

Circuit breaker 10kA, 3-pole, C, 20A according to UL 489-480Y/277V



| Model                                                                                |                                                                      |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Product brand name                                                                   | SETRON                                                               |
| Product designation                                                                  | Miniature circuit breakers                                           |
| Design of the product                                                                | Miniature circuit-breaker 5SJ4                                       |
| General technical data                                                               |                                                                      |
| Number of poles                                                                      | 3                                                                    |
| Number of poles / Note                                                               | 3P                                                                   |
| Tripping characteristic class                                                        | C                                                                    |
| Installation environment regarding EMC                                               | Suitable for environment B (immunity to interference not applicable) |
| circuit-breaker / Design                                                             | 5SJ4                                                                 |
| Mechanical service life (switching cycles) / typical                                 | 20 000                                                               |
| Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 | F                                                                    |
| Overvoltage category                                                                 | 3                                                                    |
| Degree of pollution                                                                  | 3                                                                    |
| Voltage                                                                              |                                                                      |
| Insulation voltage / at AC / rated value                                             | 440 V                                                                |

|                                                                                             |                                                            |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Supply voltage</b>                                                                       |                                                            |
| Type of voltage                                                                             | AC/DC                                                      |
| Operating current / at AC / rated value                                                     | 20 A                                                       |
| Supply voltage / at AC / rated value                                                        | 400 V                                                      |
| Operating voltage                                                                           |                                                            |
| • at AC / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum                                   | 277 V                                                      |
| • at DC / rated value / maximum                                                             | 60 V                                                       |
| • at DC / 1-channel / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum                       | 60 V                                                       |
| • at DC / 2-channel / acc. to UL 489 and CSA C22.2 No. 5-02 / maximum                       | 125 V                                                      |
| Supply voltage frequency                                                                    |                                                            |
| • rated value                                                                               | 50 Hz                                                      |
| <b>Protection class</b>                                                                     |                                                            |
| Protection class IP                                                                         | IP20, with connected conductors, IP 40 in the handle range |
| <b>Switching capacity</b>                                                                   |                                                            |
| Switching capacity current                                                                  |                                                            |
| • acc. to EN 60898 / rated value                                                            | 10 kA                                                      |
| • acc. to IEC 60947-2 / rated value                                                         | 15 kA                                                      |
| <b>Dissipation</b>                                                                          |                                                            |
| Power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 2.2 W                                                      |
| <b>Current</b>                                                                              |                                                            |
| Tripping residual / rated value / derated current / at 40 Cel                               | 20 A                                                       |
| <b>Main circuit</b>                                                                         |                                                            |
| Type of voltage supply / at AC / acc. to UL 489 and CSA C22.2 No. 5-02                      | 480/277                                                    |
| Suitability for operation                                                                   | Mechanical engineering / industry                          |
| <b>Product details</b>                                                                      |                                                            |
| Product function / neutral conductor switching                                              | No                                                         |
| Product feature / Touch protection                                                          | Yes                                                        |
| Product component                                                                           |                                                            |
| • Tunnel terminals top                                                                      | No                                                         |
| • Tunnel terminals bottom                                                                   | No                                                         |
| • combined terminal top                                                                     | Yes                                                        |
| • combined terminal bottom                                                                  | Yes                                                        |
| Product feature                                                                             |                                                            |
| • halogen-free                                                                              | Yes                                                        |
| • sealable                                                                                  | Yes                                                        |

|                                                              |     |
|--------------------------------------------------------------|-----|
| • silicon-free                                               | Yes |
| Product extension / can be installed / supplementary devices | Yes |

## Product function

|                         |                                                           |
|-------------------------|-----------------------------------------------------------|
| Product function / Note | Terminal tightening torque for Cu, 60/75°C; 3.5Nm/31lb.in |
|-------------------------|-----------------------------------------------------------|

## Short circuit

|                                                                                                           |       |
|-----------------------------------------------------------------------------------------------------------|-------|
| Breaking capacity short-circuit current (I <sub>cn</sub> ) / at AC / acc. to UL 1077 and CSA C22.2 No.235 | 10 kA |
|-----------------------------------------------------------------------------------------------------------|-------|

## Connections

|                                                                                  |                     |
|----------------------------------------------------------------------------------|---------------------|
| Connectable conductor cross-section / finely stranded / with core end processing |                     |
| • minimum                                                                        | 1.5 mm <sup>2</sup> |
| • maximum                                                                        | 25 mm <sup>2</sup>  |
| Position / of power supply cord                                                  | Any                 |

## Mechanical Design

|                       |                           |
|-----------------------|---------------------------|
| Height                | 121 mm                    |
| Width                 | 54 mm                     |
| Depth                 | 76 mm                     |
| Installation depth    | 70 mm                     |
| Number of width units | 3                         |
| Mounting type         | on standard mounting rail |
| Mounting position     | any                       |
| Net weight            | 500 g                     |

## Environmental conditions

|                                              |                                                                          |
|----------------------------------------------|--------------------------------------------------------------------------|
| Influence of the surrounding temperature     | max. 95% humidity                                                        |
| Vibration resistance                         | 50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |
| Vibration resistance / acc. to IEC 60068-2-6 | 50 m/s <sup>2</sup> at 25 to 150Hz and 60m/s <sup>2</sup> at 35Hz (4sec) |
| Ambient temperature                          |                                                                          |
| • minimum                                    | -25 °C                                                                   |
| • maximum                                    | 55 °C                                                                    |
| Ambient temperature / during storage         |                                                                          |
| • minimum                                    | -40 °C                                                                   |
| • maximum                                    | 75 °C                                                                    |

## Certificates

|                          |   |
|--------------------------|---|
| Reference code           |   |
| • acc. to DIN EN 61346-2 | F |
| • acc. to DIN EN 81346-2 | F |

| General Product Approval                                                          |                                                                                   |                                                                                   | Declaration of<br>Conformity                                                      | Test Certificates           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|
|  |  |  |  | Special Test<br>Certificate |
| CCC                                                                               | UL                                                                                | VDE                                                                               | EG-Konf.                                                                          |                             |

Further information



