



2NO+2NC CONTACTOR,
AC3: 4KW DC 110V 4-POLE, 2NO+2NC,
SZ: S00, SCREW TERMINAL

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Product extension		
• auxiliary switch		Yes
• function module for communication		No
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at DC		6,7g / 5 ms, 4,2g / 10 ms
• at sine pulse		
• at DC		10,5g / 5 ms, 6,6g / 10 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690

Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1	V	400
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
Main circuit:		
Number of NC contacts / for main contacts		2
Number of NO contacts / for main contacts		2
Operational current / at AC-1 / up to 690 V		
• at 40 °C ambient temperature / rated value	A	22
• at 60 °C ambient temperature / rated value	A	20
Operating current / at AC-2 / at AC-3		
• at 400 V		
• per NO contact / rated value	A	9
• per NC contact / rated value	A	9
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	2.1
• at 220 V / rated value	A	0.8
• at 440 V / rated value	A	0.6
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	12
• at 220 V / rated value	A	1.6
• at 440 V / rated value	A	0.8
Operating current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V		
• per NO contact / rated value	A	16
• per NC contact / rated value	A	16
• at 110 V		
• per NO contact / rated value	A	0.15
• per NC contact / rated value	A	0.075
• at 220 V		
• per NO contact / rated value	A	0.75
• per NC contact / rated value	A	0.375
• with 2 current paths in series / at DC-3 / at DC-5		

• at 24 V • per NO contact / rated value • per NC contact / rated value • at 110 V • per NO contact / rated value • per NC contact / rated value	A	16
	A	16
	A	0.35
	A	0.175
Operating performance		
• at AC-1 • at 230 V / rated value • at 400 V / rated value • at AC-2 / at AC-3 • at 230 V • per NO contact / rated value • per NC contact / rated value • at 400 V • per NO contact / rated value • per NC contact / rated value	kW	6.5
	kW	11
	kW	2.2
	kW	2.2
	kW	4
	kW	4
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor	W	0.7
Off-load operating frequency		
• at AC • at DC	1/h	10,000
	1/h	10,000
Frequency of operation		
• with AC-1 / maximum • at AC-2 / at AC-3 / maximum	1/h	1,000
	1/h	1,000

Control circuit/ Control:		
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		0.8 ... 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Closing delay		
• at DC	ms	30 ... 100
Opening delay		
• at DC	ms	7 ... 13
Arcing time	ms	10 ... 15
Residual current / of electronics / for control with signal <0>		

- at 24 V / with DC / maximum permissible

A 0.01

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

0

Number of NO contacts / for auxiliary contacts / instantaneous switching

0

Operating current

- at AC-12 / maximum
- at AC-15 / at 230 V / rated value
- at AC-15 / at 400 V / rated value

A 10
A 10
A 3

Operating current / at DC-12

- at 48 V / rated value
- at 60 V / rated value
- at 110 V / rated value
- at 125 V / rated value
- at 220 V / rated value
- at 440 V / rated value
- at 600 V / rated value

A 6
A 6
A 3
A 2
A 1
A 0.3
A 0.15

Operating current / at DC-13

- at 24 V / rated value
- at 48 V / rated value
- at 60 V / rated value
- at 110 V / rated value
- at 220 V / rated value
- at 600 V / rated value

A 10
A 2
A 2
A 1
A 0.3
A 0.1

UL/CSA ratings:

yielded mechanical performance [hp]

- for single-phase squirrel cage motors
 - at 110/120 V / rated value
 - at 230 V / rated value

hp 0.33
hp 1

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Short-circuit:

Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

- at type of coordination 2 / required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 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 according to DIN EN 50022
Mounting type / series installation		Yes
Width	mm	45
Height	mm	57.5
Depth	mm	73

Connections/ terminals:

Design of the electrical connection		
• for main current circuit • for auxiliary and control current circuit		screw-type terminals screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts • solid • finely stranded • with conductor end processing • for AWG conductors / for main contacts • for auxiliary contacts • solid • finely stranded • with conductor end processing • for AWG conductors / for auxiliary contacts		2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12

Safety related data:

B10 value / with high demand rate		
• according to SN 31920		1,000,000
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		
• mirror contact to IEC 60947-4-1		Yes

- comment

- positively driven operation to IEC 60947-5-1

with 3RH29

No

Certificates/ approvals:

General Product Approval



CCC



CSA



UL

Functional Safety / Safety of Machinery

[Type Examination](#)

Declaration of Conformity



EG-Konf.

