SIEMENS

Data sheet 3SK2511-2FA10



SIRIUS, interface module PROFINET interface for safety relay 3SK2 as of E05 and 3RK31 as of E04 PROFINET IO interface 100 Mbit/s, RJ45 22.5 mm width Spring-type terminal Can be parameterized via Safety ES without connecting cable

Figure similar

product ategory product designation design of the product General technical data configuration software required protection class IP protection class IP of the enclosure shock resistance degree of pollution certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value insulation voltage rated value insulation voltage rated value insulation Voltage resistance of a code according to EN 61346-2 Communication/ Protocol protocol is supported PROFIBUS DP protocol • NIMP • HTTPS • LLDP • PROFINET IO protocol • PROFisafe protocol • NTP • Media Redundancy Protocol (ARP) • Address Resolution Protocol (ARP) • Address Resolution Protocol (ARP) • Address Resolution Protocol (ARP) • Transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data • for inputs with PROFINET IO • Autoregotiation • Autoregotiation • Autoregotiation • Autoregotiation • Autoresosver service for open IE communication • LLDP • LLDP • Ves • Autoresosver service for open IE communication • LLDP • Ves service for open IE communication • LLDP • Ves Ves Ves Safety Elex PX: 10. SP3 and higher PROFINET io PROFINET io bit 64 Ves Ves Ves Ves Ves Ves Ves Ve	product brand name		SIRIUS
design of the product General technical data configuration software required protection class IP protection class IP IP20 protection class IP of the enclosure IP20 shock resistance I5g /11 ms degree of pollution 3 3 certificate of suitability UL approval Yes vibration resistance according to IEC 60068-2-6 5 500 Hz: 0.75 mm surge voltage resistance rated value V 800 insulation voltage rated value V 50 consumed current for rated value of supply voltage A 0.04 reference code according to EN 61346-2 K Communication/ Protocol protocol Is supported PROFIBUS DP protocol	product category		Safety relay
configuration software required protection class IP protection class IP iP20 shock resistance degree of pollution surfactor of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value insulation voltage rated value consumed current for rated value of supply voltage reference code according to EN 61346-2 Communication/ Protocol Protocol is supported PROFIBUS DP protocol SNMP HITPS No PROFINET IO protocol PROFISATe protocol PROFISATe protocol NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume as user data per station maximum data volume as user data of rinputs with PROFINET IO of outputs with PROFINET IO Autocrossover service for open IE communication	product designation		Interface module
configuration software required protection class IP protection class IP of the enclosure shock resistance degree of pollution certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value insulation voltage rated value consumed current for rated value of supply voltage reference code according to EN 61346-2 Communication/ Protocol PROFIBUS DP protocol • SNMP • HTTPS • LLDP • PROFINET IO protocol • PROFIsafe protocol • NTP • Media Redundancy Protocol (MRP) • Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume as user data per station maximum data volume as user data per station maximum of for inputs with PROFINET IO of or outputs with PROFINET IO of outputs with PROFINET IO of outputs with PROFINET IO of outputs wi	design of the product		PN interface
Protection class IP IP20	General technical data		
protection class IP of the enclosure shock resistance degree of pollution certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value v 800 insulation voltage rated value v 50 consumed current for rated value of supply voltage reference code according to EN 61346-2 K Communication/ Protocol protocol is supported PROFIBUS DP protocol SMMP HTTPS LLDP PROFINET IO protocol PROFISE protocol No No NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) Address Resolution Protocol (ARP) Transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO product function at the Ethernet interface Autonegotiation Autocrossover Service for open IE communication	configuration software required		Yes; Safety ES V1.0 SP3 and higher
shock resistance degree of pollution 3 certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value vibration voltage rated value voltage reference code according to EN 61346-2 Communication/ Protocol protocol is supported PROFIBUS DP protocol SNMP HTTPS LLDP PROFINET IO protocol PROFISafe protocol No No No No Address Resolution Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO product function at the Ethernet interface Autocrossover Autocrossover service for open IE communication	protection class IP		IP20
degree of pollution certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value insulation voltage rated value voltage rated value consumed current for rated value of supply voltage reference code according to EN 61346-2 Communication/ Protocol protocol is supported PROFIBUS DP protocol SNMP HITPS No LLDP PROFINET IO protocol PROFINET IO protocol PROFISafe protocol No No No Hedia Redundancy Protocol (MRP) Address Resolution Protocol (ARP) Transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data of or inputs with PROFINET IO bit of or outputs with PROFINET IO product function at the Ethernet interface Autocerossover Service for open IE communication	protection class IP of the enclosure		IP20
certificate of suitability UL approval vibration resistance according to IEC 60068-2-6 surge voltage resistance rated value vibration voltage rated value vi	shock resistance		15g / 11 ms
vibration resistance according to IEC 60068-2-6 5 500 Hz: 0.75 mm surge voltage resistance rated value V 800 insulation voltage rated value of supply voltage A 0.04 reference code according to EN 61346-2 K Communication/ Protocol K protocol is supported No • PROFIBUS DP protocol No • SNMP Yes • HTTPS No • LLDP Yes • PROFINET IO protocol Yes • PROFISE protocol No • NTP No • Media Redundancy Protocol (MRP) No • Address Resolution Protocol (ARP) Yes transmission mode for Industrial Ethernet PROFINET with 100 Mbps full duplex (100BASE-TX) data volume as user data per station maximum byte data volume of the cyclic user data For inputs with PROFINET IO • for outputs with PROFINET IO bit • for outputs with PROFINET IO bit • Autonegotiation Yes • Autornostover Yes • Autorossover Yes • service for open IE communication Yes	degree of pollution		3
