



CIRCUIT-BREAKER SZ S0,
FOR MOTOR PROTECTION, CLASS 10,
A-RELEASE 17...22A, N-RELEASE 286A,
SPRING-L. CONNECTION,
STANDARD SW. CAPACITY,
W. TRANSVERSE AUX. SWITCH 1NO+1NC

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		
• removable terminal for auxiliary and control circuit		No
• overload protection		Yes
• phase disturbance recognition		Yes
• short-circuit to earth recognition		No
Product component		
• auxiliary switch		Yes
• undervoltage release mechanism		No
• trip indicator		No
Product extension		
• auxiliary switch		Yes
• optional / motor drive		No
Impulse voltage resistance / rated value	kV	6
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe

Installation altitude / at a height over sea level / maximum	m	2,000
Resistance against shock		25g / 11 ms
Ambient temperature		
• during transport	°C	-50 ... +80
• during storage	°C	-50 ... +80
• during operating	°C	-20 ... +60
Active power loss / total / typical	W	9.9

Main circuit:

Operating voltage / rated value	V	690
Service power / at AC-3		
• at 400 V / rated value	W	11,000
• at 500 V / rated value	W	11,000
• at 690 V / rated value	W	18,500
Operational current / at AC-3 / at 400 V / rated value	A	22
Mechanical operating cycles as operating time / of the main contacts / typical		100,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	15

Auxiliary circuit:

Design of the auxiliary switch		transverse
Number of change-over switches / for auxiliary contacts		0
Mechanical operating cycles as operating time / of the auxiliary contacts / typical		100,000
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $I_k < 400$ A)
Operating current / of the auxiliary contacts / at AC-15 / at 24 V	A	2
Operating current / of the auxiliary contacts		
• at AC-15		
• at 230 V	A	0.5
• at DC-13		
• at 24 V	A	1
• at 60 V	A	0.15

Protection function:

Trip class		CLASS 10
Adjustable response current / of the current-dependent overload release	A	17 ... 22
Breaking capacity limit short-circuit current (I_{cu})		
• at 400 V / rated value	A	55,000
• at 500 V / rated value	A	10,000
• at 690 V / rated value	A	4,000

Safety:**Proportion of dangerous failures**

• with high demand rate / according to SN 31920	%	40
• with low demand rate / according to SN 31920	%	40

Failure rate (FIT value) / with low demand rate / according to SN 31920

FIT 50

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

a 10

Installation/mounting/dimensions:**Type of mounting**

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:**Arrangement of electrical connectors / for main current circuit**

Top and bottom

Design of the electrical connection

• for main current circuit	spring-loaded terminals
• for auxiliary and control current circuit	spring-loaded terminals

Type of the connectable conductor cross-section

• for main contacts	
• solid	2x (1 ... 10 mm ²)
• finely stranded	
• without conductor final cutting	2x (1 ... 6 mm ²)
• with conductor end processing	2x (1 ... 6 mm ²)
• for AWG conductors / for main contacts	2x (18 ... 8)
• for auxiliary contacts	
• solid	2x (0.5 ... 2.5 mm ²)
• finely stranded	
• without conductor final cutting	2x (0.5 ... 1.5 mm ²)
• with conductor end processing	2x (0.5 ... 1.5 mm ²)
• for AWG conductors / for auxiliary contacts	2x (20 ... 14)

UL/CSA ratings:**yielded mechanical performance (hp)**

• for single-phase squirrel cage motors	
• at 110/120 V / rated value	hp 1.5
• at 230 V / rated value	hp 3

- for three-phase squirrel cage motors
 - at 200/208 V / rated value
 - at 220/230 V / rated value
 - at 460/480 V / rated value

hp	5
hp	7.5
hp	15

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

- at 480 V / rated value

A	21
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Contact rating designation / for auxiliary contacts / according to UL

C300 / R300

Certificates/approvals:

General Product Approval

For use in hazardous locations

Declaration of Conformity



Test Certificates

[other](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



Shipping Approval

other



[other](#)

