



Contactor, AC-1, 40 A/400 V/40 °C, S0, 4-pole, 230 V AC/50 Hz, 1 NO+1 NC, screw terminal

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT23

### General technical data

size of contactor	S0
product extension	
• function module for communication	No
• auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	9.6 W
• at AC in hot operating state per pole	2.4 W
insulation voltage	
• of main circuit with degree of pollution 3 rated value	690 V
• of the auxiliary and control circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
• of main circuit rated value	6 kV
• of auxiliary circuit rated value	6 kV
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (operating cycles)	
• of contactor typical	10 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009

### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

### Main circuit

number of poles for main current circuit	4
number of NO contacts for main contacts	4
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	40 A

<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> <li>• at AC-4 at 400 V rated value</li> </ul>	40 A
minimum cross-section in main circuit at maximum AC-1 rated value	35 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> <li>• at AC-4 at 400 V rated value</li> </ul>	15.5 A
<b>short-time withstand current in cold operating state up to 40 °C</b>	15.5 A
<ul style="list-style-type: none"> <li>• limited to 1 s switching at zero current maximum</li> <li>• limited to 5 s switching at zero current maximum</li> <li>• limited to 10 s switching at zero current maximum</li> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul>	10 mm <sup>2</sup>
<b>no-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	7.5 kW
operating frequency at AC-1 maximum	7.5 kW

Use minimum cross-section acc. to AC-1 rated value  
Use minimum cross-section acc. to AC-1 rated value  
Use minimum cross-section acc. to AC-1 rated value  
Use minimum cross-section acc. to AC-1 rated value  
Use minimum cross-section acc. to AC-1 rated value

#### Control circuit/ Control

<b>type of voltage</b>	AC
<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	230 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.8 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	77 VA
<b>inductive power factor with closing power of the coil</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.82
<b>apparent holding power of magnet coil at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	9.8 VA
<b>inductive power factor with the holding power of the coil</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>	0.25
<b>closing delay</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	8 ... 40 ms
<b>opening delay</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	4 ... 16 ms
<b>arcing time</b>	10 ... 10 ms
<b>control version of the switch operating mechanism</b>	Standard A1 - A2

#### Auxiliary circuit

<b>number of NC contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>• attachable</li> </ul>	2
<ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>	1
<b>number of NO contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>• attachable</li> </ul>	2
<ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>	1
operational current at AC-12 maximum	10 A
<b>operational current at AC-15</b>	
<ul style="list-style-type: none"> <li>• at 230 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	10 A
<b>operational current at DC-12</b>	3 A
<ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> </ul>	2 A
	1 A
	10 A
	6 A
	6 A
	3 A
	2 A

- at 220 V rated value
  - at 600 V rated value
- operational current at DC-13**

- at 24 V rated value
- at 48 V rated value
- at 110 V rated value
- at 125 V rated value
- at 220 V rated value
- at 600 V rated value

design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required

**contact reliability of auxiliary contacts**

1 A  
0.15 A

10 A  
2 A  
1 A  
0.9 A  
0.3 A  
0.1 A

gG: 10 A (230 V, 400 A)

1 faulty switching per 100 million (17 V, 1 mA)

**UL/CSA ratings**

**contact rating of auxiliary contacts according to UL** A600 / Q600

**Short-circuit protection**

**product function short circuit protection design of the fuse link**

- for short-circuit protection of the main circuit
  - with type of coordination 1 required
  - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

No

gG: 63 A (690 V, 100 kA)  
gG: 20 A (690 V, 100 kA)  
gG: 10 A (690 V, 1 kA)

**Installation/ mounting/ dimensions**

**mounting position**

**fastening method**

- side-by-side mounting

**height**

**width**

**depth**

**required spacing**

- with side-by-side mounting
  - forwards
  - upwards
  - downwards
  - at the side
- for grounded parts
  - forwards
  - upwards
  - at the side
  - downwards
- for live parts
  - forwards
  - upwards
  - downwards
  - at the side

+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface

screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715

Yes

85 mm  
60 mm  
97 mm

10 mm  
10 mm  
10 mm  
0 mm

10 mm  
10 mm  
6 mm  
10 mm

10 mm  
10 mm  
10 mm  
6 mm

**Connections/ Terminals**

**type of electrical connection**

- for main current circuit
- for auxiliary and control circuit
- at contactor for auxiliary contacts
- of magnet coil

**type of connectable conductor cross-sections**

- for main contacts
  - solid
  - solid or stranded
  - finely stranded with core end processing
- at AWG cables for main contacts

**connectable conductor cross-section for main contacts**

- solid
- solid or stranded
- stranded

screw-type terminals  
screw-type terminals  
Screw-type terminals  
Screw-type terminals

2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)  
2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)  
2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²  
2x (16 ... 12), 2x (14 ... 8)

1 ... 10 mm²  
1 ... 10 mm²  
1 ... 10 mm²

- finely stranded with core end processing

**connectable conductor cross-section for auxiliary contacts**

- solid or stranded
- finely stranded with core end processing

**type of connectable conductor cross-sections**

- for auxiliary contacts
  - solid
  - solid or stranded
  - finely stranded with core end processing

