



circuit breaker 3VA2 IEC Frame 160 breaking capacity class C Icu=110 kA @ 415 V 3-pole, line protection ETU860, LSIG, In=25 A overload protection Ir=10 A...25 A short-circuit protection I<sub>sd</sub>=0.6..10x I<sub>n</sub>, I<sub>i</sub>=1.5..12x I<sub>n</sub> neutral conductor protection optionally with external current transformer, up to 160% ground-fault protection, can be switched off I<sub>g</sub>=0.2...1 x I<sub>n</sub>, t<sub>g</sub>=0.05-0.8s 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                                                                     | ETU860                                  |
| protection function of the overcurrent release                                                        | LSIG                                    |
| 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                                                                              | 0.6 W                                   |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 0.2 W                                   |
| mechanical service life (operating cycles) / typical                                                  | 25 000                                  |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                      | 14 000                                  |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                          | 9 800                                   |
| product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof | Yes                                     |
| ground-fault monitoring version                                                                       | Summation current formation L-conductor |
| product function                                                                                      |                                         |
| • communication function                                                                              | Yes                                     |
| • other measurement function                                                                          | Yes                                     |
| Net Weight                                                                                            | 2.5 kg                                  |
| Current                                                                                               |                                         |
| operational 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                                                                                            | 25 A                                    |
| • at 70 °C                                                                                            | 25 A                                    |
| Switching capacity according to IEC 60947                                                             |                                         |
| switching capacity class of the circuit breaker                                                       | C                                       |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                    |                                         |
| • at 240 V                                                                                            | 150 kA                                  |
| • at 415 V                                                                                            | 110 kA                                  |
| • at 440 V                                                                                            | 110 kA                                  |
| • at 500 V                                                                                            | 85 kA                                   |
| • at 690 V                                                                                            | 3 kA                                    |
| operating short-circuit current breaking capacity (I <sub>cs</sub> )                                  |                                         |
| • at 240 V                                                                                            | 150 kA                                  |
| • at 415 V                                                                                            | 110 kA                                  |
| • at 440 V                                                                                            | 110 kA                                  |
| • at 500 V                                                                                            | 85 kA                                   |
| • at 690 V                                                                                            | 2.5 kA                                  |
| short-circuit current making capacity (I <sub>cm</sub> )                                              |                                         |
| • at 240 V                                                                                            | 330 kA                                  |

|            |        |
|------------|--------|
| • at 415 V | 242 kA |
| • at 440 V | 242 kA |
| • at 500 V | 187 kA |
| • at 690 V | 3.7 kA |

#### Adjustable parameters

|                                                                                                |                             |
|------------------------------------------------------------------------------------------------|-----------------------------|
| product feature / for L-tripping / can be switched on/off                                      | No                          |
| adjustable response value setting current ( $I_r$ ) / of the L-trip / with I2t characteristic  |                             |
| • minimum                                                                                      | 10 A                        |
| • maximum                                                                                      | 25 A                        |
| adjustable response value delay time ( $t_r$ ) / for L-tripping / with I2t characteristic      |                             |
| • minimum                                                                                      | 0.5 s                       |
| • maximum                                                                                      | 25 s                        |
| adjustable response value setting current ( $I_{sd}$ ) / of S-trip / with I0t characteristic   |                             |
| • minimum                                                                                      | 15 A                        |
| • maximum                                                                                      | 250 A                       |
| adjustable response value setting current ( $I_{sd}$ ) / of S-trip / with I2t characteristic   |                             |
| • minimum                                                                                      | 15 A                        |
| • maximum                                                                                      | 250 A                       |
| adjustable response value delay time ( $t_{sd}$ ) / for S-tripping / with I0t characteristic   |                             |
| • minimum                                                                                      | 0.05 s                      |
| • maximum                                                                                      | 0.5 s                       |
| adjustable response value delay time ( $t_{sd}$ ) / for S-tripping / with I2t characteristic   |                             |
| • minimum                                                                                      | 0.05 s                      |
| • maximum                                                                                      | 0.5 s                       |
| adjustable response value setting current ( $I_l$ ) / for I-tripping                           |                             |
| • minimum                                                                                      | 37 A                        |
| • maximum                                                                                      | 300 A                       |
| adjustable current response value current / for G-tripping / with standard characteristic      |                             |
| • initial value                                                                                | 15 A                        |
| • full-scale value                                                                             | 25 A                        |
| adjustable response value delay time ( $t_g$ ) / for G-tripping / with I0t characteristic      |                             |
| • minimum                                                                                      | 0.05 s                      |
| • maximum                                                                                      | 0.8 s                       |
| adjustable response value setting current ( $I_g$ ) / for G-tripping / with I2t characteristic |                             |
| • minimum                                                                                      | 15 A                        |
| • maximum                                                                                      | 25 A                        |
| adjustable response value delay time ( $t_g$ ) / for G-tripping / with I2t characteristic      |                             |
| • minimum                                                                                      | 0.05 s                      |
| • maximum                                                                                      | 0.8 s                       |
| adjustable setting current ( $I_{nN}$ ) / for N-tripping                                       |                             |
| • minimum                                                                                      | 10 A                        |
| • maximum                                                                                      | 40 A                        |
| design of the N-conductor protection                                                           | adjustable OFF; 40% to 160% |
| product function / grounding protection                                                        | Yes                         |

#### Mechanical Design

|                        |         |
|------------------------|---------|
| product component      |         |
| • undervoltage release | No      |
| • voltage trigger      | No      |
| • trip indicator       | No      |
| height [in]            | 7.13 in |
| height                 | 181 mm  |
| width [in]             | 4.13 in |

|                                                                                           |                              |
|-------------------------------------------------------------------------------------------|------------------------------|
| width                                                                                     | 105 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)        | tin                          |
| 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](#)



[Confirmation](#)

|                                 |            |                          |                             |
|---------------------------------|------------|--------------------------|-----------------------------|
| <b>General Product Approval</b> | <b>EMV</b> | <b>Test Certificates</b> | <b>Maritime application</b> |
|---------------------------------|------------|--------------------------|-----------------------------|



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



|                             |              |
|-----------------------------|--------------|
| <b>Maritime application</b> | <b>other</b> |
|-----------------------------|--------------|



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

[Miscellaneous](#)

|              |                        |                    |
|--------------|------------------------|--------------------|
| <b>other</b> | <b>Dangerous goods</b> | <b>Environment</b> |
|--------------|------------------------|--------------------|



## Environment

[Environmental Con-  
firmations](#)

## 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=3VA2125-7KQ32-0AA0>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3VA2125-7KQ32-0AA0>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2125-7KQ32-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2125-7KQ32-0AA0)**CAX-Online-Generator**<https://www.siemens.com/cax>**Tender specifications**<https://www.siemens.com/specifications>**Characteristic curves**[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

last modified:

5/25/2025