



circuit breaker 3VA2 IEC frame 160 breaking capacity class M Icu=55kA @ 415V 3-pole, motor protection ETU350M, LSI, In=63A overload protection Ir=25A...63A short-circuit protection Isd=3...15 x Ir, li=15 x In nut keeper kit 2 auxiliary switches HQ 1 trip alarm switch HQ

| Model                                                                                          |                                               |
|------------------------------------------------------------------------------------------------|-----------------------------------------------|
| product brand name                                                                             | SENTRON                                       |
| product designation                                                                            | Molded case circuit breaker                   |
| Product version                                                                                | Motor protection                              |
| design of the overcurrent release                                                              | ETU350M                                       |
| protection function of the overcurrent release                                                 | LSI                                           |
| number of poles                                                                                | 3                                             |
| design of the auxiliary release                                                                | Without auxiliary release                     |
| Auxiliary contact version                                                                      | 2 auxiliary switches + 1 trip alarm switch HQ |
| General technical data                                                                         |                                               |
| rated insulation voltage Ui                                                                    | 800 V                                         |
| operating power / at AC-3 / at 400 V                                                           | 30 000 W                                      |
| operating power / at AC-3 / at 230 V                                                           | 18 500 W                                      |
| power loss [W] / maximum                                                                       | 4 W                                           |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 1.33 W                                        |
| mechanical service life (switching cycles) / typical                                           | 25 000                                        |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 14 000                                        |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 9 800                                         |
| Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz                      | 7 500                                         |
| Neutral conductors / upgradeable/retrofitable                                                  | No                                            |
| ground-fault monitoring version                                                                | Without                                       |
| product function                                                                               |                                               |
| • communication function                                                                       | No                                            |
| • phase failure detection                                                                      | Yes                                           |
| • other measurement function                                                                   | No                                            |
| Net Weight                                                                                     | 2,284 kg                                      |
| Current                                                                                        |                                               |
| Max. rated operational current of the frame size                                               | 160 A                                         |
| Courant permanent assigné lu                                                                   | 63 A                                          |
| operational current                                                                            |                                               |
| • at 40 °C                                                                                     | 63 A                                          |
| • at 45 °C                                                                                     | 63 A                                          |
| • at 50 °C                                                                                     | 63 A                                          |
| • at 55 °C                                                                                     | 63 A                                          |
| • at 60 °C                                                                                     | 63 A                                          |
| • at 65 °C                                                                                     | 63 A                                          |

|                                                                                         |                                    |
|-----------------------------------------------------------------------------------------|------------------------------------|
| • at 70 °C                                                                              | 63 A                               |
| <b>Switching capacity according to IEC 60947</b>                                        |                                    |
| switching capacity class of the circuit breaker                                         | M                                  |
| breaking capacity maximum short-circuit current (I <sub>cu</sub> )                      |                                    |
| • at 240 V                                                                              | 85 kA                              |
| • at 415 V                                                                              | 55 kA                              |
| • at 440 V                                                                              | 55 kA                              |
| • at 500 V                                                                              | 36 kA                              |
| • at 690 V                                                                              | 2.5 kA                             |
| breaking capacity operating short-circuit current (I <sub>cs</sub> )                    |                                    |
| • at 240 V                                                                              | 85 kA                              |
| • at 415 V                                                                              | 55 kA                              |
| • at 440 V                                                                              | 55 kA                              |
| • at 500 V                                                                              | 36 kA                              |
| • at 690 V                                                                              | 2.5 kA                             |
| short-circuit current making capacity (I <sub>cm</sub> )                                |                                    |
| • at 240 V                                                                              | 187 kA                             |
| • at 415 V                                                                              | 121 kA                             |
| • at 440 V                                                                              | 121 kA                             |
| • at 500 V                                                                              | 75.6 kA                            |
| • at 690 V                                                                              | 3.7 kA                             |
| <b>Adjustable parameters</b>                                                            |                                    |
| Adjustable response value current / I <sub>i</sub> min.                                 | 945 A                              |
| Adjustable response value current / I <sub>i</sub> max.                                 | 945 A                              |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF                 | No                                 |
| <b>Mechanical Design</b>                                                                |                                    |
| height [in]                                                                             | 7.13 in                            |
| Height                                                                                  | 181 mm                             |
| width [in]                                                                              | 4.13 in                            |
| Width                                                                                   | 105 mm                             |
| depth [in]                                                                              | 3.39 in                            |
| depth                                                                                   | 86 mm                              |
| <b>Connections</b>                                                                      |                                    |
| 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                          |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)      | tin                                |
| <b>Auxiliary circuit</b>                                                                |                                    |
| product component                                                                       |                                    |
| • undervoltage release                                                                  | No                                 |
| • voltage trigger                                                                       | No                                 |
| • undervoltage release with leading contact                                             | No                                 |
| • trip indicator                                                                        | Yes                                |
| number of CO contacts / for auxiliary contacts                                          | 3                                  |
| <b>Accessories</b>                                                                      |                                    |
| product extension / optional / motor drive                                              | Yes                                |
| manufacturer's article number                                                           |                                    |
| • of the supplied basic switch                                                          | <a href="#">3VA2163-5MN32-0AA0</a> |
| • of the integrated auxiliary switch/alarm switch                                       | <a href="#">3VA9988-0AA12</a>      |
| • of the integrated auxiliary switch/alarm switch                                       | <a href="#">3VA9988-0AB12</a>      |
| <b>Environmental conditions</b>                                                         |                                    |
| protection class IP / on the front                                                      | IP40                               |
| ambient temperature                                                                     |                                    |
| • during operation / minimum                                                            | -25 °C                             |
| • during operation / maximum                                                            | 70 °C                              |

