



SEMI-COND. CONTACTOR 3RF2,1-PH. AC51 30 A 40 DEG. C 48-460 V / 4-30 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
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	3RF2950-0GA16
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 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	4
• final rated value	V	30
Control supply voltage		
• for DC / final value for signal<0>-recognition	V	1
Control current		
• for DC / rated value	mA	20
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		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 the connectable conductor cross-section		
• for main contacts		
• solid		2x (1.5 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²)
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• for AWG conductors		
• for main contacts		2x (14 ... 10)
• for auxiliary and control contacts		1x (AWG 20 ... 12)
• for auxiliary and control contacts		
• solid		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²)

<ul style="list-style-type: none"> finely stranded 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 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 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		14 ... 10
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	other
 GOST	 UL	 C-TICK	 EG-Konf.	Special Test Certificate Environmental Confirmations

Further information:

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

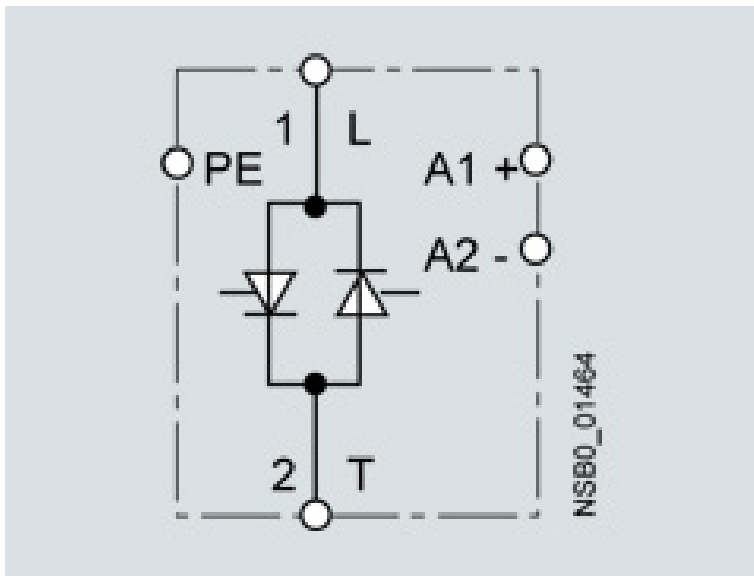
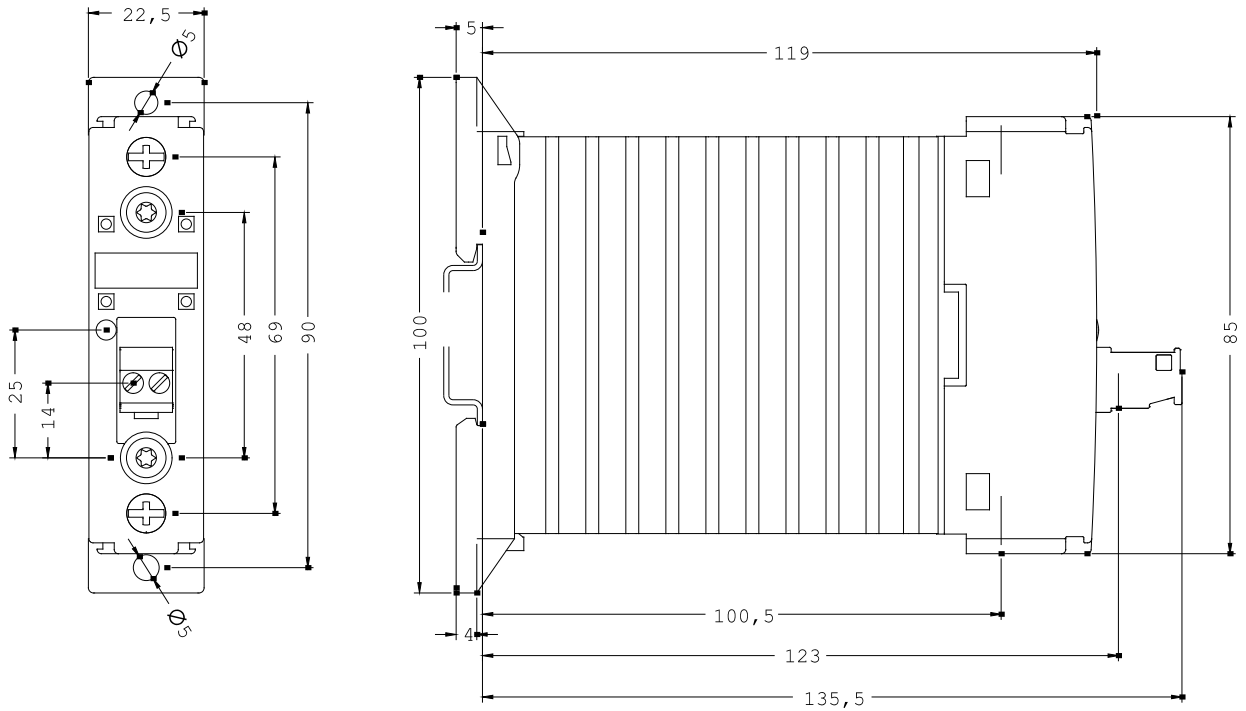
<http://www.siemens.com/industrial-controls/catalogs>

