

CIRCUIT BREAKER CURR. SENS DC 440V AC 400V 10KA, 2-POLE, C, 20A



| Model  |                           |
|--|---------------------------|
| product brandname                                    | SENTRON                   |
| Product designation                                  | Miniature circuit breaker |
| General technical data                               |                           |
| Number of poles                                      | 2                         |
| Number of poles / Note                               | 2P                        |
| Tripping characteristic class                        | C                         |
| circuit-breaker / Design                             | 5SY5                      |
| Mechanical service life (switching cycles) / typical | 20 000                    |
| Overvoltage category                                 | 3                         |
| Voltage  |                           |
| Type of voltage                                      | AC/DC                     |
| Insulation voltage                                   |                           |
| • at DC / rated value                                | 250 V                     |
| • with multi-phase operation / at AC / rated value   | 440 V                     |
| Supply voltage                                       |                           |
| Supply voltage / at AC / rated value                 | 400 V                     |
| Supply voltage frequency                             |                           |

|   |                                 |
|---|---------------------------------|
| • rated value   | 50/60 Hz                        |
| <b>Protection class</b>   |                                 |
| <b>Protection class IP</b>  | IP20, with connected conductors |
| <b>Energy limiting class</b>  | 3                               |
| <b>Switching capacity</b>   |                                 |
| <b>Switching capacity current</b>   |                                 |
| • at DC / acc. to IEC 60947-2 / rated value                                       | 15 kA                           |
| • acc. to EN 60898 / rated value  | 10 kA                           |
| <b>Dissipation</b>  |                                 |
| <b>Power loss [W]</b>   |                                 |
| • for rated value of the current / at AC / in hot operating state / per pole      | 1.7 W                           |
| • maximum   | 3.4 W                           |
| <b>Electricity</b>  |                                 |
| Current / at AC / rated value   | 20 A                            |
| <b>Product details</b>  |                                 |
| Product feature / Touch protection  | Yes                             |
| <b>Product component</b>  |                                 |
| • combined terminal top   | Yes                             |
| • combined terminal bottom  | Yes                             |
| <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 / can be installed / supplementary devices                      | Yes                             |
| <b>Product function</b>   |                                 |
| Product function / neutral conductor switching                                    | No                              |
| <b>Short circuit</b>  |                                 |
| <b>Breaking capacity short-circuit current (I<sub>cn</sub>)</b>                   |                                 |
| • at DC / acc. to EN 60898-2  | 10 kA                           |
| <b>Number</b>   |                                 |
| <b>Number of test cycles / for environmental testing / acc. to IEC 60068-2-30</b> | 6                               |
| <b>Connections</b>  |                                 |
| <b>Connectable conductor cross-section / stranded</b>                             |                                 |
| • minimum   | 0.75 mm <sup>2</sup>            |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• maximum</li> </ul>   | 35 mm <sup>2</sup>   |
| <b>Connectable conductor cross-section</b>  |  |
| <ul style="list-style-type: none"> <li>• solid <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> <li>• finely stranded / with core end processing <ul style="list-style-type: none"> <li>— minimum</li> <li>— maximum</li> </ul> </li> </ul> | 0.75 mm <sup>2</sup><br>35 mm <sup>2</sup><br>0.75 mm <sup>2</sup><br>25 mm <sup>2</sup> |
| <b>AWG number / as coded connectable conductor cross section</b>  |  |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>  | 14<br>4  |
| <b>Tightening torque [lbf·in] / with screw-type terminals</b>   |  |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>  | 22 lbf·in<br>26 lbf·in   |
| <b>Tightening torque / with screw-type terminals</b>  |  |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>  | 2.5 N·m<br>3 N·m   |
| Position / of power supply cord   | AC as required, observe DC polarity  |

### Mechanical Design

|                              |                       |
|------------------------------|-----------------------|
| <b>Height</b>                | 90 mm                 |
| <b>Width</b>                 | 36 mm                 |
| <b>Depth</b>                 | 76 mm                 |
| <b>Mounting position</b>     | any                   |
| <b>Installation depth</b>    | 70 mm                 |
| <b>Number of width units</b> | 2                     |
| <b>Mounting type</b>         | Quick assembly system |
| <b>Net weight</b>            | 324 g                 |

### Environmental conditions

|  |   |
|--|---|
| <b>Influence of the surrounding temperature</b>  | Max. 95% humidity   |
| Vibration resistance / acc. to IEC 60068-2-6   | 50m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |
| <b>Ambient temperature</b>   |   |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>55 °C<br>-40 °C<br>75 °C                                      |

### Certificates

|  |   |
|--|---|
| Equipment marking / acc. to DIN EN 61346-2 | F |
|--|---|

| General Product Approval | Declaration of Conformity | Test Certificates |
|--------------------------|---------------------------|-------------------|
|--------------------------|---------------------------|-------------------|



CCC



VDE

[sonstig](#)



EG-Konf.

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### 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=5SY5220-7>

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

<http://support.automation.siemens.com/WW/view/en/5SY5220-7/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SY5220-7](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY5220-7)

**CAX-Online-Generator**

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

**Tender specifications**

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



