60068-2-42 - Kc)
Mixed gas resistance	100 ppb - H <sub>2</sub> S 2000 ppb - NO <sub>2</sub> 100 ppb - Cl <sub>2</sub> 2,000 ppb - SO <sub>2</sub> , 21 days, 30 °C (IEC 60068-2-60 Ke)

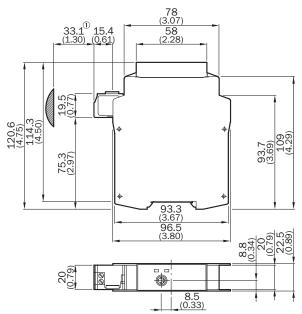
#### Classifications

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

SAFETY CONTROLLERS

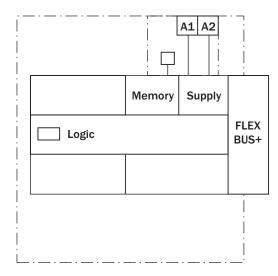
### Dimensional drawing (Dimensions in mm (inch))

FX3-CPU0



① Approximate connector range

#### **Connection diagram**



### **Recommended accessories**

Other models and accessories → www.sick.com/Flexi\_Soft

	Brief description	Туре	Part no.
Others			
P	<ul> <li>Description: System plug: Voltage supply of the Flexi Soft system and storage of system configuration (without EFI-compatible devices). With protective coating for more challenging ambient conditions (e.g., resistance to sulfur).</li> <li>Connection systems: Screw-type terminals</li> <li>Note: Protective coating for more challenging ambient conditions (e.g., resistance to sulfur).</li> </ul>	FX3-MPL000011	1050619
	<ul> <li>Sub product family: SIM1000 FX</li> <li>Product category: Programmable devices</li> <li>Supported products: 2D and 3D LiDAR sensors, 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</li> <li>Processor: Dual-core ARM Cortex-A9 CPU with NEON accelerator</li> <li>Toolkit: SICK algorithm API</li> <li>Further functions: FPGA for I/O handling</li> <li>Connections: Terminal block 1-4, Ethernet, FLEXBUS+</li> <li>Enclosure rating: IP20</li> </ul>	SIM1000-0P0B110	1097817
	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Unshielded, Configuration cable with integrated RS-232 transducer on USB for connecting a sensor configuration connection (M8, 4-pin) to the USB interface of a PC</li> </ul>	DSL- 8U04G02M025KM1	6034574
	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Unshielded, Configuration cable with integrated RS-232 transducer on USB for connecting a sensor configuration connection (M8, 4-pin) to the USB interface of a PC</li> </ul>	DSL- 8U04G10M025KM1	6034575
Safety switchi	ng amplifier		
	<ul> <li>Applications: Output expansion module for OSSDs</li> <li>Compatible sensor types: Safety sensors with OSSDs</li> <li>Connection type: Front connector with spring terminals</li> <li>Restart interlock: no</li> <li>External device monitoring (EDM): Via path</li> <li>Outputs: 2 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe)</li> <li>Housing width: 18 mm</li> </ul>	RLY3-OSSD100	1085343
	<ul> <li>Applications: Output expansion module for OSSDs</li> <li>Compatible sensor types: Safety sensors with OSSDs</li> <li>Connection type: Front connector with spring terminals</li> <li>Restart interlock: no</li> <li>External device monitoring (EDM): Via path</li> <li>Outputs: 4 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe), 1 signaling current path (not safe)</li> <li>Housing width: 28 mm</li> </ul>	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



Online data sheet

