



LOAD MONITORING BASIS CURRENT RANGE 20A  
40 DEGREES C CONTROL VOLTAGE 24 V DC FOR  
SEMICON. RELAY/CONTACTOR OUTPUT NO

### General technical data:

product brand name		SIRIUS
Product designation		load monitoring, basis
Product function		solid-state relay / solid-state contactor 3RF2
Number of poles for main current circuit		0
Protection class IP		IP20
Product designation _1 of the accessories that can be ordered		sealable end cover
Manufacturer article number _1 of the accessories that can be ordered		<a href="#">3RF2900-0RA88</a>
Hole diameter of the current transformer	mm	7
Number of partial loads for load monitoring		6
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-55 ... +80
Installation altitude at height above sea level maximum	m	1 000
Vibration resistance acc. to IEC 60068-2-6		2g
Shock resistance acc. to IEC 60068-2-27		15g / 11 ms
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		A
Equipment marking acc. to DIN EN 61346-2		B

### Main circuit:

Number of NO contacts for main contacts		0
Number of NC contacts for main contacts		0
Operating current		

• at AC-1 at 400 V Rated value	A	20
<b>Derating temperature</b>	°C	40
Operating frequency Rated value	Hz	50 ... 60
<b>Relative symmetrical tolerance of the operating frequency</b>	%	10
<b>Insulation voltage Rated value</b>	V	600
<b>Partial load for load monitoring</b>	A	0.65
<b>Current measuring range</b>	A	0 ... 22

#### Control circuit/ Control:

<b>Type of voltage</b>		DC
<b>Control supply voltage</b>		
• for DC		
— Rated value	V	24 ... 24
— Full-scale value for signal<0> recognition	V	12
<b>Relative symmetrical tolerance of the supply voltage frequency</b>	%	10
<b>Control current</b>		
• for DC Rated value	mA	25
<b>Response delay</b>	s	0.1 ... 0.1

#### Auxiliary circuit:

<b>Number of NC contacts for auxiliary contacts</b>		0
<b>Number of NO contacts for auxiliary contacts</b>		0
<b>Number of CO contacts for auxiliary contacts</b>		0
Operating voltage of the auxiliary contacts		
• for DC	V	15 ... 24
Operating current of the auxiliary contacts		
• for DC	mA	1 ... 50
<b>Voltage drop at digital output at the clearance between open contacts for signal &lt;1&gt;</b>	mV	1
<b>Output current at digital output with signal &lt;0&gt; maximum</b>	µA	200

#### Installation/ mounting/ dimensions:






<b>Mounting type</b>		clip-on
<b>Mounting type Side-by-side mounting</b>		Yes
<b>Width</b>	mm	22.5
<b>Height</b>	mm	101.5
<b>Depth</b>	mm	67

#### Connections/ Terminals:

<b>Type of electrical connection</b>		
• for auxiliary and control current circuit		screw-type terminals
<b>Design of the thread of the connection screw of the auxiliary and control contacts</b>		M3

<b>Type of connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for auxiliary and control contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded <ul style="list-style-type: none"> <li>— with core end processing</li> <li>— without core end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors for auxiliary and control contacts</li> </ul>		<p>1x (0.5 ... 2.5 mm<sup>2</sup>), 2x (0.5 ... 1.0 mm<sup>2</sup>)</p> <p>1x (0.5 ... 2.5 mm<sup>2</sup>), 2x (0.5 ... 1.0 mm<sup>2</sup>)</p> <p>1x (0.5 ... 2.5 mm<sup>2</sup>), 2x (0.5 ... 1.0 mm<sup>2</sup>)</p> <p>1x (AWG 20 ... 12)</p>
<b>Connectable conductor cross-section for auxiliary and control contacts</b>		
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded <ul style="list-style-type: none"> <li>— with core end processing</li> <li>— without core end processing</li> </ul> </li> </ul>	mm <sup>2</sup>	0.5 ... 2.5
	mm <sup>2</sup>	0.5 ... 2.5
	mm <sup>2</sup>	0.5 ... 2.5
<b>AWG number as coded connectable conductor cross section for auxiliary and control contacts</b>		12 ... 20
<b>Wire stripping length of the cable for auxiliary and control contacts</b>	mm	7
<b>Tightening torque for auxiliary and control contacts with screw-type terminals</b>	N·m	0.5 ... 0.6
<b>Tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals</b>	lbf·in	4.5 ... 5.3

#### Certificates/ approvals:

General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CSA	 UL		 C-TICK
		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

#### other

[Environmental 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

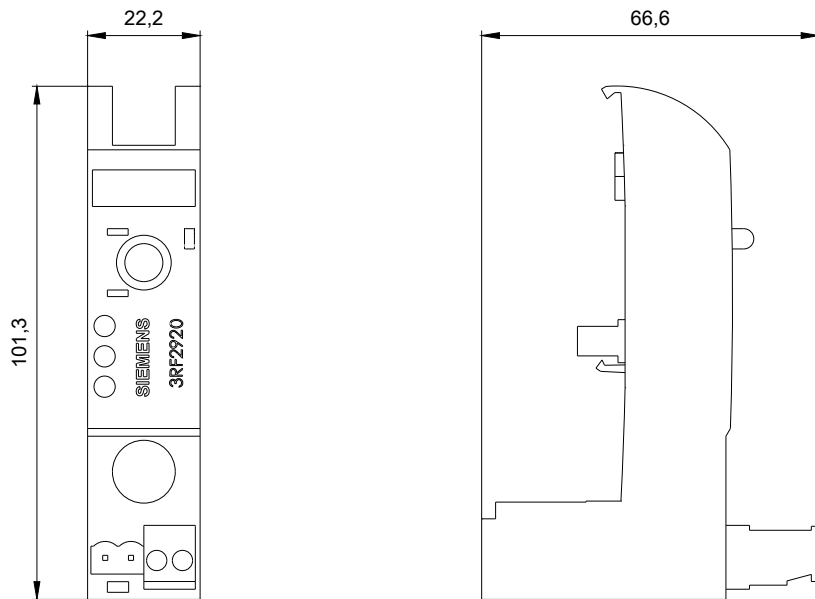
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF29200FA08>

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

<http://support.automation.siemens.com/WW/view/en/3RF29200FA08/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF29200FA08&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF29200FA08&lang=en)



last modified:

12.03.2015