



CONTACTOR, AC-3, 7.5KW/400V, 1NC,  
AC110V 50HZ, 120V 60HZ 3-POLE,  
SZ S00 SCREW TERMINAL

**General technical data:**

<b>product brand name</b>	SIRIUS	
<b>Size of the contactor</b>	S00	
<b>Product extension / auxiliary switch</b>	Yes	
<b>Protection class IP / on the front</b>	IP20	
<b>Protection against electrical shock</b>	finger-safe	
<b>Degree of pollution</b>	3	
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b>		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
<b>Shock resistance</b>		
• at rectangular impulse		
• at AC		
• at sine pulse	7,3g / 5 ms, 4,7g / 10 ms	
• at AC	11,4g / 5 ms, 7,3g / 10 ms	
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Insulation voltage / rated value</b>	V	690
<b>Mechanical operating cycles as operating time</b>		
• 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
<b>Main circuit:</b>		
<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		3
<b>Operating current</b>		
• at AC-1 / at 400 V		
• at 40 °C ambient temperature / rated value	A	22
• at 60 °C ambient temperature / rated value	A	20
• at AC-2 / at 400 V / rated value	A	16
• at AC-3 / at 400 V / rated value	A	16
• at AC-4 / at 400 V / rated value	A	11.5
<b>Operating current</b>		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	2.1
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	12
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	20
• at 110 V / rated value	A	20
• 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
<b>Service power</b>		
• at AC-2 / at 400 V / rated value	kW	7.5
• at AC-3 / at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	kW	5.5
<b>Active power loss / per conductor / typical</b>		
<b>Off-load operating frequency</b>		
• at AC	1/h	10,000

• at DC	1/h	10,000
<b>Frequency of operation / at AC-1 / according to IEC 60947-6-2</b>	1/h	1,000
<b>Frequency of operation / at AC-2 / according to IEC 60947-6-2</b>	1/h	750
<b>Frequency of operation / at AC-3 / according to IEC 60947-6-2</b>	1/h	750
<b>Frequency of operation / at AC-4 / according to IEC 60947-6-2</b>	1/h	250

<b>Control circuit:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		AC
<b>Control supply voltage / 1</b>		
• at 50 Hz / for AC / rated value	V	110
• at 60 Hz / for AC / rated value	V	120
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• at 50 Hz / for AC		0.8 ... 1.1
• at 60 Hz / for AC		0.85 ... 1.1
<b>Apparent pull-in power / of the solenoid / for AC</b>	V·A	43
<b>Apparent holding power / of the solenoid / for AC</b>	V·A	6.5
<b>Inductive power factor</b>		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
<b>Closing delay</b>		
• at AC	ms	8 ... 33
<b>Opening delay</b>		
• at AC	ms	4 ... 15
<b>Arcing time</b>	ms	10 ... 15

<b>Auxiliary circuit:</b>		
<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		1
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Operating current / of the auxiliary contacts</b>		
• at AC-12 / maximum	A	10
• at AC-15	A	10
• at 230 V	A	3
• at 400 V	A	6
• at DC-12	A	6
• at 48 V	A	3
• at 60 V	A	6
• at 110 V	A	10

• at 220 V	A	1
• at DC-13	A	10
• at 24 V	A	2
• at 48 V	A	2
• at 60 V	A	1
• at 110 V	A	0.3
• at 220 V		

### 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
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 <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• finely stranded		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• with conductor end processing		
• for AWG conductors / for main contacts		2x (20 ... 16), 2x (18 ... 14), 2x 12
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
• finely stranded		

• with conductor end processing	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 2x 12

### Certificates/approvals:

#### General Product Approval

#### Declaration of Conformity

#### Test Certificates



[Special Test Certificate](#)

#### Shipping Approval



#### Shipping Approval | other



[Confirmation](#)



### UL/CSA ratings:

#### yielded mechanical performance (hp)

• for single-phase squirrel cage motors	hp	1
• at 110/120 V / rated value	hp	2
• at 230 V / rated value	hp	3
• for three-phase squirrel cage motors	hp	5
• at 200/208 V / rated value	hp	10
• at 220/230 V / rated value	hp	10
• at 460/480 V / rated value	hp	10
• at 575/600 V / rated value	hp	10

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

• at 480 V / rated value	A	14
• at 600 V / rated value	A	11

#### 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

<b>Failure rate (FIT value) / with low demand rate</b>	FIT	100
• according to SN 31920		
<b>Product function</b>		
• mirror contact to IEC 60947-4-1		Yes
• positively driven operation to IEC 60947-5-1		No

