

CONTACTOR RELAY, 2NO+2NC, DC 24V, SIZE S00, SCREW
TERMINAL



product brand name	SIRIUS
Product designation	contactor relay
General technical data:	
Size of contactor	S00
Product extension	
• Auxiliary switch	Yes
Insulation voltage	
• with degree of pollution 3 rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20
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 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	-25 ... +60 °C
• during storage	-55 ... +80 °C
Main circuit:	
No-load switching frequency	
• at AC	10 000 1/h
• at DC	10 000 1/h
Control circuit/ Control:	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 ... 1.1
Closing power of magnet coil at DC	4 W
Holding power of magnet coil at DC	4 W
Closing delay	
• at DC	30 ... 100 ms
Opening delay	
• at DC	7 ... 13 ms
Arcing time	10 ... 15 ms
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	2
— instantaneous contact	2
Number of NO contacts	
• for auxiliary contacts	2
— 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	

• at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	10 A 3 A 2 A 1 A
Operating current at 1 current path at DC-12 • 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	10 A 3 A 1 A 0.3 A 0.15 A
Operating current with 2 current paths in series at DC-12 • 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	10 A 10 A 4 A 2 A 1.3 A 0.65 A
Operating current with 3 current paths in series at DC-12 • 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	10 A 10 A 10 A 3.6 A 2.5 A 1.8 A
Operating frequency at DC-12 maximum	1 000 1/h
Operating current at 1 current path at DC-13 • 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	10 A 1 A 0.3 A 0.14 A 0.1 A
Operating current with 2 current paths in series at DC-13 • 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	10 A 3.5 A 1.3 A 0.9 A 0.2 A 0.1 A

Operating current with 3 current paths in series at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	4.7 A
• at 110 V rated value	3 A
• at 220 V rated value	1.2 A
• at 440 V rated value	0.5 A
• at 600 V rated value	0.26 A
Operating frequency at DC-13 maximum	1 000 1/h
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 auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings:	
Contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
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
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	57.5 mm
Width	45 mm
Depth	73 mm
Required spacing	
• for grounded parts — at the side	6 mm
• for live parts — at the side	6 mm
Connections/ Terminals:	
Type of electrical connection	
• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for auxiliary contacts — single or multi-stranded	2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
• at AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 2x 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 %
Failure rate [FIT]	
• with low demand rate acc. to SN 31920	100 FIT
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
spezielle Prüfbescheinigungen Typprüfbescheinigung/Werkszeugnis sonstige	 ABS
	 BUREAU VERITAS
	 DNV

Shipping Approval	other
 GL	Umweltbestätigung
 LRS	
 PRS	
 RINA	
 RMRS	

other
Bestätigungen  VDE

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH21221BB40>

Cax online generator

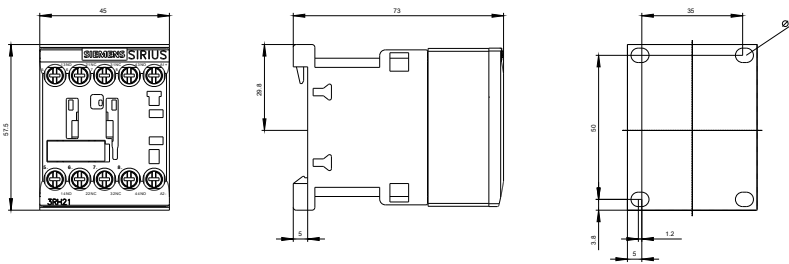
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21221BB40>

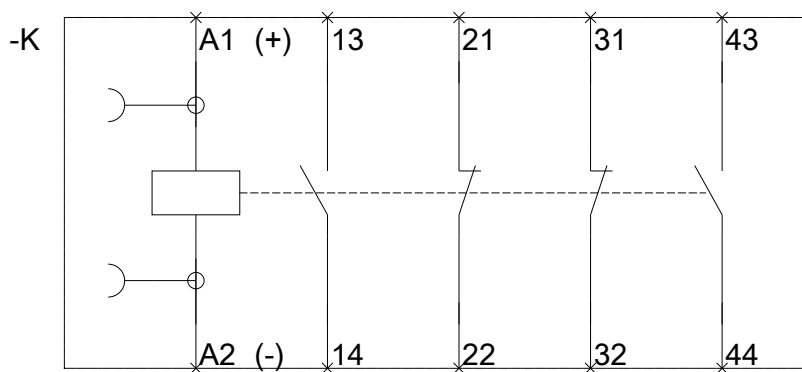
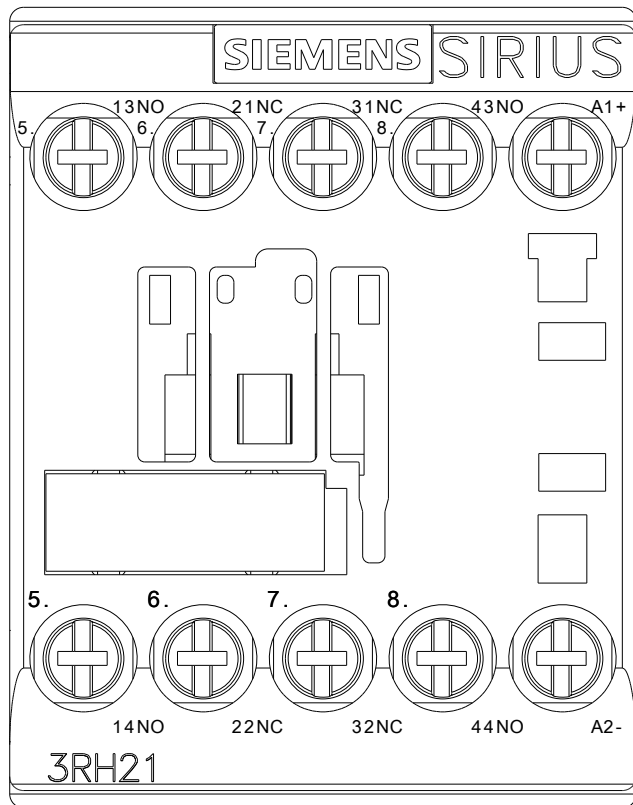
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RH21221BB40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21221BB40&lang=en





last modified:

21.03.2016