

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
circuit-breaker / Design	5SP4
Mechanical service life (switching cycles) / typical	10 000
Overvoltage category	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
Current / at AC / rated value	80 A
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	7 W

Current	
Tripping residual / rated value / derated current / at 40 Cel	75.2 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

Connections	
<ul style="list-style-type: none"> • Connectable conductor cross-section <ul style="list-style-type: none"> — solid — stranded • Connectable conductor cross-section / finely stranded / with core end processing 	25 ... 50 mm ² 25 ... 50 mm ² 25 ... 35 mm ²
AWG number / as coded connectable conductor cross section	3 ... 1
Tightening torque [lbf·in] / with screw-type terminals	22.1 ... 31 lbf·in
Tightening torque / with screw-type terminals	2.5 ... 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 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	-25 ... +55 °C
• during storage	-40 ... +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
--------------------------	---------------------------	-------------------



[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=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>



