

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



Figure similar

General technical data	
product brandname	SIRIUS
Product category	Safety relays
Product designation	Output expansion
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
<ul style="list-style-type: none"> • Number of outputs <ul style="list-style-type: none"> — as contact-affected switching element as NC contact for signaling function delayed switching — as contact-based switch block as NC contact for feedback circuit instantaneous switching — as contact-affected switching element as NC contact safety-related instantaneous contact — as contact-affected switching element as NC contact safety-related delayed switching • Number of outputs as contact-affected switching element as NO contact <ul style="list-style-type: none"> — for signaling function instantaneous contact — for signaling function delayed switching — safety-related instantaneous contact — safety-related delayed switching 	0 1 0 0 0 0 0 4 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

<ul style="list-style-type: none"> • at AC-15 <ul style="list-style-type: none"> — at 24 V — at 115 V — at 230 V 	5 A 5 A 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 <ul style="list-style-type: none"> • typical • at DC maximum 	15 ms 30 ms
Make time with automatic start after power failure <ul style="list-style-type: none"> • typical • maximum 	15 ms 30 ms
Backslide delay time in the event of power failure <ul style="list-style-type: none"> • typical • maximum 	10 ms 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 <ul style="list-style-type: none"> • at DC <ul style="list-style-type: none"> — rated value 	24 V
Operating range factor control supply voltage rated value of magnet coil <ul style="list-style-type: none"> • 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	screw-type terminals
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • solid 	1x (0.5 ... 2.5 mm²), 2x (1.0 ... 1.5 mm²)

<ul style="list-style-type: none"> finely stranded — with core end processing 	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)
Type of connectable conductor cross-sections at AWG conductors <ul style="list-style-type: none"> solid 	1x (20 ... 14), 2x (18 ... 16)

Product Function	
Product function parameterizable	undelayed/delayed (only with system connector)
Suitability for operation Device connector 3ZY12	Yes
Suitability for use <ul style="list-style-type: none"> safety-related circuits 	Yes

Certificates/approvals	
Certificate of suitability <ul style="list-style-type: none"> TÜV (German technical inspectorate) certificate UL approval 	Yes Yes

General Product Approval	EMC	Functional Safety/Safety of Machinery
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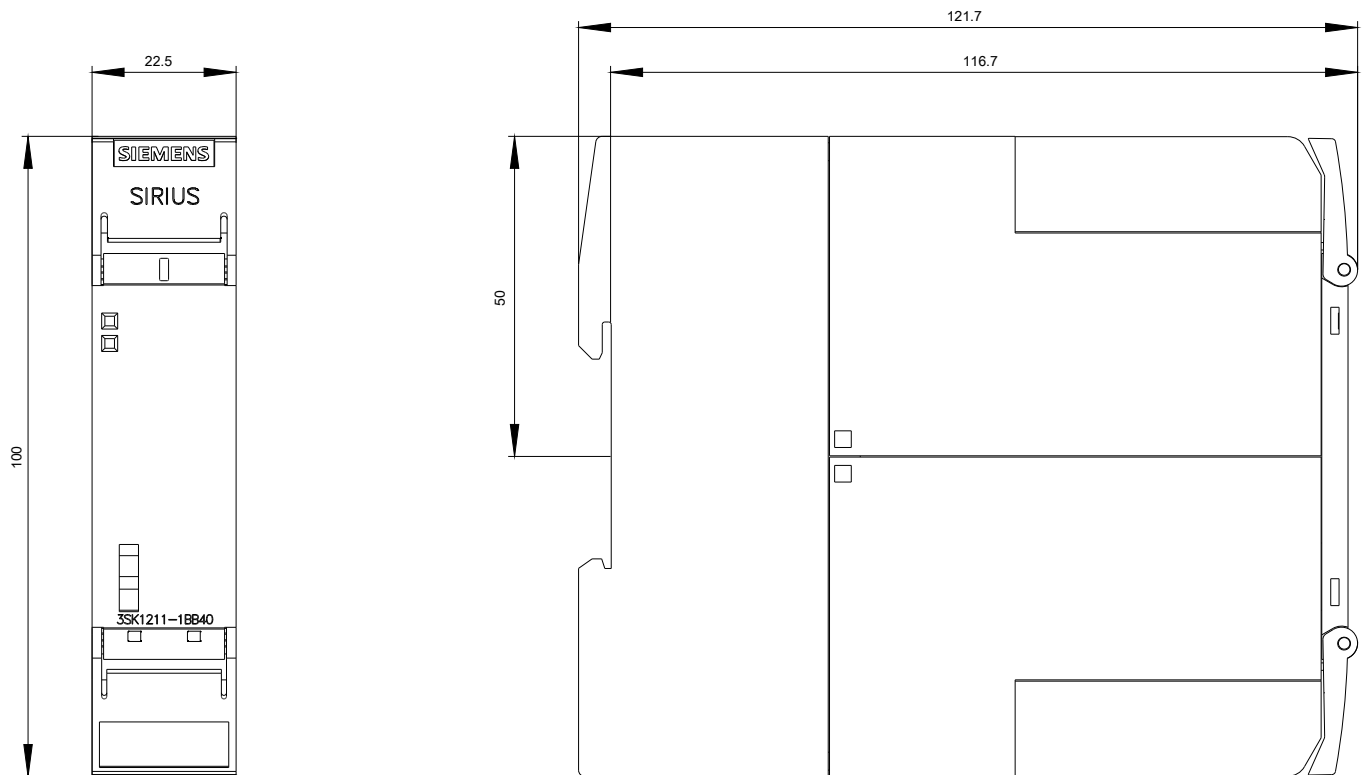


