



CONTACTOR RELAY, 3NO+1NC, DC 24V,
SZ S00, SPRING-LOADED TERMINAL,
MULTI-UNIT PACKAGE = 60 UNITS PACKAGE = 60 UNITS

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
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at DC		10g / 5 ms, 5g / 10 ms
• at sine pulse		
• at DC		15g / 5 ms, 8g / 10 ms
Impulse voltage resistance / rated value	kV	6
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		DC
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
[nicht versorgt: PMD_ABP551_001_000]		
•	A	2
• at 690 V	A	1
[nicht versorgt: PMD_ABP553_001_000]		
• [nicht versorgt: PMD_ABP553_001_000]		
•	A	10
•	A	3
•	A	1
• with 2 current paths in series / at DC-12		
• at 24 V / rated value	A	10
• at 60 V / rated value	A	10
• at 110 V / rated value	A	4
• at 220 V / rated value	A	2
• at 440 V / rated value	A	1.3
• at 600 V / rated value	A	0.65
• with 3 current paths in series / at DC-12		
• at 24 V / rated value	A	10
• at 60 V / rated value	A	10

<ul style="list-style-type: none"> • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value 	A	10
	A	3.6
	A	2.5
	A	1.8
Operating current		
<ul style="list-style-type: none"> • [nicht versorgt: PMD_ABP558_001_000] • • • • with 2 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 • 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	10
	A	1
	A	0.3
	A	10
	A	3.5
	A	1.3
	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

- required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A
(short-circuit current $I_k < 400$ 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
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	45
Height	mm	70
Depth	mm	73

Connections:

Design of the electrical connection		spring-loaded terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 		
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 • without conductor final cutting • for AWG conductors / for auxiliary contacts 		2x (0.5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12)

Certificates/approvals:

General Product Approval	Functional Safety / Safety of Machinery	Declaration of Conformity
 CCC  CSA  GOST  UL	Type Examination	 EG-Konf.

Test Certificates

[Special Test
Certificate](#)

Shipping Approval



Shipping Approval

other



UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL	A600 / Q600
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Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate <ul style="list-style-type: none"> • according to SN 31920 • note 		1,000,000 With 0.3 x le
T1 value / for proof test interval or service life <ul style="list-style-type: none"> • according to IEC 61508 	a	20
Proportion of dangerous failures <ul style="list-style-type: none"> • with low demand rate / according to SN 31920 • with high demand rate / according to SN 31920 	%	40 73
Failure rate (FIT value) / with low demand rate <ul style="list-style-type: none"> • 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:

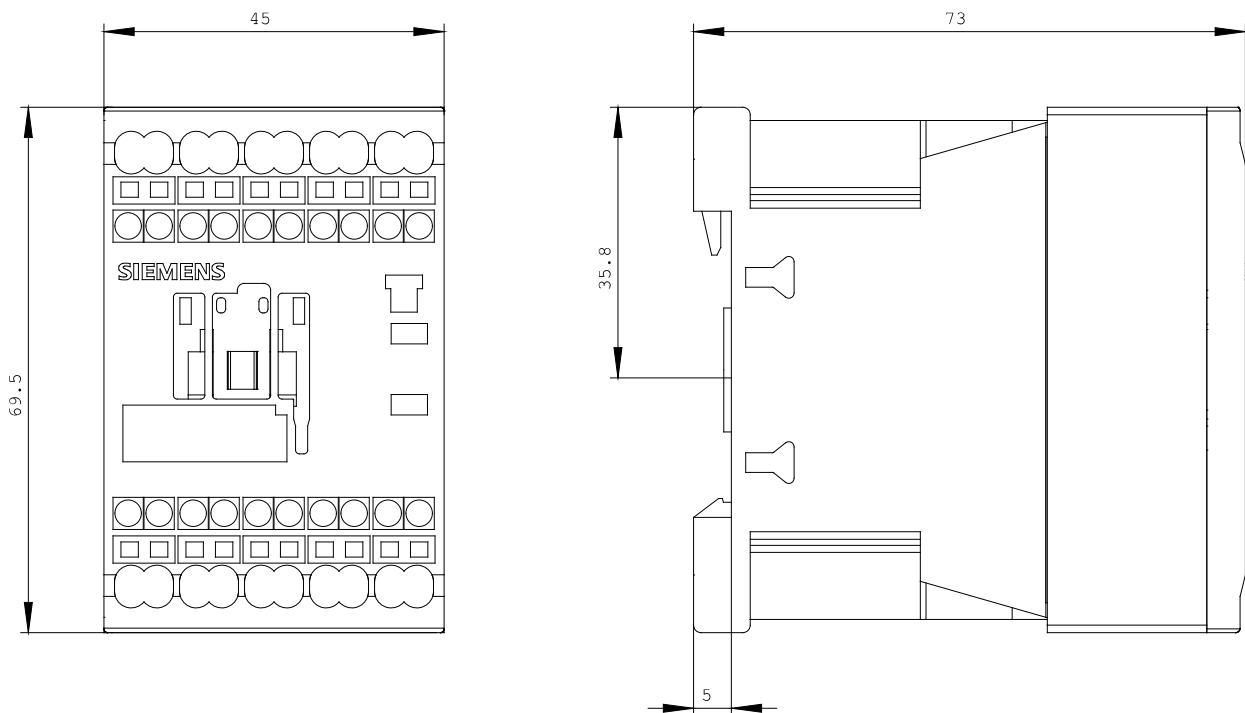
<http://www.siemens.com/cax>

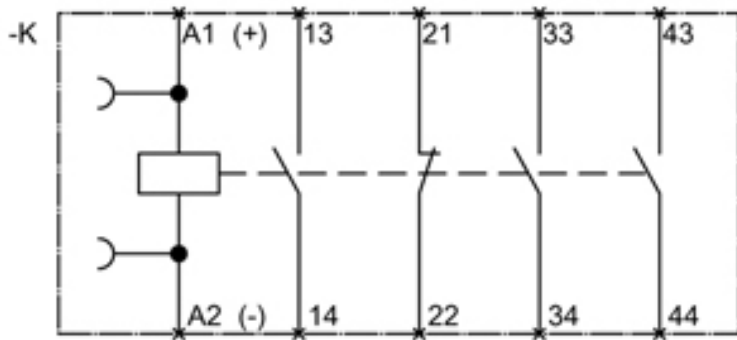
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH2131-2BB40-ZW96/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2131-2BB40-ZW96





last change:

Feb 15, 2013