SIEMENS

Data sheet

3SK1213-1AJ20

SIRIUS SAFETY RELAY OUTPUT EXTENSION 3RO POWER, WITH RELAY ENABLING CIRCUITS 3 NO CONTACTS + RELAY FEEDBACK CIRCUIT 1 NC CONTACT US = 115 V AC SCREW CONNECTION



Figure similar

General technical data				
product brandname	SIRIUS			
Product category	Safety relays			
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	5 g / 10 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	0.00000001 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 у			
Hardware fault tolerance acc. to IEC 61508	1			
Safety device type acc. to IEC 61508-2	Туре А			
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	3			
— 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	6 A			
— at 115 V	1.1 A			
— at 230 V	0.55 A			
• at AC-15				

— at 24 V	10 A
— at 115 V	10 A
— at 230 V	10 A
Thermal current of the switching element with	10 A
contacts maximum	
Operating current at 17 V minimum	5 mA
Mechanical service life (switching cycles) typical	10 000 000
maximum permissible voltage for safe isolation	300 V
between electronic evaluation device and enabling circuit acc. to EN 60947-1	
Design of the fuse link for short-circuit protection of	gL/gG: 16 A or MCB type A: 6 A or MCB type B: 4 A or MCB type
the NO contacts of the relay outputs required	C: 4 A
Make time with automatic start	
• typical	10 ms
• at AC maximum	15 ms
Make time with automatic start after power failure	
• typical	10 ms
• maximum	15 ms
Backslide delay time in the event of power failure	
• typical	15 ms
• maximum	15 ms
Recovery time after power failure typical	0 s
Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Control supply voltage	
• at AC	
— at 50 Hz	
— rated value	115 V
— at 60 Hz	
— rated value	115 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
Power loss [W] typical	4 W
Installation/ mounting/ dimensions	
Mounting position	on horizontal standard mounting rail
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	90 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 4.0 mm²), 2x (0.5 2.5 mm²)			
 finely stranded 				
— with core end processing	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)			
Type of connectable conductor cross-sections at				
AWG conductors				
• solid	1x (20 12), 2x (20 14)			
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 Produc	t Approval			EMC	Functional Safety/Safety of Machinery
	(SA) CSA		EHC	C-Tick	Baumusterbescheini gung
Declaration of Conformity	Test Certificates	Shipping Approval		other	
EG-Konf.	Typprüfbescheinigu ng/Werkszeugnis	Llovd's Register LRS	RINA	RMRS	Bestätigungen
Railway					

Bestätigungen

urther information

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

Industry Mall (Online ordering system)

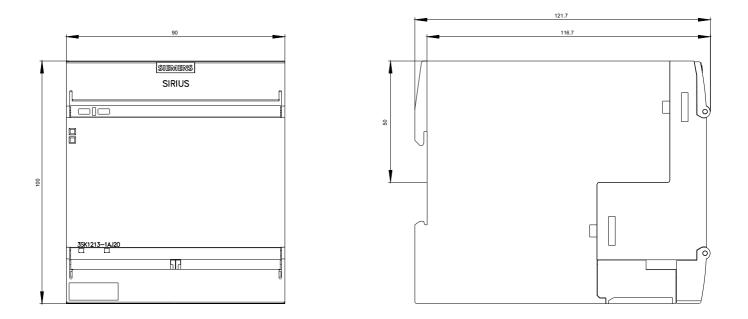
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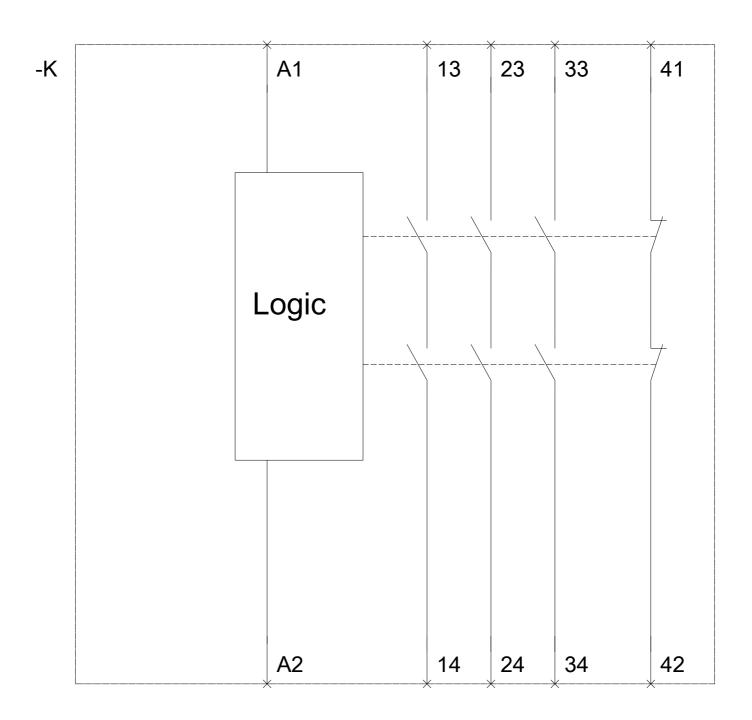
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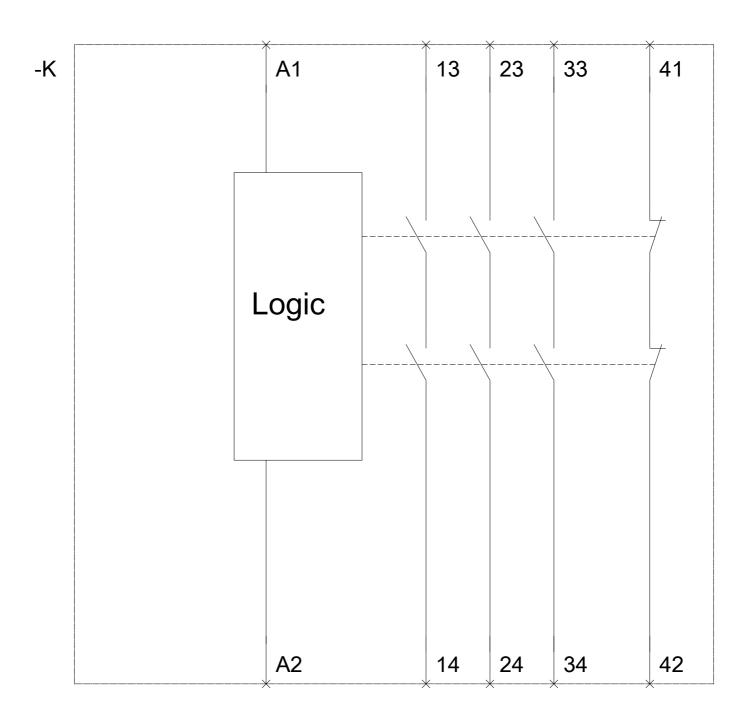
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3SK1213-1AJ20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3SK1213-1AJ20&lang=en







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