SIEMENS

Product data sheet

3RV2411-1CA20



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROT. A-RELEASE 1.8...2.5A, N-RELEASE 52A 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	6	
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 / typical100,000Type of the diriving mechanism / motor driveNoDesign of the operating mechanismSector switchProduct functionYes• overload protectionYes• base disturbance recognitionNo• auxiliary switchNo• auxiliary cortact sit auxiliary switchNo• auxiliary dotableW• auxiliary switchNo• auxiliary switchNo• auxiliary switchNo• auxiliary switchNo• auxiliary switchNo• auxiliary switchNo• auxiliary switchNo <tr< th=""><th>Mechanical operating cycles as operating time</th><th></th><th></th></tr<>	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 • overload protection No • undervoltage release mechanism No • tip indicator No Product extension / optional / motor drive No Main circuit: No Number of poles / for main current circuit 3 Operating current / at AC-3 / at 400 V / rated value A • at 400 V / rated value W 750 • at 400 V / rated value W 1,00 • at 600 V / rated value W 1,00 • at 600 V / rated value W 1,500 Frequency of operation / at AC-3 / according to IEC 60947-6-21 Top and bottom • of the non-delayed short-circuit release A 52 52 Service power / at AC-3 / according release A 52 52 Service power / at AC-3 / rated value W 370	of the main contacts / typical		100,000
Design of the operating mechanism is selector switch Product function Yes • overload protection Yes • phase disturbance recognition Yes Product component Yes • sublingy switch No • undervoltage release mechanism No • tip indicator 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 voltage / at AC-3 / rated value / maximum V 690 Service power / at AC-3 19 Service power / at AC-3 • at 400 V / rated value W 750 • at 800 V / rated value W 1,000 • at 800 V / rated value W 1,000 • at 800 V / rated value W 1,000 • at 800 V / rated value W 1,000 • of the non-delayed short-circuit release A 52	of the auxiliary contacts / typical		100,000
Product function Yes • overload protection Yes • phase disturbance recognition Yes 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 Service power / at AC-3 - • at 400 V / rated value A • at 500 V / rated value W • at 500 V / rated value W • at 500 V / rated value W • at 600 V / rated value W • at 500 V / rated value W • at 500 V / rated value W • at 600 V / rated value W • at 600 V / rated value W • of the non-delayed short-circuit release A • of the non-delayed short-circuit rele	Type of the driving mechanism / motor drive		No
• overlead protectionYes• phase disturbance recognitionYesProduct componentYes• suxiliary switchNo• undervoltage release mechanismNo• indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVService power / at AC-3800Operating voltage / at AC-3 / rated valueA• at 400 V / rated valueW• at 400 V rated valueY• at 400 V rated valueY <th>Design of the operating mechanism</th> <th></th> <th>selector switch</th>	Design of the operating mechanism		selector switch
• phase distributions recognition Yes Product component	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 1.9 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 / maximumV6900Operating current / at AC-3 / rated value / maximumV0 perating current / at AC-3 / rated value / maximumV0 perating current / at AC-3 / rated valueA1.9Service power / at AC-3V• at 400 V / rated valueW• at 400 V / rated valueW• at 600 V / rated valueV• at 600 V / rated valueW• at 600 V / rated valueW• at 600 V / rated valueW• at 600 V / rated valueM• at 600 V / rated valueM	phase disturbance recognition	_	Yes
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVOperating current / at AC-3 / at 400 V / rated valueA1.9Service power / at AC-3 / at 400 V / rated valueW• of the non-delayed short-circuit releaseA• of the non-delayed short-circuit releaseA• of the current / rated valueW• of the current / rated valueM• of the current / rated valueA• of the current / rated valueYesNumber of NO contacts / for auxiliary conta	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 Service power / at AC-3 1.9 9 Service power / at AC-3 / rated value W 1.9 • at 400 V / rated value W 1.100 • at 600 V / rated value W 1.500 • at 690 V / rated value W 1.500 • at 690 V / rated value W 1.500 • at 690 V / rated value W 1.500 • at 690 V / rated value W 1.500 • at 690 V / rated value W 1.500 Frequency of operation / at AC-3 / according to IEC 60947-6-21 1/h 15 Arrangement of electrical connectors / for main current circuit A 52 52 • of the non-delayed short-circuit release A 1.8 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value Yes<	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 1.9 Service power / at AC-3 V 690 • at 400 V / rated value W 750 • at 400 V / rated value W 1.00 • at 400 V / rated value W 1.000 • at 400 V / rated value W 1.000 • at 400 V / rated value W 1.000 • at 600 V / rated value W 1.000 • at 600 V / rated value W 1.000 • at 600 V / rated value W 1.000 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / 1/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current I I I • of the non-delayed short-circuit release A 52 52 Service power / at AC-3 / at 230 V / rated value W 370 I Continuous current / rated value	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 1.9 Service power / at AC-3 W 750 • at 400 V / rated value W 750 • at 500 V / rated value W 1.00 • at 600 V / rated value W 1.00 • at 600 V / rated value W 1.500 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 - - • of the non-delayed short-circuit release A 52 • of the current-dependent overload release A 1.8 • of the current-dependent overload release A 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value Yes 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Number of Ange-over switches / for auxiliary contacts 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 630 Operating current / at AC-3 / rated value A 1.9 Service power / at AC-3 W 750 • at 400 V / rated value W 750 • at 600 V / rated value W 1.100 • at 690 V / rated value W 1.500 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 - - • of the non-delayed short-circuit release A 52 52 • of the current-dependent overload release A 1.8 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value V 370 Auxiliary circuit: Yes 1.8 2.5 Product extension / auxiliary contacts / instantaneous switching 0 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 0 Number of change-over	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 1.9 Service power / at AC-3 V 750 • at 400 V / rated value W 750 • at 500 V / rated value W 1,100 • at 690 V / rated value W 1,500 Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum N/h 15 Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current • 5252 • of the non-delayed short-circuit release A 18 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value W 370 Auxiliary circuit: Yes 1 Product extension / auxiliary switch Yes 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 Number of change-over switches / for auxiliary contacts 0 0	Main circuit:		