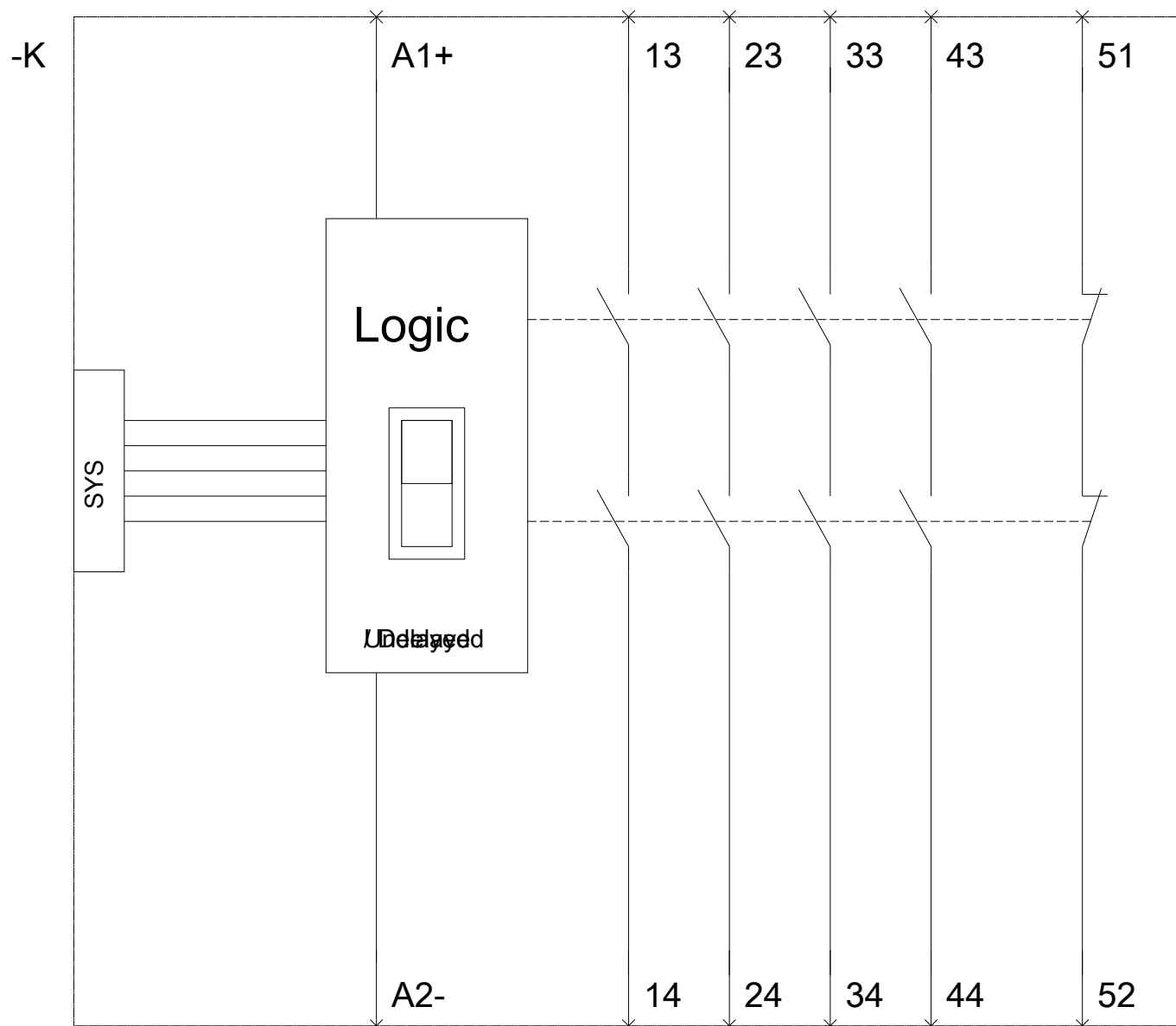
[Type Examination](#)

