



CONTACTOR RELAY, 3NO+1NC, AC 110V, 50/60 HZ, W/ FULL-WAVE RECTIFIER, SZ S00, SPRING-LOADED TERMINAL

product brand name		SIRIUS
Product designation		contactor relay

General technical data:

Insulation voltage		
<ul style="list-style-type: none"> with degree of pollution 3 Rated value 	V	690
Degree of pollution		3
Surge voltage resistance Rated value	kV	6
Mechanical service life (switching cycles)		
<ul style="list-style-type: none"> of the contactor typical 		30 000 000
<ul style="list-style-type: none"> of the contactor with added electronics-compatible auxiliary switch block typical 		5 000 000
<ul style="list-style-type: none"> of the contactor with added auxiliary switch block typical 		10 000 000
Protection class IP		
<ul style="list-style-type: none"> on the front 		IP20
Equipment marking		
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 		K
<ul style="list-style-type: none"> acc. to DIN EN 81346-2 		K

Control circuit/ Control:

Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
<ul style="list-style-type: none"> at 50 Hz Rated value 	V	110
<ul style="list-style-type: none"> at 60 Hz Rated value 	V	110
Control supply voltage for DC		
<ul style="list-style-type: none"> Rated value 	V	100

• Rated value	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60
Operating range factor control supply voltage rated value of the magnet coil with AC		
• at 50 Hz		0.8 ... 1.1
• at 60 Hz		0.85 ... 1.1
Design of the surge suppressor		with full-wave rectification
Apparent pick-up power of the magnet coil with AC	V·A	37
Apparent holding power of the magnet coil with AC	V·A	5.7
Closing power of the magnet coil for DC	W	4
Holding power of the magnet coil for DC	W	4
Inductive power factor		
• with closing power of the coil		0.8
• with the holding power of the coil		0.25

Auxiliary circuit:

Number of NC contacts		
• for auxiliary contacts		1
— instantaneous contact		1
Number of NO contacts		
• for auxiliary contacts		3
— instantaneous contact		3
Product expansion Auxiliary switch		Yes
Identification number and letter for switching elements		31 E
Operating current at AC-15		
• at 230 V Rated value	A	10
• at 400 V Rated value	A	3
• at 690 V Rated value	A	1
Design of the miniature circuit breaker		
• 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		
• 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
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Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Height	mm	70
Width	mm	45
Depth	mm	73
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 	mm	6
	mm	6

Connections/ Terminals:

Type of electrical connection		spring-loaded terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 		
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 		2x (0,5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12)

Safety related data:

B10 value with high demand rate acc. to SN 31920		1 000 000
<ul style="list-style-type: none"> • Note 		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 	%	40
	%	73
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

Mechanical data:

Size of contactor		S00
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Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul style="list-style-type: none"> • during operation • during storage 	°C	-25 ... +60
	°C	-55 ... +80

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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[Type Examination](#)



Test Certificates	Shipping Approval
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[Special Test Certificate](#)



Shipping Approval	other
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[Environmental Confirmations](#)



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

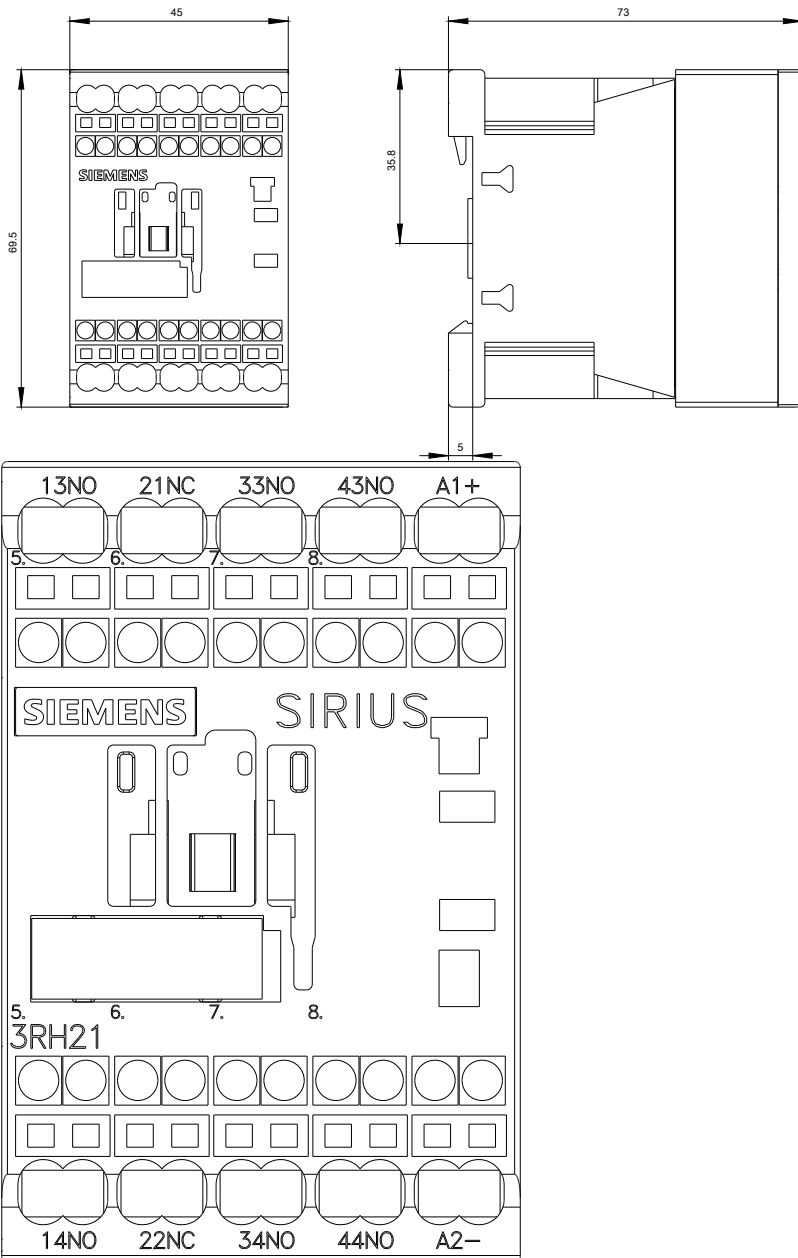
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21312GG20>

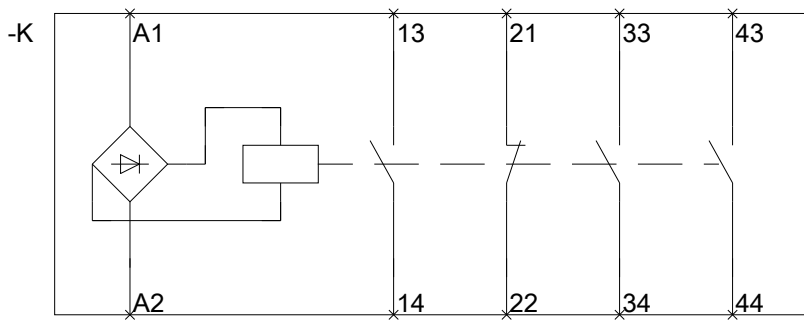
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH21312GG20/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21312GG20&lang=en





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