

SIRIUS ACT with PROFINET: failsafe interface module with 4 DI, 1 DQ (DC 24 V), 1 AI (10-Bit A/D resolution), 24V DC, spring-type 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  |     |
| <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 |

| General technical data  |   |
|---|---|
| Product function  |   |
| <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  |
| Firmware version  | 1.0.0   |
| Hardware version  | 1   |

|   |        |
|---|--------|
| <b>Configuration function with dataset</b>      | Yes    |
| <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>                          |        |
| • 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>Equipment marking acc. to DIN EN 81346-2</b> | K      |

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Main circuit</b>                  |                         |
| <b>Operating voltage rated value</b> | 20.4 V                  |
| <b>I<sup>2</sup>t value</b>          | 0.008 A <sup>2</sup> ·s |

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

|   |     |
|---|-----|
| <b>Communication/ Protocol</b>  |     |
| <b>Protocol is supported</b>  |     |
| • PROFINET IO protocol  | Yes |
| • PROFINET IO protocol  | Yes |
| <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</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   |
| <b>GSD version/revision with PROFINET required</b>              | V2.3  |
| <b>Transmission mode for Industrial Ethernet</b>                | PROFINET with 100 Mbps full duplex (100BASE-TX) |
| <b>Network load class acc. to PROFINET</b>                      | 1   |
| <b>Specification for Security Level 1 test acc. to PROFINET</b> | Resilient to network loading                    |

#### Control circuit/ Control

|                               |      |
|-------------------------------|------|
| <b>Inrush current maximum</b> | 16 A |
|-------------------------------|------|

#### Galvanic isolation

|  |     |
|--|-----|
| Galvanic isolation between PROFINET and all other circuits | Yes |
|--|-----|

#### Inputs/ Outputs

|                                  |   |
|----------------------------------|---|
| <b>Number of digital inputs</b>  | 4 |
| • safety-related                 | 0 |
| <b>Number of digital outputs</b> | 1 |

#### Connections/Terminals

|   |                              |
|---|------------------------------|
| <b>Type of electrical connection</b>                              | spring-loaded terminals      |
| <b>Connectable conductor cross-section for auxiliary contacts</b> |                              |
| • single or multi-stranded  | 0.2 ... 2.5 mm <sup>2</sup>  |
| • finely stranded with core end processing                        | 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                    |

#### Safety related data

|   |                 |
|---|-----------------|
| <b>Safety Integrity Level (SIL) acc. to IEC 61508</b> | 3               |
| <b>SIL Claim Limit (subsystem) acc. to EN 62061</b>   | SILCL 3         |
| <b>Performance level (PL) acc. to EN ISO 13849-1</b>  | e               |
| <b>Category acc. to EN ISO 13849-1</b>                | 4               |
| <b>Safe failure fraction (SFF)</b>                    | 99.6 %          |
| <b>PFHD with high demand rate acc. to EN 62061</b>    | 0.000000006 1/h |
| <b>PFDAvg with low demand rate acc. to IEC 61508</b>  | 0.0000024       |
| <b>Service life maximum</b>                           | 20 y            |
| <b>T1 value acc. to IEC 61508</b>                     | 1 y             |

|   |                             |
|---|-----------------------------|
| <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 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   |
|---|---|---|---|
| <br>UL |  | <br>EG-Konf. |   |
|   | <a href="#">Type Examination Certificate</a>  |   | <a href="#">Declaration of the Compliance with the order</a> <a href="#">Special Test Certificate</a> |

