



circuit breaker 3VM1 IEC frame 160 breaking capacity class S Icu=36kA @ 415V  
3-pole, line protection TM210, FTFM, In=32A overload protection Ir=32A, not  
adjustable short-circuit protection li=10 x In nut keeper kit

| Model                                                                                                 |                             |
|-------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                    | SENTRON                     |
| product designation                                                                                   | Molded case circuit breaker |
| design of the product                                                                                 | Line protection             |
| design of the overcurrent release                                                                     | TM210                       |
| protection function of the overcurrent release                                                        | LI                          |
| number of poles                                                                                       | 3                           |
| General technical data                                                                                |                             |
| insulation voltage / rated value                                                                      | 800 V                       |
| operating voltage / at AC / at 50/60 Hz / rated value                                                 | 500 V                       |
| operating voltage / at DC / rated value                                                               | 500 V                       |
| operating voltage / at AC / rated value                                                               | 690 V                       |
| power loss [W] / maximum                                                                              | 11 W                        |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 3.53 W                      |
| mechanical service life (operating cycles) / typical                                                  | 15 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 6 000                       |
| 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                                                                                            | 967 g                       |
| Current                                                                                               |                             |
| operational current                                                                                   |                             |
| • at 40 °C                                                                                            | 32 A                        |
| • at 45 °C                                                                                            | 32 A                        |
| • at 50 °C                                                                                            | 32 A                        |
| • at 55 °C                                                                                            | 31 A                        |
| • at 60 °C                                                                                            | 31 A                        |
| • at 65 °C                                                                                            | 30 A                        |
| • at 70 °C                                                                                            | 30 A                        |
| Switching capacity according to IEC 60947                                                             |                             |
| switching capacity class of the circuit breaker                                                       | S                           |
| maximum short-circuit current breaking capacity (Icu)                                                 |                             |
| • at 240 V                                                                                            | 55 kA                       |
| • at 415 V                                                                                            | 36 kA                       |
| • at 440 V                                                                                            | 25 kA                       |
| • at 500 V                                                                                            | 7 kA                        |
| operating short-circuit current breaking capacity (Ics)                                               |                             |

|                                                                                                                                                                                   |                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> </ul>                                                          | 41 kA<br>27 kA<br>18 kA<br>5 kA                                                                                                                               |
| short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> </ul> | 121 kA<br>76 kA<br>53 kA<br>12 kA                                                                                                                             |
| design of short-circuit protection                                                                                                                                                | For switching capacity values in DC power systems, see the 3VA Molded Case Circuit Breaker Manual; link available under Service & Support in the last chapter |

#### Adjustable parameters

|                                                                                                                                                                                                  |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| product feature / for L-tripping / can be switched on/off                                                                                                                                        | No             |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul> | 32 A<br>32 A   |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>     | 1 s<br>1 s     |
| adjustable response value setting current (I <sub>I</sub> ) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                      | 320 A<br>320 A |
| adjustable setting current (I <sub>N</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                     | 0 A<br>0 A     |
| adjustable current response value current / of instantaneous short-circuit trip unit <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                 | 320 A          |
| product function / grounding protection                                                                                                                                                          | No             |

#### Mechanical Design

|                                                                                                                                                 |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| product component <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul> | No<br>No<br>No |
| height [in]                                                                                                                                     | 5.12 in        |
| height                                                                                                                                          | 130 mm         |
| width [in]                                                                                                                                      | 3 in           |
| width                                                                                                                                           | 76.2 mm        |
| depth [in]                                                                                                                                      | 2.76 in        |
| depth                                                                                                                                           | 70 mm          |

#### Connections

|                                                                                           |                             |
|-------------------------------------------------------------------------------------------|-----------------------------|
| arrangement of electrical connectors / for main current circuit                           | Front connection            |
| 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 | No |
|--------------------------------------------|----|

#### Environmental conditions

|                                                                                                                                          |                 |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| protection class IP / on the front                                                                                                       | IP40            |
| ambient temperature <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> </ul> | -25 °C<br>70 °C |

- during storage / minimum
- during storage / maximum

-40 °C

80 °C

## Approvals / Certificates

### General Product Approval



[Confirmation](#)



EG-Konf.



VDE

[Miscellaneous](#)

### General Product Approval

#### Test Certificates

#### Marine / Shipping



[Miscellaneous](#)



ABS



BUREAU  
VERITAS



DNV



LRS

### Marine / Shipping

#### other

#### Environment



RMRS

[Confirmation](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

## Further information

### 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=3VM1132-4ED32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VM1132-4ED32-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VM1132-4ED32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VM1132-4ED32-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





