



CIRCUIT-BREAKER SIZE S3 A-RELEASE 70...90 A, N-RELEASE 1170A, MOTOR PROTECTION UP TO 100 KA, CLASS 20, SCREW CONNECTION INCREASED BREAKING CAPACITY

Figure similar

product brand name	SIRIUS
Product designation	circuit breaker
Design of the product	for motor protection

### General technical data:

<b>Product expansion</b>	
• Auxiliary switch	Yes
<b>Active power loss total typical</b>	30 W
<b>Surge voltage resistance Rated value</b>	6 000 V
<b>Protection class IP</b>	
• on the front	IP20
<b>Mechanical service life (switching cycles)</b>	
• of the main contacts typical	50 000

### Ambient conditions:

<b>Installation altitude at height above sea level maximum</b>	2 000 m
<b>Ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C

### Main circuit:

<b>Adjustable response value current of the current-dependent overload release</b>	70 ... 90 A
<b>Operating voltage</b>	
• Rated value	690 V

<ul style="list-style-type: none"> <li>• at AC-3 Rated value maximum</li> </ul>	690 V
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> </ul> </li> </ul>	90 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> </ul> </li> </ul>	45 kW
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	15 1/h

#### Auxiliary circuit:

<b>Number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	0

#### Protective and monitoring functions:

<b>Trip class</b>	CLASS 20
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
<ul style="list-style-type: none"> <li>• at AC at 240 V Rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• with AC at 400 V Rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at AC at 500 V Rated value</li> </ul>	10 kA
<ul style="list-style-type: none"> <li>• at AC at 690 V Rated value</li> </ul>	6 kA

#### Short-circuit:

<b>Design of the overcurrent release and short-circuit release</b>	thermomagnetic
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#### Installation/ mounting/ dimensions:

<b>mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<b>Height</b>	165 mm
<b>Width</b>	70 mm
<b>Depth</b>	174 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— Backwards</li> </ul> </li> </ul>	0 mm
<ul style="list-style-type: none"> <li>— at the side</li> </ul>	0 mm

#### Connections/ Terminals:

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	No
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	screw-type terminals with box terminals
<ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>	screw-type terminals

Arrangement of electrical connectors for main current circuit	front side
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG conductors for main contacts</li> </ul>	2x (2.5 ... 16 mm <sup>2</sup> ) 2x (10 ... 50 mm <sup>2</sup> ), 1x (10 ... 70 mm <sup>2</sup> ) 2x (2.5 ... 35 mm <sup>2</sup> ), 2.5 ... 50 mm <sup>2</sup> 2x (10 ... 1), 1x (10 ... 2)


#### Mechanical data:

Size of the circuit-breaker	S3
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#### Certificates/ approvals:

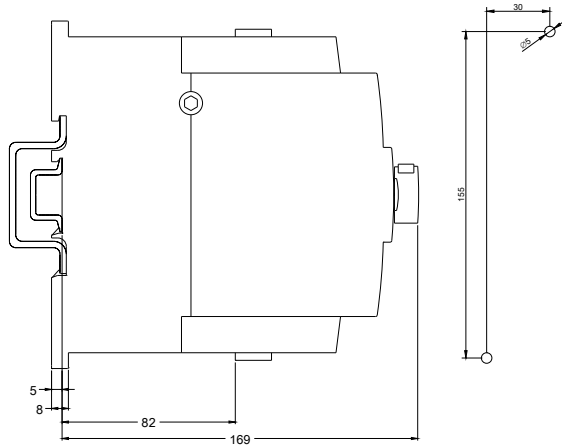
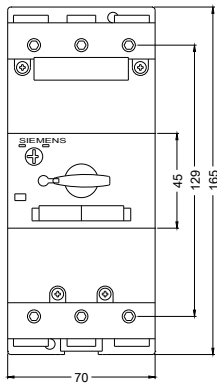
General Product Approval			Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL	 EAC	 EG-Konf.
				<a href="#">spezielle Prüfbescheinigung</a> <a href="#">n</a>

Shipping Approval	other
 ABS  BUREAU VERITAS  DNV  GL  RMRS	<a href="#">sonstig</a>

other
<a href="#">Bestätigungen</a> <a href="#">Umweltbestätigung</a>  VDE

#### 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://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RV10424LB10>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RV10424LB10>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RV10424LB10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RV10424LB10&lang=en)



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