



Miniature circuit breaker 400 V 10kA, 3-pole, C, 16A, D=70 mm

| Model                                                                                       |                                 |
|---------------------------------------------------------------------------------------------|---------------------------------|
| product brand name                                                                          | SENTRON                         |
| product designation                                                                         | Miniature circuit breaker       |
| General technical data                                                                      |                                 |
| number of poles                                                                             | 3                               |
| tripping characteristic class                                                               | C                               |
| mechanical service life (switching cycles) / typical                                        | 10 000                          |
| overvoltage category                                                                        | III                             |
| degree of pollution                                                                         | 3                               |
| Voltage                                                                                     |                                 |
| insulation voltage (Ui)                                                                     |                                 |
| • 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                            |
| supply voltage frequency / rated value                                                      | 50/60 Hz                        |
| 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 | 1.6 W                           |
| Current                                                                                     |                                 |
| operational current                                                                         |                                 |
| • at 35 °C / rated value                                                                    | 16 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                                                                                                          | 54 mm                                                |
| depth                                                                                                          | 76 mm                                                |
| installation depth                                                                                             | 70 mm                                                |
| number of modular width units                                                                                  | 3                                                    |
| fastening method                                                                                               | Quick assembly system                                |
| mounting position                                                                                              | any                                                  |
| net weight                                                                                                     | 418 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 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 IEC 60068-2-30                                     | 6                                                    |

## Certificates

reference code

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

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### General Product Approval



[Miscellaneous](#)

[KC](#)

General Product Approval

EMC

Declaration of Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Miscellaneous](#)



Marine / Shipping

other

Railway



[Miscellaneous](#)

[Confirmation](#)

Railway

[Vibration and Shock](#)

## 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=5SY4316-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4316-7>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY4316-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4316-7)

CAX-Online-Generator

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

Tender specifications

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



