

Residual current operated circuit breaker, 4-pole, type B+, short-time delayed, In: 80 A, 300 mA, Un AC: 400 V



Model	
Product brand name	SENTRON
Product designation	RCCB
Design of the product	Short-time delayed
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 rating	10 kA
circuit-breaker / Design	5SM3
Mechanical service life (switching cycles) / typical	10 000
Switching function / short-term delayed	Yes
Overvoltage category	III
Supply voltage	
Current / at AC / rated value	80 A
<ul style="list-style-type: none"> <li>• Supply voltage / at AC / rated value</li> <li>• Supply voltage / for testing equipment / minimum</li> </ul>	400 V 195 V

• rated value

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

4.3 W

### Current

Tripping residual current / rated value

300 mA

Tripping residual / rated value / derated current

- at 40 Cel
- at 45 Cel
- at 50 Cel
- at 55 Cel
- at 60 Cel
- at 65 Cel
- at 70 Cel

80 A  
80 A  
76.8 A  
73.6 A  
70.4 A  
67.2 A  
64 A

Type of fault current

B+

I<sub>2t</sub>-value / permissible

70 000 A<sup>2</sup>·s

Surge current resistance / rated value

3 kA

Operating frequency

50/60Hz

### Product details

Product feature / silicon-free

Yes

Product extension / can be installed / supplementary devices

Yes

### Connections

Connectable conductor cross-section

- solid
- stranded

1.5 ... 25 mm<sup>2</sup>  
1.5 ... 25 mm<sup>2</sup>

Tightening torque / with screw-type terminals

2.5 ... 3 N·m

Position / of power supply cord

Top or bottom (bottom for SIGRES function also in switched-off state)

### Mechanical Design

Height

90 mm

Width

72 mm

Depth

77 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	-25 ... +45 °C
• during storage	-40 ... +75 °C

#### Certificates

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

<b>General Product Approval</b>	<b>Declaration of Con- formity</b>	<b>other</b>
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[Miscellaneous](#)



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#### 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=5SM3647-4KK14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SM3647-4KK14>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SM3647-4KK14](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SM3647-4KK14)

##### CAX-Online-Generator

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

##### Tender specifications

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

