SIEMENS

Product data sheet

3RV2411-0JA20



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROT. A-RELEASE 0.7...1 A, N-RELEASE 21A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY

General technical data:						
Product brand name		SIRIUS				
product designation		3RV2 circuit breaker				
Size of the circuit-breaker		S00				
Trip class		CLASS 10				
Protection class IP / on the front		IP20				
Degree of pollution		3				
Installation altitude / at a height over sea level / maximum	m	2,000				
Ambient temperature						
during storage	°C	-50 80				
during operating	°C	-20 60				
during transport	°C	-50 80				
Resistance against shock		25g / 11 ms				
Impulse voltage resistance / rated value	kV	6				
Insulation voltage / rated value	V	690				
Active power loss / total / typical	W	5.1				
Item designation						
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F				
according to DIN EN 61346-2		F				

• of the main contacts / typical100,000• of the auviliary contacts / typical100,000Type of the driving mechanism / motor driveNoDesign of the operating mechanismNo• overhaad protectionVes• overhaad protectionYes• has disturbance recognitionYesProduct functionNo• auviliary switchNo• undervolage release mechanismNo• a 40	Mechanical operating cycles as operating time			
Type of the driving mechanism / motor drive No Design of the operating mechanism selector switch Product function Yes • overload protection Yes • phase disturbance recognition Yes Product organization Yes • auxiliary switch No • undervoltage release mechanism No • inp indicator No Product extension / optional / motor drive No Mine circuit: No Number of poles / for main current circuit 3 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value W 250 • at 400 V / rated value W 370 • at 600 V / rated value W 550 • at 600 V / rated value W 500 • at 600 V / rated value A 21 21 • of the non-delayed short-circuit release A 21 21 • of the non-delayed short-circuit release A 21 21 • of the non-delayed short-circuit release A 1 <	of the main contacts / typical		100,000	
Design of the operating mechanism selector switch Product function Ves • overload protection Ves • phase disturbance recognition Ves • audiary switch No • undervoltage release mechanism No • tip indicator No Product statesion / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / at 400 V / rated value As5 • at 400 V / rated value WW 250 • at 400 V / rated value WW 370 • at 500 V / rated value WW 550 Frequency of operation / at AC-3 / according to IEC 60947-6-2.1 Th 1f Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current A 21 21 • of the non-delayed short-circuit release A 07 1 Service power / at AC-3 / according to IEC 60947-6-21 Th 160 • of the non-delayed short-circuit release A 01 1	of the auxiliary contacts / typical		100,000	
Product function Yes • overfoad protection Yes • phase disturbance recognition Yes Product component No • audilary switch No • undervoltage release mechanism No • trip indicator No Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating outage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.85 Service power / at AC-3 W 250 • at 400 V / rated value W 350 • at 400 V / rated value W 550 Frequency of operation / at AC-3 / according to IEC 60947-6-2/ 1/h 15 Maximum A 2121 Adjustable response current W 160 • of the non-delayed short-clicuit release A 1 Adjustable response current W 180 Continuous current / rated value No 1 Accil a current-dependent overload release A 1	Type of the driving mechanism / motor drive	_	No	
• overload protectionImage: Second secon	Design of the operating mechanism	_	selector switch	
• phase disturbance recognitionYesProduct componentNo• undervoltage release mechanismNo• inf indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690GoOperating current / at AC-3 / rated value / maximumV691Service power / at AC-3692W992So• at 400 V / rated valueW992So• at 400 V / rated valueW993So• at 400 V / rated valueW994So• at 400 V / rated valueW995SoFrequency of operation / at AC-3 / according to IEC 60947-6-21 maximumTop and bottomAdjustable response currentIm• of the non-delayed short-circuit releaseA914Q• of the current-dependent overload releaseA914So• of the current / rated valueW1015Service power / at AC-3 / at 230 V / rated valueW1020Im1030AC-3 / at 230 V / rated value1040W1050Im1050Im1060Im1070Im1080Im1090Im1090Im1090Im1090Im1090 <t< td=""><td>Product function</td><td>_</td><td></td></t<>	Product function	_		
Product component No • auxiliary switch No • undervoltage release mechanism No • trip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value A 0.85 Service power / at AC-3	overload protection		Yes	
• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV6600Operating current / at AC-3 / rated value / maximumV06800Operating current / at AC-3 / rated value / maximumV06800Operating current / at AC-3 / rated valueA0.850.85Service power / at AC-3V0.41 400 V / rated valueW0.41 40 40 40W0.41 40 40W0.41 40 40W0.41 40 40W10 40 40W <td>phase disturbance recognition</td> <td></td> <td>Yes</td>	phase disturbance recognition		Yes	
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV0 operating current / at AC-3 / at 400 V / rated valueA0 operating current / at AC-3 / at 400 V / rated valueW0 operating current / at AC-3 / at 400 V / rated valueW0 v / rated valueM10 v / rated valueV10 v / rated valueM11 h1511 h1512 current / at AC-3 / according to IEC 60947-6-2 / maximum1/h13 v / rated valueW14 current dependent overload releaseA11 / rated valueM10 the non-delayed short-oricuit releaseA11 / rated valueW10 the current / rated valueW11 / rated valueN10 the current / rated valueN11 / rated valueN12 / v / rated valueN13 / rate114 / rated valueN15 / rate valueYes </td <td>Product component</td> <td>_</td> <td></td>	Product component	_		
• trip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value / maximum V 690 • at 400 V / rated value A 0.85 Service power / at AC-3 V 250 • at 400 V / rated value W 370 • at 600 V / rated value W 350 • at 600 V / rated value W 370 • at 600 V / rated value W 370 • at 600 V / rated value W 370 • at 600 V / rated value W 370 • at 600 V / rated value W 370 • at 600 V / rated value W 370 • of the non-delayed short-circuit release A 21 21 • of the current / ated value W 180 Continuous current / rated value A	auxiliary switch		No	
