SIEMENS

Product data sheet

3RF2255-2AB45



SOLID STATE RELAY 3-PHASE 3RF2

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		<u>3RF2900-0EA18</u>
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	А	55	
• at AC-51 / rated value	А	55	
Derating temperature	°C	40	
Operating current / minimum	mA	500	
Resistance against the impulse current / rated value	А	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			
	V	1	
 for DC / final value for signal<0>-recognition 	v		

• 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		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 (Ibf-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 processing		0.5 2.5 mm2	
 without conductor final cutting 		0.5 2.5 mm2	

Conductor cross section that can be connected

for main contacts
solid

• with conductor end processing

• without conductor final cutting

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• stranded wire

0.5 ... 2.5

0.5 ... 1.5

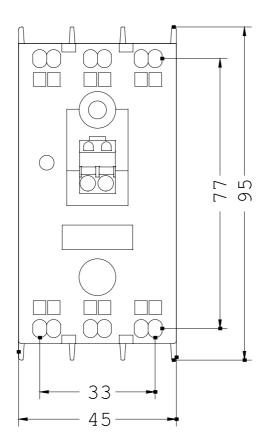
0.5 ... 2.5

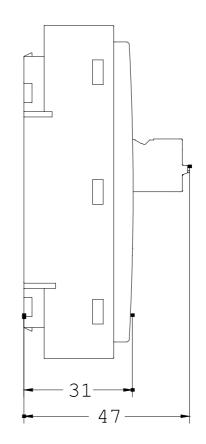
mm²

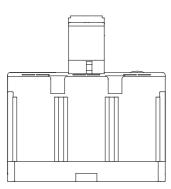
mm²

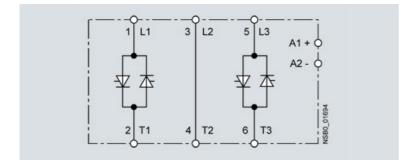
mm²

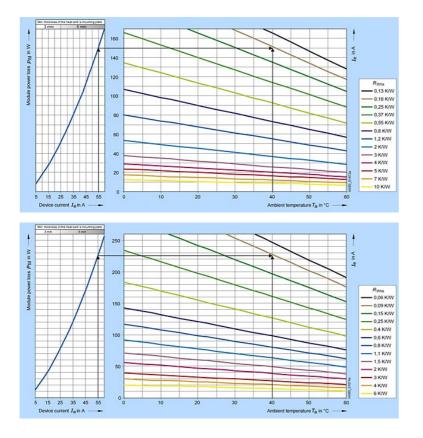
 for auxiliary and control contacts 			
• solid	mm²	0.5	1.5
• stranded wire			
 with conductor end processing / minimum 	mm²	0.5 2.5	
without conductor final cutting	mm²	0.5 2.5	
AWG number / as coded connectable conductor cross-section	_		
for main contacts		10 14	
 for auxiliary and control contacts 		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 Certific	ates	other
ROSTEST CSA	Manufacture	r	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/3RF2255-2AB45			











last change:

Aug 24, 2011