# **SIEMENS**

Product data sheet 3RH1131-2AD00



CONTACTOR RELAY, 3NO+1NC, AC 42 V, 50/60 HZ, CAGE-CLAMP CONNECTION, SIZE S00

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 <b>+</b> 80
during storage	°C	-55 <b>+</b> 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
<ul> <li>according to DIN 40719 extended according to IEC 204-2 / according to IEC 750</li> </ul>		К
according to DIN EN 81346-2		κ

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
<ul> <li>of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>	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	42
• at 60 Hz / at AC / rated value	V	42
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		
• at AC-12 / maximum	А	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:		
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
•		can be tilted forward and backward by +/- 22.5° on
mounting position	mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface
mounting position  Mounting type	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting
mounting position  Mounting type  Width		can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting  45
mounting position  Mounting type  Width  Height	mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45
mounting position  Mounting type  Width  Height  Depth	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73
mounting position  Mounting type  Width  Height  Depth  Distance, to be maintained, to the ranks assembly / sidewards  Connections/ terminals:  Design of the electrical connection / for auxiliary and control	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73 0
mounting position  Mounting type  Width  Height  Depth  Distance, to be maintained, to the ranks assembly / sidewards  Connections/ terminals:  Design of the electrical connection / for auxiliary and control current circuit	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73 0
mounting position  Mounting type  Width  Height  Depth  Distance, to be maintained, to the ranks assembly / sidewards  Connections/ terminals:  Design of the electrical connection / for auxiliary and control current circuit  Type of the connectable conductor cross-section	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73 0
mounting position  Mounting type  Width  Height  Depth  Distance, to be maintained, to the ranks assembly / sidewards  Connections/ terminals:  Design of the electrical connection / for auxiliary and control current circuit  Type of the connectable conductor cross-section  • for auxiliary contacts	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73 0  Cage Clamp terminals
mounting position  Mounting type  Width  Height  Depth  Distance, to be maintained, to the ranks assembly / sidewards  Connections/ terminals:  Design of the electrical connection / for auxiliary and control current circuit  Type of the connectable conductor cross-section  • for auxiliary contacts  • solid	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 60 73 0  Cage Clamp terminals

2x (24 ... 14)

# 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

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,...)

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

Industry Mall (Online ordering system)

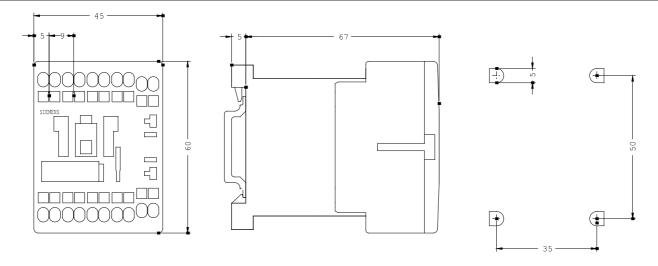
https://mall.industry.siemens.com/

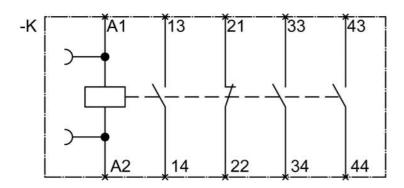
Cax online generator

http://www.siemens.com/cax

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

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RH1131-2AD00/all}}$ 





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