

**Siemens**  
**EcoTech**



circuit breaker 3VA2 IEC Frame 630 breaking capacity class H  $I_{cu}=85 \text{ kA} @ 415 \text{ V}$   
3-pole, line protection ETU860, LSIG,  $I_n=630 \text{ A}$  overload protection  $I_r=250 \text{ A} \dots 630 \text{ A}$   
short-circuit protection  $I_{sd}=0.6 \dots 9 \times I_n$ ,  $I_i=1.5 \dots 9 \times I_n$  neutral conductor protection  
optionally with external current transformer, up to 160% ground-fault protection,  
can be switched off  $I_g=0.2 \dots 1 \times I_n$ ,  $t_g=0.05-0.8 \text{ s}$  nut keeper kit



| Model                                                                                                 |                                         |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------|
| product brand name                                                                                    | SENTRON                                 |
| product designation                                                                                   | Molded case circuit breaker             |
| design of the product                                                                                 | 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                                                                              | 162 W                                   |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole           | 54 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                                   |
| 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                                                                                            | 5.258 kg                                |
| Current                                                                                               |                                         |
| operational current                                                                                   |                                         |
| • at 40 °C                                                                                            | 630 A                                   |
| • at 45 °C                                                                                            | 600 A                                   |
| • at 50 °C                                                                                            | 570 A                                   |
| • at 55 °C                                                                                            | 540 A                                   |
| • at 60 °C                                                                                            | 510 A                                   |
| • at 65 °C                                                                                            | 480 A                                   |
| • at 70 °C                                                                                            | 450 A                                   |
| Switching capacity according to IEC 60947                                                             |                                         |
| switching capacity class of the circuit breaker                                                       | H                                       |
| maximum short-circuit current breaking capacity ( $I_{cu}$ )                                          |                                         |
| • at 240 V                                                                                            | 110 kA                                  |
| • at 415 V                                                                                            | 85 kA                                   |
| • at 440 V                                                                                            | 85 kA                                   |

|                                                                                                                                                                                                      |                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 500 V</li> <li>• at 690 V</li> </ul>                                                                                                                     | 55 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> | 110 kA<br>85 kA<br>85 kA<br>55 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>             | 242 kA<br>187 kA<br>187 kA<br>121 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>                 | 250 A<br>630 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>12 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>                    | 378 A<br>5 670 A            |
| adjustable response value setting current (Isd) / of S-trip / with I2t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                    | 378 A<br>5 670 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>                    | 0.05 s<br>0.5 s             |
| adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                    | 0.05 s<br>0.5 s             |
| adjustable response value setting current (Ii) / for I-tripping <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>                                          | 945 A<br>5 670 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> | 126 A<br>630 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>                | 126 A<br>630 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>                                                        | 126 A<br>1 008 A            |
| design of the N-conductor protection                                                                                                                                                    | adjustable OFF; 20% to 160% |
| product function / grounding protection                                                                                                                                                 | Yes                         |

#### Mechanical Design

|                        |         |
|------------------------|---------|
| 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 | EMV |
|--------------------------|-----|



[Confirmation](#)



[Miscellaneous](#)



|                   |                   |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



|                   |       |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



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

[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)



## Further information

### 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=3VA2463-6KQ32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2463-6KQ32-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2463-6KQ32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2463-6KQ32-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





