



COUPLING CONTACTOR RELAY, 2NO+2NC,
DC 110V, 0.7..1.25*US,
W/ INTEGRATED SUPPRESSOR DIODE, SZ S00,
SPRING-LOADED TERMINAL STANDING BUILT-IN

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Identification number and letter for switching elements		21
Product extension / auxiliary switch		Yes
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... +80
• during operating	°C	-40 ... +70
• note		Railway application: See catalog for rated conditions
Shock resistance		
• at rectangular impulse		
• at DC		10g / 5 ms, 5g / 10 ms
• at sine pulse		
• at DC		15g / 5 ms, 8g / 10 ms
Impulse voltage resistance / rated value	kV	6

Mechanical operating cycles as operating time		
• of the contactor / typical		30,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000
• of the contactor with added electronics-compatible auxiliary switch block / typical		5,000,000

Control circuit/ Control:		
Design of the surge suppressor		with suppressor diode
Voltage type / of control feed voltage		DC
Control supply voltage		
• for DC / rated value	V	110
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.7 ... 1.25
Holding power / of the solenoid / for DC	W	4
Pull-in power / of the solenoid / for DC	W	13
Closing delay		
• at DC	ms	30 ... 100
Opening delay		
• at DC	ms	25 ... 90
Arcing time	s	10 ... 15

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		2
Operating current		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V / rated value	A	10
• at 400 V / rated value	A	3
• at 500 V / rated value	A	2
• at 690 V / rated value	A	1
Operating current		
• with 1 current path / at DC-12		
• at 24 V / rated value	A	10
• at 110 V / rated value	A	3
• at 220 V / rated value	A	1
• at 440 V / rated value	A	0.3
• at 600 V / rated value	A	0.15

<ul style="list-style-type: none"> • with 2 current paths in series / at DC-12 <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 • with 3 current paths in series / at DC-12 <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 	A	10
	A	10
	A	4
	A	2
	A	1.3
	A	0.65
<hr/>		
Operating current		
<ul style="list-style-type: none"> • with 1 current path / at DC-13 <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 • with 2 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 • 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 	A	10
	A	1
	A	0.3
	A	0.14
	A	0.1
	A	10
	A	3.5
	A	1.3
	A	0.9
	A	0.2
	A	0.1
	A	10
	A	4.7
	A	3
	A	1.2
	A	0.5
	A	0.26
<hr/>		
Off-load operating frequency		
<ul style="list-style-type: none"> • at AC • at DC 	1/h	10,000
	1/h	10,000
<hr/>		
Frequency of operation		
<ul style="list-style-type: none"> • at AC-12 / maximum 	1/h	1,000

- at AC-14 / maximum
- at AC-15 / maximum
- at DC-12 / maximum
- at DC-13 / maximum

1/h	1,000
1/h	1,000
1/h	1,000
1/h	1,000

Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch

- required

fuse gL/gG: 10 A

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

Installation/ mounting/ dimensions:

mounting position

standing, on horizontal mounting surface

Mounting type

screw and snap-on mounting onto 35 mm standard mounting rail

Width

mm 45

Height

mm 70

Depth

mm 123

Connections/ terminals:

Design of the electrical connection

- for auxiliary and control current circuit
- for auxiliary contacts / finely stranded / with conductor end processing
- for auxiliary contacts / finely stranded / without conductor final cutting
- for AWG conductors / for auxiliary contacts

spring-loaded terminals

2x (0.5 ... 2.5 mm²)

2x (0.5 ... 2.5 mm²)

2x (20 ... 12)

Certificates/ approvals:

General Product Approval

Declaration of Conformity

Test Certificates



CCC



CSA



UL



EG-Konf.