#### 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?mfb=3SU1400-1LL10-3BA1>

**Cax online generator**

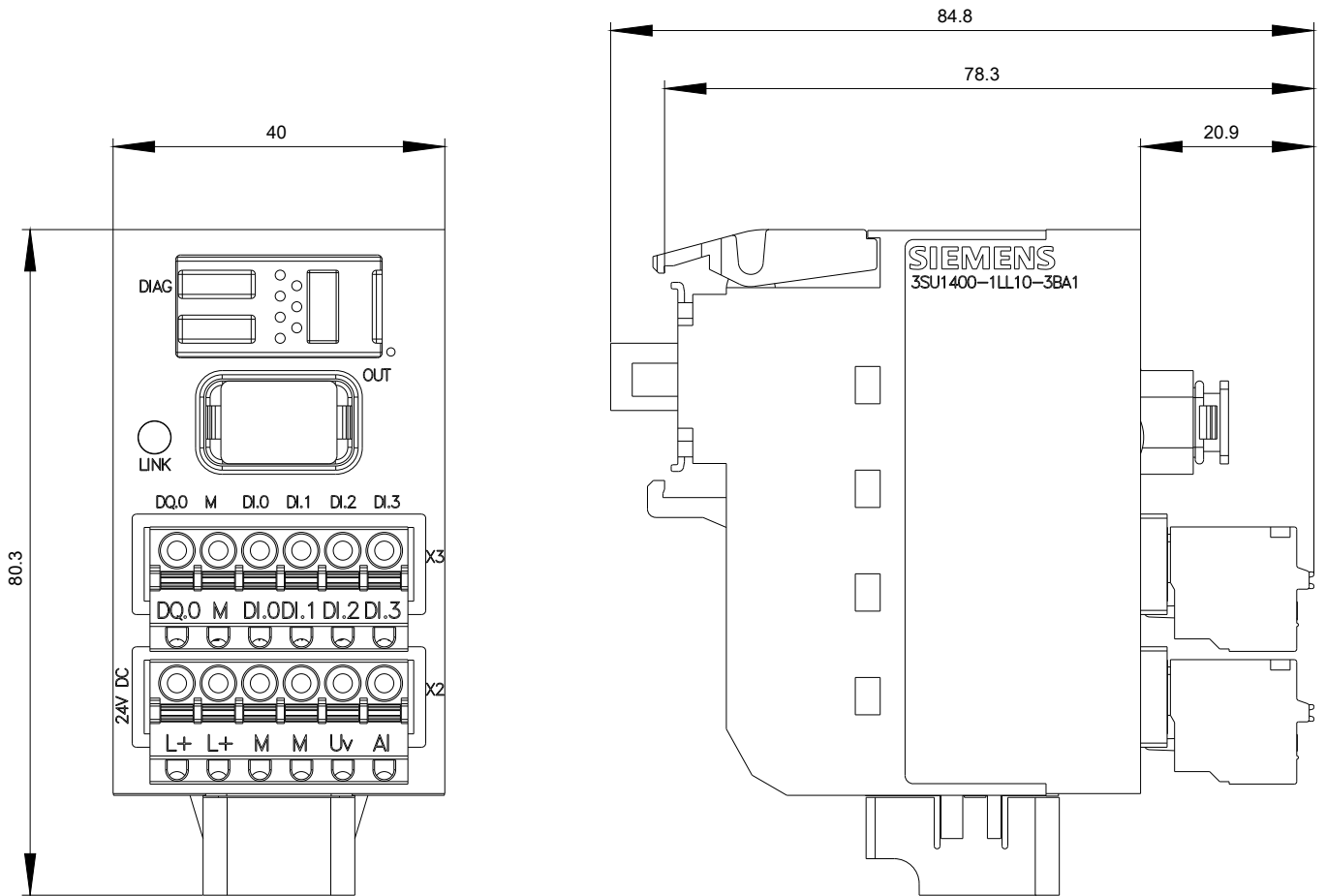
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3SU1400-1LL10-3BA1>

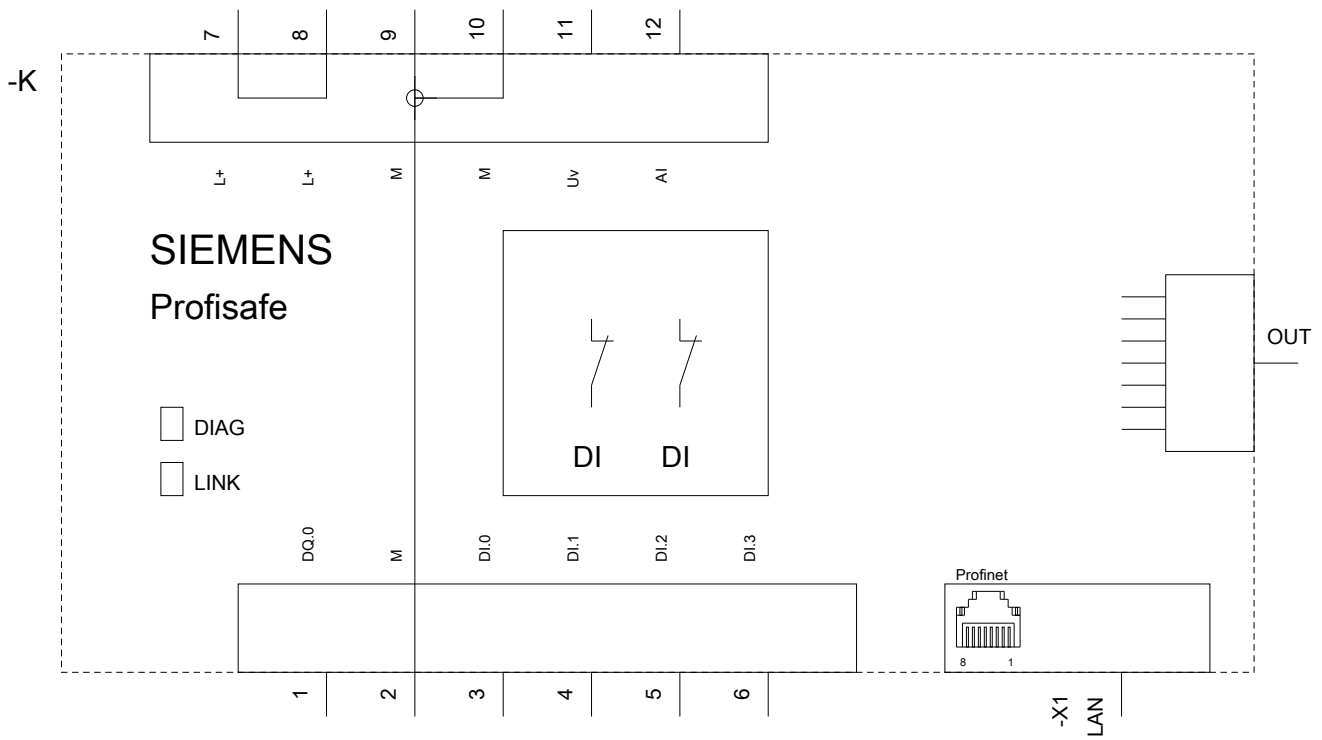
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

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





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