

Siemens  
EcoTech



SIRIUS ACT with PROFINET: standard interface module with extended inputs and outputs 24 V DC, spring-loaded terminal, front plate mounting, 1 to 20 terminal modules connectable, with additional 1 DQ + 4 DI + 1 AI



|                                                                |                                  |
|----------------------------------------------------------------|----------------------------------|
| product brand name                                             | SIRIUS ACT                       |
| product designation                                            | 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                              |
| • diagnostics function                                         | Yes                              |
| • alarms                                                       | Yes                              |
| • I&M data                                                     | Yes; I&M0 ... I&M3               |
| firmware version                                               | 2.1.4                            |
| hardware version                                               | 1                                |
| configuration function with dataset                            | Yes                              |
| software version with STEP 7 required                          | TIA Portal V13 SP1               |
| software version with STEP 7 in the TIA Portal required        | TIA portal V13                   |
| 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                             |
| shock resistance                                               |                                  |
| • according to IEC 60068-2-27                                  | sinusoidal half-wave 15g / 11 ms |
| • for railway applications according to EN 61373               | Category 1, Class B              |
| vibration resistance                                           |                                  |

|                                                                                                                                                                                                                     |                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• according to IEC 60068-2-6</li> <li>• for railway applications according to EN 61373</li> </ul>                                                                            | 10 ... 500 Hz: 5g<br>Category 1, Class B                                                                                                                                                          |
| <b>reference code according to IEC 81346-2</b>                                                                                                                                                                      | K                                                                                                                                                                                                 |
| <b>Substance Prohibition (Date)</b>                                                                                                                                                                                 | 08/24/2018                                                                                                                                                                                        |
| <b>SVHC substance name</b>                                                                                                                                                                                          | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 |
| <b>Net Weight</b>                                                                                                                                                                                                   | 149 g                                                                                                                                                                                             |
| operating voltage rated value minimum                                                                                                                                                                               | 20.4 V                                                                                                                                                                                            |
| <b>I2t value</b>                                                                                                                                                                                                    | 0.008 A²·s                                                                                                                                                                                        |
| <b>Supply voltage</b>                                                                                                                                                                                               |                                                                                                                                                                                                   |
| supply voltage at DC rated value                                                                                                                                                                                    | 24 V                                                                                                                                                                                              |
| <b>Communication/ Protocol</b>                                                                                                                                                                                      |                                                                                                                                                                                                   |
| <b>protocol is supported</b>                                                                                                                                                                                        |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• PROFINET IO protocol</li> <li>• PROFIsafe protocol</li> </ul>                                                                                                              | Yes<br>No                                                                                                                                                                                         |
| <b>product function at the Ethernet interface</b>                                                                                                                                                                   |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• Autocrossover</li> <li>• Autonegotiation</li> </ul>                                                                                                                        | Yes<br>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>                                                                                                                                                                                |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• prioritized startup</li> <li>• isochronous mode</li> <li>• supports Shared Device</li> <li>• supports PROFIenergy</li> <li>• IRT</li> <li>• MRP</li> <li>• MRPD</li> </ul> | No<br>No<br>No<br>No<br>No<br>No<br>No                                                                                                                                                            |
| <b>service for open IE communication</b>                                                                                                                                                                            |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• LLDP</li> <li>• SNMP</li> <li>• TCP/IP</li> </ul>                                                                                                                          | Yes<br>Yes<br>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>                                                                                                                                                                     | I                                                                                                                                                                                                 |
| <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                                                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>• safety-related</li> </ul>                                                                                                                                                  | 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>                                                                                                                                                   |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing maximum</li> </ul>                                                                                   | 0.2 ... 2.5 mm²<br>2.5 mm²                                                                                                                                                                        |
| <b>connectable conductor cross-section</b>                                                                                                                                                                          |                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• solid</li> <li>• solid with core end processing</li> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> </ul>      | 0.2 ... 2.5 mm²<br>0.2 ... 2.5 mm²<br>0.25 ... 2.5 mm²<br>0.2 ... 2.5 mm²                                                                                                                         |

