

**Siemens**  
**EcoTech**



circuit breaker 3VA2 IEC Frame 630 breaking capacity class E Icu=200 kA @ 415 V 3-pole, motor protection ETU860M, LSIG, In=400 A overload protection Ir=160 A ... 400 A short-circuit protection Isd=1.2...13xIn, li=3...13xIn nut keeper kit



| Model                                                                                                  |                                         |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------|
| product brand name                                                                                     | SENTRON                                 |
| product designation                                                                                    | Molded case circuit breaker             |
| design of the product                                                                                  | Motor protection                        |
| design of the overcurrent release                                                                      | ETU860M                                 |
| 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                                   |
| operating power / at AC-3 / at 400 V                                                                   | 160 000 W                               |
| operating power / at AC-3 / at 230 V                                                                   | 90 000 W                                |
| power loss [W] / maximum                                                                               | 63.5 W                                  |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole            | 21.17 W                                 |
| mechanical service life (operating cycles) / typical                                                   | 20 000                                  |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V                                       | 5 000                                   |
| electrical endurance (operating cycles) / at AC-1 / at 690 V                                           | 3 500                                   |
| electrical endurance (operating cycles) / at AC-3 / at 380/415 V                                       | 3 000                                   |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No                                      |
| ground-fault monitoring version                                                                        | Summation current formation L-conductor |
| product function                                                                                       |                                         |
| • communication function                                                                               | Yes                                     |
| • phase failure detection                                                                              | Yes                                     |
| • other measurement function                                                                           | Yes                                     |
| Net Weight                                                                                             | 5.05 kg                                 |
| Current                                                                                                |                                         |
| short-time withstand current (Icw) / limited to 1 s                                                    | 5 kA                                    |
| operational current                                                                                    |                                         |
| • at 40 °C                                                                                             | 400 A                                   |
| • at 45 °C                                                                                             | 400 A                                   |
| • at 50 °C                                                                                             | 400 A                                   |
| • at 55 °C                                                                                             | 400 A                                   |
| • at 60 °C                                                                                             | 400 A                                   |
| • at 65 °C                                                                                             | 400 A                                   |

|                                                                                                                    |                              |
|--------------------------------------------------------------------------------------------------------------------|------------------------------|
| • at 70 °C                                                                                                         | 400 A                        |
| <b>Switching capacity according to IEC 60947</b>                                                                   |                              |
| switching capacity class of the circuit breaker                                                                    | E                            |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )                                                 |                              |
| • at 415 V                                                                                                         | 200 kA                       |
| • at 690 V                                                                                                         | 85 kA                        |
| operating short-circuit current breaking capacity (I <sub>cs</sub> )                                               |                              |
| • at 415 V                                                                                                         | 200 kA                       |
| • at 690 V                                                                                                         | 65 kA                        |
| short-circuit current making capacity (I <sub>cm</sub> )                                                           |                              |
| • at 415 V                                                                                                         | 440 kA                       |
| • at 690 V                                                                                                         | 187 kA                       |
| <b>Adjustable parameters</b>                                                                                       |                              |
| product feature / for L-tripping / can be switched on/off                                                          | No                           |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic  |                              |
| • minimum                                                                                                          | 160 A                        |
| • maximum                                                                                                          | 400 A                        |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic      |                              |
| • minimum                                                                                                          | 3 s                          |
| • maximum                                                                                                          | 25 s                         |
| adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>0t</sub> characteristic     |                              |
| • minimum                                                                                                          | 480 A                        |
| • maximum                                                                                                          | 5 200 A                      |
| adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic     |                              |
| • minimum                                                                                                          | 0.03 s                       |
| • maximum                                                                                                          | 0.03 s                       |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping                                       |                              |
| • minimum                                                                                                          | 1 200 A                      |
| • maximum                                                                                                          | 5 200 A                      |
| adjustable current response value current / for G-tripping / with standard characteristic                          |                              |
| • initial value                                                                                                    | 80 A                         |
| • full-scale value                                                                                                 | 400 A                        |
| adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>0t</sub> characteristic      |                              |
| • minimum                                                                                                          | 0.05 s                       |
| • maximum                                                                                                          | 0.8 s                        |
| adjustable response value setting current (I <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic |                              |
| • minimum                                                                                                          | 80 A                         |
| • maximum                                                                                                          | 400 A                        |
| adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic      |                              |
| • minimum                                                                                                          | 0.05 s                       |
| • maximum                                                                                                          | 0.8 s                        |
| adjustable setting current (I <sub>nN</sub> ) / for N-tripping                                                     |                              |
| • minimum                                                                                                          | 0 A                          |
| • maximum                                                                                                          | 0 A                          |
| product function / grounding protection                                                                            | Yes                          |
| adjustable trip class (T <sub>c</sub> CLASS)                                                                       | 10A, 10/10E, 20/ 20E, 30/30E |
| tripping time (T <sub>p</sub> ) / with adjustable trip class (T <sub>c</sub> CLASS)                                |                              |
| • minimum                                                                                                          | 3 s                          |
| • maximum                                                                                                          | 25 s                         |
| <b>Mechanical Design</b>                                                                                           |                              |
| product component                                                                                                  |                              |
| • undervoltage release                                                                                             | No                           |
| • voltage trigger                                                                                                  | No                           |

|                  |         |
|------------------|---------|
| • trip indicator | No      |
| height [in]      | 9.76 in |
| height           | 248 mm  |
| width [in]       | 5.43 in |
| width            | 138 mm  |
| depth [in]       | 4.33 in |
| depth            | 110 mm  |

