

Siemens  
EcoTech







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-loaded terminal, front plate mounting, 1 to 20 terminal modules connectable



<b>product brand name</b>	SIRIUS ACT
<b>product designation</b>	Fail-safe interface module for PROFINET
<b>product type designation</b>	3SU1
<b>Display</b>	
<b>display version</b>	
<ul style="list-style-type: none"> <li>for diagnostic function: Supply voltage monitoring power LED</li> </ul>	Yes
<ul style="list-style-type: none"> <li>status Tx/Rx link</li> </ul>	Yes
<b>General technical data</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>reverse polarity protection</li> </ul>	Yes; With polarity change, DI1 ... DI4 may not be connected to (M) pole
<ul style="list-style-type: none"> <li>diagnostics function</li> </ul>	Yes
<ul style="list-style-type: none"> <li>alarms</li> </ul>	Yes
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 ... I&M3
<b>firmware version</b>	2.1.4
<b>hardware version</b>	1
<b>configuration function with dataset</b>	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
<b>insulation voltage rated value</b>	30 V
<b>degree of pollution</b>	3
<b>type of voltage</b>	
<ul style="list-style-type: none"> <li>of the operating voltage</li> </ul>	DC
<ul style="list-style-type: none"> <li>of the input voltage</li> </ul>	DC
<b>surge voltage resistance rated value</b>	0.8 kV
<b>consumed current</b>	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	100 mA
<ul style="list-style-type: none"> <li>rated value</li> </ul>	28 mA
<b>protection class IP</b>	IP20
<b>shock resistance</b>	
<ul style="list-style-type: none"> <li>according to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms
<ul style="list-style-type: none"> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
<b>vibration resistance</b>	
<ul style="list-style-type: none"> <li>according to IEC 60068-2-6</li> </ul>	10 ... 500 Hz: 5g
<ul style="list-style-type: none"> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B

reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	12/19/2016
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Lead titanium zirconium oxide - 12626-81-2
Weight	0.154 kg
operating voltage rated value minimum	20.4 V
I2t value	0.008 A <sup>2</sup> ·s
<b>Supply voltage</b>	
supply voltage at DC rated value	24 V
<b>Communication/ Protocol</b>	
<b>protocol is supported</b>	
• PROFINET IO protocol	Yes
• PROFI-safe protocol	Yes
<b>product function at the Ethernet interface</b>	
• Autocrossover	Yes
• Autonegotiation	Yes
protocol at the 1st interface media redundancy protocol	No
product function at the 1st interface PROFINET IO device	Yes
<b>product function of the PROFINET IO device is supported PROFINET system redundancy</b>	No
<b>service as PROFINET IO device</b>	
• prioritized startup	No
• isochronous mode	No
• supports Shared Device	No
• supports PROFIenergy	No
• IRT	No
• MRP	No
• MRPD	No
<b>service for open IE communication</b>	
• LLDP	Yes
• SNMP	Yes
• TCP/IP	Yes
<b>GSD version/revision with PROFINET required</b>	V2.34
<b>transmission mode for Industrial Ethernet</b>	PROFINET with 100 Mbps full duplex (100BASE-TX)
<b>network load class according to PROFINET</b>	1
<b>specification for Security Level 1 test according to PROFINET</b>	Resilient to network loading
<b>Control circuit/ Control</b>	
<b>inrush current maximum</b>	16 A
<b>Galvanic isolation</b>	
galvanic isolation between PROFINET and all other circuits	Yes
<b>Inputs/ Outputs</b>	
<b>number of digital inputs</b>	4
• safety-related	0
<b>number of analog inputs</b>	1
<b>number of digital outputs</b>	1
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	spring-loaded terminals
<b>connectable conductor cross-section for auxiliary contacts</b>	
• solid or stranded	0.2 ... 2.5 mm <sup>2</sup>
• finely stranded with core end processing maximum	2.5 mm <sup>2</sup>
<b>connectable conductor cross-section</b>	
• 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>
<b>AWG number as coded connectable conductor cross section</b>	26 ... 12
<b>Safety related data</b>	
product function suitable for safety function	Yes

