



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

<b>product brand name</b>	SIRIUS
<b>product designation</b>	solid-state contactor
<b>design of the product</b>	1-pole
<b>product type designation</b>	3RF23
<b>General technical data</b>	
<b>degree of pollution</b>	3
surge voltage resistance of main circuit rated value	6 kV
protection class IP on the front according to IEC 60529	IP20
<b>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibition (Date)</b>	05/28/2009
<b>SVHC substance name</b>	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4
<b>Net Weight</b>	0.14 kg
<b>Main circuit</b>	
<b>type of voltage of the operating voltage</b>	AC
<b>operational current</b>	
• at AC-1 at 400 V rated value	10.5 A
• 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
<b>rate of voltage rise at the thyristor for main contacts maximum permissible</b>	1 000 V/μs
<b>I<sup>2</sup>t value maximum</b>	200 A <sup>2</sup> ·s
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
<b>control supply voltage 1 at DC rated value</b>	24 V
<b>control supply voltage 1 at DC rated value maximum permissible</b>	30 V
<b>control supply voltage 1 at DC</b>	15 ... 24 V
<b>control supply voltage</b>	
• at DC initial value for signal <1> detection	15 V
• at DC full-scale value for signal<0> recognition	5 V
<b>control current at minimum control supply voltage</b>	
• at DC	6.5 mA
control current at DC rated value	9 mA
<b>ON-delay time</b>	1 ms; additionally max. one half-wave
<b>OFF-delay time</b>	1 ms; additionally max. one half-wave
<b>Installation/ mounting/ dimensions</b>	
<b>fastening method</b>	screw fixing and snap-on mounting on standard mounting rail 35 mm according

	to IEC 60715
<b>height</b>	95 mm
<b>width</b>	22.5 mm
<b>depth</b>	88 mm
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>stripped length of the cable</b>	
• for main contacts	10 mm
• for auxiliary and control contacts	7 mm
<b>Electrical Safety</b>	
<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>Electromagnetic compatibility</b>	
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV / 5 kHz behavior criterion 2
• due to conductor-earth surge according to IEC 61000-4-5	2 kV behavior criterion 2
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV behavior criterion 2
• due to high-frequency radiation according to IEC 61000-4-6	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
<b>Short-circuit protection, design of the fuse link</b>	
manufacturer's article number	
• of gS fuse for semiconductor protection at NH design usable	<a href="#">3NE1813-0</a>
• of full range R fuse link for semiconductor protection at cylindrical design usable	<a href="#">5SE1316</a>
• of back-up R fuse link for semiconductor protection at NH design usable	<a href="#">3NE8015-1</a>
• of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable	<a href="#">3NC1016</a>
• of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable	<a href="#">3NC1420</a>
• of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable	<a href="#">3NC2220</a>
manufacturer's article number of the gG fuse	
• at NH design usable	<a href="#">3NA6801</a>
• at cylindrical design 10 x 38 mm usable	<a href="#">3NW6001-1: These fuses have a smaller rated current than the semiconductor relays</a>
• at cylindrical design 14 x 51 mm usable	<a href="#">3NW6101-1: These fuses have a smaller rated current than the semiconductor relays</a>
manufacturer's article number	
• of NEOZED fuse usable	<a href="#">5SE2306: These fuses have a smaller rated current than the semiconductor relays</a>

last modified:

5/19/2025 