# SIEMENS

# **Product data sheet**

# 3RV2411-1DA20



CIRCUIT-BREAKER SZ S00, FOR TRANSFORMER PROT. A-RELEASE 2.2...3.2A, N-RELEASE 65A 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	6.9	
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 contracts / typical100,000Type of the driving mechanism / motor driveNoDesign of the operating mechanismSector switchProduct functionYes• overload protectionYes• have diary switchNo• undiary at AC-3 / rated value / maximumV• service power / at AC-3I at AC-3 / at	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 opponent         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         1,100           • at 400 V / rated value         W         1,500           • at 600 V / rated value         W         1,500           • at 600 V / rated value         W         2,200           Frequency of operation / at AC-3 / according to IEC 60947-6-21         The and bottom           • of the non-delayed short-circuit release         A         6565           • of the non-delayed short-circuit release         A         223,2           Service power / at AC-3 / according release	of the main contacts / typical		100,000
Design of the operating mechanism         Image: Constraint of the consthe do the constraint of the constraint of the consth	of the auxiliary contacts / typical		100,000
Product function     Yes       • overfoad protection     Yes       • phase disturbance recognition     Yes       Product component     Yes       • audilary 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 / at 400 V / rated value     A     2,7       Service power / at AC-3     W     1,100       • at 400 V / rated value     W     1,500       • at 400 V / rated value     W     2,200       Frequency of operation / at AC-3 / according to IEC 60947-6-2/     1/h     15       Arrangement of electrical connectors / for main current circuit     W     2,200       Frequency of operation / at AC-3 / according to IEC 60947-6-2/     1/h     15       Arrangement of electrical connectors / for main current circuit     W     2,200       Frequency of operation / at AC-3 / according to IEC 60947-6-2/     1/h     15       Arrangement of electrical connectors / for main current circuit     To pa and bottom       Adjustable response current     A     3,2       Continuous	Type of the driving mechanism / motor drive	_	No
• overload protectionYes• phase disturbance recognitionYesProduct componentYes• auxiliary switchNo• undervoltage release mechanismNo• indicatorNoProduct extension / optional / motor driveNoProduct extension / optional / motor driveNoOperating voltage / at AC-3 / rated value / maximumVOperating units of at AC-3 / rated value / maximumVOperating current / at AC-3 / rated valueW11.000• at 400 V / rated valueW• at 400 V / rated valueY• at 400 V / rated valueA• at 400 V / rated val	Design of the operating mechanism	_	selector switch
• phase disturbance recognitionImage: Second Se	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 / maximum       V       690         Operating current / at AC-3 / rated value       A       2.7         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 / maximumVOperating current / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated value / maximumVOperating current / at AC-3 / rated valueA2.7Service power / at AC-3I• at 400 V / rated valueW• at 500 V / rated valueW• at 600 V / rated valueW• of the non-delayed short-circuit releaseA• of the non-delayed short-circuit releaseA• of the current-dependent overload releaseA• of the current-dependent overload releaseA• of the current-dependent overload releaseA• oth current-dependent o	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 / maximumV690Operating current / at AC-3 / at 400 V / rated valueA2.7Service power / at AC-3 / at 400 V / rated valueW1.100• at 400 V / rated valueW1.500• at 400 V / rated valueW1.500• at 600 V / rated valueW2.200Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximumTop and bottomAdjustable response currentITop and bottom• of the non-delayed short-ficuit releaseA65 65• of the non-delayed short-ficuit releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550• of the non-delayed short-ficuit releaseA3.2• of the non-delayed short-ficuit releaseA55 65• of the non-delayed short-ficuit releaseA3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueM550Continuous current / rated valueM9Instantaneous switchingIYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of Change-over switches / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0 <td>Product component</td> <td></td> <td></td>	Product component		
• 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 / maximum       V       690         Operating current / at AC-3 / rated value / maximum       V       690         operating current / at AC-3 / at 400 V / rated value       A       2.7         service power / at AC-3       400 V / rated value       W       1.100         • at 400 V / rated value       W       1.500       100         • at 690 V / rated value       W       1.500       100         • at 690 V / rated value       W       2.200       100         • at 690 V / rated value       W       2.200       100         • at 690 V / rated value       W       2.200       100         • at 690 V / rated value       W       2.200       100         Arrangement of electrical connectors / for main current circuit       Top and bottom       100         Adjustable response current       A       22 3.2       3.2         Service power / at AC-3 / at 230 V / rated value       W       550       10 <th>auxiliary switch</th> <th></th> <th>No</th>	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       2,7         Service power / at AC-3       400 V / rated value       W       1,100         • at 400 V / rated value       W       1,000       3         • at 400 V / rated value       W       1,000       3         • at 400 V / rated value       W       1,000       3         • at 400 V / rated value       W       1,000       3         • at 400 V / rated value       W       2,200       3         Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum       Top and bottom         Adjustable response current       A       65 65       50         • of the non-delayed short-circuit release       A       22 3.2       Service power / at AC-3 / at 230 V / rated value       W       550         Continuous current / rated value       Image: Service power / at AC-3 / at 230 V / rated value       Yes         Number of NC contacts / for auxiliary contacts / instantaneous switching       Qualitation of auxiliary contacts / instantaneous switching       Qualitation of au	undervoltage release mechanism		No
