



circuit breaker 3VA2 IEC Frame 1250 breaking capacity class H Icu=85 kA @ 415 V 4-pole line protection ETU320 LI In=1250 A overload protection Ir=500 A ...1250 A short-circuit protection Ii=15...10 x In neutral conductor protection adjustable (OFF/50%/100%) circuit breaker with straight bus connectors extended

| 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                                                                              | 516 W                       |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 172 W                       |
| mechanical service life (operating cycles) / typical                                                  | 10 000                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 4 600                       |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                          | 3 200                       |
| 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                                                                                            | 28.6 kg                     |
| Current                                                                                               |                             |
| operational current                                                                                   |                             |
| • at 40 °C                                                                                            | 1 250 A                     |
| • at 45 °C                                                                                            | 1 250 A                     |
| • at 50 °C                                                                                            | 1 250 A                     |
| • at 55 °C                                                                                            | 1 187 A                     |
| • at 60 °C                                                                                            | 1 125 A                     |
| • at 65 °C                                                                                            | 1 000 A                     |
| • at 70 °C                                                                                            | 875 A                       |
| Switching capacity according to IEC 60947                                                             |                             |
| switching capacity class of the circuit breaker                                                       | H                           |
| maximum short-circuit current breaking capacity (Icu)                                                 |                             |
| • at 240 V                                                                                            | 110 kA                      |
| • at 415 V                                                                                            | 85 kA                       |
| • at 440 V                                                                                            | 85 kA                       |
| • at 500 V                                                                                            | 55 kA                       |
| • at 690 V                                                                                            | 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 440 V</li><li>• at 500 V</li><li>• at 690 V</li></ul>                                                                      | 110 kA<br>85 kA<br>70 kA<br>55 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 440 V</li><li>• at 500 V</li><li>• at 690 V</li></ul>                          | 242 kA<br>187 kA<br>187 kA<br>121 kA<br>73.5 kA |                   |                      |
| Adjustable parameters                                                                                                                                                                                       |                                                 |                   |                      |
| 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>                                        | 500 A<br>1 250 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>                                                                 | 1 875 A<br>12 500 A                             |                   |                      |
| adjustable setting current (InN) / for N-tripping <ul style="list-style-type: none"><li>• minimum</li><li>• maximum</li></ul>                                                                               | 250 A<br>1 250 A                                |                   |                      |
| design of the N-conductor protection                                                                                                                                                                        | adjustable OFF; 50%; 100%                       |                   |                      |
| 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]                                                                                                                                                                                                 | 12.6 in                                         |                   |                      |
| height                                                                                                                                                                                                      | 320 mm                                          |                   |                      |
| width [in]                                                                                                                                                                                                  | 11.02 in                                        |                   |                      |
| width                                                                                                                                                                                                       | 280 mm                                          |                   |                      |
| depth [in]                                                                                                                                                                                                  | 4.72 in                                         |                   |                      |
| depth                                                                                                                                                                                                       | 120 mm                                          |                   |                      |
| Connections                                                                                                                                                                                                 |                                                 |                   |                      |
| arrangement of electrical connectors / for main current circuit                                                                                                                                             | Front terminal                                  |                   |                      |
| type of electrical connection / for main current circuit                                                                                                                                                    | busbar connection pieces extended on two sides  |                   |                      |
| 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                                          |                   |                      |
| Auxiliary circuit                                                                                                                                                                                           |                                                 |                   |                      |
| number of CO contacts / for auxiliary contacts                                                                                                                                                              | 0                                               |                   |                      |
| Accessories                                                                                                                                                                                                 |                                                 |                   |                      |
| product extension / optional / motor drive                                                                                                                                                                  | No                                              |                   |                      |
| 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              |                   |                      |
| reference code / according to IEC 81346-2                                                                                                                                                                   | Q                                               |                   |                      |
| Approvals / Certificates                                                                                                                                                                                    |                                                 |                   |                      |
| General Product Approval                                                                                                                                                                                    | EMV                                             | Test Certificates | Maritime application |



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

### Environmental Con- firmations

### 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=3VA2612-6HL47-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2612-6HL47-0AA0>

