SIEMENS

Product data sheet 3RH2131-1AP00



CONTACTOR RELAY, 3NO+1NC AC 230V, 50/60 HZ, SZ S00, SCREW TERMINAL

General technical data:		
Product brand name		SIRIUS
Product designation		contactor relay
Size of the contactor		S00
Protection class IP / frontal/front side		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 the operating phase	°C	-25 60
Resistance against shock		10g / 5 ms and 5g / 10 ms
Impulse voltage resistance / rated value	kV	6
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		К
according to DIN EN 61346-2		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 	10,000,000

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	230
at 60 Hz / for AC / rated value	V	230
Operating range factor control supply voltage rated value / of the solenoid		
• 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	37
Apparent holding power / of the solenoid / for AC	V-A	5.7
Power factor inductive		
at pull-in power of the coil		0.8
at holding power of the coil		0.25

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 contact		1
instantaneous switching		1
delayed switching		0
asynchronous switching		0
lagging switching		0
Number of NO contacts / for auxiliary contact		3
• instantaneous switching		3
delayed switching		0
asynchronous switching		0
leading switching		0
Number of changeover contacts		
for auxiliary contact		0
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	Α	10
• at AC-15		

• at 230 V	Α	10
• 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	6
• at 110 V	Α	3
• at 220 V	Α	1
• at DC-13		
• at 24 V	Α	6
• at 110 V	Α	1
• at 220 V	Α	0.3

Short-circuit:	
Design of the fuse link / for short-circuit protection of the auxiliary switch	
• required	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)

Installation/mounting/dimensions:		
Built in orientation		vertical
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	45
Height	mm	57.5
Depth	mm	72
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	0
downwards	mm	0
• sidewards	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0

• upwards	mm	0
• downwards	mm	0
• sidewards	mm	0

Connections:	
Design of the electrical connection	
 for auxiliary and control current circuit 	screw-type terminals
Type of 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 wire 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), 2x 12

Certificates/approvals:	
Verification of suitability	CE/UL/CSA/CCC

Safety:		
B10 value / with high demand rate		
according to SN 31920		1,000,000
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	75
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	100
T1 value / for proof test interval or service life		
according to IEC 61508	а	10
Protection against electrical shock		finger-safe

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Global Industry Mall (Online ordering system)

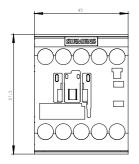
http://www.siemens.com/industrial-controls/mall

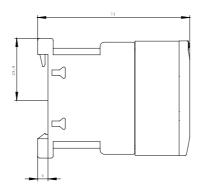
 $Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)$

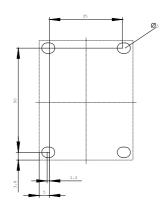
http://support.automation.siemens.com/WW/view/en/3RH2131-1AP00/all

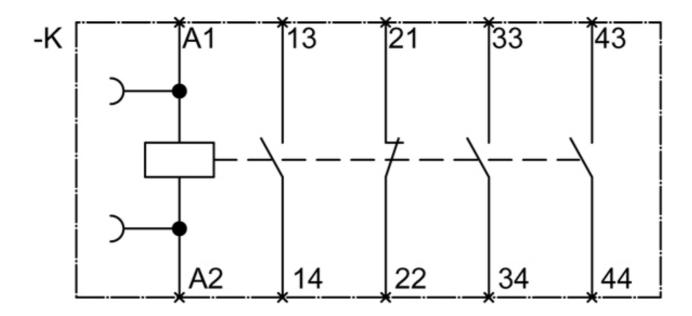
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2131-1AP00









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