

circuit breaker 3VA2 IEC frame 100 breaking capacity class M  
Icu=55kA @ 415V 4-pole, line protection ETU330, LIG, In=25A  
overload protection Ir=10A...25A short-circuit protection li=1.5...12 x  
In N conductor protection adjustable (OFF, 100%) ground-fault  
protection Ig=0.6...1 x In= tg=0.1/0.3s clamp connection

| Model                                          |                             |
|------------------------------------------------|-----------------------------|
| product brand name                             | SENTRON                     |
| product designation                            | Molded case circuit breaker |
| Product version                                | Line protection             |
| design of the overcurrent release              | ETU330                      |
| protection function of the overcurrent release | LIG                         |
| number of poles                                | 4                           |

| General technical data                                                                         |                                             |
|------------------------------------------------------------------------------------------------|---------------------------------------------|
| Tension assignée d'isolement Ui                                                                | 800 V                                       |
| Max. rated operational voltage Ue with AC 50/60Hz                                              | 690 V                                       |
| power loss [W] / maximum                                                                       | 0.84 W                                      |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 0.28 W                                      |
| mechanical service life (switching cycles) / typical                                           | 20 000                                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 14 000                                      |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 8 000                                       |
| Neutral conductors / upgradeable/retrofitable                                                  | No                                          |
| ground fault monitoring version                                                                | Summation current formation L + N conductor |
| product function                                                                               |                                             |
| • communication function                                                                       | No                                          |
| • other measurement function                                                                   | No                                          |
| net weight                                                                                     | 3.13 kg                                     |

| Current                                          |       |
|--------------------------------------------------|-------|
| Max. rated operational current of the frame size | 100 A |
| Courant permanent assigné Iu                     | 25 A  |
| operating current                                |       |
| • at 40 °C                                       | 25 A  |
| • at 45 °C                                       | 25 A  |
| • at 50 °C                                       | 25 A  |
| • at 55 °C                                       | 25 A  |
| • at 60 °C                                       | 25 A  |

- at 65 °C
- at 70 °C

25 A  
25 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  |
| • at 690 V                                                | 2 kA   |
| operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 440 V                                                | 55 kA  |
| • at 500 V                                                | 36 kA  |
| • at 690 V                                                | 2 kA   |
| short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 187 kA |
| • at 415 V                                                | 121 kA |
| • at 440 V                                                | 121 kA |
| • at 500 V                                                | 76 kA  |
| • at 690 V                                                | 3 kA   |

#### Adjustable parameters

|                                                                                                 |                      |
|-------------------------------------------------------------------------------------------------|----------------------|
| Adjustable response value current / I <sub>g</sub> min.                                         | 10 A                 |
| Adjustable response value current / I <sub>g</sub> min.                                         | 25 A                 |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.5                  |
| Adjustable response value current / I <sub>g</sub> min.                                         | 17                   |
| Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF                              | No                   |
| Adjustable response value current / I <sub>i</sub> min.                                         | 38 A                 |
| Adjustable response value current / I <sub>i</sub> max.                                         | 300 A                |
| design of the N-conductor protection                                                            | adjustable OFF; 100% |
| Ground fault protection can be switched ON/OFF                                                  | No                   |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF                         | Yes                  |
| Adjustable response value current / I <sub>g</sub> min.                                         | 15 A                 |
| Adjustable response value current / I <sub>g</sub> max.                                         | 25 A                 |
| Adjustable response value current / t <sub>g</sub> min.                                         | 0.1 s                |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.3 s                |
| Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / min. | 0 A                  |

|                                                                                     |                              |
|-------------------------------------------------------------------------------------|------------------------------|
| Adjustable response value current / for G-tripping / with I2t characteristic / max. | 0 A                          |
| <b>Mechanical Design</b>                                                            |                              |
| height [in]                                                                         | 7.1 in                       |
| Height                                                                              | 181 mm                       |
| width [in]                                                                          | 5.5 in                       |
| Width                                                                               | 140 mm                       |
| depth [in]                                                                          | 3.4 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                            | double-sided box terminal    |
| Type of connectable conductor cross-section, round conductor terminal, stranded     | 1 x (6-120 mm <sup>2</sup> ) |
| <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>Certificates</b>                                                                 |                              |
| reference code / acc. to DIN EN 81346-2                                             | Q                            |

|                          |     |
|--------------------------|-----|
| General Product Approval | EMC |
|--------------------------|-----|



CCC



VDE

CB

CB

[Miscellaneous](#)



RCM

|                           |                   |                   |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Shipping Approval |
|---------------------------|-------------------|-------------------|



EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



LRS

|                   |       |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|

[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)

## Further information

### 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=3VA2025-5HM46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2025-5HM46-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2025-5HM46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2025-5HM46-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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



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