



HEATING CURRENT MONITORING CURRENT RANGE 16 A 40 DEG. C 110-230 V / 24 V AC/DC FOR SOLID STATE RELAY/CONTACTOR REMOTE TEACH / W/O CONTROL CON. CUSTOMIZED VERSION

**General technical data:**

<b>product brand name</b>		SIRIUS
<b>product designation</b>		heating current monitoring
<b>Product function</b>		solid-state relay / solid-state contactor 3RF2 with standby
<b>Number of poles / for main current circuit</b>		0
<b>Protection class IP</b>		IP20
<b>Product designation / _1 / of the accessories that can be ordered</b>		sealable end cover
<b>Manufacturer article number / _1 / of the accessories that can be ordered</b>		<a href="#">3RF2900-0RA88</a>
<b>Hole diameter / of the current transformer</b>	mm	17
<b>Number of partial loads / for load monitoring</b>		6
<b>Ambient temperature</b>		
• during operating	°C	-25 ... +60
• during storage	°C	-55 ... +80
<b>Installation altitude / at a height over sea level / maximum</b>	m	1,000
<b>Resistance against vibration / according to IEC 60068-2-6</b>		2g
<b>Resistance against shock / according to IEC 60068-2-27</b>		15g / 11 ms
<b>Item designation</b>		

- according to DIN 40719 extendable after IEC 204-2 / according to IEC 750
- according to DIN EN 61346-2

A

B

**Main circuit:**

<b>Number of NO contacts / for main contacts</b>		0
<b>Number of NC contacts / for main contacts</b>		0
<b>Operating current</b>		
• at AC-1 / at 400 V / rated value	A	16
<b>Derating temperature</b>	°C	40
<b>Operating voltage</b>		
• at 50 Hz / at AC / rated value	V	110 ... 230
• at 60 Hz / at AC / rated value	V	110 ... 230
<b>Working area related to the operating voltage</b>		
• at 50 Hz / for AC	V	93.5 ... 253
• at 60 Hz / for AC	V	93.5 ... 253
<b>Operating frequency</b>		
• rated value	Hz	50 ... 60
<b>Relative symmetrical tolerance / of the operation frequency</b>	%	10
<b>Insulation voltage / rated value</b>	V	600
<b>Kompensation of the mains voltage swing</b>	%	20
<b>Partial load / for load monitoring</b>	A	0.42
<b>Metering range current</b>	A	0 ... 16





**Control circuit:**

<b>type of voltage</b>		AC/DC
<b>Control supply voltage</b>		
• for DC / rated value	V	24 ... 24
• at 50 Hz / at AC / rated value	V	24 ... 24
• at 60 Hz / at AC / rated value	V	24 ... 24
• at 50 Hz / for AC / final value for signal<0>-recognition	V	14
• at 60 Hz / for AC / final value for signal<0>-recognition	V	14
• for DC / final value for signal<0>-recognition	V	15
<b>Supply voltage frequency / for auxiliary and control current circuit</b>		
• rated value	Hz	50 ... 60
<b>Tolerance of the line frequency</b>	Hz	5
<b>Relative symmetrical tolerance / of the supply voltage frequency</b>	%	10
<b>Control current / for AC / rated value</b>	mA	40
<b>Control current / for DC / rated value</b>	mA	40

<b>Response delay time</b>	s	0.1 ... 3
<b>Auxiliary circuit:</b>		
<b>Number of NC contacts / for auxiliary contacts</b>		1
<b>Number of NO contacts / for auxiliary contacts</b>		0
<b>Number of change-over switches / for auxiliary contacts</b>		0
<b>Operating voltage / of the auxiliary contacts</b>		
• for AC	V	15 ... 30
• for DC	V	15 ... 30
<b>Operating current / of the auxiliary contacts</b>		
• for AC	mA	5 ... 1,000
• for DC	mA	5 ... 1,000
<b>Installation/mounting/dimensions:</b>		
<b>Type of mounting</b>		clip-on
<b>Type of fixing/fixation / series installation</b>		Yes
<b>Width</b>	mm	45
<b>Height</b>	mm	111.5
<b>Depth</b>	mm	69.5
<b>Connections:</b>		
<b>Design of the 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 pins</b>		M3
<b>Type of the connectable conductor cross-section</b>		
• for auxiliary and control contacts		
• solid		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )
• without conductor final cutting		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )
• for AWG conductors / for auxiliary and control contacts		1x (AWG 20 ... 12)
<b>Conductor cross-section that can be connected / for auxiliary and control contacts</b>		
• solid	mm <sup>2</sup>	0.5 ... 2.5
• stranded wire		
• with conductor end processing /	mm <sup>2</sup>	0.5 ... 2.5
• without conductor final cutting	mm <sup>2</sup>	0.5 ... 2.5
<b>AWG number / as coded connectable conductor cross-section</b>		
• for auxiliary and control contacts		12 ... 20
<b>Skinning length / of the cable / for auxiliary and control contacts</b>	mm	7

