## **SIEMENS**

Product data sheet 3RF2230-3AC45



SOLID STATE RELAY 3-PHASE 3RF2 30 A 40 DEG. C 48-600 V / 4-30 V DC 3PH.-CONTROLLED RING TERMINAL LUG BLOCKING VOLTAGE 1200 V

General technical data:		
product brand name		SIRIUS
product designation		solid-state relay
Product function		zero-point switching
Number of poles / for main current circuit		3
Protection class IP		IP20
Product designation / _2 / of the accessories that can be ordered		converter
Manufacturer article number / _2 / of the accessories that can be ordered		3RF2900-0EA18
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>		К
according to DIN EN 61346-2		Q
Number of NC contacts / for auxiliary contacts		0

Number of NO contacts / for auxiliary contacts	0
Number of change-over switches / for auxiliary contacts	0

Main circuit:		
Number of NO contacts / for main contacts		3
Number of NC contacts / for main contacts		0
Operating current		
• at AC-1 / at 400 V / rated value	Α	30
• at AC-51 / rated value	Α	30
Derating temperature	°C	40
Operating current / minimum	mA	500
Resistance against the impulse current / rated value	Α	300
I2t-level / maximum	A²-s	450
Operating voltage		
• at 50 Hz / at AC / rated value	V	48 600
at 60 Hz / at AC / rated value	V	48 600
Working area related to the operating voltage		
• at 50 Hz / for AC	V	40 660
• at 60 Hz / for AC	V	40 660
Operating frequency		
rated value	Hz	50 60
Relative symmetrical tolerance / of the operation frequency	%	10
Insulation voltage / rated value	V	600
Voltage slew rate / at the thyristor / for main contacts / maximum permissible	V/µs	500
Block voltage / at the thyristor / for main contacts / maximum permissible	V	1,200
Reverse current / of the thyristor	mA	10
Control current / at minimum control supply voltage		
• for DC	mA	2
Fuse assignments		https://www.automation.siemens.com/cd-static/material/info/3RF22_eng.pdf

Control circuit:			
Type of voltage / of the controlled supply voltage		DC	
Control supply voltage / 1			
• for DC	V	4 30	
Control supply voltage			
<ul><li>for DC / final value for signal&lt;0&gt;-recognition</li></ul>	V	1	
Control current			
• for DC / rated value	mA	15	

Installation/mounting/dimensions:		
Type of mounting		screw fixing
Type of fixing/fixation / series installation		Yes
Design of the thread / of the screw for fastening of the operating resource		M4
Tightening torque / of the screw for fastening of the operating resource	N-m	1.5
Width	mm	45
Height	mm	95
Depth	mm	47
Connections:		
Design of the electrical connection / for main current circuit		ring cable connection
Design of the thread / of the connection screw / for main contacts		M4
Tightening torque / for main contacts		
• with screw-type terminals	N∙m	2 2.5
Tightening torque (lbf·in) / for main contacts		
with screw-type terminals	lbf-in	7 10.3
Type of the connectable conductor cross-section		
for AWG conductors		
for auxiliary and control contacts		1x (AWG 20 12)
for auxiliary and control contacts		
• solid		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
finely stranded		
with conductor end processing		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
without conductor final cutting		1x (0.5 2.5 mm²), 2x (0.5 1.0 mm²)
Conductor cross section that can be connected		
for auxiliary and control contacts		
• solid	mm²	0.5 2.5
• stranded wire		
with conductor end processing /	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		20 12
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
Skinning length / of the cable		
for main contacts	mm	7
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
<b>S</b>	<b>P</b> □ GOST	<b>SU</b> °	C-TICK	EG-Konf.	Type Test Certificates/Test Report

## 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** 

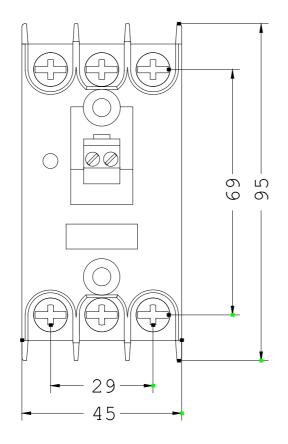
http://www.siemens.com/cax

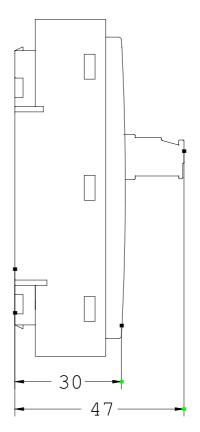
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

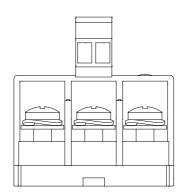
http://support.automation.siemens.com/WW/view/en/3RF2230-3AC45/all

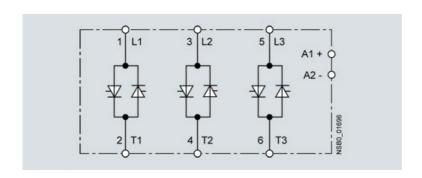
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

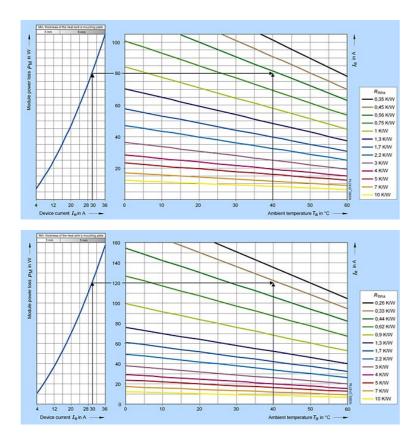
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RF2230-3AC45











last change: Feb 4, 2013