



SEMI-COND. CONTACTOR 3RF2,1-PH. AC51 20A 40
 DEGREE C 48-600 V / 4-30 V DC SCREW CONNECTION
 BLOCKING VOLTAGE 1200 V

General technical data:	
product brand name	SIRIUS
Product designation	solid-state contactor
Product function	zero-point 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	3RF2900-3PA88
Product designation / _3 / of the accessories that can be ordered	converter
Manufacturer article number / _3 / of the accessories that can be ordered	3RF2900-0EA18
Product designation / _4 / of the accessories that can be ordered	load monitoring
Manufacturer article number / _4 / of the accessories that can be ordered	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 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 changeover 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-1 / at 400 V / rated value	A	20
• at AC-51 / rated value	A	20
Operating current / minimum	mA	500
Operating voltage		
• at 50 Hz / at AC / rated value	V	48 ... 600
• at 60 Hz / at AC / rated value	V	48 ... 600
Working area related to the operating voltage		
• at 50 Hz / for AC	V	40 ... 660
• at 60 Hz / for AC	V	40 ... 660
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	20
Resistance against the impulse current / rated value	A	600
I²t-level / maximum	A ² ·s	1,800

Control circuit/ Control:

Type of voltage / of the controlled supply voltage		DC
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Control supply voltage / 1		
<ul style="list-style-type: none"> • for DC <ul style="list-style-type: none"> • initial rated value • final rated value 	V	4
	V	30
Control supply voltage		
<ul style="list-style-type: none"> • for DC / final value for signal<0>-recognition 	V	1
Control current		
<ul style="list-style-type: none"> • for DC / rated value 	mA	20
Fuse assignments:		https://www.automation.siemens.com/cd-static/material/info/3RF23_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/ terminals:

Design of the 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		
<ul style="list-style-type: none"> • with screw-type terminals 	N·m	2 ... 2.5
Tightening torque (lbf-in) / for main contacts		
<ul style="list-style-type: none"> • with screw-type terminals 	lbf-in	18 ... 22
Type of the connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors <ul style="list-style-type: none"> • for main contacts • for auxiliary and control contacts • for auxiliary and control contacts <ul style="list-style-type: none"> • solid • finely stranded 		<p>2x (1.5 ... 2.5 mm²), 2x (2.5 ... 6 mm²)</p> <p>2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²</p> <p>2x (14 ... 10)</p> <p>1x (AWG 20 ... 12)</p> <p>1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.0 mm²)</p>

<ul style="list-style-type: none"> • with conductor end processing • without conductor final cutting 		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²)
Conductor cross section that can be connected		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • solid • stranded wire <ul style="list-style-type: none"> • with conductor end processing 	mm ²	1.5 ... 6
<ul style="list-style-type: none"> • for auxiliary and control contacts <ul style="list-style-type: none"> • solid • stranded wire <ul style="list-style-type: none"> • with conductor end processing / • without conductor final cutting 	mm ²	1 ... 10
	mm ²	0.5 ... 2.5
	mm ²	0.5 ... 2.5
	mm ²	0.5 ... 2.5
AWG number / as coded connectable conductor cross-section / for main contacts		10 ... 14
Design of the electrical connection / for auxiliary and control current circuit		screw-type terminals
Design of the thread / of the connection screw / of the auxiliary and control pins		M3
AWG number / as coded connectable conductor cross-section		
<ul style="list-style-type: none"> • for auxiliary and control contacts 		20 ... 12
Skinning length / of the cable / for main contacts	mm	7
Skinning length / of the cable / for auxiliary and control contacts	mm	7
Tightening torque / for auxiliary and control contacts		
<ul style="list-style-type: none"> • with screw-type terminals 	N-m	0.5 ... 0.6
Tightening torque (lbf-in) / for auxiliary and control contacts		
<ul style="list-style-type: none"> • with screw-type terminals 	lbf-in	4.5 ... 5.3

Certificates/ approvals:

General Product Approval	EMC	Declaration of Conformity	Test Certificates
   			Special Test Certificate Type Test Certificates/Test Report
other Environmental Confirmations			

