SIEMENS

Data sheet 3SU1400-1LL10-3BA1

SIRIUS ACT with PROFINET: Fail-safe interface module with 4 DI, 1 DQ (24 V DC), 1 AI (12-bit A/D resolution), 24 V DC, spring-type terminal, front plate mounting, 1 to 20 terminal modules connectable

Product brand name	SIRIUS ACT
Product designation	Fail-safe interface module for PROFINET
Product type designation	3SU1

Display

Display version	
• for diagnostic function: Supply voltage monitoring Power LED	Yes
• status Tx/Rx link	Yes

General technical data

Product function	
• Reverse polarity protection	Yes; With polarity change, DI1 ... DI4 may not be connected to (M) pole
• Diagnostics function	Yes
• Alarms	Yes
• I&M data	Yes; I&M0 ... I&M3
Firmware version	2.1.1
Hardware version	1
Configuration function with dataset	Yes

Software version with STEP 7 in the TIA Portal required	Integrated in TIA Portal Version 14 SP1 or higher (HSP for V13 and V14)
Number of units per rack maximum	20
Number of submodules per station maximum	24
Power loss [W] typical	0.67 W
Insulation voltage rated value	30 V
Degree of pollution	3
Type of voltage	
• of the operating voltage	DC
• of the input voltage	DC
Surge voltage resistance rated value	0.8 kV
Consumed current	
• maximum	100 mA
• Rated value	28 mA
Protection class IP	IP20
Reference code acc. to DIN EN 81346-2	K
Operating voltage rated value	20.4 V
I2t value	0.008 $A^2 \cdot s$

Supply voltage	
Supply voltage at DC Rated value	24 V

Communication/ Protocol	
Protocol is supported	
• PROFINET IO protocol	Yes
• PROFIsafe protocol	Yes
Product function at the Ethernet interface	
• Autocrossover	Yes
• Autonegotiation	Yes
Protocol at the 1st interface	
• media redundancy protocol	No
Product function at the 1st interface	
• PROFINET IO device	Yes
Product function of the PROFINET IO device is supported PROFINET system redundancy	No
Service as PROFINET IO device	
• prioritized startup	No
• isochronous mode	No
• supports Shared Device	No
• supports PROFIenergy	No
• IRT	No
• MRP	No
• MRPD	No
Service for open IE communication	

• LLDP	Yes
• SNMP	Yes
• TCP/IP	Yes
GSD version/revision with PROFINET required	V2.3
Transmission mode for Industrial Ethernet	PROFINET with 100 Mbps full duplex (100BASE-TX)
Network load class acc. to PROFINET	1
Specification for Security Level 1 test acc. to PROFINET	Resilient to network loading

Control circuit/ Control	
Inrush current maximum	16 A

Galvanic isolation	
Galvanic isolation between PROFINET and all other circuits	Yes

Inputs/ Outputs	
Number of digital inputs	4
• safety-related	0
Number of analog inputs	1
Number of digital outputs	1

Connections/ Terminals	
Type of electrical connection	spring-loaded terminals
Connectable conductor cross-section for auxiliary contacts	
• single or multi-stranded	0.2 ... 2.5 mm²
• finely stranded with core end processing	2.5 mm²
Connectable conductor cross-section	
• solid	0.2 ... 2.5 mm²
• solid with core end processing	0.2 ... 2.5 mm²
• finely stranded with core end processing	0.25 ... 2.5 mm²
• finely stranded without core end processing	0.2 ... 2.5 mm²
AWG number as coded connectable conductor cross section	26 ... 12

Safety related data	
Safety Integrity Level (SIL) acc. to IEC 61508	3
SIL Claim Limit (subsystem) acc. to EN 62061	SILCL 3
Performance level (PL) acc. to EN ISO 13849-1	e
Category acc. to EN ISO 13849-1	4
Safe failure fraction (SFF)	99.6 %
PFHD with high demand rate acc. to EN 62061	0.0000000006 1/h
PFDavg with low demand rate acc. to IEC 61508	0.0000024
Service life maximum	20 y
T1 value acc. to IEC 61508	1 y