Main circuit:       3         Operating voltage / at AC-3 / rated value / maximum       V       690         Operating vortage / at AC-3 / rated value / maximum       V       690         Operating current / at AC-3 / at 400 V / rated value       A       2.7         Service power / at AC-3       W       1,100         • at 400 V / rated value       W       1,500         • at 600 V / rated value       W       1,500         • at 600 V / rated value       W       2,200         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       65 65         • of the current-dependent overload release       A       3.2         Service power / at AC-3 / at 230 V / rated value       W       550         Continuous current / rated value       Yes       0         Number of NC contacts / for auxiliary contacts / instantaneous switching       0       0         Number of NC contacts / for auxiliary contacts / instantaneous switching       0       0         Number of change-over switches / for auxiliary contacts       0       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 valueA2.7Service power / at AC-3W1.100• at 400 V / rated valueW1.500• at 600 V / rated valueW1.500• at 600 V / rated valueW2.200Frequency 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 releaseA65 65• of the current-dependent overload releaseA5.50Continuous current / rated valueW550Continuous current / rated valueV9Number of NC contacts / for auxiliary contacts / instantaneous switchingVesNumber of NO contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0Number of change-over switches / for auxiliary contacts0	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       2.7         Service power / at AC-3       W       1,100         • at 400 V / rated value       W       1,500         • at 600 V / rated value       W       2,200         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       65 65         • of the current-dependent overload release       A       2.2 3.2         Service power / at AC-3 / at 230 V / rated value       W       550         Continuous current / rated value       W       550         Auxiliary circuit:       Yes       1         Product extension / auxiliary contacts / instantaneous switching       0       0         switching       0       0       0       0         Number of NO contacts / for auxiliary contacts / instantaneous switching       0       0       0         Switching       0       0       0       0       0       0         Number of change-ov	Main circuit:		
Operating current / at AC-3 / at 400 V / rated valueA2.7Service power / at AC-3V1,100• at 400 V / rated valueW1,100• at 500 V / rated valueW1,500• at 690 V / rated valueW2,200Frequency 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 releaseA65 65• of the current-dependent overload releaseA2.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueW550Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber of NC contacts / for auxiliary contacts / instantaneous switching0Number of NC 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-3W1,100• at 400 V / rated valueW1,500• at 500 V / rated valueW1,500• at 690 V / rated valueW2,200Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum1/h15Arrangement of electrical connectors / for main current circuitTop and bottomAdjustable response current65 65• of the non-delayed short-circuit releaseA65 65• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueA3.2Auxiliary circuit:YesProduct extension / auxiliary switchYes0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of NC contacts / for auxiliary contacts / instantaneous switching0Number of change-over switches / for auxiliary contacts0	Operating voltage / at AC-3 / rated value / maximum	V	690
• at 400 V / rated valueW1,100• at 500 V / rated valueW1,500• at 690 V / rated valueW2,200Frequency 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 releaseA65 65• of the current-dependent overload releaseA65 65• of the current / rated valueW550Continuous current / rated valueW550Auxiliary circuit:A3.2Product extension / auxiliary switchYesNumber 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	2.7
• at 500 V / rated valueW1,500• at 690 V / rated valueW2,200Frequency 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 releaseA65 65• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueW550Auxiliary circuit:YesProduct extension / auxiliary switchYesNumber 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 valueW2,200Frequency 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 releaseA65 65• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueW550Auxiliary 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	• at 400 V / rated value	W	1,100
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       Top and bottom         • of the non-delayed short-circuit release       A       65 65         • of the current-dependent overload release       A       2.2 3.2         Service power / at AC-3 / at 230 V / rated value       W       550         Continuous current / rated value       A       3.2         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	1,500
maximum       Imaximum       Imaxim       Imaxim       Imax	• at 690 V / rated value	W	2,200
Adjustable response currentImage: Constant of the non-delayed short-circuit releaseA65 65• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueA3.2Auxiliary 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:1		1/h	15
• of the non-delayed short-circuit releaseA65 65• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueA3.2Auxiliary 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:U	Arrangement of electrical connectors / for main current circuit		Top and bottom
• of the current-dependent overload releaseA2.2 3.2Service power / at AC-3 / at 230 V / rated valueW550Continuous current / rated valueA3.2Auxiliary 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:U	Adjustable response current		
Service power / at AC-3 / at 230 V / rated value       W       550         Continuous current / rated value       A       3.2         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	<ul> <li>of the non-delayed short-circuit release</li> </ul>	А	65 65
Continuous current / rated value       A       3.2         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:       U	of the current-dependent overload release	А	2.2 3.2
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	550
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	3.2
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	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)	
<ul> <li>stranded</li> </ul>					4 mm²)	
<ul> <li>finely stranded</li> </ul>	ł					
with conduct	ctor end processing			2x (0.5	2.5 mm²)	
<ul> <li>without con</li> </ul>	ductor final cutting			2x (0.5	2.5 mm²)	
<ul> <li>for AWG conduct</li> </ul>	ors / for main contacts			2x (20 .	12)	
Certificates/appro	wale:					
Verification of suital			_	CE / UL	/094	
	onsschutz für Zone 21/2	22		no	/ 03A	
	protection for zone 1/2			no		
General Product A				no	Test Certificates	
General Product A		ROSTEST	•		Manufacturer	
Cac	<b>(</b> SP		(UL)		manalacturol	
cqc	CSA		UL			
Shipping Approva	I					
ABS	GL	Lloyd's Kegister LRS	PRS		RINA	RMRS
other						
Manufacturer	<u>other</u>	DVE VDE				
UL/CSA ratings						
yielded mechanical performance (hp)						
<ul> <li>for single-phase</li> </ul>	squirrel cage motors					
• at 110/120 V /	rated value		hp	0.1		
• at 230 V / rate	d value		hp	0.25		

