



circuit breaker 3VA2 IEC frame 630 breaking capacity class C  $I_{cu}=110\text{kA}$  @ 415V  
3-pole, motor protection ETU860M, LSIG,  $I_n=400\text{A}$  overload protection  
 $I_r=160\text{A}...400\text{A}$  short-circuit protection  $I_{sd}=1.2...15 \times I_n$ ,  $I_i=3...15 \times I_n$  gr.-fault prot.,  
can be sw. off  $I_g=0.2...1 \times I_n$ ,  $t_g=0.05-0.8\text{s}$  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/retrofitable / 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                                                                                            | 4.816 kg                                |
| Current                                                                                               |                                         |
| short-time withstand current ( $I_{cw}$ ) / 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                                   |
| Switching capacity according to IEC 60947                                                             |                                         |
| switching capacity class of the circuit breaker                                                       | C                                       |
| maximum short-circuit current breaking capacity ( $I_{cu}$ )                                          |                                         |
| • at 240 V                                                                                            | 150 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>                                                                             | 110 kA<br>110 kA<br>85 kA<br>6 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> | 150 kA<br>110 kA<br>110 kA<br>85 kA<br>6 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>             | 330 kA<br>242 kA<br>242 kA<br>187 kA<br>9 kA |

#### Adjustable parameters

|                                                                                                                                                                                         |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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>                 | 160 A<br>400 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>                     | 3 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>                    | 480 A<br>6 000 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>                    | 0.03 s<br>0.03 s             |
| adjustable response value setting current (Ii) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                          | 1 200 A<br>6 000 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> | 80 A<br>400 A                |
| adjustable response value delay time (tg) / for G-tripping / with I0t characteristic <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                        | 0.8 s                        |
| adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                | 80 A<br>400 A                |
| adjustable response value delay time (tg) / for G-tripping / with I2t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                     | 0.05 s<br>0.8 s              |
| adjustable setting current (InN) / for N-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                                        | 0 A<br>0 A                   |
| product function / grounding protection                                                                                                                                                 | Yes                          |
| adjustable trip class (Tc CLASS)                                                                                                                                                        | 10A, 10/10E, 20/ 20E, 30/30E |
| tripping time (Tp) / with adjustable trip class (Tc CLASS) <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                               | 3 s<br>25 s                  |

#### Mechanical Design

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| product component <ul style="list-style-type: none"> <li>• undervoltage release</li> </ul> | 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  |
| reference code / according to IEC 81346-2 | Q      |

#### Approvals / Certificates

##### General Product Approval



[Confirmation](#)



[Miscellaneous](#)

| General Product Approval | EMC | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|
|--------------------------|-----|-------------------|-------------------|



[Miscellaneous](#)

[Special Test Certificate](#)



| Marine / Shipping | other | Dangerous Good | Environment |
|-------------------|-------|----------------|-------------|
|-------------------|-------|----------------|-------------|

[CCS / China Classification Society](#)

[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)

[Transport Information](#)

[Environmental Conformations](#)

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VA2440-7MQ32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2440-7MQ32-0AA0>

