










Circuit breaker size S0 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 20 A N-release 260 A screw terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For system protection according to UL 489/CSA C22.2 No. 5
product type designation	3RV2
<b>General technical data</b>	
size of the circuit-breaker	S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	10.5 W
• at AC in hot operating state per pole	3.5 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25 g / 11 ms (rectangular impulse and sine pulse)
mechanical service life (operating cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (operating cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
number of poles for main current circuit	3
operating voltage	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	20 A
operational current	
• at AC-3 at 400 V rated value	20 A
• at AC-3e at 400 V rated value	20 A
operating power	
• at AC-3	
— at 230 V rated value	5.5 kW

— at 400 V rated value	7.5 kW
— at 500 V rated value	11 kW
— at 690 V rated value	15 kW
● at AC-3e	
— at 230 V rated value	5.5 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	11 kW
— at 690 V rated value	15 kW
<b>operating frequency</b>	
● at AC-3 maximum	15 1/h
● at AC-3e maximum	15 1/h
<b>Protective and monitoring functions</b>	
<b>product function</b>	
● ground fault detection	No
● phase failure detection	No
<b>design of the overload release</b>	thermal
<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	55 kA
● at AC at 500 V rated value	10 kA
● at AC at 690 V rated value	4 kA
● at 480 AC Y/277 V according to UL 489 rated value	50 kA
<b>operating short-circuit current breaking capacity (Ics) at AC</b>	
● at 240 V rated value	100 kA
● at 400 V rated value	25 kA
● at 500 V rated value	5 kA
● at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	260 A
<b>Short-circuit protection</b>	
<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 400 V	gG 63 A
● at 500 V	gG 50 A
● at 690 V	gG 50 A
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
<b>height</b>	144 mm
<b>width</b>	45 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
● for grounded parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	30 mm
● for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	30 mm
● for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	30 mm
● for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	30 mm
● for grounded parts at 690 V	
— downwards	70 mm

<div><div><div>— upwards</div><div>— backwards</div><div>— at the side</div><div>— forwards</div></div><div><div>• for live parts at 690 V</div><div><div>— downwards</div><div>— upwards</div><div>— backwards</div><div>— at the side</div><div>— forwards</div></div></div></div>	<div><div>70 mm</div><div>0 mm</div><div>30 mm</div><div>0 mm</div></div> <div><div>70 mm</div><div>70 mm</div><div>0 mm</div><div>30 mm</div><div>0 mm</div></div>		
Connections/ Terminals			
<div><div>type of electrical connection</div><div><div>• for main current circuit</div></div></div>	<div><div>screw-type terminals</div></div>		
<div><div>arrangement of electrical connectors for main current circuit</div></div>	<div><div>Top and bottom</div></div>		
<div><div>type of connectable conductor cross-sections</div><div><div><div>• for main contacts</div><div><div>— solid or stranded</div><div>— finely stranded with core end processing</div></div></div><div>• for AWG cables for main contacts</div></div></div>	<div><div>1 ... 10 mm², max. 2x 10 mm²</div><div>1 ... 16 mm², max. 6 + 16 mm²</div><div>2x (14 ... 10)</div></div>		
<div><div>tightening torque</div><div><div>• for main contacts with screw-type terminals</div></div></div>	<div><div>2.5 ... 3 N·m</div></div>		
<div><div>design of screwdriver shaft</div></div>	<div><div>Diameter 5 to 6 mm</div></div>		
<div><div>size of the screwdriver tip</div></div>	<div><div>Pozidriv size 2</div></div>		
<div><div>design of the thread of the connection screw</div><div><div>• for main contacts</div></div></div>	<div><div>M4</div></div>		
Safety related data			
<div><div>B10 value</div><div><div>• with high demand rate according to SN 31920</div></div></div>	<div><div>5 000</div></div>		
<div><div>proportion of dangerous failures</div><div><div><div>• with low demand rate according to SN 31920</div><div>• with high demand rate according to SN 31920</div></div></div></div>	<div><div>50 %</div><div>50 %</div></div>		
<div><div>failure rate [FIT]</div><div><div>• with low demand rate according to SN 31920</div></div></div>	<div><div>50 FIT</div></div>		
<div><div>T1 value for proof test interval or service life according to IEC 61508</div></div>	<div><div>10 a</div></div>		
<div><div>protection class IP on the front according to IEC 60529</div></div>	<div><div>IP20</div></div>		
<div><div>touch protection on the front according to IEC 60529</div></div>	<div><div>finger-safe, for vertical contact from the front</div></div>		
<div><div>display version for switching status</div></div>	<div><div>Handle</div></div>		
Certificates/ approvals			
<div><div>General Product Approval</div></div>	<div><div>Declaration of Con- formity</div></div>		
<div><div><div><div>CCC</div></div><div><div><a href="#">Confirmation</a></div></div><div><div><div>UL</div></div></div><div><div><div><a href="#">KC</a></div></div><div><div></div></div><div><div></div></div></div></div></div>			
<div><div>Declaration of Con- formity</div></div>	<div><div>Test Certificates</div></div>	<div><div>Marine / Shipping</div></div>	<div><div>other</div></div>
<div><div><div><div>EG-Konf.</div></div><div><div><div><a href="#">Type Test Certi- ficates/Test Report</a></div><div><a href="#">Special Test Certi- ficate</a></div></div><div><div><div>BUREAU VERITAS</div></div><div><div><div>LRS</div></div><div><div><a href="#">Confirmation</a></div></div></div></div></div></div></div>			
<div><div>other</div></div>	<div><div>Railway</div></div>		