<b>safe state</b>	Process value within PROFISafe telegram is set to zero				
<b>service life maximum</b>	20 a				
<b>test wear-related service life necessary</b>	No				
<b>function test interval maximum</b>	1 mo				
<b>IEC 62061</b>					
<b>Safety Integrity Level (SIL) according to IEC 62061</b>	3				
PFHD with high demand rate according to IEC 62061	6E-10 1/h				
<b>ISO 13849</b>					
<b>performance level (PL) according to ISO 13849-1</b>	e				
<b>category according to ISO 13849-1</b>	4				
<b>IEC 61508</b>					
Safety Integrity Level (SIL) according to IEC 61508	SIL 3				
<b>safety device type according to IEC 61508-2</b>	Type B				
<b>PFHD with high demand rate according to IEC 61508</b>	6E-10 1/h				
PFDavg with low demand rate according to IEC 61508	2.426E-6				
<b>Safe failure fraction (SFF)</b>	99.6 %				
hardware fault tolerance according to IEC 61508	1				
<b>T1 value</b>					
• according to IEC 61508	1 a				
• of service life according to IEC 61508	20 a				
<b>Interfaces</b>					
<b>design of the interface</b>					
• 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 according to PROFINET	1				
<b>Ambient conditions</b>					
<b>ambient temperature</b>					
• during operation	-25 ... +60 °C				
• during storage	-40 ... +80 °C				
environmental category during operation according 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				
<b>Environmental footprint</b>					
Environmental Product Declaration (EPD)	Yes				
Global Warming Potential [CO2 eq] total	0.787 kg				
Global Warming Potential [CO2 eq] during manufacturing	0.566 kg				
Global Warming Potential [CO2 eq] during operation	0.235 kg				
Global Warming Potential [CO2 eq] after end of life	-0.015 kg				
Siemens Eco Profile (SEP)	Siemens EcoTech				
<b>Installation/ mounting/ dimensions</b>					
fastening method of modules and accessories	Front plate mounting				
<b>height</b>	80.1 mm				
<b>width</b>	40 mm				
<b>depth</b>	72.1 mm				
<b>Approvals Certificates</b>					
<b>General Product Approval</b>	<b>Functional Safety</b>				
 EG-Konf.		<a href="#">Confirmation</a>	 US		<a href="#">Type Examination Certificate</a>
<b>Test Certificates</b>	<b>other</b>	<b>Environment</b>			

**Industrial Communication**

[PROFIsafe](#)

**Further information**

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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

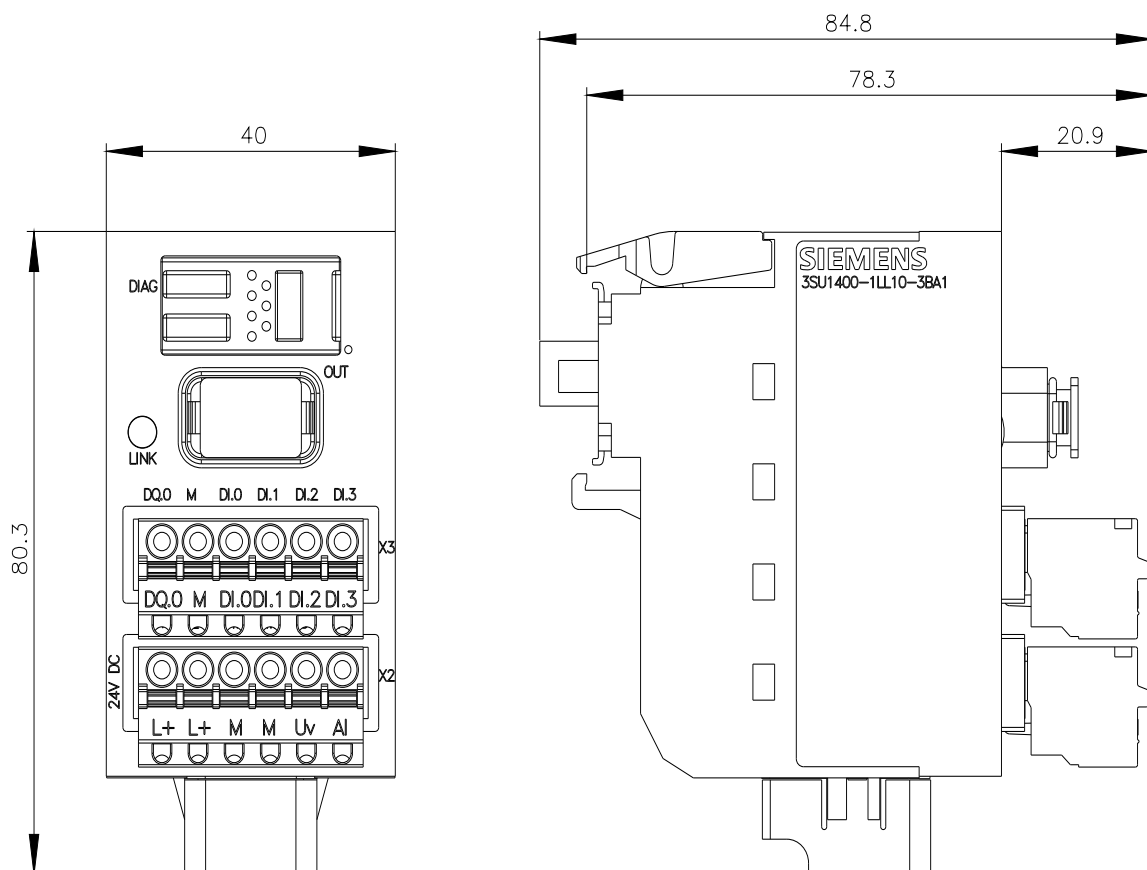
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LL10-3BA1>