[Special Test Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS



VDE

[Environmental Confirmations](#)

UL/CSA ratings:**Contact rating designation / for auxiliary contacts / according to UL**

A600 / Q600

Safety related data:**B10 value / with high demand rate**

- according to SN 31920
- note

1,000,000

With 0.3 x I_e**T1 value / for proof test interval or service life**

- according to IEC 61508

a

20

Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%

40

%

73

Failure rate [FIT] / with low demand rate

- according to SN 31920

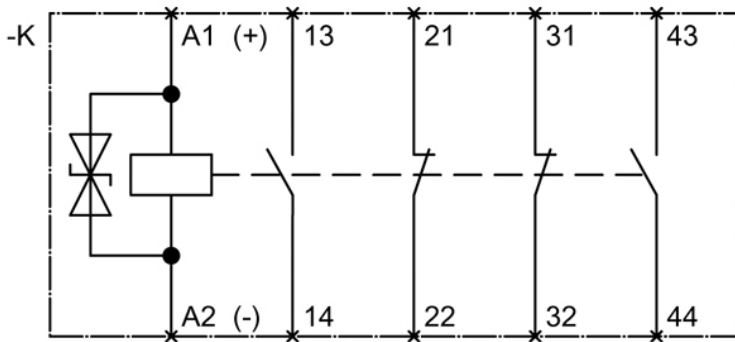
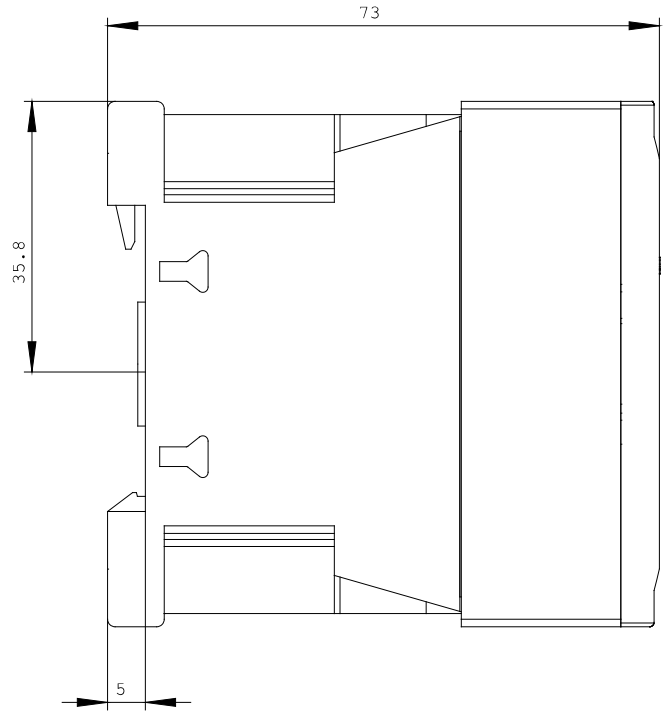
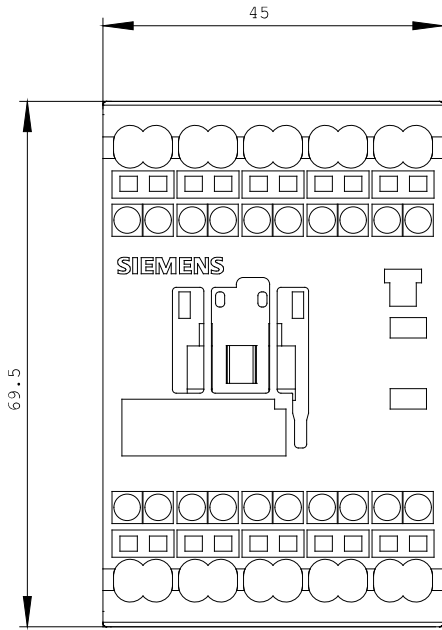
FIT

100

Product function / positively driven operation to IEC 60947-5-1

Yes

Further information:**Information- and Downloadcenter (Catalogs, Brochures,...)**<http://www.siemens.com/industrial-controls/catalogs>**Industry Mall (Online ordering system)**<http://mall.industry.siemens.com/>**Cax online generator**<http://www.siemens.com/cax>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<http://support.automation.siemens.com/WW/view/en/3RH2122-2KF40-1AA0/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2122-2KF40-1AA0



last change:

Jul 21, 2014