#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2721-4BD10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2721-4BD10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2721-4BD10>

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

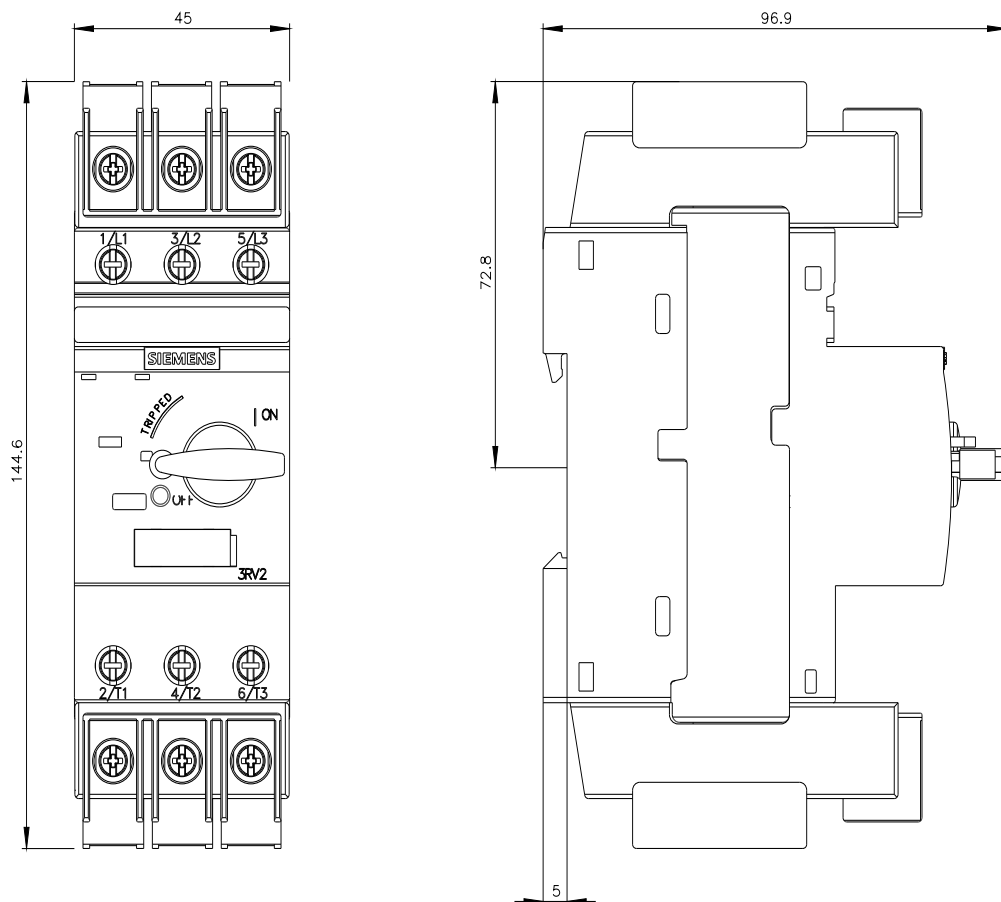
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2721-4BD10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2721-4BD10&lang=en)

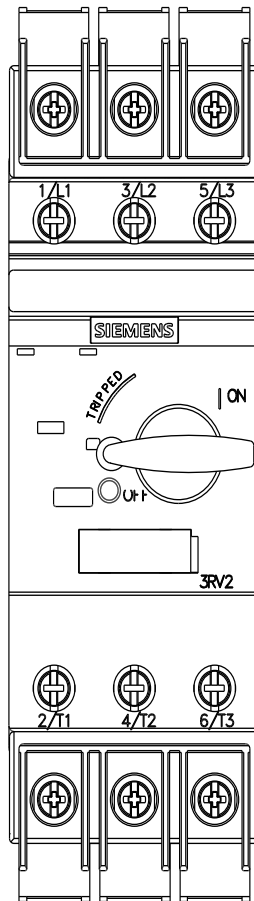
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2721-4BD10/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2721-4BD10&objecttype=14&gridview=view1>





last modified:

5/1/2023

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

[3RV27214BD10](#)