# SIEMENS

## Data sheet

## 3RF23 10-1BA04



SEMI-COND. CONTACTOR,3RF2, 1-PH AC 51 10 A / AC15 6A 40 DEG. C 48-460 V / 24 V DC INSTANTANEOUS SWITCHING

General technical data:	
product brand name	SIRIUS
Product designation	solid-state contactor
Product function	instantaneous switching
Number of poles for main current circuit	1
Protection class IP	IP20
Product designation _1 of the accessories that can be ordered	terminal cover
Manufacturer article number _1 of the accessories that can be ordered	<u>3RF2900-3PA88</u>
Product designation _2 of the accessories that can be ordered	power regulator
Manufacturer article number _2 of the accessories that can be ordered	<u>3RF2920-0HA16</u>
Product designation _3 of the accessories that can be ordered	converter
Manufacturer article number _3 of the accessories that can be ordered	<u>3RF2900-0EA18</u>
Product designation _4 of the accessories that can be ordered	load monitoring

Manufacturer article number _4 of the accessories       3RF2920-0GA16         Product designation _5 of the accessories that can be ordered       load monitoring, basis         Manufacturer article number _5 of the accessories that can be ordered       3RF2920-0FA08         Ambient temperature       • during operation       °C       -25 +60         • during storage       °C       -55 +80       Installation altitude at height above sea level         maximum       °C       -55 +80       m       1 000         Manufrecture article number _5 to IEC 60068-2-6       2g       Shock resistance acc. to IEC 60068-2-7       1 5g / 11 ms         Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750       Q       Q         Equipment marking acc. to DIN EN 61346-2       Q       Q         Number of NC contacts for auxillary contacts       0       0         Number of NO contacts for auxillary contacts       0       0         Number of NO contacts for main contacts       1       Number of NC contacts for main contacts       0         Operating current       at AC-1 at 400 V Rated value       A       10.5       0         • at AC-151 Rated value       V       48 460       48 460         • at 50 Hz Rated value       V       48 460       480 <th></th>	
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Operating current minimum     mA     100       Operating voltage at AC     V     48 460	
Operating voltage at AC       • at 50 Hz Rated value       V       48 460	
• at 50 Hz Rated value V 48 460	
• at 60 Hz Rated value V 48 460	
Operating range relative to the operating voltage at	
AC	
• at 50 Hz V 40 506	
• at 60 Hz V 40 506	
Operating frequency Rated value     Hz     50 60	
Insulation voltage Rated value V 600	
Rate of voltage rise at the thyristor for main contacts V/µs 500	
Blocking voltage at the thyristor for main contacts V 1 200 maximum permissible	
Reverse current of the thyristor mA 10	
Derating temperature °C 40	
Active power loss total typical W 11	
Surge current resistance Rated value A 200	
I2t value maximumA²·s200	

Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage 1		
• at DC		
— Initial rated value	V	15
— Final rated value	V	24
Control supply voltage		
<ul> <li>at DC Full-scale value for signal&lt;0&gt; recognition</li> </ul>	V	5
Control current		
<ul> <li>at minimum control supply voltage</li> </ul>		
— at DC	mA	2
• at DC Rated value	mA	15

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BIGHIGHU	/ mounting/		

installation/ mounting/ dimensions.		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Mounting type Side-by-side mounting		Yes
Design of the thread of the screw for securing the equipment		M4
Tightening torque of the screw for securing the equipment	N∙m	1.5
Width	mm	22.5
Height	mm	100
Depth	mm	94

Connections/ Terminals:		
Type of electrical connection for main current circuit		screw-type terminals
Design of the thread of the connection screw for main contacts		M4
Tightening torque for main contacts with screw-type terminals	N∙m	2 2.5
Tightening torque [lbf·in] for main contacts with screw-type terminals	lbf∙in	18 22
Type of connectable conductor cross-section for main contacts		
• solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
<ul> <li>finely stranded</li> </ul>		
— with core end processing		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
Type of connectable conductor cross-section	-	
<ul> <li>for AWG conductors</li> </ul>		
— for main contacts		2x (14 10)
— for auxiliary and control contacts		1x (AWG 20 12)
Type of connectable conductor cross-section for auxiliary and control contacts		

• solid		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
• finely stranded		
— with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
— without core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
Connectable conductor cross-section		
• for main contacts		
— single or multi-stranded	mm²	1.5 6
— finely stranded		
- with core end processing	mm²	1 10
<ul> <li>for auxiliary and control contacts</li> </ul>		
— solid	mm²	0.5 2.5
— finely stranded		
— with core end processing	mm²	0.5 2.5
— without core end processing	mm²	0.5 2.5
AWG number as coded connectable conductor cross section		
for main contacts		10 14
<ul> <li>for auxiliary and control contacts</li> </ul>		20 12
Type of electrical connection for auxiliary and control current circuit		screw-type terminals
Design of the thread of the connection screw of the auxiliary and control contacts		M3
Wire stripping length of the cable		
• for main contacts	mm	7
<ul> <li>for auxiliary and control contacts</li> </ul>	mm	7
Tightening torque for auxiliary and control contacts with screw-type terminals	N∙m	0.5 0.6
Tightening torque [lbf-in] for auxiliary and control contacts with screw-type terminals	lbf∙in	4.5 5.3

Certificates/ approvals:

General Prod	luct Approval		EMC	Declaration of Conformity	Test Certificates
(SA		EHC	С-тіск	EG-Konf.	Typprüfbescheinigu ng/Werkszeugnis

Test	other
Certificates	
spezielle	Umweltbestätigung
Prüfbescheinigunge	
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### Further information

Short-circuit protection, design of the fuse link https://www.automation.siemens.com/cd-static/material/info/3RF23\_eng.pdf

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

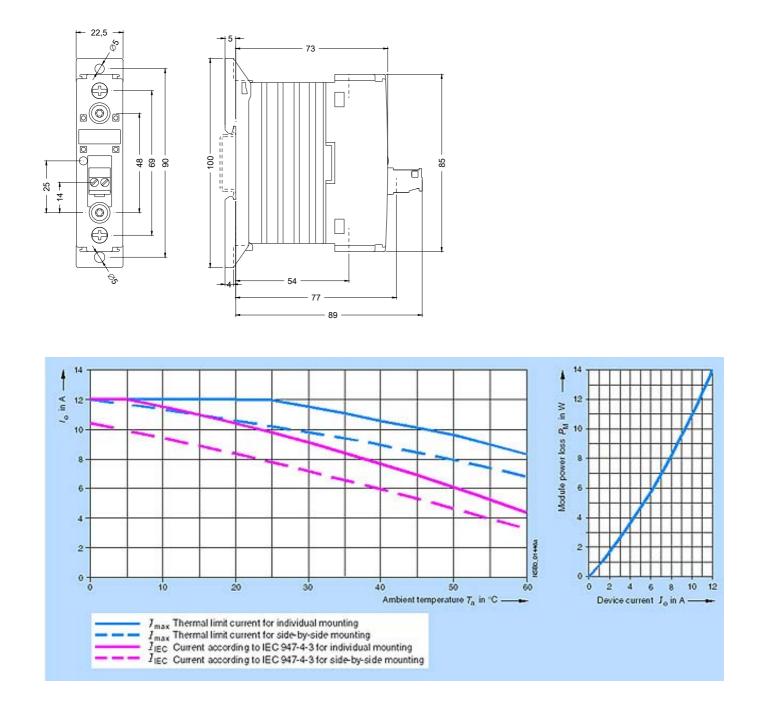
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF23101BA04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RF23101BA04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RF23101BA04&lang=en



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