

Siemens  
EcoTech



circuit breaker 3VA2 IEC Frame 250 breaking capacity class M Icu=55 kA @ 415 V  
4-pole, line protection ETU330, LIG, In=160 A overload protection Ir=63 A...160 A  
short-circuit protection Ii=1.5...12 x In neutral conductor protection adjustable (OFF,  
50%, 100%) ground-fault protection Ig=0.2...1 x In= tg=0.1/0.3s 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                                                                     | ETU330                                      |
| protection function of the overcurrent release                                                        | LIG                                         |
| 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                                                                              | 19.7 W                                      |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 6.57 W                                      |
| mechanical service life (operating cycles) / typical                                                  | 25 000                                      |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 12 000                                      |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                          | 8 400                                       |
| 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                                                                              | No                                          |
| • other measurement function                                                                          | No                                          |
| Net Weight                                                                                            | 2.894 kg                                    |
| Current                                                                                               |                                             |
| operational current                                                                                   |                                             |
| • at 40 °C                                                                                            | 160 A                                       |
| • at 45 °C                                                                                            | 160 A                                       |
| • at 50 °C                                                                                            | 160 A                                       |
| • at 55 °C                                                                                            | 160 A                                       |
| • at 60 °C                                                                                            | 160 A                                       |
| • at 65 °C                                                                                            | 160 A                                       |
| • at 70 °C                                                                                            | 160 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                                       |

|                                                                                                                                                                                                      |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>                                                                             | 55 kA<br>55 kA<br>36 kA<br>3 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>3 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>4.5 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>                              | 63 A<br>160 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>                                                       | 240 A<br>1 920 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>              | 32 A<br>160 A                                   |
| adjustable response value delay time (tg) / for G-tripping / with I0t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                  | 0.1 s<br>0.3 s                                  |
| adjustable setting current (InN) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                                     | 31 A<br>160 A                                   |
| design of the N-conductor protection                                                                                                                                                                 | adjustable OFF; 50%; 100%                       |
| 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]                                                                                                                                                                                          | 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)    | silver          |
| 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                                                                   |                 |
| • during operation / minimum                                                          | -25 °C          |
| • during operation / maximum                                                          | 70 °C           |
| • during storage / minimum                                                            | -40 °C          |
| • during storage / maximum                                                            | 80 °C           |
| <b>Environmental footprint</b>                                                        |                 |
| global warming potential [CO2 eq] / total                                             | 61.814 kg       |
| global warming potential [CO2 eq] / during manufacturing                              | 14.6 kg         |
| global warming potential [CO2 eq] / during operation                                  | 48.9 kg         |
| global warming potential [CO2 eq] / after end of life                                 | -2.2 kg         |
| Siemens Eco Profile (SEP)                                                             | Siemens EcoTech |
| reference code / according to IEC 81346-2                                             | Q               |

#### Approvals / Certificates

##### General Product Approval



[Miscellaneous](#)



|                          |     |                   |                      |
|--------------------------|-----|-------------------|----------------------|
| General Product Approval | EMV | Test Certificates | Maritime application |
|--------------------------|-----|-------------------|----------------------|



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



|                      |       |
|----------------------|-------|
| Maritime application | other |
|----------------------|-------|



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



[Confirmation](#)

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

[Miscellaneous](#)

[Transport Information](#)



Siemens EcoTech



[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### 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=3VA2216-5HM42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2216-5HM42-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2216-5HM42-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2216-5HM42-0AA0)

## CAX-Online-Generator

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

## Tender specifications

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





