



contactor AC-1, 40 A, 400 V / 40 °C, 4-pole, 24 V AC, 50/60 Hz, auxiliary contacts:  
1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT23
<b>General technical data</b>	
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
type of calculation of power loss depending on pole	quadratic
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
Weight	0.54 kg
<b>Ambient conditions</b>	
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 %
<b>Environmental footprint</b>	
Environmental Product Declaration (EPD)	Yes
global warming potential [CO <sub>2</sub> eq] total	166 kg
global warming potential [CO <sub>2</sub> eq] during manufacturing	2.26 kg

global warming potential [CO2 eq] during operation	164 kg
global warming potential [CO2 eq] after end of life	-0.152 kg
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	4
<b>number of NO contacts for main contacts</b>	4
<b>type of voltage for main current circuit</b>	AC
<b>operational current</b>	
<ul style="list-style-type: none"> <li>• at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	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> </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>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	15.5 A
<ul style="list-style-type: none"> <li>• at AC-4 at 400 V rated value</li> </ul>	15.5 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm <sup>2</sup>
<b>operational current</b>	
<ul style="list-style-type: none"> <li>• <b>at 1 current path at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	20 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	4.5 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	1 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	0.4 A
<ul style="list-style-type: none"> <li>• <b>with 2 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	1 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	1 A
<ul style="list-style-type: none"> <li>• <b>with 3 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	2.9 A
<ul style="list-style-type: none"> <li>• <b>at 1 current path at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	20 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	5 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	2.5 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	1 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	0.09 A
<ul style="list-style-type: none"> <li>• <b>with 2 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	15 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	3 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	0.27 A
<ul style="list-style-type: none"> <li>• <b>with 3 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>	10 A
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>	0.6 A
<b>operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 at 400 V rated value</li> </ul>	7.5 kW
<ul style="list-style-type: none"> <li>• at AC-4 at 400 V rated value</li> </ul>	7.5 kW
<b>no-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	5 000 1/h
operating frequency at AC-1 maximum	1 000 1/h

<b>Control circuit/ Control</b>	
<b>type of voltage</b>	AC
<b>type of voltage of the control supply voltage</b>	AC
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
<b>operating range factor control supply voltage rated value of magnet coil at AC</b>	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
<b>apparent pick-up power of magnet coil at AC</b>	
• at 50 Hz	81 VA
• at 60 Hz	79 VA
<b>inductive power factor with closing power of the coil</b>	
• at 50 Hz	0.72
• at 60 Hz	0.74
<b>apparent holding power of magnet coil at AC</b>	
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
<b>inductive power factor with the holding power of the coil</b>	
• at 50 Hz	0.25
• at 60 Hz	0.28
<b>closing delay</b>	
• at AC	8 ... 40 ms
<b>opening delay</b>	
• at AC	4 ... 16 ms
<b>arcing time</b>	10 ... 10 ms
<b>control version of the switch operating mechanism</b>	Standard A1 - A2
<b>Auxiliary circuit</b>	
<b>number of NC contacts for auxiliary contacts</b>	1
• attachable	2
• instantaneous contact	1
<b>number of NO contacts for auxiliary contacts</b>	1
• attachable	2
• instantaneous contact	1
<b>operational current at AC-12 maximum</b>	10 A
<b>operational current at AC-15</b>	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
<b>operational current at DC-12</b>	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
<b>operational current at DC-13</b>	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
<b>contact reliability of auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)
<b>UL/CSA ratings</b>	
<b>contact rating of auxiliary contacts according to UL</b>	A600 / Q600
<b>Short-circuit protection</b>	
<b>design of the miniature circuit breaker for short-circuit protection</b>	C characteristic: 10 A; 0.4 kA

