

3RH2131-1BB40 CONT.RELAY,3NO+1NC,DC24V

Technical / CAx data

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CONTACTOR RELAY, 3NO+1NC, DC 24V, SIZE S00, SCREW TERMINAL

General technical data:	
product brand name	SIRIUS
Size of the contactor	S00
Identification number and letter for switching elements	31 E
Product extension / auxiliary switch	Yes
Protection class IP / on the front	IP20
Protection against electrical shock	finger-safe
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 storage	°C -55...+80
Ambient temperature / during operating	°C -25...+60
Shock resistance	
<ul style="list-style-type: none"> at rectangular impulse at DC at sine pulse at DC 	10g / 5 ms, 5g / 10 ms
Impulse voltage resistance / rated value	kV 6
Mechanical operating cycles as operating time	
<ul style="list-style-type: none"> of the contactor / typical of the contactor with added auxiliary switch block / typical of the contactor with added electronics-compatible auxiliary switch block / typical 	30,000,000 10,000,000 10,000,000
Control circuit:	
Type of voltage / of the controlled supply voltage	DC

Control supply voltage / 1 • for DC / rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil • for DC		0.8...1.1
Holding power / of the solenoid / for DC	W	4
Pull-in power / of the solenoid / for DC	W	4
Closing delay • at DC	ms	30...100
Opening delay • at DC	ms	25...90
Arcing time	s	10...15

Auxiliary circuit:

Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		3
Operating current / of the auxiliary contacts / at AC-12 / maximum	A	10
Operating current / of the auxiliary contacts / at AC-15 • at 230 V • at 400 V • at 500 V • at 690 V	A	6 3 2 1
Operating current • of the auxiliary contacts / with 1 current path / at DC-12 • at 24 V • at 110 V • at 220 V • with 2 current paths in series / at DC-12 • at 24 V / rated value • at 60 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value • with 3 current paths in series / at DC-12 • at 24 V / rated value • at 60 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value	A	6 3 1 10 10 4 2 1.3 0.65 10 10 10 3.6 2.5 1.8
Operating current • of the auxiliary contacts / with 1 current path / at DC-13 • at 24 V • at 110 V • at 220 V • with 2 current paths in series / at DC-13 • at 24 V / rated value • at 60 V / rated value • at 110 V / rated value	A	6 1 0.3 10 3.5 1.3

<ul style="list-style-type: none"> • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value • with 3 current paths in series / at DC-13 <ul style="list-style-type: none"> • at 24 V / rated value • at 60 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value 	A 0.9 A 0.2 A 0.1 A 10 A 4.7 A 3 A 1.2 A 0.5 A 0.26
Off-load operating frequency <ul style="list-style-type: none"> • at AC • at DC 	1/h 10,000 1/h 10,000
Frequency of operation <ul style="list-style-type: none"> • at AC-12 / maximum • at AC-14 / maximum • at AC-15 / maximum • at DC-12 / maximum • at DC-13 / maximum 	1/h 1,000 1/h 1,000 1/h 1,000 1/h 1,000 1/h 1,000

Short-circuit:	
Design of the fuse link / for short-circuit protection of the auxiliary switch <ul style="list-style-type: none"> • required 	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I _k < 400 A)

Installation/mounting/dimensions:	
Built in orientation	vertical
Type of mounting	screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm 45
Height	mm 57.5
Depth	mm 73
Distance, to be maintained, to the ranks assembly / sideways	mm 0

Connections:	
Design of the electrical connection <ul style="list-style-type: none"> • for auxiliary and control current circuit 	screw-type terminals
Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for auxiliary contacts 	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), 2x 4 mm ² 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14), 2x 12

Certificates/approvals:	
General Product Approval	Declaration of Conformity
<input checked="" type="checkbox"/> CCC <input checked="" type="checkbox"/> CSA <input checked="" type="checkbox"/> GOST <input checked="" type="checkbox"/> UL	<input checked="" type="checkbox"/> EC-Declarator
Test Certificates	
other	Special Test Certificate
	Type Test Certificates/Test Report
Shipping Approval	
<input checked="" type="checkbox"/> ABS (Americas) <input checked="" type="checkbox"/> DNV / Det Nor <input checked="" type="checkbox"/> GL / Germani <input checked="" type="checkbox"/> LRS / Lloyds R <input checked="" type="checkbox"/> PRS / Polski R <input checked="" type="checkbox"/> RINA / Registr	

Shipping Approval	other
<input checked="" type="checkbox"/> RMRS / Russ	<input checked="" type="checkbox"/> Household anc

UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL	A600 / Q600
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Safety-related Parameter:

B10 value / with high demand rate • according to SN 31920	1,000,000
T1 value / for proof test interval or service life • according to IEC 61508	a 20
Proportion of dangerous failures • with low demand rate / according to SN 31920	% 40
• with high demand rate / according to SN 31920	% 73
Failure rate (FIT value) / with low demand rate • according to SN 31920	FIT 100
Product function / positively driven operation to IEC 60947-5-1	Yes

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:

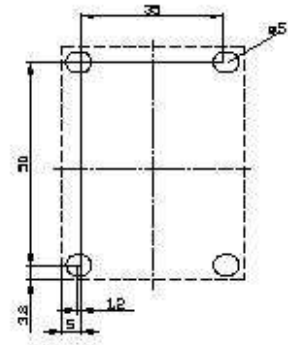
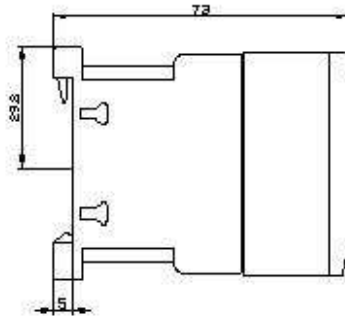
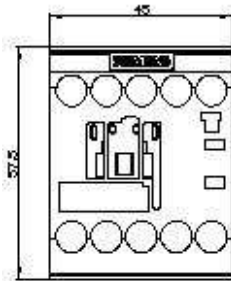
<http://www.siemens.com/cax>

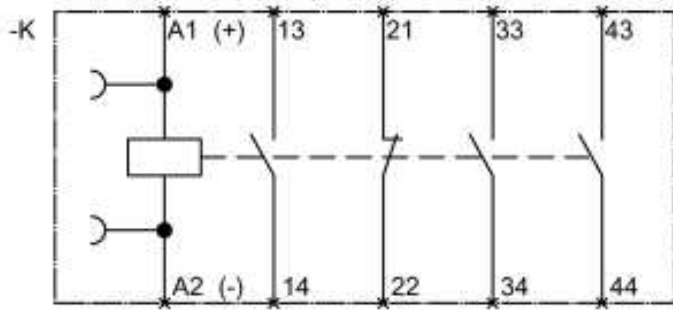
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH2131-1BB40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2131-1BB40





last change:

Mar 27, 2012