



COUPLING RELAY, AC-3, 3KW/400V, 1NC,  
DC 24V, 0.85...1.85\*US, 3-POLE,  
SZ S00 SPRING-LOADED TERMINAL

#### General technical data:

<b>product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S00
<b>Product extension / auxiliary switch</b>		No
<b>Product extension / function module for communication</b>		No
<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 DC		6,7g / 5 ms, 4,2g / 10 ms
• at sine pulse		
• at DC		10,5g / 5 ms, 6,6g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Insulation voltage / rated value</b>	V	690

<b>Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1</b>	V	400
<b>Mechanical operating cycles as operating time</b> • of the contactor / typical		30,000,000

<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 / at AC-1 / at 400 V</b> • at 40 °C ambient temperature / rated value • at 60 °C ambient temperature / rated value	A A	18 16
<b>Connectable conductor cross-section / in main circuit</b> • at AC-1 • at 40 °C / minimum permissible • at 60 °C / minimum permissible	m <sup>2</sup> m <sup>2</sup>	2.5 2.5
<b>Operational current</b> • at AC-2 / at 400 V / rated value • at AC-3 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at AC-4 / at 400 V / rated value	A A A A A	7 7 6 4.9 6.5
<b>Operational current</b> • with 1 current path / at DC-1 • at 24 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value • with 2 current paths in series / at DC-1 • at 24 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value • at 600 V / rated value • with 3 current paths in series / at DC-1 • at 24 V / rated value • at 110 V / rated value • at 220 V / rated value • at 440 V / rated value	A A A A A A A A A A A A A A A A A A A A	15 1.5 0.6 0.42 0.42 15 8.4 1.2 0.6 0.5 15 15 15 0.9

• at 600 V / rated value	A	0.7
<b>Operational current</b>		
• 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
• at 220 V / rated value	A	1.2
• at 440 V / rated value	A	0.14
• at 600 V / rated value	A	0.14
<b>Service power</b>		
• at AC-1		
• at 230 V / rated value	kW	6.3
• at 400 V / rated value	kW	11
• at 500 V / rated value	kW	13.8
• at 690 V / rated value	kW	19
• at AC-2 / at 400 V / rated value	kW	3
• at AC-3		
• at 230 V / rated value	kW	1.5
• at 400 V / rated value	kW	3
• at 690 V / rated value	kW	4
• at AC-4 / at 400 V / rated value	kW	3
<b>Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor</b>	W	0.4
<b>Off-load operating frequency</b>		
• at AC	1/h	10,000
• at DC	1/h	10,000
<b>Frequency of operation</b>		
• 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
<b>Control circuit:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Control supply voltage</b>		

• for DC / rated value	V	24
<b>operating range factor control supply voltage rated value / of the magnet coil</b>		
• for DC		0.85 ... 1.85
<b>Pull-in power / of the solenoid / for DC</b>	W	1.6
<b>Holding power / of the solenoid / for DC</b>	W	1.6
<b>Closing delay</b>		
• at DC	ms	30 ... 100
<b>Opening delay</b>		
• at DC	ms	7 ... 13
<b>Arcing time</b>	ms	10 ... 15
<b>Residual current / of electronics / for control with signal &lt;0&gt;</b>		
• at 230 V / with AC / maximum permissible	mA	3
• at 24 V / with DC / maximum permissible	mA	10

#### Auxiliary circuit:

<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>		
• [nicht versorgt: PMD_ABP551_001_000]		
•	A	2
• at 690 V	A	1

#### UL/CSA ratings:

<b>yielded mechanical performance (hp)</b>		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.25
• at 230 V / rated value	hp	0.75
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	1.5
• at 220/230 V / rated value	hp	2
• at 460/480 V / rated value	hp	3
• at 575/600 V / rated value	hp	5
<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
• at 480 V / rated value	A	4.8
• at 600 V / rated value	A	6.1
<b>Contact rating designation / for auxiliary contacts / according to UL</b>		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 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
- for auxiliary and control current circuit

spring-loaded terminals

spring-loaded terminals

**Type of the connectable conductor cross-section**

- for main contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for auxiliary contacts

2x (0.5 ... 4 mm<sup>2</sup>)2x (0.5 ... 2.5 mm<sup>2</sup>)2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (20 ... 12)

2x (0.5 ... 4 mm<sup>2</sup>)2x (0.5 ... 2.5 mm<sup>2</sup>)2x (0.5 ... 2.5 mm<sup>2</sup>)

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**

• according to IEC 61508	a	20
<b>Proportion of dangerous failures</b>		
• 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>		
• according to SN 31920	FIT	100
<b>Product function</b>		
• mirror contact to IEC 60947-4-1		Yes
• 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](#)



EG-Konf.

