

Load monitoring Current range 50 A / 40 °C 400-600 V / 24 V AC/DC for semiconductor relay / contactor



<b>Product brand name</b>	SIRIUS
<b>Product designation</b>	load monitoring
<b>Manufacturer's article number</b>	
• _1 / of the accessories that can be ordered	<a href="#">3RF2900-0RA88</a>
<b>Product designation</b>	
• _1 / of the accessories that can be ordered	sealable end cover

General technical data	
<b>Product function</b>	solid-state relay / solid-state contactor 3RF2
<b>Insulation voltage</b>	
• rated value	600 V
<b>Degree of pollution</b>	3
<b>Protection class IP</b>	IP20
Shock resistance / acc. to IEC 60068-2-27	15g / 11 ms
Vibration resistance / acc. to IEC 60068-2-6	2g
<b>Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750</b>	A
<b>Reference code / acc. to DIN EN 81346-2</b>	B
<b>Reference code / acc. to DIN EN 61346-2</b>	B

### Main circuit

<b>Number of poles / for main current circuit</b>	0
<b>Number of NO contacts / for main contacts</b>	0
<b>Number of NC contacts / for main contacts</b>	0
<b>Operating voltage / at AC</b>	
• at 50 Hz / rated value	400 ... 600 V
• at 60 Hz / rated value	400 ... 600 V
<b>Operating frequency / rated value</b>	50 ... 60 Hz
<b>Relative symmetrical tolerance / of the operating frequency</b>	10 %
<b>Operating range relative to the operating voltage / at AC</b>	
• at 50 Hz	340 ... 660 V
• at 60 Hz	340 ... 660 V
<b>Operating current</b>	
• at AC-51 / rated value	50 A
<b>Derating temperature</b>	40 °C

#### Control circuit/ Control

<b>Control supply voltage / 1</b>	
• at DC	24 V
<b>Control supply voltage / at AC</b>	
• at 50 Hz / Full-scale value for signal<0> recognition	5 V
• at 60 Hz / Full-scale value for signal<0> recognition	5 V
<b>Control supply voltage</b>	
• at DC / Full-scale value for signal<0> recognition	5 V
<b>Symmetrical line frequency tolerance</b>	5 Hz
<b>Control current / at minimum control supply voltage</b>	
• at AC	2 mA
• at DC	2 mA
Control current / at AC / rated value	40 mA
Control current / at DC / rated value	40 mA
<b>Number of NC contacts / for auxiliary contacts</b>	1
<b>Number of NO contacts / for auxiliary contacts</b>	1
Number of CO contacts / for auxiliary contacts	1

#### Installation/ mounting/ dimensions

<b>Mounting type</b>	clip-on
• Side-by-side mounting	Yes
<b>Height</b>	111.5 mm
<b>Width</b>	45 mm
<b>Depth</b>	69.5 mm

<b>Installation altitude / at height above sea level / maximum</b>	1 000 m
<b>Connections/ Terminals</b>	
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>	screw-type terminals
<b>Type of connectable conductor cross-sections</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 / with core end processing</li> <li>— finely stranded / without core end processing</li> </ul> </li> <li>• at AWG conductors / for auxiliary and control contacts</li> </ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )  1x (AWG 20 ... 12)
<b>Tightening torque</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control contacts / with screw-type terminals</li> </ul>	0.5 ... 0.6 N·m
<b>Tightening torque [lbf·in]</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control contacts / with screw-type terminals</li> </ul>	4.5 ... 5.3 lbf·in
<b>Design of the thread / of the connection screw</b>	
<ul style="list-style-type: none"> <li>• of the auxiliary and control contacts</li> </ul>	M3
<b>Wire stripping length / of the cable</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control contacts</li> </ul>	7 mm
<b>Ambient conditions</b>	
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	-25 ... +60 °C -55 ... +80 °C
<b>Electromagnetic compatibility</b>	
<b>Conducted interference</b>	
<ul style="list-style-type: none"> <li>• due to burst / acc. to IEC 61000-4-4</li> <li>• due to conductor-earth surge / acc. to IEC 61000-4-5</li> <li>• due to conductor-conductor surge / acc. to IEC 61000-4-5</li> <li>• due to high-frequency radiation / acc. to IEC 61000-4-6</li> </ul>	2 kV / 5 kHz behavior criterion 2 2 kV behavior criterion 2 1 kV behavior criterion 2 140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
<b>Electrostatic discharge / acc. to IEC 61000-4-2</b>	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
<b>Conducted HF-interference emissions / acc. to CISPR11</b>	Class A for industrial environment
<b>Field-bound HF-interference emission / acc. to CISPR11</b>	Class B for the domestic, business and commercial environments

## Further information

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

<https://www.siemens.com/ic10>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RF2950-0GA16>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RF2950-0GA16>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2950-0GA16>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RF2950-0GA16&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RF2950-0GA16&lang=en)

