SIEMENS

Product data sheet 3RF2230-1AB45



SOLID STATE RELAY 3-PHASE 3RF2 30 A $\,40$ DEG. C 48- $\,600$ V / 4-30 V DC 2PH.-CONTROLLED

General technical data:		
Product brand name		SIRIUS
product designation		solid-state relays
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		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		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		2
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 AC	mA	2
• 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		
 for DC / final value for signal<0>-recognition 	V	1
Control current		

mA

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		screw-type terminals
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 main contacts		
• solid		2x (1.5 2.5 mm2), 2x (2.5 6 mm2)
• finely stranded		
 with conductor end processing 		2x (1 2.5 mm2), 2x (2.5 6 mm2), 1x 10 mm2
• for AWG conductors		
• for main contacts		2x (14 10)
 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 processi ng 		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
 without conductor final cut ting 		1x (0.5 2.5 mm2), 2x (0.5 1.0 mm2)
Conductor cross section that can be connected		
• for main contacts		
• solid	mm²	1.5 6
• stranded wire		
 with conductor end processing 	mm²	1 10
for auxiliary and control contacts		

• solid	mm²	0.5 2.5
stranded wire		
 with conductor end processing / minimum 	mm²	0.5 2.5
without conductor final cutting	mm²	0.5 2.5
AWG number / as coded connectable conductor cross-section		
• for main contacts		10 14
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

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

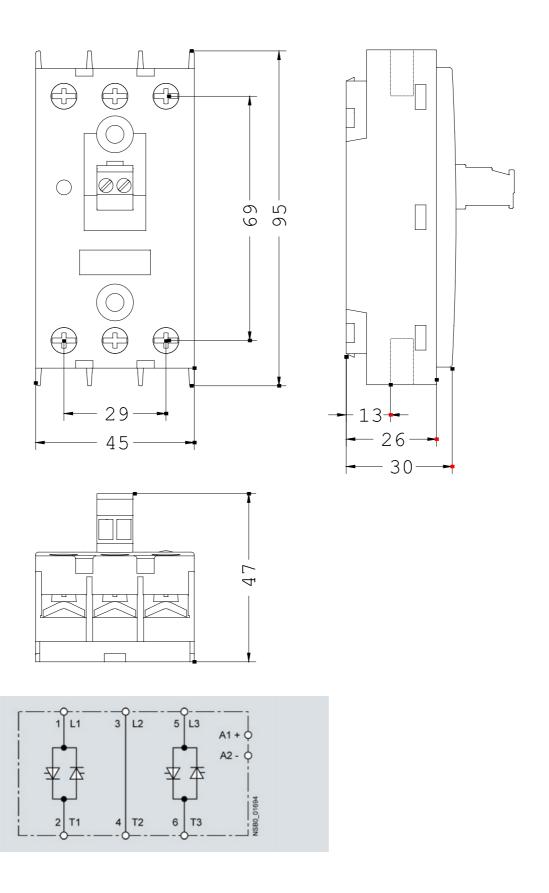
http://www.siemens.com/cax

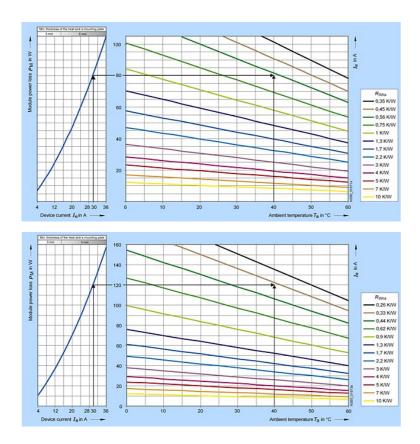
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RF2230-1AB45/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2230-1AB45





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