SIEMENS

Product data sheet

3RF2310-1AA24



SEMICOND. CONTACTOR 3RF2, 1-PH. AC 51 10 A 40 DEGREES C 48-460 V / 110-230 V AC SCREW TERMINAL

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		<u>3RF2900-3PA88</u>	
Product designation / $_4$ / of the accessories that can be ordered		load monitoring	
Manufacturer article number / $_4$ / of the accessories that can be ordered		<u>3RF2920-0GA36</u>	
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 		к
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	А	10.5
• at AC-51 / rated value	А	10.5
Operating current / minimum	mA	100
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
Relative symmetrical tolerance / of the operation frequency	%	10
Insulation voltage / rated value	V	600
Voltage slew rate / at the thyristor / for main contacts / maximum permissible	V/µs	500
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	11
Resistance against the impulse current / rated value	A	200
I2t-level / maximum	A²·s	200
Control circuit:		
Control supply voltage frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Type of voltage / of the controlled supply voltage		AC
Control supply voltage / 1		
• at 50 Hz / for AC		

initial rated value	V	110
final rated value	V	230
• at 60 Hz / for AC		
initial rated value	V	110
• final rated value	V	230
Control supply voltage		
• at 50 Hz / for AC / final value for signal<0>-recognition	V	40
 at 60 Hz / for AC / final value for signal<0>-recognition 	V	40
Tolerance of the line frequency	Hz	5
Relative symmetrical tolerance / of the supply voltage frequency	%	10
Control current		
 at minimum control supply voltage / for AC 	mA	2
• for AC / rated value	mA	15
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	94	

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 mm2), 2x (2.5 6 mm2)
finely stranded		
 with conductor 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 (AW0	G 20 12)
 for auxiliary and control contacts 			
• solid		1x (0.5 .	2.5 mm2), 2x (0.5 1.0 mm2)
finely stranded			
with conductor end processing		1x (0.5 .	2.5 mm2), 2x (0.5 1.0 mm2)
without conductor final cutting		1x (0.5 .	2.5 mm2), 2x (0.5 1.0 mm2)
Conductor cross section that can be connected			
for main contacts			
• solid	mm²	1.5 6	
stranded wire			
 with conductor end processing 	mm²	1 10	
 for auxiliary and control contacts 			
• solid	mm²	0.5 2.5	
stranded wire			
with conductor end processing / minimum	mm²	0.5 2.5	
 without conductor final cutting 	mm²	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		ype 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	2
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	-		
with screw-type terminals	N∙m	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 Product Approval	Test Certificates		other
	Manufacture		Manufacturer

Further information:

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

Industry Mall (Online ordering system)

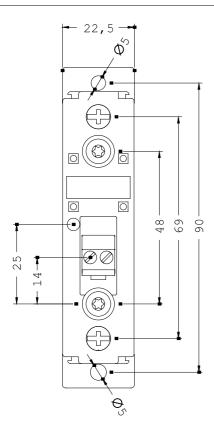
http://www.siemens.com/industrial-controls/mall

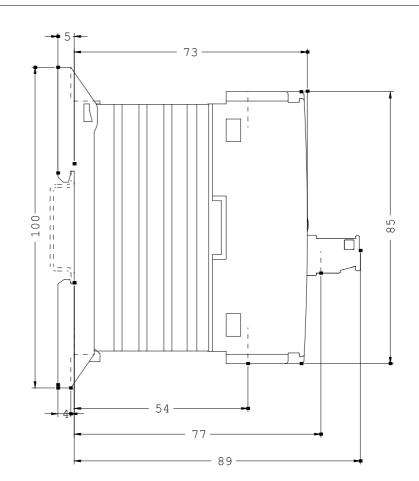
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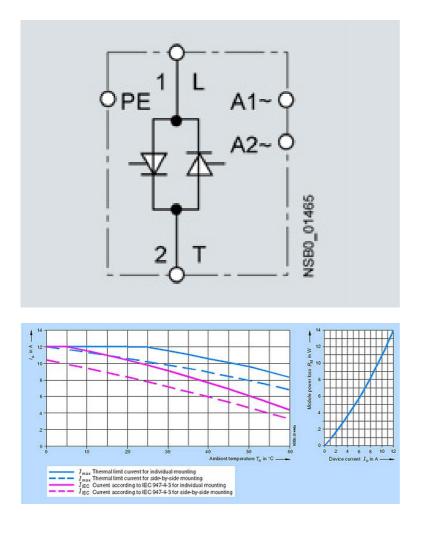
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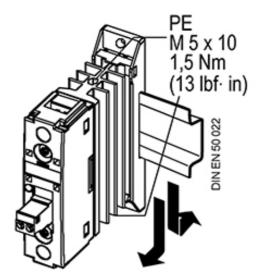
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RF2310-1AA24/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2310-1AA24









last change:

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