

Contactor, AC-1, 40 A/400 V/40 °C, S0, 4-pole, 220 V DC, 1 NO+1 NC, Spring-type terminal



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

### General technical data

<b>Size of contactor</b>	S0
<ul style="list-style-type: none"> <li>• Product extension function module for communication</li> <li>• product extension auxiliary switch</li> </ul>	No Yes
<b>Surge voltage resistance</b>	
<ul style="list-style-type: none"> <li>• of main circuit rated value</li> <li>• of auxiliary circuit rated value</li> </ul>	6 kV 6 kV
<ul style="list-style-type: none"> <li>• protection class IP on the front</li> <li>• protection class IP of the terminal</li> </ul>	IP20 IP20
<b>Shock resistance at rectangular impulse</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	10g / 5 ms, 7,5g / 10 ms
<b>Shock resistance with sine pulse</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	15g / 5 ms, 10g / 10 ms
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	10 000 000

<ul style="list-style-type: none"> <li>of the contactor with added auxiliary switch block typical</li> </ul>	100 000 000
<b>reference code acc. to DIN EN 81346-2</b>	Q
<b>Ambient conditions</b>	
<ul style="list-style-type: none"> <li>installation altitude at height above sea level maximum</li> </ul>	2 000 m
<ul style="list-style-type: none"> <li>ambient temperature during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>ambient temperature during storage</li> </ul>	-55 ... +80 °C
<b>relative humidity</b>	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	95 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	4
<b>Number of NO contacts for main contacts</b>	4
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>operating voltage at AC at 50 Hz rated value</li> </ul> </li> </ul>	690 V
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>operating voltage at AC at 60 Hz rated value</li> </ul> </li> </ul>	690 V
<ul style="list-style-type: none"> <li>Operating current at AC-1 at 400 V <ul style="list-style-type: none"> <li>at ambient temperature 40 °C rated value</li> </ul> </li> </ul>	40 A
<ul style="list-style-type: none"> <li>Operating current at AC-1 <ul style="list-style-type: none"> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul> </li> </ul>	40 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>operating current at AC-3 at 400 V rated value</li> </ul> </li> </ul>	15.5 A
<ul style="list-style-type: none"> <li>Operating current at AC-4 at 400 V rated value</li> </ul>	15.5 A
<b>Minimum cross-section in main circuit</b>	
<ul style="list-style-type: none"> <li>at maximum AC-1 rated value</li> </ul>	10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>operating power at AC-3 at 400 V rated value</li> </ul> </li> </ul>	7.5 kW
<ul style="list-style-type: none"> <li>Operating power at AC-4 at 400 V rated value</li> </ul>	7.5 kW
<b>Short-time withstand current in cold operating state up to 40 °C</b>	
<ul style="list-style-type: none"> <li>limited to 1 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> <li>limited to 5 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<ul style="list-style-type: none"> <li>limited to 10 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value

<ul style="list-style-type: none"> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
<b>No-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	1 500 1/h
<ul style="list-style-type: none"> <li>• Operating frequency at AC-1 maximum</li> </ul>	1 000 1/h

Control circuit/ Control	
<b>type of voltage</b>	DC
<b>Type of voltage of the control supply voltage</b>	DC
<ul style="list-style-type: none"> <li>• control supply voltage at DC rated value</li> </ul>	220 V
<b>Operating range factor control supply voltage rated value of magnet coil at DC</b>	
<ul style="list-style-type: none"> <li>• initial value</li> <li>• Full-scale value</li> </ul>	0.8 1.1
<b>Closing power of magnet coil at DC</b>	5.9 W
<b>Holding power of magnet coil at DC</b>	5.9 W
<b>Closing delay</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	50 ... 170 ms
<b>Opening delay</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	15 ... 17.5 ms
<b>Arcing time</b>	10 ... 10 ms
<b>Control version of the switch operating mechanism</b>	Standard A1 - A2

Auxiliary circuit	
<ul style="list-style-type: none"> <li>• <b>number of NC contacts for auxiliary contacts</b></li> </ul>	1
<ul style="list-style-type: none"> <li>• Number of NC contacts for auxiliary contacts attachable</li> </ul>	2
<ul style="list-style-type: none"> <li>• Number of NC contacts for auxiliary contacts instantaneous contact</li> </ul>	1
<ul style="list-style-type: none"> <li>• <b>number of NO contacts for auxiliary contacts</b></li> </ul>	1
<ul style="list-style-type: none"> <li>• Number of NO contacts for auxiliary contacts attachable</li> </ul>	2
<ul style="list-style-type: none"> <li>• Number of NO contacts for auxiliary contacts instantaneous contact</li> </ul>	1
<ul style="list-style-type: none"> <li>• Operating current at AC-12 maximum</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• Operating current at AC-15 at 230 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• Operating current at AC-15 at 400 V rated value</li> </ul>	3 A
<ul style="list-style-type: none"> <li>• Operating current at AC-15 at 500 V rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>• Operating current at AC-15 at 690 V rated value</li> </ul>	1 A

