



CONTACTOR, AC-3, 7.5KW/400V, 1NO,
DC 24V, 3-POLE, 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		7.3g / 5 ms, 4.7g / 10 ms
• at sine pulse		
• at DC		11.4g / 5 ms, 7.3g / 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		0
Number of NO contacts / for main contacts		3
Connectable conductor cross-section / in main circuit		
• at AC-1		
• at 40 °C / minimum permissible	m ²	4
• at 60 °C / minimum permissible	m ²	2.5
Operating current		
• at AC-2		
• at 400 V / rated value	A	16
• at AC-3		
• at 400 V / rated value	A	16
• at 500 V / rated value	A	12.4
• at 690 V / rated value	A	8.9
• at AC-4		
• at 400 V / rated value	A	11.5
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
• at 600 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
• at 600 V / rated value	A	0.7
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
• at 220 V / rated value	A	20

• at 440 V / rated value	A	1.3
• at 600 V / rated value	A	1
Operating current		
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	0.1
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	0.35
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
• at 220 V / rated value	A	1.5
• at 440 V / rated value	A	0.2
• at 600 V / rated value	A	0.2
Service power		
• at AC-1		
• at 230 V / rated value	kW	7.5
• at 400 V / rated value	kW	13
• at 690 V / rated value	kW	22
• at AC-2		
• at 400 V / rated value	kW	7.5
• at AC-3		
• at 230 V / rated value	kW	4
• at 400 V / rated value	kW	7.5
• at 690 V / rated value	kW	7.5
• at AC-4		
• at 400 V / rated value	kW	5.5
Thermal short-time current / restricted to 10 s		
	A	128
Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor		
	W	2.2
Off-load operating frequency		
• at DC	1/h	10,000
Frequency of operation		
• at AC-1 / according to IEC 60947-6-2	1/h	1,000
• at AC-2 / according to IEC 60947-6-2	1/h	750
• at AC-3 / according to IEC 60947-6-2	1/h	750
• at AC-4 / according to IEC 60947-6-2	1/h	250

Control circuit:

Type of voltage / of the controlled supply voltage		DC
Control supply voltage • for DC / rated value	V	24
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 230 V / with AC / maximum permissible • at 24 V / with DC / maximum permissible	mA mA	4 10

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		1
Operating current • at AC-12 / maximum • at AC-15 • at 230 V / rated value • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value	A A A A A	10 10 3 2 1
Operating current / at DC-12 • at 24 V / rated value • 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 A A A A A A A	10 6 6 3 2 1 0.3 0.15
Operating current / at DC-13 • at 24 V / rated value	A	10

- 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	2
A	2
A	1
A	0.9
A	0.3
A	0.14
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
- for three-phase squirrel cage motors
 - at 200/208 V / rated value
 - at 220/230 V / rated value
 - at 460/480 V / rated value
 - at 575/600 V / rated value

hp	1
hp	2
hp	3
hp	5
hp	10
hp	10

Operating current (FLA) / for three-phase squirrel cage motors

- at 480 V / rated value
- at 600 V / rated value

A	14
A	11

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
 - at type of coordination 2 / required

fuse gL/gG: 10 A

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

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

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

Type of mounting

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

Type of fixing/fixation / series installation

Yes

Width

mm 45

Height

mm 57.5

Depth

mm 73

Distance, to be maintained, to the ranks assembly / sideways	mm	0
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Connections:

Design of the electrical connection		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		<p>screw-type terminals</p> <p>screw-type terminals</p>
Type of the connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for main contacts • for auxiliary contacts <ul style="list-style-type: none"> • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for auxiliary contacts 		<p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 2x 12</p>

Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate		
<ul style="list-style-type: none"> • according to SN 31920 		1,000,000
T1 value / for proof test interval or service life		
<ul style="list-style-type: none"> • according to IEC 61508 	a	20
Proportion of dangerous failures		
<ul style="list-style-type: none"> • with low demand rate / according to SN 31920 • with high demand rate / according to SN 31920 	%	40
	%	73
Failure rate (FIT value) / with low demand rate		
<ul style="list-style-type: none"> • according to SN 31920 	FIT	100
Product function		
<ul style="list-style-type: none"> • mirror contact to IEC 60947-4-1 <ul style="list-style-type: none"> • comment • positively driven operation to IEC 60947-5-1 		<p>Yes</p> <p>with 3RH29</p> <p>No</p>

Certificates/approvals:

General Product Approval	Functional Safety / Safety of Machinery
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CCC



CSA

[EAC](#)



GOST



UL

[Type Examination](#)

Declaration of Conformity

Test Certificates



EG-Konf.

