



Safety controllers  
Flexi Soft, main module, FX3-CPU1

FX3-CPU130002



**Model Name** > [FX3-CPU130002](#)  
**Part No.** > [1043784](#)



**At a glance**

- CPU0: Basic functions incl. RS-232 programming interface
- CPU1: CPU0 functions plus interface for advanced functions of SICK safety sensors
- CPU2: CPU1 functions plus backup function automatic configuration recovery (ACR)
- CPU3: CPU2 functions plus USB programming and Flexi Line interface
- Connection of up to 12 Flexi Soft expansion modules
- Connection of up to two Flexi Soft gateways

**Your benefits**

- System plug enables fast commissioning
- Less downtime since all status information can be transferred to every standard fieldbus system using Flexi Soft gateways
- Fast troubleshooting and minimum downtime due to real-time diagnostics
- Quick replacement of sensors due to automatic configuration recovery (ACR), which automatically configures newly connected sensors
- Fast, reliable communication among up to 32 Flexi Soft stations



**Safety-related parameters**

Safety integrity level:	SIL3 (IEC 61508) SILCL3 (EN 62061)
Category:	Category 4 (EN ISO 13849-1)
Performance level:	PL e (EN ISO 13849-1)
PFHd:	1.69 * 1E-09 (EN ISO 13849)
TM (mission time):	20 a (EN ISO 13849)

**Functions**

Restart interlock:	-
External device monitoring (EDM):	✓
Differentiation between man and material (muting):	✓
Safe SICK device communication via EFI/SDL:	✓
Flexi Link:	✓
Flexi Line:	-
Automatic Configuration Recovery (ACR):	-

**Mechanical data**

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

### Electrical data

Protection class: III (EN 61140)  
 Type of voltage supply: PELV or SELV <sup>1)</sup>  
 Supply voltage Vs: 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.

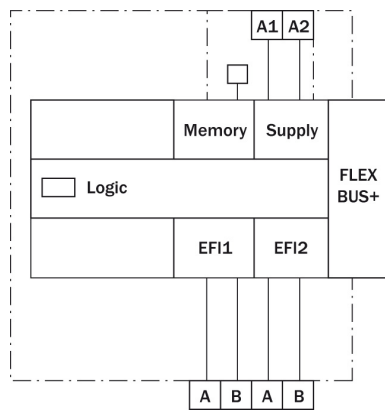
### Interfaces

System connection: System plug FX3-MPL000001  
 Connection type system plug: Screw-type terminals  
 Connection type EFI connection: Spring terminals  
 Number of EFI interfaces: 2  
 Configuration and diagnostics interface: RS-232

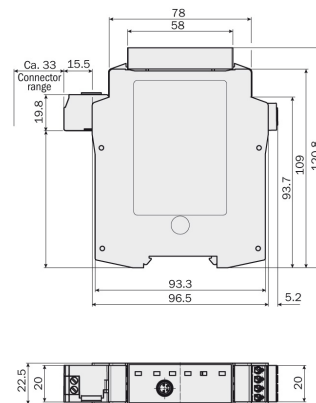
### Ambient data

Enclosure rating terminals: IP 20 (EN 60529)  
 Protection class housing: IP 40 (EN 60529)  
 Ambient operating temperature: -25 °C ... 55 °C  
 Storage temperature: -25 °C ... 70 °C  
 Air humidity: 10 % ... 95 %, non-condensing  
 Climate conditions according to: EN 61131-2 (55 °C ambient operating temperature, 95% rel. humidity)  
 Electromagnetic compatibility (EMC): Class A (EN 61000-6-2, EN 55011)  
 Vibration resistance: 1 g, 5 Hz ... 150 Hz (EN 60068-2-6)  
 3 g RMS, 10 Hz ... 500 Hz (EN 60068-2-64)  
 Shock resistance (continuous shock): 10 g, 16 ms (EN 60068-2-27)  
 Shock resistance (single shock): 30 g, 11 ms (EN 60068-2-27)

### Connection diagram



### Dimensional drawing



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