



contactor AC-1, 35 A, 400 V / 40 °C, 4-pole, 24 V DC, auxiliary contacts: 1 NO + 1 NC, screw 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	7.6 W
• at AC in hot operating state per pole	1.9 W
• without load current share typical	5.9 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 DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 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
<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 [CO2 eq] total	293 kg
Global Warming Potential [CO2 eq] during manufacturing	3.36 kg

Global Warming Potential [CO2 eq] during operation	290 kg
Global Warming Potential [CO2 eq] after end of life	-0.566 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>operational current</b>	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	35 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	35 A
— up to 690 V at ambient temperature 60 °C rated value	30 A
• at AC-3	
— at 400 V rated value	15.5 A
• at AC-4 at 400 V rated value	15.5 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm <sup>2</sup>
<b>operating power</b>	
• at AC-3 at 400 V rated value	7.5 W
• at AC-4 at 400 V rated value	7.5 W
<b>no-load switching frequency</b>	
• at DC	1 500 1/h
operating frequency at AC-1 maximum	1 000 1/h
<b>Control circuit/ Control</b>	
<b>type of voltage</b>	DC
<b>type of voltage of the control supply voltage</b>	DC
<b>control supply voltage at DC rated value</b>	
•	24 V
<b>operating range factor control supply voltage rated value of magnet coil at DC</b>	
• initial value	0.8
• full-scale value	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>	
• at DC	50 ... 170 ms
<b>opening delay</b>	
• at DC	15 ... 18 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
operational current at AC-12 maximum	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	0.3 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.3 A
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	gG: 10 A (230 V, 400 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>product function short circuit protection</b>	No
<b>design of the fuse link</b>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 63 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 20 A (690 V, 100 kA)
• for short-circuit protection of the auxiliary switch required	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
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<b>height</b>	85 mm
<b>width</b>	60 mm
<b>depth</b>	107 mm
<b>required spacing</b>	
• with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type terminals
• at contactor for auxiliary contacts	Screw-type terminals
• of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)
• solid or stranded	2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)
• finely stranded with core end processing	2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
<b>connectable conductor cross-section for main contacts</b>	
• solid	1 ... 10 mm²
• solid or stranded	1 ... 10 mm²
• stranded	1 ... 10 mm²
• finely stranded with core end processing	1 ... 10 mm²
<b>connectable conductor cross-section for auxiliary contacts</b>	
• solid or stranded	0.5 ... 2.5 mm²
• finely stranded with core end processing	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> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul>	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• for main contacts</li> <li>• for auxiliary contacts</li> </ul>	16 ... 8 20 ... 14

<b>Safety related data</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>• mirror contact according to IEC 60947-4-1</li> </ul>	Yes
IEC 61508	
<b>T1 value</b>	
<ul style="list-style-type: none"> <li>• for proof test interval or service life according to IEC 61508</li> </ul>	20 a
Electrical Safety	
<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front
<b>Communication/ Protocol</b>	
<b>product function bus communication</b>	No
<b>Approvals Certificates</b>	
<b>General Product Approval</b>	



[Confirmation](#)



General Product Approval	EMV	Functional Safety	Test Certificates	Marine / Shipping
		<a href="#">Type Examination Certificate</a>	<a href="#">Special Test Certificate</a>	<a href="#">Type Test Certificates/Test Report</a>

Marine / Shipping	other
	<a href="#">Miscellaneous</a>

other	Dangerous Good	Environment
<a href="#">Confirmation</a>	<a href="#">Transport Information</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- 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=3RT2325-1BB40">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2325-1BB40</a>	
Cax online generator	
<a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2325-1BB40">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2325-1BB40</a>	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
<a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BB40">https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BB40</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=3RT2325-1BB40&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2325-1BB40&amp;lang=en</a>	

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2325-1BB40/char>  
Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2325-1BB40&objecttype=14&gridview=view1>





