



COUPLING CONTACTOR RELAY, 2NO+2NC, DC 24V, 0.7...1.25\*US, W/ INTEGRATED SUPPRESSOR DIODE, SZ S00, SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	Coupling relay for switching auxiliary circuits

General technical data:	
Size of contactor	S00
Product expansion	No
<ul style="list-style-type: none"> <li>Auxiliary switch</li> </ul>	No
Insulation voltage	690 V
<ul style="list-style-type: none"> <li>with degree of pollution 3 Rated value</li> </ul>	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	IP20
<ul style="list-style-type: none"> <li>on the front</li> </ul>	IP20
Degree of pollution	3
Mechanical service life (switching cycles)	30 000 000
<ul style="list-style-type: none"> <li>of the contactor typical</li> </ul>	30 000 000
Equipment marking	K
<ul style="list-style-type: none"> <li>acc. to DIN EN 61346-2</li> <li>acc. to DIN EN 81346-2</li> </ul>	K

Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	-25 ... +60 °C
<ul style="list-style-type: none"> <li>during operation</li> <li>during operation Note</li> <li>during storage</li> </ul>	-25 ... +60 °C Railway application: -40 ... 70 °C with 10 mm clearance. See catalog for other rated conditions -55 ... +80 °C

Main circuit:	
<b>No-load switching frequency</b>	
• at AC	10 000 1/h
• at DC	10 000 1/h
Control circuit/ Control:	
<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	
• Rated value	24 V
<b>Operating range factor control supply voltage rated value of the magnet coil at DC</b>	0.7 ... 1.25
<b>Design of the surge suppressor</b>	with suppressor diode
<b>Closing power of the magnet coil at DC</b>	2.8 W
<b>Holding power of the magnet coil for DC</b>	2.8 W
<b>Closing delay</b>	
• at DC	30 ... 100 ms
<b>Opening delay</b>	
• at DC	7 ... 13 ms
<b>Arcing time</b>	10 ... 15 s
Auxiliary circuit:	
<b>Number of NC contacts</b>	
• for auxiliary contacts	2
— instantaneous contact	2
<b>Number of NO contacts</b>	
• for auxiliary contacts	2
— instantaneous contact	2
<b>Identification number and letter for switching elements</b>	22 E
<b>Operating current at AC-12 maximum</b>	10 A
<b>Operating current at AC-15</b>	
• at 230 V Rated value	10 A
• at 400 V Rated value	3 A
• at 500 V Rated value	2 A
• at 690 V Rated value	1 A
<b>Operating current with 1 current path at DC-12</b>	
• at 24 V Rated value	10 A
• at 110 V Rated value	3 A
• at 220 V Rated value	1 A
• at 440 V Rated value	0.3 A
• at 600 V Rated value	0.15 A
<b>Operating current with 2 current paths in series at DC-12</b>	
• at 24 V Rated value	10 A

<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> <li>• at 440 V Rated value</li> <li>• at 600 V Rated value</li> </ul>	10 A 4 A 2 A 1.3 A 0.65 A
<b>Operating current with 3 current paths in series at DC-12</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> <li>• at 440 V Rated value</li> <li>• at 600 V Rated value</li> </ul>	10 A 10 A 10 A 3.6 A 2.5 A 1.8 A
<b>Operating frequency at DC-12 maximum</b>	1 000 1/h
<b>Operating current with 1 current path at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> <li>• at 440 V Rated value</li> <li>• at 600 V Rated value</li> </ul>	10 A 1 A 0.3 A 0.14 A 0.1 A
<b>Operating current with 2 current paths in series at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> <li>• at 440 V Rated value</li> <li>• at 600 V Rated value</li> </ul>	10 A 3.5 A 1.3 A 0.9 A 0.2 A 0.1 A
<b>Operating current with 3 current paths in series at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> <li>• at 60 V Rated value</li> <li>• at 110 V Rated value</li> <li>• at 220 V Rated value</li> <li>• at 440 V Rated value</li> <li>• at 600 V Rated value</li> </ul>	10 A 4.7 A 3 A 1.2 A 0.5 A 0.26 A
<b>Operating frequency at DC-13 maximum</b>	1 000 1/h
<b>Design of the miniature circuit breaker</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary circuit up to 230 V</li> </ul>	C characteristic: 6 A; 0.4 kA
<b>Contact reliability of the auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

