

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 Prohibitation (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 slave type	2 F-DI + 1 LED
AS-Interface slave profile	S-7.B.F
ID1 code	0...F
number of AS-i slaves	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	
• solid without core end processing	1x (0.2 ... 2.5 mm ²)

- finely stranded with core end processing - finely stranded without core end processing - for AWG cables	1x (0.25 ... 2.5 mm²)	
	1x (0.2 ... 2.5 mm²)	
	1x (30 ... 12)	
tightening torque with screw-type terminals	0.5 ... 0.6 N·m	
Lamp		
color of the light source	red	
Product Function		
suitability for use safety-related circuits	Yes	
Safety related data		
product function suitable for safety function	Yes	
safe state	off	
test wear-related service life necessary	No	
category according to EN 954-1	4	
average diagnostic coverage level (DCavg)	99 %	
IEC 62061		
SIL Claim Limit (subsystem) according to EN 62061	SIL CL 3	
Safety Integrity Level (SIL) according to IEC 62061	SIL 3	
PFHD with high demand rate according to IEC 62061	4.5E-9 1/h	
ISO 13849		
performance level (PL) according to ISO 13849-1	PL e	
category according to ISO 13849-1	4	
device type according to ISO 13849-1	1	
IEC 61508		
Safety Integrity Level (SIL) according to IEC 61508	SIL 3	
safety device type according to IEC 61508-2	Type B	
PFHD with high demand rate according to IEC 61508	4.5E-9 1/h	
PFDavg with low demand rate according to IEC 61508	5E-6	
Safe failure fraction (SFF)	99 %	
hardware fault tolerance according to IEC 61508	1	
T1 value of service life according to IEC 61508	20 a	
Ambient conditions		
ambient temperature - during operation - during storage	-25 ... +70 °C -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)	
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 - of AS-i slaves	Front plate mounting Frontplattenbefestigung	
height	42 mm	
width	30 mm	
depth	66.9 mm	
Approvals Certificates		
General Product Approval	EMV	Test Certificates
 EG-Konf.   US   RCM Type Test Certificates/Test Report		
Test Certificates	Maritime application	other

[Type Test Certificates/Test Report](#)

Environment



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[Environmental Confirmations](#)



Industrial Communication

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

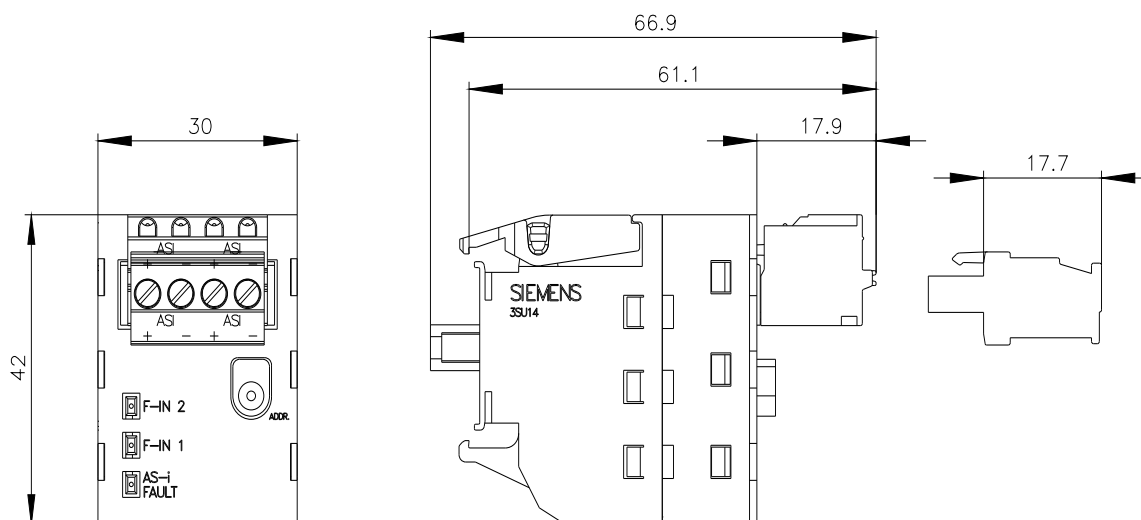
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SU1401-1EE20-2AA0>

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

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

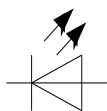
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

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



-K1

AS-i Bus:
Slave:

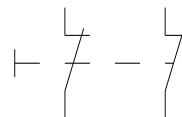


☐ F-IN1

☐ F-IN2

☐ AS-i Fault

Logic



1 ASI+

2 ASI-

3 ASI+

4 ASI-

ADDR

last modified:

9/13/2025