



Miniature circuit breaker 230/400 V 10kA, 1-pole, B, 16A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	B
mechanical service life (switching cycles) / typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage / of the operating voltage	AC
insulation voltage (U <sub>i</sub> )	
• with single-phase operation / at AC / rated value	440 V
• with multi-phase operation / at AC / rated value	440 V
supply voltage / with single-phase operation / at AC / rated value	230 V
Supply voltage	
supply voltage	
• at AC / rated value	400 V
operating voltage / at DC / rated value / maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
• at DC / acc. to IEC 60947-2 / rated value	15 kA
• acc. to EN 60898 / rated value	10 kA
• acc. to IEC 60947-2 / rated value	20 kA
energy limitation class	3
Dissipation	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.8 W
Current	
operational current	
• at 35 °C / rated value	16 A
• at 40 °C / rated value	15.23 A
• at 45 °C / rated value	14.83 A
• at 50 °C / rated value	14.43 A
• at 55 °C / rated value	14 A

<ul style="list-style-type: none"> <li>at 60 °C / rated value</li> </ul>	13.57 A
<ul style="list-style-type: none"> <li>at AC / rated value</li> </ul>	16 A
suitability for operation	Mechanical engineering / industry
<b>Product details</b>	
product component / neutral conductor switching	No
product feature / touch protection	Yes
product component	
<ul style="list-style-type: none"> <li>combined terminal top</li> </ul>	Yes
<ul style="list-style-type: none"> <li>combined terminal bottom</li> </ul>	Yes
product feature	
<ul style="list-style-type: none"> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>halogen-free</li> </ul>	Yes
<ul style="list-style-type: none"> <li>sealable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>silicon-free</li> </ul>	Yes
product extension / installable / supplementary devices	Yes
<b>Short circuit</b>	
breaking capacity short-circuit current (I <sub>cn</sub> )	
<ul style="list-style-type: none"> <li>at AC / acc. to UL 1077 and CSA C22.2 No.235</li> </ul>	5 kA
<b>Connections</b>	
connectable conductor cross-section / solid	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	35 mm <sup>2</sup>
connectable conductor cross-section / stranded	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	35 mm <sup>2</sup>
connectable conductor cross-section / finely stranded / with core end processing	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	0.75 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>maximum</li> </ul>	25 mm <sup>2</sup>
AWG number / as coded connectable conductor cross section	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	18
<ul style="list-style-type: none"> <li>maximum</li> </ul>	4
tightening torque [lbf·in] / with screw-type terminals	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	22 lbf·in
<ul style="list-style-type: none"> <li>maximum</li> </ul>	31 lbf·in
tightening torque / with screw-type terminals	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	2.5 N·m
<ul style="list-style-type: none"> <li>maximum</li> </ul>	3.5 N·m
position / of power supply cord	Any
<b>Mechanical Design</b>	
height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	130 g
<b>Environmental conditions</b>	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
vibration resistance / acc. to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz
ambient temperature / during operation	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	70 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> <li>minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>maximum</li> </ul>	75 °C
number of test cycles / for environmental testing / acc. to	6

IEC 60068-2-30

### Certificates

reference code

- acc. to DIN EN 61346-2
- acc. to IEC 81346-2

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### General Product Approval



[Miscellaneous](#)



EMC

Declaration of  
Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Miscellaneous](#)



Marine / Shipping

other

Railway



[Miscellaneous](#)

[Vibration and Shock](#)

[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=5SY4116-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4116-6>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY4116-6](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4116-6)

CAX-Online-Generator

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

Tender specifications

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



