SIEMENS

Data sheet 3SK2511-1FA10



SIRIUS, interface module PROFINET interface for safety relay 3SK2 from E05 and 3RK312/3RK313 from E04 PROFINET IO interface 100 Mbps, RJ45 22.5 mm width screw terminal parameter assignment via Safety ES without connection cable

product designation Interface module design of the product PN interface Module design of the product PN interface Module design of the product PN interface PN interface PN interface of suitability UL approval Yes: Safety ES V1.0 SP3 and higher Insulation voltage rated value 50 V degree of pollution 3 surge voltage resistance rated value 800 V consumed current for rated value of supply voltage 0.04 A protection class IP of the enclosure IP20 Protection class IP of the enclosure IP20 Insulation voltage rated value of supply voltage 1920 Insulation resistance IP20 Insulation resistance IP20 Insulation resistance IP30 Insulation resistanc	product brand name	SIRIUS
design of the product General technical data certificate of suitability UL approval degree of pollution surge vortage resistance rated value consumed current for rated value of supply voltage protection class IP of the enclosure shock resistance lp20 consumed current for rated value of supply voltage protection class IP of the enclosure shock resistance lp20 consumed current for rated value of supply voltage protection class IP of the enclosure lp20 consumed current for rated value of supply voltage lp20 consumed current for rated value lp20 consumer for ra	product category	Safety relay
Certificate of suitability UL approval Yes Configuration software required Yes; Safety ES V1.0 SP3 and higher insulation voltage rated value 50 V SP3 and higher insulation voltage rated value 50 V SP3 and higher insulation voltage rated value 50 V SP3 and higher insulation voltage rated value 50 V SP3 and higher insulation voltage rated value 50 V SP3	product designation	Interface module
configration software required	design of the product	PN interface
configuration software required insulation voltage rated value degree of pollution 3 surge voltage resistance rated value consumed current for rated value of supply voltage protection class IP of the enclosure protection class IP of the enclosure protection class IP of the enclosure is shock resistance a according to IEC 60088-2-6 according to IEC 60088-2-6 ference code according to IEC 81346-2 SUbstance Prohibitance (Date) SYHC substance (Date) SYHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation air pressure according to IEC 60947-1 class A Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A Conducted interference due to burst according to IEC 61000-4-3 due to burst according to IEC 61000-4-3 due to burst according to IEC 61000-4-2 due to burst according to IEC 61000-4-3 filed-based interference according to IEC 61000-4-3 due to conductor-earth surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 filed-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 filed-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 filed-based interference according to IEC 61000-4-3 filed-ba	General technical data	
Insulation voltage rated value degree of pollution 3 surge voltage resistance rated value 800 V consumed current for rated value of supply voltage 9.0.04 A protection class IP of the enclosure 1P20 shock resistance 15g / 11 ms vibration resistance • according to IEC 80068-2-6 reference code according to IEC 811346-2 K Substance Prohibitance (Date) 55/01/2012 SVHG substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A Conducted interference according to IEC 60947-1 claue humidity according to IEC 60947-1 claue humidity according to IEC 61000-4-4 edue to ounductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 edue to conductor-earth surge according to IEC 61000-4-2 edue to conductor-earth surge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-3 electro	certificate of suitability UL approval	Yes
degree of pollution 3 surge voltage resistance rated value 6 consumed current for rated value of supply voltage 0.04 A protection class IP of the enclosure IP20 shock resistance 15g / 11 ms vibration resistance 5	configuration software required	Yes; Safety ES V1.0 SP3 and higher
surge voltage resistance rated value 800 V consumed current for rated value of supply voltage 0.04 A protection class IP of the enclosure IP20 shock resistance 15g / 11 ms vibration resistance • according to IEC 60068-2-6 5 500 Hz: 0.75 mm reference code according to IEC 81346-2 K Substance Prohibitance (Date) 05/01/2012 SVHG substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 00 106 kPa EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 class A conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-3 10 V/m electrostatic discharge according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge Electrical Safely touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFISafe protocol	insulation voltage rated value	50 V
consumed current for rated value of supply voltage protection class IP of the enclosure shock resistance vibration resistance • according to IEC 60068-2-6 • according to IEC 80068-2-6 substance Prohibitance (Date) SVHC substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight O.182 kg Ambiont conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation air pressure according to SN 31205 BMC emitted interference according to IEC 60947-1 EMC emitted interference • due to burst according to IEC 61000-4-4 • due to burst according to IEC 61000-4-3 delectrostatic discharge according to IEC 61000-4-3 flield-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 flield-based interference according to IEC 61000-4-3 flield-based interference according to IEC 61000-4-5 flield-based interference • A kV contact discharge / 8 kV air discharge electrical Safety touch protection against electrical shock finger-safe PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS	degree of pollution	3
protection class IP of the enclosure IP20 shock resistance vibration resistance • according to IEC 60068-2-6 reference code according to IEC 81346-2 K Substance Prohibitance (Date) SVHC substance name Lead - navoxide (lead oxide) - 1317-36-8 Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum relative humidity during operation air pressure according to ISC 60947-1 Calss A Centited interference according to IEC 61000-4-3 • due to conductor-earth surge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electricol Safety touch protection against electrical shock Finger-safe Communication/ Protocol PROFIBUS DP protocol • PROFIBUS DP protocol	surge voltage resistance rated value	800 V