<b>Contact rating of the auxiliary contacts acc. to UL</b>	A600 / Q600
<b>Short-circuit:</b>	
<b>Design of the fuse link</b>	fuse gL/gG: 10 A
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	
<b>Installation/ mounting/ dimensions:</b>	
<b>mounting position</b>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail
<b>Height</b>	70 mm
<b>Width</b>	45 mm
<b>Depth</b>	73 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	6 mm
<ul style="list-style-type: none"> <li>• for live parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	6 mm
<b>Connections/ Terminals:</b>	
<b>Type of electrical connection</b>	spring-loaded terminals
<ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>	
<b>Type of connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— single or multi-stranded</li> </ul> </li> </ul>	2x (0,5 ... 4 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>— finely stranded without core end processing</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• for AWG conductors for auxiliary contacts</li> </ul>	2x (20 ... 12)
<b>Safety related data:</b>	
<b>B10 value with high demand rate acc. to SN 31920</b>	1 000 000; With 0.3 x I <sub>e</sub>
<b>Proportion of dangerous failures</b>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>	40 %
<ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	73 %
<b>Product function</b>	Yes
<ul style="list-style-type: none"> <li>• positively driven operation acc. to IEC 60947-5-1</li> </ul>	
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>Certificates/ approvals:</b>	

General Product Approval			Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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### Shipping Approval



Shipping Approval	other
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[Umweltbestätigung](#)



### Further information

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

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

**Industry Mall (Online ordering system)**

<http://www.siemens.com/industrymall>

**Cax online generator**

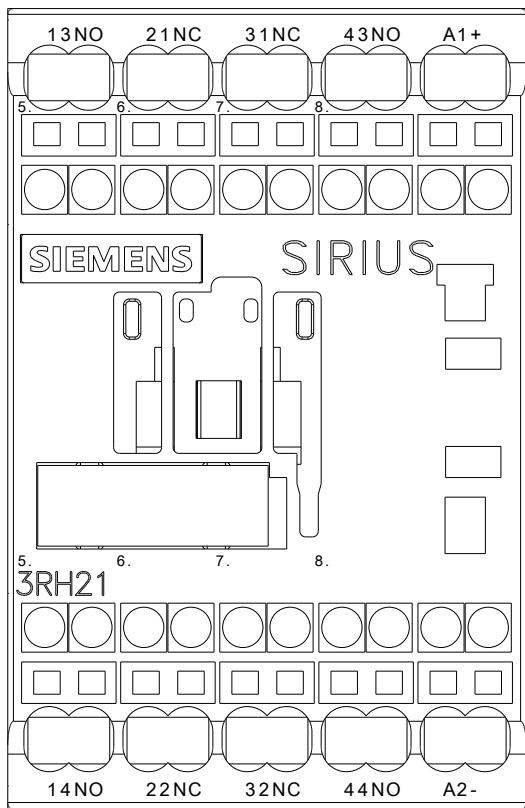
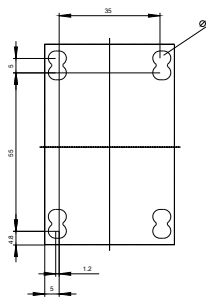
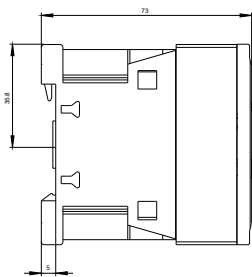
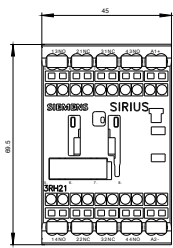
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21222KB40>

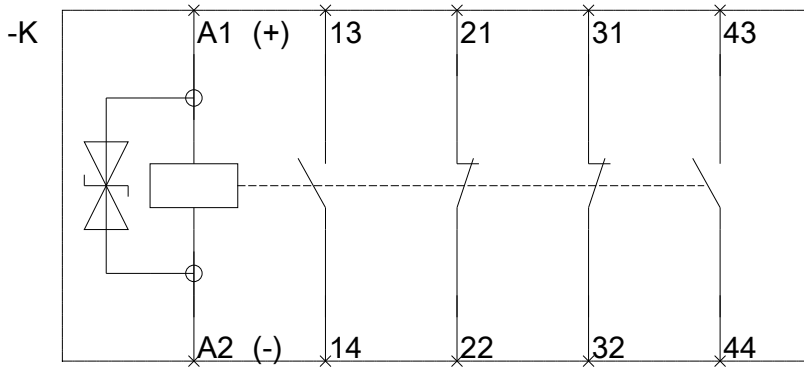
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RH21222KB40>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RH21222KB40&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21222KB40&lang=en)





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