



circuit breaker 3VA2 IEC frame 1000 breaking capacity class M  
 $I_{cu}=55kA$  @ 415V 4-pole, line protection ETU860, LSIG,  $I_n=800A$   
 overload protection  $I_r=320A...800A$  short-circuit protection  
 $I_{sd}=0.6..10 \times I_n$ ,  $I_i=1.5..12 \times I_n$  N conductor protection adjustable  
 (OFF, up to 160%) gr.-fault prot., can be sw. off  $I_g=0.2...1 \times I_n$   
 $t_g=0.05-0.8s$  nut keeper kit

| Model                                          |                             |
|------------------------------------------------|-----------------------------|
| product brand name                             | SETRON                      |
| 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 $U_i$                                                             | 800 V  |
| Max. rated operational voltage $U_e$ 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   |
| operating 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           | M      |
| maximum short-circuit current breaking capacity (Icu)     |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 440 V                                                | 55 kA  |
| • at 500 V                                                | 36 kA  |
| • at 690 V                                                | 25 kA  |
| operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 440 V                                                | 55 kA  |
| • at 500 V                                                | 36 kA  |
| • at 690 V                                                | 19 kA  |
| short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 187 kA |
| • at 415 V                                                | 121 kA |
| • at 440 V                                                | 121 kA |
| • at 500 V                                                | 76 kA  |
| • at 690 V                                                | 53 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                |        |
| • during operation / minimum       | -25 °C |
| • during operation / maximum       | 70 °C  |
| • during storage / minimum         | -40 °C |
| • during storage / maximum         | 80 °C  |

### Certificates

|                                         |   |
|-----------------------------------------|---|
| reference code / acc. to DIN EN 81346-2 | Q |
|-----------------------------------------|---|

| General Product Approval                                                                 |                                                                                          | EMC                                                                                             | Declaration of Conformity                                                                  |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CCC | <br>VDE | <br>EAC        | <br>RCM |
| <a href="#">Miscellaneous</a>                                                            |                                                                                          | <br>EG-Konf. |                                                                                            |

| Test Certificates             | Shipping Approval                                                                        | other                                              |                                          |                               |
|-------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------|-------------------------------|
| <a href="#">Miscellaneous</a> | <br>LRS | <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=3VA2580-5KQ42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2580-5KQ42-0AA0>

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

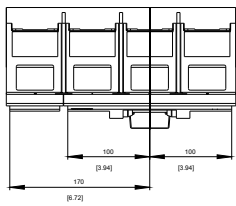
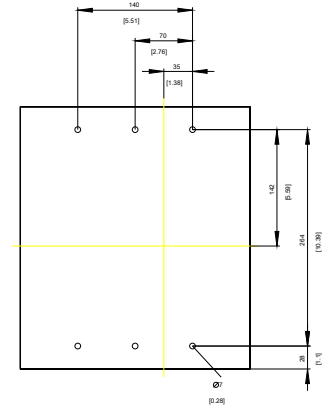
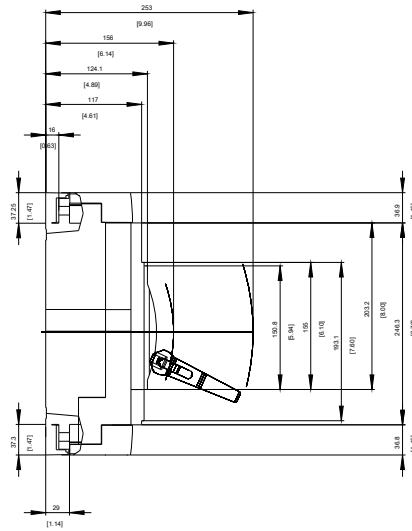
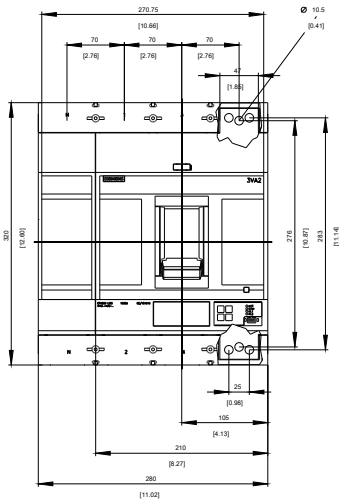
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2580-5KQ42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2580-5KQ42-0AA0)