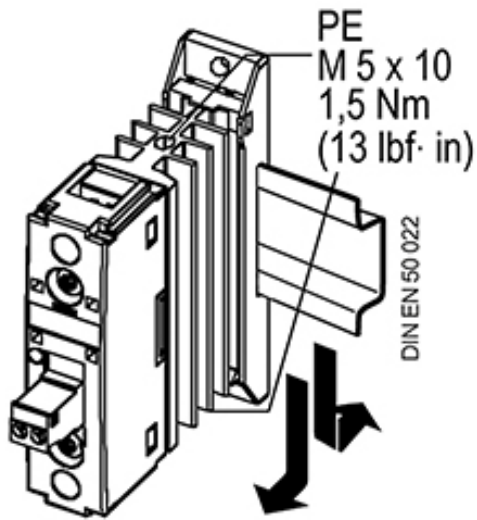
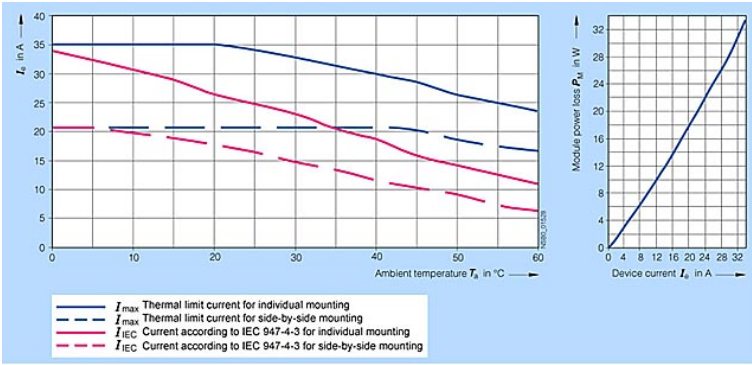
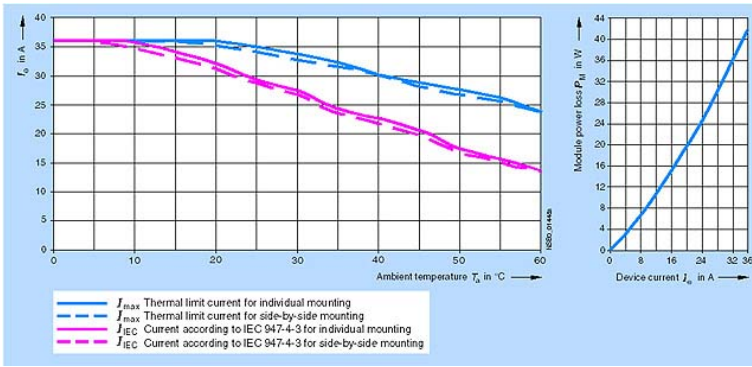
Industry Mall (Online ordering system)

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

CAX-Online-Generator

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





last change:

Feb 4, 2013