

SEMI-COND. CONTACTOR 3RF2,1-PH. AC51 30 A 40
DEG. C 48-460 V / 110 V DC SHORT CIRC. PROOF UP TO
25 A WITH B-AUTOMAT

General technical data:

product brand name		SIRIUS
product designation		solid-state contactor
Product function		short-circuit resistant with B-automatic device
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		3RF2900-3PA88
Ambient temperature		
• during operating	°C	-25 ... +60
• during storage	°C	-55 ... +80
Installation altitude / at a height over sea level / maximum	m	1,000
Resistance against vibration / according to IEC 60068-2-6		2g
Resistance against shock / according to IEC 60068-2-27		15g / 11 ms
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		K
• according to DIN EN 61346-2		Q
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Number of change-over switches / 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-1 / at 400 V / rated value	A	30
• at AC-51 / rated value	A	30
Operating current / of line safety switch / for AC / rated value	A	25
Operating current / minimum	mA	500
Operating voltage		

• at 50 Hz / at AC / rated value	V	48 ... 460
• at 60 Hz / at AC / rated value	V	48 ... 460
Working area related to the operating voltage		
• at 50 Hz / for AC	V	40 ... 506
• at 60 Hz / for AC	V	40 ... 506
Operating frequency		
• rated value	Hz	50 ... 60
Insulation voltage / rated value		
	V	600
Voltage slew rate / at the thyristor / for main contacts / maximum permissible		
	V/μs	1,000
Block voltage / at the thyristor / for main contacts / maximum permissible		
	V	1,200
Reverse current / of the thyristor		
	mA	10
Derating temperature		
	°C	40
Active power loss / total / typical		
	W	33
Resistance against the impulse current / rated value		
	A	1,150
I²t-level / maximum		
	A ² ·s	6,600

Control circuit:

Type of voltage / of the controlled supply voltage			DC
Control supply voltage / 1			
• for DC			
• initial rated value	V	77	
• final rated value	V	110	
Control supply voltage			
• for DC / final value for signal<0>-recognition	V	40	
Control current			
• for DC / rated value	mA	10	
Fuse assignments			https://www.automation.siemens.com/cd-static/material/info/3RF21_eng.pdf

Installation/mounting/dimensions:

Type of mounting			screw and snap-on mounting onto 35 mm standard mounting rail
Type of fixing/fixation / series installation			Yes
Design of the thread / of the screw for fastening of the operating resource			M4
Tightening torque / of the screw for fastening of the operating resource			N·m 1.5
Width			mm 22.5
Height			mm 100
Depth			mm 140.5

Connections:

Design of the electrical connection / for main current circuit		spring-loaded terminals
Type of the connectable conductor cross-section • for main contacts • solid • finely stranded • with conductor end processing • without conductor final cutting • for AWG conductors • for main contacts • for auxiliary and control contacts • for auxiliary and control contacts • solid • finely stranded • with conductor end processing • without conductor final cutting		2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (18 ... 14) 1x (AWG 20 ... 12) 1x (0.5 ... 2.5 mm ²) 0.5 ... 2.5 mm ² 0.5 ... 2.5 mm ²
Conductor cross section that can be connected • for main contacts • solid • stranded wire • with conductor end processing • without conductor final cutting • for auxiliary and control contacts • solid • stranded wire • with conductor end processing / • without conductor final cutting	mm ² mm ² mm ² mm ² mm ² mm ²	0.5 ... 2.5 0.5 ... 1.5 0.5 ... 2.5 0.5 ... 2.5 0.5 ... 2.5 0.5 ... 2.5
AWG number / as coded connectable conductor cross-section / for main contacts		18 ... 14
Design of the electrical connection / for auxiliary and control current circuit		spring-loaded terminals
Design of the thread / of the connection screw / of the auxiliary and control pins		M3
AWG number / as coded connectable conductor cross-section • for auxiliary and control contacts		20 ... 12
Skinning length / of the cable / for main contacts	mm	10
Skinning length / of the cable / for auxiliary and control contacts	mm	10

Certificates/approvals:

Further information:

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

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

Industry Mall (Online ordering system)

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

CAX-Online-Generator

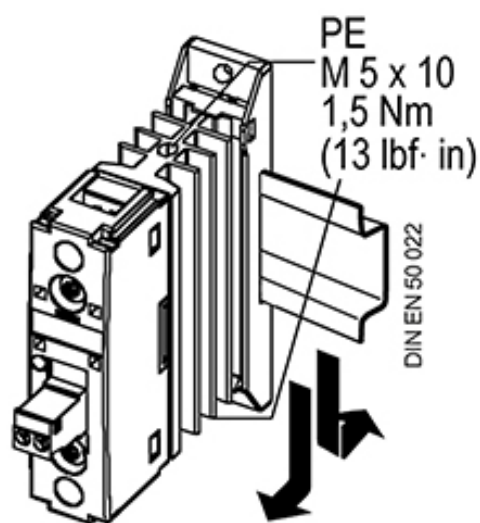
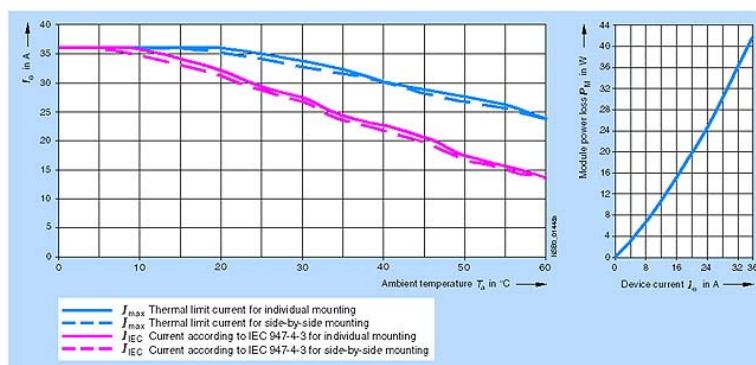
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RF2330-2DA64/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2330-2DA64



last change:

Feb 4, 2013