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Data sheet 3RK3141-1CD10



DP/AS-Interface F-Link. gateway PROFIBUS DP/AS-i for safety-oriented data transmission from ASIsafe to PROFIBUS-DP-PROFIsafe. Master profile M3/M4 according to AS-i specification V3.0. degree of protection IP20. screw terminals

General technical data		
product designation		PROFIsafe/ASIsafe F-Link
product type designation		DP/AS-i F-Link
protection class IP		IP20
type of electrical connection of the AS-Interface		Screw-type connection
type of voltage supply		via 24 V DC
consumed current		
● from profile conductors of the AS-Interface		
— at 24 V with AS-i Power24V maximum	mA	100
power loss [W]	W	3
insulation voltage rated value	V	500
product feature redundancy capability		No
product function suitable for AS-i Power24V		No
product function		
● web-based management		No
● diagnostics via email		No
● galvanic isolation		Yes
display version		
● as status display by LED		DEVICE, ASi, BF, SF
● as status indication through display		Dot-matrix display, 2-line
type of configuration of the AS-Interface		Set pushbutton on device, STEP7, GSD, command interface
Communication/ Protocol		
version of the AS-Interface specification		V 3.0
AS-Interface master profile is supported		M4 (in acc. with AS-interface specification V 3.0)
type of data transmission		PROFIBUS
number of interfaces		
● as AS-Interface		1
● according to RS 485		1
● according to Industrial Ethernet		0
● according to PROFINET		0
● according to wireless		0
● according to USB		0
● other		0
product component optical interface		No
protocol is supported		
● ASIsafe (Safety at work) protocol		Yes
● PROFIsafe protocol		Yes
● PROFIBUS protocol		Yes
● PROFINET IO protocol		No

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● PROFINET CBA protocol		No
● TCP/IP		No
● SNMP		No
standard for wireless communication IEEE 802.11		No
Inputs/ Outputs		
number of inputs for AS-Interface maximum		496
number of outputs for AS-Interface maximum		496
number of AS-i devices per AS-Interface maximum		62
bus cycle time of the AS-Interface		
● for 31 devices	ms	5
● for 62 devices	ms	10
access to digital I/O data		via process image/peripheral addresses
access to analog I/O data		via process diagram/peripheral addresses and data record transfer
Mechanical data		
width	mm	45
height	mm	111
depth	mm	124
fastening method		snap-on fastening on 35 mm DIN rail or screw fastening using an additional push-in lug
module format		IP20
Ambient conditions		
ambient temperature		
● if installed on horizontal mounting rail during operation	°C	0 ... 50
● during transport	°C	-40 ... +85
● during storage	°C	-40 ... +85
relative humidity at 25 °C during operation maximum	%	95
installation altitude at height above sea level maximum	m	2 000
Safety related data		
suitability for use safety-related function		Yes
category according to EN 954-1		4
Safety Integrity Level (SIL) according to IEC 61508		SIL 3
SIL Claim Limit (subsystem) according to EN 62061		3
performance level (PL) according to EN ISO 13849-1		e
requirement class according to DIN V 19250		AK7, AK8
explosion protection marking for intrinsic safety of related equipment		
● EEx ia		No
● EEx ib		No
explosion protection category for gas		none
explosion protection category for dust		none

Certificates/ approvals

General Product Approval				EMV	Functional Saftey
					Type Examination Certificate

Test Certificates	other		Environment	Industrial Communication
Type Test Certificates/Test Report	Confirmation	产品合格 QC PASS	Environmental Confirmations	

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage

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

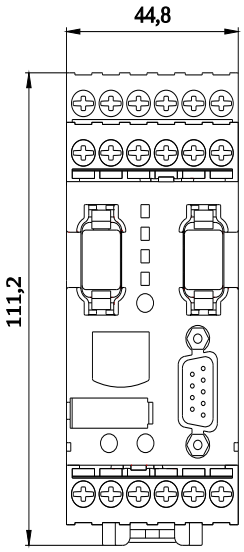
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10

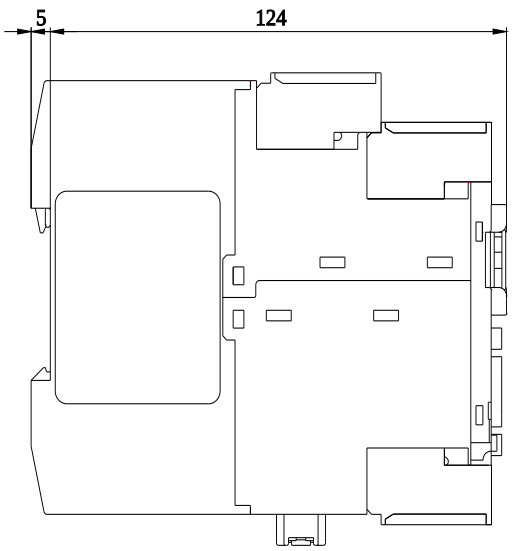
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RK3141-1CD10

Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK3141-1CD10

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RK3141-1CD10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK3141-1CD10&lang=en





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