



CONTACTOR RELAY, 3NO+1NC, AC 220V 50HZ, 240V 60HZ, SIZE S00, SCREW TERMINAL

product brand name	SIRIUS
Product designation	contactor relay
<b>General technical data:</b>	
Size of contactor	S00
Product expansion	Yes
<ul style="list-style-type: none"> <li>Auxiliary switch</li> </ul>	Yes
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)	
<ul style="list-style-type: none"> <li>of the contactor typical</li> </ul>	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
Equipment marking	
<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
<b>Ambient conditions:</b>	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	

- during operation
- during storage

-25 ... +60 °C

-55 ... +80 °C

#### Main circuit:

##### No-load switching frequency

- at AC
- at DC

10 000 1/h

10 000 1/h

#### Control circuit/ Control:

##### Type of voltage of the control supply voltage

AC

##### Control supply voltage at AC

- at 50 Hz Rated value
- at 60 Hz Rated value
- Rated value

220 V

240 V

50 Hz

##### Control supply voltage frequency 2 Rated value

60 Hz

##### Operating range factor control supply voltage rated value of the magnet coil at AC

- at 50 Hz
- at 60 Hz

0.8 ... 1.1

0.85 ... 1.1

##### Apparent pick-up power of the magnet coil at AC

37 V·A

##### Inductive power factor with closing power of the coil

0.8

##### Apparent holding power of the magnet coil at AC

5.7 V·A

##### Inductive power factor with the holding power of the coil

0.25

##### Closing delay

- at AC

8 ... 33 ms

##### Opening delay

- at AC

4 ... 15 ms

##### Arcing time

10 ... 15 s

#### Auxiliary circuit:

##### Number of NC contacts

- for auxiliary contacts
- instantaneous contact

1

1

##### Number of NO contacts

- for auxiliary contacts
- instantaneous contact

3

3

##### Identification number and letter for switching elements

31 E

##### Operating current at AC-12 maximum

10 A

##### Operating current at AC-15

- at 230 V Rated value
- at 400 V Rated value
- at 500 V Rated value

10 A

3 A

2 A

<ul style="list-style-type: none"> <li>• at 690 V Rated value</li> </ul>	1 A
<b>Operating current with 1 current path at DC-12</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 110 V Rated value</li> </ul>	3 A
<ul style="list-style-type: none"> <li>• at 220 V Rated value</li> </ul>	1 A
<ul style="list-style-type: none"> <li>• at 440 V Rated value</li> </ul>	0.3 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	0.15 A
<b>Operating current with 2 current paths in series at DC-12</b>	
<ul style="list-style-type: none"> <li>• at 24 V Rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 110 V Rated value</li> </ul>	4 A
<ul style="list-style-type: none"> <li>• at 220 V Rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>• at 440 V Rated value</li> </ul>	1.3 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	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> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 110 V Rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 220 V Rated value</li> </ul>	3.6 A
<ul style="list-style-type: none"> <li>• at 440 V Rated value</li> </ul>	2.5 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	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> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 110 V Rated value</li> </ul>	1 A
<ul style="list-style-type: none"> <li>• at 220 V Rated value</li> </ul>	0.3 A
<ul style="list-style-type: none"> <li>• at 440 V Rated value</li> </ul>	0.14 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	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> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> </ul>	3.5 A
<ul style="list-style-type: none"> <li>• at 110 V Rated value</li> </ul>	1.3 A
<ul style="list-style-type: none"> <li>• at 220 V Rated value</li> </ul>	0.9 A
<ul style="list-style-type: none"> <li>• at 440 V Rated value</li> </ul>	0.2 A
<ul style="list-style-type: none"> <li>• at 600 V Rated value</li> </ul>	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> </ul>	10 A
<ul style="list-style-type: none"> <li>• at 60 V Rated value</li> </ul>	4.7 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>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
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#### Short-circuit:

<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>	57.5 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>	screw-type terminals
<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> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for auxiliary contacts</li> </ul>	<p>2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup></p> <p>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p>






#### 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>	
<ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	<p>40 %</p> <p>73 %</p>

