## **SIEMENS**

Data sheet 5SY4480-6



Miniature circuit breaker 400 V 10kA, 4-pole, B, 80 A, D=70 mm

| Model   |                                 |  |  |  |
|---|---------------------------------|--|--|--|
| product brand name  | SENTRON                         |  |  |  |
| product designation   | Miniature circuit breaker       |  |  |  |
| General technical data  |                                 |  |  |  |
| number of poles   | 4                               |  |  |  |
| design of pole  | 4P                              |  |  |  |
| tripping characteristic class   | В                               |  |  |  |
| mechanical service life (operating cycles) typical                                  | 10 000                          |  |  |  |
| overvoltage category  | III                             |  |  |  |
| degree of pollution   | 3                               |  |  |  |
| Voltage   |                                 |  |  |  |
| type of voltage of the operating voltage  | AC                              |  |  |  |
| insulation voltage (Ui)   |                                 |  |  |  |
| <ul> <li>with single-phase operation at AC rated value</li> </ul>                   | 440 V                           |  |  |  |
| <ul> <li>with multi-phase operation at AC rated value</li> </ul>                    | 440 V                           |  |  |  |
| Supply voltage  |                                 |  |  |  |
| supply voltage  |                                 |  |  |  |
| <ul> <li>at AC rated value</li> </ul>   | 400 V                           |  |  |  |
| at DC rated value   | 60 V                            |  |  |  |
| value range of the supply voltage frequency   | 50/60 Hz                        |  |  |  |
| operating voltage at DC rated value maximum   | 72 V                            |  |  |  |
| Protection class  |                                 |  |  |  |
| protection class IP   | IP20, with connected conductors |  |  |  |
| Switching capacity  |                                 |  |  |  |
| switching capacity current  |                                 |  |  |  |
| <ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>                      | 15 kA                           |  |  |  |
| <ul> <li>according to EN 60898 rated value</li> </ul>                               | 10 kA                           |  |  |  |
| Dissipation   |                                 |  |  |  |
| power loss [W] for rated value of the current at AC in hot operating state per pole | 6.7 W                           |  |  |  |
| Product details   |                                 |  |  |  |
| product component   |                                 |  |  |  |
| <ul> <li>combined terminal top</li> </ul>   | Yes                             |  |  |  |
| <ul> <li>combined terminal bottom</li> </ul>  | Yes                             |  |  |  |
| neutral conductor switching   | No                              |  |  |  |
| product feature   |                                 |  |  |  |
| <ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>      | Yes                             |  |  |  |
| <ul><li>halogen-free</li></ul>  | Yes                             |  |  |  |
| • sealable  | Yes                             |  |  |  |

| Approvals Certificates   |   |    |
|--|---|----|
| 60068-2-30   |   |    |
| number of test cycles for environmental testing according to IEC | 6   |    |
| • maximum  | 75 °C   |    |
| • minimum  | -40 °C  |    |
| ambient temperature during storage                               |   |    |
| • maximum  | 70 °C   |    |
| • minimum  | -40 °C  |    |
| ambient temperature during operation                             |   |    |
| vibration resistance according to IEC 60068-2-6                  | ±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz            |    |
| standard   | IEC / EN 60898-1, IEC / EN 60947-2                  |    |
| influence of the surrounding temperature                         | max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75° | °C |
| Environmental conditions   | 302 g   |    |
| net weight   | 692 g   |    |
| mounting position  | any   |    |
| fastening method   | Quick assembly system                               |    |
| number of modular width units                                    | 4   |    |
| depth installation depth   | 70 mm   |    |
| width  | 72 mm<br>76 mm                                      |    |
| height   | 90 mm<br>72 mm                                      |    |
| Mechanical Design  | 00 mm   |    |
| position of power supply cord                                    | Any   |    |
| • maximum  | 3.5 N·m   |    |
| • minimum  | 2.5 N·m   |    |
| tightening torque with screw-type terminals                      | 0.5.11  |    |
| • maximum  | 31 lbf·in   |    |
| • minimum  | 22 lbf·in   |    |
| tightening torque [lbf-in] with screw-type terminals             | 00 lbf:-  |    |
| • maximum  | 4   |    |
| • minimum  | 18  |    |
| AWG number as coded connectable conductor cross section          | 40  |    |
| • maximum  | 25 mm²  |    |
| • minimum  | 0.75 mm²  |    |
| end processing   | 0.75 mm²  |    |
| connectable conductor cross-section finely stranded with core    |   |    |
| maximum  | 35 mm²  |    |
| • minimum  | 0.75 mm <sup>2</sup>                                |    |
| connectable conductor cross-section stranded                     |   |    |
| • maximum  | 35 mm²  |    |
| • minimum  | 0.75 mm²  |    |
| connectable conductor cross-section solid                        |   |    |
| Connections  |   |    |
| at AC according to UL 1077 and CSA C22.2 No.235                  | 5 kA  |    |
| short-circuit current breaking capacity (Icn)                    |   |    |
| Short circuit  | A   |    |
| reference value setting current (li) for I-tripping              | x In  |    |
| set values setting current (li) for I-tripping                   | 4   |    |
|  |   |    |
| roduct function  | Yes   |    |

