SIEMENS

## Data sheet 5SU1646-7FP16



Figure similar

RCBO, 6 kA, 4P Type A, 300mA, C-Char, In: 16A Un: 400V

| | |
|---|---|
| **Model** | |
| **product brand name** | SENTRON |
| **product designation** | RCBO |
| **design of the product** | Instantaneous |
| **General technical data** | |
| **number of poles** | 4 |
| **number of poles with protection** | 4 |
| **design of pole** | 4P |
| **tripping characteristic class** | C |
| **mechanical service life (operating cycles) typical** | 10 000 |
| **overvoltage category** | 3 |
| **degree of pollution** | 3 |
| **Voltage** | |
| **type of voltage of the operating voltage** | AC |
| **insulation voltage (Ui) rated value** | 500 V |
| **surge voltage resistance rated value** | 4 000 V |
| **surge current resistance at (8/20) µs** | 0.25 kA |
| **tripping fault current rated value** | 300 mA |
| **• operational current** | |
| **— at 30 °C rated value** | 16 A |
| **— at 40 °C rated value** | 15.2 A |
| **— at 45 °C rated value** | 14.8 A |
| **— at 50 °C rated value** | 14.3 A |
| **— at 55 °C rated value** | 13.9 A |
| **— at 60 °C rated value** | 13.4 A |
| **— at 70 °C rated value** | 12.5 A |
| **• operational current at AC rated value** | 16 A |
| **residual current type** | A |
| **Supply voltage** | |
| **supply voltage** | |
| • at AC rated value | 400 V |
| • for testing equipment minimum | 195 V |
| **operating frequency** | 50 Hz |
| supply voltage frequency rated value | 50 Hz |
| **Protection class** | |
| **protection class IP** | IP20, if the distribution board is installed, with connected conductors |
| **Breaking Capacity** | |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| **switching capacity current** | |
| ● according to EN 60898 rated value | 6 kA |
| ● according to IEC 60947-2 rated value | 6 kA |
| **short-circuit current breaking capacity (Icn) according to EN 61009-1 rated value** | 6 kA |
| **rated residual switching capacity (IΔm) according to IEC 61009-1** | 4.5 kA |
| **energy limitation class** | 3 |
| **Dissipation** | |
| **power loss [W]** | |
| ● **maximum** | 2.3 W |
| **Product details** | |
| **product feature touch protection** | Yes |
| product component neutral conductor switching | Yes |
| **product feature halogen-free** | No |
| **Connections** | |
| **connectable conductor cross-section solid** | |
| ● minimum | 1 mm² |
| ● maximum | 35 mm² |
| **connectable conductor cross-section stranded** | |
| ● minimum | 1 mm² |
| ● maximum | 35 mm² |
| **connectable conductor cross-section finely stranded with core end processing** | |
| ● minimum | 1 mm² |
| ● maximum | 35 mm² |
| **tightening torque with screw-type terminals** | |
| ● minimum | 2 N·m |
| ● maximum | 2 N·m |
| **position of power supply cord** | Either top or bottom |
| **Mechanical Design** | |
| **height** | 85 mm |
| **width** | 72 mm |
| **depth** | 72 mm |
| **installation depth** | 70 mm |
| **number of modular width units** | 4 |
| **mounting position** | any |
| **Net Weight** | 454 g |
| **Environmental conditions** | |
| **influence of the surrounding temperature** | Max. 95% humidity |
| **ambient temperature during operation** | |
| ● minimum | -25 °C |
| ● maximum | 40 °C |
| **ambient temperature during storage** | |
| ● minimum | -40 °C |
| ● maximum | 70 °C |
| **number of test cycles for environmental testing according to IEC 60068-2-30** | 28 |

**Approvals Certificates**

| **Environment** | | | **General Product Approval** | | |
|---|---|---|---|---|---|
| Environmental Confirmations | Environmental Confirmations | EPD | CCC | Miscellaneous | EAC |

| **General Product Approval** | **other** |
|---|---|

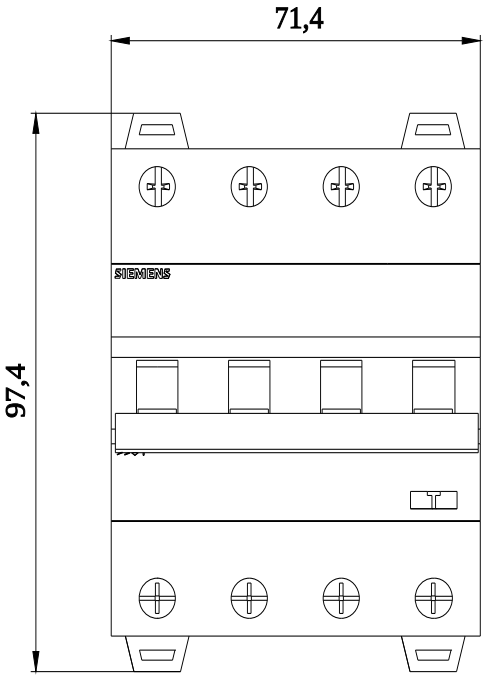

Subject to change without notice
© Copyright Siemens

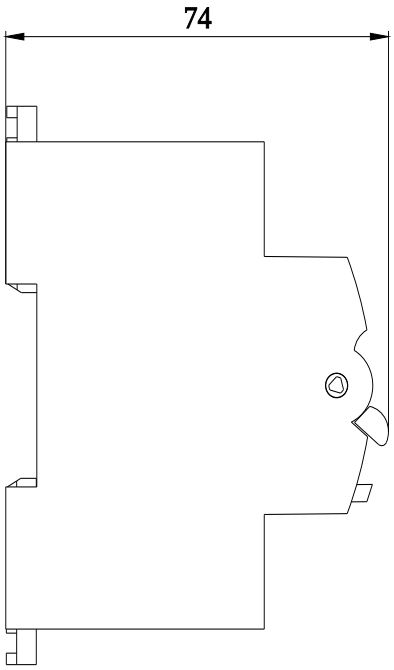
| | | | | |
|---|---|---|---|---|
| Confirmation | UK CA | CE EG-Konf. | Miscellaneous | 产品合格 QC PASS Confirmation |

| other | Dangerous goods |
|---|---|
| Miscellaneous | Transport Information |

## Further information

**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875
**Information for data generation and storage**
https://support.industry.siemens.com/cs/ww/en/view/109995012
**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/lowvoltage/catalogs
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SU1646-7FP16
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/5SU1646-7FP16
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SU1646-7FP16
**CAx-Online-Generator**
https://www.siemens.com/cax
**Tender specifications**
https://www.siemens.com/specifications
**Kennlinien**
https://curves.simaris.siemens.com/curves/5SU1646-7FP16





© Copyright Siemens

Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| **last modified:** | 7/22/2025 |


Subject to change without notice
© Copyright Siemens