- at AWG cables for auxiliary contacts

**AWG number as coded connectable conductor cross section**

- for main contacts
- for auxiliary contacts

1 ... 10 mm<sup>2</sup>

0.5 ... 2.5 mm<sup>2</sup>

0.5 ... 2.5 mm<sup>2</sup>

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14)

16 ... 8

20 ... 14

#### Safety related data

**product function**

- mirror contact according to IEC 60947-4-1

T1 value for proof test interval or service life according to IEC 61508

**protection class IP on the front according to IEC 60529**

**touch protection on the front according to IEC 60529**

Yes

20 a

IP20

finger-safe, for vertical contact from the front

#### Communication/ Protocol

**product function bus communication**

No

#### Certificates/ approvals

General Product Approval

EMC



[Confirmation](#)



Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

[Type Examination Certificate](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping

other



[Confirmation](#)

other

Railway



[Vibration and Shock](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2326-1AP00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-1AP00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1AP00>

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

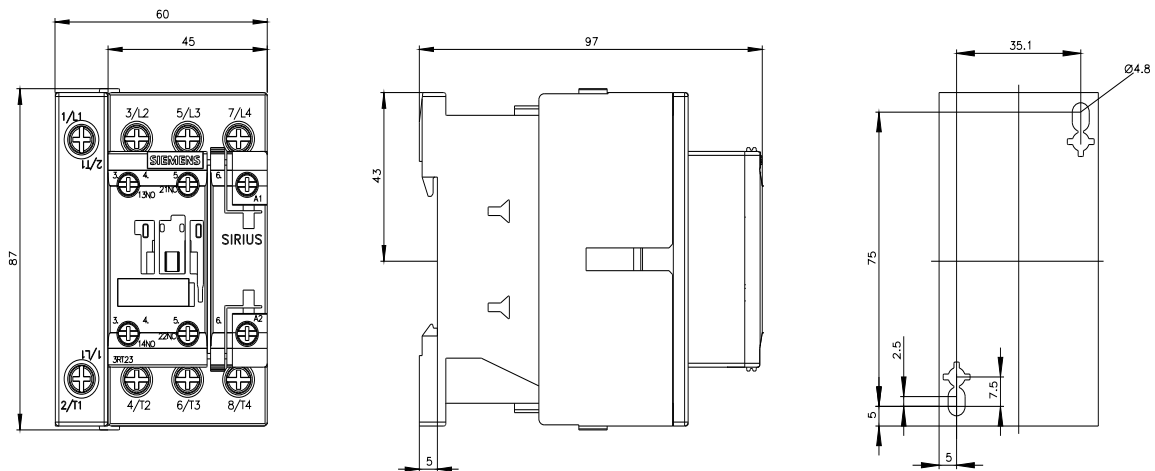
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2326-1AP00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-1AP00&lang=en)

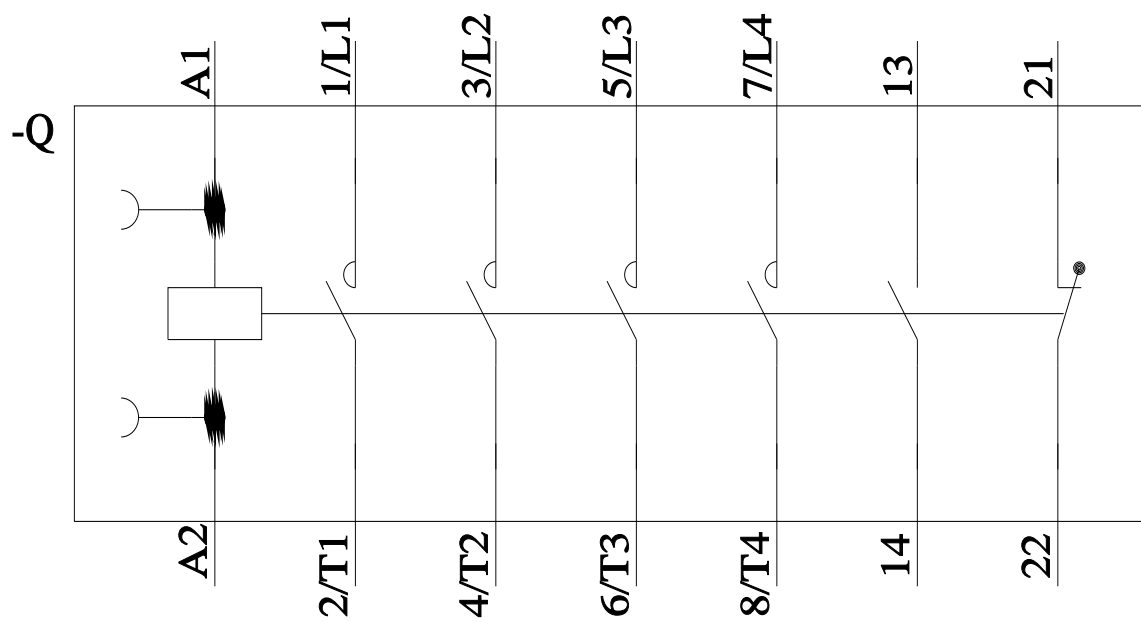
Characteristic: Tripping characteristics, I<sub>pt</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1AP00/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-1AP00&objecttype=14&gridview=view1>





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