



CONTACTOR, AC-3, 4KW/400V, 1NC,
AC 230V, 50/60 HZ, 3-POLE,
SZ S00 SPRING-LOADED TERMINAL

General technical data:

product brand name	SIRIUS	
Size of the contactor	S00	
Product extension / auxiliary switch	Yes	
Product extension / 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	<ul style="list-style-type: none">• during storage °C -55 ... +80• during operating °C -25 ... +60	
Shock resistance	<ul style="list-style-type: none">• at rectangular impulse °C 6,7g / 5 ms, 4,2g / 10 ms• at AC °C 10,5g / 5 ms, 6,6g / 10 ms• at sine pulse °C• at AC °C	
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
Operating current / at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	22
• at 60 °C ambient temperature / rated value	A	20
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
Operational current		
• at AC-2 / at 400 V / rated value	A	9
• at AC-3		
• at 400 V / rated value	A	9
• at 500 V / rated value	A	7.7
• at 690 V / rated value	A	6.7
• at AC-4 / at 400 V / rated value	A	8.5
Operational 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
Operational 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 500 V / rated value	kW	17
• at 690 V / rated value	kW	22
• at AC-2 / at 400 V / rated value	kW	4
• at AC-3		
• at 230 V / rated value	kW	2.2
• at 400 V / rated value	kW	4
• at 690 V / rated value	kW	5.5
• at AC-4 / at 400 V / rated value	kW	4
Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor	W	0.7
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
• 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		AC
Control supply voltage		
• at 50 Hz / at AC / rated value	V	230
• at 60 Hz / at AC / rated value	V	230
operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 ... 1.1
• at 60 Hz / for AC		0.85 ... 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	27
Apparent holding power / of the solenoid / for AC	V·A	4.2
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay		
• at AC	ms	9 ... 35
Opening delay		
• at AC	ms	3.5 ... 14
Arcing time	ms	10 ... 15
Residual current / of electronics / for control with signal <0>		
• at 230 V / with AC / maximum permissible	mA	3
• at 24 V / with DC / maximum permissible	mA	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		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Operating current / of the auxiliary contacts		
• [nicht versorgt: PMD_AB551_001_000]		
•	A	2
• at 690 V	A	1

UL/CSA ratings:

yielded mechanical performance (hp)		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.33
• at 230 V / rated value	hp	1
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3

• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	A	7.6
• at 600 V / rated value	A	9
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		fuse gL/gG: 10 A
• for short-circuit protection of the main circuit		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
• with type of assignment 1 / required		gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A
• at type of coordination 2 / required		

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	70
Depth	mm	73
Distance, to be maintained, to the ranks assembly / sideways	mm	0

Connections:		
Design of the electrical connection		
• for main current circuit		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
Type of the connectable conductor cross-section		
• for main contacts		2x (0.5 ... 4 mm ²)
• solid		
• finely stranded		2x (0.5 ... 2.5 mm ²)
• with conductor end processing		2x (0.5 ... 2.5 mm ²)
• without conductor final cutting		2x (0.5 ... 2.5 mm ²)
• for AWG conductors / for main contacts		2x (20 ... 12)
• for auxiliary contacts		
• solid		2x (0.5 ... 4 mm ²)
• finely stranded		

• with conductor end processing	2x (0.5 ... 2.5 mm ²)
• without conductor final cutting	2x (0.5 ... 2.5 mm ²)
• for AWG conductors / for auxiliary contacts	2x (20 ... 12)

Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate			
• according to SN 31920			1,000,000
T1 value / for proof test interval or service life	a	20	
• according to IEC 61508			
Proportion of dangerous failures	%	40	
• with low demand rate / according to SN 31920	%	73	
• with high demand rate / according to SN 31920			
Failure rate (FIT value) / with low demand rate	FIT	100	
• according to SN 31920			
Product function		Yes	
• mirror contact to IEC 60947-4-1			
• positively driven operation to IEC 60947-5-1		No	

Certificates/approvals:

General Product Approval	Functional Safety / Safety of Machinery	Declaration of Conformity
 CCC  CSA  GOST  UL		Type Examination  CE EG-Konf.