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:

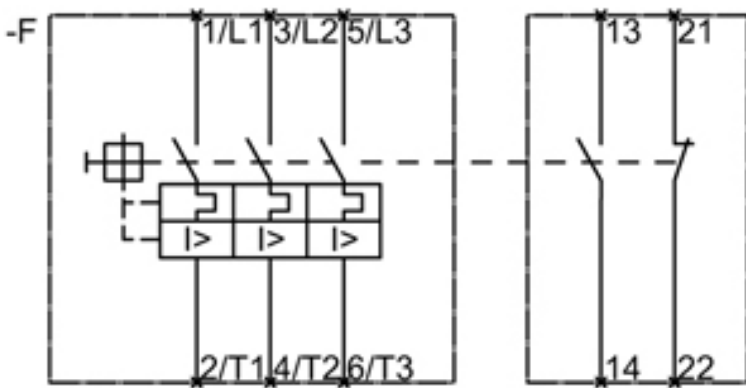
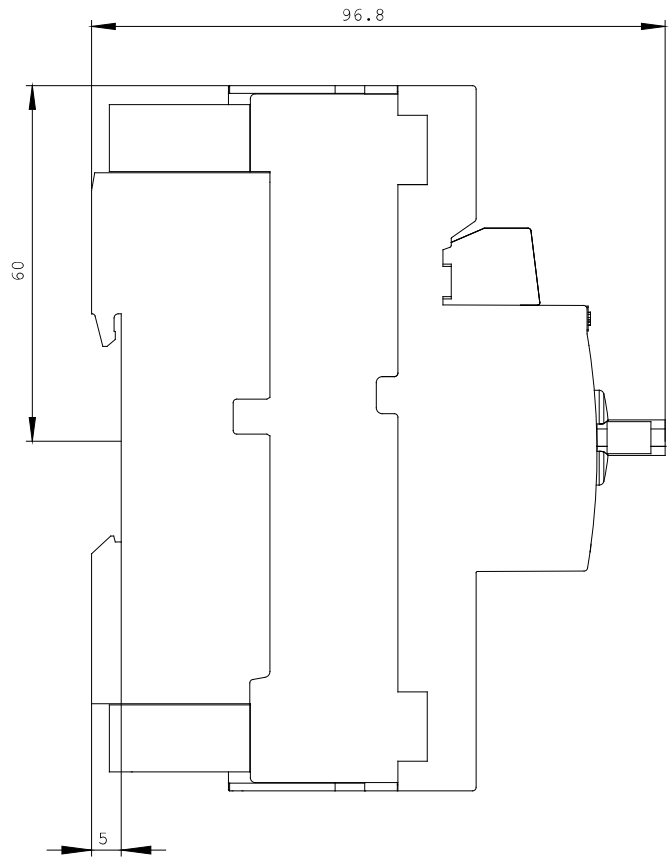
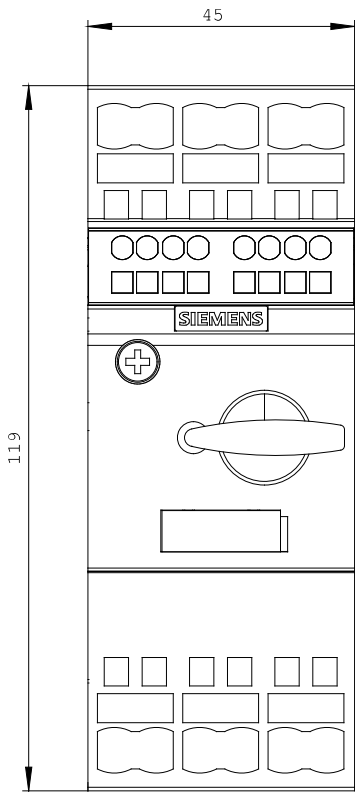
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2021-4CA25/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4CA25



last change:

Feb 14, 2013