



\*\*\*phase-out type\*\*\* extended load monitoring current range 90 A / 40 °C 110 ... 230 V / 110 V AC for semiconductor relay/contactors

<b>product brand name</b>	SIRIUS
<b>product designation</b>	extended load monitoring
<b>manufacturer's article number</b>	
<ul style="list-style-type: none"> <li>_1 of the accessories that can be ordered</li> </ul>	<a href="#">3RF2900-0RA88</a>
<b>product designation</b>	
<ul style="list-style-type: none"> <li>_1 of the accessories that can be ordered</li> </ul>	sealable end cover
<b>General technical data</b>	
<b>product function</b>	solid-state relay / solid-state contactor 3RF2
<b>power loss [W] for rated value of the current</b>	
<ul style="list-style-type: none"> <li>without load current share typical</li> </ul>	2.2 W
<b>insulation voltage rated value</b>	600 V
<b>degree of pollution</b>	3
surge voltage resistance of main circuit rated value	2.5 kV
<b>protection class IP</b>	IP20
protection class IP on the front according to IEC 60529	IP20
<b>shock resistance according to IEC 60068-2-27</b>	15 g / 11 ms
<b>vibration resistance according to IEC 60068-2-6</b>	2 g
<b>reference code according to IEC 81346-2</b>	B
<b>Substance Prohibitance (day/month/year)</b>	05/01/2012
<b>SVHC substance name</b>	Lead monoxide (lead oxide) CAS-No. 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol CAS-No. 119-47-1
<b>Net Weight</b>	0.13 kg
<b>Main circuit</b>	
<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
operating voltage at AC	
<ul style="list-style-type: none"> <li>at 50 Hz rated value</li> </ul>	110 ... 230 V
<ul style="list-style-type: none"> <li>at 60 Hz rated value</li> </ul>	110 ... 230 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>	
<ul style="list-style-type: none"> <li>at 50 Hz</li> </ul>	93.5 ... 253 V
<ul style="list-style-type: none"> <li>at 60 Hz</li> </ul>	93.5 ... 253 V
<b>operational current</b>	
<ul style="list-style-type: none"> <li>at AC-51 rated value</li> </ul>	90 A
<b>derating temperature</b>	40 °C
<b>teach range current initial value</b>	2.93 A
<b>teach range current full-scale value</b>	90 A

partial load for load monitoring	2.9 A
<b>Control circuit/ Control</b>	
type of voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	90 ... 121 V
• at 60 Hz rated value	90 ... 121 V
control supply voltage at AC	
• at 50 Hz full-scale value for signal<0> recognition	15 V
• at 60 Hz full-scale value for signal<0> recognition	15 V
supply voltage frequency for auxiliary and control circuit rated value	50 ... 60 Hz
symmetrical line frequency tolerance	5 Hz
control current at minimum control supply voltage	
• at AC	2 mA
control current at AC rated value	20 mA
<b>Auxiliary circuit</b>	
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	1
<b>Installation/ mounting/ dimensions</b>	
fastening method side-by-side mounting	Yes
fastening method	clip-on
height	111.5 mm
width	45 mm
depth	69.5 mm
<b>Connections/ Terminals</b>	
type of electrical connection	
• for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
• for auxiliary and control contacts	
— solid	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )
— finely stranded with core end processing	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )
— finely stranded without core end processing	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1 mm <sup>2</sup> )
• for AWG cables for auxiliary and control contacts	1x (20 ... 12)
tightening torque for auxiliary and control contacts with screw-type terminals	0.5 ... 0.6 N·m
tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals	4.5 ... 5.3 lbf·in
design of the thread of the connection screw of the auxiliary and control contacts	M3
stripped length of the cable for auxiliary and control contacts	7 mm
<b>Electrical Safety</b>	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	1 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
<b>Electromagnetic compatibility</b>	
conducted interference	
• due to burst according to IEC 61000-4-4	2 kV / 5 kHz, behavior criterion 2
• due to conductor-earth surge according to IEC 61000-4-5	2 kV, behavior criterion 2
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV, behavior criterion 2
• due to high-frequency radiation according to IEC 61000-4-6	140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
conducted HF interference emissions according to CISPR11	Class A for industrial environment
field-bound HF interference emission according to CISPR11	Class B for the domestic, business and commercial environments

Approvals Certificates

Environment	General Product Approval
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[Environmental Confirmations](#)



EMV	Test Certificates	other
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[Type Test Certificates/Test Report](#)

[Confirmation](#)

[Confirmation](#)



Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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?mlfb=3RF2990-0GA33>

