



circuit breaker 3VA1 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 3-pole, starter protection TM110M, FM, In=4A without overload protection short-circuit protection Ii=15 x In nut keeper kit

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded case circuit breaker |
| Product version  | Starter protection          |
| design of the overcurrent release  | TM110M                      |
| protection function of the overcurrent release   | I                           |
| number of poles  | 3                           |
| General technical data   |                             |
| rated insulation voltage Ui  | 800 V                       |
| power loss [W] / maximum   | 5.4 W                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 1.8 W                       |
| mechanical service life (switching cycles) / typical   | 20 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 9 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 6 300                       |
| Neutral conductors / upgradeable/retrofitable  | No                          |
| ground-fault monitoring version  | Without                     |
| product function   |                             |
| • communication function   | No                          |
| • phase failure detection  | No                          |
| • other measurement function   | No                          |
| Net Weight   | 991 g                       |
| Current  |                             |
| Max. rated operational current of the frame size   | 160 A                       |
| Courant permanent assigné Iu   | 4 A                         |
| operational current  |                             |
| • at 40 °C   | 4 A                         |
| • at 45 °C   | 4 A                         |
| • at 50 °C   | 4 A                         |
| • at 55 °C   | 4 A                         |
| • at 60 °C   | 4 A                         |
| • at 65 °C   | 4 A                         |
| • at 70 °C   | 4 A                         |
| Switching capacity according to IEC 60947  |                             |
| switching capacity class of the circuit breaker  | M                           |
| breaking capacity maximum short-circuit current (Icu)  |                             |
| • at 240 V   | 85 kA                       |
| • at 415 V   | 55 kA                       |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>   | 36 kA<br>5 kA<br>5 kA                           |
| breaking capacity operating short-circuit current (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> <li>• at 690 V</li> </ul> | 85 kA<br>55 kA<br>36 kA<br>5 kA<br>5 kA         |
| short-circuit current making capacity (Icm) <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> <li>• at 690 V</li> </ul>             | 187 kA<br>121 kA<br>75.6 kA<br>7.5 kA<br>7.5 kA |

#### Adjustable parameters

|  |      |
|--|------|
| Adjustable response value current / li min.                | 64 A |
| Adjustable response value current / li max.                | 64 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No   |

#### Mechanical Design

|             |         |
|-------------|---------|
| 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 terminal              |
| type of electrical connection / for main current circuit                                | nut keeper kit on both ends |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 12 x 1 mm                   |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 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                               |
| ambient temperature  |                                    |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C |

#### Certificates

|                                      |   |
|--------------------------------------|---|
| reference code / acc. to IEC 81346-2 | Q |
|--------------------------------------|---|

#### General Product Approval

EMC

Declaration of Conformity



[Miscellaneous](#)



[UK Declaration of Conformity](#)

Test Certificates

Marine / Shipping

other

[Miscellaneous](#)

[Miscellaneous](#)

Further information

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=3VA1104-5MG32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1104-5MG32-0AA0>

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

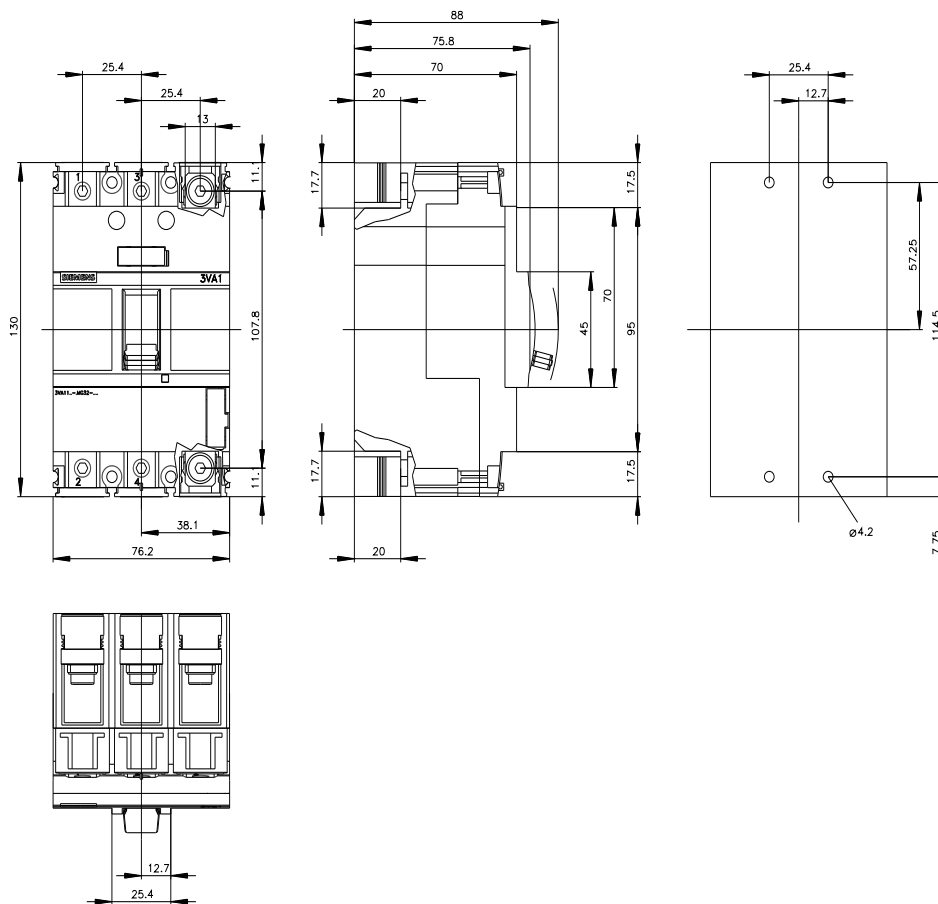
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1104-5MG32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1104-5MG32-0AA0)

