



CIRCUIT-BREAKER SZ S0,  
FOR MOTOR PROTECTION, CLASS 10,  
A-RELEASE 20...25A, N-RELEASE 325A,  
SCREW CONNECTION,  
STANDARD SW. CAPACITY,  
W. TRANSVERSE AUX. SWITCH 1NO+1NC

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>	
• short circuit protection	Yes
• overload protection	Yes
• phase disturbance recognition	Yes
• plant protection	Yes
• motor protection	Yes
• motor protection with relais overload functionality	No
• starter protection	No
• transformer protection	No
• disconnecter functionality	Yes
• main control switches with supply disconnect function and EM-STOP switches	No
<b>Design of the operating mechanism</b>	selector switch
<b>Product component</b>	
• auxiliary switch	Yes
• undervoltage release mechanism	No

• trip indicator		No
<b>Product extension</b>		
• auxiliary switch		Yes
• optional / motor drive		No
<b>Insulation voltage / with degree of pollution 3 / rated value</b>	V	690
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Protection class IP</b>		
• of the terminal		IP20
• on the front		IP20
<b>Protection against electrical shock</b>		finger-safe
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Relative humidity</b>		
• during operating phase	%	10 ... 95
<b>Ambient temperature</b>		
• during transport	°C	-50 ... +80
• during storage	°C	-50 ... +80
• during operating	°C	-20 ... +60
<b>Shock resistance / according to IEC 60068-2-27</b>		25g / 11 ms
<b>Usage category</b>		
• according to IEC 60947-4-1		AC-3
<b>Active power loss / total / typical</b>	W	10.4

#### Main circuit:

<b>Operating voltage / rated value</b>	V	690
<b>Voltage type / for main circuit</b>		AC/DC
<b>Operating frequency</b>		
• rated value	Hz	50 ... 60
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	25

#### Hilfsstromkreis

<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 <sub>k</sub> < 400 A)
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#### Protective and monitoring functions:

<b>Type of protection</b>		Increased safety
<b>Varification of suitability / ATEX</b>		Yes
<b>Design of the overload circuit breaker</b>		thermal
<b>Adjustable response current / of the current-dependent overload release</b>	A	20 ... 25
<b>Trip class</b>		CLASS 10
<b>Design of the short-circuit trip</b>		magnetic

<b>Current response value / of the instantaneous short-circuit trip</b>	A	325
<b>Operational short-circuit current breaking capacity (Ics) / with AC</b>		
• 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
<b>Breaking capacity maximum short-circuit current (Icu)</b>		
• at 240 V / for AC / rated value	kA	100
• at 400 V / for AC / rated value	kA	55
• at 500 V / for AC / rated value	kA	10
• at 690 V / for AC / rated value	kA	4
<b>Design of fuse insert / for IT network / for short-circuit protection of the main circuit</b>		
• at 400 V		gL/gG 63 A
• at 500 V		gL/gG 50 A
• at 690 V		gL/gG 50 A
<b>Breaking capacity short-circuit current (Icn)</b>		
• with 1 current path / at 150 V / for DC / rated value	kA	10
• with 2 current paths in series / at 300 V / for DC / rated value	kA	10
• with 3 current paths in series / at 450 V / for DC / rated value	kA	10

#### Installation/ mounting/ dimensions:

<b>Mounting type</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/ terminals:

<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Design of the electrical connection / for main current circuit</b>		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid or multi-stranded		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)
<b>Design of the electrical connection / for auxiliary and control current circuit</b>		screw-type terminals
<b>Type of the connectable conductor cross-section</b>		

- for auxiliary contacts
  - solid or multi-stranded
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0,5 ... 1,5 mm<sup>2</sup>), 2x (0,75 ... 2,5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14)