Cax online generator

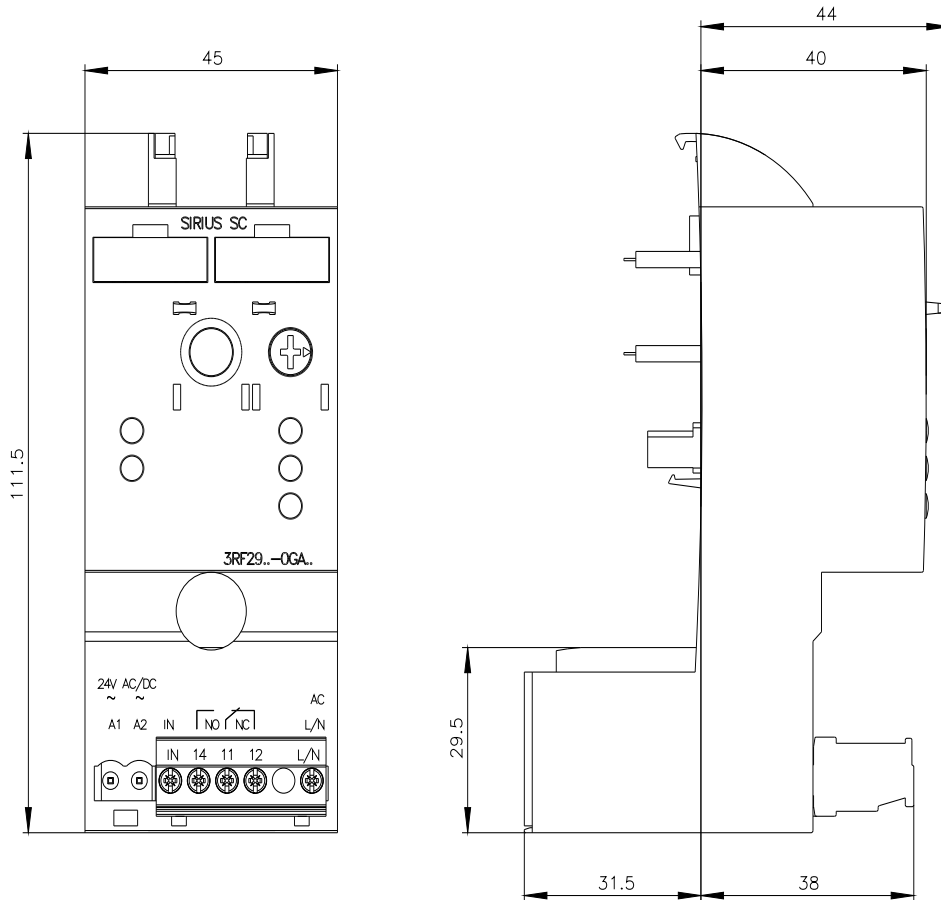
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2990-0GA33>

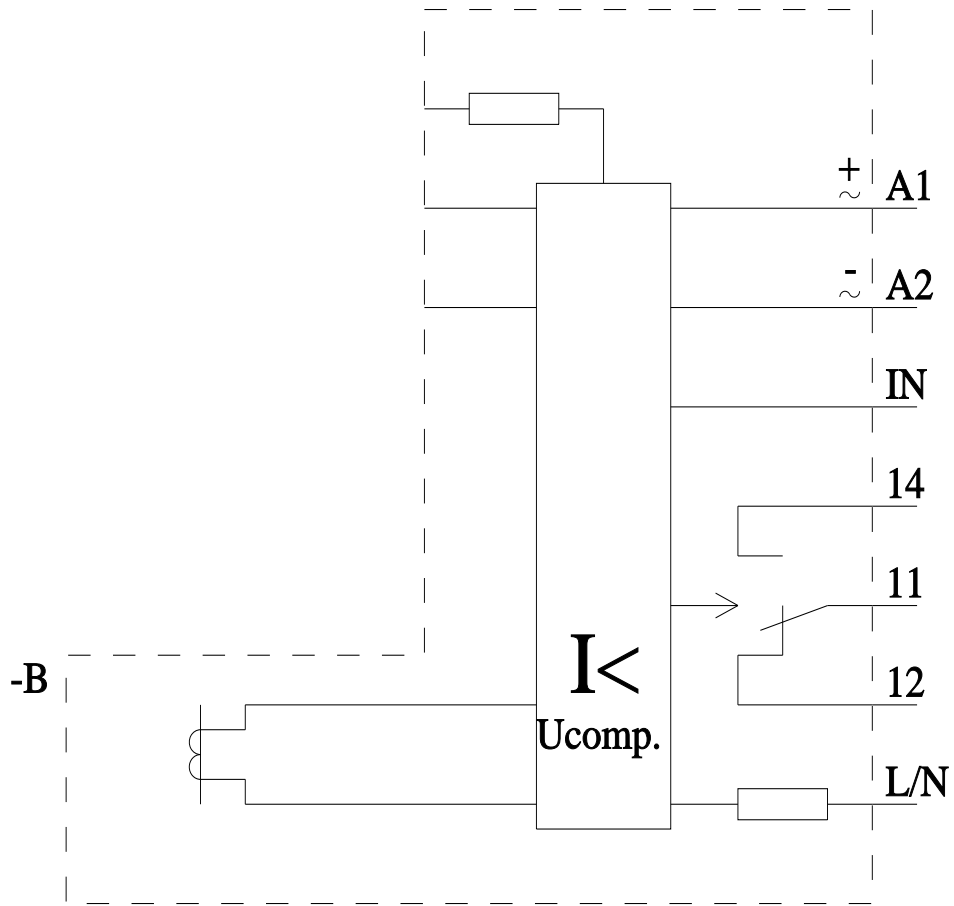
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2990-0GA33>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF2990-0GA33&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2990-0GA33&lang=en)





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