SIEMENS

Data sheet

3RF21 50-1AA04



SEMICONDUCTOR RELAY 3RF2, 1-PH. WIDTH 22.5MM, 50 A 48-460 V / 24 V DC SCREW TERMINAL

General technical data:	
product brand name	SIRIUS
Product designation	solid-state relay
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 _2 of the accessories that can be ordered	power regulator
Manufacturer article number _2 of the accessories that can be ordered	<u>3RF2950-0HA16</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>3RF2950-0GA16</u>
Product designation _5 of the accessories that can be ordered	load monitoring, basis
Manufacturer article number _5 of the accessories that can be ordered	<u>3RF2920-0FA08</u>
Ambient temperature	

• during storage *C -55 +80 Installation altitude at height above sea level maximum m 1000 Vibration resistance acc. to IEC 60068-2-6 2g Shock resistance acc. to IEC 60068-2-7 15g / 11 ms Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 K Equipment marking acc. to DIN EN 61346-2 Q Number of NC contacts for auxiliary contacts 0 Number of NO contacts for auxiliary contacts 0 Number of NO contacts for main contacts 0 Operating current 1 • Rated value maximum A 50 • at AC-51 Rated value A 50 Operating outrage with AC v 48 460 • at 60 Hz Rated value V 48 460 • at 60 Hz V 40 506 Operating range relative to the operating voltage with AC 10 • at 50 Hz V 40 506 • at 60 Hz V 40 506 Operating range relative to the operating voltage with AC 100 • at 60 Hz V 40 506 Operating frequency Rated value V	 during operation 	°C	-25 +60
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Derating temperature°C40Active power loss total typicalW66Apparent power loss maximumV·A66			10
Active power loss total typical W 66 Apparent power loss maximum V·A 66			
Apparent power loss maximum V·A 66	•	_	
	-		
		A∹s	
Short-circuit protection, design of the fuse link	Short-circuit protection, design of the fuse link		
Control circuit/ Control:	Control circuit/ Control:		
Type of voltage of the control supply voltage DC	Type of voltage of the control supply voltage		DC

Control supply voltage 1		
• for DC		
— Initial rated value	V	15
— Final rated value	V	24
Control supply voltage		
 for DC Full-scale value for signal<0> recognition 	V	5
Control current		
 at minimum control supply voltage 		
— for DC	mA	2
• for DC Rated value	mA	15

Installation/ mounting/ dimensions:

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Mounting type		screw fixing
Mounting type Side-by-side mounting		Yes
Design of the thread of the screw for securing the equipment		M4
Tightening torque of the screw for securing the equipment	N∙m	1.5
Width	mm	22.5
Height	mm	85
Depth	mm	48

Connections/ Terminals:		
Type of 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	7 10.3
Type of connectable conductor cross-section		
 for main contacts 		
— solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
— finely stranded		
— with core 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 (AWG 20 12)
 for auxiliary and control contacts 		
— solid		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
— finely stranded		
— with core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
— without core end processing		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)

Connectable conductor cross-section		
 for main contacts 		
— single or multi-stranded	mm²	1.5 6
— finely stranded		
— with core end processing	mm²	1 10
 for auxiliary and control contacts 		
— solid	mm²	0.5 2.5
— finely stranded		
— with core end processing	mm²	0.5 2.5
- without core end processing	mm²	0.5 2.5
AWG number as coded connectable conductor cross		14 10
section for main contacts		
Type of electrical connection for auxiliary and control current circuit		screw-type terminals
Design of the thread of the connection screw of the		МЗ
auxiliary and control contacts		
AWG number as coded connectable conductor cross		20 12
section for auxiliary and control contacts		
Wire stripping length of the cable		
 for main contacts 	mm	7
 for auxiliary and control contacts 	mm	7
Tightening torque for auxiliary and control contacts	N∙m	0.5 0.6
with screw-type terminals		
Tightening torque [lbf·in] for auxiliary and control	lbf∙in	4.5 5.3
contacts with screw-type terminals		

Certificates/ approvals:

0	ertineatee, appre	vale.				
	General Produ	ct Approval		EMC	Declaration of	Test
					Conformity	Certificates
	SP CSA	GAU® UR	EHE	С-тіск	EG-Konf.	<u>Type Test</u> Certificates/Test <u>Report</u>

Test Certificates	other
Special Test	Environmental
Certificate	Confirmations

Further information

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

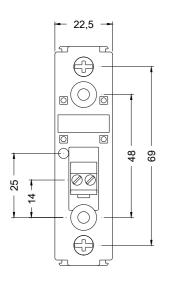
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

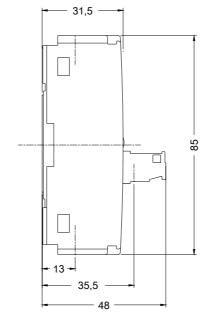
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF21501AA04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RF21501AA04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attlD9=3RF21501AA04&lang=en





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