



CONTACTOR, AC-3, 7.5KW/400V, 1NO+1NC,  
AC 220V 50/60HZ, 3-POLE,  
SZ S0 SCREW TERMINAL

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

General technical data:

<b>product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S0
<b>Product extension</b>		
• auxiliary switch		Yes
• function module for communication		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 AC		7,5g / 5 ms, 4,7g / 10 ms
• at sine pulse		
• at AC		11,8g / 5 ms, 7,4g / 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		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
<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>Connectable conductor cross-section / in main circuit</b>		
• at AC-1		
• at 40 °C / minimum permissible	m <sup>2</sup>	10
• at 60 °C / minimum permissible	m <sup>2</sup>	10
<b>Operating current</b>		
• at AC-1 / up to 690 V		
• at 40 °C ambient temperature / rated value	A	40
• at 60 °C ambient temperature / rated value	A	35
• at AC-2 / at 400 V / rated value	A	17
• at AC-3		
• at 400 V / rated value	A	17
• at 500 V / rated value	A	17
• at 690 V / rated value	A	13
• at AC-4 / at 400 V / rated value	A	15.5
<b>Operating current</b>		
• with 1 current path / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	4.5
• at 220 V / rated value	A	1
• at 440 V / rated value	A	0.4
• at 600 V / rated value	A	0.25
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	35
• at 220 V / rated value	A	5
• at 440 V / rated value	A	1
• at 600 V / rated value	A	0.8
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	35
• at 110 V / rated value	A	35

<ul style="list-style-type: none"> <li>• at 220 V / rated value</li> <li>• at 440 V / rated value</li> <li>• at 600 V / rated value</li> </ul>	A	35
	A	2.9
	A	1.4
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• with 1 current path / at DC-3 / at DC-5 <ul style="list-style-type: none"> <li>• at 24 V / rated value</li> <li>• at 110 V / rated value</li> <li>• at 220 V / rated value</li> <li>• at 440 V / rated value</li> <li>• at 600 V / rated value</li> </ul> </li> <li>• with 2 current paths in series / at DC-3 / at DC-5 <ul style="list-style-type: none"> <li>• at 24 V / rated value</li> <li>• at 110 V / rated value</li> <li>• at 220 V / rated value</li> <li>• at 440 V / rated value</li> <li>• at 600 V / rated value</li> </ul> </li> <li>• with 3 current paths in series / at DC-3 / at DC-5 <ul style="list-style-type: none"> <li>• at 24 V / rated value</li> <li>• at 110 V / rated value</li> <li>• at 220 V / rated value</li> <li>• at 440 V / rated value</li> <li>• at 600 V / rated value</li> </ul> </li> </ul>	A	20
	A	2.5
	A	1
	A	0.09
	A	0.06
	A	35
	A	15
	A	3
	A	0.27
	A	0.16
	A	35
	A	35
	A	10
	A	0.6
	A	0.6
<b>Service power</b>		
<ul style="list-style-type: none"> <li>• at AC-1 / at 230 V / rated value</li> <li>• at AC-1 / at 400 V / rated value</li> <li>• at AC-1 / at 690 V / rated value</li> <li>• at AC-2 <ul style="list-style-type: none"> <li>• at 400 V / rated value</li> </ul> </li> <li>• at AC-3 <ul style="list-style-type: none"> <li>• at 230 V / rated value</li> <li>• at 400 V / rated value</li> <li>• at 690 V / rated value</li> </ul> </li> <li>• at AC-4 <ul style="list-style-type: none"> <li>• at 400 V / rated value</li> </ul> </li> </ul>	kW	13.3
	kW	23
	kW	40
	kW	7.5
	kW	4
	kW	7.5
	kW	11
	kW	7.5
<b>Thermal short-time current / restricted to 10 s</b>	A	150
<b>Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor</b>	W	0.9
<b>Off-load operating frequency</b>		
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	1/h	5,000
<b>Frequency of operation</b>		

- at AC-1 / according to IEC 60947-6-2
- at AC-2 / according to IEC 60947-6-2
- at AC-3 / according to IEC 60947-6-2
- at AC-4 / according to IEC 60947-6-2

1/h	1,000
1/h	1,000
1/h	1,000
1/h	300

#### Control circuit/ Control:

##### Type of voltage / of the controlled supply voltage

AC

##### Control supply voltage

- at 50 Hz / at AC / rated value
- at 60 Hz / at AC / rated value

V	220
V	220

##### operating range factor control supply voltage rated value / of the magnet coil

- at 50 Hz / for AC
- at 60 Hz / for AC

0.8 ... 1.1  
0.85 ... 1.1

##### Apparent pull-in power / of the solenoid / for AC

V-A 68

##### Apparent holding power / of the solenoid / for AC

V-A 7.9

##### Inductive power factor

- with the pull-in power of the coil
- with the pull-in power of the coil

0.82  
0.25

##### Closing delay

- at AC

ms 9 ... 38

##### Opening delay

- at AC

ms 4 ... 16

##### Arcing time

ms 10 ... 10

##### Residual current / of electronics / for control with signal <0>

- at 230 V / with AC / maximum permissible
- at 24 V / with DC / maximum permissible

mA 6  
mA 16

#### 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

1

##### Operating current

- at AC-12 / maximum
- at AC-15
  - at 230 V / rated value
  - at 400 V / rated value
  - at 500 V / rated value
  - at 690 V / rated value

A	10
A	10
A	3
A	2
A	1

胜特力材料 886-3-5753170  
 胜特力电子(上海) 86-21-34970699  
 胜特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