|  | Test Certificates | other | Railway | Environment |
|--|-------------------|-------|---------|-------------|
|--|-------------------|-------|---------|-------------|

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

**Miscellaneous** 

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=5SY4480-6

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4480-6

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

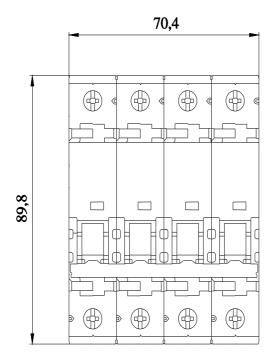
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY4480-6

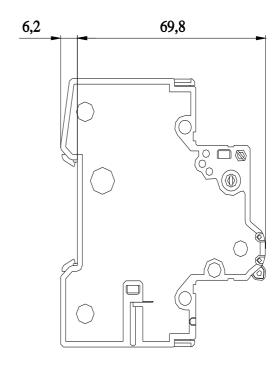
CAx-Online-Generator

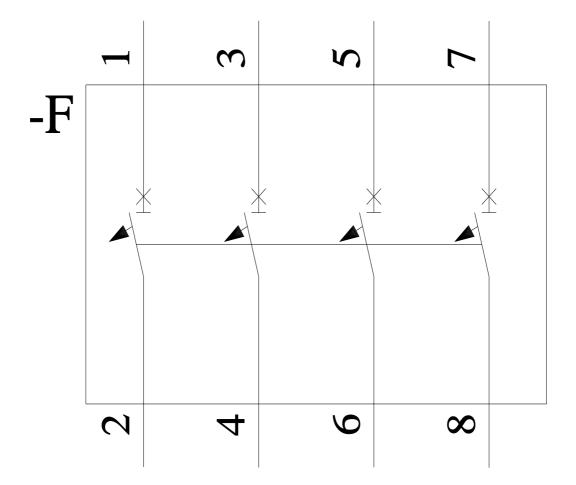
http://www.siemens.com/cax

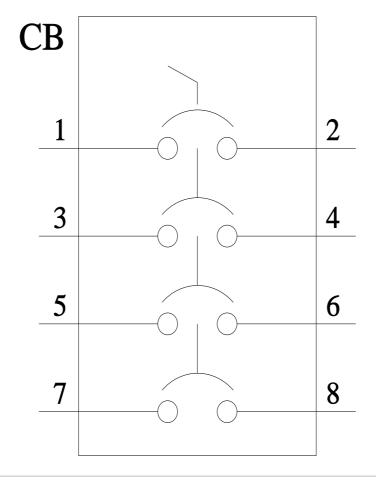
**Tender specifications** 

http://www.siemens.com/specifications









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