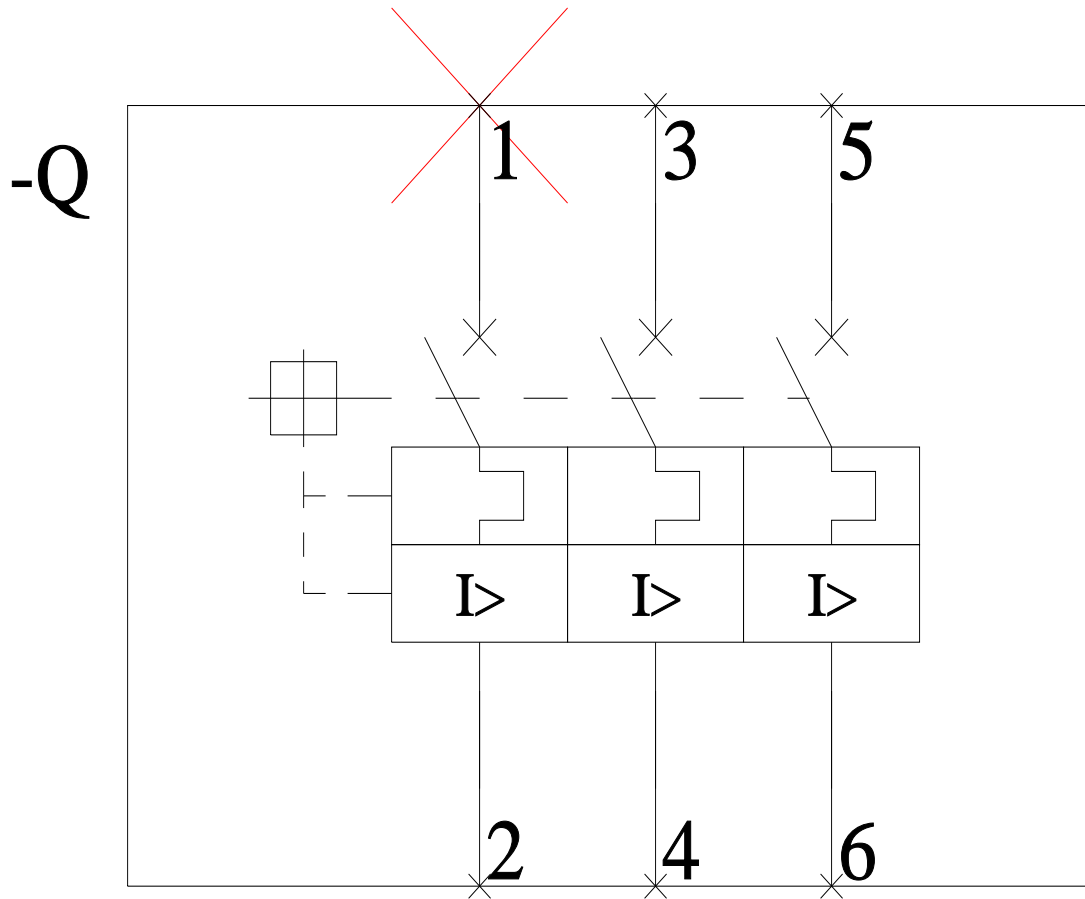
CAX-Online-Generator

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

Tender specifications

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





last modified:

10/3/2021 [↗](#)

