



CIRCUIT-BREAKER SZ S0,  
FOR MOTOR PROTECTION, CLASS 10,  
A-REL. 17...22A, N-REL. 286A,  
SCREW CONNECTION,  
STANDARD SWITCHING CAPACITY,  
REUSABLE PACKING, PACKAGE = 43 UNITS

**General technical data:**

<b>product brand name</b>		SIRIUS
<b>product designation</b>		3RV2 circuit breaker
<b>Size of the circuit-breaker</b>		S0
<b>Number of poles / for main current circuit</b>		3
<b>Product function</b>		
• removable terminal for auxiliary and control circuit		No
• overload protection		Yes
• phase disturbance recognition		Yes
• short-circuit to earth recognition		No
<b>Product component</b>		
• auxiliary switch		No
• undervoltage release mechanism		No
• trip indicator		No
<b>Product extension</b>		
• auxiliary switch		Yes
• optional / motor drive		No
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Protection class IP / on the front</b>		IP20
<b>Protection against electrical shock</b>		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	9.9

#### Main circuit:

<b>Operating voltage / rated value</b>	V	690
<b>Service power / at AC-3</b>		
• at 400 V / rated value	W	11,000
• at 500 V / rated value	W	11,000
• at 690 V / rated value	W	18,500
<b>Operational current / at AC-3 / at 400 V / rated value</b>	A	22
<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>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

#### Protection function:

<b>Trip class</b>		CLASS 10
<b>Adjustable response current / of the current-dependent overload release</b>	A	17 ... 22
<b>Breaking capacity limit short-circuit current (Icu)</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:**

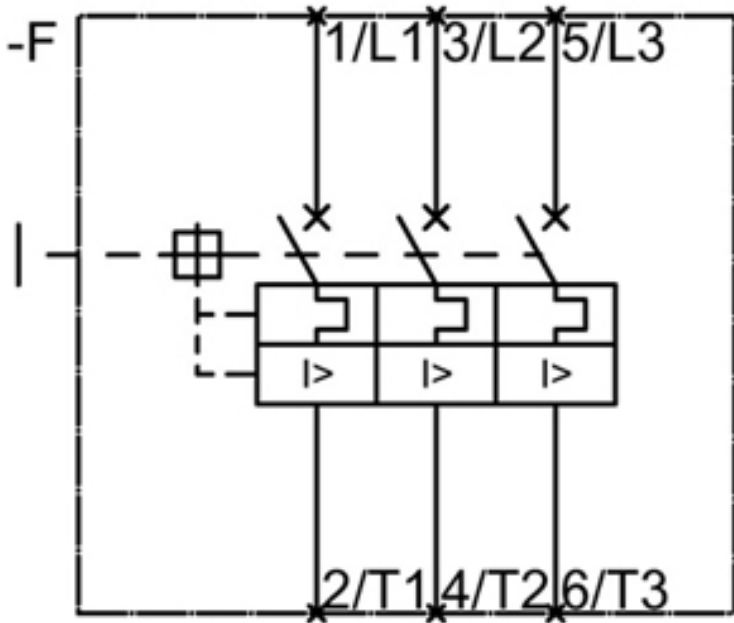
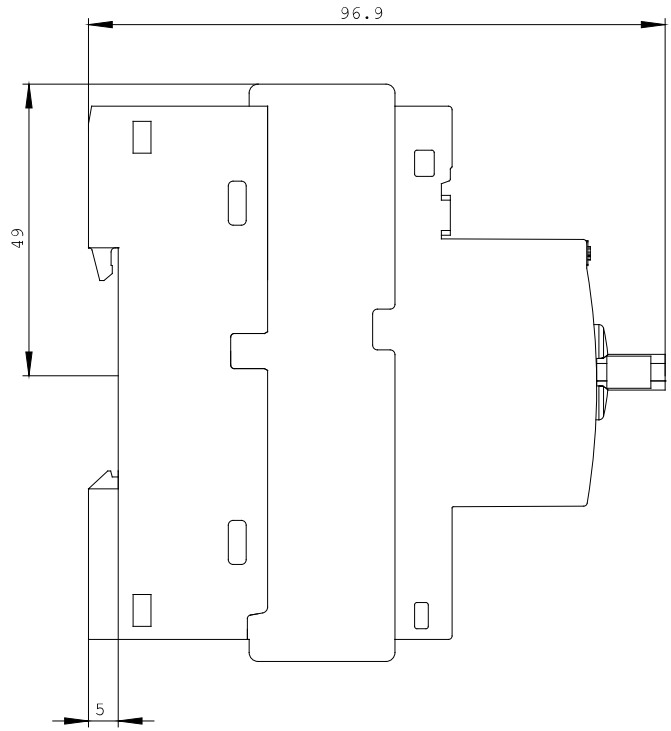
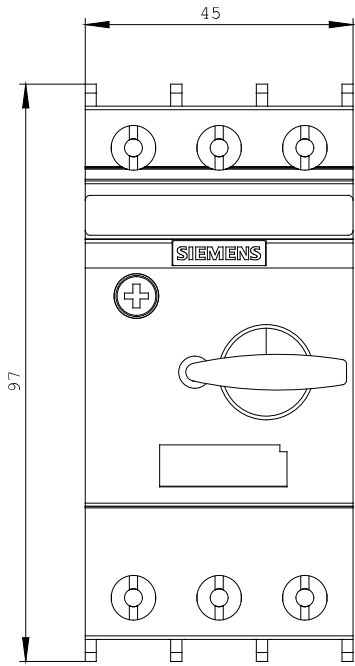
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Design of the electrical connection</b> • for main current circuit		screw-type terminals
<b>Type of the connectable conductor cross-section</b> • for main contacts • solid • finely stranded • with conductor end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

**UL/CSA ratings:**

<b>yielded mechanical performance (hp)</b> • for single-phase squirrel cage motors • at 110/120 V / rated value • at 230 V / rated value • 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	1.5
	hp	3
	hp	5
	hp	7.5
	hp	15
<b>Operating current (FLA) / for three-phase squirrel cage motors</b> • at 480 V / rated value	A	21

**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/3RV2021-4CA10-ZX95/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2021-4CA10-ZX95](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4CA10-ZX95)



last change:

Feb 14, 2013