#### Connections

|                                                                                           |                              |
|-------------------------------------------------------------------------------------------|------------------------------|
| 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 | 20 x 1 mm                    |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 35 x 10 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)     | silver                       |

#### Auxiliary circuit

|                                                |   |
|------------------------------------------------|---|
| number of CO contacts / for auxiliary contacts | 0 |
|------------------------------------------------|---|

#### Accessories

|                                            |     |
|--------------------------------------------|-----|
| product extension / optional / motor drive | Yes |
|--------------------------------------------|-----|

#### 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  |

#### Environmental footprint

|                                                          |                 |
|----------------------------------------------------------|-----------------|
| global warming potential [CO2 eq] / total                | 495 kg          |
| global warming potential [CO2 eq] / during manufacturing | 28.7 kg         |
| global warming potential [CO2 eq] / during operation     | 470 kg          |
| global warming potential [CO2 eq] / after end of life    | -4.07 kg        |
| Siemens Eco Profile (SEP)                                | Siemens EcoTech |
| reference code / according to IEC 81346-2                | Q               |

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



[Miscellaneous](#)



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



[Special Test Certificate](#)

[Miscellaneous](#)

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



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

[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)



[Environmental Conformations](#)



#### Environment

#### 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=3VA2440-0MQ32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2440-0MQ32-0AA0>

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

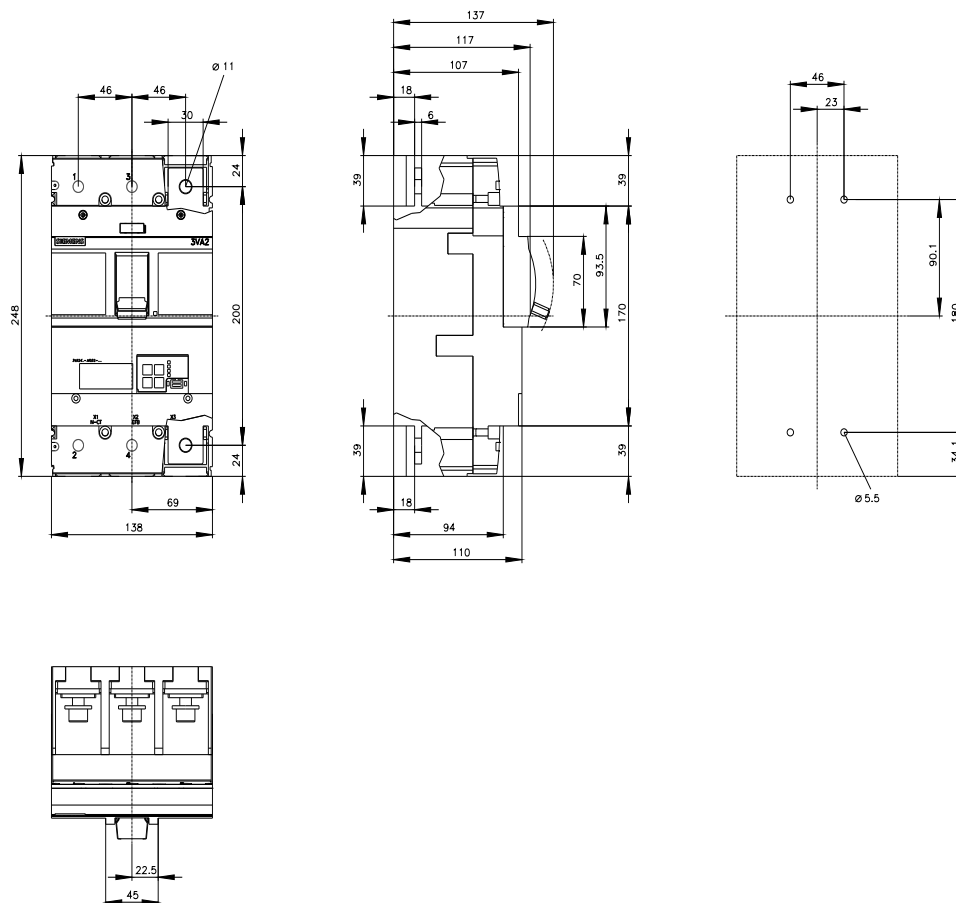
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2440-0MQ32-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2440-0MQ32-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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





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