[other](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



ABS



BUREAU VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS

[Confirmation](#)



VDE

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

Cax online generator

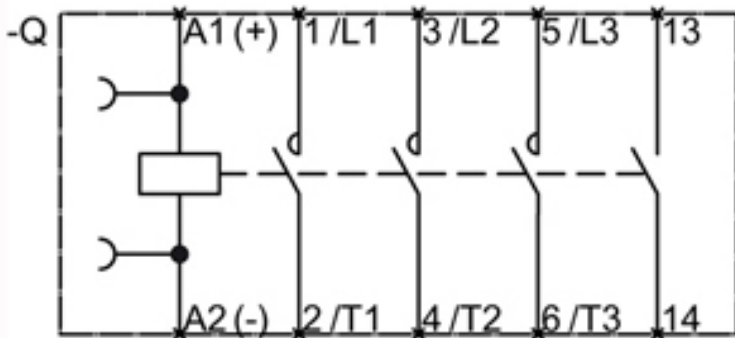
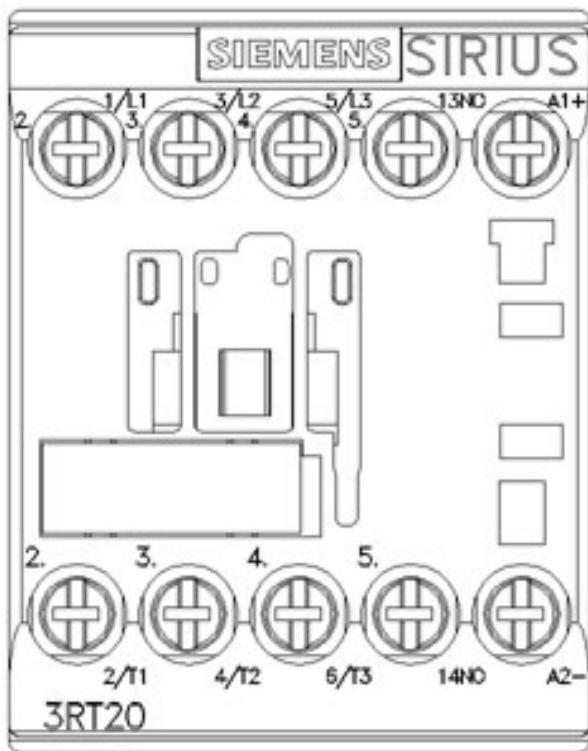
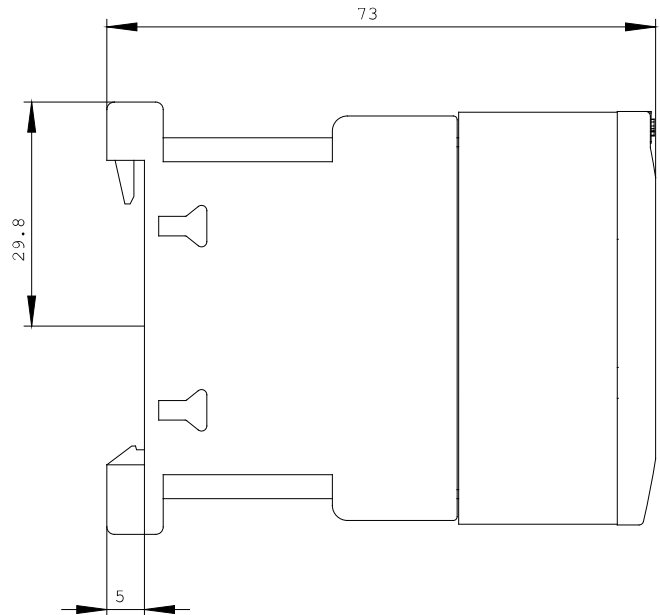
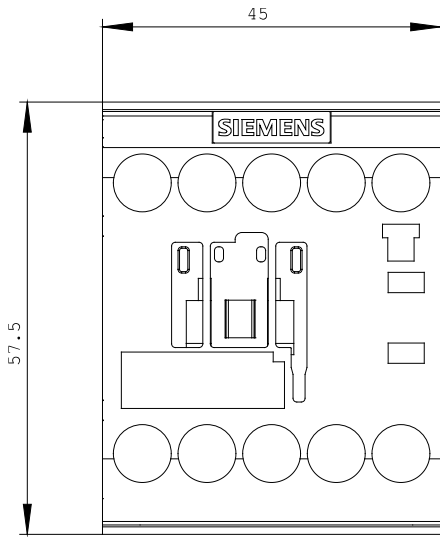
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT2018-1BB41/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2018-1BB41



last change:

Oct 9, 2013