



circuit breaker 3VA2 IEC Frame 1250 breaking capacity class M Icu=55 kA @ 415 V 4-pole line protection ETU550 LSI In=1250 A overload protection Ir=500 A ...1250 A short-circuit protection Isd=06..10x In li=15..10x In neutral conductor protection adjustable (OFF up to 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                                                                     | ETU550                                      |
| protection function of the overcurrent release                                                        | LSI                                         |
| 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                                                                       | Summation current formation L + N conductor |
| product function                                                                                      |                                             |
| • communication function                                                                              | Yes                                         |
| • 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                                                       | M                                           |
| maximum short-circuit current breaking capacity (Icu)                                                 |                                             |
| • at 240 V                                                                                            | 85 kA                                       |
| • at 415 V                                                                                            | 55 kA                                       |
| • at 440 V                                                                                            | 55 kA                                       |
| • at 500 V                                                                                            | 36 kA                                       |

|                                                                                                                                              |                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 690 V</li> </ul>                                                                                 | 25 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>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> | 187 kA<br>121 kA<br>121 kA<br>76 kA<br>52.5 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>                                                               | 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>25 s                                  |
| adjustable response value setting current (Isd) / of S-trip / with I0t characteristic                                                        |                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                               | 750 A<br>12 500 A                              |
| adjustable response value setting current (Isd) / of S-trip / with I2t characteristic                                                        |                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                               | 750 A<br>12 500 A                              |
| adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic                                                        |                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                               | 0.05 s<br>0.5 s                                |
| adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic                                                        |                                                |
| <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                               | 0.05 s<br>0.5 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; 20% to 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]                                                                                                                                  | 12.6 in                                        |
| height                                                                                                                                       | 320 mm                                         |
| width [in]                                                                                                                                   | 11.02 in                                       |
| width                                                                                                                                        | 280 mm                                         |
| depth [in]                                                                                                                                   | 4.72 in                                        |
| depth                                                                                                                                        | 120 mm                                         |
| <b>Connections</b>                                                                                                                           |                                                |
| 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                       |        |
| • 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 | EMV | Test Certificates |
|--------------------------|-----|-------------------|



[Miscellaneous](#)



[Miscellaneous](#)

|                   |                      |       |                 |
|-------------------|----------------------|-------|-----------------|
| Test Certificates | Maritime application | other | Dangerous goods |
|-------------------|----------------------|-------|-----------------|

[Type Test Certificates/Test Report](#)



[Confirmation](#)



[Miscellaneous](#)

[Transport Information](#)

#### Environment

[Environmental Conformations](#)

[Environmental Conformations](#)

#### 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=3VA2612-5JP47-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2612-5JP47-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2612-5JP47-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2612-5JP47-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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



