

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, screw terminal, front plate mounting, 1 to 20 terminal modules connectable



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

**Display**

<b>Display version</b> <ul style="list-style-type: none"> <li>• for diagnostic function: Supply voltage monitoring Power LED</li> <li>• status Tx/Rx link</li> </ul>	<p>Yes</p> <p>Yes</p>
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**General technical data**

<b>Product function</b> <ul style="list-style-type: none"> <li>• Reverse polarity protection</li> <li>• Diagnostics function</li> <li>• Alarms</li> <li>• I&amp;M data</li> </ul>	<p>Yes; With polarity change, DI1 ... DI4 may not be connected to (M) pole</p> <p>Yes</p> <p>Yes</p> <p>Yes; I&amp;M0 ... I&amp;M3</p>
(firmware version)	1.0.0
(hardware version)	1
Configuration function with dataset	Yes

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

<b>Supply voltage</b>	
Supply voltage at DC Rated value	24 V

<b>Communication/ Protocol</b>	
<b>Product function at the Ethernet interface</b>	
• Autocrossover	Yes
• Autonegotiation	Yes
<b>Protocol at the 1st interface</b>	
• media redundancy protocol	No
<b>Product function at the 1st interface</b>	
• PROFINET IO device	Yes
<b>Product function of the PROFINET IO device is supported PROFINET system redundancy (S2)</b>	No
<b>Service as PROFINET IO device</b>	
• prioritized startup	No
• isochronous mode	No
• supports Shared Device	No
• supports PROFINET energy	No
• IRT	No
• MRP	No
• MRPD	No
<b>Service for open IE communication</b>	
• 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	4
• safety-related	0
Number of analog inputs	1
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 <sup>2</sup>
• finely stranded with core end processing	2.5 mm <sup>2</sup>
Connectable conductor cross-section	
• solid	0.2 ... 2.5 mm <sup>2</sup>
• solid with core end processing	0.2 ... 2.5 mm <sup>2</sup>
• finely stranded with core end processing	0.25 ... 2.5 mm <sup>2</sup>
• finely stranded without core end processing	0.2 ... 2.5 mm <sup>2</sup>
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	0.000000006 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
<b>Interface design 1</b>	
• integrated switch	No
• RJ45 (Ethernet)	Yes
<b>Number of ports at the 1st interface</b>	1
Number of interfaces acc. to PROFINET	1







### Ambient conditions

<b>Ambient temperature</b>	
• 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)
<b>Explosion protection marking for intrinsic safety of related equipment EEx ia</b>	No
<b>Explosion protection marking for intrinsic safety of related equipment EEx ib</b>	No

### Installation/ mounting/ dimensions

Mounting type of modules and accessories	Snap-on mounting
<b>(height)</b>	80.1 mm
<b>Width</b>	40 mm
<b>Depth</b>	72.1 mm

### Certificates/approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
 UL	 EAC	 EG-Konf.	  

[Type Examination Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

### other

[Confirmation](#)

### Further information

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

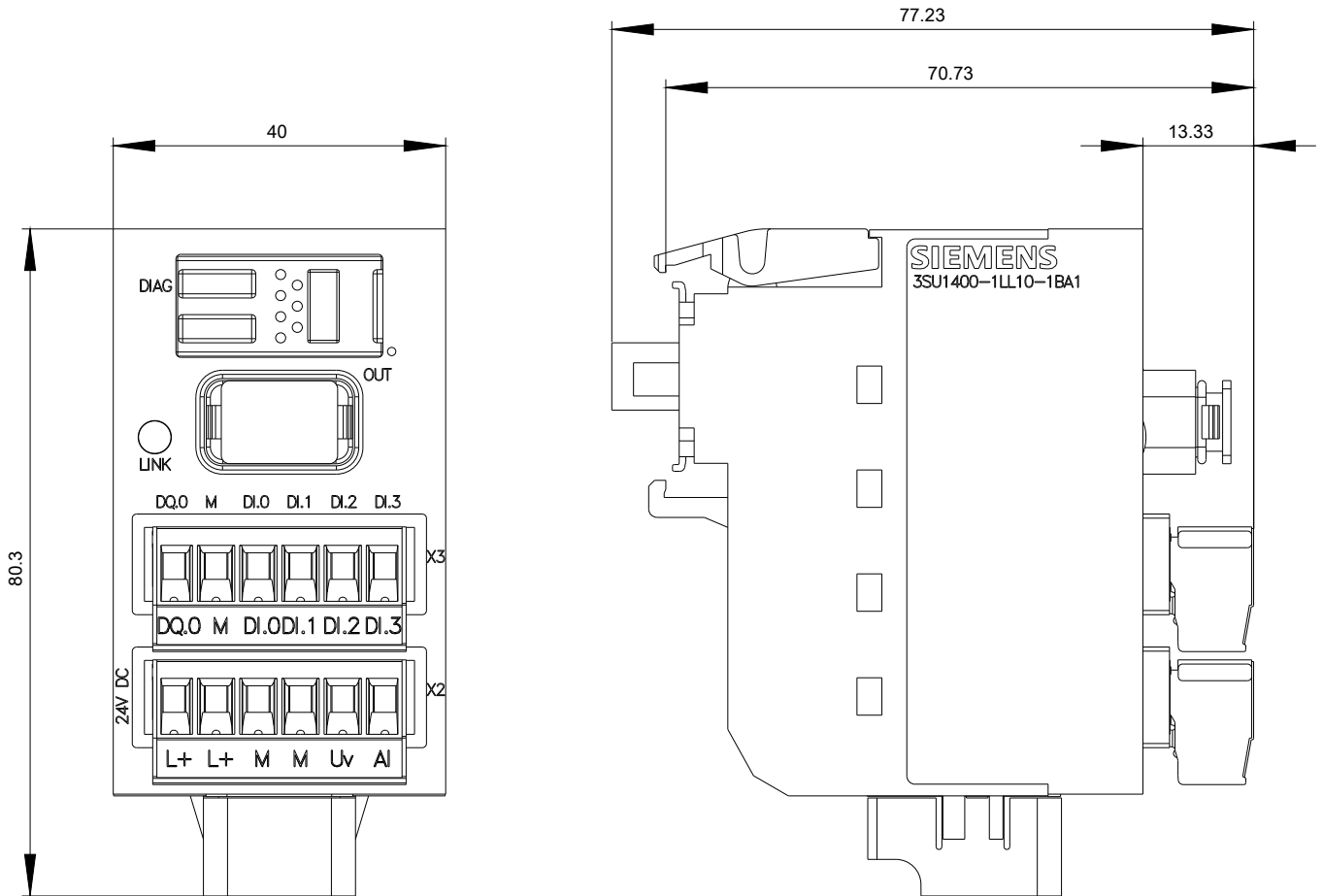
<http://www.siemens.com/industrial-controls/catalogs>

