

CONT. RELAY LATCHED, 4-POLE 3 NO + 1NC,
DC 42 V



General technical data:

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
Reference code		
• according to DIN EN 61346-2		K
• according to DIN 40719 extended according to IEC 204-2 / according to IEC 750		K
• according to DIN EN 81346-2		K

Mechanical operating cycles as operating time		
• of the contactor / typical		5,000,000
• of the contactor with added auxiliary switch block / typical		5,000,000
• of the contactor with added electronics-compatible auxiliary switch block / typical		5,000,000

Control circuit/ Control:		
Voltage type / of control feed voltage		DC
Control supply voltage		
• for DC / rated value	V	42
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.8 ... 1.1
Pull-in power / of the solenoid / for DC	W	3.2
Holding power / of the solenoid / for DC	W	3.2

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

- at DC-12
 - at 24 V / rated value
 - at 110 V / rated value
 - at 220 V / rated value
- at DC-13
 - at 24 V / rated value
 - at 110 V / rated value
 - at 220 V / rated value

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:

mounting position

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

Mounting type

screw and snap-on mounting

Width

mm 90

Height

mm 57.5

Depth

mm 72

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

mm 0

Connections/ terminals:

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 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

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	Declaration of Conformity
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[Type Examination](#)



Test Certificates	Shipping Approval
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[Special Test
Certificate](#)

[Type Test
Certificates/Test
Report](#)



other

[other](#)

[Environmental
Confirmations](#)

Safety related data:

Proportion of dangerous failures

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

%	75
%	40

Protection against electrical shock

finger-safe

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

a	20
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B10 value / with high demand rate

- according to SN 31920
- note

1,000,000
With 0.3 x Ie

Further information:

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/>

Cax online generator

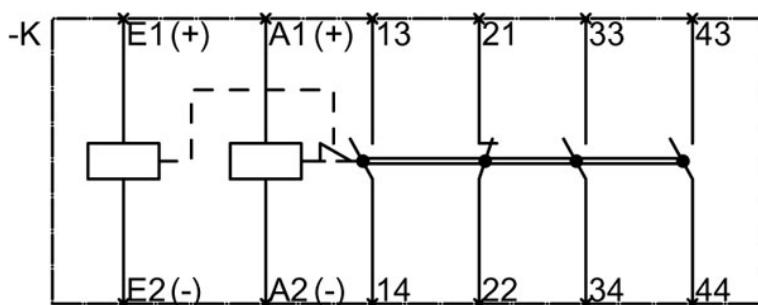
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1431-1BD40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1431-1BD40



last change:

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