



residual current operated circuit breaker, 4-pole, type A, In: 80 A, 300 mA, Un AC: 400 V, SIGRES: harsh environmental conditions extended test interval

Model	
product brand name	SENTRON
product designation	Residual current operated circuit breaker
design of the product	Instantaneous
product type designation	5SV3
product version	SIGRES (harsh ambient conditions)
General technical data	
number of poles	4
size of installation devices according to DIN 43880	1
mechanical service life (operating cycles) typical	10 000
short-circuit current of series fuse maximum permissible	100 A
short-circuit current rating	10 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	7 100 A
I <sup>2</sup> t value permissible	110 000 A <sup>2</sup> ·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	4.2 W
• maximum	12.6 W
Appearance	
RAL color number	7 035

RAL color number (similar)	7 035
<b>Product details</b>	
product feature silicon-free	Yes
product extension installable supplementary devices	Yes
<b>Connections</b>	
connectable conductor cross-section solid	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 mm <sup>2</sup>
connectable conductor cross-section stranded	
• minimum	0.75 mm <sup>2</sup>
• maximum	35 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 (top for SIGRES function also in switched-off state)

<b>Mechanical Design</b>	
height	90 mm
width	72 mm
depth	70 mm
installation depth	70 mm
number of modular width units	4
fastening method	DIN rail
mounting position	any
Net Weight	336 g

<b>Environmental conditions</b>	
ambient temperature during operation	
• minimum	-25 °C
• maximum	45 °C
ambient temperature during storage minimum	-40 °C
number of test cycles for environmental testing according to IEC 60068-2-30	28

<b>Approvals Certificates</b>	
Environment	General Product Approval

[Environmental Confirmations](#)



[Environmental Confirmations](#)



**General Product Approval**



[Miscellaneous](#)



[Confirmation](#)



Test Certificates	other	Railway	Dangerous goods
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[Miscellaneous](#)



[Confirmation](#)

[Special Test Certificate](#)

[Transport Information](#)

**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=5SV3647-6KK12>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SV3647-6KK12>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SV3647-6KK12](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SV3647-6KK12)

