

SIRIUS ACT with PROFINET: failsafe interface module with 4 DI, 1 DQ (DC 24 V), 1 AI (10-Bit A/D resolution), 24V DC, screw terminals, front plate mounting, 1 to 20 terminal modules connectable



Figure similar

Product brand name	SIRIUS ACT
Product designation	Fail-safe interface module
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	1.0.0
Hardware version	1

Configuration function with dataset	Yes
Number of units per rack maximum	20
Number of submodules per station maximum	24
Power loss [W] typical	0.6 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	150 mA
• Rated value	28 mA
Protection class IP	IP20
Equipment marking acc. to DIN EN 81346-2	K

Main circuit	
Operating voltage rated value	20.4 V
I²t value	0.008 A ² ·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
• open IE communication	No
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 PROFINET energy	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
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Galvanic isolation

Galvanic isolation between PROFINET and all other circuits	Yes
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Inputs/ Outputs

Number of digital inputs	
• safety-related	4
Number of digital outputs	1

Connections/Terminals

Type of electrical connection	screw-type terminals
Connectable conductor cross-section for auxiliary contacts	
• single or multi-stranded	0.2 ... 2.5 mm ²
• finely stranded with core end processing	2.5 mm ²
Connectable conductor cross-section	
• solid	0.2 ... 2.5 mm ²
• solid with core end processing	0.2 ... 2.5 mm ²
• finely stranded with core end processing	0.25 ... 2.5 mm ²
• finely stranded without core end processing	0.2 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	30 ... 12
Tightening torque with screw-type terminals	0.5 ... 0.6 N·m

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

Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
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
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Installation/ mounting/ dimensions

Mounting type of modules and accessories	Snap-on mounting
Height	80.1 mm
Width	40 mm
Depth	72.1 mm

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SU1400-1LL10-1BA1>

Cax online generator

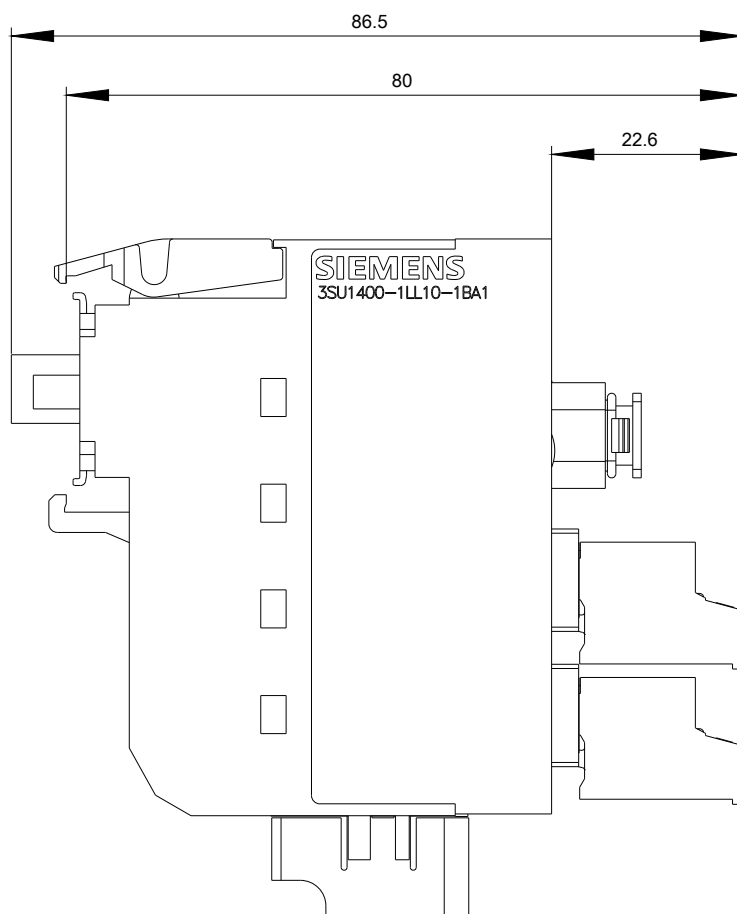
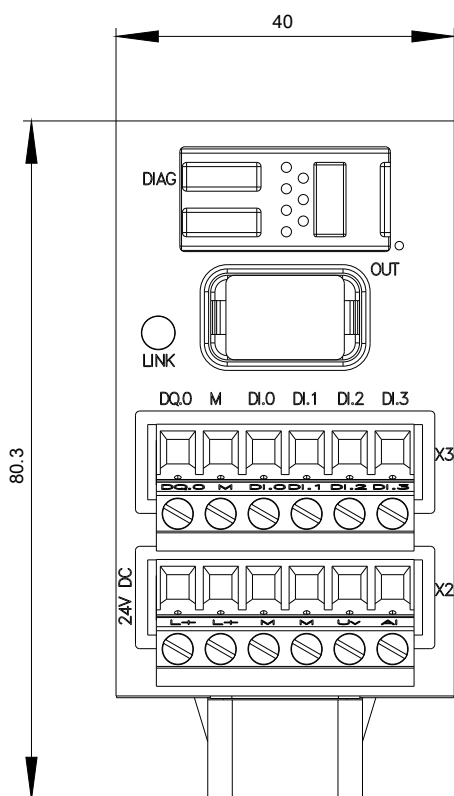
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LL10-1BA1>