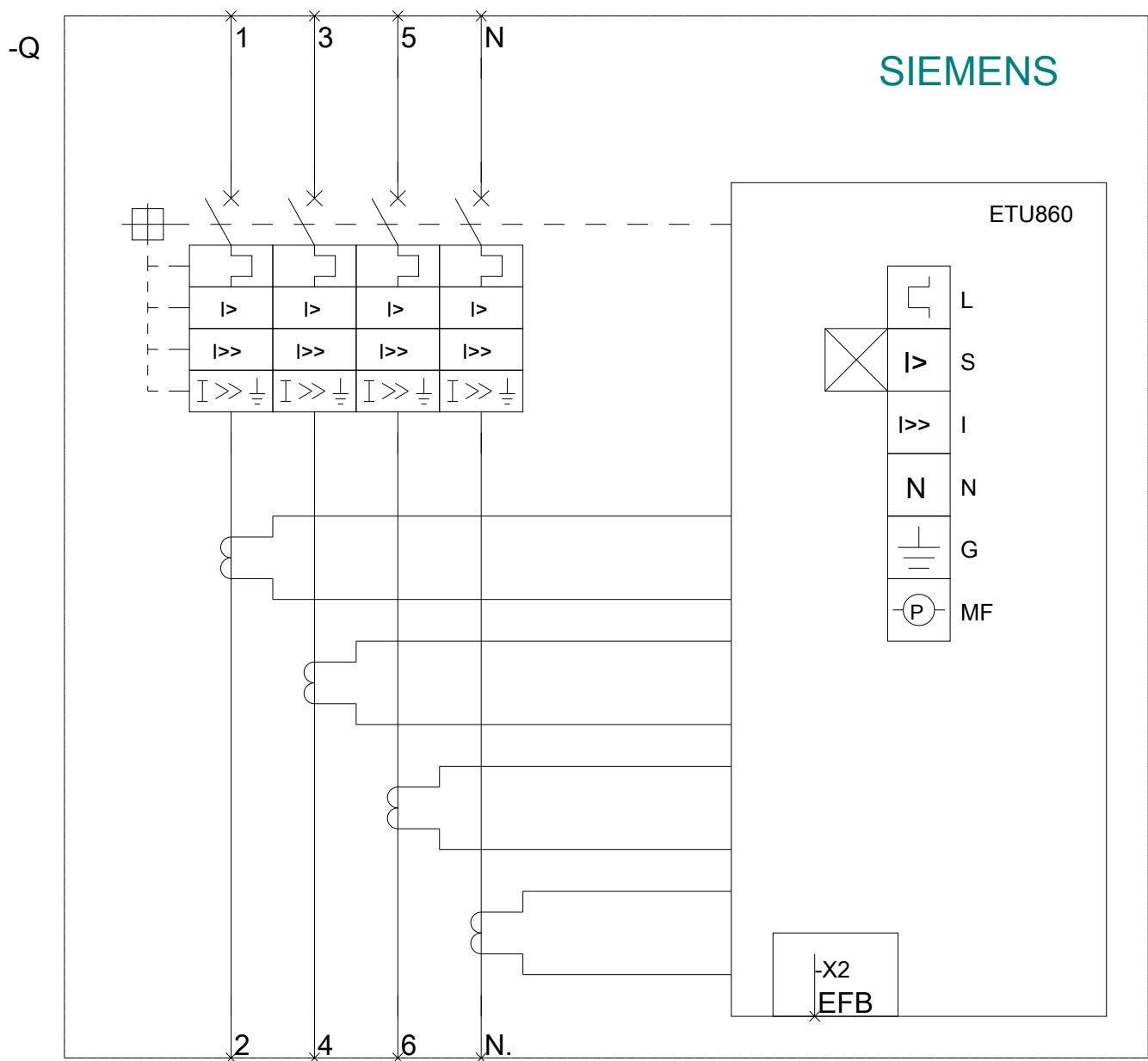
##### CAX-Online-Generator

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

##### Tender specifications

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





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