



circuit breaker 3VA2 IEC frame 1000 breaking capacity class H Icu=85kA @ 415V 4-pole, line protection ETU860, LSIG, In=800A overload protection Ir=320A...800A short-circuit protection Isd=0.6..10x In, li=1.5..12x In N conductor protection adjustable (OFF, up to 160%) gr.-fault prot., can be sw. off Ig=0.2...1 x In= tg=0.05-0.8s nut keeper kit

| Model  |   |
|--|---|
| product brand name   | SENTRON                                     |
| product designation  | Molded case circuit breaker                 |
| Product version  | Line protection                             |
| design of the overcurrent release  | ETU860                                      |
| protection function of the overcurrent release   | LSIG  |
| 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   | 231 W                                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 77 W  |
| mechanical service life (switching cycles) / typical   | 10 000                                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 4 600                                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 3 200                                       |
| Neutral conductors / upgradeable/retrofitable  | No  |
| ground-fault monitoring version  | Summation current formation L + N conductor |
| product function   |   |
| • communication function   | Yes   |
| • other measurement function   | Yes   |
| Current  |   |
| Max. rated operational current of the frame size   | 1 000 A                                     |
| Courant permanent assigné Iu   | 800 A                                       |
| operational current  |   |
| • at 40 °C   | 800 A                                       |
| • at 45 °C   | 800 A                                       |
| • at 50 °C   | 800 A                                       |
| • at 55 °C   | 800 A                                       |
| • at 60 °C   | 800 A                                       |
| • at 65 °C   | 767 A                                       |
| • at 70 °C   | 703 A                                       |
| Switching capacity according to IEC 60947  |   |
| switching capacity class of the circuit breaker  | H   |
| breaking capacity maximum short-circuit current (Icu)  |   |
| • at 240 V   | 110 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>   | 85 kA<br>85 kA<br>55 kA<br>35 kA              |
| breaking capacity operating short-circuit current (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>70 kA<br>55 kA<br>19 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>74 kA |

#### Adjustable parameters

|   |         |
|---|---------|
| Adjustable response value current / I <sub>g</sub> min.                 | 320 A   |
| Adjustable response value current / I <sub>g</sub> min.                 | 800 A   |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5     |
| Adjustable response value current / I <sub>g</sub> min.                 | 25      |
| Adjustable response value current / I <sub>g</sub> min.                 | 480 A   |
| Adjustable response value current / I <sub>g</sub> min.                 | 8 000 A |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5 s   |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.5 s   |
| Adjustable response value current / I <sub>i</sub> min.                 | 1 200 A |
| Adjustable response value current / I <sub>i</sub> max.                 | 8 000 A |
| Ground fault protection can be switched ON/OFF                          | Yes     |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | Yes     |
| Adjustable response value current / I <sub>g</sub> min.                 | 160 A   |
| Adjustable response value current / I <sub>g</sub> max.                 | 800 A   |
| Adjustable response value current / t <sub>g</sub> min.                 | 0.05 s  |
| Adjustable response value current / I <sub>g</sub> min.                 | 0.8 s   |

#### Mechanical Design

|             |         |
|-------------|---------|
| height [in] | 12.6 in |
| Height      | 320 mm  |
| width [in]  | 11 in   |
| Width       | 280 mm  |
| depth [in]  | 4.7 in  |
| depth       | 120 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-section, connection screw, width x thickness , min. | 20 x 4 mm                    |





#### Auxiliary circuit


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

#### Environmental conditions

|  |                                    |
|--|------------------------------------|
| protection class IP / on the front   | IP40                               |
| ambient temperature  |                                    |
| <ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul> | -25 °C<br>70 °C<br>-40 °C<br>80 °C |

#### Certificates

| General Product Approval  |   |                               | EMC   | Declaration of Conformity   |   |
|---|---|-------------------------------|---|---|---|
|  |  | <a href="#">Miscellaneous</a> |  |  |  |

| Test Certificates             | Shipping Approval             |   | other  |  |                               |
|-------------------------------|-------------------------------|---|--|--|-------------------------------|
| <a href="#">Miscellaneous</a> | <a href="#">Miscellaneous</a> |  | <a href="#">CCS / China Classification Society</a> | <a href="#">Manufacturer Declaration</a> | <a href="#">Miscellaneous</a> |

