SIEMENS

Product data sheet

3RF2320-1BA06



SEMI-COND. CONTACTOR 3RF2,1-PH. AC 51 20A / AC15 12A 40 DEG. C 48-600 V / 24 V DC INSTANTANEOUS SWITCHING

General technical data:	
Product brand name	SIRIUS
product designation	solid-state contactor
Product function	instantaneous 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 / _2 / of the accessories that can be ordered	power regulator
Manufacturer article number / _2 / of the accessories that can be ordered	<u>3RF2920-0HA16</u>
Product designation / _3 / of the accessories that can be ordered	converter
Manufacturer article number / _3 / of the accessories that can be ordered	<u>3RF2900-0EA18</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>3RF2920-0GA16</u>

Product designation / _5 / of the accessories that can be		load monitoring, basis
ordered	-	
Manufacturer article number / _5 / of the accessories that can be ordered		<u>3RF2920-0FA08</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	20
• at AC-51 / rated value	А	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
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	1,600
Reverse current / of the thyristor	mA	10
Derating temperature	°C	40

Resistance against the impulse current / rated value	A	600
I2t-level / maximum	A²-s	1,800
Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC		
• initial rated value	V	15
• final rated value	V	24
Control supply voltage	_	
 for DC / final value for signal<0>-recognition 	V	5
Control current		
 at minimum control supply voltage / for DC 	mA	2
• for DC / 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	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 (Ibf-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 for auxiliary and control contacts for auxiliary and control contacts solid finely stranded with conductor end processing without conductor final cut ting Conductor cross section that can be connected for main contacts solid stranded wire with conductor end processing for auxiliary and control contacts 	mm² mm² mm²	2x (14 10) 1x (AWG 20 12) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6 1 10
 for auxiliary and control contacts solid finely stranded with conductor end processing without conductor final cut ting Conductor cross section that can be connected for main contacts solid stranded wire with conductor end processing 	mm²	1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6
 solid finely stranded with conductor end processing without conductor final cut ting Conductor cross section that can be connected for main contacts solid stranded wire with conductor end processing 	mm²	1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6
 finely stranded with conductor end processing ng without conductor final cut ting Conductor cross section that can be connected for main contacts solid stranded wire with conductor end processing 	mm²	1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6
 with conductor end processing without conductor final cut ting Conductor cross section that can be connected for main contacts solid stranded wire with conductor end processing 	mm²	1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6
ng • without conductor final cut ting Conductor cross section that can be connected • for main contacts • solid • stranded wire • with conductor end processing	mm²	1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2) 1.5 6
without conductor final cut ting Conductor cross section that can be connected ofor main contacts solid stranded wire with conductor end processing	mm²	1.5 6
ting Conductor cross section that can be connected • for main contacts • solid • stranded wire • with conductor end processing	mm²	1.5 6
 for main contacts solid stranded wire with conductor end processing 	mm²	
 solid stranded wire with conductor end processing 	mm²	
stranded wire with conductor end processing	mm²	
with conductor end processing		1 10
		1 10
 for auxiliary and control contacts 	mm²	
	mm²	
• solid		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	cates other
	Manufacturer	er <u>Manufacturer</u>

Further information:

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

Industry Mall (Online ordering system)

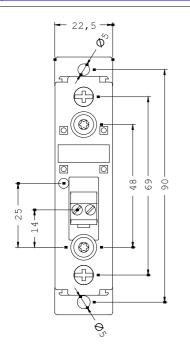
http://www.siemens.com/industrial-controls/mall

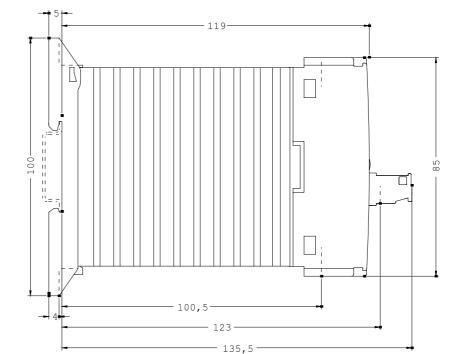
CAx-Online-Generator

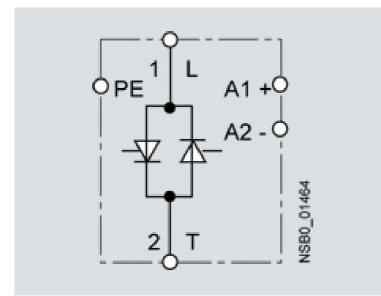
http://www.siemens.com/cax

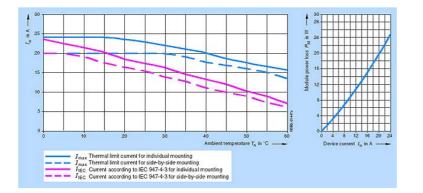
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RF2320-1BA06/all

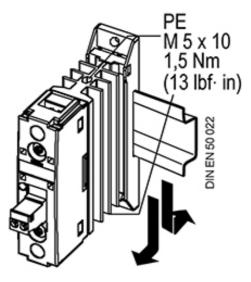
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2320-1BA06











last change:

Aug 22, 2011