



CIRCUIT-BREAKER SZ S0,  
FOR MOTOR PROTECTION, CLASS 10,  
A-RELEASE 27...32A, N-RELEASE 400A,  
SCREW 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

<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Resistance against shock</b>		25g / 11 ms
<b>Ambient temperature</b>		
• during transport	°C	-50 ... +80
• during storage	°C	-50 ... +80
• during operating	°C	-20 ... +60
<b>Active power loss / total / typical</b>	W	12.2

#### Main circuit:

<b>Operating voltage / rated value</b>	V	690
<b>Service power / at AC-3</b>		
• at 400 V / rated value	W	15,000
• at 500 V / rated value	W	18,500
• at 690 V / rated value	W	30,000
<b>Operational current / at AC-3 / at 400 V / rated value</b>	A	32
<b>Mechanical operating cycles as operating time / of the main contacts / typical</b>		100,000
<b>Frequency of operation / at AC-3 / according to IEC 60947-6-2</b>	1/h	15

#### Auxiliary circuit:

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

<b>Trip class</b>		CLASS 10
<b>Adjustable response current / of the current-dependent overload release</b>	A	27 ... 32
<b>Breaking capacity limit short-circuit current (<math>I_{cu}</math>)</b>		
• 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:		
<b>Proportion of dangerous failures</b>		
• with high demand rate / according to SN 31920	%	40
• with low demand rate / according to SN 31920	%	40
<b>Failure rate (FIT value) / with low demand rate / according to SN 31920</b>	FIT	50
<b>B10 value / with high demand rate / according to SN 31920</b>		50,000
<b>T1 value / for proof test interval or service life / according to IEC 61508</b>	a	10

Installation/mounting/dimensions:		
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>mounting position</b>		any
<b>Depth</b>	mm	96
<b>Height</b>	mm	97
<b>Width</b>	mm	45

Connections:		
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)

UL/CSA ratings:		
<b>yielded mechanical performance (hp)</b>		
• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	2
• at 230 V / rated value	hp	5
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	7.5

• at 220/230 V / rated value	hp	10
• at 460/480 V / rated value	hp	20
<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
• at 480 V / rated value	A	27
<b>Contact rating designation / for auxiliary contacts / according to UL</b>		C300 / R300

#### Certificates/approvals:

<b>General Product Approval</b>	<b>For use in hazardous locations</b>	<b>Declaration of Conformity</b>
 CSA  GOST  UL	 ATEX	 EG-Konf.

#### Test Certificates

[other](#)     
[Special Test Certificate](#)     
[Type Test Certificates/Test Report](#)

#### Shipping Approval



#### Shipping Approval

other



#### Further information:

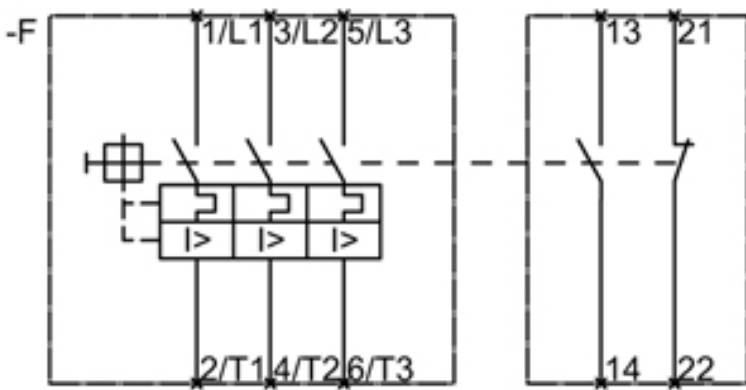
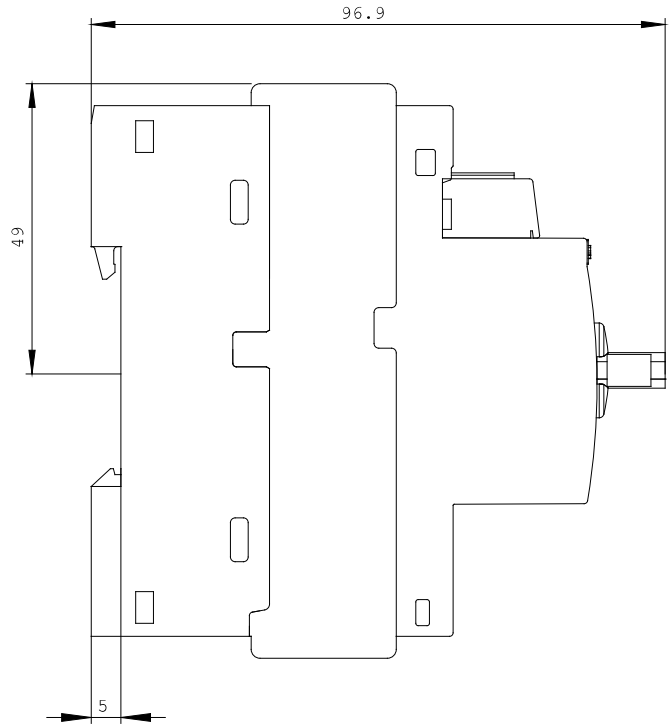
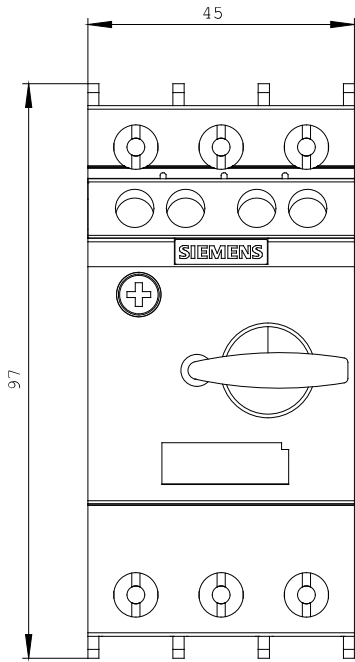
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<http://www.siemens.com/cax>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WWW/view/en/3RV2021-4EA15/all>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2021-4EA15](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4EA15)



last change:

Feb 14, 2013