SIEMENS

Show actual product details

Data sheet 3SK1211-2BB40

SIRIUS SAFETY RELAY OUTPUT EXTENSION 4RO WITH RELAY ENABLING CIRCUITS 4 NO CONTACTS + RELAY FEEDBACK CIRCUIT 1 NC CONTACT US = 24 V DC SPRING-LOADED CONNECTION

Figure similar

General technical data:	
product brand name	SIRIUS
Product designation	Output expansions
Design of the product	Expansion unit
Protection class IP of the enclosure	IP20
Protection against electrical shock	finger-safe
Insulation voltage rated value	300 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
Surge voltage resistance rated value	4 000 V
EMC emitted interference	IEC 60947-5-1, IEC 61000

Installation environment regarding EMC	This product is suitable for Class B environments and can also be used in domestic environments.
Overvoltage category	3
Degree of pollution	3
Equipment marking acc. to DIN EN 61346-2	F
Safety Integrity Level (SIL) acc. to IEC 61508	SIL3
Performance level (PL) acc. to EN ISO 13849-1	e
Category acc. to EN ISO 13849-1	4
PFHD with high demand rate acc. to EN 62061	0.0000000017 1/h
PFDavg with low demand rate acc. to IEC 61508	0.000001
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Hardware fault tolerance acc. to IEC 61508	1
Safety device type acc. to IEC 61508-2	Type A
• Number of outputs	
— as contact-affected switching element as NC contact for signaling function delayed switching	0
— as contact-based switch block as NC contact for feedback circuit instantaneous switching	1
— as contact-affected switching element as NC contact safety-related instantaneous contact	0
— as contact-affected switching element as NC contact safety-related delayed switching	0
• Number of outputs as contact-affected switching element as NO contact	
— for signaling function instantaneous contact	0
— for signaling function delayed switching	0
— safety-related instantaneous contact	4
— safety-related delayed switching	0
Stop category acc. to DIN EN 60204-1	0

General technical data:	
Type of electrical connection Plug-in socket	No
Operating frequency maximum	360 1/h
Switching capacity current of the NO contacts of the relay outputs	
• at DC-13	
— at 24 V	5 A
— at 115 V	0.2 A
— at 230 V	0.1 A
• at AC-15	

— at 24 V	5 A
— at 115 V	5 A
— at 230 V	5 A
Thermal current of the switching element with contacts maximum	5 A
Operating current at 17 V minimum	5 mA
Mechanical service life (switching cycles) typical	10 000 000
Design of the fuse link for short-circuit protection of the NO contacts of the relay outputs required	gL/gG: 6A or circuit breaker type A: 3A or circuit breaker type B: 2A or circuit breaker type C: 1A
Make time with automatic start	
• typical	15 ms
• at DC maximum	30 ms
Make time with automatic start after power failure	
• typical	15 ms
• maximum	30 ms
Backslide delay time in the event of power failure	
• typical	10 ms
• maximum	15 ms
Recovery time after power failure typical	0.015 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	2.5 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	22.5 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 mm²), 2x (0.5 ... 1.5 mm²)
• finely stranded	

— with core end processing	1x (0.5 ... 1.0 mm²), 2x (0.5 ... 1.0 mm²)
— without core end processing	1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²)
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	undelayed/delayed (only with system connector)
Suitability for operation Device connector 3ZY12	Yes
Suitability for use	
• 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
CCC	CSA	UL		C-Tick	Baumusterbescheinigung

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

Further information

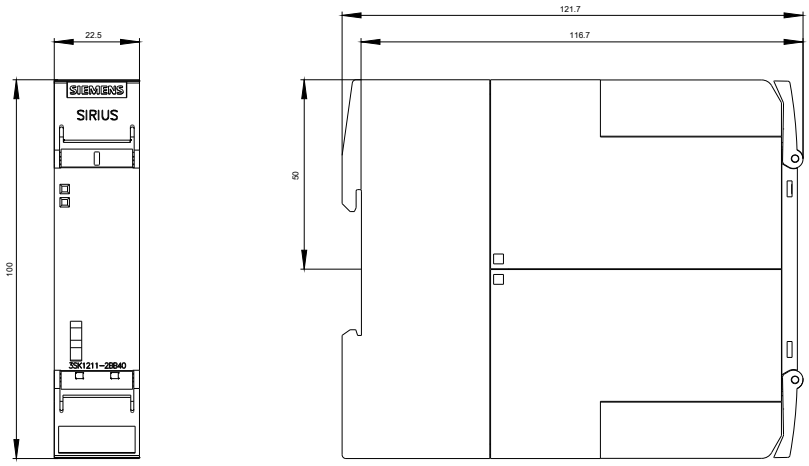
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

