SIEMENS

Product data sheet 3RV2021-4NA10

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

General technical data:		
product brand name		SIRIUS
Product designation		3RV2 circuit breaker
Size of the circuit-breaker		S0
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
• motor protection with overload relay function		No
• starter protection		No
• Transformer protection		No
• Disconnector functionality		Yes
• Main switches with supply disconnect function and EM-STOP switches		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	10.8

Main circuit:

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	A	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	A	23 … 28
Trip class		CLASS 10
Design of the short-circuit trip		magnetic
Response value current / of the instantaneous short-circuit release	A	364
Operational short-circuit current breaking capacity (Ics) / 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	97
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		screw-type terminals
Type of connectable conductor cross-section		
• for main contacts		
• single or multi-stranded		2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²)
• finely stranded		
• with core end processing		2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 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	A	28
• at 600 V / Rated value	A	28

Certificates/ approvals:

General Product Approval			Declaration of Conformity	Test Certificates	
CCC		UL	EG-Konf.	Special Test Certificate	Type Test Certificates/Test Report

Shipping Approval					
ABS	BUREAU VERITAS	DNV	GL	LRS	PRS

Shipping Approval		other			
RINA	RMRS	Confirmation	VDE	other	Environmental Confirmations

Further information:

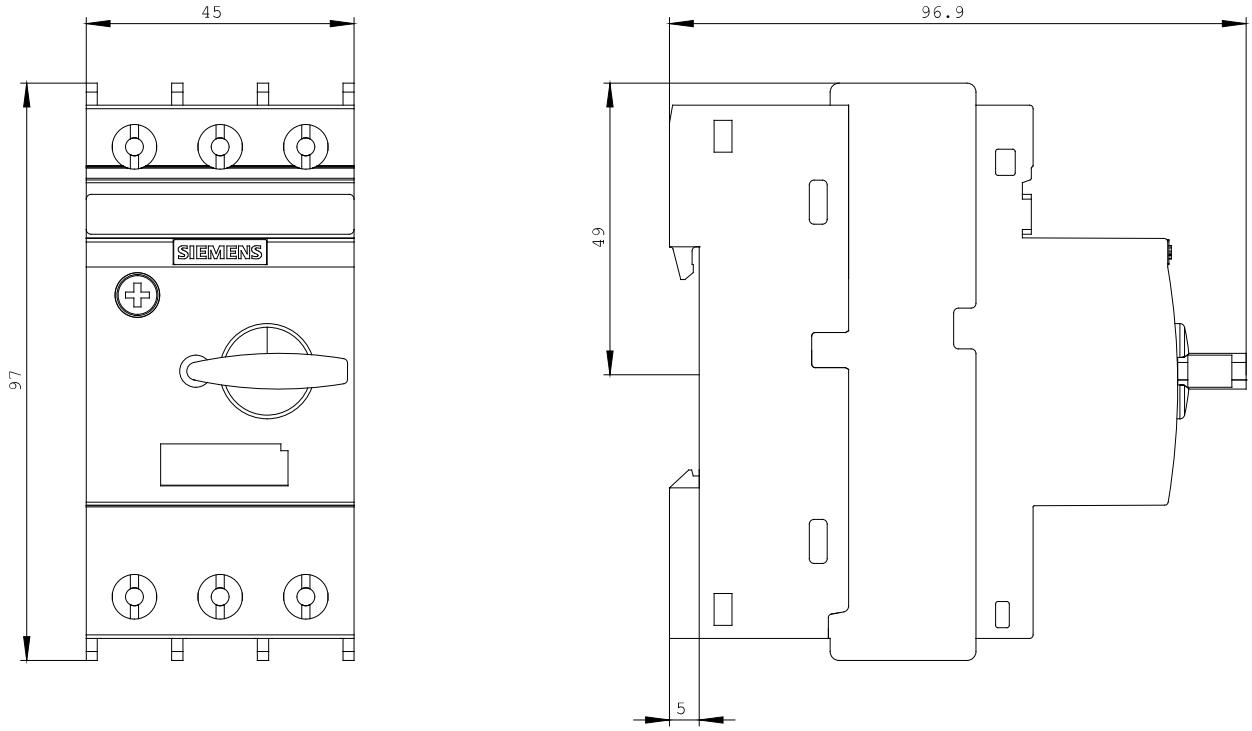
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

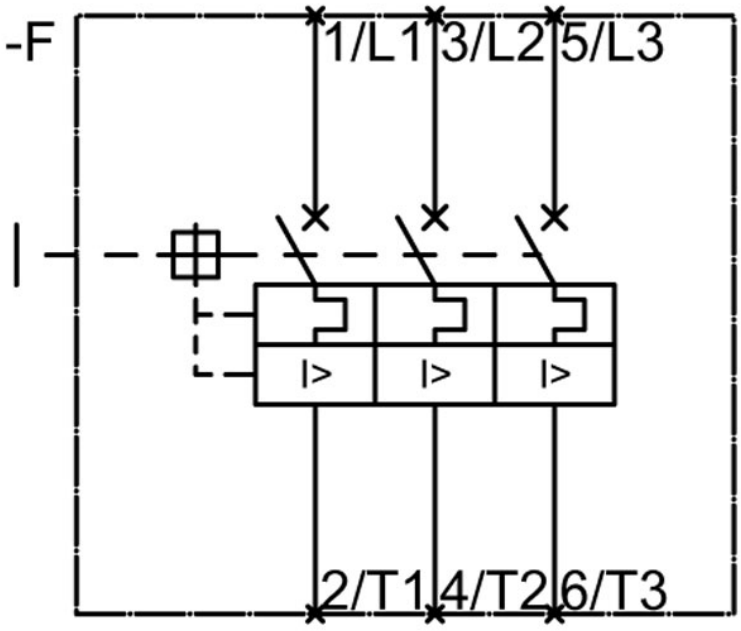
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RV2021-4NA10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4NA10





last change: Oct 20, 2014