<b>Operating current / at DC-12</b>		
• at 24 V / rated value	A	10
• at 48 V / rated value	A	6
• at 60 V / rated value	A	6
• at 110 V / rated value	A	3
• at 125 V / rated value	A	2
• at 220 V / rated value	A	1
• at 440 V / rated value	A	0.3
• at 600 V / rated value	A	0.15

<b>Operating current / at DC-13</b>		
• at 24 V / rated value	A	10
• at 48 V / rated value	A	2
• at 60 V / rated value	A	2
• at 110 V / rated value	A	1
• at 125 V / rated value	A	0.9
• at 220 V / rated value	A	0.3
• at 440 V / rated value	A	0.14
• at 600 V / rated value	A	0.1

**UL/CSA ratings:**

<b>yielded mechanical performance (hp)</b>		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	1
• at 230 V / rated value	hp	3
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	3
• at 220/230 V / rated value	hp	5
• at 460/480 V / rated value	hp	10
• at 575/600 V / rated value	hp	15

<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
• at 480 V / rated value	A	14
• at 600 V / rated value	A	17

<b>Contact rating designation / for auxiliary contacts / according to UL</b>	A600 / Q600
--	-------------

**Short-circuit:**

<b>Design of the fuse link</b>	
• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
• for short-circuit protection of the main circuit	
• with type of assignment 1 / required	gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A

- at type of coordination 2 / required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:  
25A

#### Installation/ mounting/ dimensions:

<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	85
<b>Depth</b>	mm	97
<b>Distance, to be maintained, to the ranks assembly / sideways</b>	mm	0

#### Connections/ terminals:

<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
• for main contacts / finely stranded / with conductor end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contacts / 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)

#### Sicherheitsrelevante Kenngrößen:

<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
• comment		with 3RH29
• positively driven operation to IEC 60947-5-1		No

#### Certificates/ approvals:

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

General Product Approval

EMC



Functional Safety /  
Safety of  
Machinery

Declaration of  
Conformity

Test Certificates

[Type Examination](#)



EG-Konf.

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

Shipping Approval



Shipping Approval

other



[Confirmation](#)



[Environmental  
Confirmations](#)

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

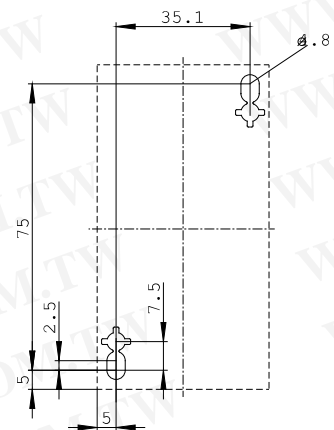
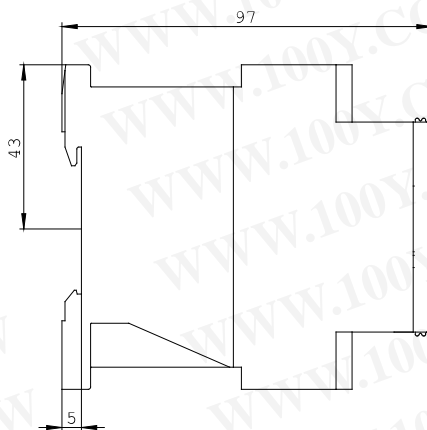
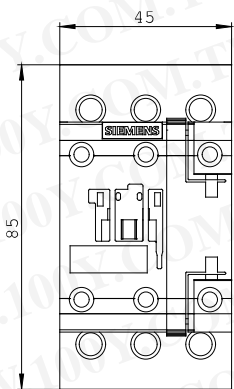
<http://www.siemens.com/cax>

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

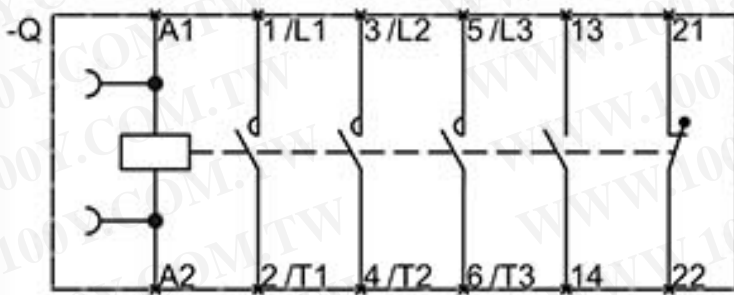
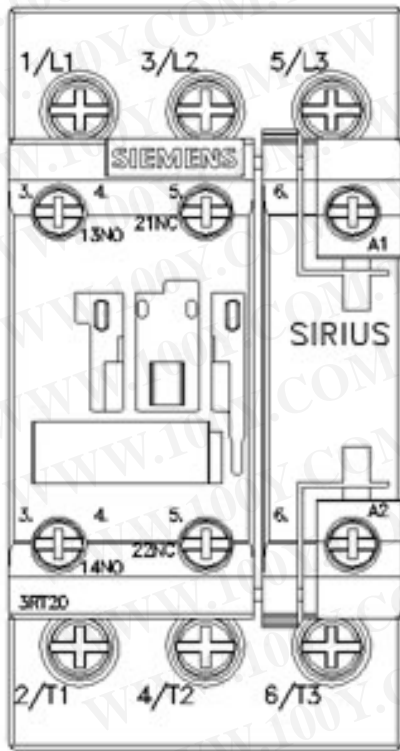
<http://support.automation.siemens.com/WW/view/en/3RT2025-1AN20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2025-1AN20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2025-1AN20)



勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



last change:

Nov 15, 2013