

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 rating	10 kA
circuit-breaker / Design	5SM3
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	
• at AC / rated value	400 V
• for testing equipment / minimum	195 V

Supply voltage frequency	
• rated value	50 Hz
<b>Protection class</b>	
Protection class IP	IP20, if the distribution board is installed, with connected conductors
<b>Switching capacity</b>	
Switching capacity current / according to IEC 61008-1 / rated value	0.8 kA
<b>Dissipation</b>	
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.3 W
<b>Current</b>	
Tripping residual current / rated value	300 mA
Tripping residual / rated value / derated current	
• at 40 Cel	80 A
• at 45 Cel	80 A
• at 50 Cel	76.8 A
• at 55 Cel	73.6 A
• at 60 Cel	70.4 A
• at 65 Cel	67.2 A
• at 70 Cel	64 A
Type of fault current	B+
I <sup>2</sup> t-value / permissible	70 000 A <sup>2</sup> ·s
Surge current resistance / rated value	5 kA
<b>Product details</b>	
Product feature / silicon-free	Yes
Product extension / can be installed / supplementary devices	Yes
<b>Connections</b>	
Connectable conductor cross-section / solid	
• minimum	1.5 mm <sup>2</sup>
• maximum	25 mm <sup>2</sup>
Connectable conductor cross-section / stranded	
• minimum	1.5 mm <sup>2</sup>
• maximum	25 mm <sup>2</sup>
Tightening torque / with screw-type terminals	
• minimum	2.5 N·m
• maximum	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	572 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

### other



[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?mfb=5SM3647-5KK14>

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

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

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

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

### CAX-Online-Generator

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

### Tender specifications

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