of the auxiliary circuit up to 230 V	
<b>design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of coordination 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 63 A (690 V, 100 kA) gG: 20 A (690 V, 100 kA) gG: 10 A (690 V, 1 kA)
<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
fastening method side-by-side mounting	Yes
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<b>height</b>	102 mm
<b>width</b>	60 mm
<b>depth</b>	97 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</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	10 mm 10 mm 10 mm 0 mm  10 mm 10 mm 6 mm 10 mm  10 mm 10 mm 10 mm 6 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>	spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals
<b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• for AWG cables for main contacts</li> </ul>	2x (1 ... 10 mm²) 2x (1 ... 10 mm²) 2x (1 ... 6 mm²) 2x (1 ... 6 mm²) 2x (18 ... 8)
<b>connectable conductor cross-section for main contacts</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• solid or stranded</li> <li>• stranded</li> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> </ul>	1 ... 10 mm² 1 ... 10 mm² 1 ... 10 mm² 1 ... 6 mm² 1 ... 6 mm²
<b>connectable conductor cross-section for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> </ul>	0.5 ... 2.5 mm² 0.5 ... 1.5 mm² 0.5 ... 2.5 mm²
<b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul>	2x (0.5 ... 2.5 mm²) 2x (0.5 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²) 2x (0.5 ... 2.5 mm²) 2x (20 ... 14)
<b>AWG number as coded connectable conductor cross</b>	18 ... 8

section for main contacts	
AWG number as coded connectable conductor cross section for auxiliary contacts	20 ... 14
<b>Safety related data</b>	
product function	
• mirror contact according to IEC 60947-4-1	Yes
• positively driven operation according to IEC 60947-5-1	No
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
<b>Communication/ Protocol</b>	
product function bus communication	No
<b>Approvals Certificates</b>	
General Product Approval	EMV

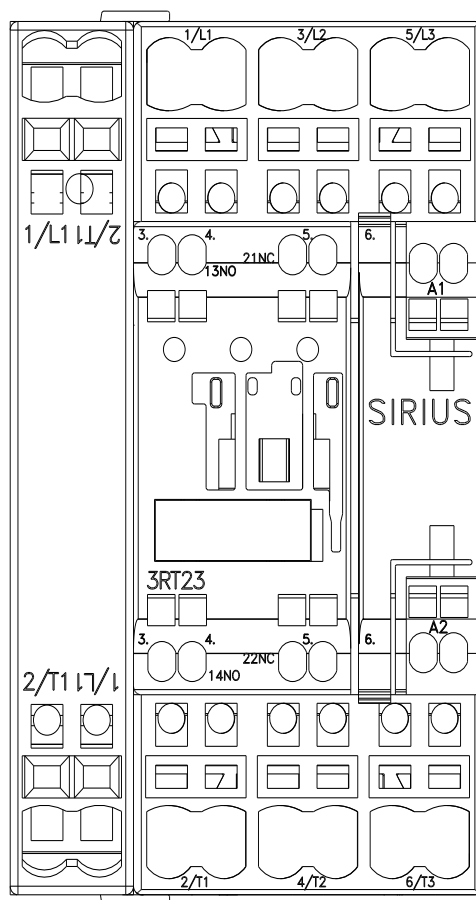
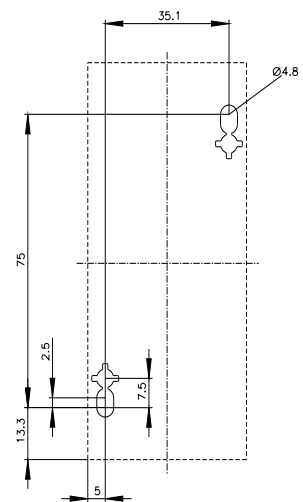
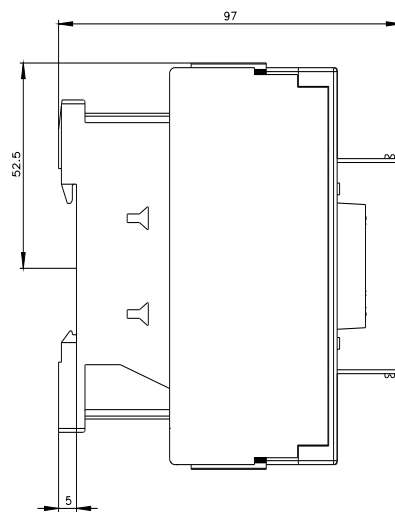
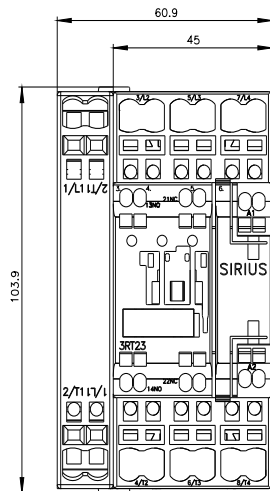