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

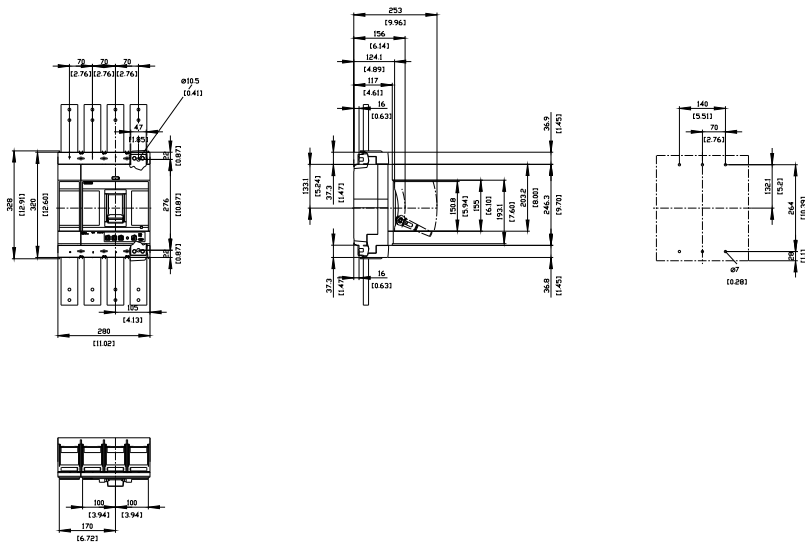
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2612-6HL47-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2612-6HL47-0AA0)

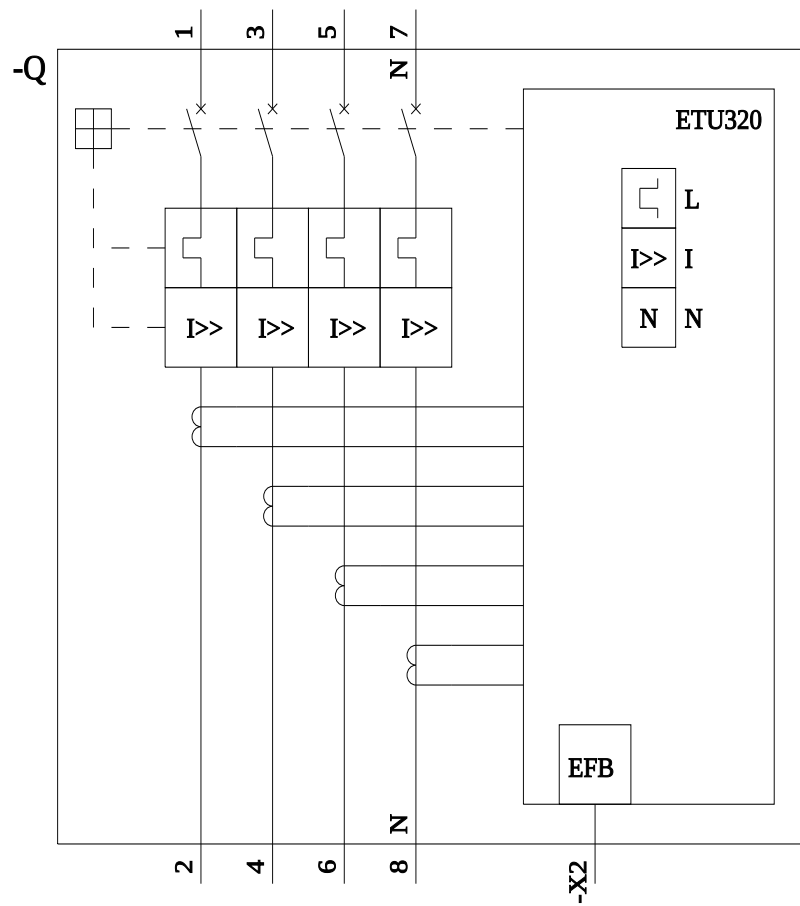
## CAX-Online-Generator

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

## Tender specifications

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





last modified:

4/3/2025 