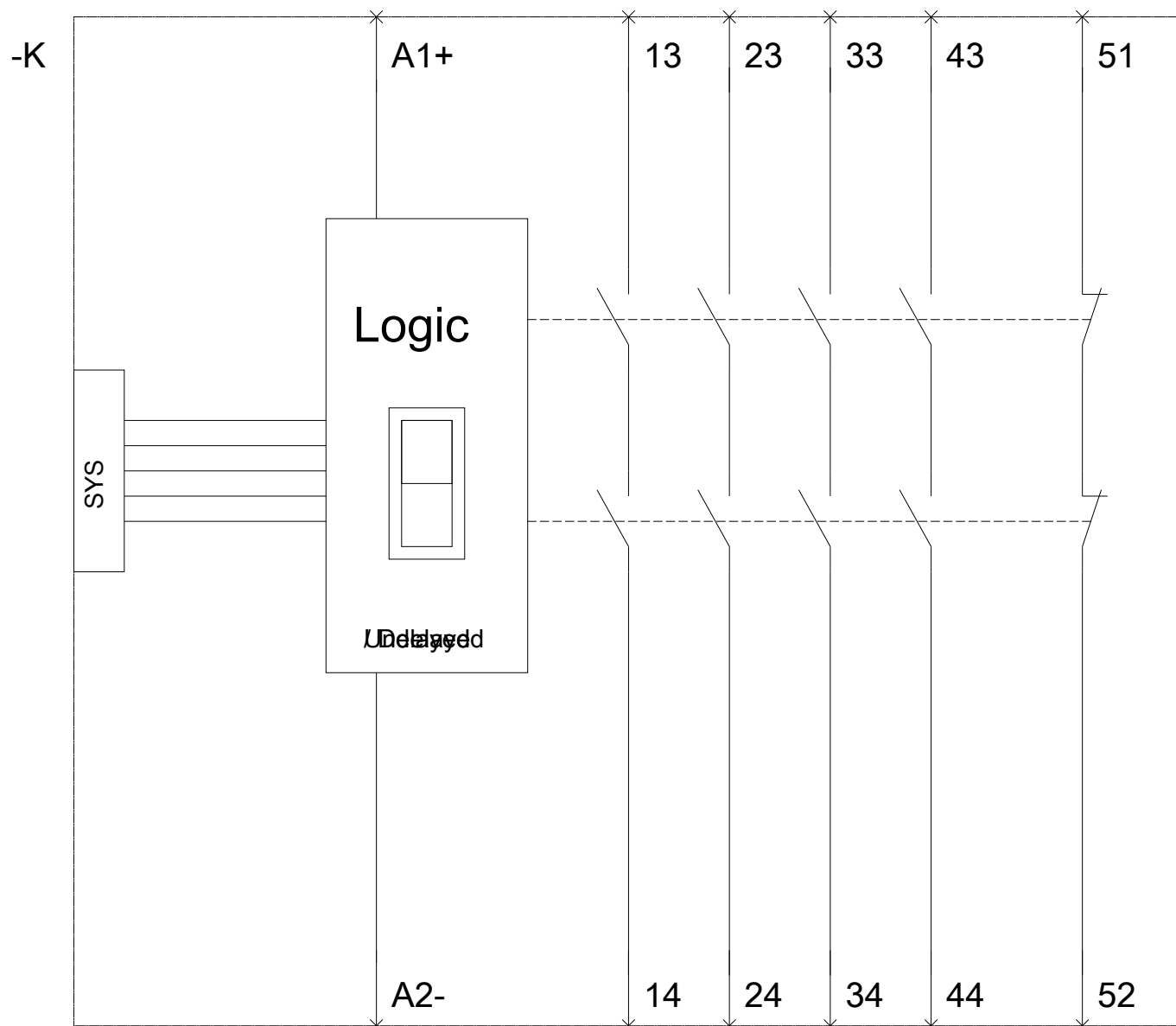
Declaration of Conformity	Test Certificates	Shipping Approval			other
<p>EG-Konf.</p>	Type Test Certificates/Test Report	<p>LRS</p>	<p>RINA</p>	<p>RMRS</p>	Confirmation

Railway
Confirmation

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=3SK1211-1BB40
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SK1211-1BB40







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