Data sheet



FLX3-XTDO100

Flexi Compact

SAFETY CONTROLLERS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
FLX3-XTDO100	1085354

Other models and accessories ➜ www.sick.com/Flexi_Compact

Detailed technical data

Features

Module	I/O module
Description	The I/O module is a safe digital input/output expansion module.
Safety inputs	8
Safety outputs	8
Configuration method	Via software (Safety Designer)
Items supplied	I/O module Front connector with 18 terminals Safety instruction Operating instructions for download

Safety-related parameters

Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	4×10^{-9} [1]
T_M (mission time)	20 years (ISO 13849-1)

[1] Calculated value when using dual-channel safety inputs and safety outputs with test pulse. Maximum 9×10^{-9} with single-channel safety inputs and safety outputs without test pulse. For details, see the operating instructions.

Functions

Monitoring of the connected safety devices	✓
Switching of the connected safety devices	✓
Fast shut-off	✓

Interfaces

Connection type	Front connector with spring terminals
Front connector	1 front connector with 18 terminals

Safety inputs	8
Safety outputs	8
Display elements	LEDs

Electrical data

Protection class	III (EN 61140)
Interference resistance	EN 61000-6-2
Interference emission	EN 61000-6-4
Voltage supply	The voltage supply of the extension modules is maintained via the backplane bus
Supply voltage V_S	24 V DC (16.8 V ... 30 V) [1]
Type of voltage supply	PELV or SELV [2]
Overvoltage category	II (EN 61131-2)
Power consumption at nominal voltage (without outputs)	2.4 W (DC)
Power loss	≤ 4.9 W

[1] Voltage supply of the safety outputs.
[2] The supply current must be limited externally to max. 4 A – either by the power supply unit used, or by means of a fuse.

Mechanical data

Dimensions (W x H x D)	14 mm x 124.7 mm x 85.5 mm
Contamination rating	2 (IEC 61010-1)
Control device type	Open device (IEC 61010-2-201)
Weight	111 g (± 5 %)
Mounting	Mounting on a 35 mm × 7.5 mm mounting rail in accordance with IEC 60715

Ambient data

Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	–25 °C ... +55 °C [1]
Storage temperature	–25 °C ... +70 °C
Air humidity	≤ 95 %, Non-condensing
Vibration resistance	1 g, 5 Hz ... 200 Hz (EN 60068-2-6)
Shock resistance	15 g, 11 ms (EN 60068-2-27)

[1] At altitudes up to 2,000 m above sea level For higher areas of application up to max. 4,000 m above sea level, see the operating instructions.

Certificates

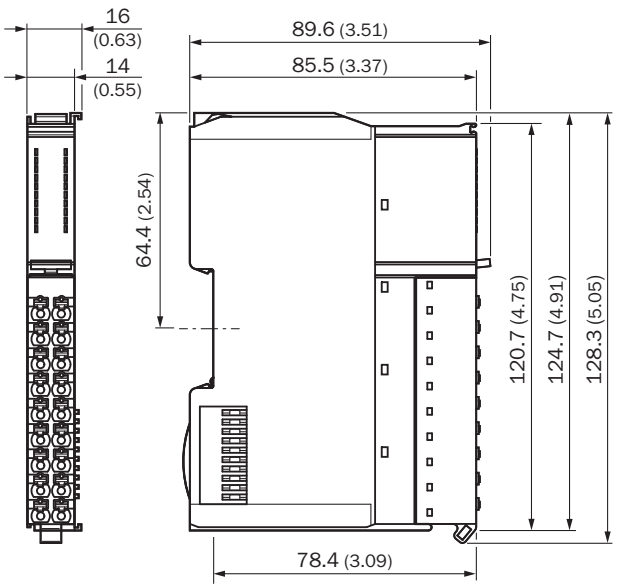
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China-RoHS	✓
UK-Type-Examination approval	✓
cULus certificate	✓
EAC certificate / DoC	✓
cTUVus certificate	✓
S Mark certificate	✓

EC-Type-Examination approval	✓
Third party certificate	✓

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

Dimensional drawing I/O modules



Dimensions in mm (inch)

Recommended accessories

Other models and accessories ➜ www.sick.com/Flexi_Compact

	Brief description	Type	part no.
Safety relays			
	• **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
	• **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

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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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