

SEMI-COND. CONTACTOR 3RF2,1-PH. AC 51 20 A  
40 DEGREES C 24-230 V / 110-230 V AC LOW NOISE



General technical data:

product brand name		SIRIUS
Product designation		solid-state contactor
Product function		low noise
Number of poles for main current circuit		1
Protection class IP		IP20
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-55 ... +80
Installation altitude at height above sea level maximum	m	1 000
Vibration resistance acc. to IEC 60068-2-6		2g
Shock resistance acc. to IEC 60068-2-27		15g / 11 ms
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		K
Equipment marking acc. to DIN EN 61346-2		Q
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		0
Number of CO contacts for auxiliary contacts		0

Main circuit:

Number of NO contacts for main contacts		1
Number of NC contacts for main contacts		0
Operating current		
• at AC-51 Rated value	A	20
Operating current minimum	mA	500

Operating voltage with AC		
• at 50 Hz Rated value	V	24 ... 230
• at 60 Hz Rated value	V	24 ... 230
Operating range relative to the operating voltage with AC		
• at 50 Hz	V	20 ... 253
• at 60 Hz	V	20 ... 253
Operating frequency Rated value	Hz	50 ... 60
<b>Insulation voltage Rated value</b>	V	600
<b>Rate of voltage rise at the thyristor for main contacts maximum permissible</b>	V/ $\mu$ s	1 000
<b>Blocking voltage at the thyristor for main contacts maximum permissible</b>	V	800
<b>Reverse current of the thyristor</b>	mA	25
<b>Derating temperature</b>	$^{\circ}$ C	40
<b>Active power loss total typical</b>	W	20
<b>Surge current resistance Rated value</b>	A	600
<b>I<sup>2</sup>t value maximum</b>	A <sup>2</sup> ·s	1 800

#### Control circuit/ Control:






<b>Control supply voltage frequency</b>		
• 1 Rated value	Hz	50
• 2 Rated value	Hz	60
<b>Type of voltage of the control supply voltage</b>		AC
<b>Control supply voltage 1</b>		
• with AC		
— at 50 Hz Initial rated value	V	110
— at 50 Hz Final rated value	V	230
— at 60 Hz Initial rated value	V	110
— at 60 Hz Final rated value	V	230
<b>Control supply voltage</b>		
• with AC		
— at 50 Hz Full-scale value for signal<0> recognition	V	40
— at 60 Hz Full-scale value for signal<0> recognition	V	40
<b>Symmetrical line frequency tolerance</b>	Hz	5
<b>Control current</b>		
• at minimum control supply voltage		
— with AC	mA	2
• with AC Rated value	mA	15

#### Installation/ mounting/ dimensions:



AWG number as coded connectable conductor cross section for auxiliary and control contacts		20 ... 12
<b>Wire stripping length of the cable</b>		
• for main contacts	mm	7
• for auxiliary and control contacts	mm	7

#### Certificates/ approvals:

General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CSA	 UL		 C-TICK
		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

Test Certificates	other
<a href="#">Special Test Certificate</a>	<a href="#">Environmental Confirmations</a>

#### Further information

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

[https://www.automation.siemens.com/cd-static/material/info/3RF23\\_eng.pdf](https://www.automation.siemens.com/cd-static/material/info/3RF23_eng.pdf)

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

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

##### Cax online generator

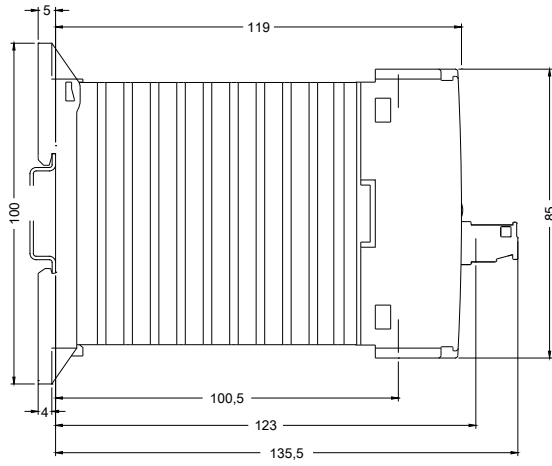
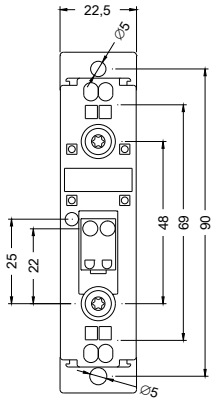
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF23202CA22>

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

<http://support.automation.siemens.com/WW/view/en/3RF23202CA22/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF23202CA22&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF23202CA22&lang=en)



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