shock resistance vibration resistance * according to IEC 60068-2-6 reference code according to IEC 81346-2 K Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 class A Conducted interference due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFIBUS DP protocol PROFIBUS DP protocol PROFIBS PP protocol	consumed current for rated value of supply voltage	0.04 A
vibration resistance	protection class IP of the enclosure	IP20
* according to IEC 60068-2-6 reference code according to IEC 81346-2 K Substance Prohibitance (Date) O5/01/2012 SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight O.182 kg Ambient conditions Installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 Class A EMC immunity according to IEC 60947-1 Class A conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 finger-safe Communication/ Protocol Protocol is supported PROFIBUS DP protocol	shock resistance	15g / 11 ms
reference code according to IEC 81346-2 K Substance Prohibitance (Date) 05/01/2012 SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 class A conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIBUS DP protocol	vibration resistance	
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Weight Ambient conditions installation altitude at height above sea level maximum relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 Class A EMC immunity according to IEC 60947-1 Class A conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFISSTE protocol • PROFISSTE protocol • PROFISSTE protocol	• according to IEC 60068-2-6	5 500 Hz: 0.75 mm
Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 class A Conducted interference • due to burst according to IEC 61000-4-4 2 kV (power ports) • due to conductor-earth surge according to IEC 61000-4-5 Test Level 0.5 KV / 1 KV field-based interference according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFIST IO protocol • PROFIST IO protocol • PROFIST IO protocol • PROFIST IO protocol	reference code according to IEC 81346-2	K
Weight 0.182 kg Ambient conditions installation altitude at height above sea level maximum 4 000 m; Derating, see Product Notification 109792701 relative humidity during operation 10 95 % air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 class A Conducted interference • due to burst according to IEC 61000-4-4 2 kV (power ports) • due to conductor-earth surge according to IEC 61000-4-5 Test Level 0.5 KV / 1 KV field-based interference according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol PROFIBUS DP protocol • PROFIBUS DP protocol • PROFINET IO protocol • PROFISafe protocol No	Substance Prohibitance (Date)	05/01/2012
installation altitude at height above sea level maximum relative humidity during operation air pressure according to SN 31205 PECENTRAL STATE	SVHC substance name	
installation altitude at height above sea level maximum relative humidity during operation air pressure according to SN 31205 po 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 conducted interference due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFISATE protocol PROFISATE protocol PROFISATE protocol PROFISATE protocol PROFISATE protocol No	Weight	0.182 kg
relative humidity during operation air pressure according to SN 31205 90 106 kPa Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 Class A conducted interference • due to burst according to IEC 61000-4-4 2 kV (power ports) • due to conductor-earth surge according to IEC 61000-4-5 Test Level 0.5 kV / 1 kV field-based interference according to IEC 61000-4-3 10 V/m electrostatic discharge according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFISafe protocol • PROFISafe protocol	Ambient conditions	
air pressure according to SN 31205 Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 EMC immunity according to IEC 60947-1 Class A Conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol • PROFIsafe protocol • PROFIsafe protocol	installation altitude at height above sea level maximum	4 000 m; Derating, see Product Notification 109792701
Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 class A EMC immunity according to IEC 60947-1 Class A conducted interference • due to burst according to IEC 61000-4-4 2 kV (power ports) • due to conductor-earth surge according to IEC 61000-4-5 Test Level 0.5 KV / 1 KV field-based interference according to IEC 61000-4-3 10 V/m electrostatic discharge according to IEC 61000-4-2 4 kV contact discharge / 8 kV air discharge Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFINET IO protocol • PROFISafe protocol No	relative humidity during operation	10 95 %
EMC emitted interference according to IEC 60947-1 EMC immunity according to IEC 60947-1 Class A conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol No	air pressure according to SN 31205	90 106 kPa
EMC immunity according to IEC 60947-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol No	Electromagnetic compatibility	
conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol • PROFIsafe protocol No	EMC emitted interference according to IEC 60947-1	class A
 due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 d kV contact discharge / 8 kV air discharge Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol No PROFIsafe protocol No 	EMC immunity according to IEC 60947-1	Class A
 due to conductor-earth surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol No PROFIsafe protocol No 	conducted interference	
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol No PROFISafe protocol No	 due to burst according to IEC 61000-4-4 	2 kV (power ports)
electrostatic discharge according to IEC 61000-4-2 Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol No PROFISafe protocol No	• due to conductor-earth surge according to IEC 61000-4-5	Test Level 0.5 KV / 1 KV
Electrical Safety touch protection against electrical shock Communication/ Protocol protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol No	field-based interference according to IEC 61000-4-3	10 V/m
touch protection against electrical shock finger-safe Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol No	electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol No	Electrical Safety	
protocol is supported • PROFIBUS DP protocol • PROFINET IO protocol • PROFIsafe protocol No	touch protection against electrical shock	finger-safe
 PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol No 	Communication/ Protocol	
 PROFINET IO protocol PROFIsafe protocol No 	protocol is supported	
PROFIsafe protocol No	 PROFIBUS DP protocol 	No
	PROFINET IO protocol	Yes
• LLDP Yes	PROFIsafe protocol	No
	• LLDP	Yes