<b>Product function</b>	
<ul style="list-style-type: none"> <li>positively driven operation acc. to IEC 60947-5-1</li> </ul>	Yes
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y

#### Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
 CSA		 UL	 UL
	 DNV	 EG-Konf.	 LRS

Test Certificates	Shipping Approval
<a href="#">Typprüfbescheinigung/Werkszeugnis</a>	 ABS
	 BUREAU VERITAS
	 DNV
	 GL
	 LRS

Shipping Approval	other
 PRS	 Umweltbestätigung
 RINA	 VDE
 RMRS	

#### 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

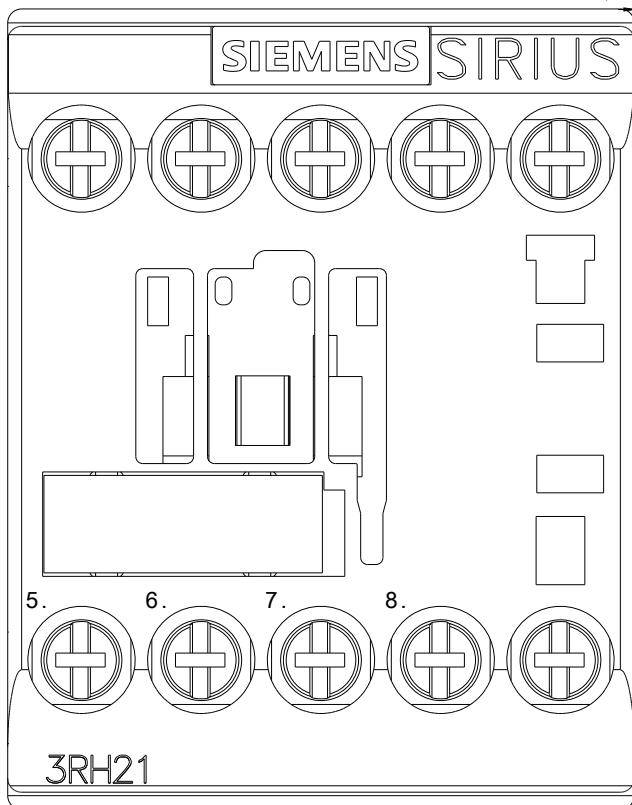
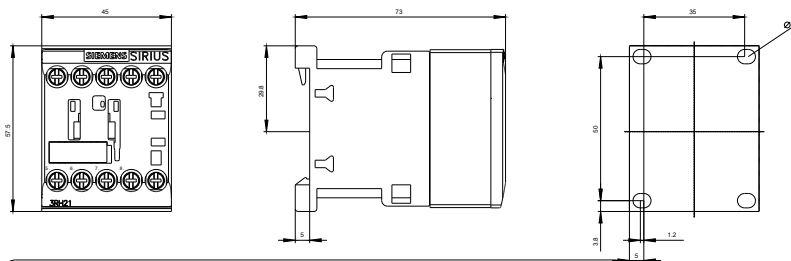
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21311AP60>

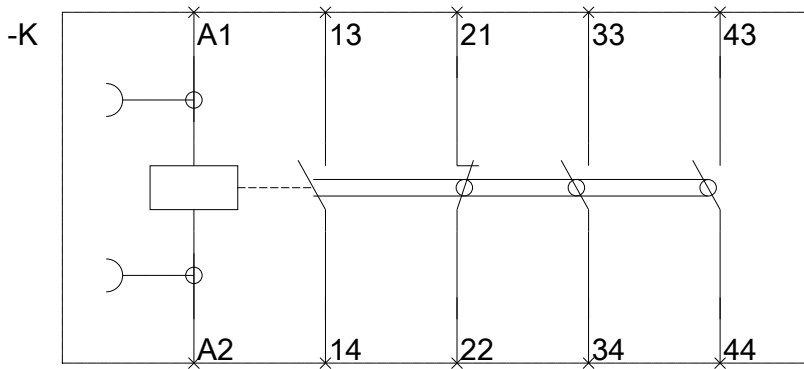
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RH21311AP60>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RH21311AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21311AP60&lang=en)





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