# SIEMENS

### **Product data sheet**

## 3RV2411-0AA20



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROT. A-RELEASE 0.11...0.16A, N-RELEASE3.3A 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	5.5
Item designation		
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		F
according to DIN EN 61346-2		F

• of the main contacts / typical     100,000       • of the davillary contacts / typical     100,000       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 component     Yes       • auxiliary switch     No       • undervoltage release mechanism     No       • trip indicator     No       Product extension / optional / motor drive     No       Main circuit:     No       Operating current / at AC-3 / rated value     A       0 operating current / at AC-3 / at 400 V / rated value     A       • at 400 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     M     60       • at 600 V / rated value     W     60       • at 600 V / rated value     W     60       • at 600 V / rated value     M     60       • at 600 V / rated value     M <th>Mechanical operating cycles as operating time</th> <th></th> <th></th>	Mechanical operating cycles as operating time		
Type of the driving mechanism / motor drive         No           Design of the operating mechanism         selector switch           Product function         Yes           • overfoad protection         Yes           • phase disturbance recognition         Yes           Product component	of the main contacts / typical		100,000
Design of the operating mechanism       selector switch         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:       3         Number of poles / for main current circuit       3         Operating outgae / at AC-3 / rated value / maximum       V       690         Operating current / at AC-3 / rated value / maximum       V       690         Operating outgae / at AC-3 / rated value       A       0.16         Service power / at AC-3       W       40         • at 400 V / rated value       W       60         • at 400 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value	of the auxiliary contacts / typical		100,000
Product function       Yes         • overload protection       Yes         • phase disturbance recognition       Yes         Product component       Yes         • auxiliary 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 voltage / at AC-3 / rated value / maximum       V       690         Operating current / at AC-3 / rated value       A       0.16         Service power / at AC-3       V       60         • at 400 V / rated value       W       60         • at 600 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • of the non-delayed short-circuit release       A       3.33.3         • of the current-dependent overload	Type of the driving mechanism / motor drive		No
• overload protectionYes• phase disturbance recognitionYesProduct component	Design of the operating mechanism		selector switch
• phase disturbance recognition       Yes         Product component       No         • auxiliary switch       No         • undervoltage release mechanism       No         • trip indicator       No         Product extension / optional / motor drive       No         Mumber 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       0.16         Service power / at AC-3       -       -         • at 400 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • at 600 V / rated value       W       60         • of the non-delayed short-circuit release       A       3.3 3.3         • of the non-delayed short-circuit release       A       0.11 0.16         Service power / at	Product function		
Product componentNo• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated value / maximumV690Operating current / at AC-3 / rated valueA0.16Service power / at AC-3-• at 400 V / rated valueW60• at 400 V / rated valueW60• at 600 V / rated valueW60• at 600 V / rated valueW60• at 600 V / rated valueW60Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximumTop and bottomArrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA33.3• of the non-delayed short-circuit releaseA33.3• of the current-dependent overload releaseA0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous0switching01	overload protection		Yes
• auxiliary switchNo• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV600600Operating current / at AC-3 / at 400 V / rated valueA0.161Service power / at AC-3V• at 400 V / rated valueW• at 600 V / rated valueW• of the on-delayed short-circuit releaseAArrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA.0.16• of the non-delayed short-circuit releaseA.33.3• of the current-dependent overload releaseA.0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueW.0.16Auxiliary circuit:YesYesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous0	phase disturbance recognition	_	Yes
• undervoltage release mechanismNo• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoMumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated valueA0.16Service power / at AC-3W• at 400 V / rated valueW• at 630 V / rated valueW• at 630 V / rated valueW• at 630 V / rated valueW• of the non-delayed short-circui releaseA• of the non-delayed short-circui releaseA• of the current-dependent overload releaseA• of the current / at AC-3 / rat 230 V / rated valueW• of the current drend releaseA• of the current drend releaseA• of the current drend valueW• OA• of the current / rated valueW• OA• of the current / rated valueW• of the current / rated valueW• OA• of the current / rated valueM• of the curr	Product component		
• trip indicatorNoProduct extension / optional / motor driveNoMain circuit:NoNumber of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.16Service power / at AC-3W40• at 400 V / rated valueW60• at 690 V / rated valueW60• at 690 V / rated valueW60• of the non-delayed short-circuit releaseA3.3 3.3• of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueW20Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous0	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       0.16         Service power / at AC-3       W       40         • at 400 V / rated value       W       60         • at 400 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         Arrangement of electrical connectors / for main current circuit       Top and bottom         Adjustable response current       V       20         • of the onn-delayed short-circuit release       A       3.3 3.3         • of the current-dependent overload release       A       0.16         Service power / at AC-3 / at 230 V / rated value       W       20         <	undervoltage release mechanism		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       0.16         Service power / at AC-3       W       40         • at 400 V / rated value       W       40         • at 400 V / rated value       W       60         • at 500 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         • at 690 V / rated value       W       60         Arrangement of electrical connectors / for main current circuit       Top and bottom         Adjustable response current       I/h       15         • of the non-delayed short-circuit release       A       3.3 3.3         • of the current-dependent overload release       A       0.11 0.16         Service power / at AC-3 / at 230 V / rated value       W       20         Continuous current / rated value       A       0.16         Auxiliary circuit:       Yes       0	trip indicator		No