<ul style="list-style-type: none"> <li>• Operating current at DC-12 at 24 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• operating current at DC-12 at 48 V rated value</li> </ul>	6 A
<ul style="list-style-type: none"> <li>• Operating current at DC-12 at 60 V rated value</li> </ul>	6 A
<ul style="list-style-type: none"> <li>• operating current at DC-12 at 110 V rated value</li> </ul>	3 A
<ul style="list-style-type: none"> <li>• Operating current at DC-12 at 125 V rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>• Operating current at DC-12 at 220 V rated value</li> </ul>	1 A
<ul style="list-style-type: none"> <li>• Operating current at DC-12 at 600 V rated value</li> </ul>	0.15 A
<ul style="list-style-type: none"> <li>• Operating current at DC-13 at 24 V rated value</li> </ul>	10 A
<ul style="list-style-type: none"> <li>• operating current at DC-13 at 48 V rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>• operating current at DC-13 at 110 V rated value</li> </ul>	1 A
<ul style="list-style-type: none"> <li>• Operating current at DC-13 at 125 V rated value</li> </ul>	0.9 A
<ul style="list-style-type: none"> <li>• Operating current at DC-13 at 220 V rated value</li> </ul>	0.3 A
<ul style="list-style-type: none"> <li>• Operating current at DC-13 at 600 V rated value</li> </ul>	0.1 A
<b>Design of the miniature circuit breaker</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (230 V, 400 A)
<b>contact reliability of auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

#### UL/CSA ratings

<b>contact rating of auxiliary contacts according to UL</b>	A600 / Q600
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#### Short-circuit protection

<b>product function short circuit protection</b>	No
<ul style="list-style-type: none"> <li>• Design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required</li> </ul>	gG: 63 A (690 V, 100 kA)
<ul style="list-style-type: none"> <li>• Design of the fuse link for short-circuit protection of the main circuit with type of assignment 2 required</li> </ul>	gG: 20 A (690 V, 100 kA)
<ul style="list-style-type: none"> <li>• design of the fuse link for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (690 V, 1 kA)

#### Installation/ mounting/ dimensions

<ul style="list-style-type: none"> <li>• <b>mounting position</b></li> </ul>	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
<ul style="list-style-type: none"> <li>• <b>mounting type</b></li> </ul>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<ul style="list-style-type: none"> <li>• mounting type side-by-side mounting</li> </ul>	Yes
<b>height</b>	102 mm

<b>width</b>	60 mm
<b>depth</b>	107 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— upwards 10 mm</li> <li>— at the side 6 mm</li> <li>— downwards 10 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 10 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 6 mm</li> </ul> </li> </ul>	

### Connections/ Terminals

<ul style="list-style-type: none"> <li>• type of electrical connection for main current circuit</li> </ul>	spring-loaded terminals
<ul style="list-style-type: none"> <li>• type of electrical connection for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for main contacts solid</li> </ul>	2x (1 ... 10 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for main contacts single or multi-stranded</li> </ul>	2x (1 ... 10 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for main contacts finely stranded with core end processing</li> </ul>	2x (1 ... 6 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for main contacts finely stranded without core end processing</li> </ul>	2x (1 ... 6 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections at AWG conductors for main contacts</li> </ul>	2x (18 ... 8)
<b>connectable conductor cross-section for main contacts</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	1 ... 10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• single or multi-stranded</li> </ul>	1 ... 10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	1 ... 10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1 ... 6 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	1 ... 6 mm <sup>2</sup>

<b>connectable conductor cross-section for auxiliary contacts</b>	
<ul style="list-style-type: none"> <li>• single or multi-stranded</li> </ul>	0.5 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	0.5 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	0.5 ... 2.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for auxiliary contacts solid</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for auxiliary contacts single or multi-stranded</li> </ul>	2x (0,5 ... 2,5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for auxiliary contacts finely stranded with core end processing</li> </ul>	2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections for auxiliary contacts finely stranded without core end processing</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• type of connectable conductor cross-sections at AWG conductors for auxiliary contacts</li> </ul>	2x (20 ... 14)
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• for main contacts</li> </ul>	18 ... 8
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	20 ... 14

