



Solid-state contactor AC 51 / 10 A / 40 °C 48-460 V / 24 V DC screw terminal Low power consumption

product brand name	SIRIUS
product designation	solid-state contactor
design of the product	single-phase
product type designation	3RF23
<b>General technical data</b>	
degree of pollution	3
type of voltage of the control supply voltage	DC
surge voltage resistance of main circuit rated value	6 kV
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/28/2009
<b>Main circuit</b>	
operational current	
• at AC-51 rated value	10.5 A
• at AC-51 according to IEC 60947-4-3	7.5 A
• according to UL 508 rated value	9.6 A
operational current minimum	101 mA
rate of voltage rise at the thyristor for main contacts maximum permissible	1 000 V/μs
I <sup>2</sup> t value maximum	200 A <sup>2</sup> ·s
<b>Control circuit/ Control</b>	
type of voltage of the control supply voltage	DC
control supply voltage 1	
• at DC rated value	24 V
• at DC rated value	30 V
• at DC	15 ... 24 V
control supply voltage	
• at DC initial value for signal <1> detection	15 V
• at DC full-scale value for signal<0> recognition	5 V
control current at minimum control supply voltage	
• at DC	6.5 mA
control current at DC rated value	9 mA
ON-delay time	1 ms; additionally max. one half-wave
OFF-delay time	1 ms; additionally max. one half-wave
<b>Installation/ mounting/ dimensions</b>	
fastening method	screw fixing and snap-on mounting on standard mounting rail 35 mm according to IEC 60715
height	95 mm
width	22.5 mm
depth	88 mm
<b>Safety related data</b>	
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>Electromagnetic compatibility</b>	
<b>conducted interference</b> <ul style="list-style-type: none"> <li>• due to burst according to IEC 61000-4-4</li> <li>• due to conductor-earth surge according to IEC 61000-4-5</li> <li>• due to conductor-conductor surge according to IEC 61000-4-5</li> <li>• due to high-frequency radiation according to IEC 61000-4-6</li> </ul>	2 kV / 5 kHz behavior criterion 2 2 kV behavior criterion 2 1 kV behavior criterion 2  140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
<b>field-based interference according to IEC 61000-4-3</b>	80 MHz ... 1 GHz 10 V/m, behavior criterion 1
<b>electrostatic discharge according to IEC 61000-4-2</b>	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
<b>conducted HF interference emissions according to CISPR11</b>	Class A for industrial environment
<b>field-bound HF interference emission according to CISPR11</b>	Class B for the domestic, business and commercial environments

#### Short-circuit protection, design of the fuse link

manufacturer's article number <ul style="list-style-type: none"> <li>• of gS fuse for semiconductor protection at NH design usable</li> <li>• of full range R fuse link for semiconductor protection at cylindrical design usable</li> <li>• of back-up R fuse link for semiconductor protection at NH design usable</li> <li>• of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable</li> <li>• of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable</li> <li>• of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable</li> </ul>	<a href="#">3NE1813-0</a> <a href="#">5SE1316</a> <a href="#">3NE8015-1</a> <a href="#">3NC1016</a> <a href="#">3NC1420</a> <a href="#">3NC2220</a>
manufacturer's article number of the gG fuse <ul style="list-style-type: none"> <li>• at NH design usable</li> <li>• at cylindrical design 10 x 38 mm usable</li> <li>• at cylindrical design 14 x 51 mm usable</li> </ul>	<a href="#">3NA6801</a> <a href="#">3NW6001-1: These fuses have a smaller rated current than the semiconductor relays</a> <a href="#">3NW6101-1: These fuses have a smaller rated current than the semiconductor relays</a>
manufacturer's article number <ul style="list-style-type: none"> <li>• of NEOZED fuse usable</li> </ul>	<a href="#">5SE2306: These fuses have a smaller rated current than the semiconductor relays</a>

#### Certificates/ approvals

General Product Approval	EMC	Declaration of Con- formity
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[Confirmation](#)



Declaration of Con- formity	Test Certificates	other	Railway
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Confirmation](#)



[Vibration and Shock](#)

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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

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

Industry Mall (Online ordering system)

