



CONTACTOR RELAY, 2NO+2NC, AC 110V 50HZ, 120V 60HZ, SZ S00, SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	contactor relay
General technical data:	
Size of contactor	S00
Product expansion	
• Auxiliary switch	Yes
Insulation voltage	
• with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP20
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the contactor typical	30 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
Equipment marking	
• acc. to DIN EN 61346-2	K
• acc. to DIN EN 81346-2	K
Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	

- during operation
- during storage

-25 ... +60 °C

-55 ... +80 °C

Main circuit:

No-load switching frequency

- at AC
- at DC

10 000 1/h

10 000 1/h

Control circuit/ Control:

Type of voltage of the control supply voltage

AC

Control supply voltage at AC

- at 50 Hz Rated value
- at 60 Hz Rated value
- Rated value

110 V

120 V

50 Hz

Control supply voltage frequency 2 Rated value

60 Hz

Operating range factor control supply voltage rated value of the magnet coil at AC

- at 50 Hz
- at 60 Hz

0.8 ... 1.1

0.85 ... 1.1

Apparent pick-up power of the magnet coil at AC

37 V·A

Inductive power factor with closing power of the coil

0.8

Apparent holding power of the magnet coil at AC

5.7 V·A

Inductive power factor with the holding power of the coil

0.25

Closing delay

- at AC

8 ... 33 ms

Opening delay

- at AC

4 ... 15 ms

Arcing time

10 ... 15 s

Auxiliary circuit:

Number of NC contacts

- for auxiliary contacts
- instantaneous contact

2

2

Number of NO contacts

- for auxiliary contacts
- instantaneous contact

2

2

Identification number and letter for switching elements

22 E

Operating current at AC-12 maximum

10 A

Operating current at AC-15

- at 230 V Rated value
- at 400 V Rated value
- at 500 V Rated value

10 A

3 A

2 A

<ul style="list-style-type: none"> • at 690 V Rated value 	1 A
Operating current with 1 current path at DC-12	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 110 V Rated value 	3 A
<ul style="list-style-type: none"> • at 220 V Rated value 	1 A
<ul style="list-style-type: none"> • at 440 V Rated value 	0.3 A
<ul style="list-style-type: none"> • at 600 V Rated value 	0.15 A
Operating current with 2 current paths in series at DC-12	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 60 V Rated value 	10 A
<ul style="list-style-type: none"> • at 110 V Rated value 	4 A
<ul style="list-style-type: none"> • at 220 V Rated value 	2 A
<ul style="list-style-type: none"> • at 440 V Rated value 	1.3 A
<ul style="list-style-type: none"> • at 600 V Rated value 	0.65 A
Operating current with 3 current paths in series at DC-12	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 60 V Rated value 	10 A
<ul style="list-style-type: none"> • at 110 V Rated value 	10 A
<ul style="list-style-type: none"> • at 220 V Rated value 	3.6 A
<ul style="list-style-type: none"> • at 440 V Rated value 	2.5 A
<ul style="list-style-type: none"> • at 600 V Rated value 	1.8 A
Operating frequency at DC-12 maximum	1 000 1/h
Operating current with 1 current path at DC-13	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 110 V Rated value 	1 A
<ul style="list-style-type: none"> • at 220 V Rated value 	0.3 A
<ul style="list-style-type: none"> • at 440 V Rated value 	0.14 A
<ul style="list-style-type: none"> • at 600 V Rated value 	0.1 A
Operating current with 2 current paths in series at DC-13	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 60 V Rated value 	3.5 A
<ul style="list-style-type: none"> • at 110 V Rated value 	1.3 A
<ul style="list-style-type: none"> • at 220 V Rated value 	0.9 A
<ul style="list-style-type: none"> • at 440 V Rated value 	0.2 A
<ul style="list-style-type: none"> • at 600 V Rated value 	0.1 A
Operating current with 3 current paths in series at DC-13	
<ul style="list-style-type: none"> • at 24 V Rated value 	10 A
<ul style="list-style-type: none"> • at 60 V Rated value 	4.7 A

<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 	<p>3 A</p> <p>1.2 A</p> <p>0.5 A</p> <p>0.26 A</p>
Operating frequency at DC-13 maximum	1 000 1/h
Design of the miniature circuit breaker	
<ul style="list-style-type: none"> • for short-circuit protection of the auxiliary circuit up to 230 V 	C characteristic: 6 A; 0.4 kA
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
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Short-circuit:

