



circuit breaker 3VA2 IEC frame 250 breaking capacity class M  $I_{cu}=55\text{kA}$  @ 415V 3-pole, line protection ETU320, LI,  $I_n=250\text{A}$  overload protection  $I_r=100\text{A}\dots250\text{A}$  short-circuit protection  $I_i=1.5\dots10 \times I_n$  nut keeper kit undervoltage release (UVR) 24V DC 2 auxiliary switches HQ 1 trip alarm switch HQ 1 electrical alarm switch

| Model                                                                                          |                                                                           |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| product brand name                                                                             | SENTRON                                                                   |
| product designation                                                                            | Molded case circuit breaker                                               |
| Product version                                                                                | Line protection                                                           |
| design of the overcurrent release                                                              | ETU320                                                                    |
| protection function of the overcurrent release                                                 | LI                                                                        |
| number of poles                                                                                | 3                                                                         |
| Auxiliary contact version                                                                      | 2 auxiliary switches + 1 trip alarm switch + 1 electrical alarm switch HQ |
| General technical data                                                                         |                                                                           |
| rated insulation voltage $U_i$                                                                 | 800 V                                                                     |
| power loss [W] / maximum                                                                       | 50.5 W                                                                    |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 16.83 W                                                                   |
| mechanical service life (switching cycles) / typical                                           | 25 000                                                                    |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 12 000                                                                    |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 8 400                                                                     |
| Neutral conductors / upgradeable/retrofitable                                                  | No                                                                        |
| ground-fault monitoring version                                                                | Without                                                                   |
| product function                                                                               |                                                                           |
| • communication function                                                                       | No                                                                        |
| • other measurement function                                                                   | No                                                                        |
| Net Weight                                                                                     | 2,63 kg                                                                   |
| Current                                                                                        |                                                                           |
| Max. rated operational current of the frame size                                               | 250 A                                                                     |
| Courant permanent assigné $I_u$                                                                | 250 A                                                                     |
| operational current                                                                            |                                                                           |
| • at 40 °C                                                                                     | 250 A                                                                     |
| • at 45 °C                                                                                     | 250 A                                                                     |
| • at 50 °C                                                                                     | 250 A                                                                     |
| • at 55 °C                                                                                     | 241 A                                                                     |
| • at 60 °C                                                                                     | 232 A                                                                     |
| • at 65 °C                                                                                     | 222 A                                                                     |
| • at 70 °C                                                                                     | 213 A                                                                     |
| Switching capacity according to IEC 60947                                                      |                                                                           |
| switching capacity class of the circuit breaker                                                | M                                                                         |
| breaking capacity maximum short-circuit current ( $I_{cu}$ )                                   |                                                                           |
| • 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>                                                                                                 | 55 kA<br>36 kA<br>3 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>55 kA<br>36 kA<br>3 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>121 kA<br>75.6 kA<br>4.5 kA |

#### Adjustable parameters

|                                                            |         |
|------------------------------------------------------------|---------|
| Adjustable response value current / li min.                | 375 A   |
| Adjustable response value current / li max.                | 2 500 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No      |

#### Mechanical Design

|             |         |
|-------------|---------|
| height [in] | 7.13 in |
| Height      | 181 mm  |
| width [in]  | 4.13 in |
| Width       | 105 mm  |
| depth [in]  | 3.39 in |
| depth       | 86 mm   |

#### Connections

|                                                                                         |                              |
|-----------------------------------------------------------------------------------------|------------------------------|
| arrangement of electrical connectors / for main current circuit                         | Front terminal               |
| type of electrical connection / for main current circuit                                | on both sides nut keeper kit |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 13 x 1 mm                    |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 25 x 8 mm                    |

#### Auxiliary circuit

|                                                                                                                                                                                    |                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| product component                                                                                                                                                                  |                        |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• undervoltage release with leading contact</li> <li>• trip indicator</li> </ul> | Yes<br>No<br>No<br>Yes |
| number of CO contacts / for auxiliary contacts                                                                                                                                     | 4                      |

#### Accessories

|                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product extension / optional / motor drive                                                                                                                                                                                                                                                                         | Yes                                                                                                                                                                    |
| manufacturer's article number                                                                                                                                                                                                                                                                                      |                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• of the supplied basic switch</li> <li>• of the integrated auxiliary switch/alarm switch</li> <li>• of the integrated auxiliary switch/alarm switch</li> <li>• of the integrated auxiliary switch/alarm switch</li> <li>• of the integrated auxiliary trip unit</li> </ul> | <a href="#">3VA2225-5HL32-0AA0</a><br><a href="#">3VA9988-0AA12</a><br><a href="#">3VA9988-0AB12</a><br><a href="#">3VA9988-0AB22</a><br><a href="#">3VA9608-0BB11</a> |

