## SIEMENS

## **Product data sheet**

## 3RF2350-1AA22



SEMI-COND. CONTACTOR 3RF2,1-PH. AC 51 50 A 40 DEGREES C 24-230 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>3RF2950-0GA33</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				

<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		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	50
• at AC-51 / rated value	А	50
Operating current / minimum	mA	500
Operating voltage		
• at 50 Hz / at AC / rated value	V	24 230
• at 60 Hz / at AC / rated value	V	24 230
Working area related to the operating voltage	_	
• at 50 Hz / for AC	V	20 253
• at 60 Hz / for AC	V	20 253
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	1,000
Block voltage / at the thyristor / for main contacts / maximum permissible	V	800
Reverse current / of the thyristor	mA	10
Derating temperature	°C	40
Active power loss / total / typical	W	54
Resistance against the impulse current / rated value	А	1,150
l2t-level / maximum	A²·s	6,600
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
<ul> <li>at 60 Hz / for AC / final value for signal&lt;0&gt;-recognition</li> </ul>	V	40
Tolerance of the line frequency	Hz	5
Relative symmetrical tolerance / of the supply voltage frequency	%	10
Control current		
<ul> <li>at minimum control supply voltage / for AC</li> </ul>	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	67.5	
Height	mm	100	
Depth	mm	156	

Design of the electrical connection / for main current circuit screw-type terminals Design of the thread / of the connection screw / for main M4 contacts Tightening torque / for main contacts 2 ... 2.5 • with screw-type terminals N∙m Tightening torque (lbf-in) / for main contacts lbf∙in 18 ... 22 • with screw-type terminals 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)
<ul> <li>for auxiliary and control contacts</li> </ul>		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		
<ul> <li>with conductor end processi</li> <li>ng</li> </ul>		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
without conductor final cut     ting		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		
<ul> <li>with conductor end processing</li> </ul>	mm²	1 10
<ul> <li>for auxiliary and control contacts</li> </ul>		
• 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
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	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	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 Certific	ates other



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

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

Industry Mall (Online ordering system)

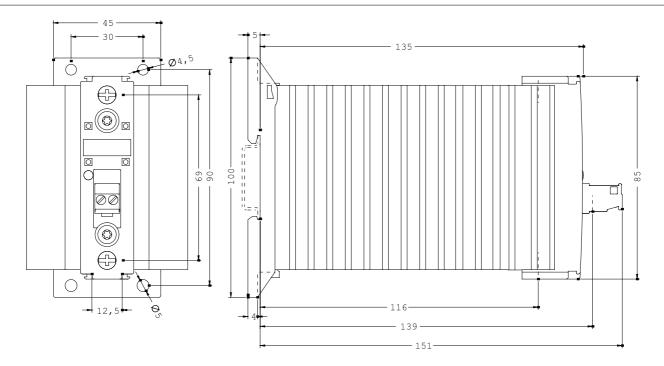
http://www.siemens.com/industrial-controls/mall

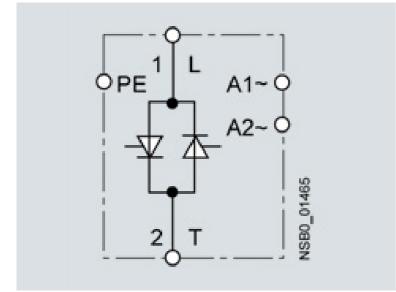
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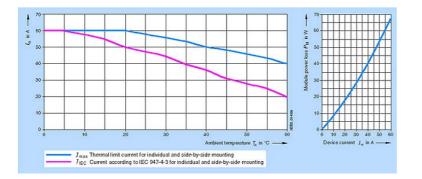
http://www.siemens.com/cax

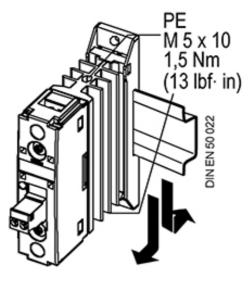
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RF2350-1AA22/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RF2350-1AA22









last change:

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