



Miniature circuit breaker 230/400 V 10kA, 1-pole, B, 80 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
mechanical service life (switching cycles) / typical	10 000
overvoltage category	3
degree of pollution	3
Voltage	
insulation voltage	
• at AC / rated value	440 V
• with single-phase operation / at AC / rated value	250 V
• with multi-phase operation / at AC / rated value	440 V
Supply voltage	
type of voltage	AC
supply voltage / at AC / rated value	400 V
supply voltage frequency / rated value	50/60 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	
• 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	7 W
Current	
operational current	
• at 30 °C / rated value	80 A
• at 40 °C / rated value	75.2 A
• at 45 °C / rated value	72.8 A
• at 50 °C / rated value	70 A
• at 55 °C / rated value	67.2 A
• at 60 °C / rated value	64.8 A

• at AC / rated value	80 A
Product details	
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 / installable / supplementary devices	Yes
Connections	
connectable conductor cross-section / solid	
• minimum	25 mm ²
• maximum	50 mm ²
connectable conductor cross-section / stranded	
• minimum	25 mm ²
• maximum	50 mm ²
connectable conductor cross-section / 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
installation depth	70 mm
number of modular width units	1.5
mounting position	any
net weight	271 g
Environmental conditions	
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 / during storage	
• minimum	-40 °C
• maximum	75 °C
Certificates	
reference code	
• acc. to DIN EN 61346-2	F
• acc. to IEC 81346-2	FC
General Product Approval	



Declaration of Conformity	Test Certificates	Marine / Shipping	other	Railway
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EG-Konf.

[Special Test Certificate](#)



LRS



DNV-GL

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[Confirmation](#)

Dangerous Good

[Transport Information](#)

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=5SP4180-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SP4180-6>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SP4180-6

CAX-Online-Generator

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

Tender specifications

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

