

Residual current operated circuit breaker, 4-pole, Type B, selective,  
In: 80 A, 300 mA, Un AC: 400 V



Model	
Product brand name	SENTRON
Product designation	RCCB
Design of the product	Selective
General technical data	
Number of poles	4
Size of installation devices / acc. to DIN 43880	1
Protection against electrical shock	Finger and back-of-hand safe
Short-circuit current / of series fuse / maximum permissible	100 A
Short-circuit current rating	10 kA
circuit-breaker / Design	5SV3
Mechanical service life (switching cycles) / typical	10 000
Switching function / short-term delayed	No
Overvoltage category	III
Supply voltage	
Operating current / at AC / rated value	80 A
Supply voltage	

<ul style="list-style-type: none"> <li>• at AC / rated value</li> </ul>	400 V
<ul style="list-style-type: none"> <li>• for testing equipment / minimum</li> </ul>	195 V
Supply voltage frequency	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	50 Hz

#### Protection class

Protection class IP	IP20, if the distribution board is installed, with connected conductors
---------------------	---

#### Switching capacity

Switching capacity current / according to IEC 61008-1 / rated value	0.8 kA
---	--------

#### Dissipation

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	7.5 W
---	-------

#### Current

Tripping residual current / rated value	300 mA
Tripping residual / rated value / derated current	
<ul style="list-style-type: none"> <li>• at 40 Cel</li> </ul>	80 A
<ul style="list-style-type: none"> <li>• at 45 Cel</li> </ul>	80 A
<ul style="list-style-type: none"> <li>• at 50 Cel</li> </ul>	80 A
<ul style="list-style-type: none"> <li>• at 55 Cel</li> </ul>	72 A
<ul style="list-style-type: none"> <li>• at 60 Cel</li> </ul>	64 A
<ul style="list-style-type: none"> <li>• at 65 Cel</li> </ul>	56 A
<ul style="list-style-type: none"> <li>• at 70 Cel</li> </ul>	48 A
Type of fault current	B
I <sup>2</sup> t-value / permissible	60 000 A <sup>2</sup> ·s
Surge current resistance / rated value	5 kA

#### Product details

Product feature / silicon-free	Yes
Product extension / can be installed / supplementary devices	Yes

#### Connections

Connectable conductor cross-section / solid	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	35 mm <sup>2</sup>
Connectable conductor cross-section / stranded	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	35 mm <sup>2</sup>
Tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	2.5 N·m
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	3 N·m

## Mechanical Design



Height	90 mm
Width	72 mm
Depth	70 mm
Installation depth	70 mm
Number of width units	4
Mounting type	DIN rail (REG)
Mounting position	any
Net weight	570 g

## Environmental conditions

Ambient temperature	
• minimum	-25 °C
• maximum	45 °C
Ambient temperature / during storage	
• minimum permissible	-40 °C
• maximum permissible	75 °C

## Certificates

Reference code	
• acc. to DIN EN 61346-2	F
• acc. to DIN EN 81346-2	F

General Product Approval	Declaration of Conformity	other	Railway
 VDE	 EG-Konf.	<a href="#">Miscellaneous</a>	<a href="#">Confirmation</a> <a href="#">Vibration and Shock</a>

## Railway

[Confirmation](#)

## Further information

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

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SV3647-5>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SV3647-5>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SV3647-5](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SV3647-5)

**CAX-Online-Generator**

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

