

**Siemens**  
**EcoTech**



circuit breaker 3VA2 IEC Frame 100 breaking capacity class M Icu=55 kA @ 415 V  
4-pole, line protection ETU320, LI, In=40 A overload protection Ir=16 A...40 A  
short-circuit protection Ii=1.5...12 x In neutral conductor protection adjustable (OFF,  
100%) 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   | ETU320                      |
| protection function of the overcurrent release  | LI                          |
| number of poles   | 4                           |
| General technical data  |                             |
| insulation voltage / rated value  | 800 V                       |
| operating voltage / at AC / rated value   | 690 V                       |
| power loss [W] / maximum  | 2.2 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 0.73 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  | 2.765 kg                    |
| Current   |                             |
| operational current   |                             |
| • at 40 °C  | 40 A                        |
| • at 45 °C  | 40 A                        |
| • at 50 °C  | 40 A                        |
| • at 55 °C  | 40 A                        |
| • at 60 °C  | 40 A                        |
| • at 65 °C  | 40 A                        |
| • at 70 °C  | 40 A                        |
| Switching capacity according to IEC 60947   |                             |
| switching capacity class of the circuit breaker   | M                           |
| maximum short-circuit current breaking capacity (Icu)   |                             |
| • at 240 V  | 85 kA                       |
| • at 415 V  | 55 kA                       |
| • at 440 V  | 55 kA                       |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• at 500 V</li> <li>• at 690 V</li> </ul>   | 36 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> | 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 |
| <b>Adjustable parameters</b>   |   |
| product feature / for L-tripping / can be switched on/off  | No  |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                              | 16 A<br>40 A                                  |
| adjustable response value delay time (tr) / for L-tripping / with I2t 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 (Ii) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 60 A<br>480 A                                 |
| adjustable setting current (InN) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>   | 40 A<br>40 A                                  |
| design of the N-conductor protection   | adjustable OFF; 100%                          |
| product function / grounding protection  | No  |
| <b>Mechanical Design</b>   |   |
| 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]   | 5.51 in                                       |
| width  | 140 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-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   |
| <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> </ul>   | -25 °C  |

- during operation / maximum 70 °C
- during storage / minimum -40 °C
- during storage / maximum 80 °C

#### Environmental footprint

|   |                 |
|---|-----------------|
| Siemens Eco Profile (SEP)                 | Siemens EcoTech |
| reference code / according to IEC 81346-2 | Q               |

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

##### General Product Approval

##### EMV

##### Test Certificates

##### Marine / Shipping



[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



##### Marine / Shipping

##### other



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

[Confirmation](#)

##### other

##### Dangerous Good

##### Environment

[Miscellaneous](#)

[Miscellaneous](#)

[Transport Information](#)



Siemens EcoTech



[Environmental Confirmations](#)

#### Environment

[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=3VA2040-5HL42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-5HL42-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2040-5HL42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-5HL42-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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