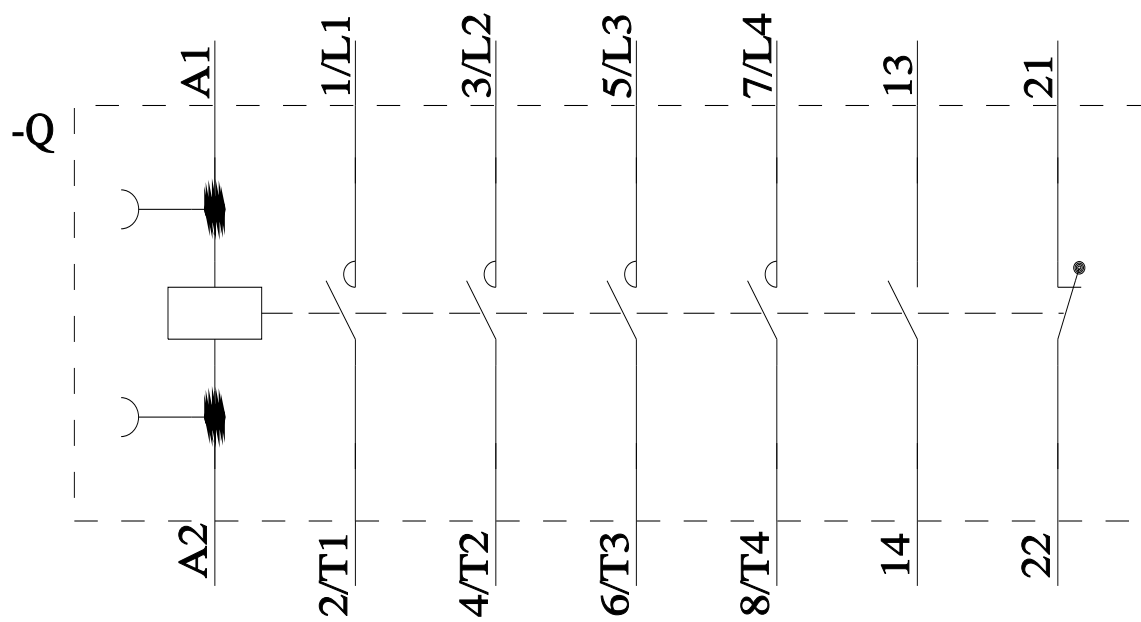
Test Certificates	Maritime application
<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Special Test Certificate</a>

Maritime application	other
	<a href="#">Miscellaneous</a>
	<a href="#">Confirmation</a>

Railway	Environment
<a href="#">Special Test Certificate</a>	
	<a href="#">Environmental Confirmations</a>

<b>Further information</b>	
Information on the packaging <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a>	
Information for data generation and storage <a href="https://support.industry.siemens.com/cs/ww/en/view/109995012">https://support.industry.siemens.com/cs/ww/en/view/109995012</a>	
Information- and Downloadcenter (Catalogs, Brochures,...) <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a>	
Industry Mall (Online ordering system) <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2326-2AC20">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2326-2AC20</a>	
Cax online generator <a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2326-2AC20">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2326-2AC20</a>	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20">https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20</a>	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-2AC20&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-2AC20&amp;lang=en</a>	
Characteristic: Tripping characteristics, I <sub>t</sub> , Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20/char">https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20/char</a>	
Further characteristics (e.g. electrical endurance, switching frequency) <a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&amp;mlfb=3RT2326-2AC20&amp;objecttype=14&amp;gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&amp;mlfb=3RT2326-2AC20&amp;objecttype=14&amp;gridview=view1</a>	





**last modified:**

4/11/2025 