



HEATER CURRENT MONITORING CURRENT RANGE  
16A 40 DEG. C 110-230V / 24V AC/DC FOR  
SEMICOND. RELAY / CONTACTOR REMOTE / W/O  
CONTROL CONNECT.

### General technical data:

product brand name		SIRIUS
Product designation		heating current monitoring
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	17
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	16
<b>Derating temperature</b>	°C	40
Operating voltage with AC		
• at 50 Hz Rated value	V	110 ... 230
• at 60 Hz Rated value	V	110 ... 230
Operating range relative to the operating voltage with AC		
• at 50 Hz	V	93.5 ... 253
• at 60 Hz	V	93.5 ... 253
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>Compensation of the supply voltage fluctuations</b>	%	20
<b>Partial load for load monitoring</b>	A	0.42
<b>Current measuring range</b>	A	0 ... 16

#### Control circuit/ Control:

<b>Type of voltage</b>		AC/DC
<b>Control supply voltage</b>		
• for DC		
— Rated value	V	24 ... 24
— Full-scale value for signal<0> recognition	V	15
• with AC		
— at 50 Hz		
— Rated value	V	24 ... 24
— Full-scale value for signal<0> recognition	V	14
— at 60 Hz		
— Rated value	V	24 ... 24
— Full-scale value for signal<0> recognition	V	14
Supply voltage frequency for auxiliary and control current circuit Rated value	Hz	50 ... 60
<b>Symmetrical line frequency tolerance</b>	Hz	5
<b>Relative symmetrical tolerance of the supply voltage frequency</b>	%	10
<b>Control current</b>		
• with AC Rated value	mA	40
• for DC Rated value	mA	40
<b>Response delay</b>	s	0.1 ... 3

#### Auxiliary circuit:

<b>Number of NC contacts for auxiliary contacts</b>		1
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<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		
• with AC	V	15 ... 30
• for DC	V	15 ... 30
Operating current of the auxiliary contacts		
• with AC	mA	5 ... 1 000
• for DC	mA	5 ... 1 000

#### Installation/ mounting/ dimensions:

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

#### Connections/ Terminals:

<b>Type of electrical connection</b>		screw-type terminals
• for auxiliary and control current circuit		
<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>		
• 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 core end processing		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> )
— without core end processing		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>Connectable conductor cross-section for auxiliary and control contacts</b>		
• solid	mm <sup>2</sup>	0.5 ... 2.5
• finely stranded		
— with core end processing	mm <sup>2</sup>	0.5 ... 2.5
— without core end processing	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
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[Type Test Certificates/Test Report](#)

**other**

[Environmental Confirmations](#)

**Further information**

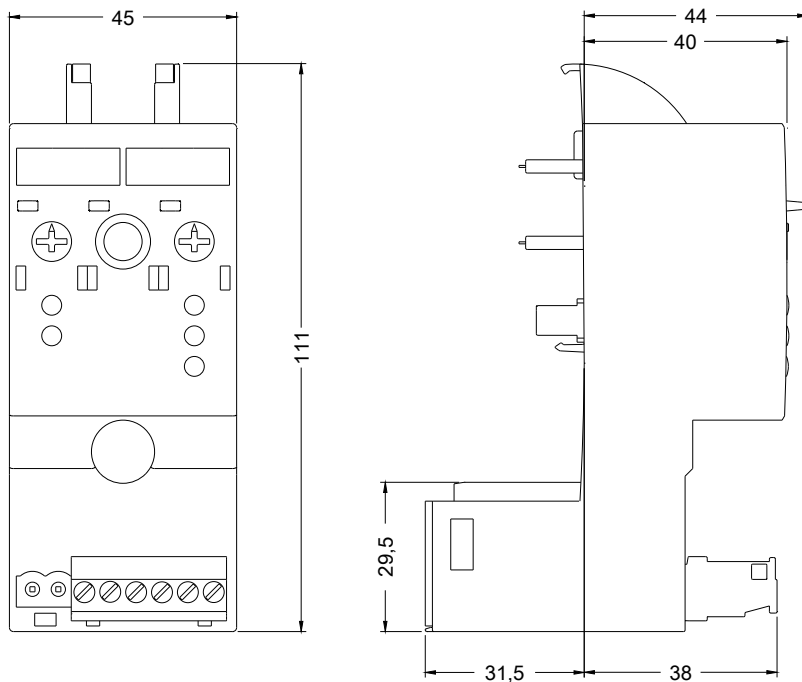
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**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
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**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
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