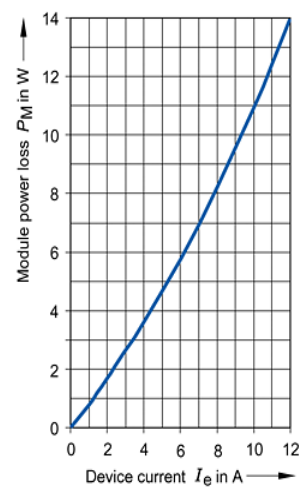
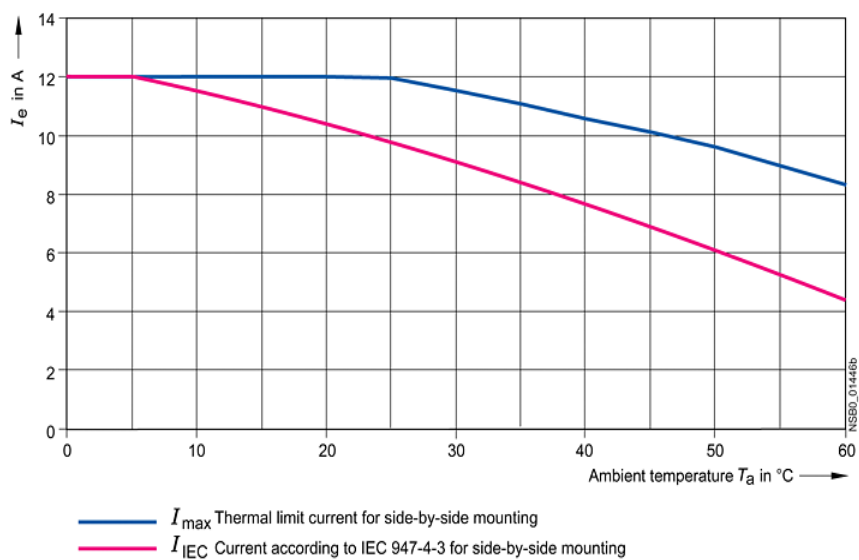
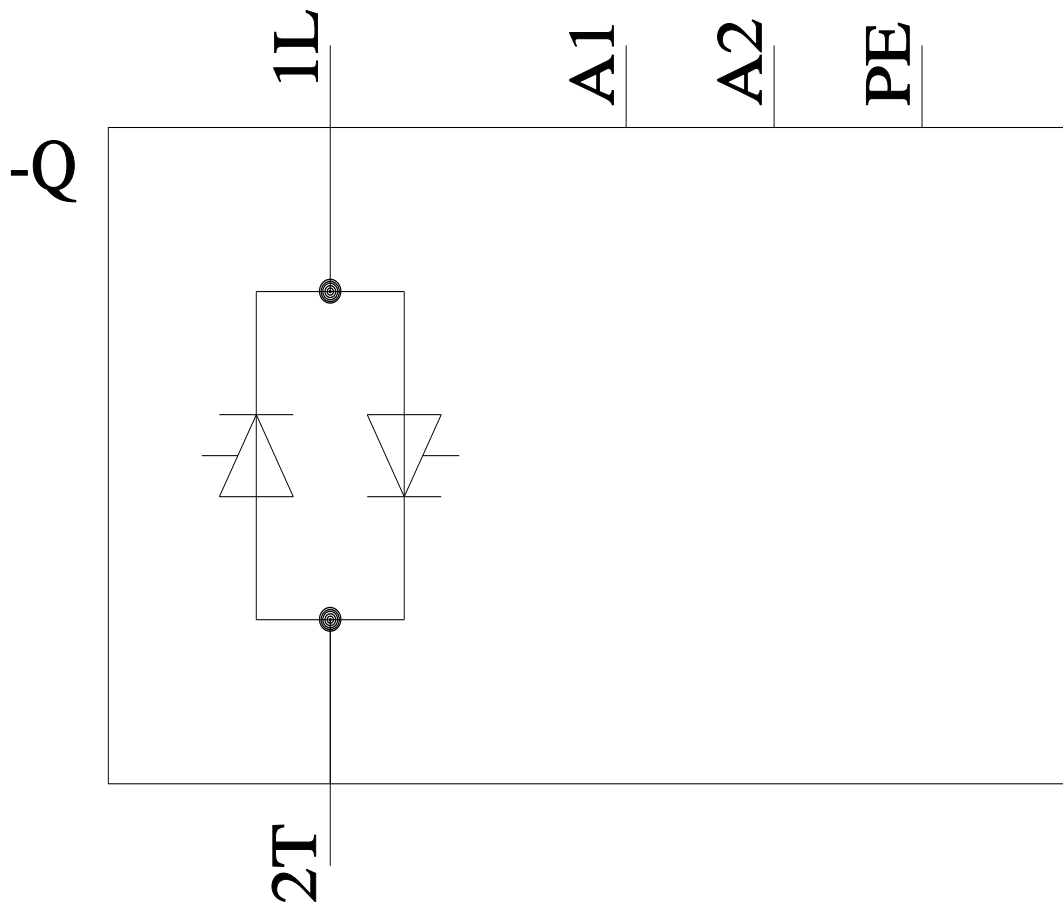
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2310-1AA04-0KN0>

Cax online generator

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

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

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last modified:

1/26/2022

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