

SIRIUS SAFETY RELAY OUTPUT EXTENSION 4RO WITH RELAY
ENABLING CIRCUITS 4 NO CONTACTS + RELAY FEEDBACK
CIRCUIT 1 NC CONTACT US = 110-240 V AC/DC SCREW
CONNECTION



Figure similar

General technical data	
product brandname	SIRIUS
Product category	Safety relays
Product designation	Output expansion
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, Class A

Installation environment regarding EMC	This product is suitable for Class A environments only. It can cause undesired radio-frequency interference in residential environments. If this is the case, the user must take appropriate measures.
Overvoltage category	3
Degree of pollution	3
Equipment marking acc. to DIN EN 61346-2	F
Safety Integrity Level (SIL) acc. to IEC 61508	3
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 — 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 — 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 — at 115 V	5 A 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	35 ms
• at AC maximum	35 ms
Make time with automatic start after power failure	
• typical	35 ms
• maximum	35 ms
Backslide delay time in the event of power failure	
• typical	200 ms
• maximum	300 ms
Recovery time after power failure typical	0.32 s

Control circuit/ Control

Type of voltage of the control supply voltage	AC/DC
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Control supply voltage	
• at DC	
— rated value	110 ... 240 V
• at AC	
— at 50 Hz	
— rated value	110 ... 240 V
— at 60 Hz	
— rated value	110 ... 240 V
Operating range factor control supply voltage rated value of magnet coil	
• at AC	
— at 50 Hz	0.85 ... 1.1
— at 60 Hz	0.85 ... 1.1
• at DC	0.85 ... 1.1
Power loss [W] typical	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	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	
• solid	1x (0.5 ... 2.5 mm ²), 2x (1.0 ... 1.5 mm ²)
• finely stranded — with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²)
Type of connectable conductor cross-sections at AWG conductors	
• solid	1x (20 ... 14), 2x (18 ... 16)

Product Function

Suitability for operation Device connector 3ZY12	No
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
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CCC



CSA



UL



C-Tick

[Type Examination](#)

Declaration of Conformity	Test Certificates	Shipping Approval	other
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EG-Konf.

[Type Test Certificates/Test Report](#)



