

CIRCUIT BREAKER, SIZE S2, FOR STARTER COMBINATION,  
RATED CURRENT 17A, N-RELEASE 260A, SCREW TERMINAL,  
STANDARD BREAKING CAPACITY



product brandname	SIRIUS
Product designation	Circuit breaker
Design of the product	For starter combinations
Product type designation	3RV2
General technical data	
Size of the circuit-breaker	S2
Size of contactor can be combined company-specific	S2
Product extension	
• Auxiliary switch	Yes
Power loss [W] total typical	12 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V
Protection class IP	

<ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>	IP20 IP00
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• of the main contacts typical</li> <li>• of auxiliary contacts typical</li> </ul>	50 000 50 000
<b>Electrical endurance (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	50 000
<b>Protection against electrical shock</b>	finger-safe when touched vertically from front acc. to IEC 60529
Equipment marking acc. to DIN EN 81346-2	Q

#### Ambient conditions

<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-20 ... +60 °C -50 ... +80 °C -50 ... +80 °C

#### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Operating voltage</b>	
<ul style="list-style-type: none"> <li>• rated value</li> <li>• at AC-3 rated value maximum</li> </ul>	690 V 690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating current rated value</b>	17 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 400 V rated value</li> </ul>	17 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-3</li> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul>	4 000 W 7 500 W 7 500 W 15 000 W
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	15 1/h

#### Protective and monitoring functions

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Ground fault detection</li> <li>• Phase failure detection</li> </ul>	No No
<b>Operational short-circuit current breaking capacity (Ics) at AC</b>	
<ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> </ul>	100 A 30 kA 6 kA

• at 690 V rated value	3 kA
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	65 kA
• at AC at 500 V rated value	12 kA
• at AC at 690 V rated value	5 kA

#### UL/CSA ratings

<b>Full-load current (FLA) for three-phase AC motor</b>	
• at 480 V rated value	17 A
• at 600 V rated value	17 A
<b>Yielded mechanical performance [hp]</b>	
• for single-phase AC motor	
— at 110/120 V rated value	1.5 hp
— at 230 V rated value	3 hp
• for three-phase AC motor	
— at 200/208 V rated value	5 hp
— at 220/230 V rated value	7.5 hp
— at 460/480 V rated value	15 hp
— at 575/600 V rated value	15 hp

#### Short-circuit protection

<b>Product function Short circuit protection</b>	Yes
<b>Design of the short-circuit trip</b>	magnetic
<b>Design of the fuse link for IT network for short-circuit protection of the main circuit</b>	
• at 240 V	none required
• at 400 V	100
• at 500 V	80
• at 690 V	63

#### 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 60715
<b>Height</b>	140 mm
<b>Width</b>	55 mm
<b>Depth</b>	149 mm
<b>Required spacing</b>	
• with side-by-side mounting	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm

— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	10 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	10 mm

## Connections/Terminals

<b>Product function</b>	
• removable terminal for auxiliary and control circuit	No
<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
<b>Arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>Type of connectable conductor cross-sections</b>	
• for main contacts	
— single or multi-stranded	2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> )
— finely stranded with core end processing	2x (1 ... 16 mm <sup>2</sup> ), 1x (1 ... 25 mm <sup>2</sup> )
• at AWG conductors for main contacts	2x (18 ... 3), 1x (18 ... 2)
<b>Tightening torque</b>	
• for main contacts with screw-type terminals	3 ... 4.5 N·m
<b>Design of screwdriver shaft</b>	Diameter 5 to 6 mm

## Safety related data

<b>B10 value</b>	
• with high demand rate acc. to SN 31920	5 000
<b>Proportion of dangerous failures</b>	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	50 %
<b>Failure rate [FIT]</b>	
• with low demand rate acc. to SN 31920	50 FIT
<b>T1 value for proof test interval or service life acc. to IEC 61508</b>	10 y
<b>Display version</b>	
• for switching status	Handle

## Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates
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CCC



CSA



UL



EG-Konf.

[Special Test Certificate](#)

Test Certificates	Shipping Approval
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[Type Test Certificates/Test Report](#)



ABS



LRS



PRS



RINA



RMRS

other	Railway
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[Environmental Confirmations](#)

[Confirmation](#)

[Miscellaneous](#)

[Vibration and Shock](#)

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2331-4TC10>

**Cax online generator**

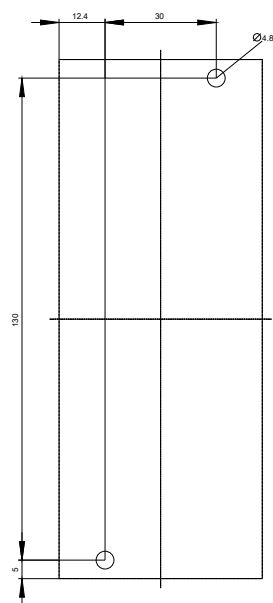
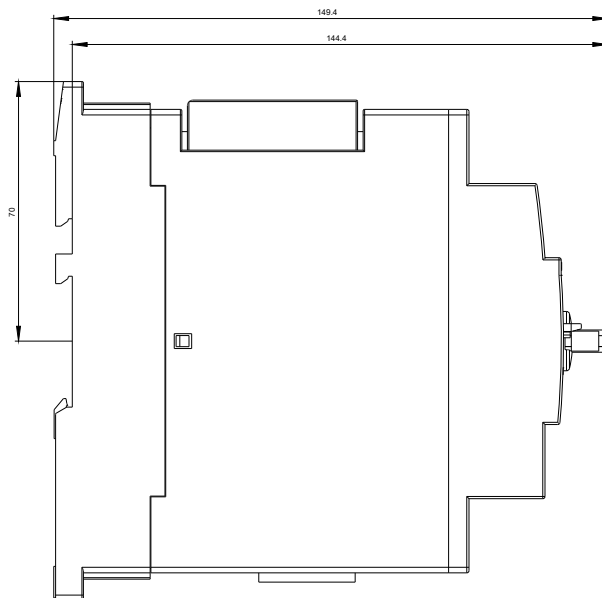
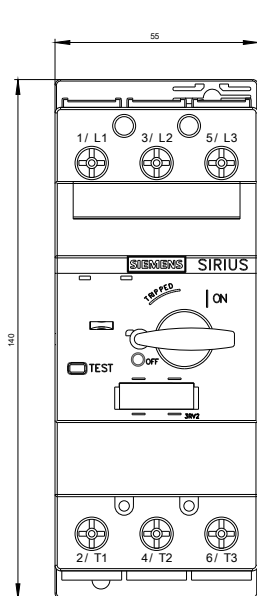
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2331-4TC10>

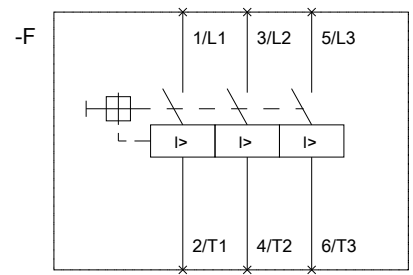
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2331-4TC10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2331-4TC10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2331-4TC10&lang=en)





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