



CONTACTOR RELAY, 4NO, DC 24V, SZ S00,  
SPRING-LOADED TERMINAL

### General technical data:

<b>product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S00
<b>Identification number and letter for switching elements</b>		40 E
<b>Product extension / auxiliary switch</b>		Yes
<b>Protection class IP / on the front</b>		IP20
<b>Protection against electrical shock</b>		finger-safe
<b>Degree of pollution</b>		3
<b>Insulation voltage / with degree of pollution 3 / rated value</b>	V	690
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b>		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
<b>Shock resistance</b>		
• at rectangular impulse		
• at DC		10g / 5 ms, 5g / 10 ms
• at sine pulse		
• at DC		15g / 5 ms, 8g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Mechanical operating cycles as operating time</b>		

• of the contactor / typical		30,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
• of the contactor with added electronics-compatible auxiliary switch block / typical		10,000,000

#### Control circuit:

<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• for DC		0.8 ... 1.1
<b>Holding power / of the solenoid / for DC</b>	W	4
<b>Pull-in power / of the solenoid / for DC</b>	W	4
<b>Closing delay</b>		
• at DC	ms	30 ... 100
<b>Opening delay</b>		
• at DC	ms	25 ... 90
<b>Arcing time</b>	s	10 ... 15

#### Auxiliary circuit:

<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		4
<b>[nicht versorgt: PMD_ABP551_001_000]</b>		
•	A	2
• at 690 V	A	1
<b>[nicht versorgt: PMD_ABP553_001_000]</b>		
• [nicht versorgt: PMD_ABP553_001_000]		
•	A	10
•	A	3
•	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>		
• [nicht versorgt: PMD_ABP558_001_000]		
•	A	10
•	A	1
•	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:

##### Design of the fuse link / for short-circuit protection of the auxiliary switch

- required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A  
(short-circuit current  $I_k < 400$  A)

#### Installation/mounting/dimensions:

##### mounting position

+/-180° rotation possible on vertical mounting surface;  
can be tilted forward and backward by +/- 22.5° on  
vertical mounting surface

<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	70
<b>Depth</b>	mm	73

### Connections:

#### Design of the electrical connection

- for auxiliary and control current circuit

spring-loaded terminals

#### Type of the connectable conductor cross-section

- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- 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)

### Certificates/approvals:

#### General Product Approval

#### Functional Safety / Safety of Machinery

#### Declaration of Conformity



CCC



CSA



GOST



UL

[Type Examination](#)



EG-Konf.

#### Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

#### Shipping Approval



ABS



BUREAU  
VERITAS



DNV



GL



LRS



PRS

#### Shipping Approval

#### other



RINA



RMRS



VDE

### UL/CSA ratings:

**Contact rating designation / for auxiliary contacts / according to UL**

A600 / Q600

### Sicherheitsrelevante Kenngrößen:

**B10 value / with high demand rate**

<ul style="list-style-type: none"> <li>• according to SN 31920</li> <li>• note</li> </ul>		1,000,000 With 0.3 x I <sub>e</sub>
<b>T1 value / for proof test interval or service life</b> <ul style="list-style-type: none"> <li>• according to IEC 61508</li> </ul>	a	20
<b>Proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>• with low demand rate / according to SN 31920</li> <li>• with high demand rate / according to SN 31920</li> </ul>	%	40
	%	73
<b>Failure rate (FIT value) / with low demand rate</b> <ul style="list-style-type: none"> <li>• according to SN 31920</li> </ul>	FIT	100
<b>Product function / positively driven operation to IEC 60947-5-1</b> <ul style="list-style-type: none"> <li>• comment</li> </ul>		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:

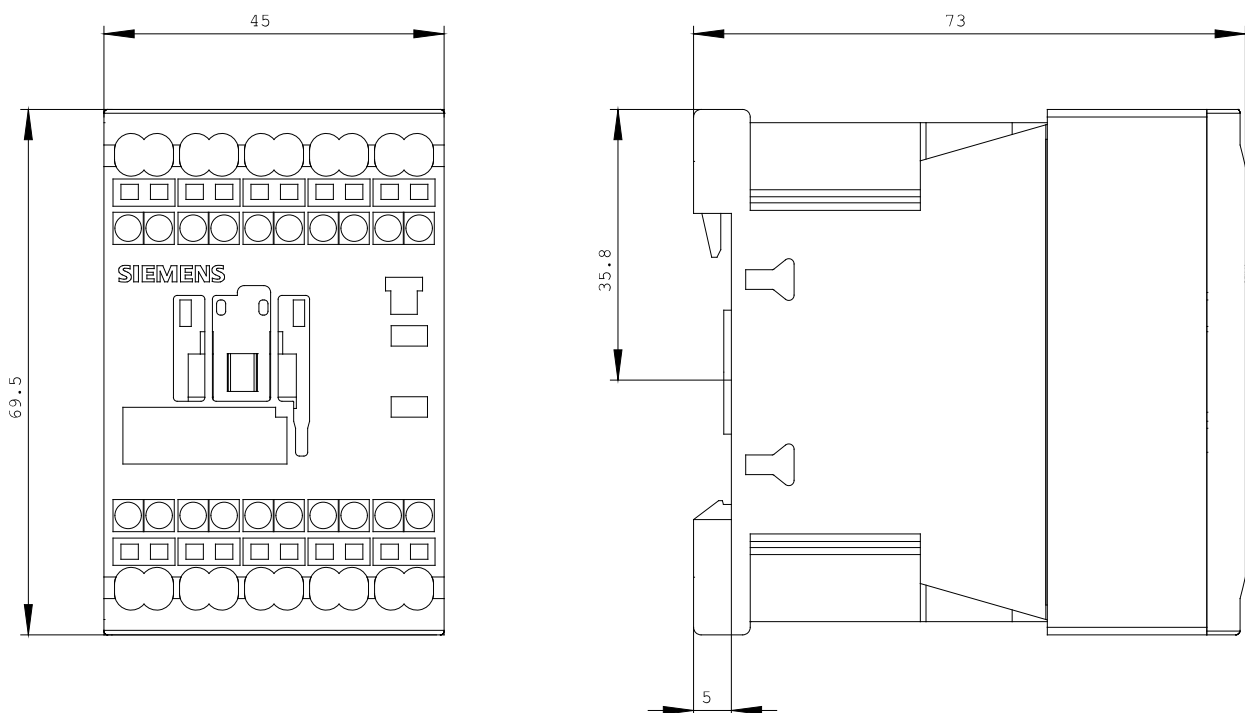
<http://www.siemens.com/cax>

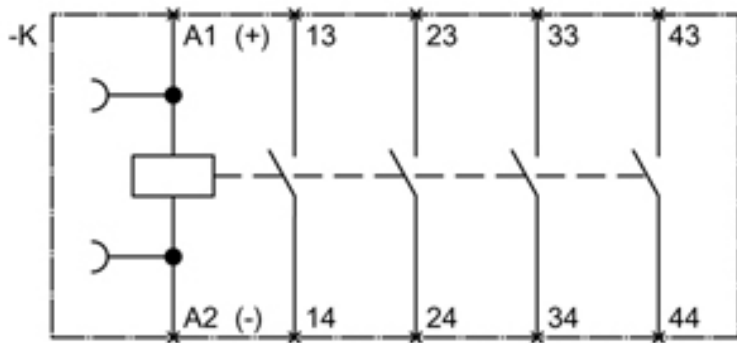
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH2140-2BB40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH2140-2BB40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-2BB40)





last change:

Feb 15, 2013