CAX-Online-Generator

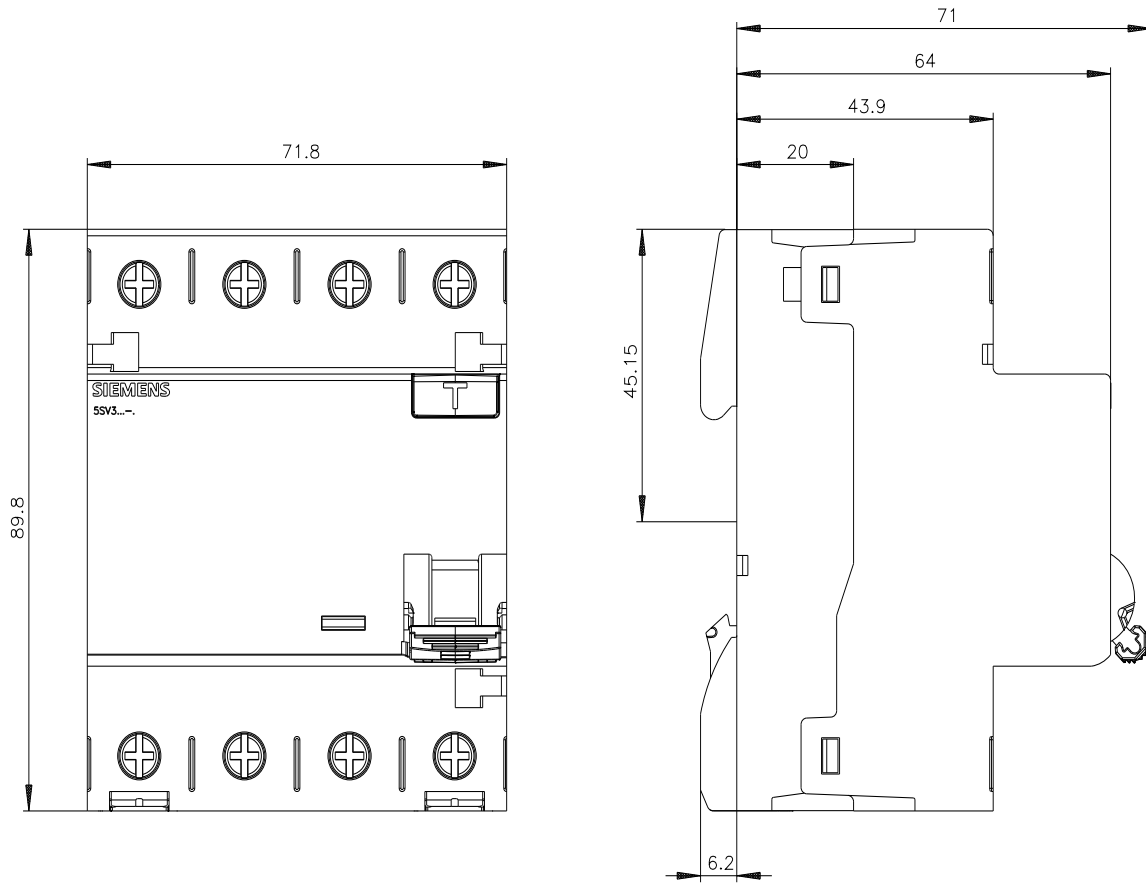
<https://www.siemens.com/cax>

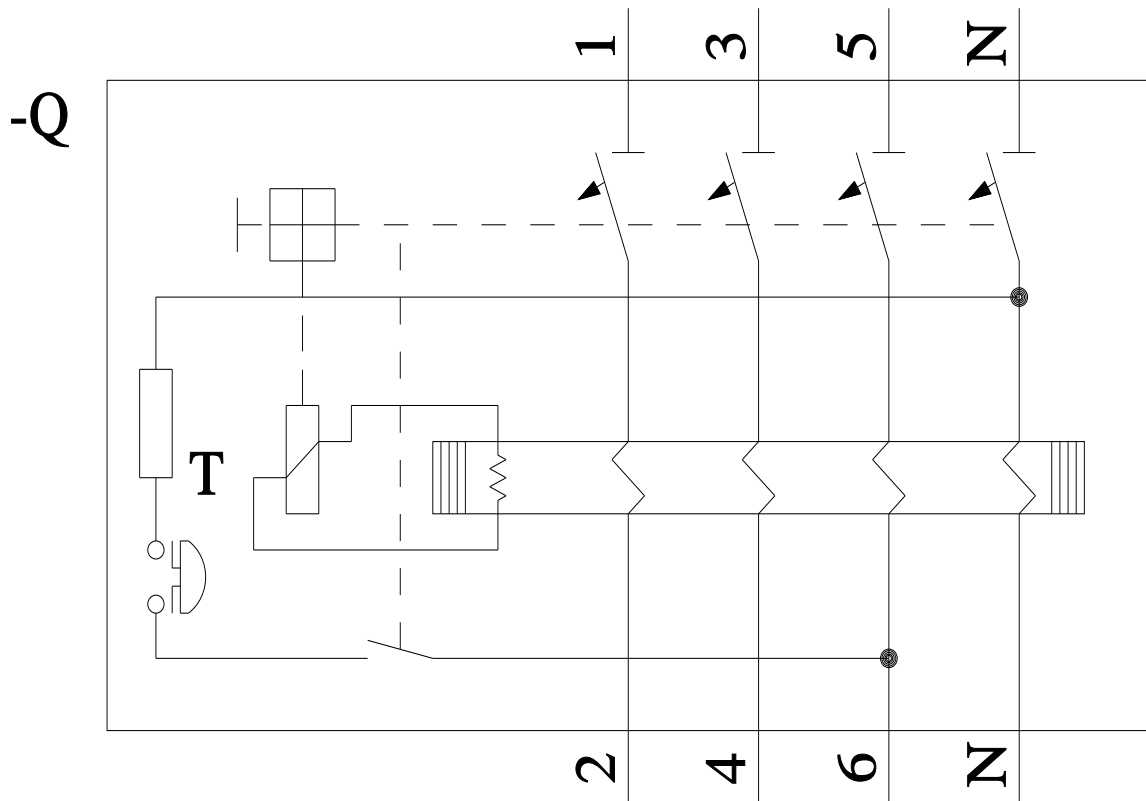
Tender specifications

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

Characteristic curves

[https://curves.simarisiemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simarisiemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





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