

Siemens  
EcoTech



circuit breaker 3VA6 UL Frame 600 breaking capacity class L 150 kA @ 480 V 3-pole, line protection ETU830, LIG, In=600 A overload protection Ir=240 A ...600 A short-circuit protection Ii=1.5...9 x In ground-fault protection IG=0.2... 1xIn, tg=0.05-0.8s cable connection on two sides



| Model  |   |
|--|---|
| product brand name   | SENTRON                                 |
| product designation  | Molded-case circuit breaker             |
| product designation / according to UL file   | LLAE                                    |
| design of the product  | System protection                       |
| design of the load switch / according 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   |   |
| insulation voltage / rated value   | 800 V                                   |
| operating voltage / at AC / rated value  | 690 V                                   |
| power loss [W] / maximum   | 151 W                                   |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole                                | 50.33 W                                 |
| mechanical service life (operating cycles) / typical   | 20 000                                  |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V   | 4 000                                   |
| electrical endurance (operating cycles) / at AC-1 / at 690 V   | 3 500                                   |
| electrical endurance (operating cycles) / at 480 V   | 4 000                                   |
| electrical endurance (operating cycles) / at 600 V   | 3 500                                   |
| 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                                     |
| • other measurement function   | Yes                                     |
| Net Weight   | 9.621 kg                                |
| Current  |   |
| marking / according to UL 489 / 100%-rated breaker   | No                                      |
| operational current  |   |
| • at 40 °C   | 600 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  | L                     |
| maximum short-circuit current breaking capacity (I <sub>cu</sub> )   |                       |
| • at 240 V   | 200 kA                |
| • at 415 V   | 150 kA                |
| • at 690 V   | 6 kA                  |
| operating short-circuit current breaking capacity (I <sub>cs</sub> )   |                       |
| • at 240 V   | 200 kA                |
| • at 415 V   | 150 kA                |
| • at 690 V   | 6 kA                  |
| short-circuit current making capacity (I <sub>cm</sub> )   |                       |
| • at 240 V   | 440 kA                |
| • at 415 V   | 330 kA                |
| • at 690 V   | 9 kA                  |
| Switching capacity according to UL 489   |                       |
| current breaking capacity  |                       |
| • at 240 V   | 200 kA                |
| • at 480 V   | 150 kA                |
| • at 600 V   | 50 kA                 |
| Adjustable parameters  |                       |
| adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic  |                       |
| • minimum  | 250 A                 |
| • maximum  | 600 A                 |
| adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic      |                       |
| • minimum  | 0.5 s                 |
| • maximum  | 15 s                  |
| adjustable response value setting current (I <sub>i</sub> ) / for I-tripping                                       |                       |
| • minimum  | 900 A                 |
| • maximum  | 5 400 A               |
| adjustable current response value current / for G-tripping / with standard characteristic                          |                       |
| • initial value  | 120 A                 |
| • full-scale value   | 600 A                 |
| adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>0t</sub> characteristic      |                       |
| • minimum  | 0.05 s                |
| • maximum  | 0.8 s                 |
| adjustable response value setting current (I <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic |                       |
| • minimum  | 120 A                 |
| • maximum  | 600 A                 |
| adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic      |                       |
| • minimum  | 0.05 s                |
| • maximum  | 0.8 s                 |
| 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               |
| type of connectable conductor cross-sections / of the round conductor terminal / stranded                          | 2 x (2/0 - 600 kcmil) |
| width  | 138 mm                |
| depth [in]   | 4.33 in               |
| depth  | 110 mm                |
| Connections  |                       |

|   |   |
|---|---|
| arrangement of electrical connectors / for main current circuit | Front connection                          |
| type of electrical connection / for main current circuit        | circular conductor terminal on both sides |
| <b>Auxiliary circuit</b>  |   |
| number of CO contacts / for auxiliary contacts                  | 0   |
| <b>Accessories</b>  |   |
| product extension / optional / motor drive                      | Yes                                       |
| <b>Environmental conditions</b>                                 |   |
| 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                                     |
| <b>Environmental footprint</b>                                  |   |
| 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**



[Confirmation](#)



|                          |     |                   |       |
|--------------------------|-----|-------------------|-------|
| General Product Approval | EMV | Marine / Shipping | other |
|--------------------------|-----|-------------------|-------|

[Miscellaneous](#)



[Confirmation](#)

[Miscellaneous](#)

|       |                 |             |
|-------|-----------------|-------------|
| other | Dangerous goods | Environment |
|-------|-----------------|-------------|

[Miscellaneous](#)

[Transport Information](#)



Siemens EcoTech



[Environmental Confirmations](#)

**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=3VA6460-8KM36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6460-8KM36-0AA0>

