



circuit breaker 3VA6 UL frame 250 breaking capacity class M 35kA @ 480V 3-pole, line protection ETU830, LIG, In=250A overload protection Ir=100A...250A short-circuit protection Ii=1.5...10 x In ground-fault protection Ig=0.2...1 x In, tg=0.05-0.8s without connection

| Model   |   |
|---|---|
| product brand name  | SENTRON                                 |
| product designation   | Molded-case circuit breaker             |
| product designation / according to UL file  | MFAE-Y                                  |
| Product version   | System protection                       |
| design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes                                     |
| design of the overcurrent release   | ETU830                                  |
| protection function of the overcurrent release  | LIG                                     |
| number of poles   | 3                                       |
| General technical data  |   |
| Tension assignée d'isolement Ui   | 600 V                                   |
| power loss [W] / maximum  | 42 W                                    |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole                        | 14 W                                    |
| mechanical service life (switching cycles) / typical  | 20 000                                  |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz   | 6 000                                   |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz   | 3 000                                   |
| electrical endurance (switching cycles) / at 480 V  | 6 000                                   |
| electrical endurance (switching cycles) / at 600 V  | 7 500                                   |
| Neutral conductors / upgradeable/retrofitable   | No                                      |
| ground-fault monitoring version   | Summation current formation L-conductor |
| product function  |   |
| • communication function  | Yes                                     |
| • other measurement function  | Yes                                     |
| Current   |   |
| marking / acc. to UL 489 / 100%-rated breaker   | Yes                                     |
| operational current   |   |
| • at 55 °C  | 238 A                                   |
| • at 60 °C  | 225 A                                   |
| • at 65 °C  | 213 A                                   |
| • at 70 °C  | 200 A                                   |
| Switching capacity according to IEC 60947   |   |
| switching capacity class of the circuit breaker   | M                                       |
| breaking capacity maximum short-circuit current (Icu)   |   |
| • at 240 V  | 85 kA                                   |

|  |                            |
|--|----------------------------|
| <ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>   | 55 kA<br>3 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 690 V</li> </ul> | 85 kA<br>55 kA<br>3 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 690 V</li> </ul>             | 187 kA<br>121 kA<br>4.5 kA |

#### Switching capacity according to UL 489

|  |                                   |
|--|-----------------------------------|
| breaking capacity current <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 Y/347 V</li> <li>• at 600 V</li> </ul> | 100 kA<br>35 kA<br>18 kA<br>18 kA |
|--|-----------------------------------|

#### Adjustable parameters

|  |         |
|--|---------|
| Adjustable response value current / li min.                | 375 A   |
| Adjustable response value current / li max.                | 2 500 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | Yes     |
| Adjustable response value current / Ig min.                | 50 A    |
| Adjustable response value current / Ig max.                | 250 A   |
| Adjustable response value current / tg min.                | 0.05 s  |
| Adjustable response value current / Ig min.                | 0.8 s   |

#### Mechanical Design

|             |        |
|-------------|--------|
| height [in] | 7.8 in |
| Height      | 198 mm |
| width [in]  | 4.1 in |
| Width       | 105 mm |
| depth [in]  | 3.4 in |
| depth       | 86 mm  |

#### Connections

|   |                    |
|---|--------------------|
| arrangement of electrical connectors / for main current circuit | Without connection |
| type of electrical connection / for main current circuit        | Without            |

#### 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 <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

|  |     |
|--|-----|
| reference code / acc. to IEC 81346-2   | Q   |
| certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB | Yes |

#### General Product Approval



[Miscellaneous](#)



|     |                           |                   |       |
|-----|---------------------------|-------------------|-------|
| EMC | Declaration of Conformity | Shipping Approval | other |
|-----|---------------------------|-------------------|-------|



Miscellaneous

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=3VA6225-5KM31-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6225-5KM31-2AA0>