Operating current / at AC-3 / at 400 V / rated valueA1.9Service power / at AC-3V750• at 400 V / rated valueW750• at 500 V / rated valueW1,100• at 690 V / rated valueW1,500Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA52 52• of the non-delayed short-circuit releaseA52 52• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueA2.5Auxiliary 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-3 W 750 • at 400 V / rated value W 1,100 • at 500 V / rated value W 1,500 • at 690 V / rated value W 1,500 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 • of the non-delayed short-circuit release A 52 52 • of the current-dependent overload release A 1.8 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value A 2.5 Auxiliary circuit: Yes Product extension / auxiliary switch Yes 0 Number of NC contacts / for auxiliary contacts / instantaneous switching 0 0 Number of NO contacts / for auxiliary contacts / instantaneous switching 0 0 Number of Change-over switches / for auxiliary contacts / instantaneous switching 0 0 Number of Change-over switches / for auxiliary contacts / instantaneous switching 0 0 Switching	Operating voltage / at AC-3 / rated value / maximum	V	690
• at 400 V / rated valueW750• at 500 V / rated valueW1,100• at 690 V / rated valueW1,500Frequency 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 releaseA52 52• of the current-dependent overload releaseA18 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueW370Auxiliary circuit:YesProduct extension / auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/Outputs:0	Operating current / at AC-3 / at 400 V / rated value	А	1.9
• at 500 V / rated valueW1,100• at 690 V / rated valueW1,500Frequency 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 releaseA52 52• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueW370Auxiliary 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 contacts0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	Service power / at AC-3	_	
• at 690 V / rated valueW1,500Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentTop and bottom• of the non-delayed short-circuit releaseA52 52• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueA2.5Product 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 contacts0	• at 400 V / rated value	W	750
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 - - • of the non-delayed short-circuit release A 52 52 • of the current-dependent overload release A 1.8 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value A 2.5 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 change-over switches / for auxiliary contacts 0 Inputs/ Outputs: Inputs/ Outputs:	• at 500 V / rated value	W	1,100
maximum Imaximum Imaximum Arrangement of electrical connectors / for main current circuit Top and bottom Adjustable response current Imaximum Imaximum • of the non-delayed short-circuit release A 52 52 • of the current-dependent overload release A 1.8 2.5 Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value M 2.5 Auxiliary circuit: Imaximum Imaximum Product extension / auxiliary switch Yes Imaximum Number of NC contacts / for auxiliary contacts / instantaneous switching 0 Imaximum Number of change-over switches / for auxiliary contacts 0 Imaximum Inputs/ Outputs: Imaximum 0 Imaximum	• at 690 V / rated value	W	1,500
Adjustable response currentImage: constraint of the non-delayed short-circuit releaseA52 52• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueA2.5Auxiliary 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:Imputs/ Outputs:		1/h	15
• of the non-delayed short-circuit releaseA52 52• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueA2.5Auxiliary 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	Arrangement of electrical connectors / for main current circuit		Top and bottom
• of the current-dependent overload releaseA1.8 2.5Service power / at AC-3 / at 230 V / rated valueW370Continuous current / rated valueA2.5Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Inputs/ Outputs:U	Adjustable response current		
Service power / at AC-3 / at 230 V / rated value W 370 Continuous current / rated value A 2.5 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	52 52
Continuous current / rated value A 2.5 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 change-over switches / for auxiliary contacts 0 Inputs/ Outputs: 0	of the current-dependent overload release	А	1.8 2.5
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	370
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	2.5
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	-		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	10,000
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 	ed				
with condu	uctor end processing			2 x (0.5 2.5 mm2)	
 without co 	onductor final cutting			2x (0.5 2.5 mm2)	
• for AWG conduct	ctors / for main contact	S		2x (20 12)	
Certificates/appr	ovals:				
Verification of suit	ability			CE / UL / CSA	
 für Staubexplos 	ionsschutz für Zone 21	/22		no	
 for gas explosio 	on protection for zone 1	/2		no	
General Product	Approval			Test Certific	ates
COC	(SA)	ROSTEST		Manufacture	ī
Shipping Approva	al				
ABS	GL	Lloyd's Register Lrs	PRS	RINA	RMRS
other					
Manufacturer	other				
UL/CSA ratings					
yielded mechanica	Il performance (hp)				
 for single-phase 	e squirrel cage motors				
• at 230 V / rat	ted value		hp	0.167	
 for three-phase 	squirrel cage motors				
• at 200/208 V	/ rated value		hp	0.5	
+ 000/000 \/				0.5	