### 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=3VA2580-6KQ42-0AA0>

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

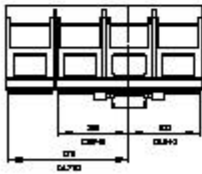
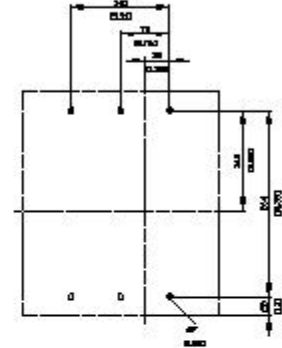
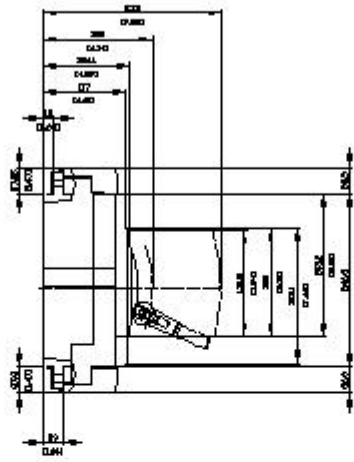
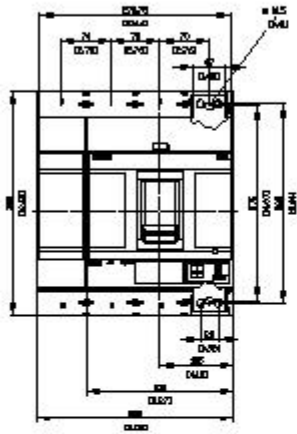
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2580-6KQ42-0AA0>

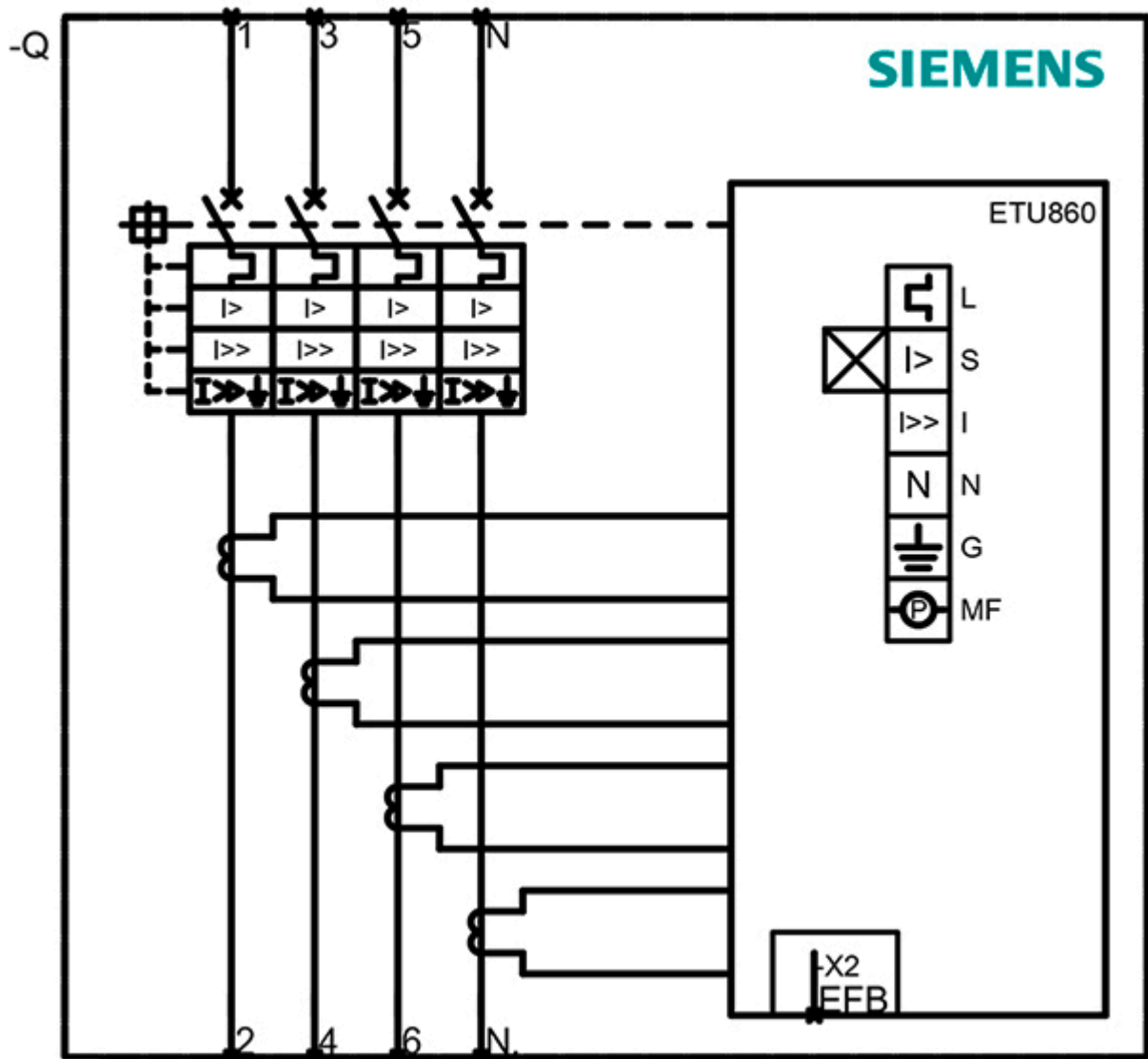
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2580-6KQ42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2580-6KQ42-0AA0)

Tender specifications

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





last modified:

12/18/2020