Design of the interface	
• Ethernet interface	Yes; for Ethernet services
• Fast Ethernet interface	Yes; PROFINET with 100 Mbps
Interface design 1	
• integrated switch	No
• RJ45 (Ethernet)	Yes
Number of ports at the 1st interface	1
Number of interfaces acc. to PROFINET	1

Ambient conditions

Environmental category during operation acc. to IEC 60721	3M6, 3S2, 3B2, 3K6 (with relative air humidity of 10 ... 95 %, no condensation in operation permitted)
Explosion protection marking for intrinsic safety of related equipment EEx ia	No
Explosion protection marking for intrinsic safety of related equipment EEx ib	No

Installation/ mounting/ dimensions

Mounting type of modules and accessories	Front plate mounting
Height	80.1 mm
Width	40 mm
Depth	72.1 mm

Certificates/ approvals

General Product Approval		Functional Safety/Safety of Machinery	Declaration of Conformity		Test Certificates
UL	EAC	Type Examination Certificate	EG-Konf.	Miscellaneous	Type Test Certificates/Test Report

Test Certificates	other		
Special Test Certificate	Confirmation	PROFINET-Certification	Profibus

Further information

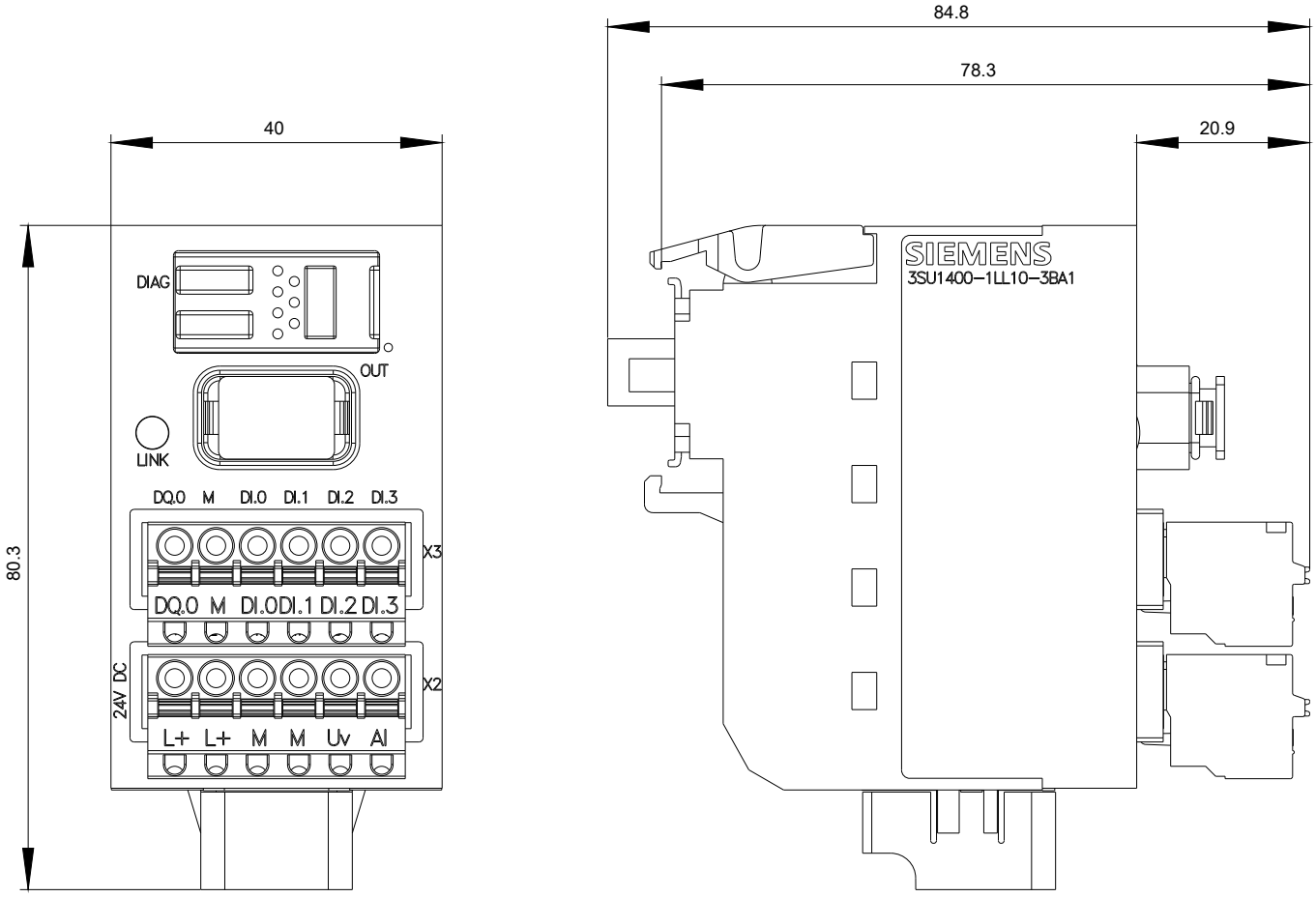
Information- and Downloadcenter (Catalogs, Brochures,...)
https://www.siemens.com/ic10

