



Miniature circuit breaker 230/400 V 6kA, 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 (operating cycles) typical                                  | 10 000                          |
| overvoltage category  | III                             |
| degree of pollution   | 3                               |
| Voltage   |                                 |
| type of voltage of the operating voltage  | AC                              |
| <b>insulation voltage (Ui)</b>  |                                 |
| • 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                           |
| operational current   |                                 |
| • at 40 °C rated value  | 15.23 A                         |
| • at 50 °C rated value  | 14.43 A                         |
| • at 55 °C rated value  | 14 A                            |
| • at AC rated value   | 16 A                            |
| Supply voltage  |                                 |
| supply voltage  |                                 |
| • at AC   | 400 V                           |
| • at DC rated value   | 60 V                            |
| value range of the supply voltage frequency   | 50/60 Hz                        |
| operating voltage at DC rated value maximum   | 72 V                            |
| Protection class  |                                 |
| protection class IP   | IP20, with connected conductors |
| Breaking Capacity   |                                 |
| switching capacity current  |                                 |
| • at DC according to IEC 60947-2 rated value  | 15 kA                           |
| • according to EN 60898 rated value   | 6 kA                            |
| • according to IEC 60947-2 rated value  | 15 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                           |
| suitability for operation   | Infrastructure / Industry       |
| Product details   |                                 |

|  |  |
|--|--|
| product feature touch protection   | Yes  |
| product component  |  |
| • combined terminal top  | Yes  |
| • combined terminal bottom   | Yes  |
| • neutral conductor switching  | No   |
| <b>product feature</b>   |  |
| • 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  |
| <b>Product function</b>  |  |
| set values setting current (Ii) for I-tripping                               | 4  |
| reference value setting current (Ii) for I-tripping                          | x In   |
| <b>Short circuit</b>   |  |
| short-circuit current breaking capacity (Icn)                                |  |
| • at AC according to UL 1077 and CSA C22.2 No.235                            | 5 kA   |
| <b>Connections</b>   |  |
| connectable conductor cross-section solid                                    |  |
| • minimum  | 0.75 mm <sup>2</sup>                                 |
| • maximum  | 35 mm <sup>2</sup>                                   |
| connectable conductor cross-section stranded                                 |  |
| • minimum  | 0.75 mm <sup>2</sup>                                 |
| • maximum  | 35 mm <sup>2</sup>                                   |
| connectable conductor cross-section finely stranded with core end processing |  |
| • minimum  | 0.75 mm <sup>2</sup>                                 |
| • maximum  | 25 mm <sup>2</sup>                                   |
| AWG number as coded connectable conductor cross section                      |  |
| • minimum  | 18   |
| • maximum  | 4  |
| tightening torque [lbf-in] with screw-type terminals                         |  |
| • minimum  | 22 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  |
| <b>Mechanical Design</b>   |  |
| height   | 90 mm  |
| width  | 18 mm  |
| depth  | 76 mm  |
| installation depth   | 70 mm  |
| number of modular width units  | 1  |
| <b>fastening method</b>  | Quick assembly system                                |
| mounting position  | any  |
| net weight   | 150 g  |
| <b>Environmental conditions</b>  |  |
| standard   | IEC / EN 60898-1, IEC / EN 60947-2 / UL1077          |
| vibration resistance according to IEC 60068-2-6                              | ±1mm at 5 to 25Hz; 50m/s <sup>2</sup> at 25 to 150Hz |
| ambient temperature during operation   |  |
| • minimum  | -25 °C   |
| • maximum  | 55 °C  |
| ambient temperature during storage   |  |
| • minimum  | -40 °C   |
| • maximum  | 75 °C  |
| number of test cycles for environmental testing according to IEC 60068-2-30  | 6  |
| <b>Environmental footprint</b>   |  |
| Environmental Product Declaration(EPD)                                       | Yes  |

|  |            |
|--|------------|
| Global Warming Potential [CO2 eq] total                | 8.5 kg     |
| Global Warming Potential [CO2 eq] during manufacturing | 0.683 kg   |
| Global Warming Potential [CO2 eq] during operation     | 7.83 kg    |
| Global Warming Potential [CO2 eq] after end of life    | -0.0048 kg |

### Approvals Certificates

#### General Product Approval



[Confirmation](#)



#### General Product Approval

#### EMV

#### Test Certificates



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[Miscellaneous](#)



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#### Marine / Shipping

#### other



[Miscellaneous](#)

#### other

#### Environment

[Confirmation](#)



[Environmental Con-  
firmations](#)

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firmations](#)

### Further information

#### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

#### 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=5SY6116-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6116-6>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY6116-6](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6116-6)

#### CAX-Online-Generator

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

#### Tender specifications

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



# CB



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