



CONTACTOR RELAY, 4NO, DC 24V, SIZE S00, SCREW TERMINAL

General technical data:		
product brand name		SIRIUS
Size of the contactor		S00
Identification number and letter for switching elements		40 E
Product extension / auxiliary switch		Yes
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 ... +80
Ambient temperature / during operating	°C	-25 ... +60
Shock resistance		
<ul style="list-style-type: none"> <li>• at rectangular impulse</li> <li> <ul style="list-style-type: none"> <li>• at DC</li> </ul> </li> <li>• at sine pulse</li> <li> <ul style="list-style-type: none"> <li>• at DC</li> </ul> </li> </ul>		10g / 5 ms, 5g / 10 ms
		15g / 5 ms, 8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Mechanical operating cycles as operating time		
<ul style="list-style-type: none"> <li>• of the contactor / typical</li> </ul>		30,000,000

- of the contactor with added auxiliary switch block / typical
- of the contactor with added electronics-compatible auxiliary switch block / typical

10,000,000

10,000,000

**Control circuit:****Type of voltage / of the controlled supply voltage**

DC

**Control supply voltage / 1**

- for DC / rated value

V

24

**Operating range factor control supply voltage rated value / of the magnet coil**

- for DC

0.8 ... 1.1

**Holding power / of the solenoid / for DC**

W

4

**Pull-in power / of the solenoid / for DC**

W

4

**Closing delay**

- at DC

ms

30 ... 100

**Opening delay**

- at DC

ms

25 ... 90

**Arcing time**

s

10 ... 15

**Auxiliary circuit:****Contact reliability / of the auxiliary contacts**

1 faulty switching per 100 million (17 V, 1 mA)

**Number of NC contacts / for auxiliary contacts / instantaneous switching**

0

**Number of NO contacts / for auxiliary contacts / instantaneous switching**

4

**Operating current / of the auxiliary contacts / at AC-12 / maximum**

A

10

**Operating current / of the auxiliary contacts / at AC-15**

- at 230 V

A

6

- at 400 V

A

3

- at 500 V

A

2

- at 690 V

A

1

**Operating current**

- of the auxiliary contacts / with 1 current path / at DC-12

- at 24 V

A

6

- at 110 V

A

3

- at 220 V

A

1

- with 2 current paths in series / at DC-12

- at 24 V / rated value

A

10

- at 60 V / rated value

A

10

- at 110 V / rated value

A

4

- at 220 V / rated value

A

2

• at 440 V / rated value	A	1.3
• at 600 V / rated value	A	0.65
• with 3 current paths in series / at DC-12		
• at 24 V / rated value	A	10
• at 60 V / rated value	A	10
• at 110 V / rated value	A	10
• at 220 V / rated value	A	3.6
• at 440 V / rated value	A	2.5
• at 600 V / rated value	A	1.8
<b>Operating current</b>		
• of the auxiliary contacts / with 1 current path / at DC-13		
• at 24 V	A	6
• at 110 V	A	1
• at 220 V	A	0.3
• with 2 current paths in series / at DC-13		
• at 24 V / rated value	A	10
• at 60 V / rated value	A	3.5
• at 110 V / rated value	A	1.3
• at 220 V / rated value	A	0.9
• at 440 V / rated value	A	0.2
• at 600 V / rated value	A	0.1
• with 3 current paths in series / at DC-13		
• at 24 V / rated value	A	10
• at 60 V / rated value	A	4.7
• at 110 V / rated value	A	3
• at 220 V / rated value	A	1.2
• at 440 V / rated value	A	0.5
• at 600 V / rated value	A	0.26
<b>Off-load operating frequency</b>		
• at AC	1/h	10,000
• at DC	1/h	10,000
<b>Frequency of operation</b>		
• at AC-12 / maximum	1/h	1,000
• at AC-14 / maximum	1/h	1,000
• at AC-15 / maximum	1/h	1,000
• at DC-12 / maximum	1/h	1,000
• at DC-13 / maximum	1/h	1,000

#### Short-circuit:

<b>Design of the fuse link / for short-circuit protection of the auxiliary switch</b>		
<ul style="list-style-type: none"> <li>required</li> </ul>		Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I <sub>k</sub> < 400 A)

### Installation/mounting/dimensions:

<b>Built in orientation</b>		vertical
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail
<b>Width</b>	mm	45
<b>Height</b>	mm	57.5
<b>Depth</b>	mm	73
<b>Distance, to be maintained, to the ranks assembly / sideways</b>	mm	0

### Connections:

<b>Design of the electrical connection</b>		
<ul style="list-style-type: none"> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded <ul style="list-style-type: none"> <li>with conductor end processing</li> </ul> </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>

### Certificates/approvals:

<b>General Product Approval</b>	<b>Declaration of Conformity</b>
---------------------------------	----------------------------------



CCC

CSA

GOST

UL

EG-Konf.

