



circuit breaker 3VA1 IEC frame 160 breaking capacity class H  $I_{cu}=70kA @ 415V$  3-pole, starter protection TM120M, AM,  $I_n=32A$  without overload protection short-circuit protection  $I_i=7...16 \times I_n$  clamp connection

| Model  |                             |
|--|-----------------------------|
| product brand name   | SENTRON                     |
| product designation  | Molded case circuit breaker |
| Product version  | Starter protection          |
| design of the overcurrent release  | TM120M                      |
| protection function of the overcurrent release   | I                           |
| number of poles  | 3                           |
| General technical data   |                             |
| rated insulation voltage $U_i$   | 800 V                       |
| power loss [W] / maximum   | 10.6 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 3.53 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   | 0.9 kg                      |
| Current  |                             |
| Max. rated operational current of the frame size   | 160 A                       |
| Courant permanent assigné $I_u$  | 32 A                        |
| 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  | H                           |
| breaking capacity maximum short-circuit current ( $I_{cu}$ )                                   |                             |

|  |  |
|--|--|
| <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>   | 100 kA<br>70 kA<br>55 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> | 100 kA<br>70 kA<br>40 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>             | 220 kA<br>154 kA<br>121 kA<br>7.5 kA<br>7.5 kA |

|  |       |
|--|-------|
| <b>Adjustable parameters</b>                               |       |
| Adjustable response value current / li min.                | 224 A |
| Adjustable response value current / li max.                | 510 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No    |

|                          |         |
|--------------------------|---------|
| <b>Mechanical Design</b> |         |
| height [in]              | 5.12 in |
| Height                   | 130 mm  |
| width [in]               | 3 in    |
| Width                    | 76.2 mm |
| depth [in]               | 2.76 in |
| depth                    | 70 mm   |

|   |                                 |
|---|---------------------------------|
| <b>Connections</b>  |                                 |
| arrangement of electrical connectors / for main current circuit                 | Front terminal                  |
| type of electrical connection / for main current circuit                        | box terminal on both sides      |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (1.5 - 70 mm <sup>2</sup> ) |

|  |   |
|--|---|
| <b>Auxiliary circuit</b>                       |   |
| number of CO contacts / for auxiliary contacts | 0 |

|  |     |
|--|-----|
| <b>Accessories</b>                         |     |
| product extension / optional / motor drive | Yes |

|  |                                    |
|--|------------------------------------|
| <b>Environmental conditions</b>  |                                    |
| 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 |

|                                      |   |
|--------------------------------------|---|
| <b>Certificates</b>                  |   |
| reference code / acc. to IEC 81346-2 | Q |

|                                 |            |                                  |
|---------------------------------|------------|----------------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Declaration of Conformity</b> |
|---------------------------------|------------|----------------------------------|



[Miscellaneous](#)



|                                  |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| <b>Declaration of Conformity</b> | <b>Test Certificates</b> | <b>Marine / Shipping</b> |
|----------------------------------|--------------------------|--------------------------|

[UK Declaration of Conformity](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Miscellaneous](#)



[CCS / China Classification Society](#)

Marine / Shipping

other



[Confirmation](#)

[Miscellaneous](#)

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#### 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=3VA1132-6MH36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1132-6MH36-0AA0>

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

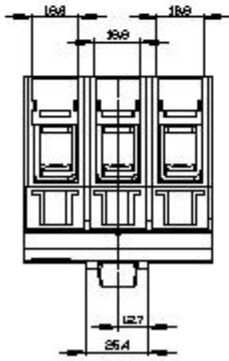
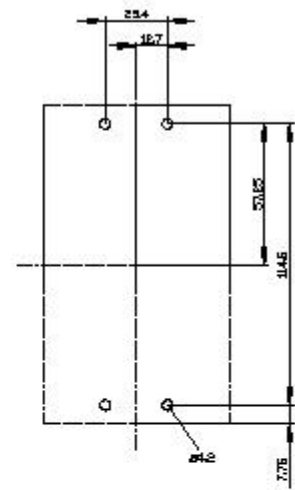
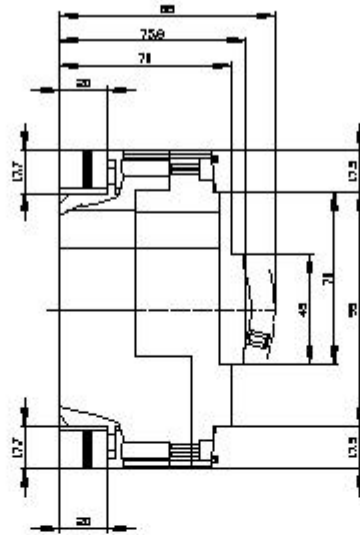
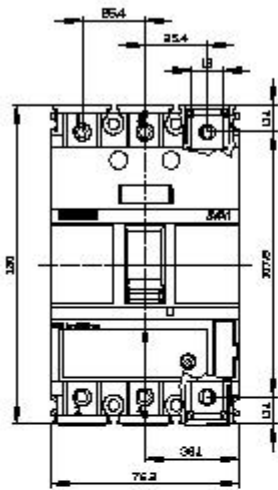
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1132-6MH36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1132-6MH36-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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





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