

circuit breaker 3VA1 IEC Frame 160 breaking capacity class S Icu=36 kA @ 415 V  
4-pole, line protection TM220, ATFM, In=16 A overload protection Ir=11 A...16 A  
short-circuit protection Ii=20 x In N conductor unprotected nut keeper kit for DC  
power OEM in China

| Model                                                                                                 |                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                                                    | SENTRON                                                                                                                                                        |
| product designation                                                                                   | Molded case circuit breaker                                                                                                                                    |
| design of the product                                                                                 | Line protection                                                                                                                                                |
| design of the overcurrent release                                                                     | TM220                                                                                                                                                          |
| protection function of the overcurrent release                                                        | LI                                                                                                                                                             |
| number of poles                                                                                       | 4                                                                                                                                                              |
| General technical data                                                                                |                                                                                                                                                                |
| mechanical service life (operating cycles) / typical                                                  | 20 000                                                                                                                                                         |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 9 000                                                                                                                                                          |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                          | 6 300                                                                                                                                                          |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | No                                                                                                                                                             |
| ground-fault monitoring version                                                                       | Without                                                                                                                                                        |
| product function                                                                                      |                                                                                                                                                                |
| • communication function                                                                              | No                                                                                                                                                             |
| • other measurement function                                                                          | No                                                                                                                                                             |
| Net Weight                                                                                            | 1.194 kg                                                                                                                                                       |
| Switching capacity according to IEC 60947                                                             |                                                                                                                                                                |
| switching capacity class of the circuit breaker                                                       | S                                                                                                                                                              |
| design of short-circuit protection                                                                    | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |
| Adjustable parameters                                                                                 |                                                                                                                                                                |
| product feature / for L-tripping / can be switched on/off                                             | No                                                                                                                                                             |
| design of the N-conductor protection                                                                  | without                                                                                                                                                        |
| product function / grounding protection                                                               | No                                                                                                                                                             |
| Mechanical Design                                                                                     |                                                                                                                                                                |
| product component                                                                                     |                                                                                                                                                                |
| • undervoltage release                                                                                | No                                                                                                                                                             |
| • voltage trigger                                                                                     | No                                                                                                                                                             |
| • trip indicator                                                                                      | No                                                                                                                                                             |
| Connections                                                                                           |                                                                                                                                                                |
| arrangement of electrical connectors / for main current circuit                                       | Front terminal                                                                                                                                                 |
| type of electrical connection / for main current circuit                                              | nut keeper kit on both ends                                                                                                                                    |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum             | 12 x 1 mm                                                                                                                                                      |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum             | 17 x 6,5 mm                                                                                                                                                    |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)                    | Silver                                                                                                                                                         |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)                 | Tin                                                                                                                                                            |
| Auxiliary circuit                                                                                     |                                                                                                                                                                |
| number of CO contacts / for auxiliary contacts                                                        | 0                                                                                                                                                              |
| Accessories                                                                                           |                                                                                                                                                                |
| product extension / optional / motor drive                                                            | Yes                                                                                                                                                            |
| Environmental conditions                                                                              |                                                                                                                                                                |
| protection class IP / on the front                                                                    | IP40                                                                                                                                                           |

## Environmental footprint

|                                           |     |
|-------------------------------------------|-----|
| Environmental Product Declaration(EPD)    | Yes |
| reference code / according to IEC 81346-2 | Q   |

## Approvals / Certificates

|                          |     |                   |
|--------------------------|-----|-------------------|
| General Product Approval | EMV | Test Certificates |
|--------------------------|-----|-------------------|

[Miscellaneous](#)



[Confirmation](#)



[Miscellaneous](#)

[Special Test Certificate](#)

## Maritime application

other



[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

other

## Environment

[Confirmation](#)



[Environmental Confirmations](#)

[Environmental Confirmations](#)

## 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=3VA1196-4EE42-0AA0-Z D00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1196-4EE42-0AA0-Z D00>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1196-4EE42-0AA0-Z D00](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1196-4EE42-0AA0-Z D00)

### CAX-Online-Generator

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

### Tender specifications

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

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>)

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