Test Certificates

[Special Test
Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS

[Confirmation](#)



VDE

[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

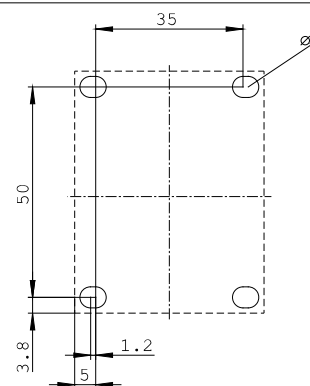
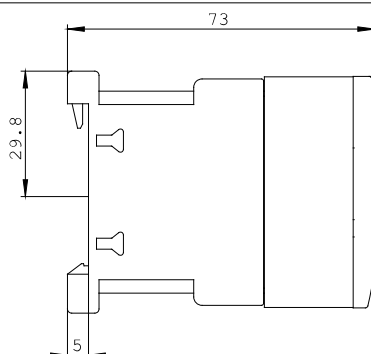
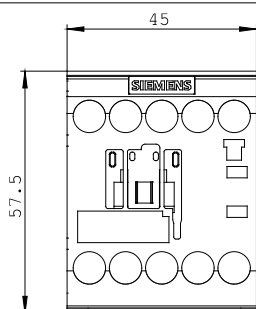
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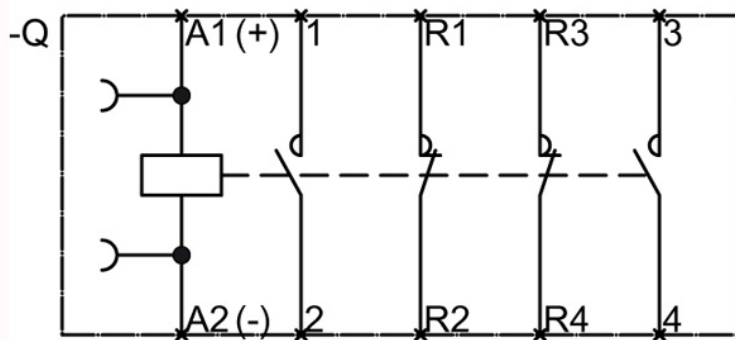
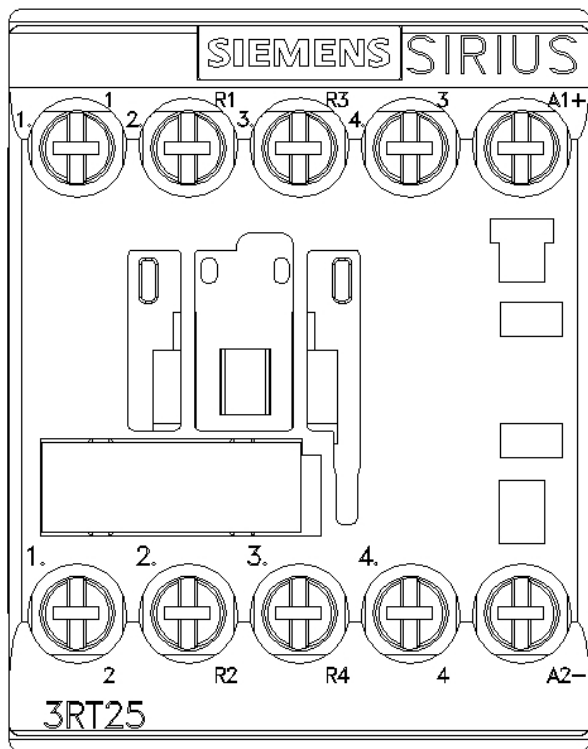
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2516-1BF40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2516-1BF40





last change:

Jul 28, 2014