- during storage / minimum -40 °C
- during storage / maximum 80 °C

## Certificates

reference code / acc. to IEC 81346-2

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### General Product Approval

EMC

Declaration of  
Conformity



[Miscellaneous](#)



[UK Declaration of  
Conformity](#)

Declaration of  
Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Miscellaneous](#)



[CCS / China Classification Society](#)

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=3VA2163-5MN32-0AH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-5MN32-0AH0>

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

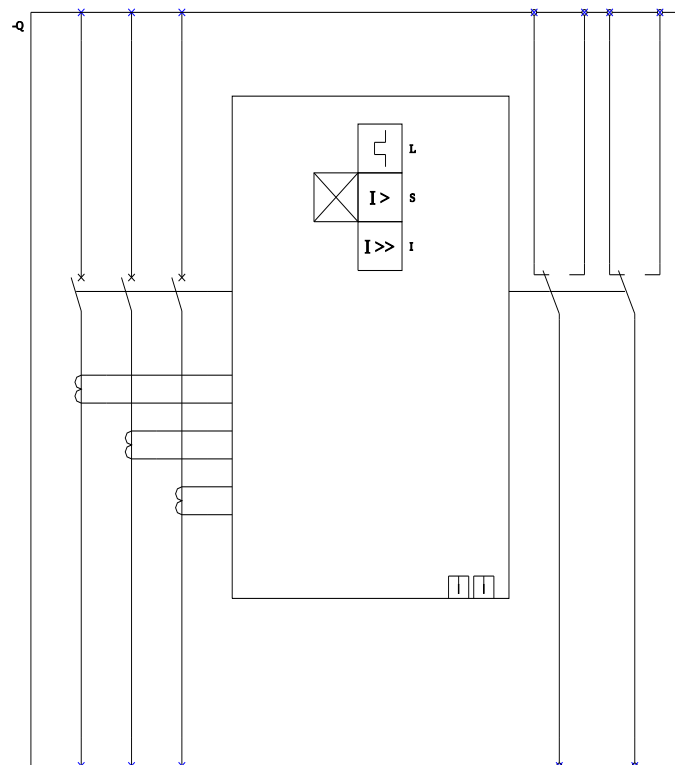
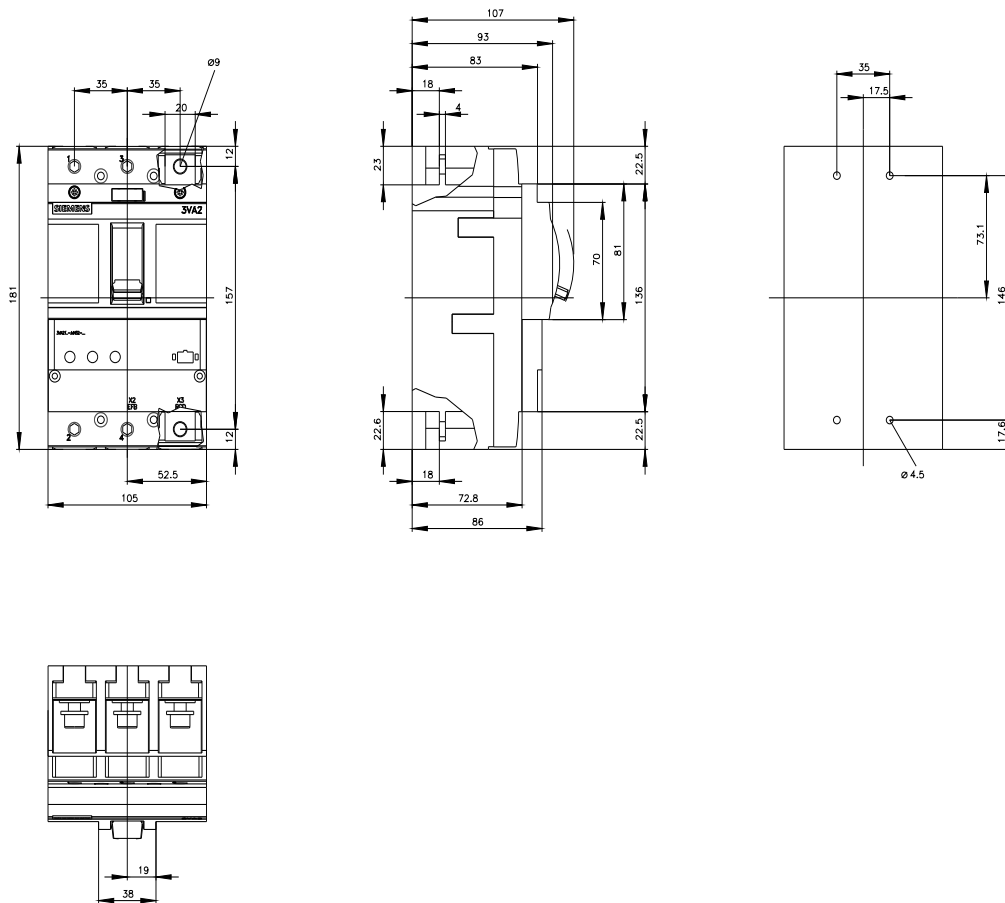
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2163-5MN32-0AH0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-5MN32-0AH0)

CAX-Online-Generator

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

Tender specifications

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



L (Long Time Delay / Überlastschutz); S (Short Time Delay / Kurzschlussschutz, kurzzeitverzögert);  
I (Instantaneous / Kurzschlussschutz, unverzögert);



