## **SIEMENS**

Product data sheet 3RF2920-0GA16



LOAD MONITORING CURRENT RANGE 20 A 40 DEGREES C 400-600 V / 24 V AC/DC TO SEMICON. RELAY/CONTACT. 3RF2

General technical data:		
Product brand name		SIRIUS
product designation		load 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		3RF2900-0RA88
Hole diameter / of the current transformer	mm	17
Number of partial loads / for load monitoring		12
Ambient temperature		
during operating	°C	-25 60
during storage	°C	-55 80
Installation altitude / at a height over sea level / maximum	m	1,000
Resistance against vibration / according to IEC 60068-2-6		2g
Resistance against shock / according to IEC 60068-2-27		15g / 11 ms
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		A

• according to DIN EN 61346-2

В

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	Α	20
Derating temperature	°C	40
Operating voltage		
• at 50 Hz / at AC / rated value	V	400 600
at 60 Hz / at AC / rated value	V	400 600
Working area related to the operating voltage		
• at 50 Hz / for AC	V	340 660
• at 60 Hz / for AC	V	340 660
Operating frequency		
• rated value	Hz	50 60
Relative symmetrical tolerance / of the operation frequency	%	10
Insulation voltage / rated value	V	600
Kompensation of the mains voltage swing	%	20
Partial load / for load monitoring	Α	0.65
Metering range current	А	0 22

Control circuit:		
type of voltage		AC/DC
Control supply voltage		
• 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
<ul> <li>for DC / final value for signal&lt;0&gt;-recognition</li> </ul>	V	15
Supply voltage frequency / for auxiliary and control current circuit		
• rated value	Hz	50 60
Tolerance of the line frequency	Hz	5
Relative symmetrical tolerance / of the supply voltage frequency	%	10
Control current / for AC / rated value	mA	40
Control current / for DC / rated value	mA	40
Response delay time	s	0.1 3

Auxiliary circuit:		
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		1
Number of change-over switches / for auxiliary contacts		1
Operating voltage / of the auxiliary contacts		
• for AC	V	15 30
• for DC	V	15 30
Operating current / of the auxiliary contacts		
• for AC	mA	5 1,000
• for DC	mA	5 1,000
Installation/mounting/dimensions:		
Type of mounting		clip-on
Type of fixing/fixation / series installation		Yes
Width	mm	45
Height	mm	111.5
Depth	mm	69.5
Connections:		
Design of the electrical connection		
for auxiliary and control current circuit		screw-type terminals
Design of the thread / of the connection screw / of the auxiliary and control pins		M3
Type of the connectable conductor cross-section		
for auxiliary and control contacts		
• solid		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
• finely stranded		
<ul> <li>with conductor end processi ng</li> </ul>		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
<ul> <li>without conductor final cut ting</li> </ul>		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
• for AWG conductors / for auxiliary and control contacts		1x (AWG 20 12)
Conductor cross-section that can be connected / for auxiliary and control contacts		
• solid	mm²	0.5 2.5
• stranded wire		
<ul> <li>with conductor end processing / minimum</li> </ul>	mm²	0.5 2.5
without conductor final cutting	mm²	0.5 2.5
AWG number / as coded connectable conductor cross-section		
for auxiliary and control contacts		12 20
Skinning 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 Test Certificates other



**ROSTEST** 



Manufacturer

Manufacturer

## 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** 

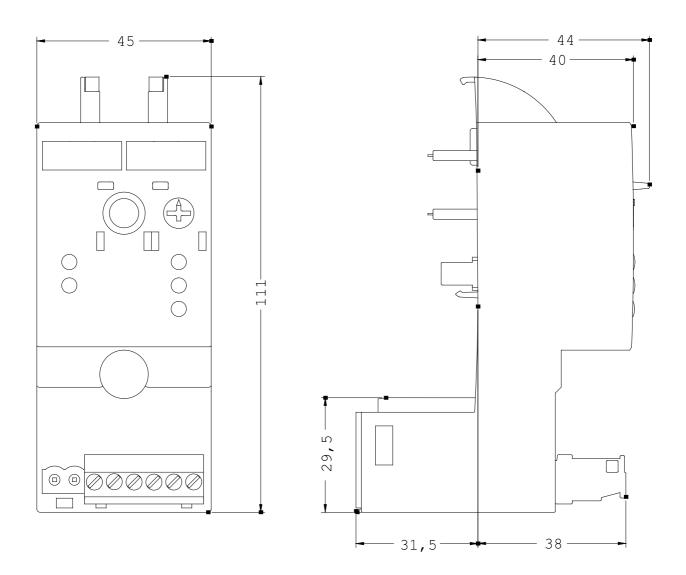
http://www.siemens.com/cax

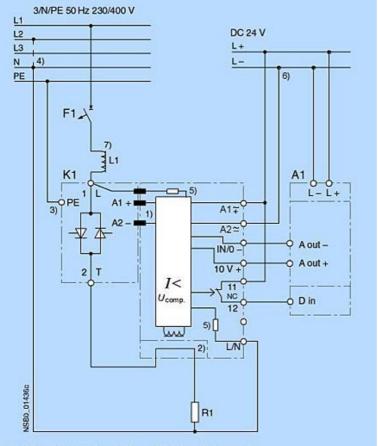
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RF2920-0GA16/all

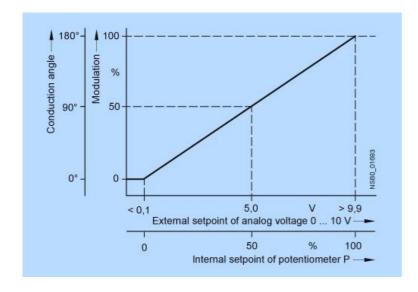
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RF2920-0GA16





- 1) Internal connection to the solid-state relay/contactor 2) Straight-through
- 3) Make PE/ground connection according to installation regulations
- Connection of L/N contact with
   3RF29 ..-0GA.3 load monitoring on neutral conductor N (e.g. 230 V),
   3RF29 ..-0GA.6 load monitoring on a second phase (e.g. 400 V)
- 5) Voltage detection not electrically isolated (3 M $\Omega$  per path)
- 6) Grounding of connection L- is recommended
- 7) A 200 µH choke must be used when operating with leading-edge phase in order to observe the limit values of the conducted interference voltage according to Class A



last change: Aug 22, 2011