LRS



RINA



RMRS

[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=3SK1211-1BW20>

Cax online generator

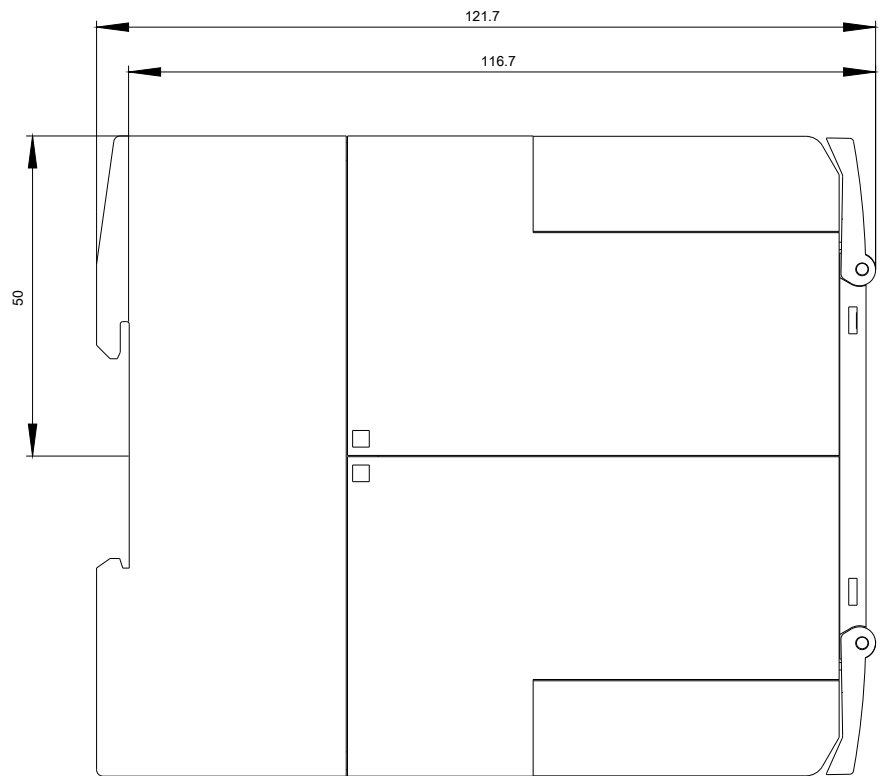
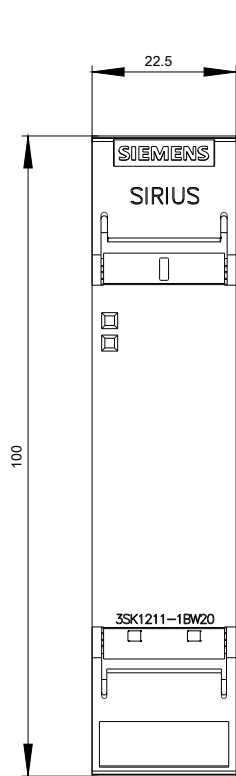
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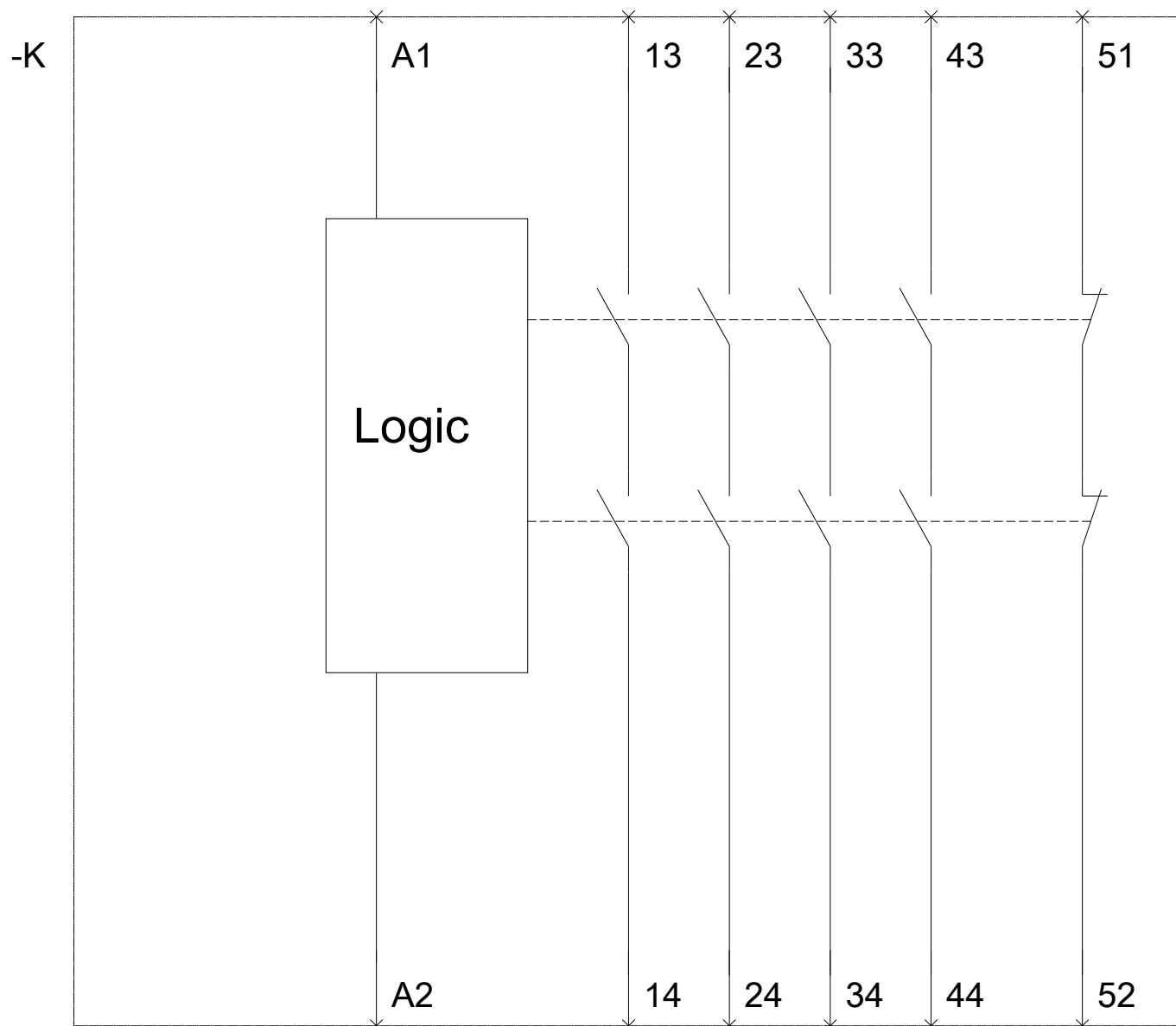
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

