Product data sheet 3RH1131-1TB00-0KV0

CONTACTOR RELAY, AC 24V, 50HZ, SIZE S00, 3NO + 1NC, INTEGRATED VARISTOR

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		К	
 according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 		К	
according to DIN EN 81346-2		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/ Control:			
Voltage type / of control feed voltage		AC	
Control supply voltage frequency			
• 1 / rated value	Hz	50	
• 2 / rated value	Hz	60	
Control supply voltage			
• at 50 Hz / at AC / rated value	V	24	

• at 60 Hz / at AC / rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz		
• for AC		0.8 1.1
• at 60 Hz		
• for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V-A	27
Apparent holding power / of the solenoid / for AC	V-A	4.6
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.27
Design of the surge suppressor		with varistor

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	Α	10
• at AC-15		
• at 230 V / rated value	Α	6
• at 400 V / rated value	Α	3
• at 500 V / rated value	Α	2
• at 690 V / rated value	Α	1
Operating current / with 1 current path		
• at DC-12		

• at 24 V / rated value	Α	10
• at 110 V / rated value	Α	3
• at 220 V / rated value	Α	1
• at DC-13		
• at 24 V / rated value	Α	10
• at 110 V / rated value	Α	1
• at 220 V / rated value	Α	0.27

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	45	
Height	mm	57.5	
Depth	mm	72	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	
Connections/ terminals:			

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	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

Short-circuit:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity













Test Certificates

Shipping Approval

Special Test Certificate Type Test
Certificates/Test
Report







other

<u>other</u> <u>Environmental</u> Confirmations

Safety related data:		
Proportion of dangerous failures		
• with high demand rate / according to SN 31920	%	75
• with low demand rate / according to SN 31920	%	40
Protection against electrical shock		finger-safe
T1 value / for proof test interval or service life / according to IEC 61508	а	20
B10 value / with high demand rate		
according to SN 31920		1,000,000
• note		With 0.3 x le

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

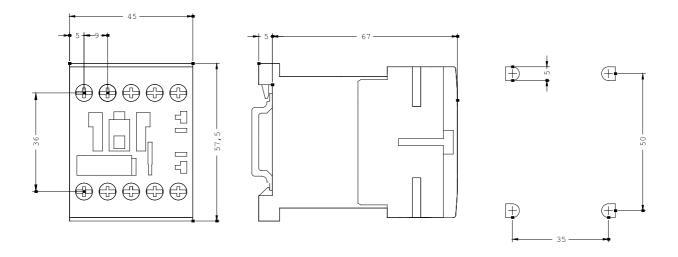
http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3RH1131-1TB00-0KV0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1TB00-0KV0



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