



circuit breaker 3VA2 IEC frame 100 breaking capacity class M  $I_{cu}=55\text{kA}$  @ 415V 3-pole, line protection ETU850, LSI,  $I_n=100\text{A}$  overload protection  $I_r=40\text{A} \dots 100\text{A}$  short-circuit protection  $I_{sd}=0.6 \dots 10 \times I_n$ ,  $I_i=1.5 \dots 12 \times I_n$  N conductor protection optionally with external current transformer nut keeper kit shunt trip (STL) 12-30V DC; 24V AC 50/60Hz 2 auxiliary switches HQ

| Model                                                                                          |                             |
|------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                             | SENTRON                     |
| product designation                                                                            | Molded case circuit breaker |
| Product version                                                                                | Line protection             |
| design of the overcurrent release                                                              | ETU850                      |
| protection function of the overcurrent release                                                 | LSI                         |
| number of poles                                                                                | 3                           |
| Auxiliary contact version                                                                      | 2 auxiliary switches HQ     |
| General technical data                                                                         |                             |
| rated insulation voltage $U_i$                                                                 | 800 V                       |
| power loss [W] / maximum                                                                       | 13.5 W                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 4.5 W                       |
| mechanical service life (switching cycles) / typical                                           | 25 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 15 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 10 500                      |
| Neutral conductors / upgradeable/retrofitable                                                  | Yes                         |
| ground-fault monitoring version                                                                | Without                     |
| product function                                                                               |                             |
| • communication function                                                                       | Yes                         |
| • other measurement function                                                                   | Yes                         |
| Net Weight                                                                                     | 2,45 kg                     |
| Current                                                                                        |                             |
| Max. rated operational current of the frame size                                               | 100 A                       |
| Courant permanent assigné $I_u$                                                                | 100 A                       |
| operational current                                                                            |                             |
| • at 40 °C                                                                                     | 100 A                       |
| • at 45 °C                                                                                     | 100 A                       |
| • at 50 °C                                                                                     | 100 A                       |
| • at 55 °C                                                                                     | 100 A                       |
| • at 60 °C                                                                                     | 100 A                       |
| • at 65 °C                                                                                     | 100 A                       |
| • at 70 °C                                                                                     | 100 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>2 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>2 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>3 kA |

#### Adjustable parameters

|                                                            |                             |
|------------------------------------------------------------|-----------------------------|
| Adjustable response value current / li min.                | 150 A                       |
| Adjustable response value current / li max.                | 1 200 A                     |
| design of the N-conductor protection                       | adjustable OFF; 20% to 160% |
| 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                    |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)      | tin                          |

#### 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> | No<br>Yes<br>No<br>No |
| number of CO contacts / for auxiliary contacts                                                                                                                                     | 2                     |

#### 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 trip unit</li> </ul> | <a href="#">3VA2010-5KP32-0AA0</a><br><a href="#">3VA9988-0AA12</a><br><a href="#">3VA9688-0BL30</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](#)



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

[UK Declaration of Conformity](#)

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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



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



[CCS / China Classification Society](#)

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[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=3VA2010-5KP32-0HC0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2010-5KP32-0HC0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2010-5KP32-0HC0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-5KP32-0HC0)

CAX-Online-Generator

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

Tender specifications

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





