

CONTACTOR RELAY, 4NO, AC 110V, 50/60 HZ, SZ S00, SPRING-LOADED TERMINAL



product brand name	SIRIUS
Product designation	contactor relay
<b>General technical data:</b>	
Size of contactor	S00
Product expansion	
• Auxiliary switch	Yes
Insulation voltage	
• with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP20
Degree of pollution	3
Shock resistance	
• at rectangular impulse	
— at AC	7,3g / 5 ms, 4,7g / 10 ms
• with sine pulse	
— at AC	11,4g / 5 ms, 7,3g / 10 ms
Mechanical service life (switching cycles)	
• of the contactor typical	30 000 000

<ul style="list-style-type: none"> <li>• of the contactor with added electronics-compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
<b>Equipment marking</b>	
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>	K
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>	K

#### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-55 ... +80 °C

#### Main circuit:

<b>No-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	10 000 1/h
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	10 000 1/h

#### Control circuit/ Control:

<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz Rated value</li> </ul>	110 V
<ul style="list-style-type: none"> <li>• at 60 Hz Rated value</li> </ul>	110 V
<ul style="list-style-type: none"> <li>• Rated value</li> </ul>	50 Hz
<b>Control supply voltage frequency 2 Rated value</b>	60 Hz
<b>Operating range factor control supply voltage rated value of the magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.8 ... 1.1
<ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>	0.85 ... 1.1
<b>Apparent pick-up power of the magnet coil at AC</b>	37 V·A
<b>Inductive power factor with closing power of the coil</b>	0.8
<b>Apparent holding power of the magnet coil at AC</b>	5.7 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.25
<b>Closing delay</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	8 ... 33 ms
<b>Opening delay</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	4 ... 15 ms
<b>Arcing time</b>	10 ... 15 s

#### Auxiliary circuit:

<b>Number of NO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	4

— instantaneous contact	4
<b>Identification number and letter for switching elements</b>	40 E
Operating current at AC-12 maximum	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 at 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
• at 60 V Rated value	10 A
• at 110 V Rated value	4 A
• at 220 V Rated value	2 A
• at 440 V Rated value	1.3 A
• at 600 V Rated value	0.65 A
<b>Operating current with 3 current paths in series at DC-12</b>	
• at 24 V Rated value	10 A
• at 60 V Rated value	10 A
• at 110 V Rated value	10 A
• at 220 V Rated value	3.6 A
• at 440 V Rated value	2.5 A
• at 600 V Rated value	1.8 A
<b>Operating frequency at DC-12 maximum</b>	1 000 1/h
<b>Operating current at 1 current path at DC-13</b>	
• at 24 V Rated value	10 A
• at 110 V Rated value	1 A
• at 220 V Rated value	0.3 A
• at 440 V Rated value	0.14 A
• at 600 V Rated value	0.1 A
<b>Operating current with 2 current paths in series at DC-13</b>	
• at 24 V Rated value	10 A
• at 60 V Rated value	3.5 A

<ul style="list-style-type: none"> <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>	<p>1.3 A</p> <p>0.9 A</p> <p>0.2 A</p> <p>0.1 A</p>
<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>	<p>10 A</p> <p>4.7 A</p> <p>3 A</p> <p>1.2 A</p> <p>0.5 A</p> <p>0.26 A</p>
<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
--	-------------

#### Short-circuit protection

<b>Design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

<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> <li>• for live parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	<p>6 mm</p> <p>6 mm</p>

#### Connections/ Terminals:

<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
<b>Type of connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	

- single or multi-stranded
- finely stranded with core end processing
- finely stranded without core end processing
- for AWG conductors for auxiliary contacts

2x (0,5 ... 4 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (20 ... 12)

#### Safety related data:

<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>	
• with low demand rate acc. to SN 31920	40 %
• with high demand rate acc. to SN 31920	73 %
<b>Product function</b>	
• positively driven operation acc. to IEC 60947-5-1	Yes
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y