## Safety:

for three-phase squirrel cage motors
at 200/208 V / rated value

• at 220/230 V / rated value

• at 460/480 V / rated value

• at 575/600 V / rated value

• at 480 V / rated value

• at 600 V / rated value

Operating current (FLA) / for three-phase squirrel cage motors

B10 value / with high demand rate	
according to SN 31920	50,000

0.5

0.75

1.5

2

3

2.7

hp

hp

hp

hp

А

А

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

Further information:

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

### Industry Mall (Online ordering system)

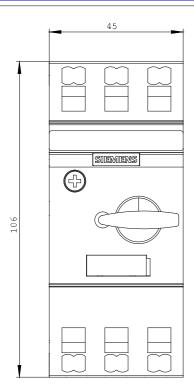
http://www.siemens.com/industrial-controls/mall

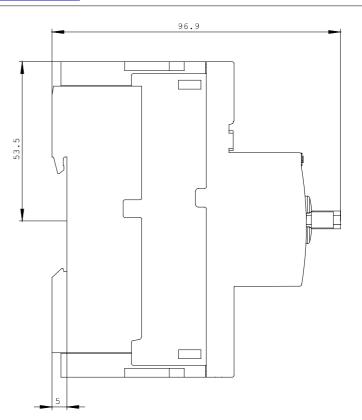
### CAx-Online-Generator

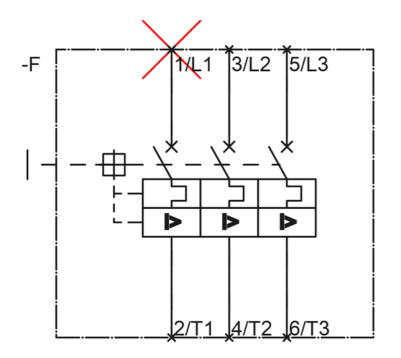
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RV2411-1DA20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2411-1DA20







last change:

Oct 24, 2011