<b>Tightening torque / for auxiliary and control contacts</b> • with screw-type terminals	N-m	0.5 ... 0.6
<b>Tightening torque (lbf-in) / for auxiliary and control contacts</b> • with screw-type terminals	lbf-in	4.5 ... 5.3

#### Certificates/approvals:

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

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/industrial-controls/mall>

**CAX-Online-Generator**

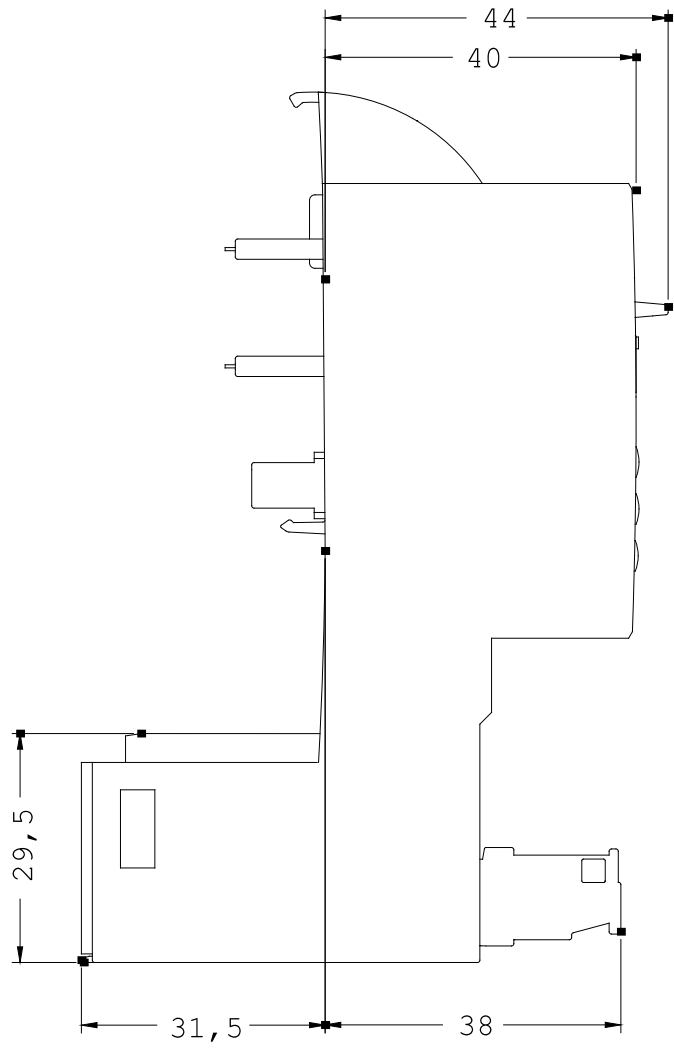
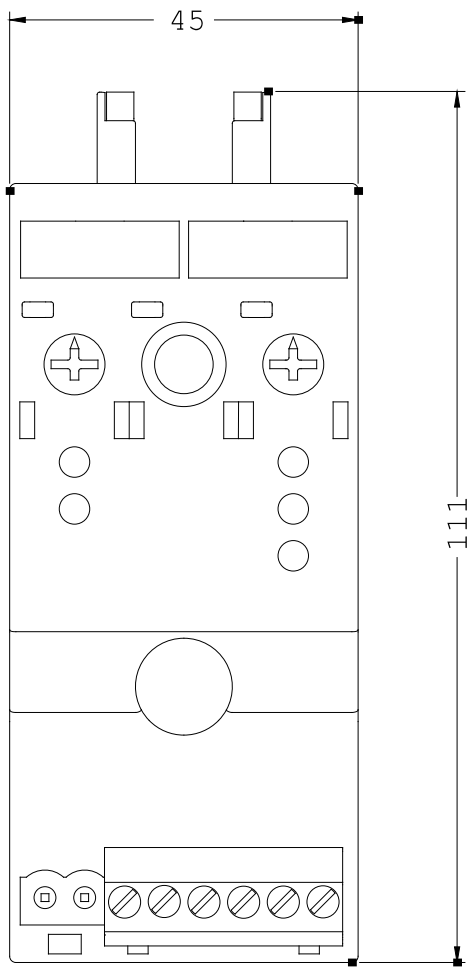
<http://www.siemens.com/cax>