• at 220/230 V / rated value	hp	0.5
• at 460/480 V / rated value	hp	1
• at 575/600 V / rated value	hp	1.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	А	2.1
• at 600 V / rated value	А	2.4

Safety: B10 value / with high demand rate • according to SN 31920 T1 value / for proof test interval or service life

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according to IEC 61508	а	10
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	50
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	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)

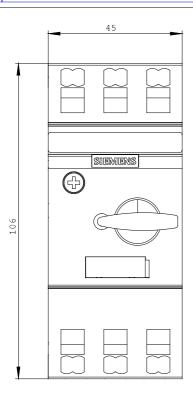
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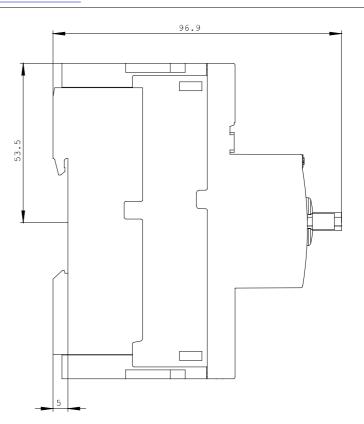
CAx-Online-Generator

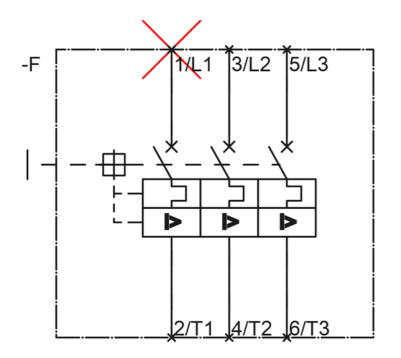
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2411-1CA20







last change:

Oct 17, 2011