### Test Certificates

[other](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

### Shipping Approval



ABS

DNV

GL

LRS

PRS

RINA

### Shipping Approval other



RMRS

VDE

### UL/CSA ratings:

<b>Contact rating designation / for auxiliary contacts / according to UL</b>	A600 / Q600
--	-------------

**Safety-related Parameter:**

<b>B10 value / with high demand rate</b> • according to SN 31920		1,000,000
<b>T1 value / for proof test interval or service life</b> • according to IEC 61508	a	20
<b>Proportion of dangerous failures</b> • with low demand rate / according to SN 31920 • with high demand rate / according to SN 31920	%	40
	%	73
<b>Failure rate (FIT value) / with low demand rate</b> • according to SN 31920	FIT	100
<b>Product function / positively driven operation to IEC 60947-5-1</b> • comment		Yes with 3RH29

**Further information:**

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

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

**Industry Mall (Online ordering system)**

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

**Cax online generator:**

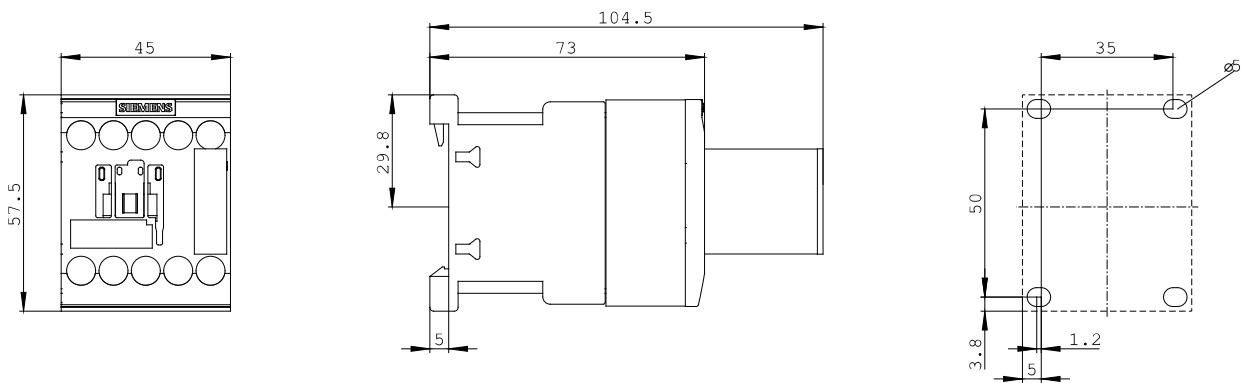
<http://www.siemens.com/cax>

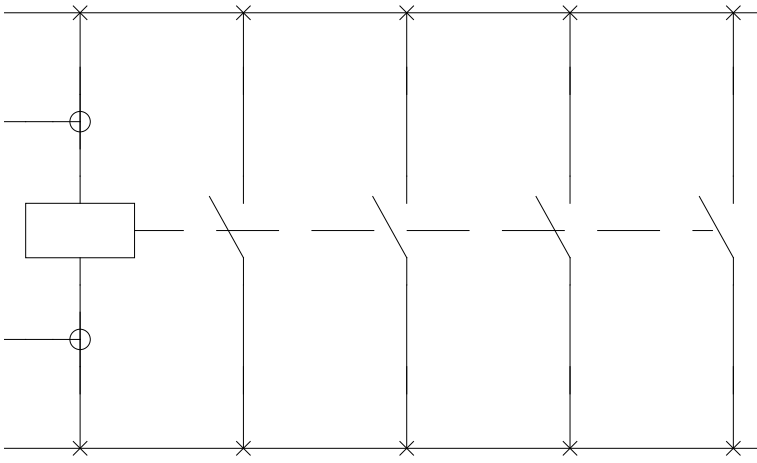
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WW/view/en/3RH2140-1BB40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH2140-1BB40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-1BB40)





**last change:**

Mar 27, 2012