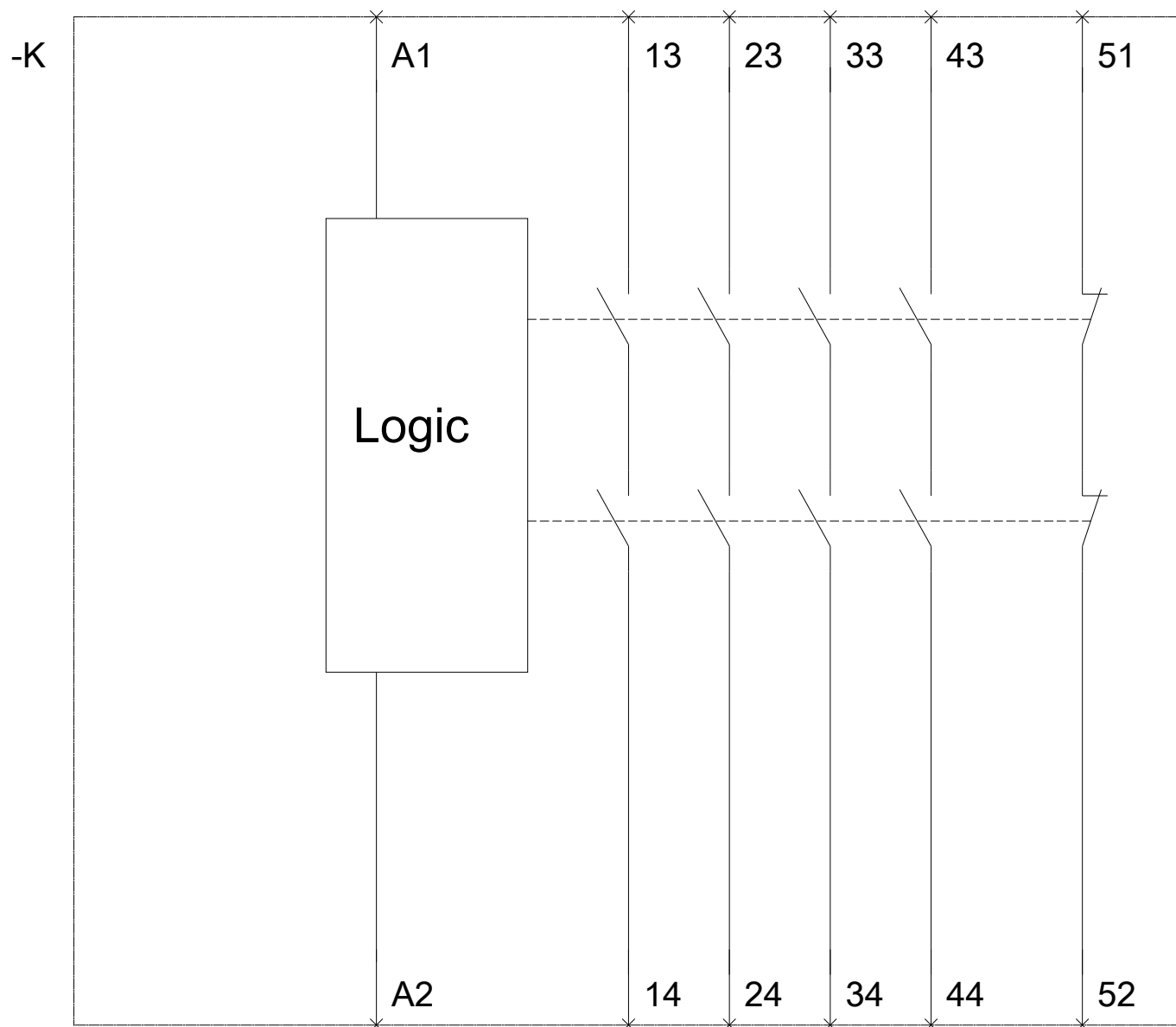
<https://support.industry.siemens.com/cs/ww/en/ps/3SK1211-1BW20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SK1211-1BW20&lang=en







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