



CONTACTOR RELAY, 3NO+1NC, DC 48 V,  
SCREW CONNECTION, SIZE S00

General details:		
product brand name		SIRIUS
product designation		contactor relay
Size of the contactor		S00
Protection class IP / on the front		IP20
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 transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Contact reliability		one incorrect switching operation of 100 million switching operations (17 V, 1 mA)
Resistance against shock		10g / 5 ms and 5g / 10 ms
Impulse voltage resistance / rated value	kV	6
Item designation		
• according to DIN EN 61346-2		K
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
Mechanical operating cycles as operating time		

• 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		5,000,000

#### Control circuit:

<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Control supply voltage / 1</b>		
• for DC / rated value	V	48
<b>Working range factor supply voltage rated value / of the magnet coil</b>		
• for DC		0.8 ... 1.1
<b>Pull-in power / of the solenoid / for DC</b>	W	3.2
<b>Holding power / of the solenoid / for DC</b>	W	3.2

#### Auxiliary circuit:

<b>Product extension / auxiliary switch</b>		Yes
<b>Identification number and letter for switching elements</b>		31 E
<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NC contacts / for auxiliary contacts</b>		1
• delayed switching		0
• instantaneous switching		1
• asynchronous switching		0
• lagging switching		0
<b>Number of NO contacts / for auxiliary contacts</b>		3
• instantaneous switching		3
• delayed switching		0
• asynchronous switching		0
• leading switching		0
<b>Number of changeover contacts</b>		
• for auxiliary contacts		0
• of the auxiliary contacts / instantaneous switching		0
<b>Operating current / of the auxiliary contacts</b>		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at 500 V	A	2
• at 690 V	A	1
• with 1 current path		
• at DC-12		

- at 24 V
- at 110 V
- at 220 V
- at DC-13
  - at 24 V
  - at 110 V
  - at 220 V

A	10
A	3
A	1
A	10
A	1
A	0.27

#### Short-circuit:

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

fuse gL/gG: 10 A

#### Installation/mounting/dimensions:

**Built in orientation**

with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back

**Type of mounting**

screw and snap-on mounting

**Width**

mm 45

**Height**

mm 57.5

**Depth**

mm 72

**Distance, to be maintained, to the ranks assembly / sideways**

mm 0

#### Connections:

**Design of the electrical connection / for auxiliary and control current circuit**

screw-type terminals

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

- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup>

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

#### Certificates/approvals:

**Verification of suitability**

CSA / UL / CCC / GL / LRS / BV / DNV / RMRS / RINA

**General Product Approval**

**Functional Safety /  
Safety of  
Machinery**

**Test Certificates**



CQC



CSA

[ROSTEST](#)



UL

[SUVA](#)

[Manufacturer](#)

**Shipping Approval**



ABS



BUREAU  
VERITAS



DNV



GL



LRS



PRS

**Shipping Approval**

**other**



RMRS

[Manufacturer](#)

**Safety:**

**Proportion of dangerous failures**

- with high demand rate / according to SN 31920
- with low demand rate / according to SN 31920

% 75

% 40

**T1 value / for proof test interval or service life / according to IEC 61508**

a 20

**Protection against electrical shock**

finger-safe

**B10 value / with high demand rate / according to SN 31920**

1,000,000

**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**

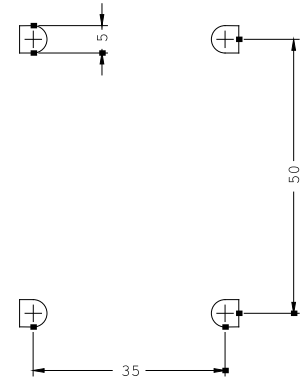
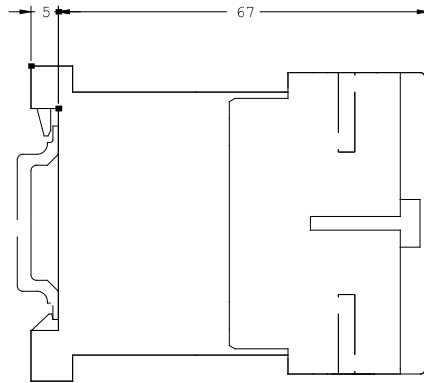
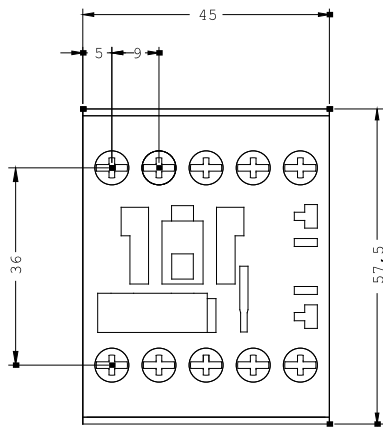
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/VW/view/en/3RH1131-1BW40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH1131-1BW40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1BW40)



last change:

Feb 6, 2012