

Miniature circuit breaker 230/400 V 10kA, 1-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	1
Number of poles / Note	1P
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	
<ul style="list-style-type: none"> • at AC / rated value 	440 V
<ul style="list-style-type: none"> • with single-phase operation / at AC / rated value 	250 V
<ul style="list-style-type: none"> • 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
Protection class	
Protection class IP	IP20 with connected conductors, IP40 in the area of the handle with distribution cover
Switching capacity	
Switching capacity current	
<ul style="list-style-type: none"> • acc. to EN 60898 / rated value 	10 kA
Dissipation	
Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	8 W
Electricity	
Tripping residual / rated value / derated current / at 40 Cel	92.5 A
Current / at AC / rated value	100 A
Product details	
Product feature / Touch protection	Yes
Product component	
<ul style="list-style-type: none"> • Tunnel terminals top • Tunnel terminals bottom 	Yes Yes
Product feature	
<ul style="list-style-type: none"> • Properties for main switches in accordance with EN 60204-1 • halogen-free • sealable • silicon-free 	Yes Yes Yes Yes
Product extension / can be installed / supplementary devices	Yes
Product function	
Product function / neutral conductor switching	No
Number	
Number of test cycles / for environmental testing / acc. to IEC 60068-2-30	6
Connections	
Connectable conductor cross-section / stranded	
<ul style="list-style-type: none"> • minimum • maximum 	25 mm ² 50 mm ²
Connectable conductor cross-section	
<ul style="list-style-type: none"> • solid 	

— minimum	25 mm ²
— maximum	50 mm ²
• finely stranded / with core end processing	
— minimum	25 mm ²
— maximum	35 mm ²
AWG number / as coded connectable conductor cross section	
• minimum	3
• maximum	1
Tightening torque [lbf·in] / with screw-type terminals	
• minimum	22.1 lbf·in
• maximum	31 lbf·in
Tightening torque / with screw-type terminals	
• minimum	2.5 N·m
• maximum	3.5 N·m
Position / of power supply cord	Any

Mechanical Design






Height	90 mm
Width	27 mm
Depth	76 mm
Mounting position	any
Installation depth	70 mm
Number of width units	1.5
Net weight	269 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 ² at 11ms half-sine
Vibration resistance / acc. to IEC 60068-2-6	50m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec)
Ambient temperature	
• minimum	-25 °C
• maximum	55 °C
• during storage / minimum	-40 °C
• during storage / maximum	75 °C

Certificates

Reference code	
• acc. to DIN EN 61346-2	F
• acc. to DIN EN 81346-2	FC

General Product Approval				Declaration of Conformity	Test Certificates
 CEBEC	 CCC	 UR	 VDE	 EG-Konf.	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=5SP4191-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP4191-6>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP4191-6

CAX-Online-Generator

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

Tender specifications

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

