

SIRIUS SAFETY RELAY ADVANCED EXPANSION UNIT INPUT EXTENSION FOR ONE ADDITIONAL 2-CHANNEL OR TWO 1-CHANNEL SENSORS US = 24 V DC SPRING-LOADED CONNECTION



Figure similar

General technical data:	
product brand name	SIRIUS
Product designation	Input expansions
Design of the product	Sensor expansion for safety-related expansion of the Advanced basic units by adding a further two-channel sensor or two single-channel sensors.
Protection class IP of the enclosure	IP20
Protection against electrical shock	finger-safe
Insulation voltage rated value	50 V
Ambient temperature	
• during storage	-40 ... +80 °C
• during operation	-25 ... +60 °C
Air pressure acc. to SN 31205	90 kPa ... 106 kPa
Relative humidity during operation	10 ... 95 %
Installation altitude at height above sea level maximum	2 000 m
Vibration resistance acc. to IEC 60068-2-6	5 ... 500 Hz: 0,75 mm
Shock resistance	10g / 11 ms

Wire length between sensor and electronic evaluation device with Cu 1.5 mm ² and 150 nF/km maximum	4 000 m
Make time with automatic start	
• typical	60 ms
• at DC maximum	60 ms
Make time with automatic start after power failure	
• typical	6 500 ms
• maximum	6 500 ms
Make time with monitored start	
• maximum	60 ms
• typical	60 ms
Backslide delay time after opening of the safety circuits typical	40 ms
Recovery time after opening of the safety circuits typical	30 ms
Pulse duration	
• of the sensor input minimum	60 ms
• of the ON pushbutton input minimum	0.15 s

Control circuit/ Control:

Type of voltage of the control supply voltage	DC
Control supply voltage	
• at DC	
— rated value	24 V
Operating range factor control supply voltage rated value of magnet coil	
• at DC	0.8 ... 1.2
Power loss [W] typical	1.2 W

Installation/ mounting/ dimensions:

Mounting position	any
Required spacing for grounded parts at the side	5 mm
Required spacing with side-by-side mounting at the side	0 mm
Mounting type	screw and snap-on mounting
Width	17.5 mm
Height	100 mm
Depth	121.6 mm

Connections/Terminals:

Type of electrical connection	Push-in terminal
Type of connectable conductor cross-sections	
• solid	1x (0.5 ... 1.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• finely stranded	

— with core end processing	1x (0.5 ... 1.0 mm ²), 2x (0.5 ... 1.0 mm ²)
— without core end processing	1x (0.5 ... 1.5 mm ²), 2x (0.5 ... 1.5 mm ²)
Type of connectable conductor cross-sections at AWG conductors	
• solid	1x (20 ... 16), 2x (20 ... 16)
• stranded	1x (20 ... 16), 2x (20 ... 16)

Product Function:	
Product function parameterizable	Sensor floating / sensor non-floating, monitored start / autostart, 1-channel / 2-channel sensor connection, cross-circuit detection, startup testing, antivalent sensors, 2-hand switches
Suitability for operation Device connector 3ZY12	Yes
Suitability for interaction press control	No
Suitability for use	
• safety switch	Yes
• Monitoring of floating sensors	Yes
• Monitoring of non-floating sensors	Yes
• magnetically operated switch monitoring	Yes
• safety-related circuits	Yes

Certificates/approvals	
Certificate of suitability	
• TÜV (German technical inspectorate) certificate	Yes
• UL approval	Yes

General Product Approval	EMC	Functional Safety/Safety of Machinery
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[Baumusterbescheinigung](#)

Declaration of Conformity	Test Certificates	Shipping Approval	other	Railway
EG-Konf.	Typrüfbescheinigung/Werkszeugnis	LRS	RMRS	Bestätigungen
			Bestätigungen	Bestätigungen

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SK1220-2AB40>

Cax online generator

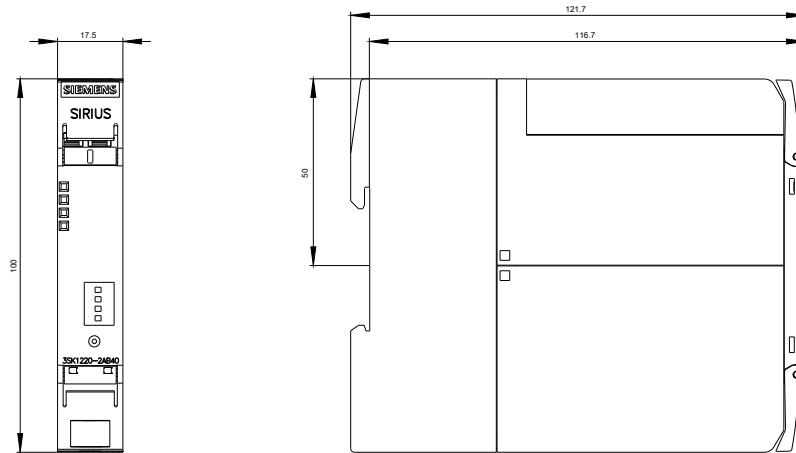
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK1220-2AB40>

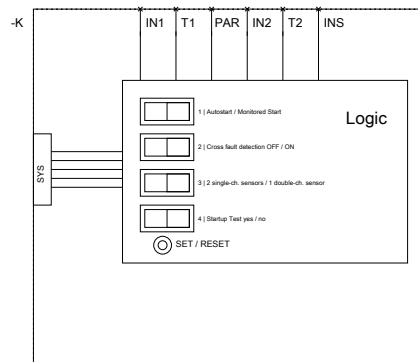
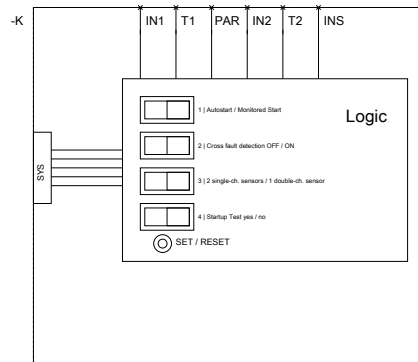
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SK1220-2AB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SK1220-2AB40&lang=en





last modified:

10/17/2016