SIEMENS

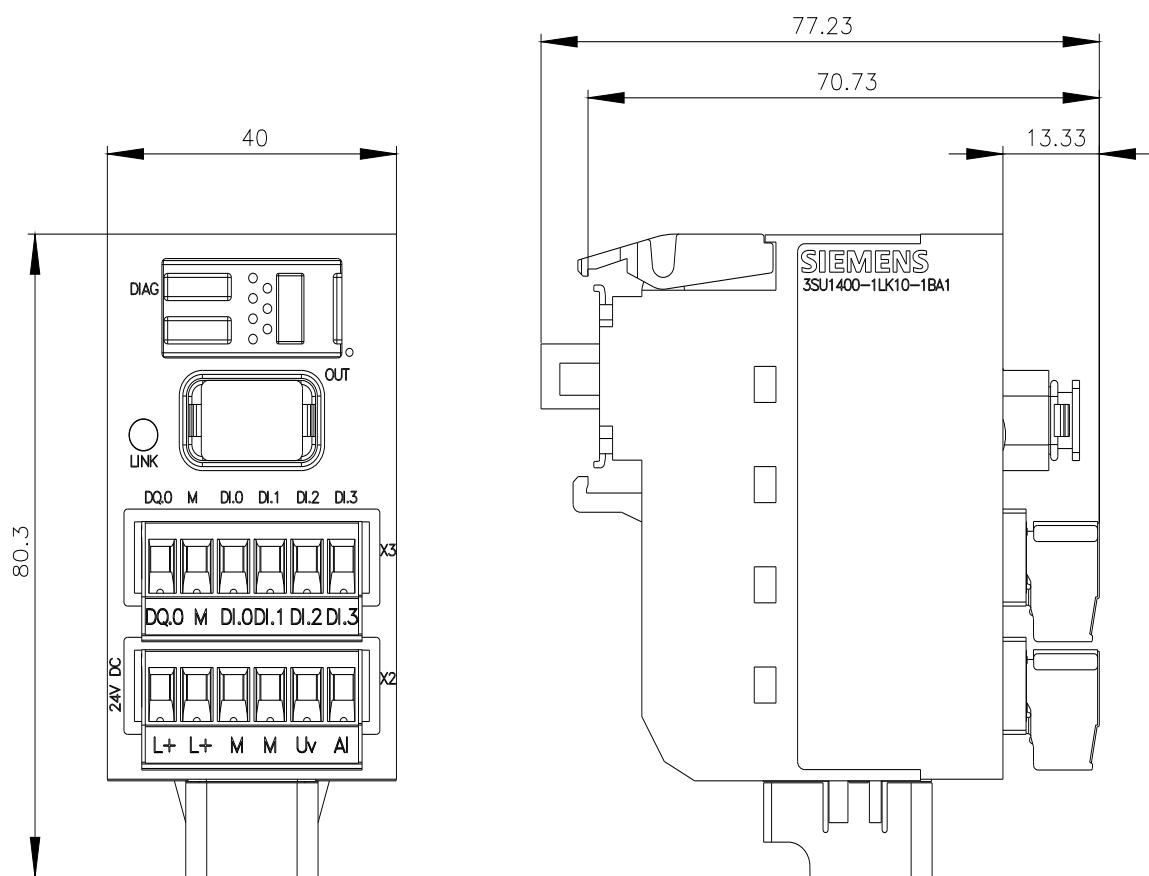**Data sheet**   **3SU1400-1LK10-1BA1**
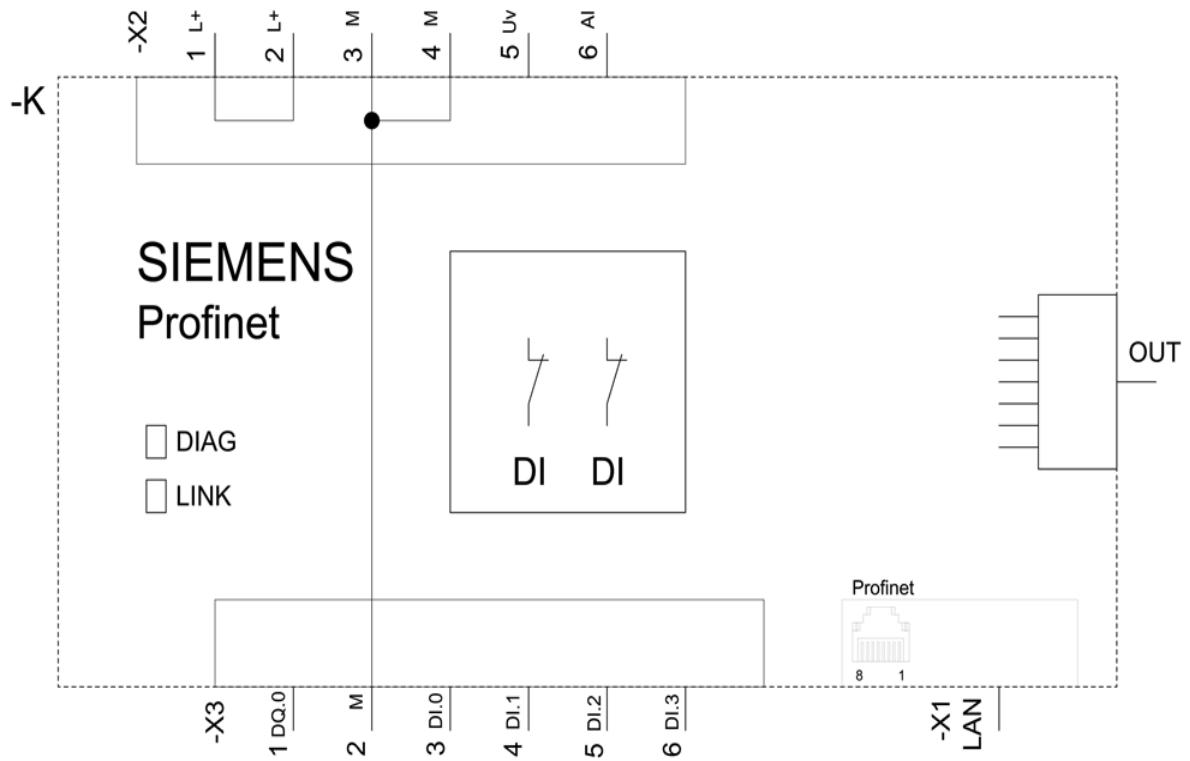
SIRIUS ACT with PROFINET: standard interface module with extended inputs and outputs 24 V DC, screw terminal, front plate mounting, 1 to 20 terminal modules connectable, with additional 1 DQ + 4 DI + 1 AI