Product extension / optional / motor drive No Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.85 Service power / at AC-3 W 250 • at 400 V / rated value W 370 • at 600 V / rated value W 350 • at 600 V / rated value W 550 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Top and bottom Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current A 1 • of the non-delayed short-circuit release A 21 21 • of the current-dependent overload release A 1 Service power / at AC-3 / at 230 V / rated value W 180 Continuous current / rated value A 1 Auxiliary circuit: Yes 1 Product extension / auxiliary sontacts / instantaneous switching 0 0 witching 0 0 0 0	undervoltage release mechanism		No	
Main circuit: Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.85 Service power / at AC-3 W 250 • at 400 V / rated value W 370 • at 600 V / rated value W 350 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / at 600 V / rated value Top and bottom Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current Inh 15 • of the non-delayed short-circuit release A 0.7 1 Service power / at AC-3 / at 230 V / rated value W 180 Continuous current / rated value W 180 Continuous current / rated value A 1 Product extension / auxiliary contacts / instantaneous switching 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0	• trip indicator		No	
Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / rated value A 0.85 Service power / at AC-3 W 250 • at 400 V / rated value W 370 • at 600 V / rated value W 350 • at 600 V / rated value W 550 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum Top and bottom Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current	Product extension / optional / motor drive		No	
Operating voltage / at AC-3 / rated value / maximum V 690 Operating current / at AC-3 / at 400 V / rated value A 0.85 Service power / at AC-3 W 250 • at 400 V / rated value W 370 • at 600 V / rated value W 370 • at 600 V / rated value W 550 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum 1/h 15 Arrangement of electrical connectors / for main current circuit V Top and bottom Adjustable response current - - 1 • of the non-delayed short-circuit release A 0.7 1 1 Service power / at AC-3 / at 230 V / rated value W 180 1 Continuous current / rated value A 1 1 Auxiliary circuit: Product extension / auxiliary switch Yes 1 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 1 Number of change-over switches / for auxiliary contacts In 0 1	Main circuit:			
Operating current / at AC-3 / at 400 V / rated valueA0.85Service power / at AC-3V250• at 400 V / rated valueW370• at 500 V / rated valueW370• at 690 V / rated valueW550Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA21 21• of the non-delayed short-circuit releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0	Number of poles / for main current circuit		3	
Service power / at AC-3W250• at 400 V / rated valueW370• at 500 V / rated valueW370• at 690 V / rated valueW550Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current70• of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts / instantaneous switching0	Operating voltage / at AC-3 / rated value / maximum	V	690	
• at 400 V / rated valueW250• at 500 V / rated valueW370• at 690 V / rated valueW550Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current • of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueW1Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	Operating current / at AC-3 / at 400 V / rated value	А	0.85	
• at 500 V / rated valueW370• at 690 V / rated valueW550Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentITop and bottom• of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	Service power / at AC-3	_		
• at 690 V / rated valueW550Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current-Top and bottom• of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	• at 400 V / rated value	W	250	
Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current 1 • of the non-delayed short-circuit release A 21 21 • of the current-dependent overload release A 0.7 1 Service power / at AC-3 / at 230 V / rated value W 180 Continuous current / rated value A 1 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Number of change-over switches / for auxiliary contacts 0	• at 500 V / rated value	W	370	
maximum Imaximum Image: Imaximum Imake: Imaximum Imaximum <th imaximu<="" td=""><td>• at 690 V / rated value</td><td>W</td><td>550</td></th>	<td>• at 690 V / rated value</td> <td>W</td> <td>550</td>	• at 690 V / rated value	W	550
Adjustable response currentImage: constraint of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:0		1/h	15	
• of the non-delayed short-circuit releaseA21 21• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of thange-over switches / for auxiliary contactsInstantaneous o0Inputs/ Outputs:Instantaneous o0	Arrangement of electrical connectors / for main current circuit	_	Top and bottom	
• of the current-dependent overload releaseA0.7 1Service power / at AC-3 / at 230 V / rated valueW180Continuous current / rated valueA1Auxiliary circuit:Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:Imputs/ Outputs	Adjustable response current	_		
Service power / at AC-3 / at 230 V / rated value W 180 Continuous current / rated value A 1 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: U	 of the non-delayed short-circuit release 	А	21 21	
Continuous current / rated value A 1 Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Inputs/ Outputs: 0	• of the current-dependent overload release	А	0.7 1	
Auxiliary circuit: Yes Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Service power / at AC-3 / at 230 V / rated value	W	180	
Product extension / auxiliary switch Yes Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Continuous current / rated value	А	1	
Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Auxiliary circuit:			
switching 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	Product extension / auxiliary switch		Yes	
switching 0 Number of change-over switches / for auxiliary contacts 0 Inputs/ Outputs:	-		0	
Inputs/ Outputs:	-		0	
	Number of change-over switches / for auxiliary contacts		0	
Number of digital inputs 0	Inputs/ Outputs:			
	Number of digital inputs		0	

