

Power regulator Current range 20 A / 40 °C 110-230 V / 110 V AC for semiconductor relay / contactor



General technical data		
Product brand name		SIRIUS
Product designation		power regulator
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's article number _1 of the accessories that can be ordered		<a href="#">3RF2900-0RA88</a>
Product designation _2 of the accessories that can be ordered		input reactor / 1AC
Manufacturer's article number _2 of the accessories that can be ordered		<a href="#">4EM4700-8CB00</a>
Hole diameter of the current transformer	mm	17
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
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		A
Reference code acc. to DIN EN 61346-2		K

### 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
Derating temperature	°C	40
Operating voltage at AC		
• at 50 Hz rated value	V	110 ... 230
• at 60 Hz rated value	V	110 ... 230
Operating range relative to the operating voltage at AC		
• at 50 Hz	V	93.5 ... 253
• at 60 Hz	V	93.5 ... 253
Operating frequency rated value	Hz	50 ... 60
Relative symmetrical tolerance of the operating frequency	%	10
Insulation voltage rated value	V	600
Compensation of the supply voltage fluctuations	%	20
Teach range current	A	4 ... 20
Current measuring range	A	0 ... 22

### Control circuit/ Control

Type of voltage		AC
Control supply voltage		
• at AC		
— at 50 Hz		
— rated value	V	90 ... 121
— Full-scale value for signal<0> recognition	V	15
— at 60 Hz		
— rated value	V	90 ... 121
— Full-scale value for signal<0> recognition	V	15
Supply voltage frequency for auxiliary and control current circuit rated value	Hz	50 ... 60
Symmetrical line frequency tolerance	Hz	5
Relative symmetrical tolerance of the supply voltage frequency	%	10
Control current		

• at AC rated value	mA	20
Operating voltage at the analog input	V	-1 ... +11
Source resistance at the analog input	$\Omega$	8 000

#### Auxiliary circuit

Number of NC contacts for auxiliary contacts		1
Number of NO contacts for auxiliary contacts		0
Number of CO contacts for auxiliary contacts		0
Operating voltage of auxiliary contacts		
• at AC	V	90 ... 121
• at DC	V	90 ... 121
Operating current of auxiliary contacts		
• at AC	mA	5 ... 1 000
• at DC	mA	5 ... 1 000

#### Installation/ mounting/ dimensions






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

#### Connections/Terminals

Type of electrical connection		
• for auxiliary and control current circuit		screw-type terminals
Design of the thread of the connection screw of the auxiliary and control contacts		M3
Type of connectable conductor cross-sections		
• for auxiliary and control contacts		
— solid		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.0 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> )
• at AWG conductors for auxiliary and control contacts		1x (AWG 20 ... 12)
Connectable conductor cross-section for auxiliary and control contacts		
• 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
AWG number as coded connectable conductor cross section for auxiliary and control contacts		12 ... 20
Wire stripping length of the cable for auxiliary and control contacts	mm	7

Tightening torque for auxiliary and control contacts with screw-type terminals	N·m	0.5 ... 0.6
Tightening torque [lbf·in] for auxiliary and control contacts with screw-type terminals	lbf·in	4.5 ... 5.3

#### Certificates/approvals

General Product Approval		EMC	Declaration of Conformity	
 CSA	 UL		 RCM	 EG-Konf.

[Miscellaneous](#)

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

[Confirmation](#)

#### Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2920-0HA33>

**Cax online generator**

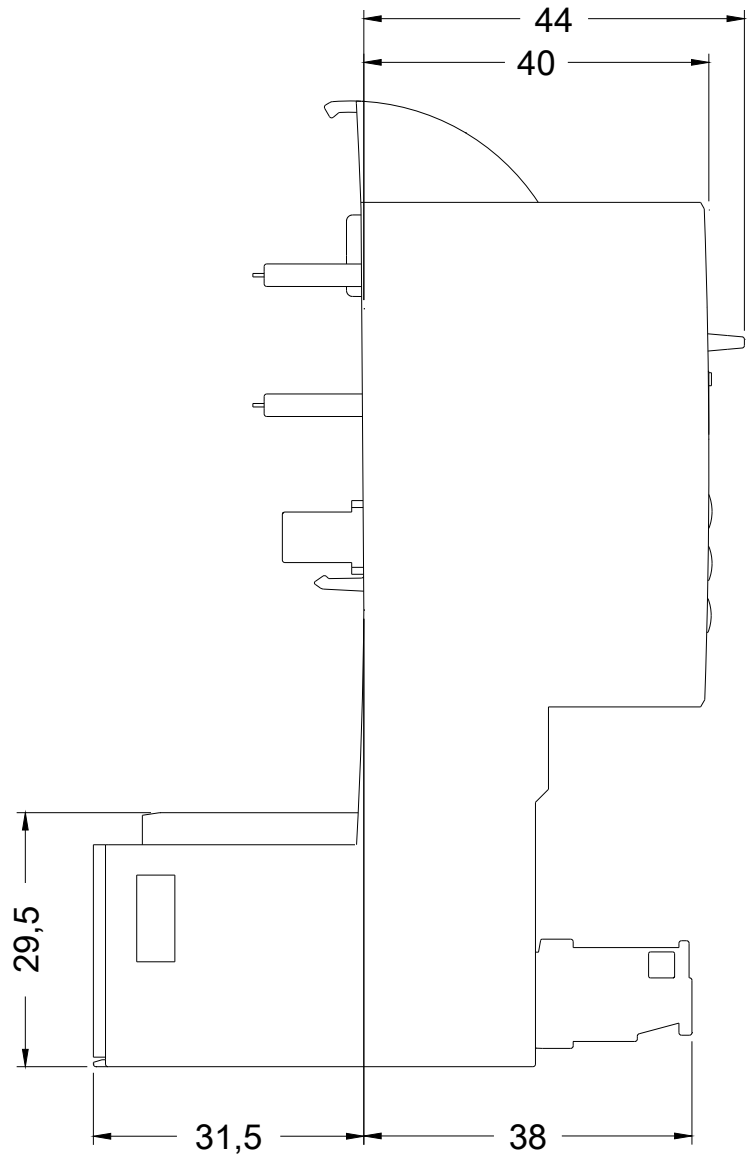
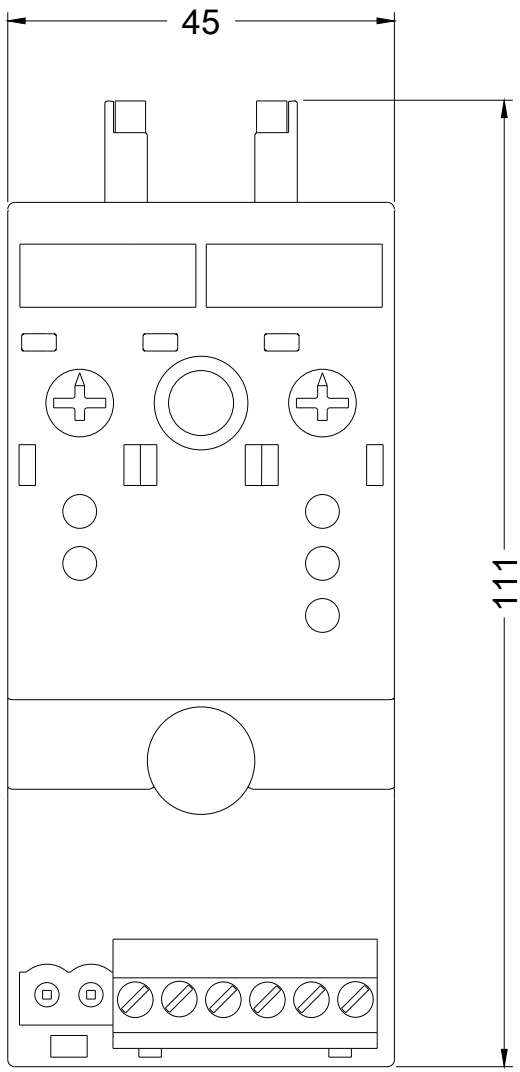
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2920-0HA33>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RF2920-0HA33>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RF2920-0HA33&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2920-0HA33&lang=en)



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