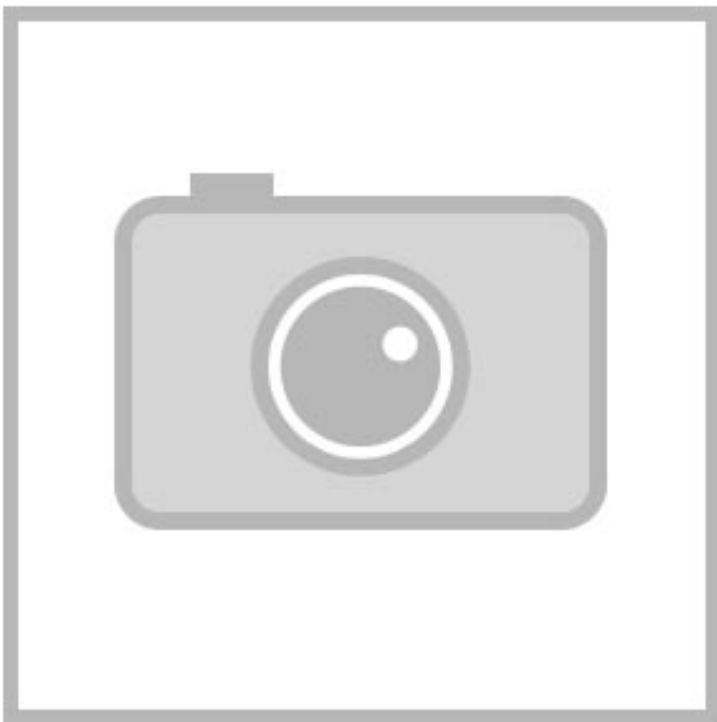
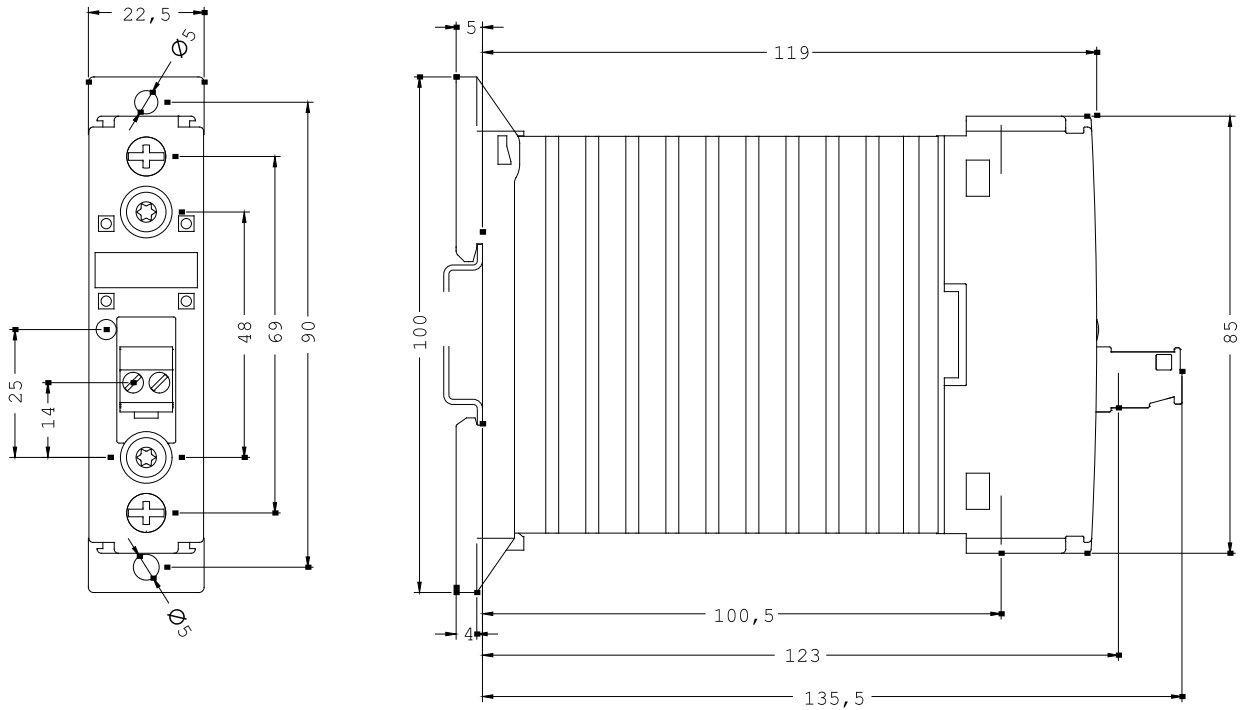
Further information:

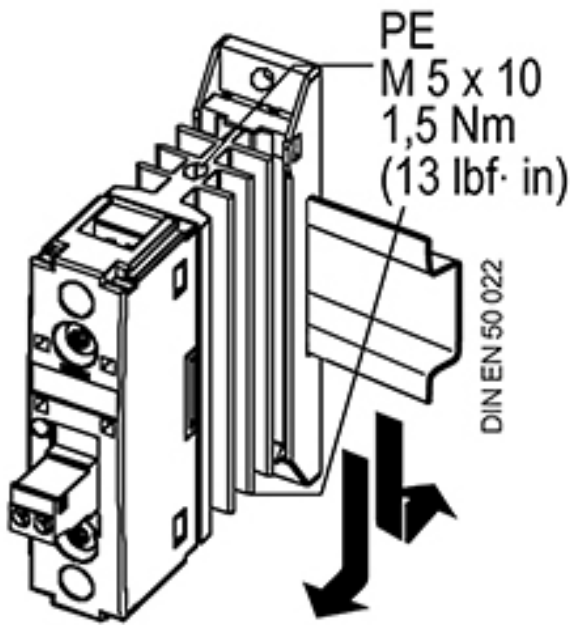
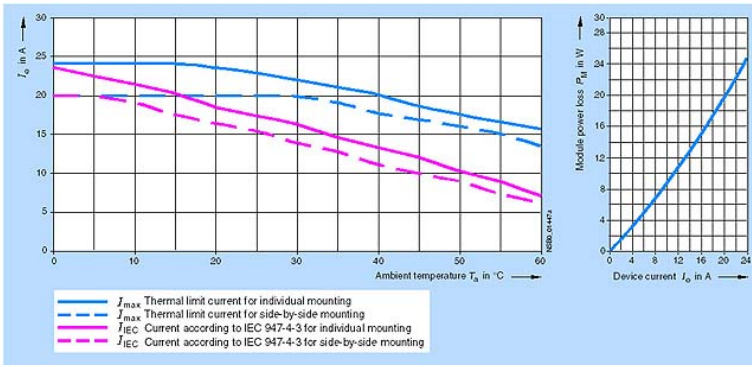
Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

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





last change:

Jan 20, 2014