SIEMENS

Product data sheet 3RH1131-1KF40



CONTROL RELAY, 3NO+1NC, 110 V DC, 0.7...1.25*US, WITH VARISTOR, SIZE S00, SCREW CONNECTION

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		κ
 according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 		К
according to DIN EN 81346-2		κ

Mechanical operating cycles as operating time	
of the contactor / typical	30,000,000

Control circuit/ Control:			
Voltage type / of control feed voltage		DC	
Control supply voltage			
• for DC / rated value	V	110	
Operating range factor control supply voltage rated value / of the magnet coil			
• for DC		0.7 1.25	
Pull-in power / of the solenoid / for DC	W	2.3	
Holding power / of the solenoid / for DC	W	2.3	
Design of the surge suppressor		with varistor	

Auxiliary circuit:		
Product extension / auxiliary switch		No
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

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	45	
Height	mm	57.5	
Depth	mm	72	
Distance, to be maintained, to the ranks assembly / sidewards	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	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 Declaration of Conformity









Type Examination



Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval

other



other

Environmental 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,...)

 $\underline{\text{http://www.siemens.com/industrial-controls/catalogs}}$

Industry Mall (Online ordering system)

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

Cax online generator

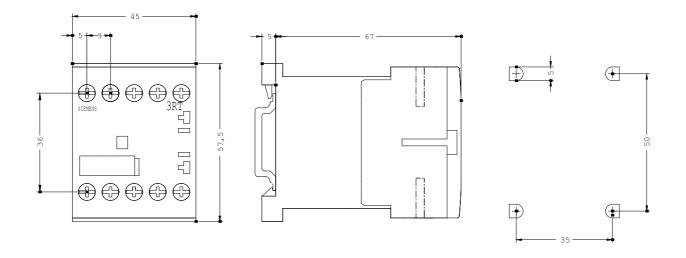
http://www.siemens.com/cax

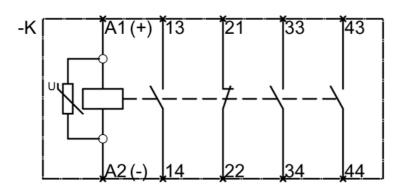
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

http://support.automation.siemens.com/WW/view/en/3RH1131-1KF40/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1KF40





last change: Jul 21, 2014