##### Test Certificates

[Special Test Certificate](#)

##### 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

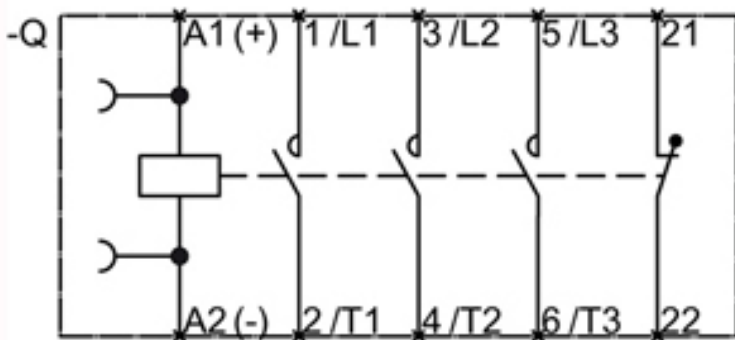
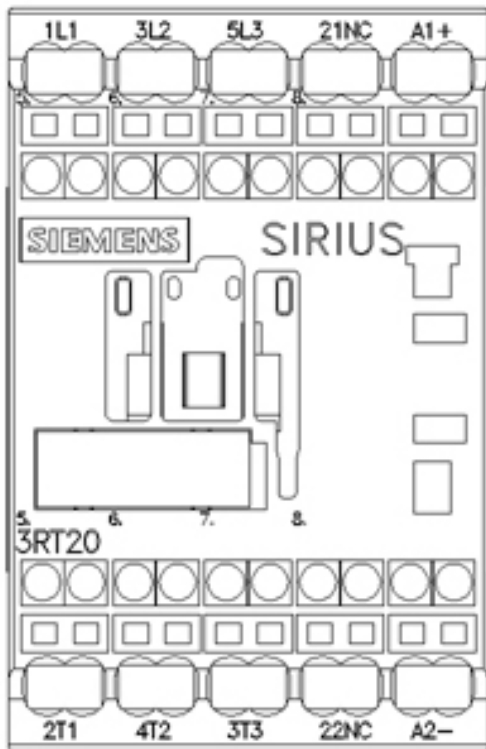
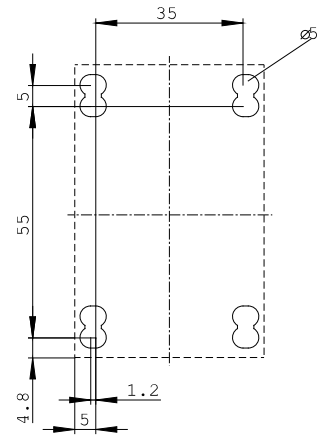
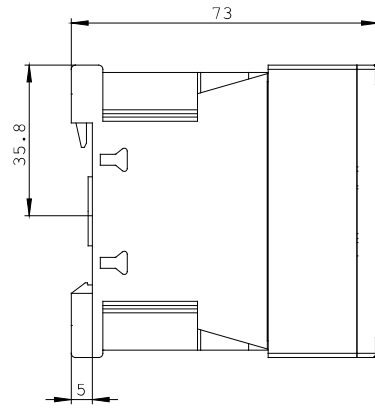
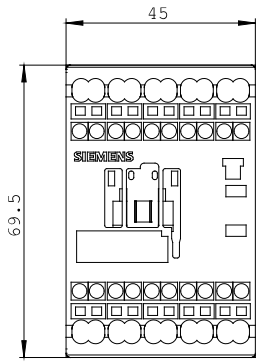
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT2015-2MB42-0KT0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2015-2MB42-0KT0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2015-2MB42-0KT0)



last change:

Feb 15, 2013