Test Certificates

Special Test Certificate

Shipping Approval



Shipping Approval



other



Confirmation

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

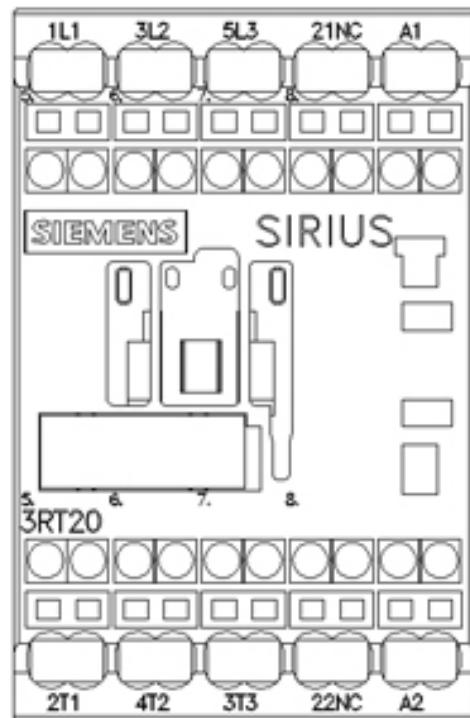
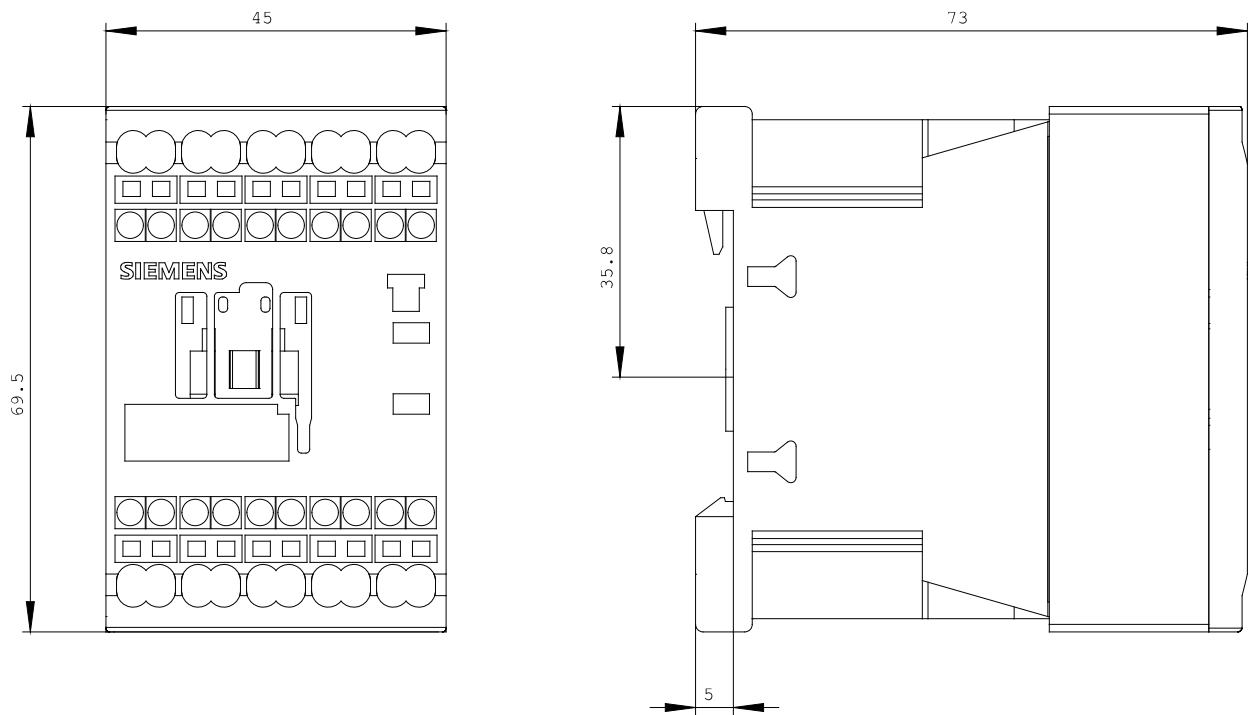
<http://www.siemens.com/cax>

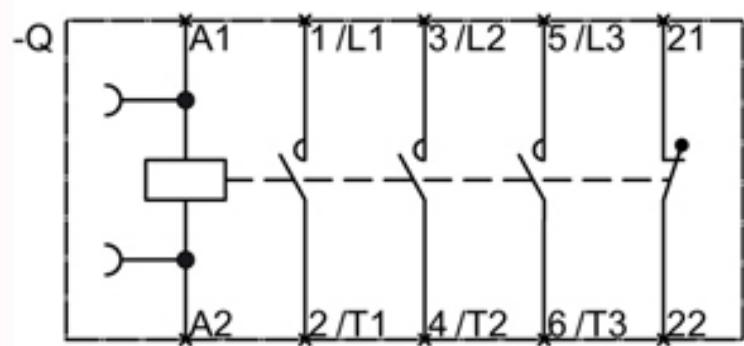
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2016-2AP02/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2016-2AP02





last change:

Feb 15, 2013