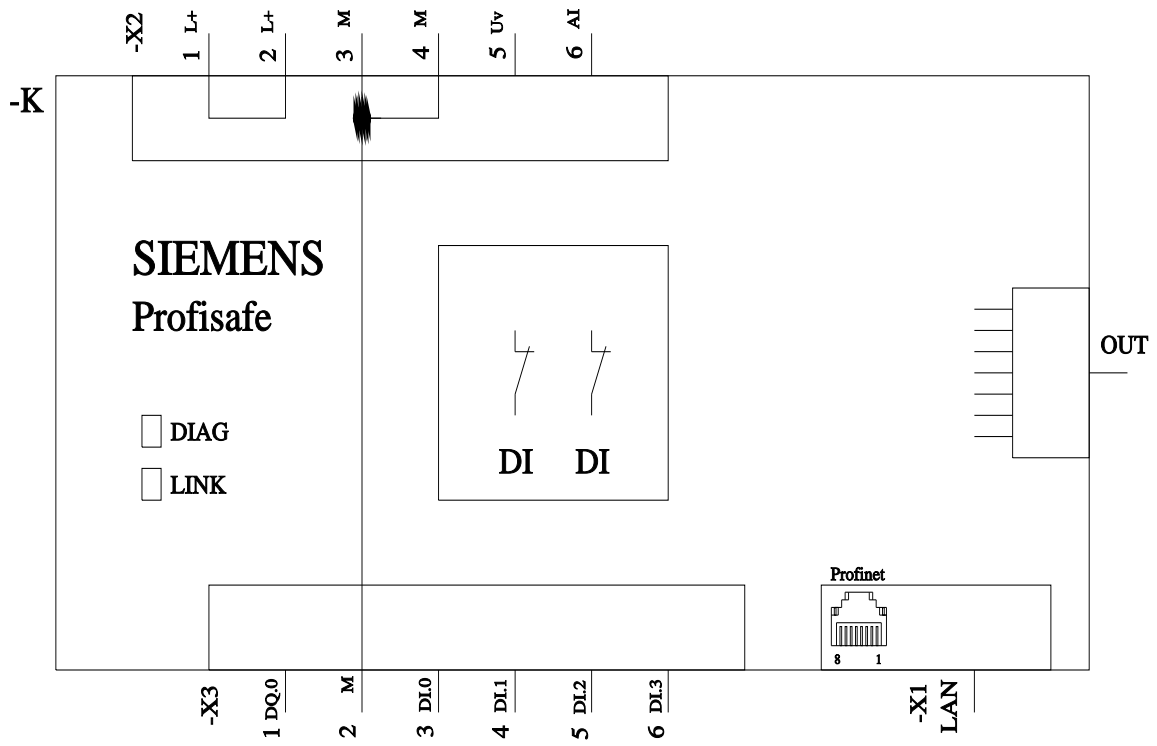
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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





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