

Automation Technology > Industrial Controls > Switching Devices > Contactors and Contactor Assemblies > Contactor Relays > Contactor Relays SIRIUS 3RH1, 4- and 8-pole

3RH1131-1AK60 CONTACTOR RELAY, 3NO+1NC,

Technical / CAx data

Technical Data CAx data



CONTACTOR RELAY, 3NO+1NC, AC 110 V 50 HZ / 120 V 60 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	
<ul style="list-style-type: none"> during transport 	°C -55...80
<ul style="list-style-type: none"> during storage 	°C -55...80
<ul style="list-style-type: none"> during the operating phase 	°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	
<ul style="list-style-type: none"> according to DIN EN 61346-2 	K
<ul style="list-style-type: none"> according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 	K
Mechanical operating cycles as operating time	
<ul style="list-style-type: none"> of the contactor / typical 	30,000,000
<ul style="list-style-type: none"> of the contactor with added auxiliary switch block / typical 	10,000,000
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> 1 / rated value 	Hz	50
<ul style="list-style-type: none"> 2 / rated value 	Hz	60
Control supply voltage / 1		
<ul style="list-style-type: none"> at 50 Hz <ul style="list-style-type: none"> for AC / rated value 	V	110
<ul style="list-style-type: none"> at 60 Hz <ul style="list-style-type: none"> for AC / rated value 	V	120
Working range factor supply voltage rated value / of the magnet coil		
<ul style="list-style-type: none"> at 50 Hz <ul style="list-style-type: none"> for AC 		0.8...1.1
<ul style="list-style-type: none"> at 60 Hz <ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> with the pull-in power of the coil 		0.8
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> delayed switching 		0
<ul style="list-style-type: none"> instantaneous switching 		1
<ul style="list-style-type: none"> asynchronous switching 		0
<ul style="list-style-type: none"> lagging switching 		0
Number of NO contacts / for auxiliary contacts		3
<ul style="list-style-type: none"> instantaneous switching 		3
<ul style="list-style-type: none"> delayed switching 		0
<ul style="list-style-type: none"> asynchronous switching 		0
<ul style="list-style-type: none"> leading switching 		0
Number of changeover contacts		
<ul style="list-style-type: none"> for auxiliary contacts 		0
<ul style="list-style-type: none"> of the auxiliary contacts / instantaneous switching 		0
Operating current / of the auxiliary contacts		
<ul style="list-style-type: none"> at AC-12 / maximum 	A	10
<ul style="list-style-type: none"> at AC-15 <ul style="list-style-type: none"> at 230 V at 400 V at 500 V at 690 V 	A	6
	A	3
	A	2
	A	1
<ul style="list-style-type: none"> with 1 current path <ul style="list-style-type: none"> at DC-12 		

- at 24 V A 10
- at 110 V A 3
- at 220 V A 1
- at DC-13
- at 24 V A 10
- at 110 V A 1
- at 220 V A 0.22

Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch / required fuse gL/gG: 10 A

Installation/mounting/dimensions:

Built in orientation with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back

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 / sideways 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), max. 2x (1 ... 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

CQC



Functional Safety / Safety of Machinery

SUVA

Test Certificates

Manufacturer

Shipping Approval

ABS



PRS

Shipping Approval



other
Manufacturer

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	a	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

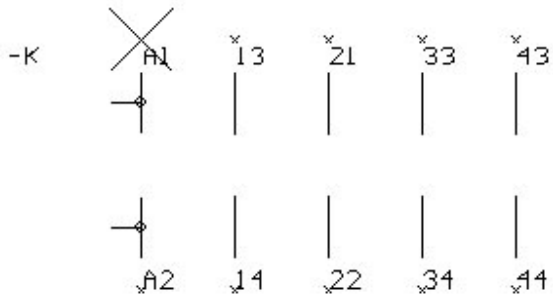
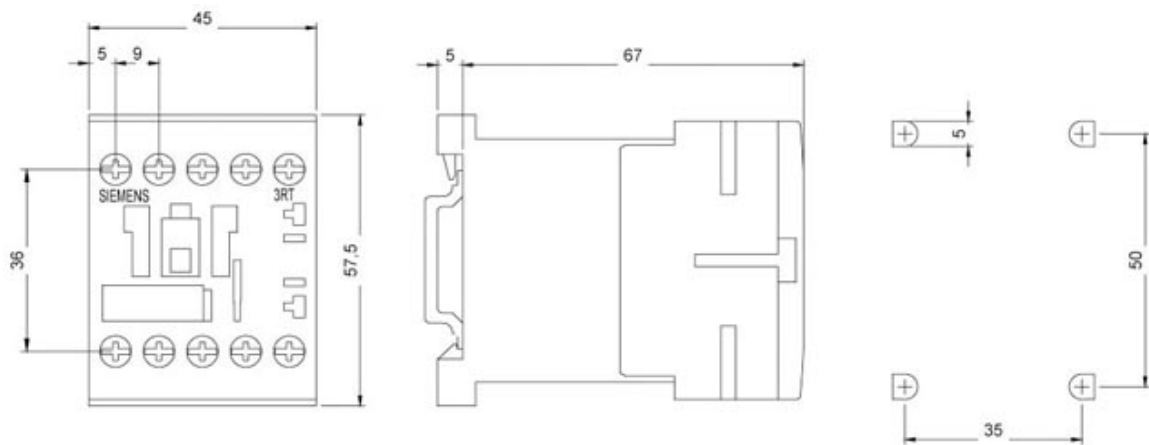
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1131-1AK60/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-1AK60



last change:

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