

Siemens
EcoTech



AS-Interface module, 2 safe inputs, 1 LED, red, 4-pole connector with screw terminal and 4-pole connector with spring-type terminal, for front plate mounting



product brand name	SIRIUS ACT
product designation	AS-Interface module
product type designation	3SU1
General technical data	
product function	2F-DI / 1 LED
degree of pollution	3
type of voltage	
• of the operating voltage	DC
• of the input voltage	DC
consumed current maximum	60 mA
protection class IP	IP20, clamping screw tightened
shock resistance for railway applications according to EN 61373	Category 1, Class B
vibration resistance for railway applications according to EN 61373	Category 1, Class B
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	10/01/2014
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Diboron trioxide - 1303-86-2
Weight	74 g
design of the device type	2 F-DI + 1 LED
AS-Interface device profile	S-7.B.F
ID1 code	0...F
number of AS-i devices	1
operating voltage rated value	26.5 ... 31.6 V
operating voltage 1 at DC rated value	30 V
Communication/ Protocol	
protocol is supported	
• AS-Interface protocol	Yes
• ASIsafe (Safety at work) protocol	Yes
Inputs/ Outputs	
number of digital inputs	
• safety-related	2
number of digital outputs	1; For controlling the LED
Connections/ Terminals	
type of electrical connection	Screw connection + spring-type terminal
type of connectable conductor cross-sections	

<ul style="list-style-type: none"> • solid without core end processing 	1x (0.2 ... 2.5 mm ²)
<ul style="list-style-type: none"> • finely stranded with core end processing 	1x (0.25 ... 2.5 mm ²)
<ul style="list-style-type: none"> • finely stranded without core end processing 	1x (0.2 ... 2.5 mm ²)
<ul style="list-style-type: none"> • for AWG cables 	1x (30 ... 12)
tightening torque with screw-type terminals	0.5 ... 0.6 N·m

Lamp

color of the light source	red
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Product Function

suitability for use safety-related circuits	Yes
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Safety related data

product function suitable for safety function	Yes
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safe state	off
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test wear-related service life necessary	No
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category according to EN 954-1	4
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average diagnostic coverage level (DCavg)	99 %
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IEC 62061

SIL Claim Limit (subsystem) according to EN 62061	SIL CL 3
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Safety Integrity Level (SIL) according to IEC 62061	SIL 3
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PFHD with high demand rate according to IEC 62061	0 1/h
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ISO 13849

performance level (PL) according to ISO 13849-1	PL e
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category according to ISO 13849-1	4
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device type according to ISO 13849-1	1
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IEC 61508

Safety Integrity Level (SIL)	
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<ul style="list-style-type: none"> • according to IEC 61508 	SIL 3
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safety device type according to IEC 61508-2	Type B
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PFHD with high demand rate according to IEC 61508	0 1/h
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PFDavg with low demand rate according to IEC 61508	5E-6
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Safe failure fraction (SFF)	99 %
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hardware fault tolerance according to IEC 61508	1
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T1 value of service life according to IEC 61508	20 a
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Ambient conditions

ambient temperature	
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<ul style="list-style-type: none"> • during operation 	-25 ... +70 °C
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<ul style="list-style-type: none"> • during storage 	-40 ... +80 °C
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environmental category during operation according to IEC 60721	3M6, 3S2, 3B2, 3K6 (with relative air humidity of 10 ... 95%, no condensation in operation permitted)
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Environmental footprint

Environmental Product Declaration (EPD)	Yes
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global warming potential [CO ₂ eq] total	0.787 kg
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global warming potential [CO ₂ eq] during manufacturing	0.566 kg
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global warming potential [CO ₂ eq] during operation	0.235 kg
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global warming potential [CO ₂ eq] after end of life	-0.015 kg
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Siemens Eco Profile (SEP)	Siemens EcoTech
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Installation/ mounting/ dimensions

fastening method	
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<ul style="list-style-type: none"> • of modules and accessories 	Front plate mounting
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<ul style="list-style-type: none"> • of the AS-i devices 	Frontplattenbefestigung
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height	42 mm
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width	30 mm
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depth	66.9 mm
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Approvals Certificates

General Product Approval	EMV	Test Certificates
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[Type Test Certificates/Test Report](#)

Test Certificates	Maritime application	other
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[Special Test Certificate](#)



other	Environment	Industrial Communication
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[Confirmation](#)



Siemens EcoTech



[Environmental Confirmations](#)



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3SU1401-1EE20-2AA0>

Cax online generator

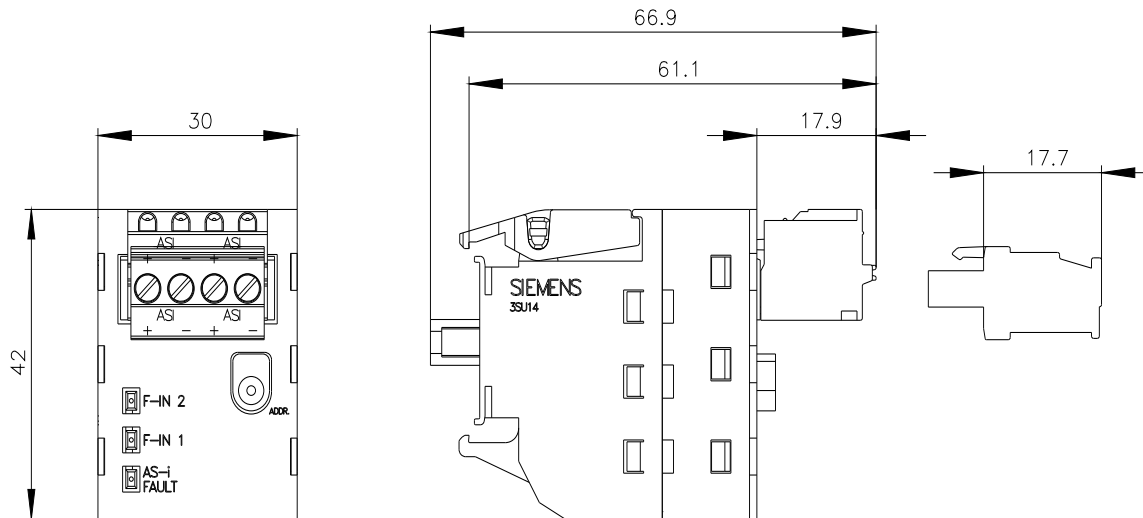
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1EE20-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3SU1401-1EE20-2AA0>

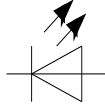
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SU1401-1EE20-2AA0&lang=en



-K1

AS-i Bus:
Slave:



F-IN1

F-IN2

AS-i Fault **Logic**

1 ASI+

2 ASI-

3 ASI+

4 ASI-

ADDR

last modified:

11/21/2025