

Siemens  
EcoTech



circuit breaker 3VA2 IEC Frame 100 breaking capacity class C Icu=110 kA @ 415 V 3-pole, line protection ETU350, LSI, In=100 A overload protection Ir=40 A...100 A short-circuit protection I<sub>sd</sub>=1.5...10 x I<sub>r</sub>, I<sub>i</sub>=12 x I<sub>n</sub> nut keeper kit



| Model   |                             |
|---|-----------------------------|
| product brand name  | SENTRON                     |
| product designation   | Molded case circuit breaker |
| design of the product   | Line protection             |
| design of the overcurrent release   | ETU350                      |
| protection function of the overcurrent release  | LSI                         |
| number of poles   | 3                           |
| General technical data  |                             |
| insulation voltage / rated value  | 800 V                       |
| operating voltage / at AC / rated value   | 690 V                       |
| power loss [W] / maximum  | 7.7 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 2.57 W                      |
| mechanical service life (operating cycles) / typical  | 25 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 15 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 690 V  | 10 500                      |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | No                          |
| ground-fault monitoring version   | Without                     |
| product function  |                             |
| • communication function  | No                          |
| • other measurement function  | No                          |
| Net Weight  | 2.103 kg                    |
| Current   |                             |
| 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   | C                           |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                    |                             |
| • at 240 V  | 150 kA                      |
| • at 415 V  | 110 kA                      |
| • at 440 V  | 110 kA                      |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• at 500 V</li> <li>• at 690 V</li> </ul>   | 85 kA<br>2 kA                                |
| operating short-circuit current breaking capacity (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> | 150 kA<br>110 kA<br>110 kA<br>85 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> | 330 kA<br>242 kA<br>242 kA<br>187 kA<br>3 kA |

#### Adjustable parameters

|   |                    |
|---|--------------------|
| product feature / for L-tripping / can be switched on/off   | No                 |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic |                    |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                    | 40 A<br>100 A      |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic     |                    |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                    | 0.5 s<br>17 s      |
| adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>2t</sub> characteristic    |                    |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                    | 150 A<br>1 000 A   |
| adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic    |                    |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                    | 0.0001 s<br>0.4 s  |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping                                      |                    |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                    | 1 200 A<br>1 200 A |
| product function / grounding protection   | No                 |

#### Mechanical Design

|   |                |
|---|----------------|
| product component   |                |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul> | No<br>No<br>No |
| 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-sections / for flat-bar terminal connection / minimum | 13 x 1 mm                    |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 25 x 8 mm                    |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)        | tin                          |
| 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                |        |
| • during operation / minimum       | -25 °C |
| • during operation / maximum       | 70 °C  |
| • during storage / minimum         | -40 °C |
| • during storage / maximum         | 80 °C  |

| Environmental footprint                                  |                 |
|--|-----------------|
| Global Warming Potential [CO2 eq] / total                | 61.814 kg       |
| Global Warming Potential [CO2 eq] / during manufacturing | 14.6 kg         |
| Global Warming Potential [CO2 eq] / during operation     | 48.9 kg         |
| Global Warming Potential [CO2 eq] / after end of life    | -2.2 kg         |
| Siemens Eco Profile (SEP)                                | Siemens EcoTech |
| reference code / according to IEC 81346-2                | Q               |

| Approvals / Certificates |     |
|--------------------------|-----|
| General Product Approval | EMV |



[Confirmation](#)



[Miscellaneous](#)



| Test Certificates | Marine / Shipping |
|-------------------|-------------------|
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



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



[CCS \(China Classification Society\)](#)

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

| Dangerous goods | Environment |
|-----------------|-------------|
|-----------------|-------------|

[Transport Information](#)



Siemens EcoTech



[Environmental Confirmations](#)

[Environmental Confirmations](#)

| Further information |
|---------------------|
|---------------------|

- Information on the packaging  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- 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=3VA2010-7HN32-0AA0>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2010-7HN32-0AA0>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2010-7HN32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-7HN32-0AA0)
- CAX-Online-Generator  
<http://www.siemens.com/cax>
- Tender specifications  
<http://www.siemens.com/specifications>





