

Miniature circuit breaker 400 V 10kA, 4-pole, B, 100 A, D=70 mm



Model	
Product brand name	SENTRON
Product designation	Miniature circuit breaker
Design of the product	5SP Miniature circuit breakers
General technical data	
Number of poles	4
Number of poles / Note	4P
Tripping characteristic class	B
circuit-breaker / Design	5SP4
Mechanical service life (switching cycles) / typical	10 000
Overvoltage category	3
Voltage	
Type of voltage	AC
Insulation voltage	
• at AC / rated value	440 V
• with multi-phase operation / at AC / rated value	440 V
Supply voltage	
Supply voltage / at AC / rated value	400 V

Supply voltage frequency / rated value	50 Hz
<b>Protection class</b>	
Protection class IP	IP20 with connected conductors, IP40 in the area of the handle with distribution cover
<b>Switching capacity</b>	
Switching capacity current	
• acc. to EN 60898 / rated value	10 kA
<b>Dissipation</b>	
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	8 W
<b>Electricity</b>	
Tripping residual / rated value / derated current / at 40 Cel	95 A
Current / at AC / rated value	100 A
<b>Product details</b>	
Product feature / Touch protection	Yes
Product component	
• Tunnel terminals top	Yes
• Tunnel terminals bottom	Yes
Product feature	
• Properties for main switches in accordance with EN 60204-1	Yes
• halogen-free	Yes
• sealable	Yes
• silicon-free	Yes
Product extension / can be installed / supplementary devices	Yes
<b>Product function</b>	
Product function / neutral conductor switching	No
<b>Number</b>	
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6
<b>Connections</b>	
Connectable conductor cross-section / stranded	
• minimum	25 mm <sup>2</sup>
• maximum	50 mm <sup>2</sup>
<b>Connectable conductor cross-section</b>	
• solid	
— minimum	25 mm <sup>2</sup>
— maximum	50 mm <sup>2</sup>

<ul style="list-style-type: none"> <li>• finely stranded / with core end processing <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> </ul>	25 mm <sup>2</sup> 35 mm <sup>2</sup>
AWG number / as coded connectable conductor cross section <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	3 1
Tightening torque [lbf·in] / with screw-type terminals <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	22.1 lbf·in 31 lbf·in
Tightening torque / with screw-type terminals <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	2.5 N·m 3.5 N·m
Position / of power supply cord	Any

### Mechanical Design

Height	90 mm
Width	108 mm
Depth	76 mm
Mounting position	any
Installation depth	70 mm
Number of width units	6
Net weight	1 034 g

### Environmental conditions

Degree of pollution	3
Influence of the surrounding temperature	Max. 95% rel. humidity
Shock resistance / acc. to IEC 60068-2-27	150m/s <sup>2</sup> at 11ms half-sine
Vibration resistance / acc. to IEC 60068-2-6	50m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec)
Ambient temperature <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	-25 °C 55 °C -40 °C 75 °C

### Certificates

Reference code <ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> <li>• acc. to DIN EN 81346-2</li> </ul>	F FC
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General Product Approval			Declaration of Conformity	Test Certificates
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[Special Test Certificate](#)

**Railway**

[Confirmation](#)

**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=5SP4491-6>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/5SP4491-6>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SP4491-6](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP4491-6)

CAX-Online-Generator  
<http://www.siemens.com/cax>

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



