



circuit breaker 3VA6 UL Frame 800 breaking capacity class H 65 kA @ 480 V 3-pole, line protection ETU330, LIG, In=800 A overload protection Ir=315 A ...800 A short-circuit protection Ii=1.5...10 x In ground-fault protection IG=0.2... 1xIn, tg=0.1/0.3s nut keeper kit

| Model  |   |
|--|---|
| product brand name   | SENTRON                                 |
| product designation  | Molded-case circuit breaker             |
| product designation / according to UL file   | HMAE                                    |
| 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  | ETU330                                  |
| protection function of the overcurrent release   | LIG                                     |
| 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   | 231 W                                   |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 77 W                                    |
| mechanical service life (operating cycles) / typical   | 10 000                                  |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V   | 5 800                                   |
| electrical endurance (operating cycles) / at AC-1 / at 690 V   | 4 000                                   |
| electrical endurance (operating cycles) / at 480 V   | 5 800                                   |
| electrical endurance (operating cycles) / at 600 V   | 4 000                                   |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof                      | No                                      |
| ground-fault monitoring version  | Summation current formation L-conductor |
| product function   |   |
| • communication function   | No                                      |
| • other measurement function   | No                                      |
| Net Weight   | 14.16 kg                                |
| Current  |   |
| marking / according to UL 489 / 100%-rated breaker   | No                                      |
| operational current  |   |
| • at 40 °C   | 800 A                                   |
| • at 45 °C   | 800 A                                   |
| • at 50 °C   | 800 A                                   |
| • at 55 °C   | 776 A                                   |
| • at 60 °C   | 752 A                                   |
| • at 65 °C   | 708 A                                   |
| • at 70 °C   | 664 A                                   |
| Switching capacity according to IEC 60947  |   |
| switching capacity class of the circuit breaker  | H                                       |
| maximum short-circuit current breaking capacity (Icu)  |   |

|  |                             |
|--|-----------------------------|
| <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>85 kA<br>35 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 690 V</li> </ul>                                     | 110 kA<br>85 kA<br>19 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 690 V</li> </ul>   | 242 kA<br>187 kA<br>74 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>   | 150 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> | 315 A<br>800 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>i</sub> ) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                      | 1 200 A<br>8 000 A          |
| adjustable current response value current / for G-tripping / with standard characteristic <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>          | 160 A<br>800 A              |
| adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>0t</sub> characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>     | 0.1 s<br>0.3 s              |
| adjustable setting current (I <sub>nN</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>  | 0 A<br>0 A                  |
| product function / grounding protection  | Yes                         |
| <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]  | 12.91 in                    |
| height   | 328 mm                      |
| width [in]   | 8.27 in                     |
| width  | 210 mm                      |
| depth [in]   | 4.72 in                     |
| depth  | 120 mm                      |
| <b>Connections</b>   |                             |
| arrangement of electrical connectors / for main current circuit  | Front connection            |
| type of electrical connection / for main current circuit   | nut keeper kit on both ends |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum  | 20 x 4 mm                   |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum  | 50 x 28 mm                  |
| <b>Auxiliary circuit</b>   |                             |
| number of CO contacts / for auxiliary contacts   | 0                           |
| <b>Accessories</b>   |                             |
| product extension / optional / motor drive   | No                          |

## 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  |
| reference code / according to IEC 81346-2 | Q      |

## Approvals / Certificates

### General Product Approval



[Confirmation](#)



### General Product Approval

### EMV

### Test Certificates



[Miscellaneous](#)



[Type Test Certificates/Test Report](#)

### Marine / Shipping

### other



[Confirmation](#)

### other

### Dangerous goods

### Environment

[Miscellaneous](#)

[Miscellaneous](#)

[Transport Information](#)

[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=3VA6580-6HM32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6580-6HM32-0AA0>