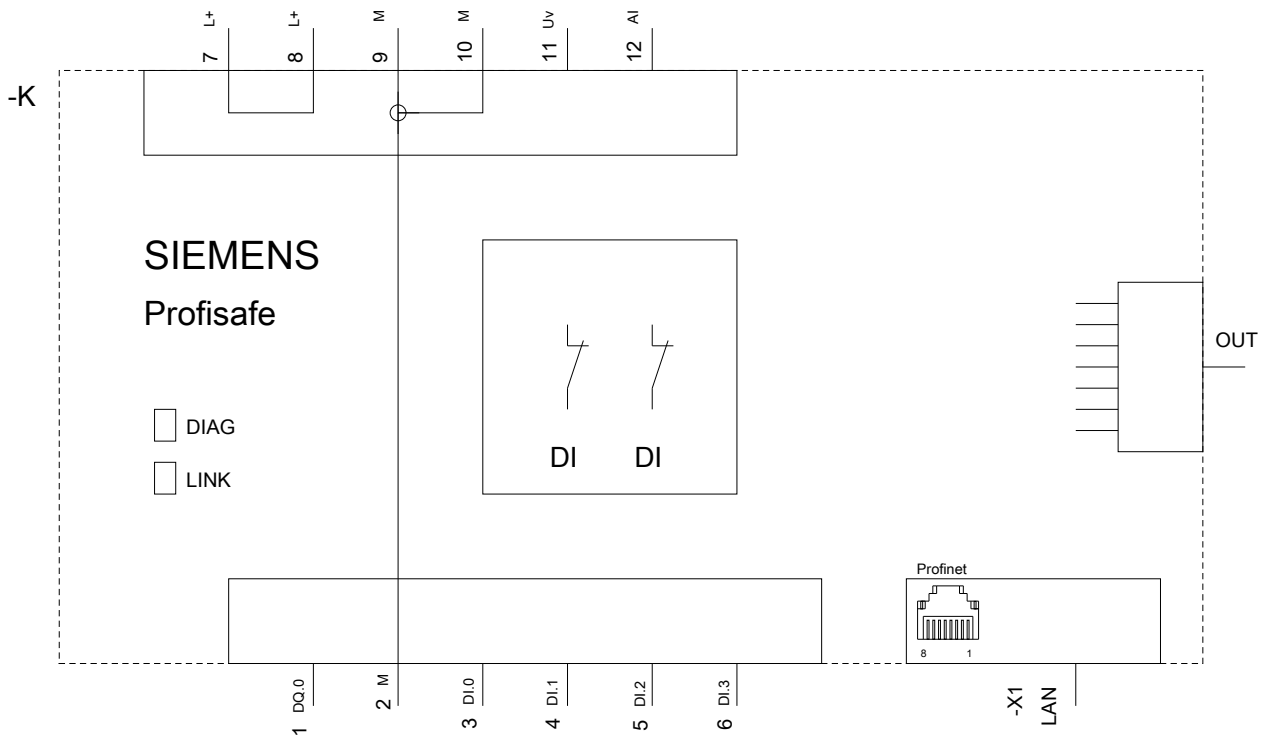
**Industry Mall (Online ordering system)**

<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>





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