### 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:

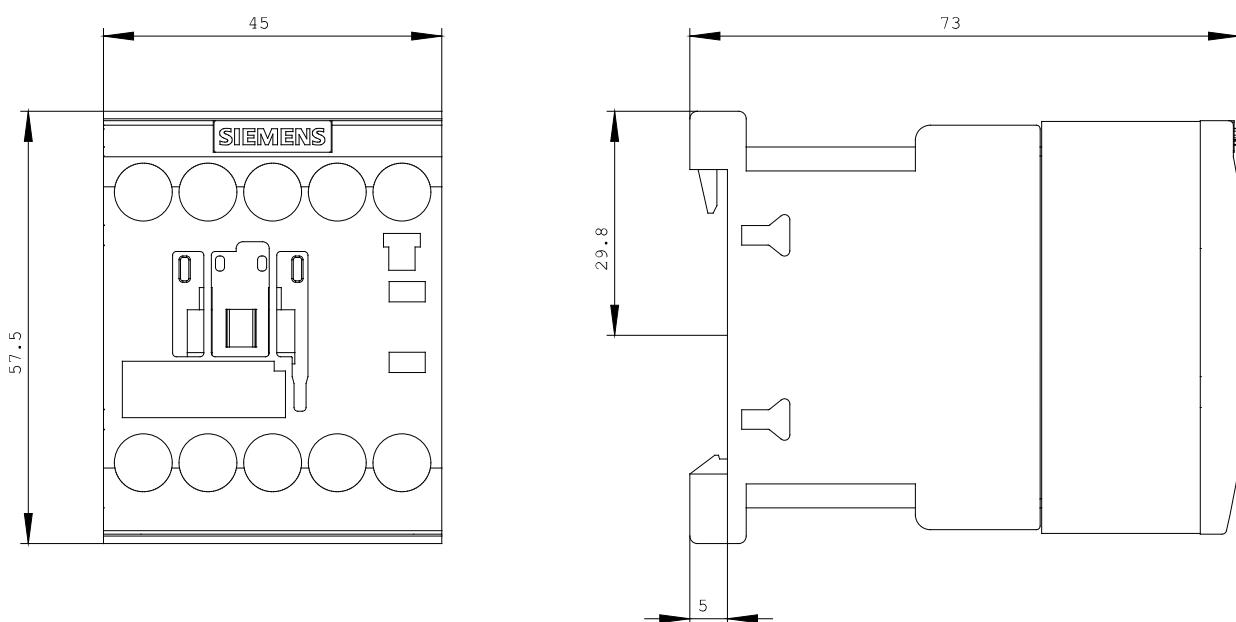
<http://www.siemens.com/cax>

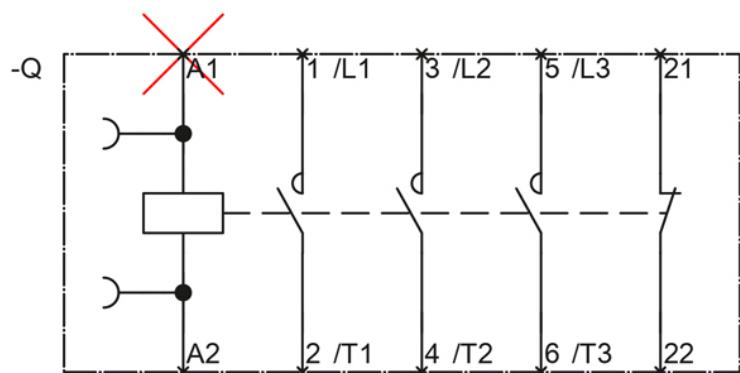
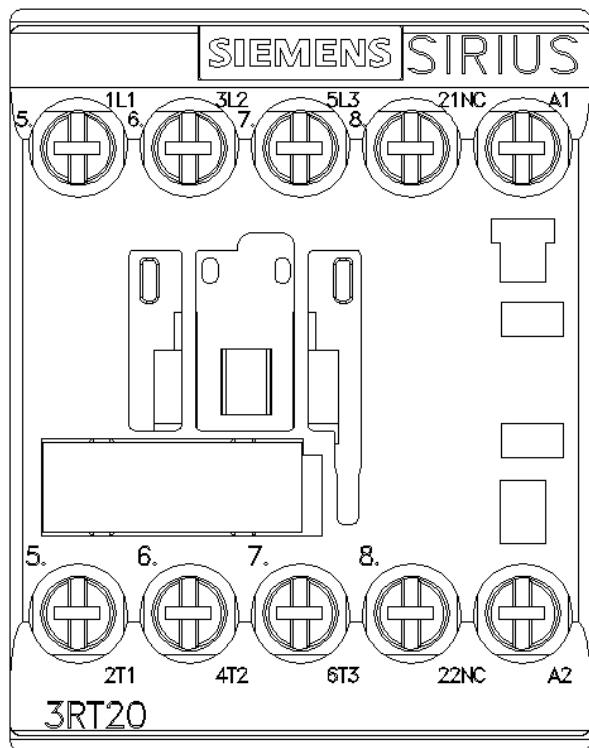
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2018-1AK62/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2018-1AK62](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2018-1AK62)





last change:

Jul 26, 2012