#### Certificates/ approvals:

<b>General Product Approval</b>	<b>Functional Safety/Safety of Machinery</b>	<b>Declaration of Conformity</b>
---------------------------------	--	----------------------------------



[Baumusterbescheinigung](#)



<b>Test Certificates</b>	<b>Shipping Approval</b>
--------------------------	--------------------------

[Typprüfbescheinigung/Werkszeugnis](#)

[spezielle Prüfbescheinigung](#)



<b>Shipping Approval</b>	<b>other</b>
--------------------------	--------------



[Umweltbestätigung](#)



#### Further information

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

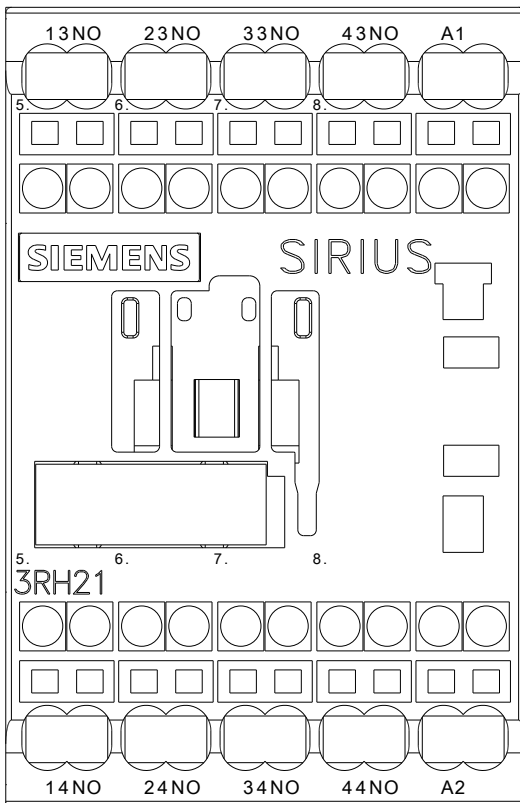
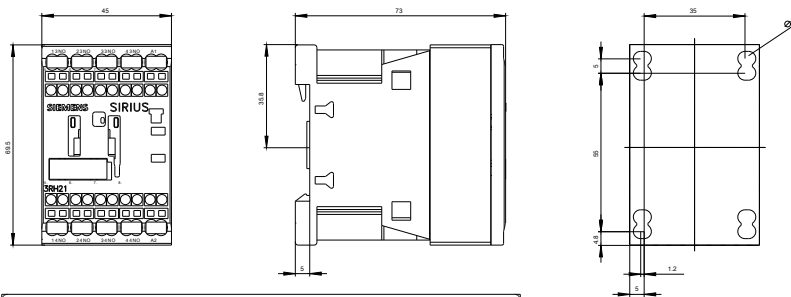
<http://www.siemens.com/industrial-controls/catalogs>

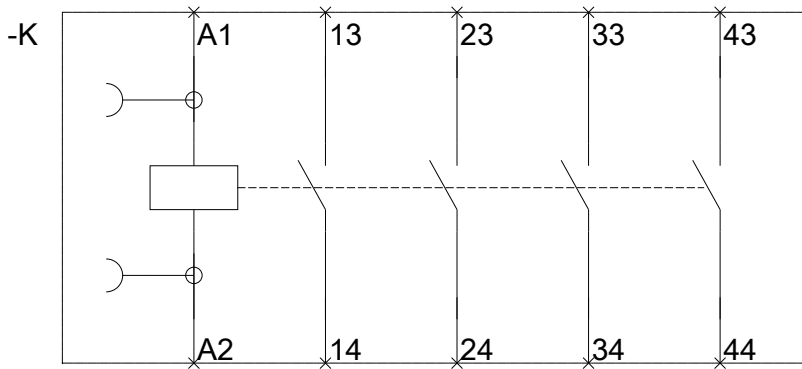
**Industry Mall (Online ordering system)**

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

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21402AF00>





last modified:

09.11.2015