





COUPLING RELAY, AC-3, 3KW/400V, 1NC,  
DC 24V, 0.7...1.25\*US,  
W. INTEGR. SUPPRESSORDIODE, SZ S00,  
SPRING-LOADED TERMINAL

## General technical data:

product brand name		SIRIUS
Size of the contactor		S00
Product extension / auxiliary switch		No
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"> <li>during storage</li> <li>during operating</li> <li>note</li> </ul>	°C °C	-55 ... +80 -25 ... +60 Railway application: -40 ... 70 °C with 10 mm clearance. See catalog for other rated conditions
Shock resistance <ul style="list-style-type: none"> <li>at rectangular impulse</li> <li>at DC</li> <li>at sine pulse</li> <li>at DC</li> </ul>		6,7g / 5 ms, 4,2g / 10 ms  10,5g / 5 ms, 6,6g / 10 ms
Impulse voltage resistance / rated value	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	 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

• at 440 V / rated value	A	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>Design of the surge suppressor</b>		with suppressor diode

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		0.7 ... 1.25
Pull-in power / of the solenoid / for DC	W	2.8
Holding power / of the solenoid / for DC	W	2.8
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	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_ABP551_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	0.25
• 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
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

<b>Contact rating designation / for auxiliary contacts / according to UL</b>		A600 / Q600
<b>Short-circuit:</b>		
<b>Design of the fuse link</b>		
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch / required</li> <li>• for short-circuit protection of the main circuit</li> <li>• with type of assignment 1 / required</li> <li>• at type of coordination 2 / required</li> </ul>		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
<b>Installation/mounting/dimensions:</b>		
<b>mounting position</b>		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<b>Type of fixing/fixation / series installation</b>		Yes
<b>Width</b>	mm	45
<b>Height</b>	mm	70
<b>Depth</b>	mm	73
<b>Distance, to be maintained, to the ranks assembly / sideways</b>	mm	0
<b>Connections:</b>		
<b>Design of the electrical connection</b>		
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>		spring-loaded terminals  spring-loaded terminals
<b>Type of the connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for main contacts               <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded                   <ul style="list-style-type: none"> <li>• with conductor end processing</li> <li>• without conductor final cutting</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for main contacts</li> <li>• for auxiliary contacts               <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded                   <ul style="list-style-type: none"> <li>• with conductor end processing</li> <li>• without conductor final cutting</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>		2x (0.5 ... 4 mm²)  2x (0.5 ... 2.5 mm²) 2x (0.5 ... 2.5 mm²) 2x (20 ... 12)  2x (0.5 ... 4 mm²)  2x (0.5 ... 2.5 mm²) 2x (0.5 ... 2.5 mm²) 2x (20 ... 12)
<b>Sicherheitsrelevante Kenngrößen:</b>		
<b>B10 value / with high demand rate</b>		

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



CCC



CSA



GOST



UL

##### Functional Safety / Safety of Machinery

[Type Examination](#)



EG-Konf.

##### Test Certificates

[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

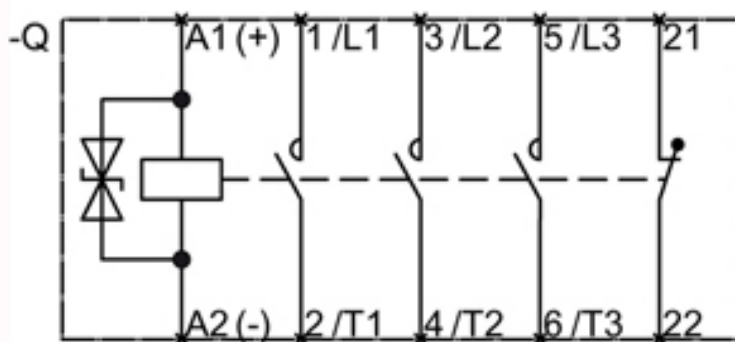
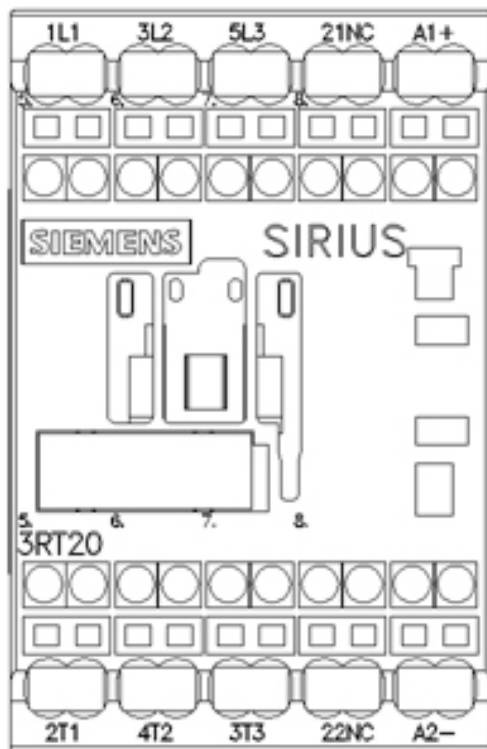
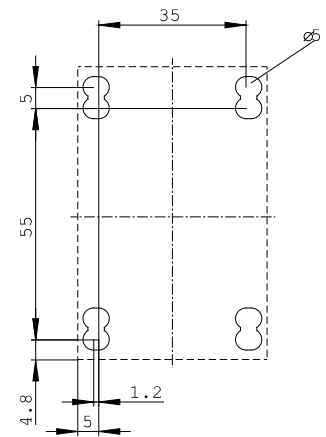
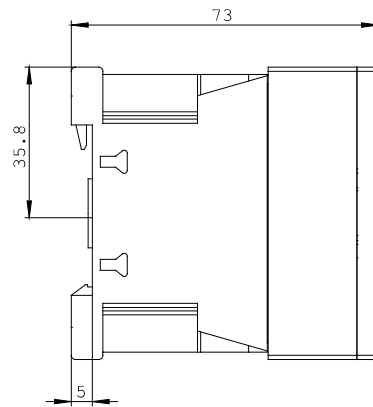
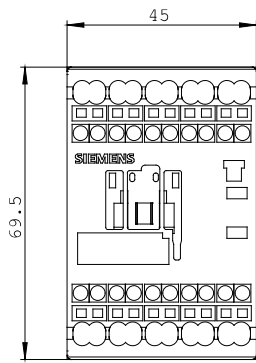
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT2015-2KB42/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2015-2KB42](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2015-2KB42)



last change:

Feb 15, 2013