| Safety related data                                                                                                                                                                                                                                                                                                                             |                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| product function suitable for safety function                                                                                                                                                                                                                                                                                                   | No                                                                                                                 |
| service life maximum                                                                                                                                                                                                                                                                                                                            | 20 a                                                                                                               |
| Interfaces                                                                                                                                                                                                                                                                                                                                      |                                                                                                                    |
| 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 according to PROFINET                                                                                                                                                                                                                                                                                                      | 1                                                                                                                  |
| Ambient conditions                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |
| ambient temperature                                                                                                                                                                                                                                                                                                                             |                                                                                                                    |
| • 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)              |
| explosion protection marking for intrinsic safety of related equipment EEx ia                                                                                                                                                                                                                                                                   | No                                                                                                                 |
| explosion protection marking for intrinsic safety of related equipment EEx ib                                                                                                                                                                                                                                                                   | No                                                                                                                 |
| Environmental footprint                                                                                                                                                                                                                                                                                                                         |                                                                                                                    |
| 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                                                                                                    |
| Installation/ mounting/ dimensions                                                                                                                                                                                                                                                                                                              |                                                                                                                    |
| fastening method of modules and accessories                                                                                                                                                                                                                                                                                                     | Front plate mounting                                                                                               |
| height                                                                                                                                                                                                                                                                                                                                          | 80.1 mm                                                                                                            |
| width                                                                                                                                                                                                                                                                                                                                           | 40 mm                                                                                                              |
| depth                                                                                                                                                                                                                                                                                                                                           | 72.1 mm                                                                                                            |
| Approvals Certificates                                                                                                                                                                                                                                                                                                                          |                                                                                                                    |
| General Product Approval                                                                                                                                                                                                                                                                                                                        | Test Certificates                                                                                                  |
|     | <a href="#">Special Test Certificate</a> <a href="#">Type Test Certificates/Test Report</a>                        |
| Maritime application                                                                                                                                                                                                                                                                                                                            | other                                                                                                              |
|     | <a href="#">Confirmation</a>  |
| Environment                                                                                                                                                                                                                                                                                                                                     | Industrial Communication                                                                                           |
|                                                                                        | <a href="#">PROFINET</a>                                                                                           |
| Further information                                                                                                                                                                                                                                                                                                                             |                                                                                                                    |
| Information on the packaging<br><a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a><br>Information for data generation and storage                                                                                                                          |                                                                                                                    |

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3SU1400-1LK10-3BA1>

Cax online generator

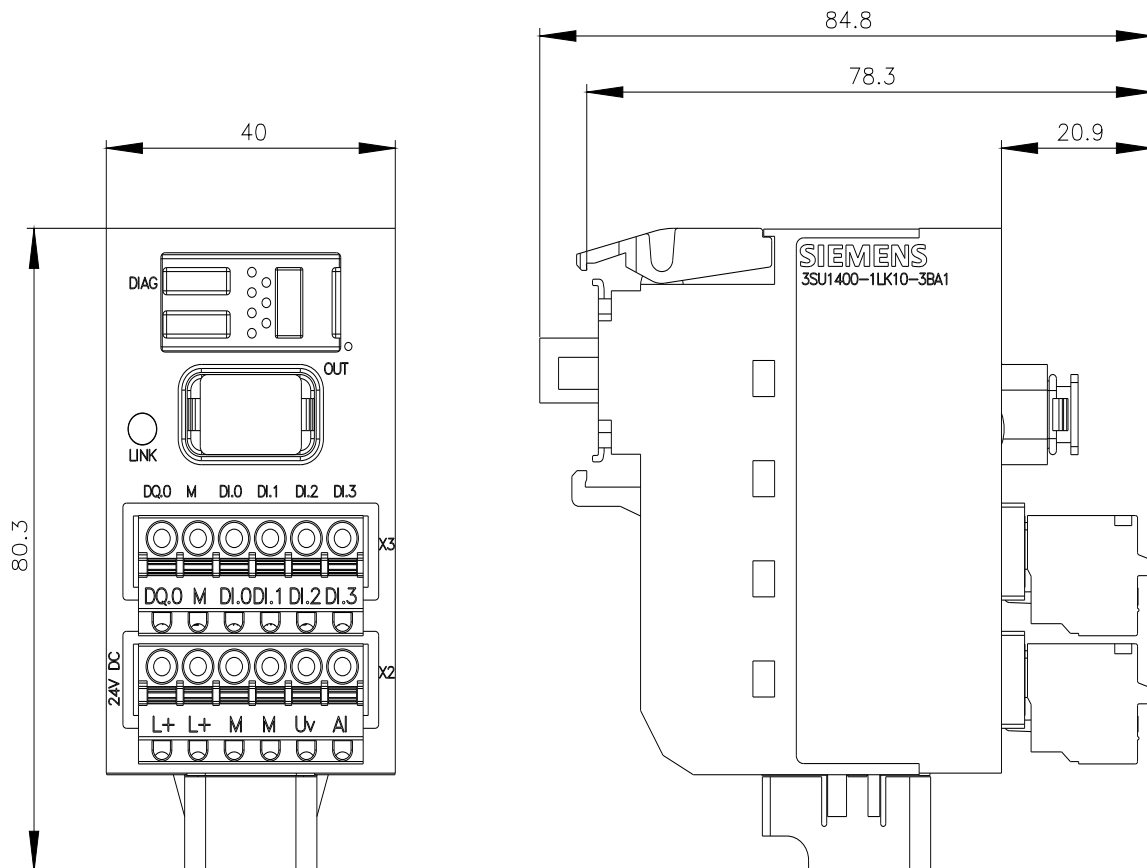
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LK10-3BA1>