Short-circuit:				
Breaking capacity limit short-circuit current (lcu)				
• at 400 V / rated value	А	100,000		
• at 500 V / rated value	А	100,000		
• at 690 V / rated value	А	100,000		
Design of the overcurrent release and short-circuit release		thermomagnetic		
Installation/mounting/dimensions:				
Built in orientation		any		
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715		
Width	mm	45		
Height	mm	109		
Depth	mm	91		
Distance, to be maintained, to the ranks assembly				
• forwards	mm	0		
backwards	mm	0		
• upwards	mm	50		
downwards	mm	50		
• sidewards	mm	0		
Distance, to be maintained, to earthed part				
• forwards	mm	0		
backwards	mm	0		
• upwards	mm	50		
• sidewards	mm	30		
downwards	mm	50		
Distance, to be maintained, conductive elements				
• forwards	mm	0		
backwards	mm	0		
• upwards	mm	50		
downwards	mm	50		
• sidewards	mm	30		
Connections:				
Product function				
removable terminal for main circuit		No		
removable terminal for auxiliary and control circuit		No		
Design of the electrical connection				
for main current circuit		spring-loaded terminals		
Type of the connectable conductor cross-section				
for main contacts				

• solid				2x (0.5	4 mm2)			
 stranded 		2x (0.5 4 mm²)						
 finely strande 	d							
 with condu 	ctor end processing			2 x (0.5 2.5 mm2)				
 without cor 	nductor final cutting			2x (0.5	2x (0.5 2.5 mm2)			
 for AWG conduct 	tors / for main contac	ts		2x (20 .	2x (20 12)			
Certificates/appro	ovals:							
Verification of suita	bility			CE / UL	_/CSA			
• für Staubexplosi	onsschutz für Zone 2	1/22		no				
 for gas explosior 	n protection for zone	1/2		no				
General Product A	Approval				Test Certificates	s		
COC	S CSA	ROSTEST		Manufacturer				
Shipping Approva	I							
ABS	GL	Lloyd's Register	PRS		RINA	RMRS		
other								
Manufacturer	<u>other</u>	DE VDE						
UL/CSA ratings								
yielded mechanical	performance (hp)							
 for three-phase s 	squirrel cage motors							
• at 575/600 V / rated value			hp	0.5				
Operating current (FLA) / for three-phase squirrel cage motors								
• at 600 V / rated value			А	0.9				
Safety:								
B10 value / with high demand rate								
 according to SN 		50,000						

T1 value / for proof test interval or service life

Failure rate (FIT value) / with low demand rate

• with low demand rate / according to SN 31920

• with high demand rate / according to SN 31920

• according to IEC 61508

• according to SN 31920

Proportion of dangerous failures

а

FIT

%

%

10

50

40

40

Protection against electrical shock

finger-safe

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

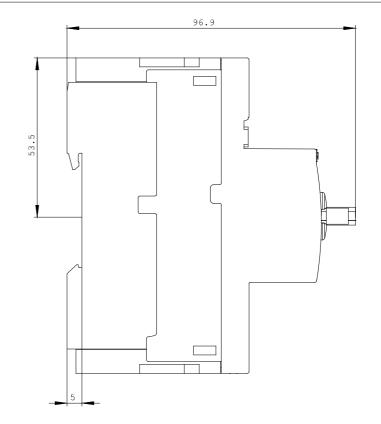
http://www.siemens.com/industrial-controls/mall

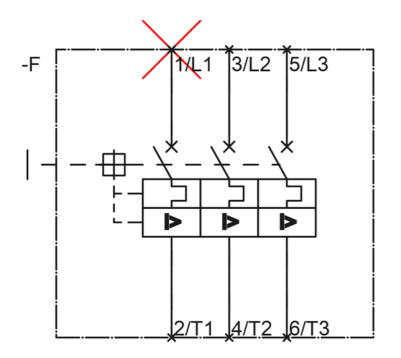
CAx-Online-Generator

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2411-0JA20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2411-0JA20





last change:

Oct 17, 2011