



POWER CONTROLLER CURRENT RANGE 20A 40 DEGREES C 110-230V / 24V AC/DC FOR SEMICONDUCTOR RELAY / CONTA W. PARTIAL LOAD MONITORING W. PARTIAL LOAD MONITORING

General technical data:

product brand name		SIRIUS
Product designation		power controller
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>
Product designation _2 of the accessories that can be ordered		input reactor / 1AC
Manufacturer article number _2 of the accessories that can be ordered		<a href="#">4EM4700-8CB00</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		K

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	20
<b>Derating temperature</b>	°C	40
<b>Operating voltage with AC</b>		
• at 50 Hz Rated value	V	110 ... 230
• at 60 Hz Rated value	V	110 ... 230
<b>Operating range relative to the operating voltage with AC</b>		
• at 50 Hz	V	93.5 ... 253
• at 60 Hz	V	93.5 ... 253
<b>Operating frequency Rated value</b>	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	0.65
<b>Current measuring range</b>	A	0 ... 22

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
<b>Supply voltage frequency for auxiliary and control current circuit Rated value</b>	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

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		1
Number of CO contacts for auxiliary contacts		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:






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-section		
• 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)
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	Test Certificates
 CSA	 UL	 EAC	 C-TICK
		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

#### 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/industrymall>

##### Cax online generator

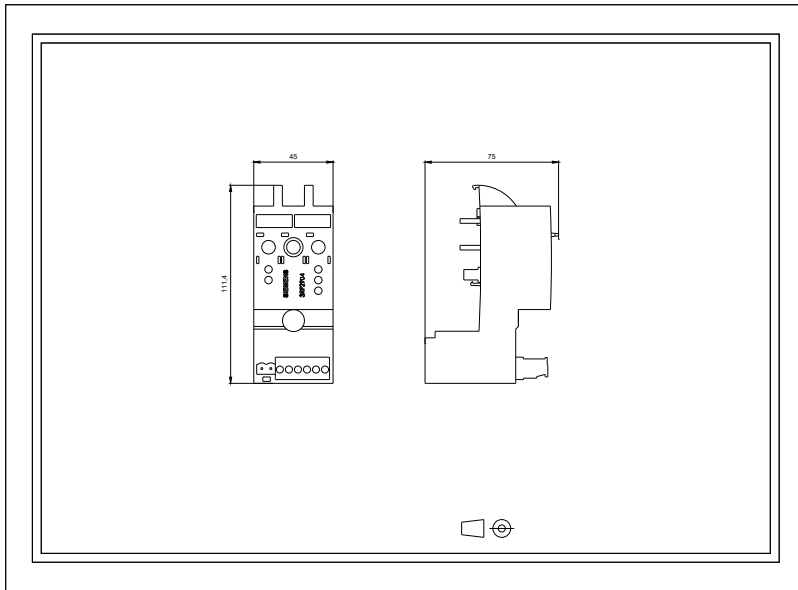
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RF29200KA13>

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

<http://support.automation.siemens.com/WW/view/en/3RF29200KA13/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RF29200KA13&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RF29200KA13&lang=en)



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