

CONTACTOR RELAY, 4NO, DC 24V, 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
Shock resistance	
• at rectangular impulse	
— at DC	10g / 5 ms, 5g / 10 ms
• with sine pulse	
— at DC	15g / 5 ms, 8g / 10 ms
Mechanical service life (switching cycles)	
• 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
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

Ambient conditions:

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

Main circuit:

No-load switching frequency	
<ul style="list-style-type: none"> • at AC 	10 000 1/h
<ul style="list-style-type: none"> • at DC 	10 000 1/h

Control circuit/ Control:

Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
<ul style="list-style-type: none"> • Rated value 	24 V
Operating range factor control supply voltage rated value of the magnet coil at DC	0.8 ... 1.1
Closing power of the magnet coil at DC	4 W
Holding power of the magnet coil at DC	4 W
Closing delay	
<ul style="list-style-type: none"> • at DC 	30 ... 100 ms
Opening delay	
<ul style="list-style-type: none"> • at DC 	7 ... 13 ms
Arcing time	10 ... 15 s

Auxiliary circuit:

Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	4
<ul style="list-style-type: none"> — instantaneous contact 	4
Identification number and letter for switching elements	40 E
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
<ul style="list-style-type: none"> • at 230 V Rated value 	10 A
<ul style="list-style-type: none"> • at 400 V Rated value 	3 A
<ul style="list-style-type: none"> • at 500 V Rated value 	2 A

<ul style="list-style-type: none"> • at 690 V Rated value 	1 A
Operating current at 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 at 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 protection

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 Ie
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:

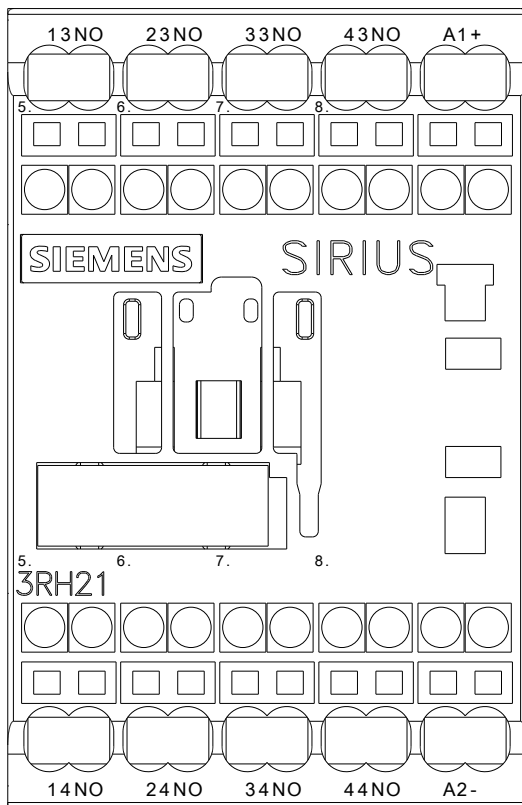
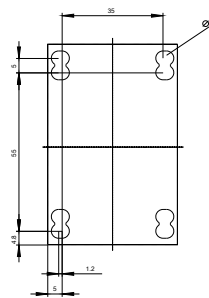
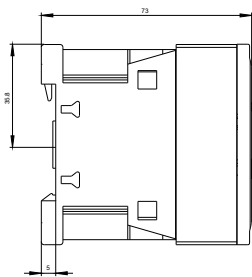
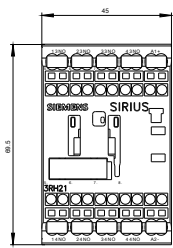
General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
 <p>CCC</p>  <p>CSA</p>  <p>UL</p>  <p>EAC</p>	<p>Baumusterbescheinigung</p>  <p>EG-Konf.</p>	

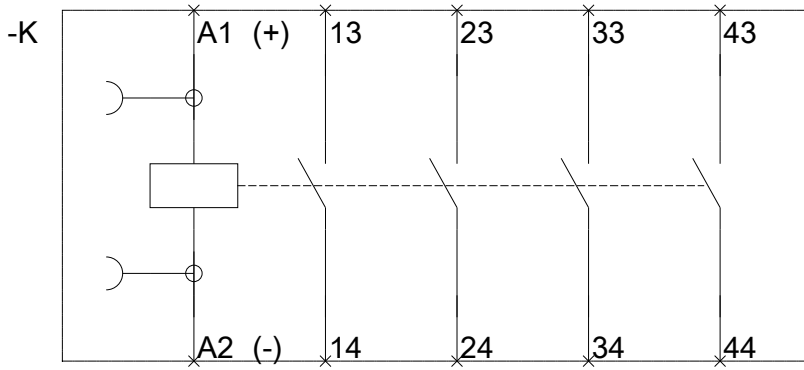
Test Certificates	Shipping Approval
<p>spezielle Prüfbescheinigungen</p> <p>Typprüfbescheinigung/Werkszeugnis</p>	 <p>ABS</p>  <p>BUREAU VERITAS</p>  <p>DNV</p>  <p>GL</p>

Shipping Approval	other
 <p>LRS</p>  <p>PRS</p>  <p>RINA</p>  <p>RMRS</p>	<p>Umweltbestätigung</p>  <p>VDE</p>

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=3RH21402BB40>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RH21402BB40>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21402BB40&lang=en





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