SIEMENS

Product data sheet 3RH1131-1BC40



CONTACTOR RELAY, 3NO+1NC, DC 30 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 		К
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		К
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:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC / rated value	V	30
Working range factor 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 / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		
• at 230 V	Α	6
• at 400 V	Α	3
• at 500 V	Α	2
• at 690 V	Α	1
with 1 current path		
• at DC-12		

• at 24 V	Α	10
• at 110 V	Α	3
• at 220 V	Α	1
• at DC-13		
• at 24 V	Α	10
• at 110 V	Α	1
• at 220 V	Α	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 / sidewards	mm	0	
Connections:			
Design of the electrical connection / for auxiliary and control		screw-type terminals	

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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
• finely stranded	
 with conductor end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• 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**





ROSTEST



SUVA

Manufacturer

Shipping Approval













Shipping Approval

other



Manufacturer

Safety:		
Proportion of dangerous failures		
• 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	а	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

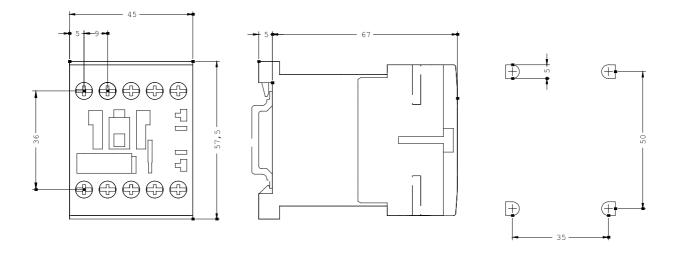
http://www.siemens.com/cax

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

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RH1131-1BC40/all}}$

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1BC40



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