surge voltage resistance rated value insulation voltage rated value consumed current for rated value of supply voltage reference code according to EN 61346-2 K Communication/ Protocol protocol is supported PROFIBUS DP protocol SNMP HITPS No HITPS PROFINET IO protocol PROFISafe protocol NO NO NO NO NO PROFISafe protocol NO NO Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO Autosensing Autocrossover Service for open IE communication	certificate of suitability UL approval		Yes
insulation voltage rated value consumed current for rated value of supply voltage reference code according to EN 61346-2 K	vibration resistance according to IEC 60068-2-6		5 500 Hz: 0.75 mm
consumed current for rated value of supply voltage reference code according to EN 61346-2 Communication/ Protocol Protocol is supported PROFIBUS DP protocol SNMP	surge voltage resistance rated value	V	800
reference code according to EN 61346-2 Communication/ Protocol protocol is supported • PROFIBUS DP protocol • SNMP • HTTPS • No • LLLDP • PROFINET IO protocol • PROFISafe protocol • NTP • Media Redundancy Protocol (MRP) • Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume as user data per station maximum data volume of the cyclic user data • for inputs with PROFINET IO product function at the Ethernet interface • Autonegotiation • Autosensing • Autocrossover service for open IE communication	insulation voltage rated value	V	50
protocol is supported PROFIBUS DP protocol SNMP PROFIBUS DP protocol SNMP PROFINET IO protocol PROFISafe protocol No No PROFISA protocol PROFISA protocol PROFISA protocol PROFISA protocol No No PROFINET IO protocol No No PROFISA protocol No No PROFINET With 100 Mbps full duplex (100BASE-TX) Transmission mode for Industrial Ethernet PROFINET with 100 Mbps full duplex (100BASE-TX) Dit at volume as user data per station maximum Dit data volume of the cyclic user data For inputs with PROFINET IO For outputs with PROFINET IO Dit 64 Product function at the Ethernet interface Autonegotiation Autocrossover Pres Service for open IE communication	consumed current for rated value of supply voltage	Α	0.04
protocol is supported PROFIBUS DP protocol SNMP HTTPS HTTPS PROFINET IO protocol PROFISafe protocol No No No No PROFISA Redundancy Protocol (MRP) Address Resolution Protocol (ARP) Transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO Autonegotiation Autosensing Autocrossover Service for open IE communication	reference code according to EN 61346-2		K
PROFIBUS DP protocol SNMP HTTPS HTTPS No LLDP PROFINET IO protocol PROFIsafe protocol No No No No Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) Transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO Autonegotiation Autosensing Autocrossover Service for open IE communication	Communication/ Protocol		
SNMP HTTPS LLDP PROFINET IO protocol PROFIsafe protocol NO NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet PROFINET with 100 Mbps full duplex (100BASE-TX) data volume as user data per station maximum byte data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO Autonegotiation Autosensing Autocrossover service for open IE communication	protocol is supported		
 HTTPS LLDP PROFINET IO protocol PROFIsafe protocol NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO product function at the Ethernet interface Autonegotiation Autocrossover service for open IE communication 	 PROFIBUS DP protocol 		No
LLDP PROFINET IO protocol PROFIsafe protocol NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO product function at the Ethernet interface	• SNMP		Yes
PROFINET IO protocol PROFIsafe protocol No NTP Nedia Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO product function at the Ethernet interface	• HTTPS		No
PROFIsafe protocol No NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum data volume of the cyclic user data for inputs with PROFINET IO for outputs with PROFINET IO product function at the Ethernet interface	• LLDP		Yes
 NTP Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum for inputs with PROFINET IO for outputs with PROFINET IO for outputs	 PROFINET IO protocol 		Yes
Media Redundancy Protocol (MRP) Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum ofor inputs with PROFINET IO ofor outputs with PROFINET IO product function at the Ethernet interface Autonegotiation Autosensing Autocrossover service for open IE communication No Yes PROFINET with 100 Mbps full duplex (100BASE-TX) bit 64 64 FROFINET With 100 Mbps full duplex (100BASE-TX) bit 64 Yes Yes Yes Yes Yes	 PROFIsafe protocol 		No
Address Resolution Protocol (ARP) transmission mode for Industrial Ethernet data volume as user data per station maximum byte data volume of the cyclic user data • for inputs with PROFINET IO • for outputs with PROFINET IO • for outputs with PROFINET IO • Autonegotiation • Autosensing • Autocrossover service for open IE communication Yes Yes PROFINET with 100 Mbps full duplex (100BASE-TX) byte 8 64 • 64 • 64 • 64 • For outputs with PROFINET IO bit for each of the cyclic user data From the cyclic	• NTP		No
transmission mode for Industrial Ethernet data volume as user data per station maximum byte data volume of the cyclic user data • for inputs with PROFINET IO • for outputs with PROFINET IO bit 64 product function at the Ethernet interface • Autonegotiation • Autosensing • Autocrossover service for open IE communication	 Media Redundancy Protocol (MRP) 		No
data volume as user data per station maximum data volume of the cyclic user data of for inputs with PROFINET IO bit for outputs wi	Address Resolution Protocol (ARP)		Yes
data volume of the cyclic user data • for inputs with PROFINET IO • for outputs with PROFINET IO bit 64 product function at the Ethernet interface • Autonegotiation • Autosensing • Autocrossover • Autocrossover service for open IE communication	transmission mode for Industrial Ethernet		PROFINET with 100 Mbps full duplex (100BASE-TX)
 for inputs with PROFINET IO for outputs with PROFINET IO bit 64 product function at the Ethernet interface Autonegotiation Autosensing Autocrossover service for open IE communication 	data volume as user data per station maximum	byte	8
for outputs with PROFINET IO bit 64 product function at the Ethernet interface Autonegotiation	data volume of the cyclic user data		
product function at the Ethernet interface • Autonegotiation • Autosensing • Autocrossover • Autocrossover service for open IE communication	•	bit	64
 Autonegotiation Autosensing Autocrossover Service for open IE communication Yes Yes	for outputs with PROFINET IO	bit	64
 Autosensing Autocrossover Service for open IE communication 	product function at the Ethernet interface		
Autocrossover Yes service for open IE communication	 Autonegotiation 		Yes
service for open IE communication	Autosensing		Yes
	Autocrossover		Yes
• LLDP Yes	service for open IE communication		
	• LLDP		Yes

