

CIRCUIT BREAKER 230V 10KA, 1+N-POLE, C, 50A, D=70MM



| Model | |
|---|---------------------------|
| Product brand name | SENTRON |
| Product designation | Miniature circuit breaker |
| General technical data | |
| Number of poles | 2 |
| Number of poles / Note | 1P+N |
| Tripping characteristic class | C |
| characteristic / Let-through current characteristic | DS_5SY_C_50 |
| circuit-breaker / Design | 5SY4 |
| Mechanical service life (switching cycles) / typical | 20 000 |
| Overvoltage category | 3 |
| Voltage | |
| Type of voltage | AC/DC |
| Insulation voltage | 250 V |
| <ul style="list-style-type: none"> with single-phase operation / at AC / rated value | |
| Supply voltage | |
| Supply voltage / at AC / rated value | 230 V |

| | |
|--|-----------------------------------|
| Supply voltage frequency | |
| • rated value | 50/60 Hz |
| Protection class | |
| Protection class IP | IP20, with connected conductors |
| Energy limiting class | 3 |
| 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 | 15 kA |
| Dissipation | |
| Power loss [W] | |
| • for rated value of the current / at AC / in hot operating state / per pole | 3.8 W |
| • maximum | 7.6 W |
| Electricity | |
| rated current I _n / IEC, DIN/VDE / at 40 Cel | 47.5 A |
| Current / at AC / rated value | 50 A |
| Current limitation characteristic, no. / Let-through energy | DE_5SY_C_50 |
| Suitability for operation | Mechanical engineering / industry |
| Product details | |
| Product feature / Touch protection | Yes |
| Product component | |
| • combined terminal top | Yes |
| • combined terminal bottom | Yes |
| Product feature | |
| • 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 |
| Product function | |
| Product function / neutral conductor switching | Yes |
| Short circuit | |
| Breaking capacity short-circuit current (I_{cn}) | |
| • at AC / acc. to UL 1077 and CSA C22.2 No.235 | 5 kA |
| Number | |

| | |
|--|---|
| Number of test cycles / for environmental testing / acc. to IEC 60068-2-30 | 6 |
|--|---|

Connections

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

Mechanical Design

| | |
|-----------------------|-----------------------|
| Height | 90 mm |
| Width | 36 mm |
| Depth | 76 mm |
| Mounting position | any |
| Installation depth | 70 mm |
| Number of width units | 2 |
| Mounting type | Quick assembly system |
| Net weight | 331 g |

Environmental conditions

| | |
|--|---|
| Degree of pollution | 3 |
| Influence of the surrounding temperature | Max. 95% humidity |
| Vibration resistance / acc. to IEC 60068-2-6 | 50m/s ² at 25 to 150Hz and 60m/s ² at 35Hz (4sec) |
| Ambient temperature | |
| <ul style="list-style-type: none"> • minimum • maximum • during storage / minimum | -25 °C 55 °C -40 °C |

• during storage / maximum

75 °C

Certificates

Equipment marking / acc. to DIN EN 61346-2

F

General Product Approval



CCC



IMQ



UL



VDE



RCM

[Miscellaneous](#)

Declaration of
Conformity

Test
Certificates

Shipping Approval



EG-Konf.

[Miscellaneous](#)



ABS



BUREAU
VERITAS



RINA

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=5SY4550-7>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY4550-7>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4550-7

CAX-Online-Generator

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

Tender specifications

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



