SIEMENS

Product data sheet 3RF2370-3AA22

SEMI-COND. CONTACTOR 3RF2,1-PH. AC 51 70 A $\,$ 40 DEGREES C 24-230 V $\,$ / 110-230 V AC RING 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		3RF2900-3PA88
Product designation / _4 / of the accessories that can be ordered		load monitoring
Manufacturer article number / _4 / of the accessories that can be ordered		3RF2990-0GA33
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 	Κ
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	Α	70
at AC-51 / rated value	Α	70
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	83
Resistance against the impulse current / rated value	Α	1,150
I2t-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
• 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 fixing
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	135
Height	mm	100
Depth	mm	157.5

Connections:		
Design of the electrical connection / for main current circuit		ring cable connection
Design of the thread / of the connection screw / for main contacts		M5
Tightening torque / for main contacts		
with screw-type terminals	N⋅m	2 2.5
Type of the connectable conductor cross-section		
• for main contacts / for JIS cable lug		JIS C 2805 R 2-5, 5,5-5, 8-5, 14-5
• for DIN cable lug / for main contacts		DIN 46234 -5-2,5, -5-6, -5-10, -5-16, -5-25
• for AWG conductors		
 for auxiliary and control contacts 		1x (AWG 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 processi ng 		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 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
Design of the electrical connection / for auxiliary and control current circuit		ring cable connection
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
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 Certificates other



ROSTEST



Manufacturer

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

CAx-Online-Generator

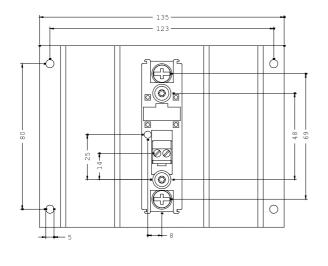
http://www.siemens.com/cax

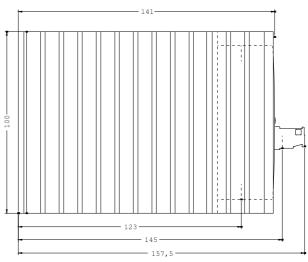
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

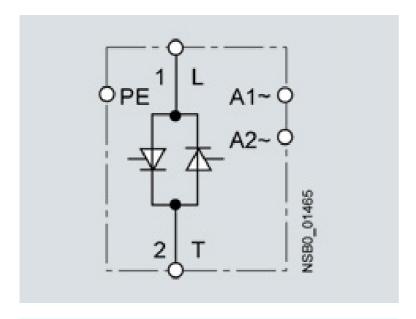
http://support.automation.siemens.com/WW/view/en/3RF2370-3AA22/all

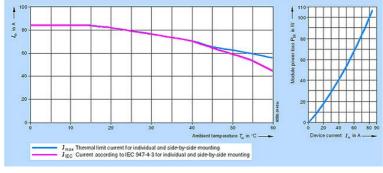
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

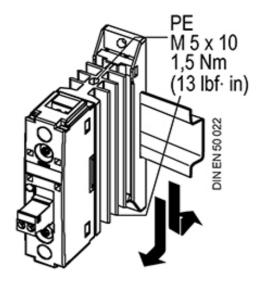
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2370-3AA22}}$











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