

CONTACTOR RELAY, 2NO+2NC, 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 NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	2
<ul style="list-style-type: none"> — instantaneous contact 	2
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	2
<ul style="list-style-type: none"> — instantaneous contact 	2
Identification number and letter for switching elements	22 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 • at 400 V Rated value • at 500 V Rated value • at 690 V Rated value 	<p>10 A</p> <p>3 A</p> <p>2 A</p> <p>1 A</p>
<p>Operating current at 1 current path at DC-12</p> <ul style="list-style-type: none"> • at 24 V Rated value • at 110 V Rated value • at 220 V Rated value • at 440 V Rated value • at 600 V Rated value 	<p>10 A</p> <p>3 A</p> <p>1 A</p> <p>0.3 A</p> <p>0.15 A</p>
<p>Operating current with 2 current paths in series at DC-12</p> <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 	<p>10 A</p> <p>10 A</p> <p>4 A</p> <p>2 A</p> <p>1.3 A</p> <p>0.65 A</p>
<p>Operating current with 3 current paths in series at DC-12</p> <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 	<p>10 A</p> <p>10 A</p> <p>10 A</p> <p>3.6 A</p> <p>2.5 A</p> <p>1.8 A</p>
<p>Operating frequency at DC-12 maximum</p>	<p>1 000 1/h</p>
<p>Operating current at 1 current path at DC-13</p> <ul style="list-style-type: none"> • at 24 V Rated value • at 110 V Rated value • at 220 V Rated value • at 440 V Rated value • at 600 V Rated value 	<p>10 A</p> <p>1 A</p> <p>0.3 A</p> <p>0.14 A</p> <p>0.1 A</p>
<p>Operating current with 2 current paths in series at DC-13</p> <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 	<p>10 A</p> <p>3.5 A</p> <p>1.3 A</p> <p>0.9 A</p> <p>0.2 A</p> <p>0.1 A</p>

Operating current 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 	<p>10 A</p> <p>4.7 A</p> <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

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 	<p>2x (0,5 ... 4 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 2.5 mm²)</p>

• for AWG conductors for auxiliary contacts

2x (20 ... 12)






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	
• with low demand rate acc. to SN 31920	40 %
• with high demand rate acc. to SN 31920	73 %
Product function	
• 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
 CCC	 UL	 EG-Konf.
 CSA	 EAC	Baumusterbescheinigung

Test Certificates	Shipping Approval
Typprüfbescheinigung/Werkszeugnis	 ABS
spezielle Prüfbescheinigung n	 BUREAU VERITAS
	 DNV
	 GL

Shipping Approval	other
 LRS	Umweltbestätigung
 PRS	 VDE
 RINA	
 RMRS	

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

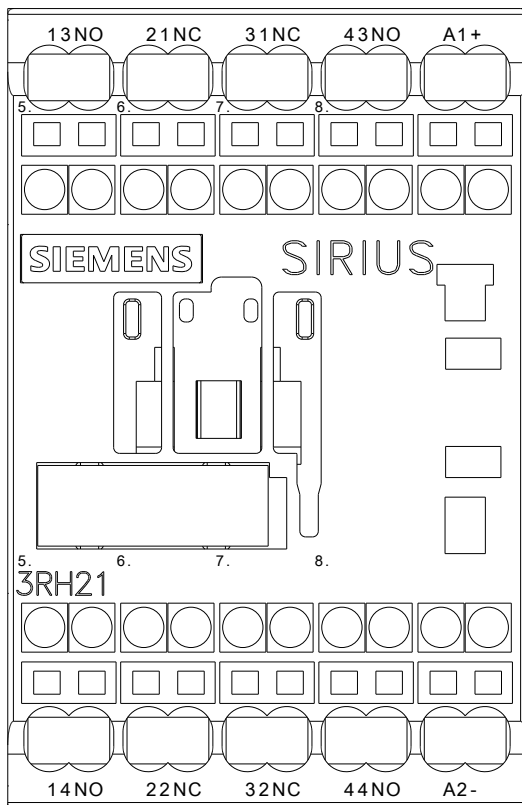
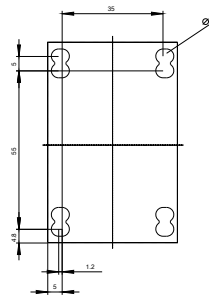
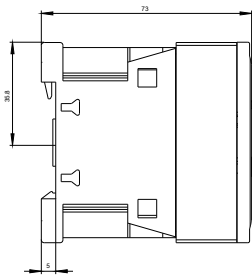
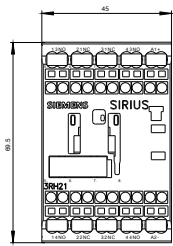
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21222BB40>

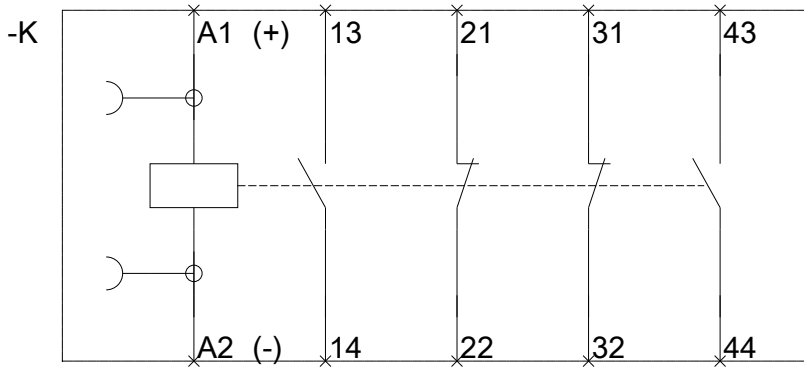
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RH21222BB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21222BB40&lang=en





last modified:

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