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

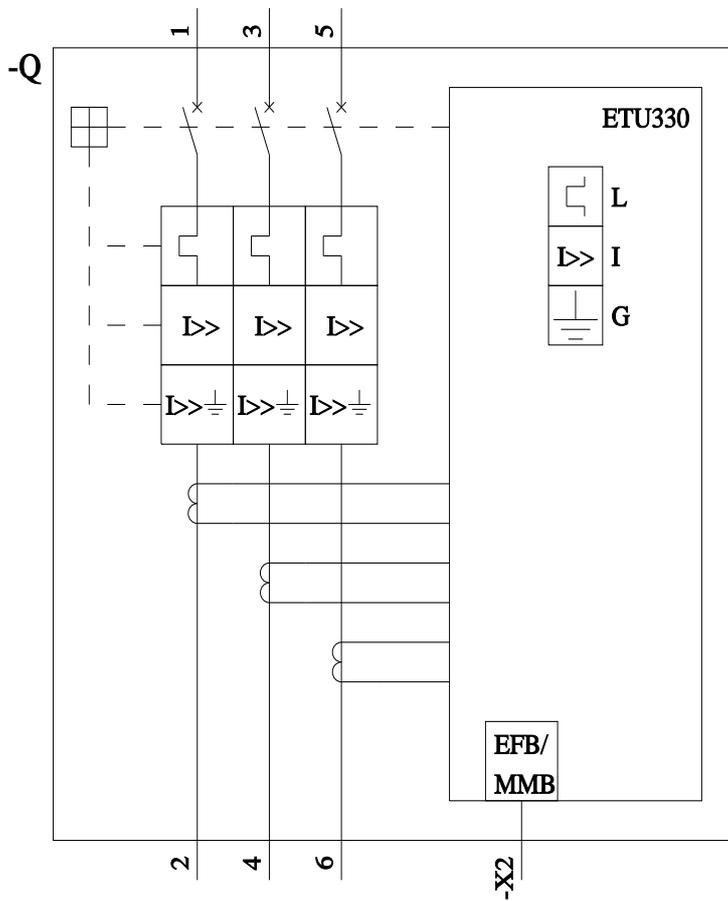
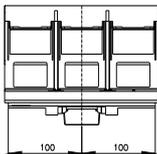
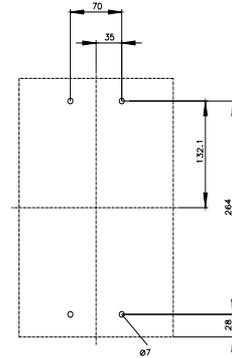
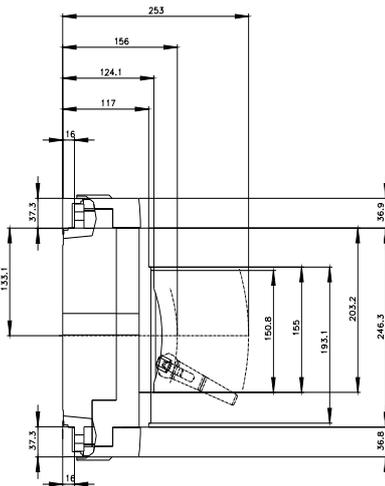
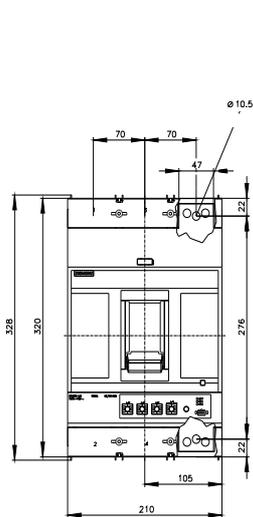
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6580-6HM32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6580-6HM32-0AA0)

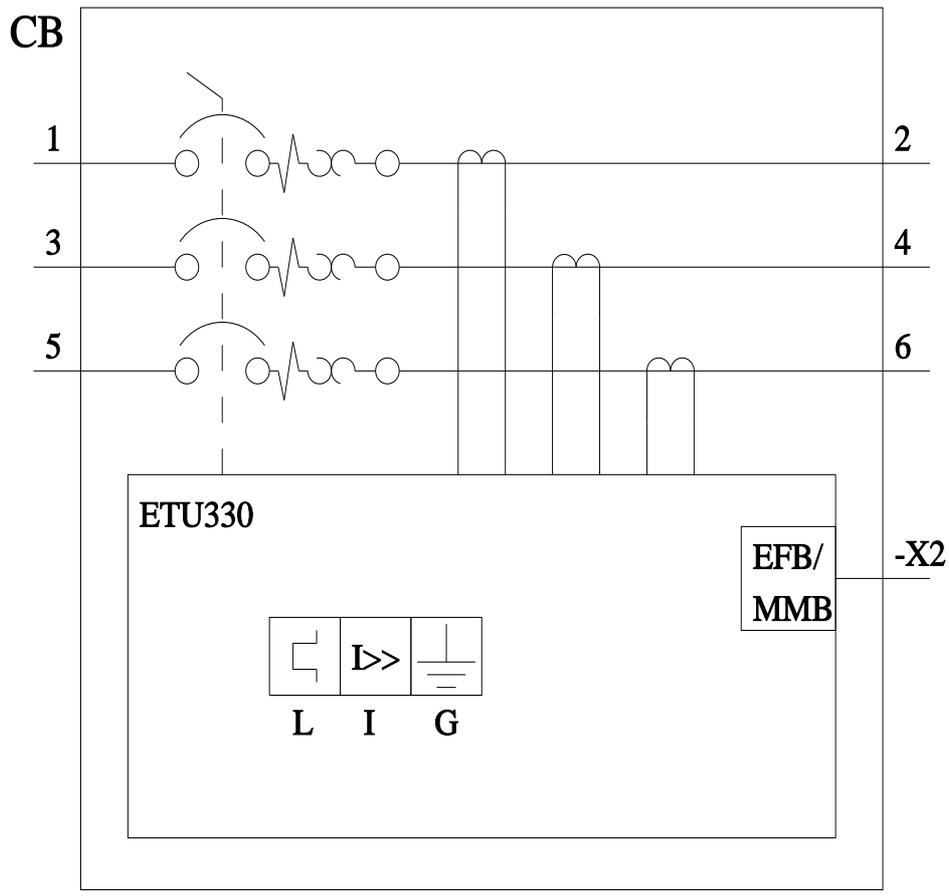
### CAX-Online-Generator

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

### Tender specifications

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





last modified:

3/11/2024 

