SIEMENS

Product data sheet 3RH1131-1AF00



CONTACTOR RELAY, 3NO+1NC, AC 110 V, 50 HZ, 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		AC
Control supply voltage frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Control supply voltage / 1		
• at 50 Hz		
• for AC / rated value	V	110
• at 60 Hz		
• for AC / rated value	V	110
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

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	А	10
• at AC-15		
• at 230 V	Α	6
• at 400 V	А	3
• at 500 V	А	2
• at 690 V	Α	1
• with 1 current path		
• at DC-12		
• at 24 V	А	10
• at 110 V	А	3
• at 220 V	А	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:		
mounting position		+/-180° rotation possible on vertical mounting surface can be tilted forward and backward by +/- 22.5° on vertical mounting surface

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
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 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)

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

Shipping Approval













Shipping Approval

other





Confirmation

other

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

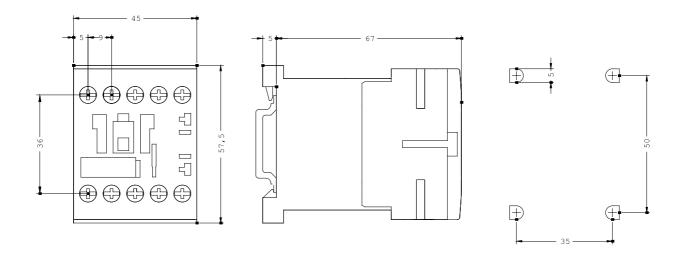
http://www.siemens.com/cax

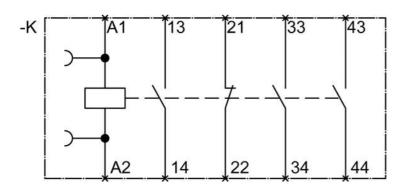
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RH1131-1AF00/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1AF00





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