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 Address Resolution Protocol (ARP) 	Yes
• SNMP	Yes
• HTTPS	No
• NTP	No
 Media Redundancy Protocol (MRP) 	No
design of the interface	
Ethernet interface	Yes
Fast Ethernet interface	No
number of interfaces according to PROFINET	1
product function	
at the Ethernet interface Autocrossover	Yes
at the Ethernet interface Autonegotiation	Yes
at the Ethernet interface Autosensing	Yes
 supports PROFlenergy measured values 	No
supports PROFlenergy shutdown	No
interface design 1 RJ45 (Ethernet)	Yes
protocol at the 1st interface media redundancy protocol	No
product function at the 1st interface PROFINET IO device	Yes
number of ports at the 1st interface	1
service as PROFINET IO device	
prioritized startup	No
• isochronous mode	No
supports PROFlenergy	No
• IRT	No
• MRP	No
	NO
service for open IE communication	
• LLDP	Yes
• SNMP	Yes
• TCP/IP	No
transmission mode for Industrial Ethernet	PROFINET with 100 Mbps full duplex (100BASE-TX)
PROFINET conformity class	В
network load class according to PROFINET	1
specification for Security Level 1 test according to PROFINET	V1.1.6
data volume of the cyclic user data	
 for inputs with PROFINET IO 	64 bit
 for outputs with PROFINET IO 	64 bit
data volume as user data per station maximum	8 byte
operating power rated value	1 W
Control circuit/ Control	
type of voltage	DC
control supply voltage rated value	24 V
inrush current peak at 24 V	4 A
·	
duration of inrush current peak at 24 V	1 ms
Installation/ mounting/ dimensions	
mounting position	any
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
height	100 mm
width	22.5 mm
depth	124.5 mm
weight without packaging	148 kg
Connections/ Terminals	
product function removable terminal	Yes
type of connectable conductor cross-sections	
• solid	1x (0.5 2.5 mm²), 2x (1.0 1.5 mm²)
solidfinely stranded with core end processing	1x (0.5 2.5 mm²), 2x (1.0 1.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
	1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
• finely stranded with core end processing	1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (20 14), 2x (18 16)
finely stranded with core end processingfor AWG cables solidfor AWG cables stranded	1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
finely stranded with core end processingfor AWG cables solid	1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²) 1x (20 14), 2x (18 16)















Functional Saftey Test Certificates Industrial Communication other **Environment**

Type Examination Cer**tificate**

Type Test Certificates/Test Report

Confirmation

Environmental Con**firmations**

88060

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=3SK2511-1FA10

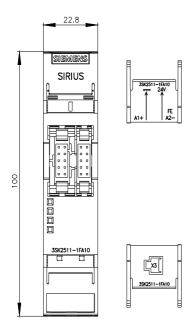
Cax online generator

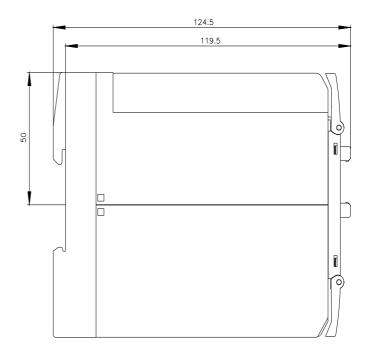
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK2511-1FA10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3SK2511-1FA10

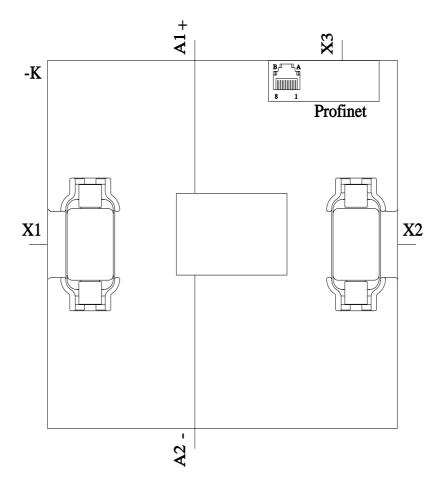
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SK2511-1FA10&lang=en









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