



CONTACTOR, AC-3, 3KW/400V, 2NO+2NC,
DC 24V, 3-POLE,
SZ S00 SCREW TERMINAL PERMANENT AUX. SWITCH
FOR SUVA APPLICATIONS

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Product extension / auxiliary switch		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
Mechanical operating cycles as operating time		
• of the contactor / typical		10,000,000

• 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
Operating current		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	18
• at 60 °C ambient temperature / rated value	A	16
• at AC-2 / at 400 V / rated value	A	7
• at AC-3 / at 400 V / rated value	A	7
• at AC-4 / at 400 V / rated value	A	6.5
Operating current		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	1.5
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	8.4
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	15
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	15
• 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	15
• at 110 V / rated value	A	0.25
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	15
• at 110 V / rated value	A	15
Service power		
• at AC-2 / at 400 V / rated value	kW	3
• at AC-3 / at 400 V / rated value	kW	3
• at AC-4 / at 400 V / rated value	kW	3
Active power loss / per conductor / typical		
Off-load operating frequency		
• at AC	1/h	10,000

• at DC	1/h	10,000
Frequency of operation / at AC-1 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-2 / according to IEC 60947-6-2	1/h	750
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	750
Frequency of operation / 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 / 1	V	24
• for DC / rated value		
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

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		2
Number of NO contacts / for auxiliary contacts / instantaneous switching		2
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	6
• at 400 V	A	3
• at DC-12		
• at 48 V	A	6
• at 60 V	A	6
• at 110 V	A	3
• at 220 V	A	1
• at DC-13		
• at 24 V	A	6
• at 48 V	A	2
• at 60 V	A	2

• at 110 V	A	1
• at 220 V	A	0.3

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	116
Distance, to be maintained, to the ranks assembly / sideways	mm	0
Distance, to be maintained, to earthed part / sideways	mm	6

Connections:

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

Certificates/approvals:

General Product Approval

Declaration of Conformity



Shipping Approval



Shipping Approval

[Confirmation](#)



UL/CSA ratings:

yielded mechanical performance (hp)

• for single-phase squirrel cage motors	hp	0.25
• at 110/120 V / rated value	hp	0.75
• at 230 V / rated value	hp	1.5
• for three-phase squirrel cage motors	hp	2
• at 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	
• at 575/600 V / rated value	hp	

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

• at 480 V / rated value	A	4.8
• at 600 V / rated value	A	6.1

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate

• according to SN 31920		1,000,000
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T1 value / for proof test interval or service life

• according to IEC 61508	a	20
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Proportion of dangerous failures

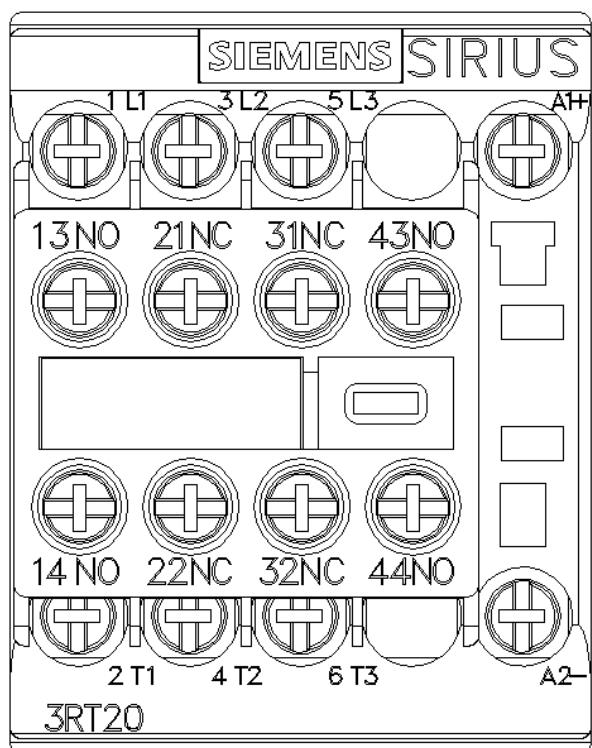
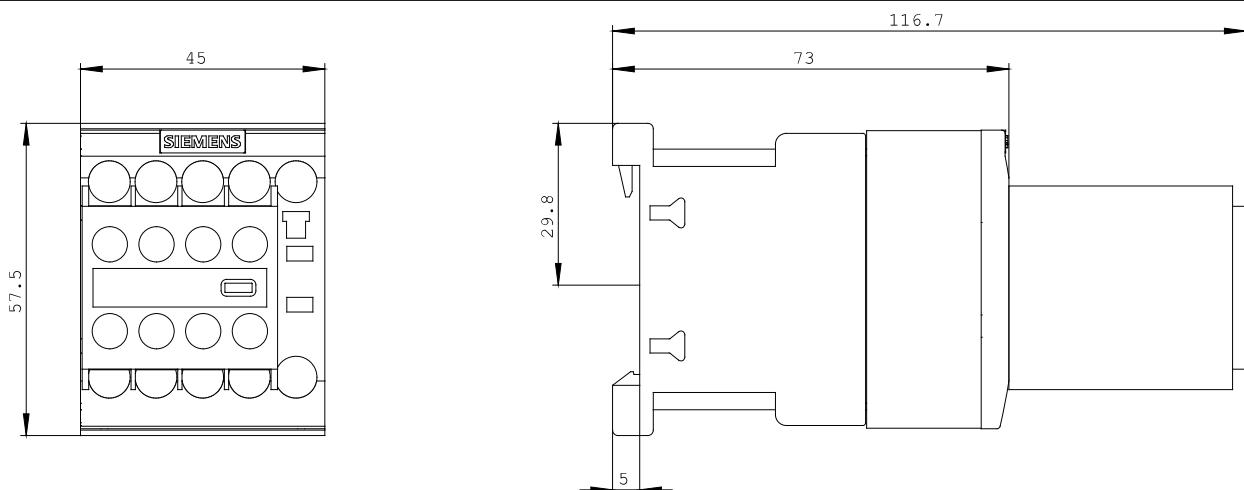
• with low demand rate / according to SN 31920	%	40
• with high demand rate / according to SN 31920	%	73

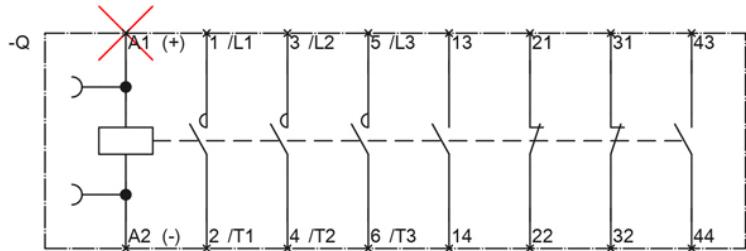
Failure rate (FIT value) / with low demand rate

• according to SN 31920	FIT	100
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Product function

• mirror contact to IEC 60947-4-1	Yes
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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/3RT2015-1BB44-3MA0/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2015-1BB44-3MA0



last change:

Jul 19, 2012