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

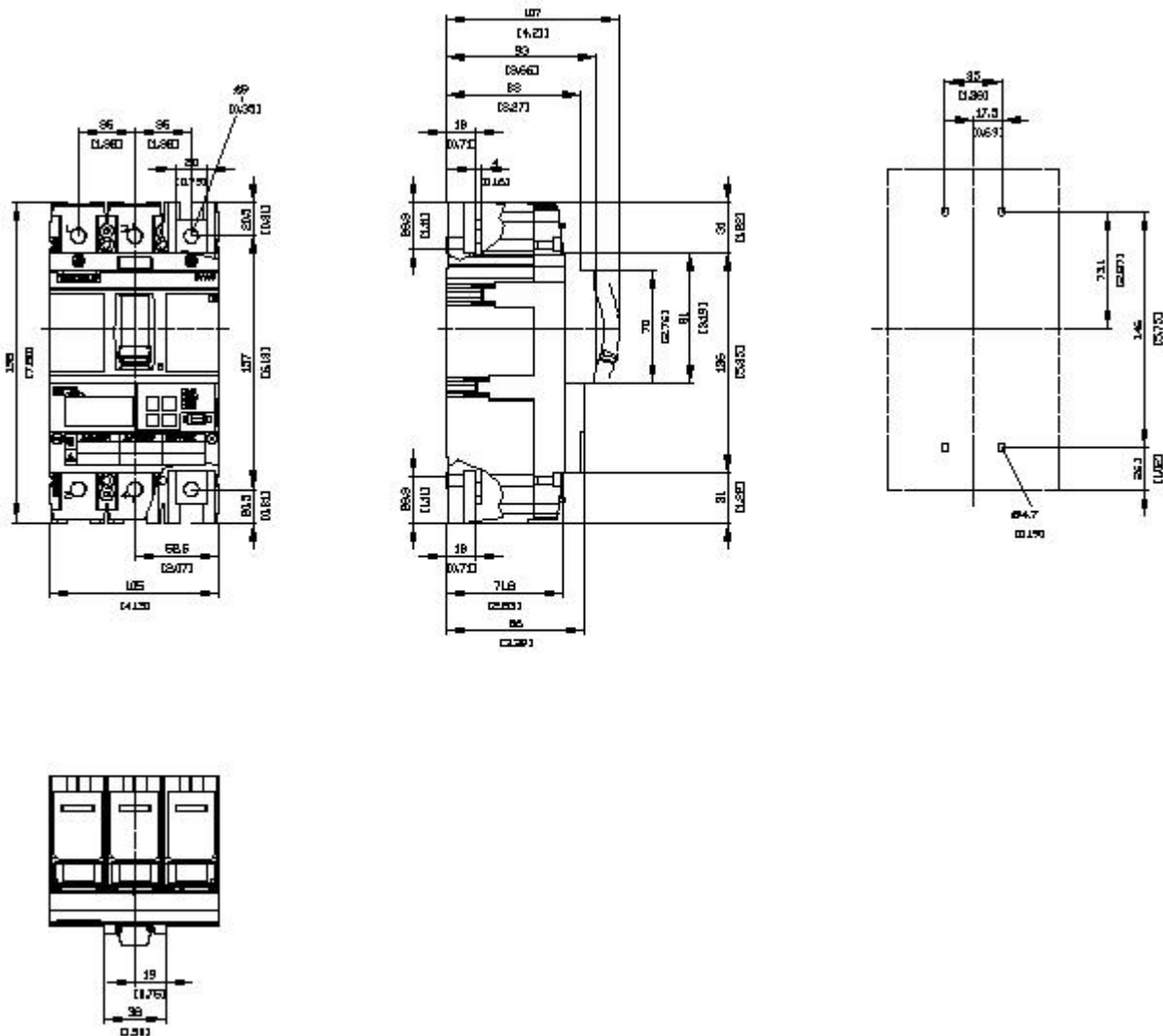
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6225-5KM31-2AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6225-5KM31-2AA0)