#### Safety related data

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Mirror contact acc. to IEC 60947-4-1</li> </ul>	Yes
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	20 y
<b>protection against electrical shock</b>	finger-safe

#### Communication/ Protocol

<b>product function bus communication</b>	No
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#### Certificates/ approvals

General Product Approval	EMC	Functional Safety/Safety of Machinery
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[Type Examination Certificate](#)

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Confirmation](#)

other
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### 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=3RT2326-2BM40>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-2BM40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2BM40>

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

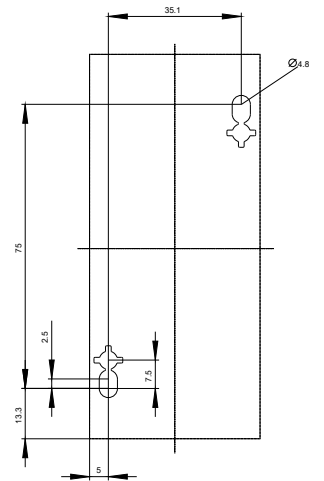
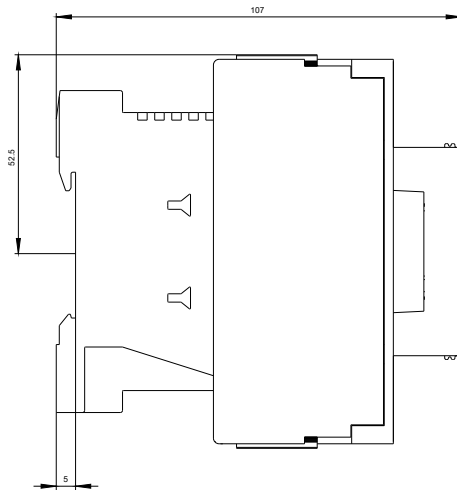
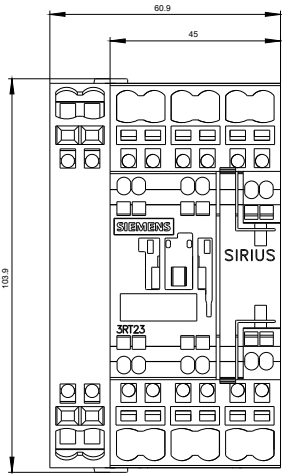
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2326-2BM40&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-2BM40&lang=en)

**Characteristic: Tripping characteristics, I<sup>t</sup>, Let-through current**

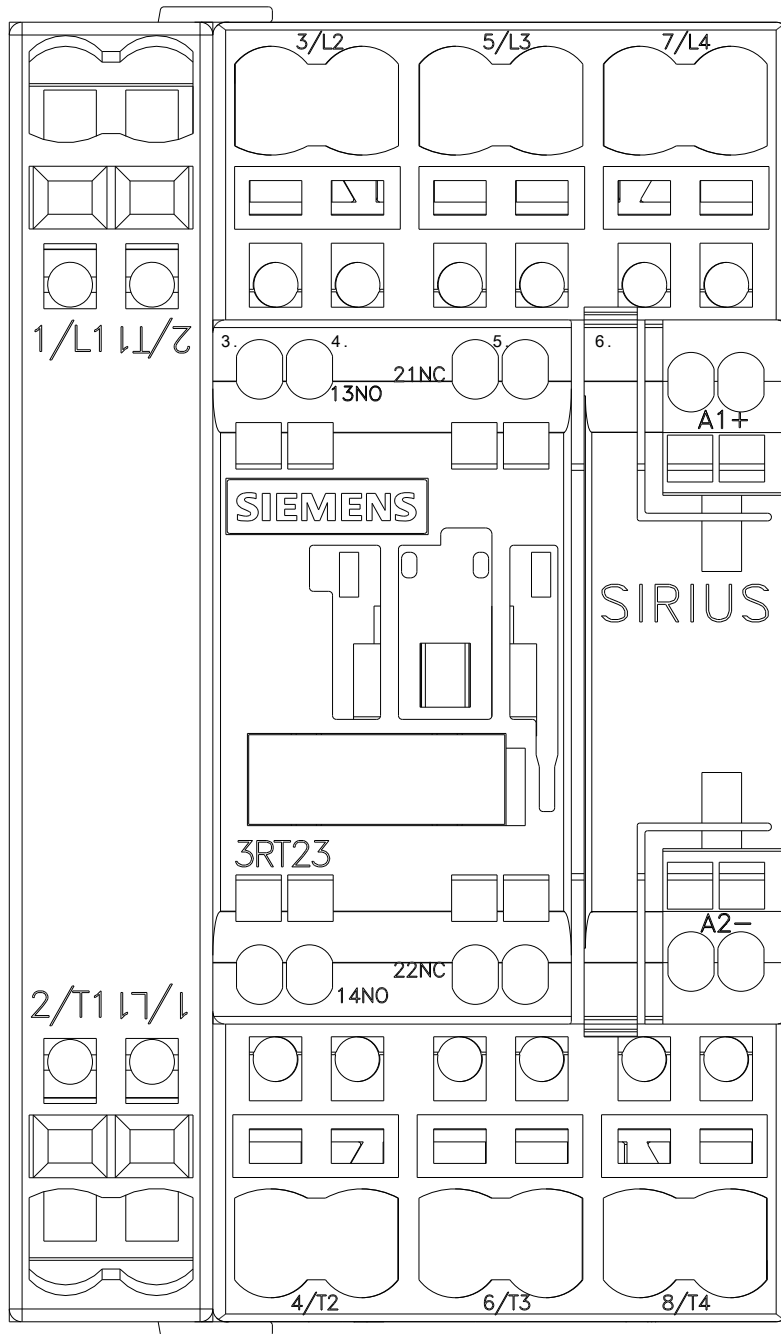
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2BM40/char>