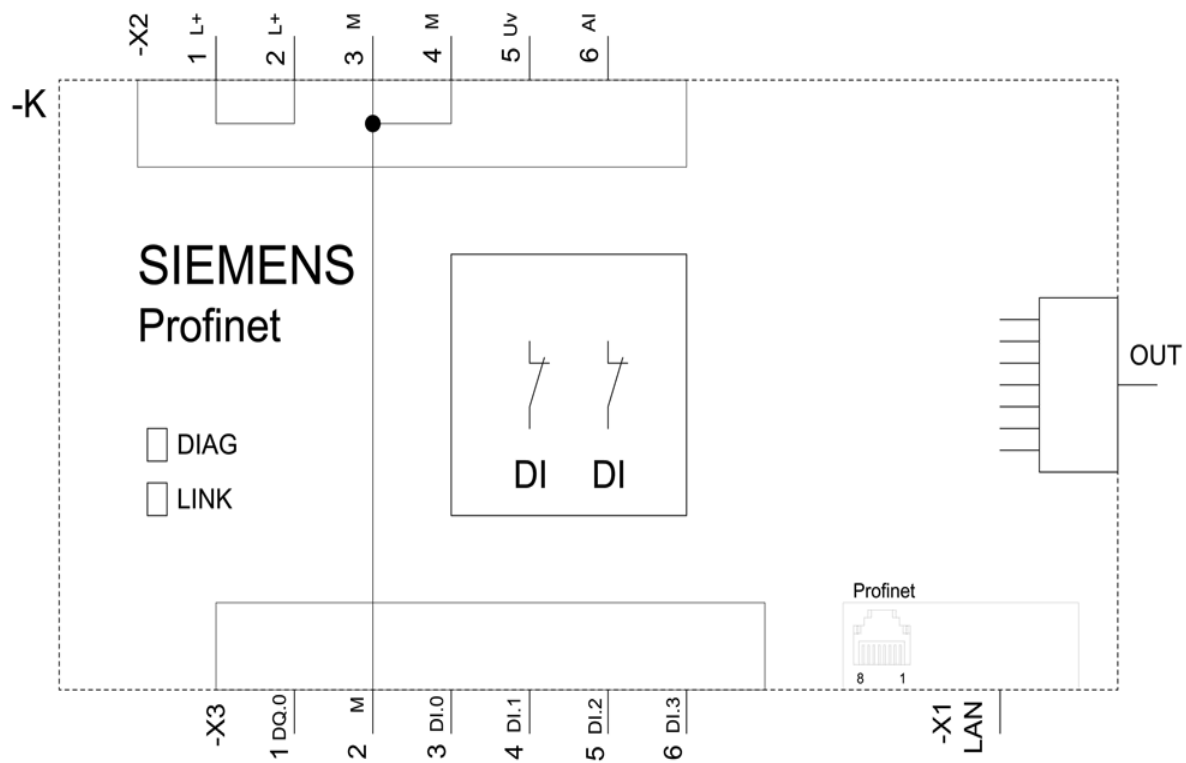
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LK10-3BA1>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3SU1400-1LK10-3BA1&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1400-1LK10-3BA1&lang=en)





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