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

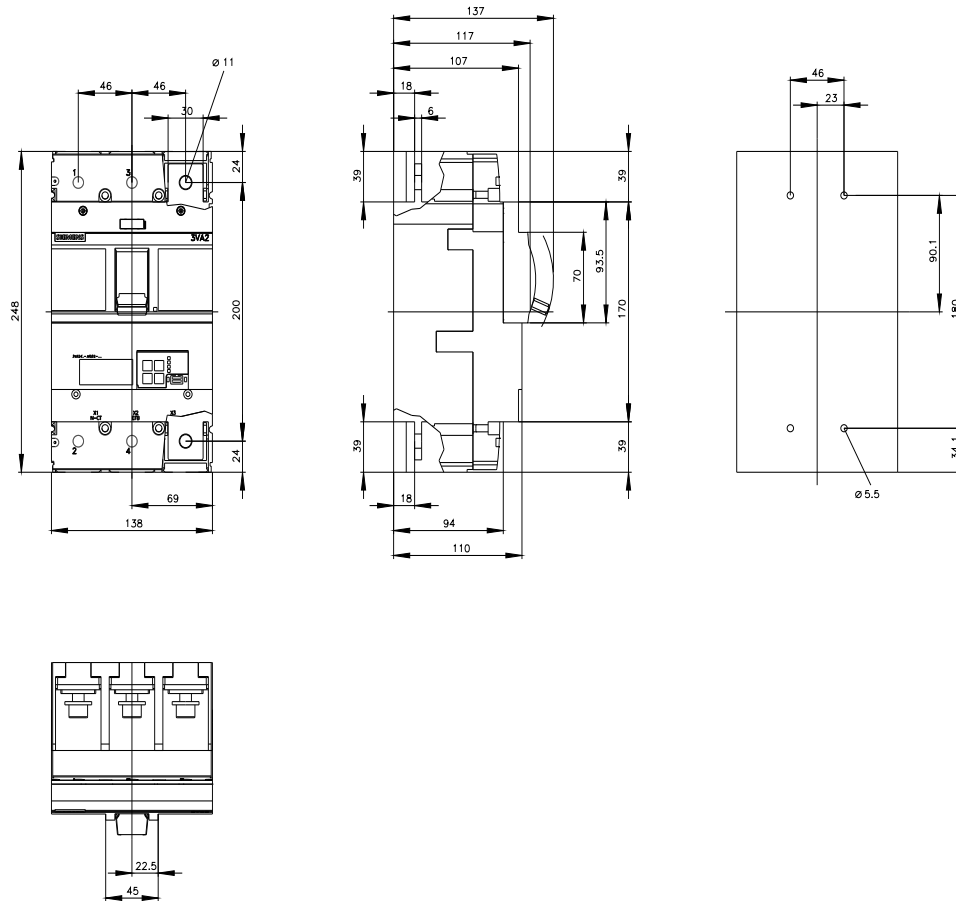
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2440-7MQ32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2440-7MQ32-0AA0)

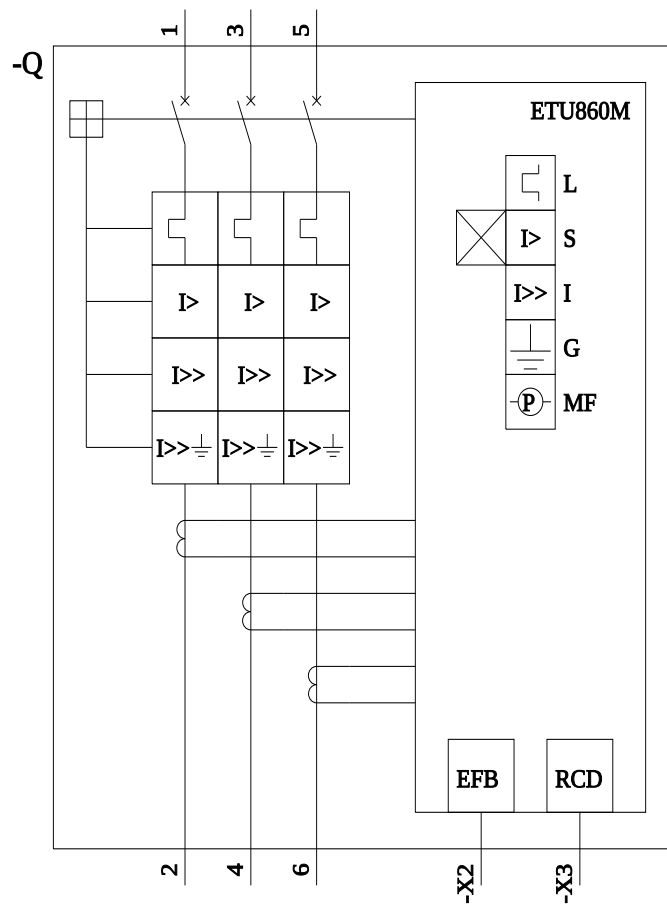
CAX-Online-Generator

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

Tender specifications

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





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