#### 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](#)



EG-Konf.

| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|
|---------------------------|-------------------|-------------------|

[UK Declaration of Conformity](#)

[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



| Marine / Shipping | other |
|-------------------|-------|
|-------------------|-------|



[CCS / China Classification Society](#)

[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=3VA2225-5HL32-0BL0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2225-5HL32-0BL0>

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

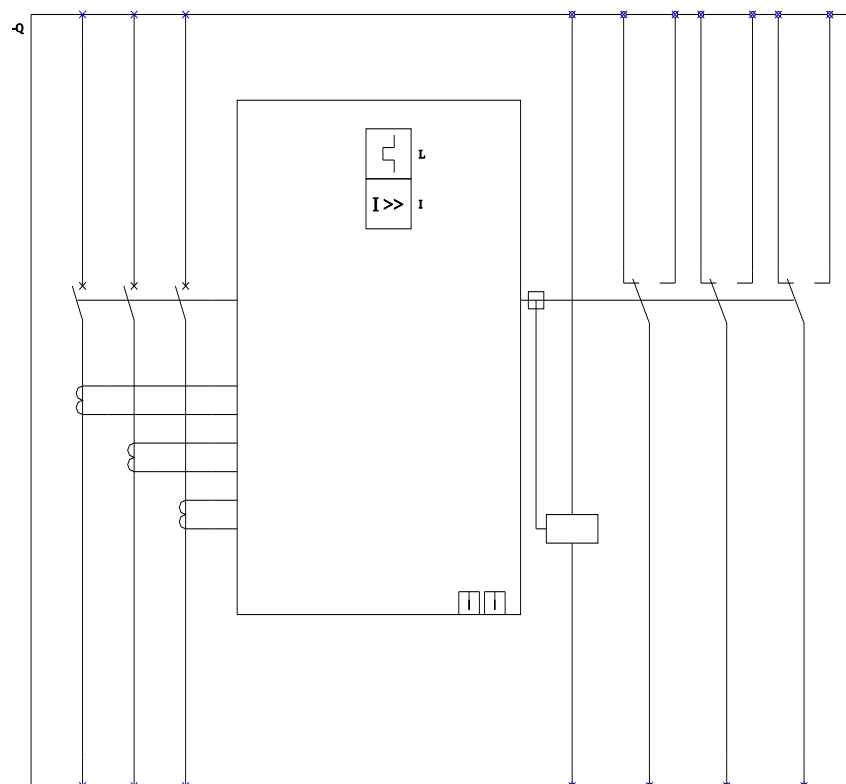
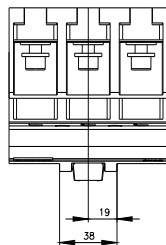
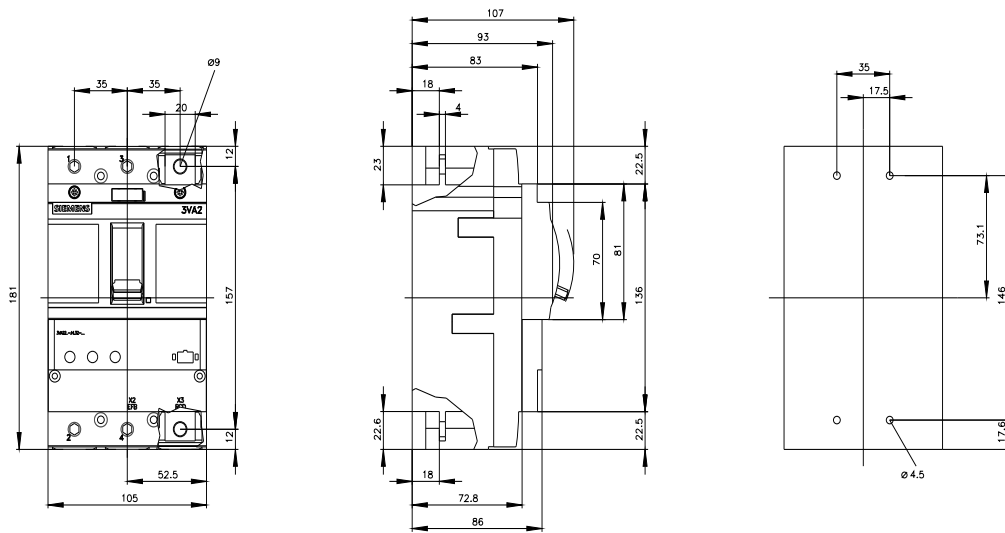
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2225-5HL32-0BL0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2225-5HL32-0BL0)

CAX-Online-Generator

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

Tender specifications

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



L (Long Time Delay / Überlastschutz); I (Instantaneous / Kurzschlusschutz, unverzögert);

last modified:

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