Number of poles / for main current circuit3Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.16Service power / at AC-3	Product extension / optional / motor drive		No
Operating voltage / at AC-3 / rated value / maximumV690Operating current / at AC-3 / at 400 V / rated valueA0.16Service power / at AC-3V400• at 400 V / rated valueW40• at 500 V / rated valueW60• at 690 V / rated valueW60• of the non-delayed short-circuit releaseA3.3 3.3• of the non-delayed short-circuit releaseA0.11 0.16• of the current-dependent overload releaseA0.16• of the current / rated valueW20Continuous current / rated valueYesProduct extension / auxiliary switchYesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneousYes	Main circuit:		
Operating current / at AC-3 / at 400 V / rated valueA0.16Service power / at AC-3V40• at 400 V / rated valueW40• at 500 V / rated valueW60• at 690 V / rated valueTop and bottomArrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentA3.3 3.3• of the non-delayed short-circuit releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	Number of poles / for main current circuit		3
Service power / at AC-3W• at 400 V / rated valueW• at 500 V / rated valueW• at 690 V / rated valueTop and bottom• at 690 V / rated valueA• of the non-delayed short-circuit releaseA• of the current-dependent overload releaseA• of the current-dependent overload releaseA• of the current / rated valueW20Continuous current / rated valueWAuxiliary circuit:Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	Operating voltage / at AC-3 / rated value / maximum	V	690
• at 400 V / rated valueW40• at 500 V / rated valueW60• at 690 V / rated valueW60Frequency 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 releaseA3.3 3.3• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueW20Auxiliary circuit:A0.16Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	Operating current / at AC-3 / at 400 V / rated value	А	0.16
• at 500 V / rated valueW60• at 690 V / rated valueW60Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response currentImage: Connector of the non-delayed short-circuit releaseA3.3 3.3• of the non-delayed short-circuit releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:YesVesProduct extension / auxiliary switchYes0Number of NC contacts / for auxiliary contacts / instantaneous switching0	Service power / at AC-3	_	
• at 690 V / rated valueW60Frequency 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 releaseA3.3 3.3• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	• at 400 V / rated value	W	40
Frequency 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 releaseA3.3 3.3• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Product extension / auxiliary switchProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	• at 500 V / rated value	W	60
maximumTop and bottomArrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current-• of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16YesProduct extension / auxiliary switchNumber of NC contacts / for auxiliary contacts / instantaneous switching0	• at 690 V / rated value	W	60
Adjustable response current       Image: Constant of the non-delayed short-circuit release       A       3.3 3.3         • of the non-delayed short-circuit release       A       0.11 0.16         • of the current-dependent overload release       A       0.11 0.16         Service power / at AC-3 / at 230 V / rated value       W       20         Continuous current / rated value       A       0.16         Auxiliary circuit:       Yes         Product extension / auxiliary switch       Yes         Number of NC contacts / for auxiliary contacts / instantaneous switching       0		1/h	15
• of the non-delayed short-circuit releaseA3.3 3.3• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:Product extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	Arrangement of electrical connectors / for main current circuit		Top and bottom
• of the current-dependent overload releaseA0.11 0.16Service power / at AC-3 / at 230 V / rated valueW20Continuous current / rated valueA0.16Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0	Adjustable response current		
Service power / at AC-3 / at 230 V / rated value       W       20         Continuous current / rated value       A       0.16         Auxiliary circuit:       Yes         Product extension / auxiliary switch       Yes         Number of NC contacts / for auxiliary contacts / instantaneous switching       0	<ul> <li>of the non-delayed short-circuit release</li> </ul>	А	3.3 3.3
Continuous current / rated value     A     0.16       Auxiliary circuit:	• of the current-dependent overload release	А	0.11 0.16
Auxiliary circuit:     Yes       Product extension / auxiliary switch     Yes       Number of NC contacts / for auxiliary contacts / instantaneous switching     0	Service power / at AC-3 / at 230 V / rated value	W	20
Product extension / auxiliary switch     Yes       Number of NC contacts / for auxiliary contacts / instantaneous switching     0	Continuous current / rated value	А	0.16
Number of NC contacts / for auxiliary contacts / instantaneous       0         switching       0	Auxiliary circuit:		
switching	Product extension / auxiliary switch		Yes
Number of NO contacts / for auxiliary contacts / instantaneous	-		0
switching	Number of NO 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
Inputs/ Outputs:	Inputs/ Outputs:		
Number of digital inputs         0	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)	
<ul> <li>stranded</li> </ul>				2x (0.5 4 mm²)	
<ul> <li>finely strande</li> </ul>	ed				
with condu	uctor end processing			2 x (0.5 2.5 mm2)	
<ul> <li>without co</li> </ul>	nductor final cutting			2x (0.5 2.5 mm2)	
<ul> <li>for AWG conduct</li> </ul>	ctors / for main contacts	3		2x (20 12)	
Certificates/appr	ovals:				
Verification of suita	ability			CE / UL / CSA	
• für Staubexplos	ionsschutz für Zone 21,	/22		no	
<ul> <li>for gas explosio</li> </ul>	n protection for zone 1/	2		no	
General Product	Approval			Test Certificates	
COC	(SA)	ROSTEST		Manufacturer	
Shipping Approva	al				
ABS	GL	Lloyd's Register	PRS	RINA	RMRS
other					
Manufacturer	other				

