

LATCHED CONTACTOR RELAY,  
4-POLE 3 NO + 1 NC, SIZE S00, AC 240 V,  
50/60 Hz

**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

<b>Control circuit:</b>			
<b>Type of voltage / of the controlled supply voltage</b>		AC	
<b>Control supply voltage frequency</b>		Hz	50
• 1 / rated value		Hz	60
<b>Control supply voltage / 1</b>			
• at 50 Hz		V	240
• for AC / rated value			
• at 60 Hz		V	240
• for AC / rated value			
<b>Working range factor supply voltage rated value / of the magnet coil</b>			
• at 50 Hz			0.8 ... 1.1
• for AC			
• at 60 Hz			0.85 ... 1.1
• for AC			
<b>Apparent pull-in power / of the solenoid / for AC</b>		V-A	27
<b>Apparent holding power / of the solenoid / for AC</b>		V-A	4.6
<b>Inductive power factor</b>			
• with the pull-in power of the coil			0.8
• with the pull-in power of the coil			0.27

<b>Auxiliary circuit:</b>			
<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	A	10	
• at 110 V	A	3	
• at 220 V	A	1	
• at DC-13			
• at 24 V	A	10	
• at 110 V	A	1	
• at 220 V	A	0.27	

#### Short-circuit:

<b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b>		fuse gL/gG: 10 A
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#### Installation/mounting/dimensions:

<b>Built in orientation</b>		with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
<b>Type of mounting</b>		screw and snap-on mounting
<b>Width</b>	mm	90
<b>Height</b>	mm	57.5
<b>Depth</b>	mm	72
<b>Distance, to be maintained, to the ranks assembly / sideways</b>	mm	0

#### Connections:

<b>Design of the electrical connection / for auxiliary and control current circuit</b>		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )

• for AWG conductors / for auxiliary contacts

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	<a href="#">ROSTEST</a>	 UL	<a href="#">SUVA</a>	<a href="#">Manufacturer</a>
Shipping Approval	other				
 ABS	 GL	 RINA		<a href="#">Manufacturer</a>	

## Safety:

Proportion of dangerous failures	%	75
• with high demand rate / according to SN 31920	%	75
• with low demand rate / according to SN 31920	%	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

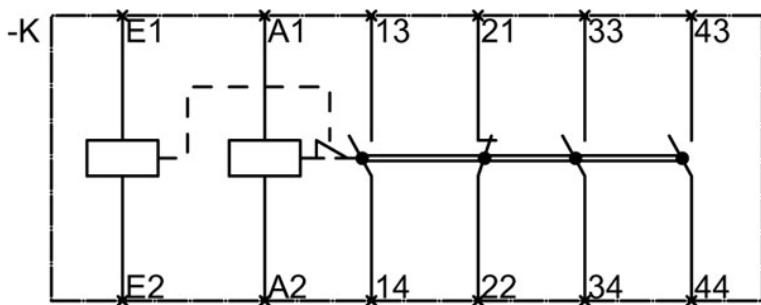
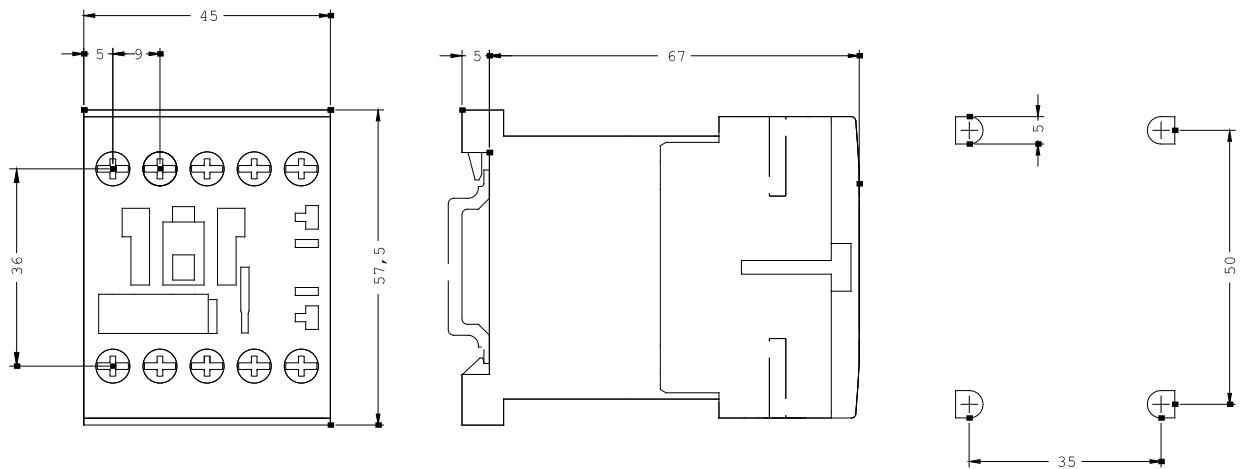
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1431-1AU00/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH1431-1AU00](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1431-1AU00)



last change:

Feb 6, 2012