Design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	fuse gL/gG: 10 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
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	70 mm
Width	45 mm
Depth	73 mm
Required spacing	
<ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side • for live parts <ul style="list-style-type: none"> — at the side 	<p>6 mm</p> <p>6 mm</p>

Connections/ Terminals:

Type of electrical connection	
<ul style="list-style-type: none"> • for auxiliary and control current circuit 	spring-loaded terminals
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for auxiliary contacts 	<p>2x (0,5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (20 ... 12)</p>

Safety related data:

B10 value with high demand rate acc. to SN 31920	1 000 000; With 0.3 x I _e
Proportion of dangerous failures	

<ul style="list-style-type: none"> with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 	<p>40 %</p> <p>73 %</p>
Product function <ul style="list-style-type: none"> positively driven operation acc. to IEC 60947-5-1 	Yes
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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[Baumusterbescheinigung](#)



[spezielle Prüfbescheinigung](#)

Test Certificates	Shipping Approval
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[Typprüfbescheinigung/Werkszeugnis](#)



Shipping Approval	other
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[Umweltbestätigung](#)



Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

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

Cax online generator

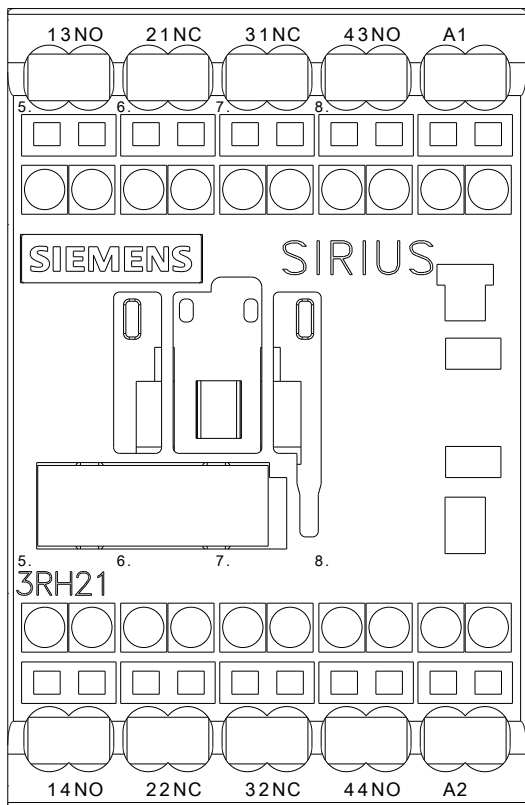
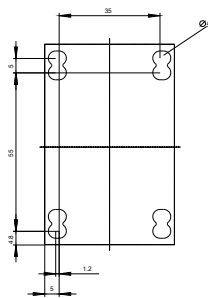
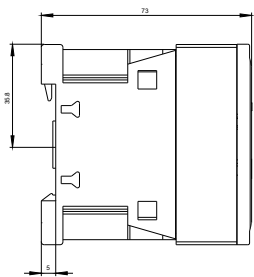
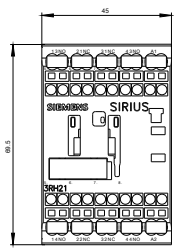
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21222AK60>

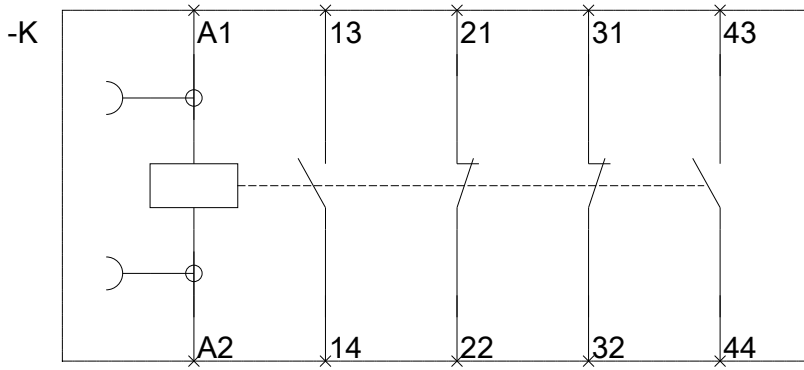
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RH21222AK60>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21222AK60&lang=en





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29.06.2015