Safety:		
B10 value / with high demand rate		
according to SN 31920		50,000
T1 value / for proof test interval or service life		
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

VDE

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

#### Industry Mall (Online ordering system)

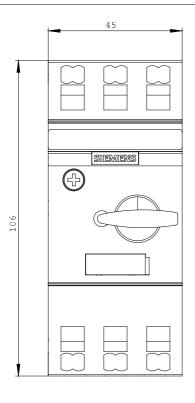
http://www.siemens.com/industrial-controls/mall

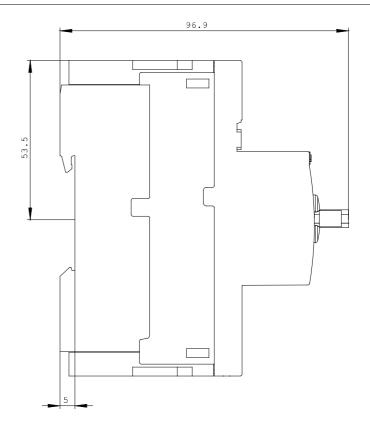
#### CAx-Online-Generator

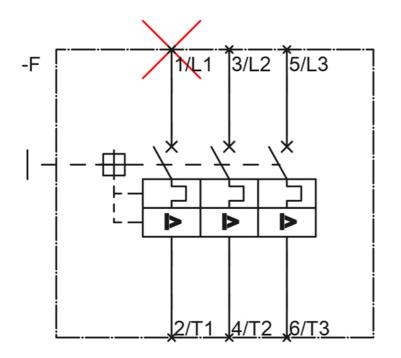
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last change:

Oct 17, 2011