SIEMENS

Product data sheet 3RF2255-2AC45





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		3
Number of NC contacts / for main contacts		0
Operating current		
• at AC-1 / at 400 V / rated value	Α	55
• at AC-51 / rated value	Α	55
Derating temperature	°C	40
Operating current / minimum	mA	500
Resistance against the impulse current / rated value	Α	600
I2t-level / maximum	A²-s	1,800
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	100
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		

Depth

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

mm

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Connections:		
Design of the electrical connection / for main current circuit		spring-loaded 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 (0.5 2.5 mm2)
• finely stranded		
 with conductor end processing 		2x (0.5 1.5 mm2)
 without conductor final cutting 		2x (0.5 2.5 mm2)
• for AWG conductors		
• for main contacts		2x (18 14)
 for auxiliary and control contacts 		1x (AWG 20 12)
for auxiliary and control contacts		
• solid		0.5 1.5 mm2
• finely stranded		
 with conductor end processi ng 		0.5 2.5 mm2
 without conductor final cut ting 		0.5 2.5 mm2
Conductor cross section that can be connected		
• for main contacts		
• solid	mm²	0.5 2.5
• stranded wire		
 with conductor end processing 	mm²	0.5 1.5

 without conductor final cutting 	mm²	0.5 2.5
• for auxiliary and control contacts		
• solid	mm²	0.5 1.5
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		spring-loaded terminals
Skinning length / of the cable		
• for main contacts	mm	10
for auxiliary and control contacts	mm	10

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)

 $\underline{\text{http://www.siemens.com/industrial-controls/mall}}$

CAx-Online-Generator

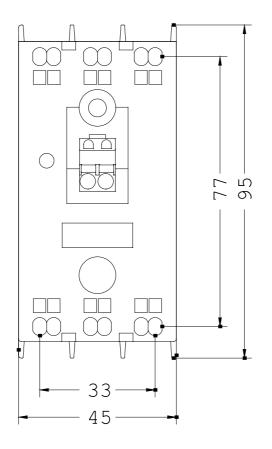
http://www.siemens.com/cax

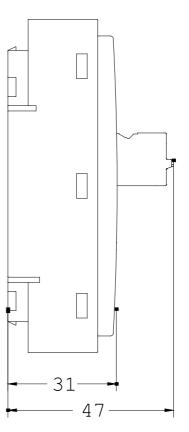
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

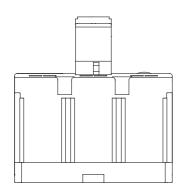
http://support.automation.siemens.com/WW/view/en/3RF2255-2AC45/all

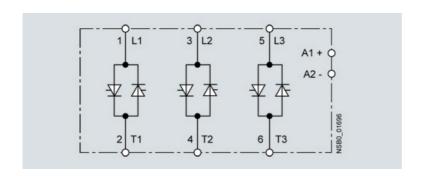
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

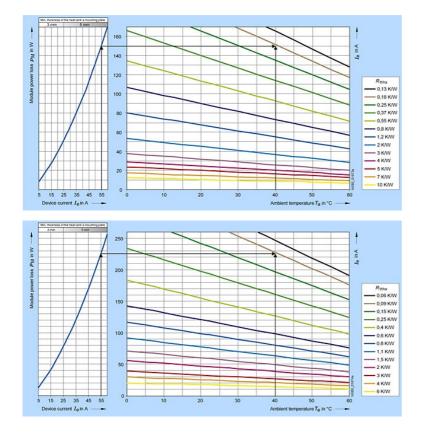
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2255-2AC45











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