



CONTACTOR RELAY, 3NO+1NC, AC 110V, 50/60 HZ, 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
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at AC		7,3g / 5 ms, 4,7g / 10 ms
• at sine pulse		
• at AC		11,4g / 5 ms, 7,3g / 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		AC
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	37
Apparent holding power / of the solenoid / for AC	V·A	5.7
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay		
• at AC	ms	8 ... 33
Opening delay		
• at AC	ms	6 ... 25
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

<ul style="list-style-type: none"> • at 600 V / rated value 	A	0.65
<ul style="list-style-type: none"> • with 3 current paths in series / at DC-12 		
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 24 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 60 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 110 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 220 V / rated value 	A	3.6
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 440 V / rated value 	A	2.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 600 V / rated value 	A	1.8
Operating current		
<ul style="list-style-type: none"> • [nicht versorgt: PMD_ABP558_001_000] 		
<ul style="list-style-type: none"> • 	A	10
<ul style="list-style-type: none"> • 	A	1
<ul style="list-style-type: none"> • 	A	0.3
<ul style="list-style-type: none"> • with 2 current paths in series / at DC-13 		
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 24 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 60 V / rated value 	A	3.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 110 V / rated value 	A	1.3
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 220 V / rated value 	A	0.9
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 440 V / rated value 	A	0.2
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 600 V / rated value 	A	0.1
<ul style="list-style-type: none"> • with 3 current paths in series / at DC-13 		
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 24 V / rated value 	A	10
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 60 V / rated value 	A	4.7
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 110 V / rated value 	A	3
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 220 V / rated value 	A	1.2
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 440 V / rated value 	A	0.5
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • at 600 V / rated value 	A	0.26
Off-load operating frequency		
<ul style="list-style-type: none"> • at AC 	1/h	10,000
<ul style="list-style-type: none"> • at DC 	1/h	10,000
Frequency of operation		
<ul style="list-style-type: none"> • at AC-12 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • at AC-14 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • at AC-15 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • at DC-12 / maximum 	1/h	1,000
<ul style="list-style-type: none"> • at DC-13 / maximum 	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	57.5
Depth	mm	73

Connections:

Design of the electrical connection		screw-type 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 • 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

Functional Safety / Safety of Machinery

Declaration of Conformity



CCC



CSA



GOST



UL

[Type Examination](#)



EG-Konf.

Test Certificates

[Special Test
Certificate](#)

[Type Test
Certificates/Test
Report](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS



VDE

UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate

- according to SN 31920
- note

1,000,000
With 0.3 x Ie

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
- with high demand rate / according to SN 31920

% 40
% 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:

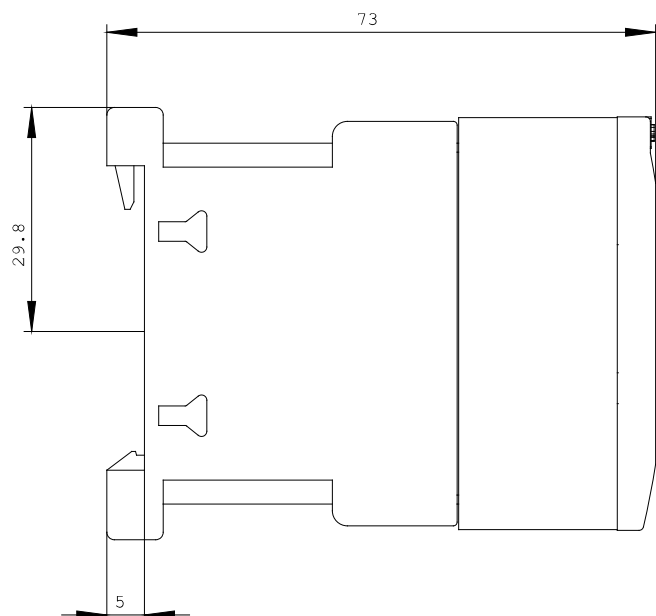
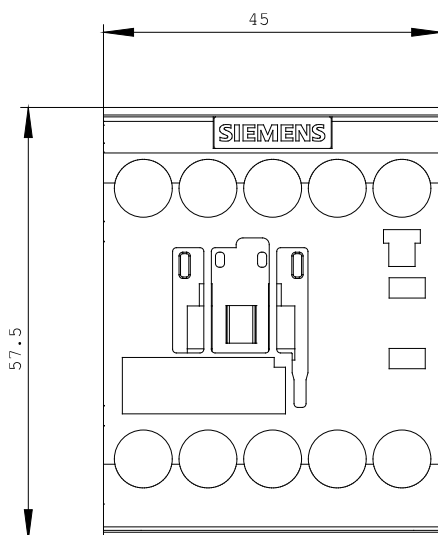
<http://www.siemens.com/cax>

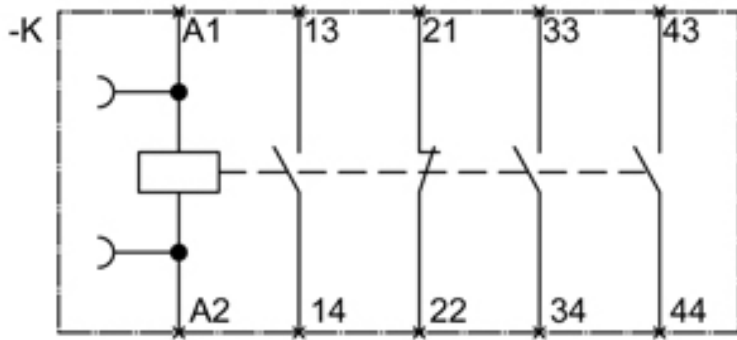
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH2131-1AF00/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2131-1AF00





last change:

Feb 15, 2013