

Product data sheet 3RV2021-4AA20

General technical data:		
Product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
Trip class		CLASS 10
Protection class IP / frontal/front side		IP20
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-50 80
during the operating phase	°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
Real loss power / total / typical	W	7
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F
Mechanical switching cycle as operating period		
of the main contacts / typical		100,000
of the auxiliary contacts / typical		100,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
Overload protection		Yes
Short-circuit to earth recognition		No
Phase disturbance recognition		Yes
Product component		
auxiliary switch		No
Undervoltage release mechanism		No
trip indicator		No
Product extension / optional / Motor drive		No

Main circuit:		
Number of poles / for main current circuit		3
Operating voltage / at 3 AC / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	Α	15.5
Service power / at AC-3		
• at 400 V / rated value	W	7,500
• at 500 V / rated value	W	7,500
• at 690 V / rated value	W	11,000
Switching frequency / 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 current-dependent overload release	А	11 16
Service power / at AC-3 / at 230 V / rated value	W	4,000
Continuous current / rated value	Α	16
Auxiliary circuit:		
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 contact		0
Inputs/ Outputs:		
Number of digital inputs		0
Short-circuit:		
Breaking capacity limit short-circuit current (Icu)		
• at 400 V / rated value	Α	55,000
• at 500 V / rated value	Α	10,000
• at 690 V / rated value	Α	4,000
Design of the overcurrent release and short-circuit release		thermomagnetic
Installation/mounting/dimensions:		
built in orientation		any
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
Width	mm	45
Height	mm	119
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	
• unifilar	2x (1 10 mm2)
• stranded wire	2x (1 10 mm2)
• stranded wire	
 with conductor end processing 	2x (1 6 mm2)
 without conductor final cutting 	2x (1 6 mm2)
• at AWG-conductors / for main contacts	2x (18 8)

Certificates/approvals:	
verification of suitability	CE / UL / CSA
• für Staubexplosionsschutz für Zone 21/22	no
• for gas explosion protection for zone 1/2	no

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

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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

Global Industry Mall (Online ordering system)

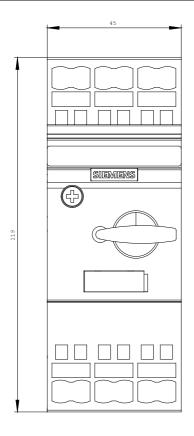
http://www.siemens.com/industrial-controls/mall

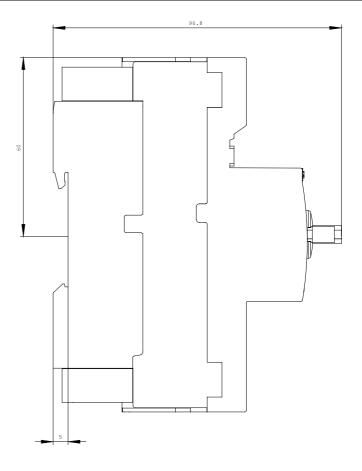
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

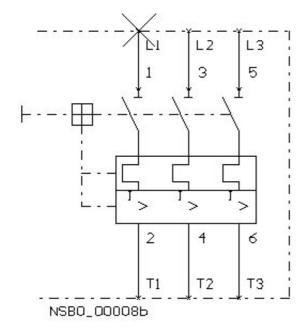
http://support.automation.siemens.com/WW/view/en/3RV2021-4AA20/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4AA20}$







last change: Apr 26, 2010