



CIRCUIT-BREAKER SZ S0,  
FOR STARTER COMBINATION,  
RATED CURRENT 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
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-50 ... 80
• during operating	°C	-20 ... 60
• during transport	°C	-50 ... 80
Resistance against shock		25g / 11 ms
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Active power loss / total / typical	W	9.9
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Mechanical operating cycles as operating time		

• of the main contacts / typical		100,000
• of the auxiliary contacts / typical		100,000
<b>Type of the driving mechanism / motor drive</b>		No
<b>Design of the operating mechanism</b>		selector switch
<b>Product function</b>		
• overload protection		No
• phase disturbance recognition		No
<b>Product component</b>		
• auxiliary switch		No
• undervoltage release mechanism		No
• trip indicator		No
<b>Product extension / optional / motor drive</b>		No

<b>Main circuit:</b>		
<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at AC-3 / rated value / maximum</b>	V	690
<b>Operating current / at AC-3 / at 400 V / rated value</b>	A	22
<b>Service power / at AC-3</b>		
• at 400 V / rated value	W	11,000
• at 500 V / rated value	W	18,500
• at 690 V / rated value	W	22,000
<b>Frequency of operation / at AC-3 / according to IEC 60947-6-2 / maximum</b>	1/h	15
<b>Arrangement of electrical connectors / for main current circuit</b>		Top and bottom
<b>Adjustable response current</b>		
• of the non-delayed short-circuit release	A	364 ... 364
<b>Service power / at AC-3 / at 230 V / rated value</b>	W	7,500
<b>Continuous current / rated value</b>	A	32

<b>Auxiliary circuit:</b>		
<b>Product extension / auxiliary switch</b>		Yes
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of change-over switches / for auxiliary contacts</b>		0

<b>Inputs/ Outputs:</b>		
<b>Number of digital inputs</b>		0

<b>Short-circuit:</b>		
<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
<b>Design of the overcurrent release and short-circuit release</b>		thermomagnetic

Installation/mounting/dimensions:		
<b>Built in orientation</b>		any
<b>Type of mounting</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>Width</b>	mm	45
<b>Height</b>	mm	97
<b>Depth</b>	mm	91
<b>Distance, to be maintained, to the ranks assembly</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	0
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• sideways	mm	30
• downwards	mm	50
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	50
• downwards	mm	50
• sideways	mm	30

Connections:		
<b>Product function</b>		
• removable terminal for main circuit		No
• removable terminal for auxiliary and control circuit		No
<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		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• stranded		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )

- finely stranded
- with conductor end processing
- for AWG conductors / for main contacts

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)

## Certificates/approvals:

### Verification of suitability

- für Staubexplosionsschutz für Zone 21/22
- for gas explosion protection for zone 1/2

CE / UL / CSA

no

no

### General Product Approval

### Test Certificates



CQC

[ROSTEST](#)



UL

[Manufacturer](#)

### Shipping Approval



ABS



GL



LRS



PRS



RINA



RMRS

### other

[Manufacturer](#)

[other](#)



VDE

## UL/CSA ratings

### yielded mechanical performance (hp)

- 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	2
hp	5
hp	7.5
hp	10
hp	20

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

- at 480 V / rated value

A	27
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## Safety:

### 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
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### Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT	50
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### Proportion of dangerous failures

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

%	40
%	40

**Protection against electrical shock**

finger-safe

#### 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

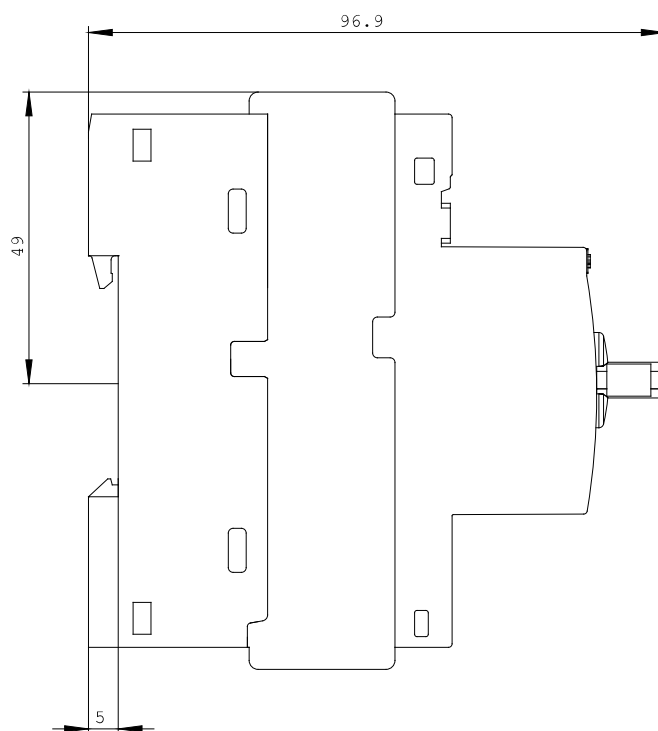
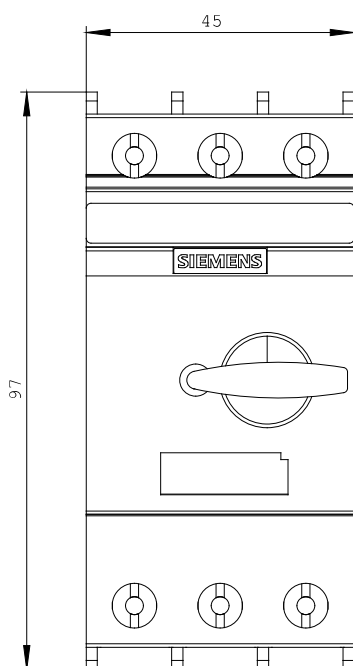
<http://www.siemens.com/cax>

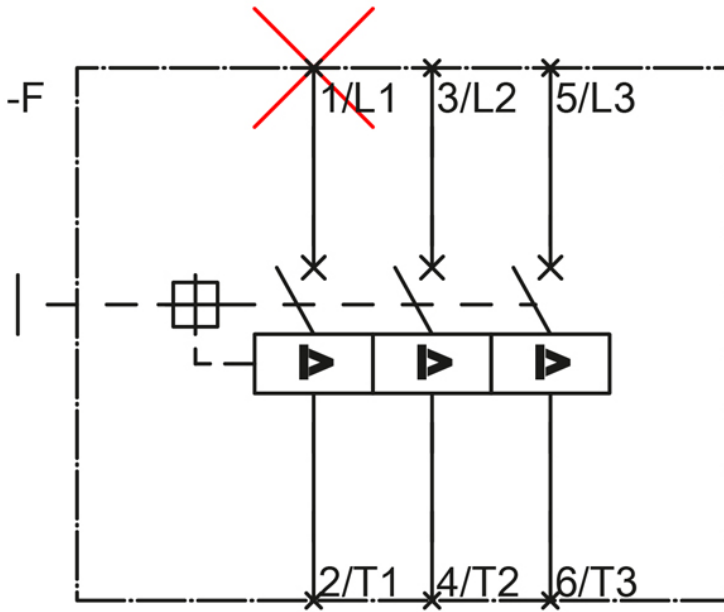
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV2321-4NC10/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RV2321-4NC10](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV2321-4NC10)





last change:

Oct 17, 2011