SIEMENS

Data sheet

3RF2420-1AC35

	Solid-state contactor 3-phase 3RF2 AC 51 / 20 A / 40 °C 48-600 V / 110 V AC 3-phase controlled screw terminal Blocking voltage 1200 V
product brand name	SIRIUS
product designation	solid-state contactor
design of the product	three-phase controlled
product type designation	3RF24
General technical data	
product function	zero-point switching
power loss [W] for rated value of the current	
 at AC in hot operating state 	66 W
 at AC in hot operating state per pole 	22 W
 without load current share typical 	1.9 W
insulation voltage rated value	600 V
degree of pollution	3
type of voltage of the control supply voltage	AC
surge voltage resistance of main circuit rated value	6 kV
shock resistance according to IEC 60068-2-27	15g / 11 ms
vibration resistance according to IEC 60068-2-6	2g
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	07/01/2006
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
operating voltage at AC	
• at 50 Hz rated value	48 600 V
• at 60 Hz rated value	48 600 V
operating frequency rated value	50 60 Hz
relative symmetrical tolerance of the operating frequency	10 %
operating range relative to the operating voltage at AC	40 00014
• at 50 Hz	40 660 V
• at 60 Hz	40 660 V
 operational current at AC-51 rated value 	22 A
	15 A
 at AC-51 according to IEC 60947-4-3 according to UL 508 rated value 	15 A 15 A
operational current minimum	500 mA
rate of voltage rise at the thyristor for main contacts maximum permissible	1 000 V/µs
blocking voltage at the thyristor for main contacts maximum permissible	1 200 V
reverse current of the thyristor	10 mA
derating temperature	40 °C

Build value Build value Davids fracture 1000 Aris Control supply voltage of the control supply voltage AC e id 60 Hz 00 125 V e id 60 Hz 00 V e id 60 Hz <th>surge current resistance rated value</th> <th>600 A</th>	surge current resistance rated value	600 A
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• for main contacts M4	design of the thread of the connection screw	
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•	and control contacts		M3					
stripped length of t			7					
 for main contain contain			7 mm					
	nd control contacts		7 mm					
Safety related data				_	_			
60529	on the front according		IP20					
	n the front according to	DIEC 60529	finger-safe, for vertical contact from the front					
Ambient conditions								
installation altitude a ambient temperatur	t height above sea level re	maximum	1 000 m					
 during operation 	on		-25 +60 °C					
 during storage 	1		-55 +80 °C					
Electromagnetic com	npatibility							
conducted interfere	ence							
	ccording to IEC 61000-4	-4	2 kV / 5 kHz behavior	criterion 2				
	tor-earth surge according		2 kV behavior criterio					
 due to conduct 61000-4-5 	tor-conductor surge acco	ording to IEC	1 kV behavior criterio	n 2				
 due to high-fre 61000-4-6 	equency radiation accord	ing to IEC	140 dBuV in the frequency range 0.15 \dots 80 MHz, behavior criterion 1					
electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11			4 kV contact discharging / 8 kV air discharging, behavior criterion 2 Class A for industrial environment					
field-bound HF inte CISPR11	rference emission acc	ording to	Class A for industrial environment					
Short-circuit protecti	ion, design of the fuse	link						
manufacturer's article	e number							
 of full range R at NH design usa 	fuse link for semiconduc able	ctor protection	<u>3NE1814-0</u>					
at cylindrical des	sign usable				SE1320; Maximum operating voltage 400 V!			
 of back-up R fuse link for semiconductor protection at NH design usable 			<u>3NE8015-1</u>					
at cylindrical des	 of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable 			<u>3NC1032</u>				
 of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable 			<u>3NC1450</u>					
 of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable manufacturer's article number of the qG fuse at NH design 			<u>3NC2250</u>					
usable	e number of the go luse	ativii uesiyii						
• up to 460 V			<u>3NA3805;</u> These fuses have a smaller rated current than the semiconductor relays					
Certificates/ approva	ls							
General Product A	pproval			EMC		Declaration of Conformity		
	Confirmation	•			•			
(SP)	Commation	(Ų)	FAL		Æ.	UK CA		
CSA		UL	LIIL		RCM	LH		
Declaration of Conformity	Test Certificates	other						
~ ~	Type Test Certific-	Confirmatic	m 🔊					
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Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF2420-1AC35

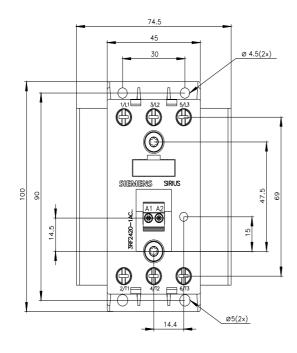
Cax online generator

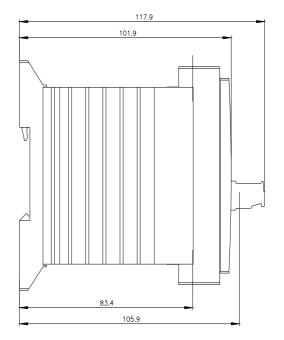
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF2420-1AC35

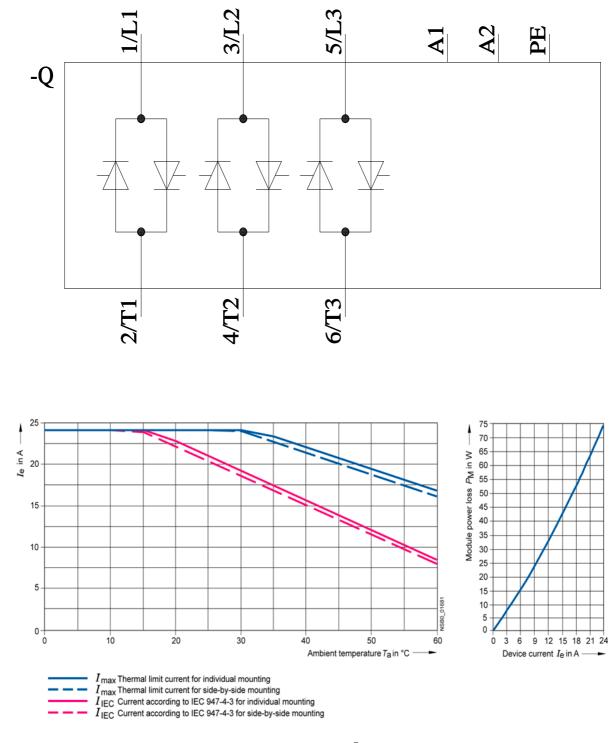
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RF2420-1AC35

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF2420-1AC35&lang=en







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