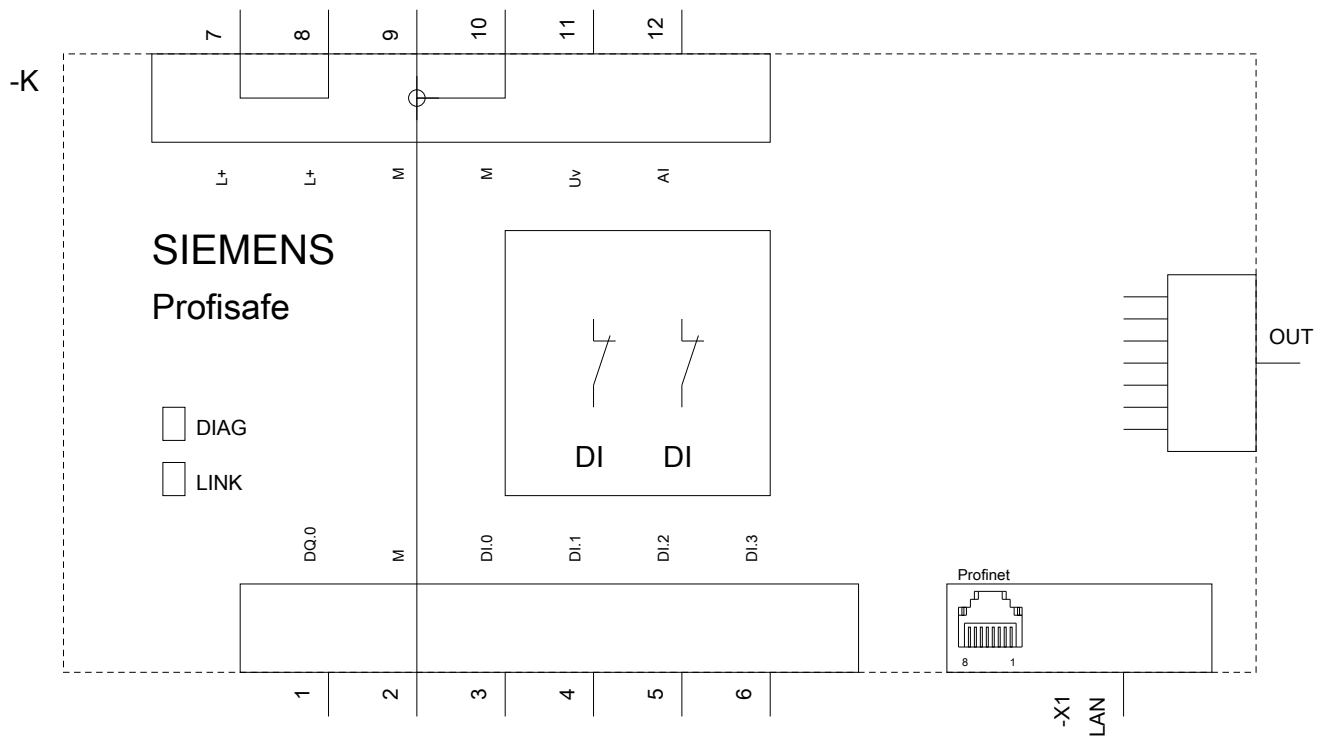
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LL10-1BA1>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1400-1LL10-1BA1&lang=en





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