

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	0 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"> • Supply voltage / at AC / rated value • Supply voltage / for testing equipment / minimum 	400 V 195 V

- rated value

50 Hz

Protection class

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

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

Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.3 W
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Current

Tripping residual current / rated value	300 mA
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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
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I ² t-value / permissible	70 000 A ² ·s
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Surge current resistance / rated value	3 kA
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Operating frequency	50/60Hz
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Product details

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

Connectable conductor cross-section

• solid	1.5 ... 25 mm ²
• stranded	1.5 ... 25 mm ²

Tightening torque / with screw-type terminals	2.5 ... 3 N·m
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Position / of power supply cord	Top or bottom (bottom for SIGRES function also in switched-off state)
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Mechanical Design

Height	90 mm
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Width	72 mm
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Depth	77 mm
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Installation depth	70 mm
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Number of width units	4
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Mounting type	DIN rail (REG)
Mounting position	any
Net weight	564 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

General Product Approval	Declaration of Conformity	Test Certificates	other
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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=5SM3647-4>

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

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

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SM3647-4

CAX-Online-Generator

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

Tender specifications

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