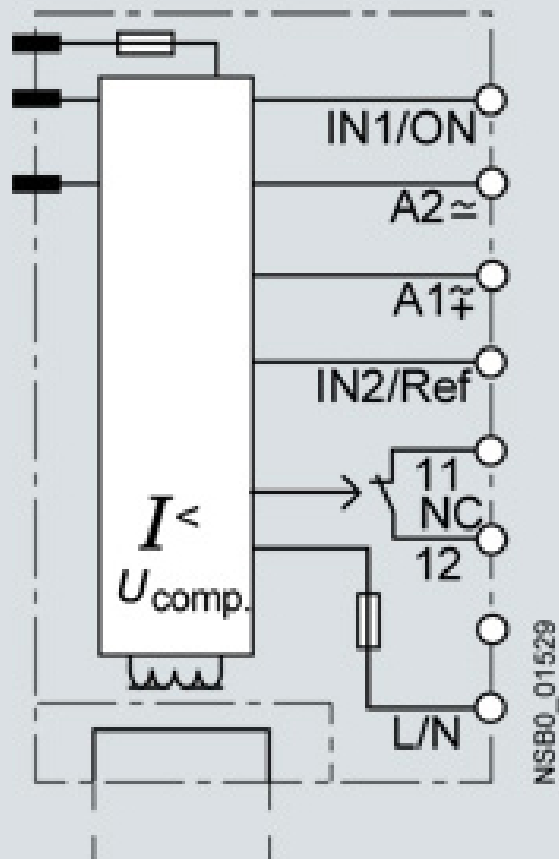
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WWW/view/en/3RF2916-0JA13-1KK0/all>

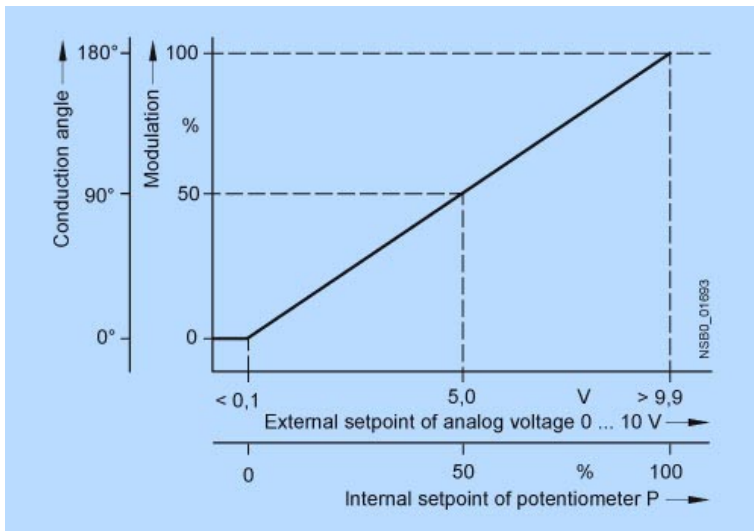
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RF2916-0JA13-1KK0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2916-0JA13-1KK0)





- ① Internal connection
- ② Straight-through transformer
- ③ Voltage detection not electrically isolated (3 M $\Omega$  per path)



last change:

Feb 18, 2013