



SOLID STATE RELAY 3-PHASE 3RF2 55 A 40 DEG. C 48-600 V / 4-30 V DC 2PH.-CONTROLLED SPRING-TYPE TERMINAL 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		<a href="#">3RF2900-0EA18</a>
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		K
• according to DIN EN 61346-2		Q
Number of NC contacts / for auxiliary contacts		0

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

<b>Main circuit:</b>		
<b>Number of NO contacts / for main contacts</b>		2
<b>Number of NC contacts / for main contacts</b>		0
<b>Operating current</b>		
• at AC-1 / at 400 V / rated value	A	55
• at AC-51 / rated value	A	55
<b>Derating temperature</b>	°C	40
<b>Operating current / minimum</b>	mA	500
<b>Resistance against the impulse current / rated value</b>	A	600
<b>I<sub>2t</sub>-level / maximum</b>	A <sup>2</sup> ·s	1,800
<b>Operating voltage</b>		
• at 50 Hz / at AC / rated value	V	48 ... 600
• at 60 Hz / at AC / rated value	V	48 ... 600
<b>Working area related to the operating voltage</b>		
• at 50 Hz / for AC	V	40 ... 660
• at 60 Hz / for AC	V	40 ... 660
<b>Operating frequency</b>		
• rated value	Hz	50 ... 60
<b>Relative symmetrical tolerance / of the operation frequency</b>	%	10
<b>Insulation voltage / rated value</b>	V	600
<b>Voltage slew rate / at the thyristor / for main contacts / maximum permissible</b>	V/µs	100
<b>Block voltage / at the thyristor / for main contacts / maximum permissible</b>	V	1,200
<b>Reverse current / of the thyristor</b>	mA	10
<b>Control current / at minimum control supply voltage</b>		
• for DC	mA	2
<b>Fuse assignments</b>	<a href="https://www.automation.siemens.com/cd-static/material/info/3RF22_eng.pdf">https://www.automation.siemens.com/cd-static/material/info/3RF22_eng.pdf</a>	

<b>Control circuit:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Control supply voltage / 1</b>		
• for DC	V	4 ... 30
<b>Control supply voltage</b>		
• for DC / final value for signal<0>-recognition	V	1
<b>Control current</b>		
• for DC / rated value	mA	15

Installation/mounting/dimensions:		
<b>Type of mounting</b>		screw fixing
<b>Type of fixing/fixation / series installation</b>		Yes
<b>Design of the thread / of the screw for fastening of the operating resource</b>		M4
<b>Tightening torque / of the screw for fastening of the operating resource</b>	N·m	1.5
<b>Width</b>	mm	45
<b>Height</b>	mm	95
<b>Depth</b>	mm	47
Connections:		
<b>Design of the electrical connection / for main current circuit</b>		spring-loaded terminals
<b>Design of the thread / of the connection screw / for main contacts</b>		M4
<b>Tightening torque / for main contacts</b>		
• with screw-type terminals	N·m	2 ... 2.5
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid		2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded		2x (0.5 ... 1.5 mm <sup>2</sup> )
• with conductor end processing		2x (0.5 ... 2.5 mm <sup>2</sup> )
• without conductor final cutting		
• 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 mm <sup>2</sup>
• finely stranded		
• with conductor end processing		0.5 ... 2.5 mm <sup>2</sup>
• without conductor final cutting		0.5 ... 2.5 mm <sup>2</sup>
<b>Conductor cross section that can be connected</b>		
• for main contacts		
• solid	mm <sup>2</sup>	0.5 ... 2.5
• stranded wire		
• with conductor end processing	mm <sup>2</sup>	0.5 ... 1.5
• without conductor final cutting	mm <sup>2</sup>	0.5 ... 2.5
• for auxiliary and control contacts		
• solid	mm <sup>2</sup>	0.5 ... 1.5
• stranded wire		
• with conductor end processing /	mm <sup>2</sup>	0.5 ... 2.5

• without conductor final cutting	mm <sup>2</sup>	0.5 ... 2.5
<b>AWG number / as coded connectable conductor cross-section</b>		
• for main contacts		10 ... 14
• for auxiliary and control contacts		20 ... 12
<b>Design of the electrical connection / for auxiliary and control current circuit</b>		spring-loaded terminals
<b>Skinning length / of the cable</b>		
• for main contacts	mm	10
• for auxiliary and control contacts	mm	10

### Certificates/approvals:

General Product Approval	Test Certificates	other
 CSA	<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Declaration of Conformity</a>
 GOST		
 UR		 UL

