



circuit breaker 3VA6 UL frame 1200 breaking capacity class H 65kA @ 480 V 3-pole, line protection ETU320, LI, In=1200A overload protection Ir=500A - 1200A short circuit protection Ii=1,5-10 x In w/o connection

| Model                                                                                                                      |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                                                         | SENTRON                     |
| product designation                                                                                                        | Molded-case circuit breaker |
| product designation / according to UL file                                                                                 | HNAE                        |
| design of the product                                                                                                      | System protection           |
| design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                         |
| design of the overcurrent release                                                                                          | ETU320                      |
| protection function of the overcurrent release                                                                             | LI                          |
| number of poles                                                                                                            | 3                           |
| General technical data                                                                                                     |                             |
| insulation voltage / rated value                                                                                           | 800 V                       |
| operating voltage / at AC / rated value                                                                                    | 600 V                       |
| power loss [W] / maximum                                                                                                   | 243 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 243 W                       |
| mechanical service life (operating cycles) / typical                                                                       | 3 000                       |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                                           | 1 500                       |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                                               | 500                         |
| electrical endurance (operating cycles) / at 480 V                                                                         | 1 500                       |
| electrical endurance (operating cycles) / at 600 V                                                                         | 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                                                                                                                 | 25.86 kg                    |
| Current                                                                                                                    |                             |
| marking / according to UL 489 / 100%-rated breaker                                                                         | No                          |
| operational current                                                                                                        |                             |
| • at 40 °C                                                                                                                 | 1 200 A                     |
| • at 45 °C                                                                                                                 | 1 200 A                     |
| • at 50 °C                                                                                                                 | 1 200 A                     |
| • at 55 °C                                                                                                                 | 1 200 A                     |
| • at 60 °C                                                                                                                 | 1 200 A                     |
| • at 65 °C                                                                                                                 | 1 200 A                     |

|                                                                                                                                                                                              |                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <ul style="list-style-type: none"> <li>• at 70 °C</li> </ul>                                                                                                                                 | 1 200 A                            |
| <b>Switching capacity according to IEC 60947</b>                                                                                                                                             |                                    |
| switching capacity class of the circuit breaker                                                                                                                                              | H                                  |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                                                                                                           |                                    |
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>                                                                                         | 110 kA<br>70 kA<br>30 kA           |
| operating short-circuit current breaking capacity (I <sub>cs</sub> )                                                                                                                         |                                    |
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>                                                                                         | 55 kA<br>35 kA<br>15 kA            |
| short-circuit current making capacity (I <sub>cm</sub> )                                                                                                                                     |                                    |
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>                                                                                         | 242 kA<br>154 kA<br>63 kA          |
| <b>Switching capacity according to UL 489</b>                                                                                                                                                |                                    |
| current breaking capacity                                                                                                                                                                    |                                    |
| <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>                                                                                         | 100 kA<br>65 kA<br>35 kA           |
| <b>Adjustable parameters</b>                                                                                                                                                                 |                                    |
| 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>                                                                                                               | 500 A<br>1 200 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>                                                                                                               | 2.5 s<br>30 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>                                                                                                               | 1 800 A<br>12 000 A                |
| product function / grounding protection                                                                                                                                                      | No                                 |
| <b>Mechanical Design</b>                                                                                                                                                                     |                                    |
| product component                                                                                                                                                                            |                                    |
| <ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• trip indicator</li> </ul>                                                                                           | No<br>No                           |
| height [in]                                                                                                                                                                                  | 8.14 in                            |
| height                                                                                                                                                                                       | 206.9 mm                           |
| width [in]                                                                                                                                                                                   | 8.99 in                            |
| width                                                                                                                                                                                        | 228.4 mm                           |
| depth [in]                                                                                                                                                                                   | 16 in                              |
| depth                                                                                                                                                                                        | 406.3 mm                           |
| <b>Connections</b>                                                                                                                                                                           |                                    |
| type of electrical connection / for main current circuit                                                                                                                                     | without terminals                  |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)                                                                                                           | silver                             |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)                                                                                                        | silver                             |
| <b>Auxiliary circuit</b>                                                                                                                                                                     |                                    |
| number of CO contacts / for auxiliary contacts                                                                                                                                               | 0                                  |
| <b>Environmental conditions</b>                                                                                                                                                              |                                    |
| 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 |
| reference code / according to IEC 81346-2                                                                                                                                                    | F                                  |
| <b>Approvals / Certificates</b>                                                                                                                                                              |                                    |

## General Product Approval



[Miscellaneous](#)



[Miscellaneous](#)



## General Product Approval

### EMV

### Test Certificates

### Maritime application

[Confirmation](#)



[Type Test Certificates/Test Report](#)



### other

### Dangerous goods

### Environment

[Miscellaneous](#)

[Confirmation](#)

[Transport Information](#)

[Environmental Conformations](#)

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## Further information

### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6712-6HL31-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6712-6HL31-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6712-6HL31-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6712-6HL31-0AA0)

### CAX-Online-Generator

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

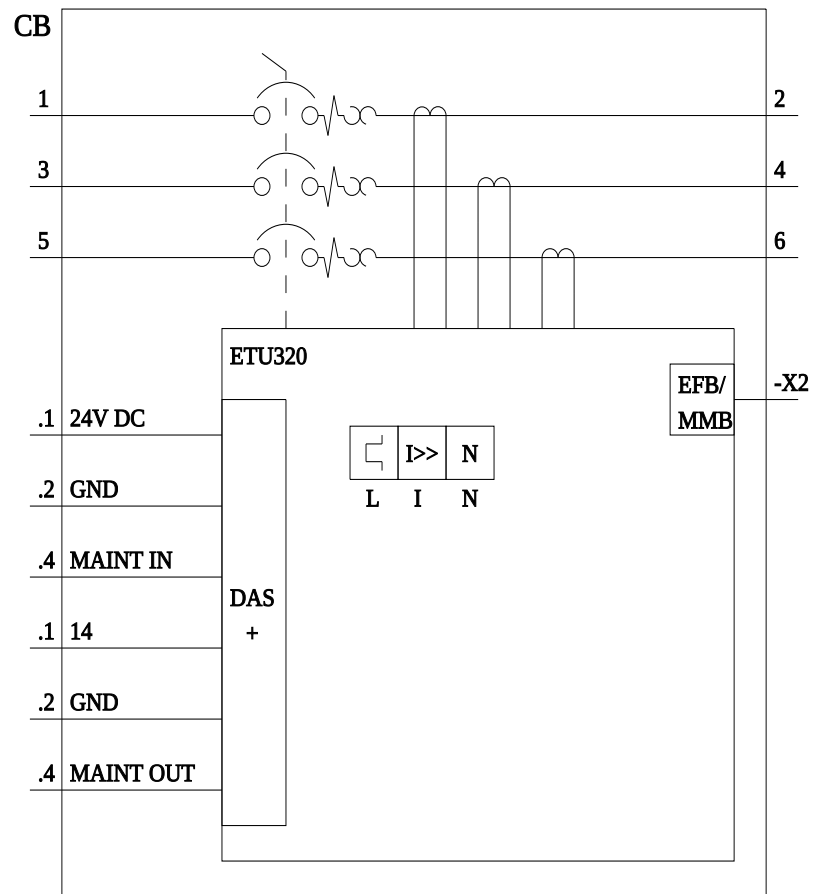
### Tender specifications

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

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)





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