



residual current operated circuit breaker, 4-pole, type A, In: 40 A, 300 mA, Un AC: 400 V, 4.5 kA

Model	
product brand name	SENTRON
product designation	Residual current operated circuit breaker
design of the product	Instantaneous
product type designation	5SZ1
General technical data	
number of poles	4
size of installation devices according to DIN 43880	1
mechanical service life (operating cycles) typical	4 000
short-circuit current of series fuse maximum permissible	80 A
short-circuit current rating	4.5 kA
switching function short-term delayed	No
degree of pollution	2
insulation voltage (Ui) rated value	2 000 V
tripping fault current rated value	300 mA
let-through current permissible	5 200 A
I2t value permissible	58 000 A ² ·s
Supply voltage	
supply voltage for testing equipment minimum	100 V
value range of the supply voltage frequency	50 Hz
value range of the operating frequency	50 Hz
value range of the supply voltage at AC	230/400 V
Protection class	
protection class IP	IP20, if the distribution board is installed, with connected conductors
Breaking Capacity	
switching capacity current	
• according to IEC 61008-1 rated value	0.8 kA
grid spacing	60 mm
Dissipation	
power loss [W]	
• for rated value of the current at AC in hot operating state per pole	2.4 W
• maximum	7.2 W
Appearance	
RAL color number	7 035
RAL color number (similar)	7 035
Product details	
product feature silicon-free	Yes
product extension installable supplementary devices	No

Connections	
connectable conductor cross-section solid	
• minimum	4 mm ²
• maximum	50 mm ²
connectable conductor cross-section stranded	
• minimum	4 mm ²
• maximum	50 mm ²
tightening torque with screw-type terminals	
• minimum	2.5 N·m
• maximum	3 N·m
position of power supply cord	top or bottom

Mechanical Design	
height	90 mm
width	72 mm
depth	70 mm
installation depth	85 mm
number of modular width units	4
fastening method	DIN rail (REG)
mounting position	any
Net Weight	295 g

Environmental conditions	
ambient temperature during operation	
• minimum	-5 °C
• maximum	40 °C
ambient temperature during storage minimum	-40 °C
number of test cycles for environmental testing according to IEC 60068-2-30	28

Approvals Certificates		
Environment	General Product Approval	other

[Environmental Confirmations](#)



EG-Konf.



[Confirmation](#)

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SZ1644-6YA>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SZ1644-6YA>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SZ1644-6YA

CAX-Online-Generator

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

Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

last modified:

3/6/2026