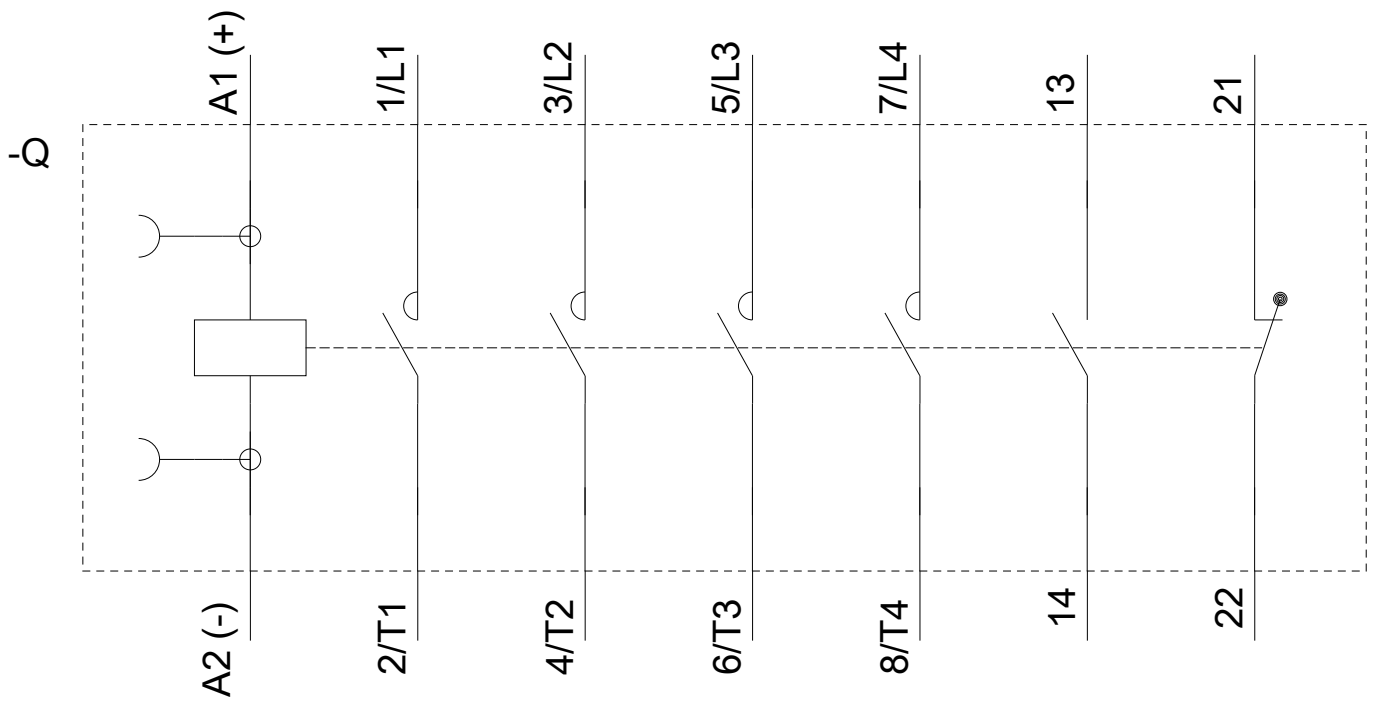
**Further characteristics (e.g. electrical endurance, switching frequency)**

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-2BM40&objecttype=14&gridview=view1>









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