# **SIEMENS**

Product data sheet 3RV2021-4NA20



CIRCUIT-BREAKER SZ S0, FOR MOTOR PROTECTION, CLASS 10, A-RELEASE 23...28A, N-RELEASE 364A, SPRING-L. CONNECTION, STANDARD SW. CAPACITY,

General technical data:		
product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Size of contactor / can be combined / company-specific		S00
Number of poles / for main current circuit		3
Product function		
Short circuit protection		Yes
overload protection		Yes
Phase failure detection		Yes
System protection		Yes
motor protection		Yes
<ul> <li>motor protection with overload relay function</li> </ul>		No
starter protection		No
Transformer protection		No
Disconnector functionality		Yes
<ul> <li>Main switches with supply disconnect function and EM-STOP switches</li> </ul>		No
Design of the operating mechanism		selector switch
Product component		
Auxiliary switch		No

undervoltage release		No
Trip indicator		No
Product expansion		
Auxiliary switch		Yes
optional / motor drive		No
Insulation voltage / with degree of pollution 3 / Rated value	V	690
Surge voltage resistance / Rated value	kV	6
Protection class IP		
of the terminal		IP20
• on the front		IP20
Protection against electrical shock		finger-safe
Installation altitude / at height above sea level / maximum	m	2,000
Relative humidity		
during operation	%	10 95
Ambient temperature		
during transport	°C	-50 +80
during storage	°C	-50 +80
during operation	°C	-20 +60
Shock resistance / acc. to IEC 60068-2-27		25g / 11 ms
Usage category		
• acc. to IEC 60947-4-1		AC-3
Active power loss / total / typical	W	11

Main circuit:		
Operating current / Rated value	Α	28
Operating voltage / Rated value	V	690
Type of voltage / for main current circuit		AC/DC
Operating frequency		
Rated value	Hz	50 60
Operating current / at AC-3 / at 400 V / Rated value	Α	28

Protective and monitoring functions:		
Type of protection		Increased safety
Certificate of suitability / ATEX		Yes
Design of the overload circuit breaker		thermal
Adjustable response value current / of the current-dependent overload release	Α	23 28
Trip class		CLASS 10
Design of the short-circuit trip		magnetic

Response value current / of the instantaneous short-circuit release	А	364
Operational short-circuit current breaking capacity (lcs) / with AC		
• at 240 V / Rated value	kA	100
• at 400 V / Rated value	kA	25
• at 500 V / Rated value	kA	5
• at 690 V / Rated value	kA	2
Maximum short-circuit current breaking capacity (Icu)		
• with AC / at 240 V / Rated value	kA	100
• with AC / at 400 V / Rated value	kA	55
• with AC / at 500 V / Rated value	kA	10
• with AC / at 690 V / Rated value	kA	4
Design of the fuse link / for IT network / for short-circuit protection of the main circuit		
• at 400 V		gL/gG 63 A
• at 500 V		gL/gG 63 A
• at 690 V		gL/gG 63 A
Breaking capacity short-circuit current (Icn)		
• with 1 current path / for DC / at 150 V / Rated value	kA	10
• with 2 current paths in series / for DC / at 300 V / Rated value	kA	10
• with 3 current paths in series / for DC / at 450 V / Rated value	kA	10

Installation/ mounting/ dimensions:		
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
mounting position		any
Depth	mm	96
Height	mm	119
Width	mm	45

Connections/ terminals:	
Arrangement of electrical connectors / for main current circuit	Top and bottom
Design of the electrical connection / for main current circuit	spring-loaded terminals
Type of connectable conductor cross-section	
• for main contacts	
single or multi-stranded	2x (1 10 mm²)
• finely stranded	
<ul> <li>without core end processing</li> </ul>	2x (1 6 mm²)
with core end processing	2x (1 6 mm²)
• for AWG conductors / for main contacts	2x (18 8)

UL/CSA ratings:		
Operating voltage / acc. to UL 60947 / Rated value	V	600
Full-load current (FLA) / for three-phase AC motor		
• at 480 V / Rated value	Α	28
• at 600 V / Rated value	Α	28

# Certificates/ approvals:

### **General Product Approval**





Special Test Certificate Type Test
Certificates/Test
Report

# **Shipping Approval**













**Shipping Approval** 





other

Confirmation



other

Environmental Confirmations

# Further information:

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

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

Industry Mall (Online ordering system)

 $\underline{\text{http://www.siemens.com/industrymall}}$ 

Cax online generator

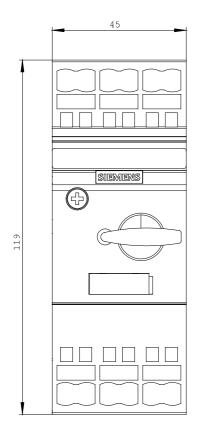
http://www.siemens.com/cax

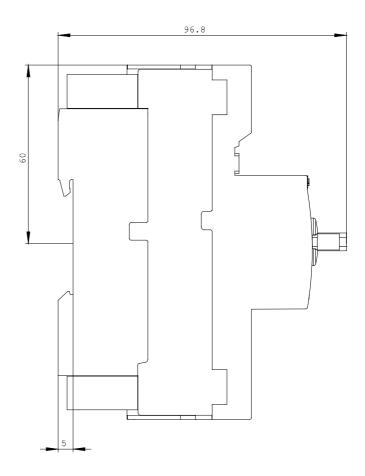
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

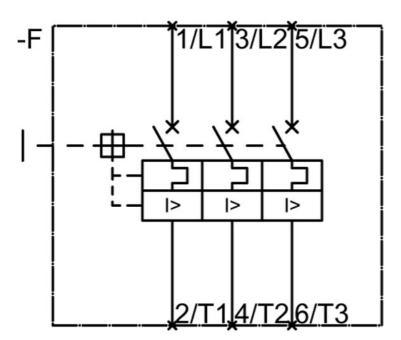
http://support.automation.siemens.com/WW/view/en/3RV2021-4NA20/all

 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$ 

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RV2021-4NA20}$ 







last change: Dec 18, 2014