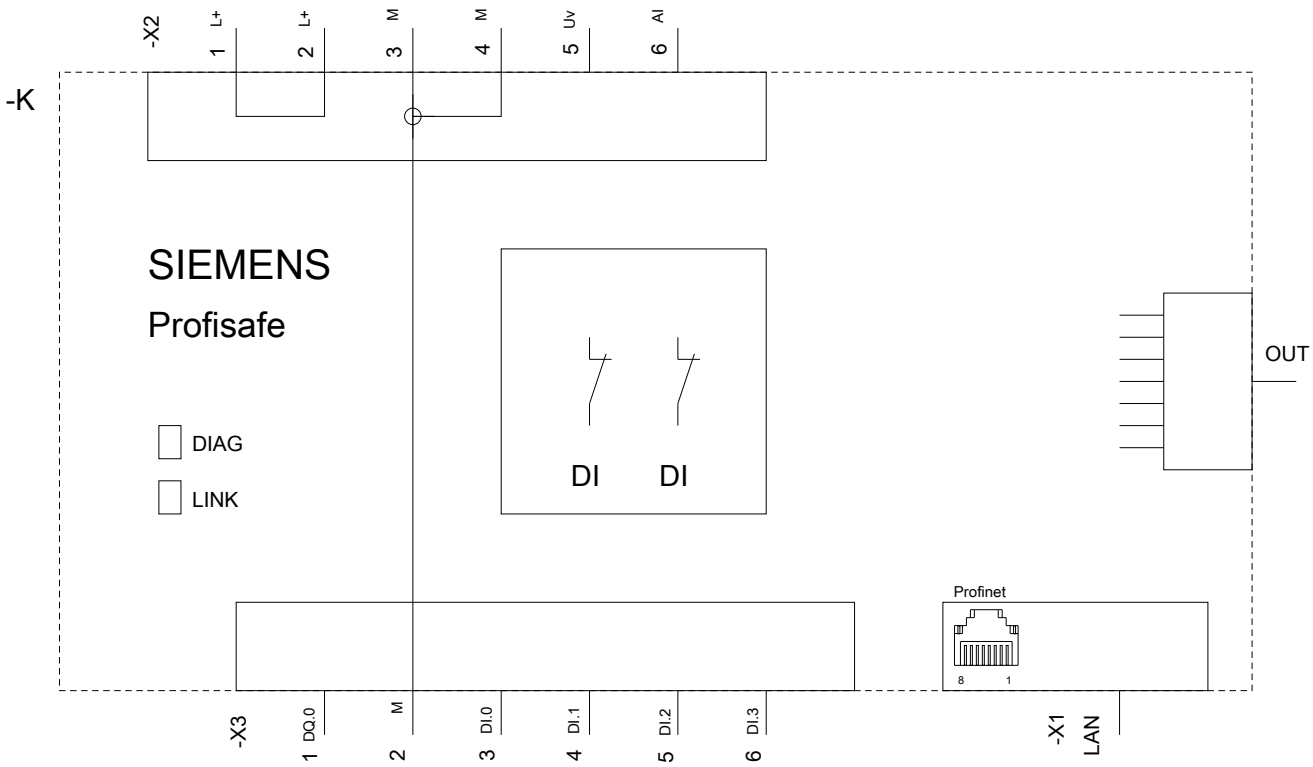
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1400-1LL10-3BA1

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LL10-3BA1

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LL10-3BA1

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1400-1LL10-3BA1&lang=en





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