# **SIEMENS**

## Data sheet

## 3RF3410-1BB04



SOLID-STATE CONTACTOR 3-PH 3RF3 AC53 9.2A 40 DEGREES C 48-480V / 24V DC 2-PH. CONTROLLED INSTANTANEOUS SCREW TERMINALS

product brand name		SIRIUS	
Product designation _2 of the accessories that can	_	Connection adapter	
be ordered			
Product designation _1 of the accessories that can	_	Link module	
be ordered			
Manufacturer article number	-		
<ul> <li>_1 of the accessories that can be ordered</li> </ul>		3RA2921-1BA00	
<ul> <li>_2 of the accessories that can be ordered</li> </ul>		3RF3900-0QA88	
Protection class IP	_	IP20	
Insulation voltage Rated value	V	600	
Installation altitude at height above sea level	m	1 000	
maximum			
Ambient temperature			
<ul> <li>during storage</li> </ul>	°C	-55 +80	
<ul> <li>during operation</li> </ul>	°C	-25 +60	
Shock resistance acc. to IEC 60068-2-27	_	15g / 11 ms	
Vibration resistance acc. to IEC 60068-2-6	_	2g	
Surge current resistance Rated value	А	600	
Active power loss total typical	W	16	
Equipment marking acc. to DIN 40719 extended		К	
according to IEC 204-2 acc. to IEC 750			
Equipment marking acc. to DIN EN 61346-2		Q	
Product function		instantaneous switching	

Number of poles for main current circuit		3
Number of NC contacts for main contacts		0
Number of NO contacts for main contacts		2
Operating frequency Rated value	Hz	60 50
Operating voltage with AC		
• at 60 Hz Rated value	V	48 480
• at 50 Hz Rated value	V	48 480
Operating current		
• minimum	mA	500
• at AC-3 at 400 V Rated value	А	9.2
Operating range relative to the operating voltage with AC		
• at 50 Hz	V	40 506
• at 60 Hz	V	40 506
Operating power at AC-3 at 400 V Rated value	kW	4
Derating temperature	°C	40
Symmetrical line frequency tolerance	Hz	5
Relative symmetrical tolerance of the operating frequency	%	10
I2t value maximum	A²·s	1 800
Rate of voltage rise at the thyristor for main contacts maximum permissible	V/µs	1 000
Blocking voltage at the thyristor for main contacts maximum permissible	V	1 200
Reverse current of the thyristor	mA	10

Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage 1		
• for DC		
— Initial rated value	V	15
— Final rated value	V	30
Control supply voltage for DC Full-scale value for signal<0> recognition	V	5
Control current		
<ul> <li>at minimum control supply voltage</li> </ul>		
— for DC	mA	2
<ul> <li>for DC Rated value</li> </ul>	mA	15
switching times		
• ON delay		1 ms
• OFF delay		1 ms + in addition max. one half-wave
Auxiliary circuit:		
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		0

nounting position		vertical
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Mounting type Side-by-side mounting	_	Yes
Tightening torque of the screw for securing the equipment	N∙m	1.5
Design of the thread of the screw for securing the equipment		M4
Width	mm	90
Height	mm	95
Depth	mm	100.8
Required spacing with side-by-side mounting	_	
• upwards	mm	70
• downwards	mm	50
Connections/ Terminals:	_	
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Design of the thread of the connection screw		
<ul> <li>for main contacts</li> </ul>		M4
<ul> <li>of the auxiliary and control contacts</li> </ul>		M3
Product function removable terminal for auxiliary and control circuit		Yes
Type of connectable conductor cross-section	_	
• for main contacts		
— solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
— finely stranded		
— with core end processing		2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
• for AWG conductors		
— for main contacts		2x (14 10)
— for auxiliary and control contacts		1x (AWG 20 12)
<ul> <li>for auxiliary and control contacts</li> </ul>		
— 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		$1x (0.5 \dots 2.5 \text{ mm}^2), 2x (0.5 \dots 1.0 \text{ mm}^2)$
Tightening torque		
for main contacts with screw-type terminals	N∙m	2 2.5
<ul> <li>for auxiliary and control contacts with screw- type terminals</li> </ul>	N·m	0.5 0.6

Tightening torque [lbf·in]		
<ul> <li>for main contacts with screw-type terminals</li> </ul>	lbf∙in	18 22
<ul> <li>for auxiliary and control contacts with screw- type terminals</li> </ul>	lbf∙in	7.5 5.3
Wire stripping length of the cable		
<ul> <li>for main contacts</li> </ul>	mm	7
<ul> <li>for auxiliary and control contacts</li> </ul>	mm	7

# Certificates/ approvals:

Certificate of suitabil	ity	CE / UI	L / CSA / CCC / C-TIC	K
General Produc	t Approval		EMC	Declaration of Conformity
	CSA	EHC	С-ТІСК	EG-Konf.
Test Certificates	other			
Type Test Certificates/Test Report	Environmental Confirmations			

yielded mechanical performance [hp] for three-phase	se	
AC motor		
• at 200/208 V Rated value	metric	1.5
	hp	
• at 220/230 V Rated value	metric	2
	hp	
• at 460/480 V Rated value	metric	3
	hp	
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	4.8

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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=3RF34101BB04

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