• SNMP		Yes
• TCP/IP		No
service as PROFINET IO device		
isochronous mode		No
• MRP		No
• IRT		No
 prioritized startup 		No
 supports PROFlenergy 		No
 supports Shared Device 		No
PROFINET conformity class		В
network load class according to PROFINET		1
specification for Security Level 1 test according to		V1.1.6
PROFINET		
product function		
 supports PROFlenergy measured values 		No
supports PROFlenergy shutdown		No
product function at the 1st interface PROFINET IO device		Yes
protocol at the 1st interface media redundancy protocol		No
number of ports at the 1st interface		1
interface design 1 RJ45 (Ethernet)		Yes
design of the interface		
Ethernet interface		Yes
Fast Ethernet interface		No
number of interfaces according to PROFINET		1
Control circuit/ Control		
control supply voltage rated value	V	24
type of voltage		DC
operating range factor control supply voltage rated value at DC		0.85 1.2
inrush current peak at 24 V	Α	4
duration of inrush current peak at 24 V	ms	1
operating power rated value	W	1
Installation/ mounting/ dimensions		
fastening method		Snap-mounted to DIN rail or screw-mounted with additional push-in lug
mounting position		any
width	mm	22.5
height	mm	100
depth	mm	124.5
weight without packaging	kg	140
Connections/ Terminals		
product function removable terminal		Yes
type of connectable conductor cross-sections solid		1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)
connectable conductor cross-section solid	mm²	0.5 1.5
type of connectable conductor cross-sections finely stranded with core end processing		1x (0.5 1.0 mm²), 2x (0.5 1.0 mm²)
connectable conductor cross-section finely stranded with core end processing	mm²	0.5 1
type of electrical connection	111111	
	111111	spring-loaded terminals
AWG number as coded connectable conductor cross section	111111	spring-loaded terminals
AWG number as coded connectable conductor cross		spring-loaded terminals 20 16
AWG number as coded connectable conductor cross section		
AWG number as coded connectable conductor cross section • solid	111111	20 16
AWG number as coded connectable conductor cross section • solid • stranded type of connectable conductor cross-sections at AWG		20 16
AWG number as coded connectable conductor cross section • solid • stranded type of connectable conductor cross-sections at AWG cables	111111	20 16 20 16
AWG number as coded connectable conductor cross section • solid • stranded type of connectable conductor cross-sections at AWG cables • solid		20 16 20 16 1x (20 16), 2x (20 16)
AWG number as coded connectable conductor cross section • solid • stranded type of connectable conductor cross-sections at AWG cables • solid • stranded		20 16 20 16 1x (20 16), 2x (20 16)

