Product data sheet



FX3-XTDI80002

Safe EFI-pro System

SAFETY SYSTEMS FOR AGVS AND AMRS

SICK
Sensor Intelligence.



Ordering information

Number of safety inputs	Number of test outputs	Type	Part no.
8	8	FX3-XTDI80002	1044124

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

Detailed technical data

Features

Module	I/O module
Configuration method	Via software (Flexi Soft Designer, Safe EFI-pro System: Safety Designer)

Safety-related parameters

Safety integrity level	SIL 3 (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)	0.4×10^{-9} (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)

Functions

Flexi Loop-compatible	✓

Interfaces

Number of safety inputs	8
Number of test outputs	8
Connection type	Plug-in spring terminals

Electrical data

Protection class	III (EN 61140)
Voltage supply	Via FLEXBUS+
Internal power consumption	≤ 2 W [1]
Inputs	
Input voltage HIGH	13 V DC ... 30 V DC
Input voltage LOW	–5 V DC ... 5 V DC

[1] Via FLEXBUS+, without streams at test outputs.

[2] On each of the two test pulse generators. This makes max. 8 testable safe series connections possible per module, each with max. 30 mA.

Input current HIGH	2.4 mA ... 3.8 mA
Input current LOW	–2.5 mA ... 2.1 mA
Test outputs	
Voltage supply	Via FLEXBUS+
Type of output	PNP semiconductors, short-circuit protected
Test pulse generator	2
Output voltage HIGH	15 V DC ... 30 V DC
Output current	≤ 120 mA [2]

[1] Via FLEXBUS+, without streams at test outputs.

[2] On each of the two test pulse generators. This makes max. 8 testable safe series connections possible per module, each with max. 30 mA.

Mechanical data

Dimensions (W x H x D)	22.5 mm x 96.5 mm x 120.6 mm
Weight	139 g (± 5 %)

Ambient data

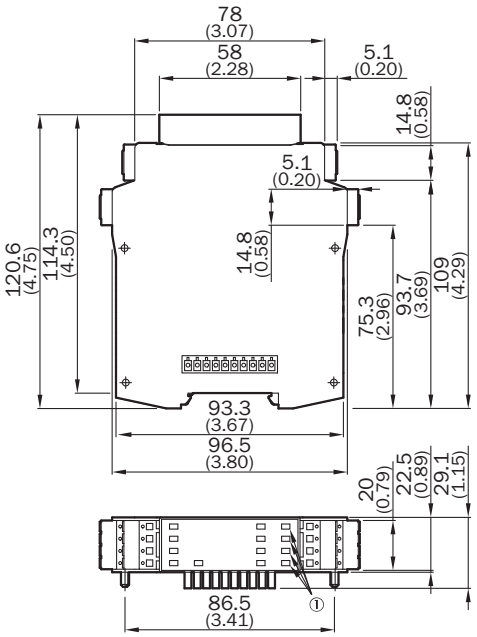
Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	–25 °C ... +55 °C
Storage temperature	–25 °C ... +70 °C
Air humidity	≤ 95 %, Non-condensing

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-XTIO, FX3-XTDI



① Only valid for FX3-XTIO

Recommended accessories

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

	Brief description	Type	Part no.
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

	Brief description	Type	Part no.
	• **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.”

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