Product data sheet

FX3-CPU000000

Safe EFI-pro System

SAFETY SYSTEMS FOR AGVS AND AMRS

SICK
Sensor Intelligence.

Ordering information

	Number of EFI interfaces	Type	Part no.
Main modules	0	FX3-CPU000000	1043783

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

Other models and accessories ➜ www.sick.com/Safe_EFI-pro_System

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”.
Items supplied	Main module without system plug 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)	1.07×10^{-9} (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)

Interfaces

System connection	System plug [1]
Number of EFI interfaces	0
Connection type	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]

[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.

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	111 g (± 5 %)

Ambient data

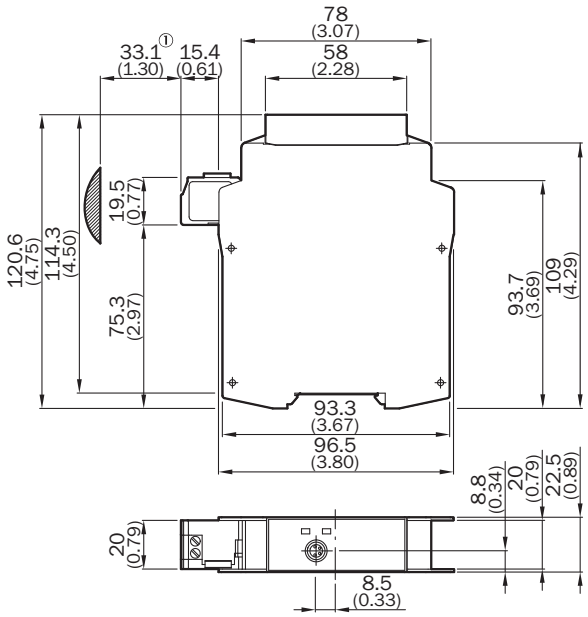
Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	–25 °C ... +55 °C
Storage temperature	–25 °C ... +70 °C
Air humidity	10 % ... 95 %, Non-condensing

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

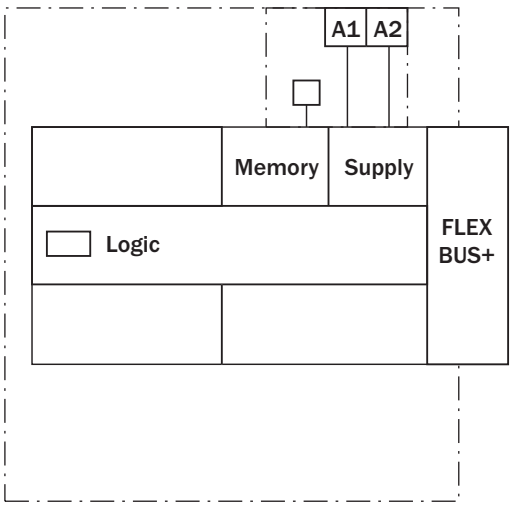
Dimensional drawing (Dimensions in mm (inch))

FX3-CPU0



① Approximate connector range

Connection diagram



Recommended accessories

Other models and accessories ➜ www.sick.com/Safe_EFI-pro_System

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m	DSL-8U04G02M025KM1	6034574
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 10 m	DSL-8U04G10M025KM1	6034575
	For FX3-CPU0 and FX3-CPU1, System plug: Voltage supply of the Flexi Soft system and storage of system configuration (without EFI-compatible devices)	FX3-MPL000001	1043700
Others			
	• **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	SIM1000-0P0B110	1097817
Safety switching amplifier			
	• **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	RLY3-0SSD100	1085343
	• **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	RLY3-0SSD400	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