Electromagnetic compatibility				
EMC immunity according to IEC 60947-1		Class A		
conducted interference due to burst according to IEC 61000-4-4		2 kV (power ports)		
conducted interference due to conductor-earth surge according to IEC 61000-4-5		Test Level 0.5 KV / 1 KV		
electrostatic discharge according to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge		
field-based interference according to IEC 61000-4-3		10 V/m		
EMC emitted interference according to IEC 60947-1		class A		
Ambient conditions				
installation altitude at height above sea level maximum	m	2 000		
ambient temperature				
 during operation 	°C	-25 +60		
 during storage 	°C	-40 +85		
during transport	°C	-40 +80		
relative humidity during operation	%	10 95		
air pressure according to SN 31205	kPa	90 106		
Contification on provide				

Certificates/ approvals

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity



Confirmation





Type Examination Certificate



Test Certificates

other

Type Test Certificates/Test Report

Confirmation



Profibu:

Further information

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=3SK2511-2FA10

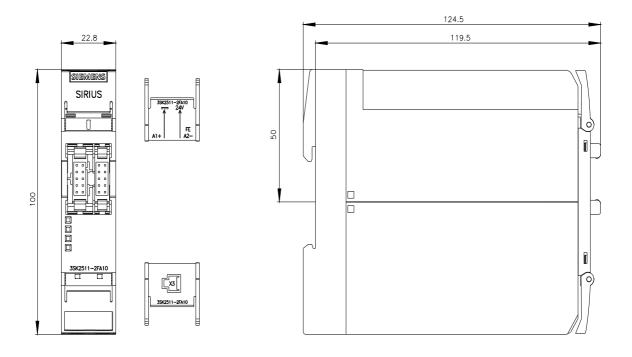
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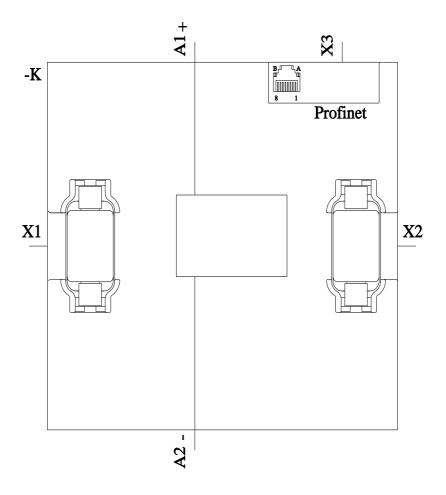
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK2511-2FA10

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3SK2511-2FA10}$

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3SK2511-2FA10&lang=en





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