Figure similar

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 in the TIA Portal required	Integrated in TIA Portal Version 14 SP1 or higher (HSP for V13 and V14)
number of units per rack maximum	20
number of submodules per station maximum	24
power loss [W] typical	0.67 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	100 mA
● rated value	28 mA
protection class IP	IP20, clamping screw tightened
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	
● **according to IEC 60068-2-6**	10 ... 500 Hz: 5g
● for railway applications according to EN 61373	Category 1, Class B
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	12/19/2016

SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 2-Methyl-1-(4-methylthiophenyl)-2-morpho - 71868-10-5 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7
operating voltage rated value minimum	20.4 V
I2t value	0.008 A²·s

Supply voltage

supply voltage at DC rated value	24 V

Communication/ Protocol

protocol is supported	
● PROFINET IO protocol	Yes
● PROFIsafe protocol	No
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
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 PROFIenergy	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	V2.34
transmission mode for Industrial Ethernet	PROFINET with 100 Mbps full duplex (100BASE-TX)
network load class according to PROFINET	1
specification for Security Level 1 test according to PROFINET	Resilient to network loading

Control circuit/ Control

inrush current maximum	16 A

Galvanic isolation

galvanic isolation between PROFINET and all other circuits	Yes

Inputs/ Outputs

● **number of digital inputs**	4
● number of digital inputs safety-related	0
number of analog inputs	1
number of digital outputs	0

Connections/ Terminals

type of electrical connection	screw-type terminals
connectable conductor cross-section for auxiliary contacts	
● solid or stranded	0.2 ... 2.5 mm²
● finely stranded with core end processing maximum	2.5 mm²
connectable conductor cross-section	
● solid	0.2 ... 2.5 mm²
● solid with core end processing	0.2 ... 2.5 mm²
● finely stranded with core end processing	0.25 ... 2.5 mm²
● finely stranded without core end processing	0.2 ... 2.5 mm²
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

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
CE EG-Konf. UKCA [Confirmation] UL EAC	[Special Test Certificate]

Test Certificates	other	Environment	Industrial Communication
[Type Test Certificates/Test Report]	[Confirmation]	[EPD Typ II/III (with life cylce assessment)]	[PROFINET]

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=3SU1400-1LK10-1BA1
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1400-1LK10-1BA1
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3SU1400-1LK10-1BA1
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1400-1LK10-1BA1&lang=en

Front View

DIAG

OUT

LINK

| DQ.0 | M | DI.0 | DI.1 | DI.2 | DI.3 |

X3

| DQ.0 | M | DI.0 | DI.1 | DI.2 | DI.3 |

24V DC

X2

| L+ | L+ | M | M | Uv | AI |

40

80.3

Side View

77.23

70.73

13.33

SIEMENS
3SU1400−1LK10−1BA1

2/16/2024

-X2

| 1 L+ | 2 L+ | 3 M | 4 M | 5 Uv | 6 AI |

-K

SIEMENS
Profinet

☐ DIAG
☐ LINK

DI   DI

OUT

Profinet
8   1

-X3

| 1 DQ.0 | 2 M | 3 DI.0 | 4 DI.1 | 5 DI.2 | 6 DI.3 |

-X1 LAN

---

last modified: 2/7/2024 ↗

2/16/2024