### 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

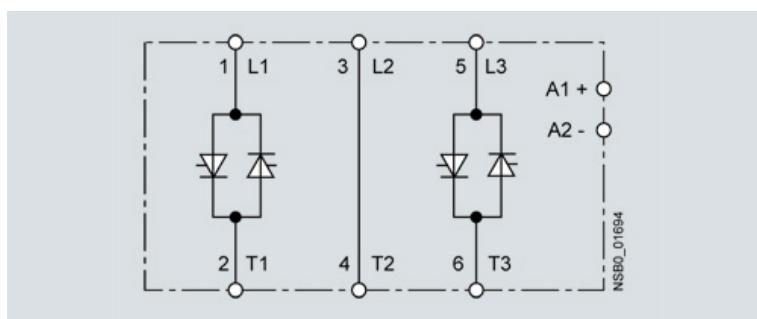
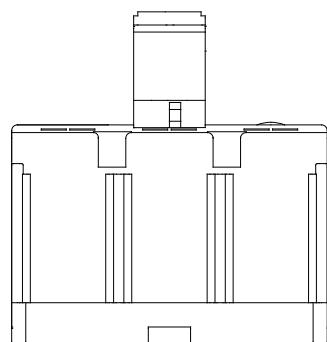
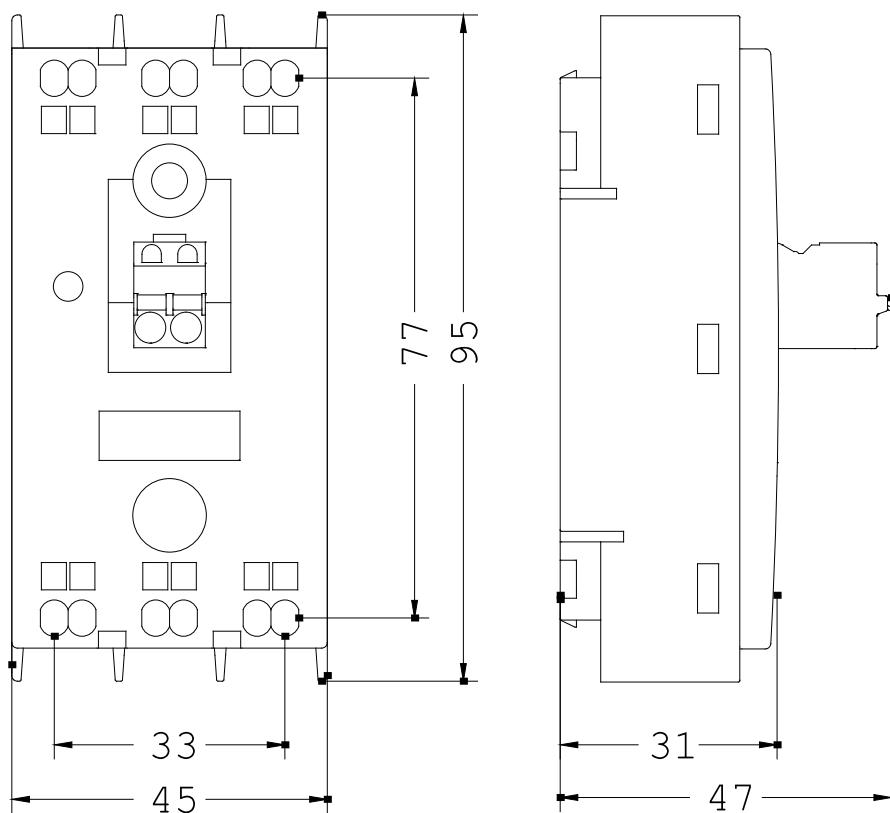
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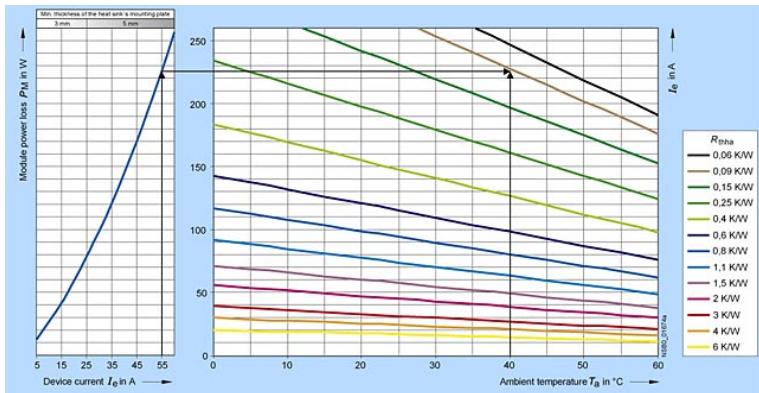
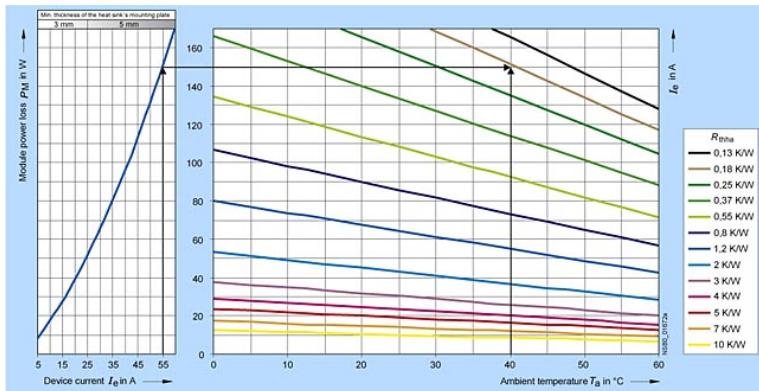
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RF2255-2AB45/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RF2255-2AB45](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF2255-2AB45)





last change:

May 28, 2012