

Miniature circuit breaker 400 V 6kA, 2-pole, B, 50 A, D=70 mm



Model

| | |
|---------------------|---------------------------|
| Product brand name | SENTRON |
| Product designation | Miniature circuit breaker |

General technical data

| | |
|--|--------|
| Number of poles | 2 |
| Number of poles / Note | 2P |
| Tripping characteristic class | B |
| circuit-breaker / Design | 5SY6 |
| Mechanical service life (switching cycles) / typical | 10 000 |
| Overvoltage category | III |

Voltage

| | |
|---|-------|
| Insulation voltage | |
| <ul style="list-style-type: none"> with single-phase operation / at AC / rated value | 440 V |
| <ul style="list-style-type: none"> with multi-phase operation / at AC / rated value | 440 V |
| Supply voltage / with single-phase operation / at AC / rated value | 230 V |

Supply voltage

| | |
|---------------------------------|----------|
| Type of voltage | AC |
| Current / at AC / rated value | 50 A |
| 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 | 6 kA |
| • acc. to IEC 60947-2 / rated value | 10 kA |
| Energy limiting class | 3 |

| | |
|---|-------|
| Dissipation | |
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 4.3 W |

| | |
|---|-----------------------------------|
| Current | |
| Tripping residual / rated value / derated current / at 40 Cel | 47.6 A |
| Suitability for operation | Mechanical engineering / industry |

| | |
|--|-----|
| Product details | |
| Product function / neutral conductor switching | No |
| 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 |

| | |
|--|------|
| Short circuit | |
| Breaking capacity short-circuit current (I _{cn}) | |
| • at AC / acc. to UL 1077 and CSA C22.2 No.235 | 5 kA |

Connections

| | |
|--|---|
| <ul style="list-style-type: none"> • Connectable conductor cross-section <ul style="list-style-type: none"> — solid — stranded • Connectable conductor cross-section / finely stranded / with core end processing | <p>0.75 ... 35 mm²</p> <p>0.75 ... 35 mm²</p> <p>0.75 ... 25 mm²</p> |
| AWG number / as coded connectable conductor cross section | 18 ... 4 |
| Tightening torque [lbf·in] / with screw-type terminals | 22 ... 31 lbf·in |
| Tightening torque / with screw-type terminals | 2.5 ... 3.5 N·m |
| Position / of power supply cord | Any |

Mechanical Design

| | |
|-----------------------|-----------------------|
| Height | 90 mm |
| Width | 36 mm |
| Depth | 76 mm |
| Installation depth | 70 mm |
| Number of width units | 2 |
| Mounting type | Quick assembly system |
| Mounting position | any |
| Net weight | 351 g |

Environmental conditions

| | |
|--|--|
| Influence of the surrounding temperature | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C |
| Ambient temperature | -25 ... +55 °C |
| <ul style="list-style-type: none"> • during storage | -40 ... +75 °C |

Certificates

| | |
|--|-------------------|
| Reference code | |
| <ul style="list-style-type: none"> • acc. to DIN EN 61346-2 • acc. to DIN EN 81346-2 | <p>F</p> <p>F</p> |

General Product Approval



[Miscellaneous](#)



Declaration of
Conformity

Test Certifi-
cates

Shipping Approval



[Miscellaneous](#)



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=5SY6250-6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SY6250-6>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY6250-6

CAX-Online-Generator

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

Tender specifications

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