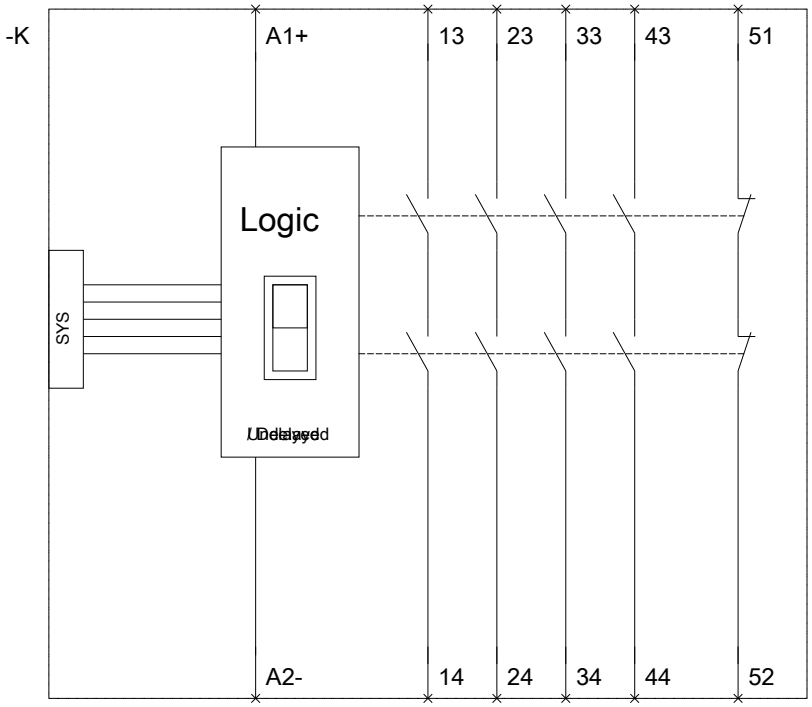
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SK1211-2BB40

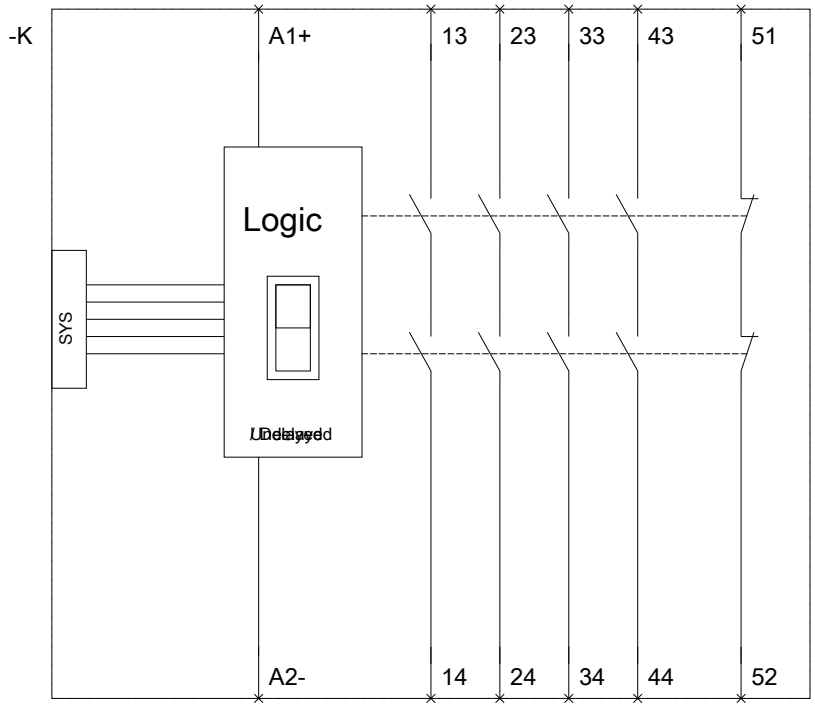
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK1211-2BB40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3SK1211-2BB40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SK1211-2BB40&lang=en







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