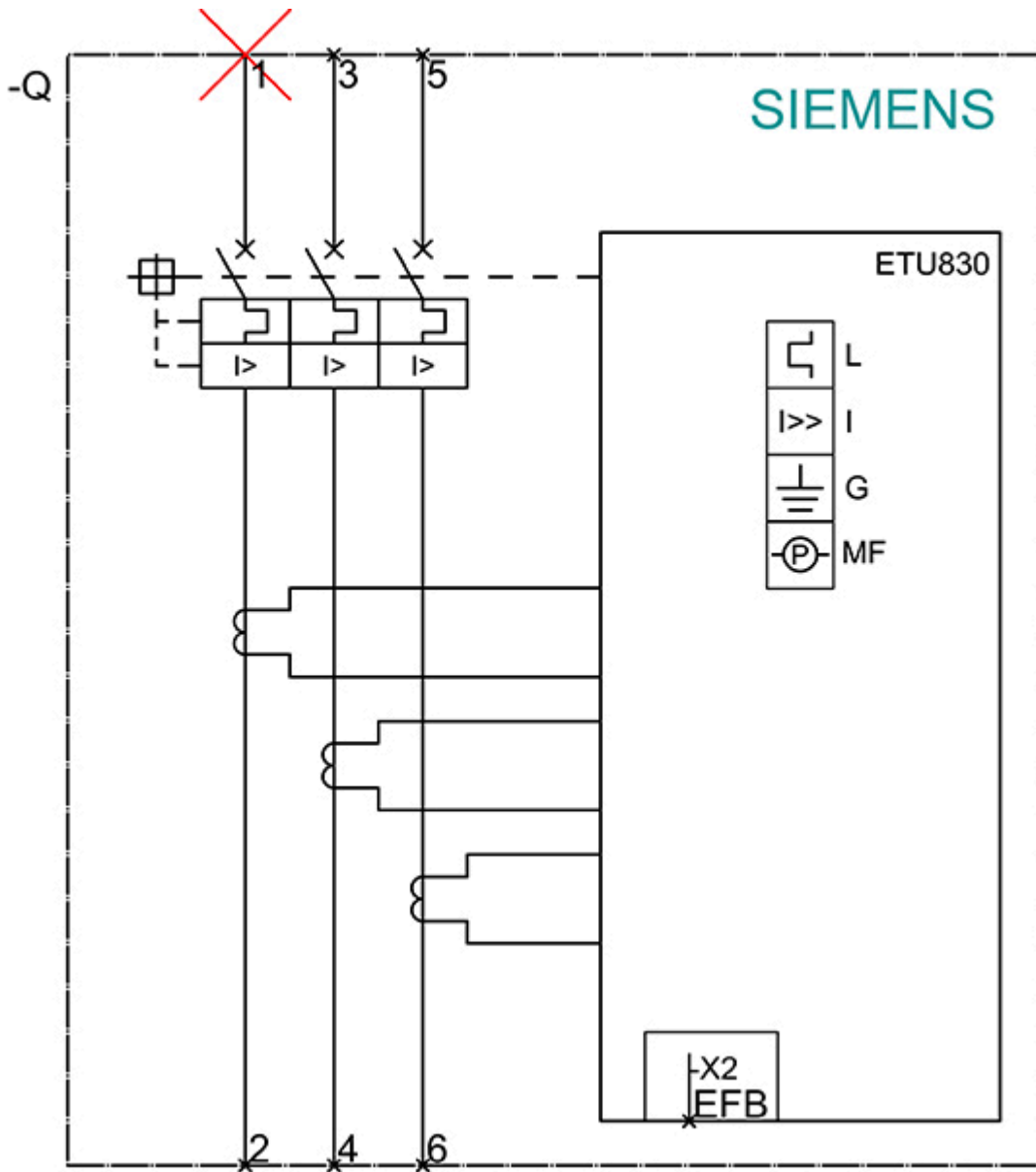
CAX-Online-Generator

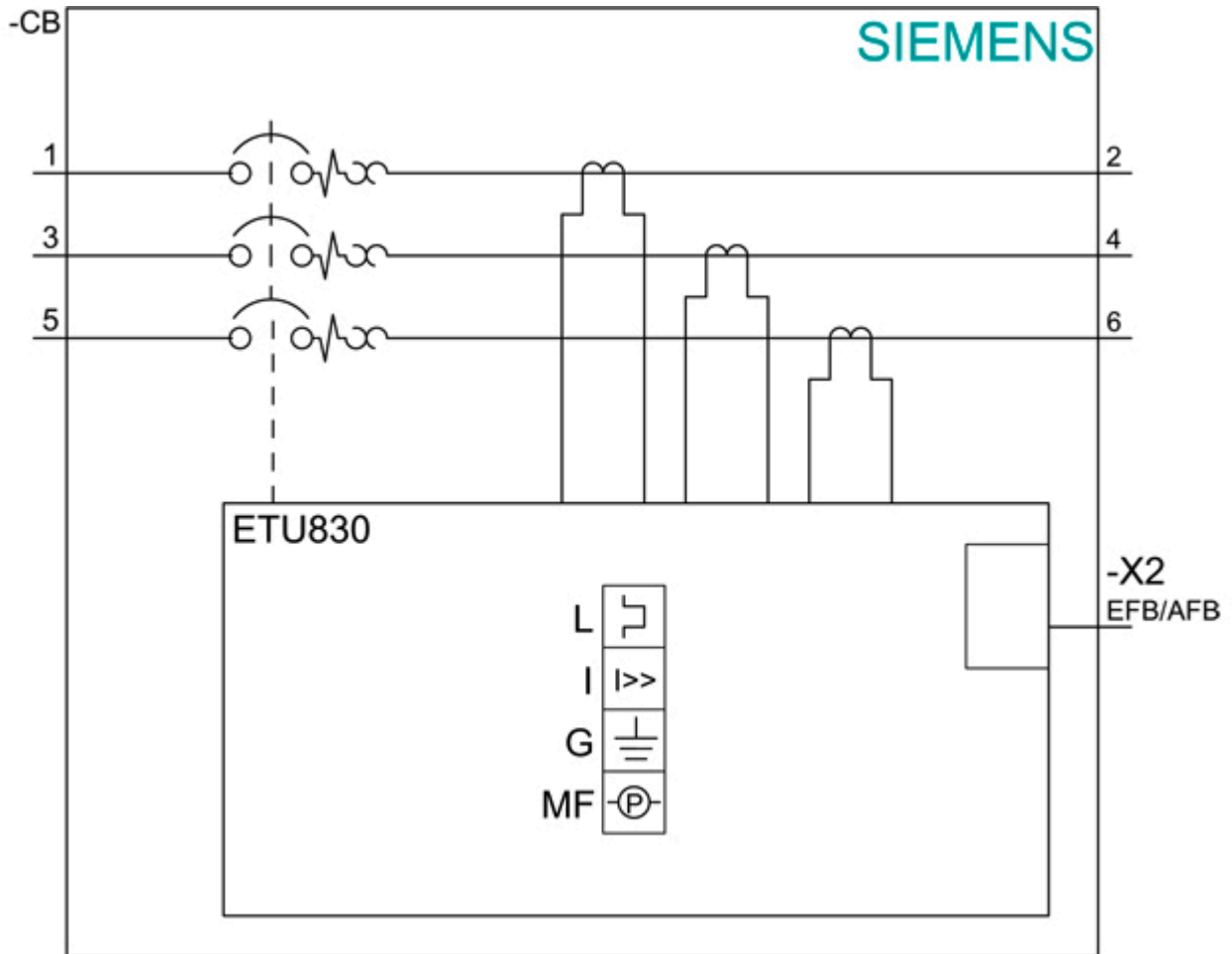
<http://www.siemens.com/cax>

Tender specifications

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







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