#### UL/CSA ratings:

**Operating voltage / according to UL 60947 / rated value**

V 600

**Full-load current (FLA) / for 3-phase motor**

- at 480 V / rated value
- at 600 V / rated value

A 25  
A 25

**Contact rating designation / for auxiliary contacts / according to UL**

C300 / R300

#### Certificates/ approvals:

**General Product Approval**

**Declaration of Conformity**

**Test Certificates**



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

**Shipping Approval**



**Shipping Approval**

**other**



[Confirmation](#)



[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**

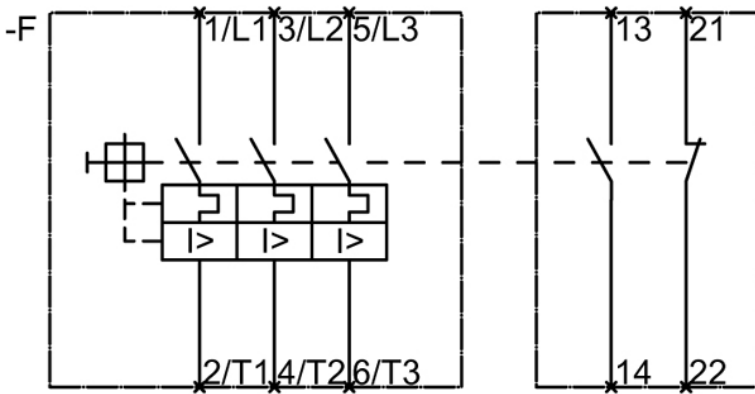
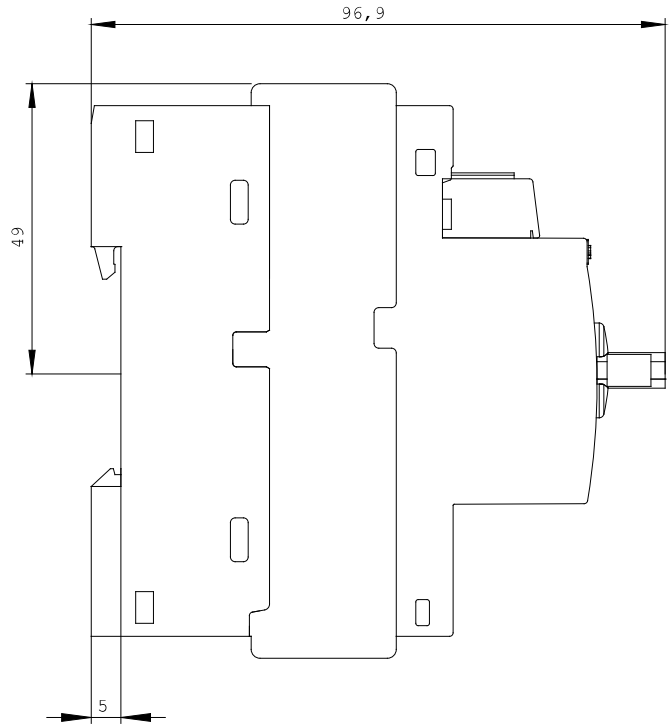
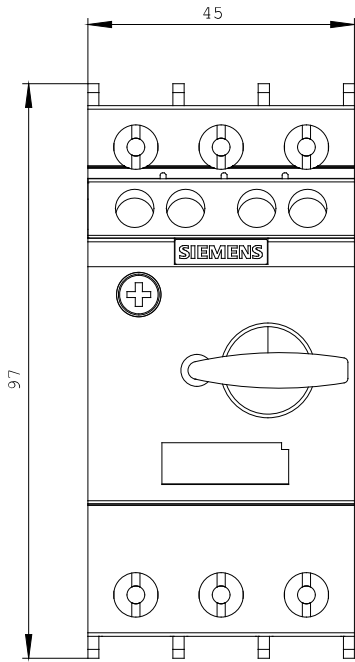
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RV2021-4DA15/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2021-4DA15](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2021-4DA15)



last change:

Sep 8, 2014