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

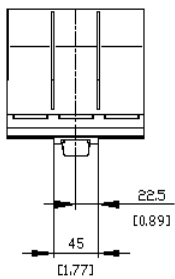
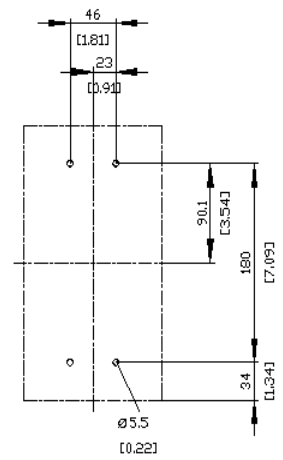
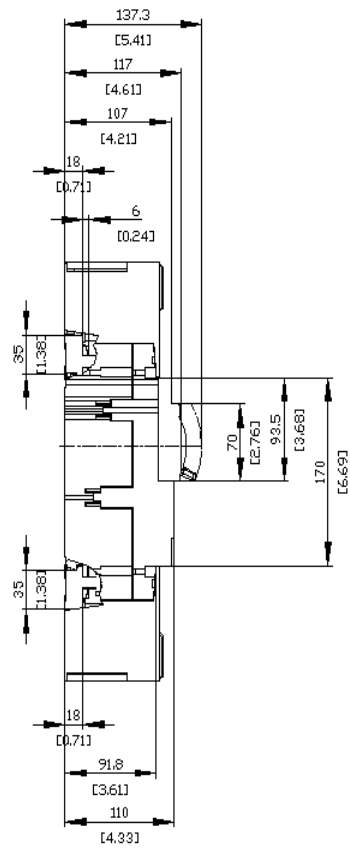
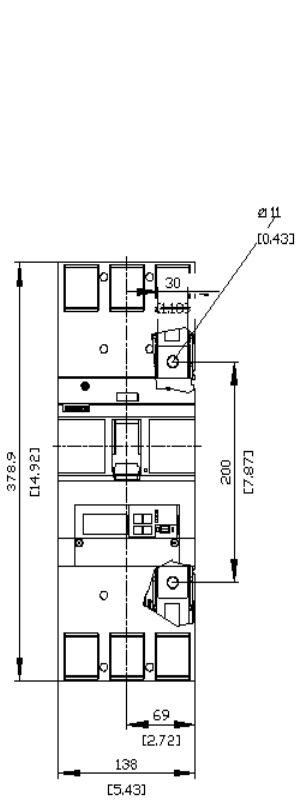
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6460-8KM36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6460-8KM36-0AA0)

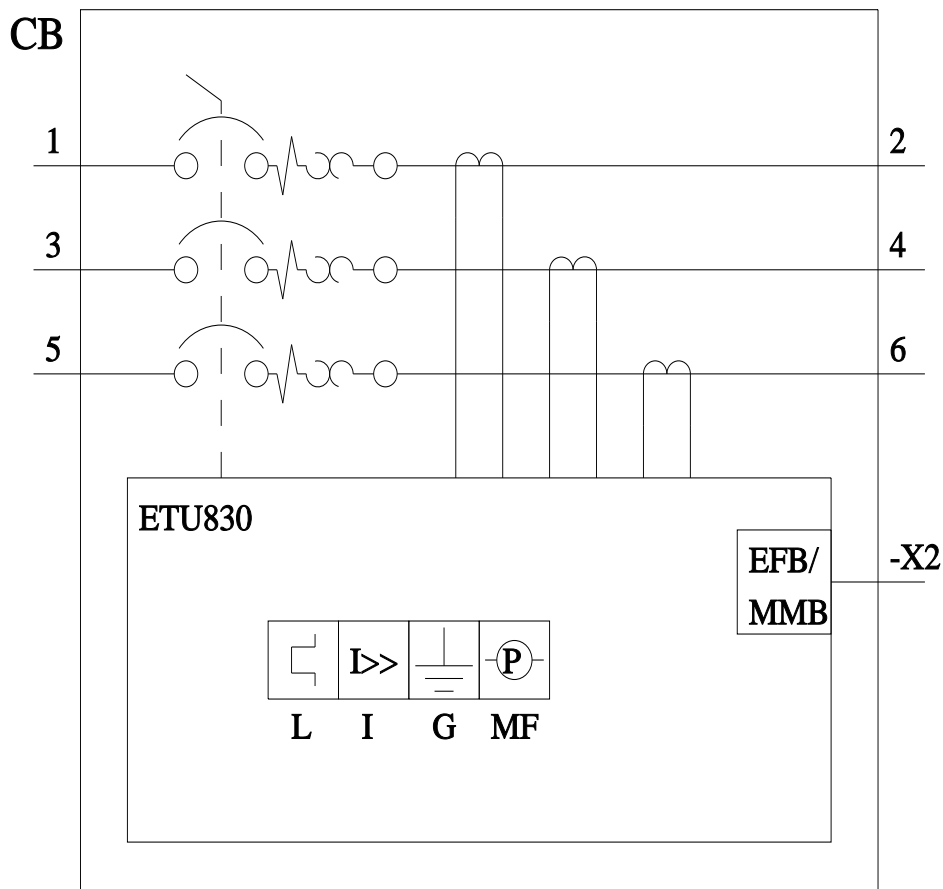
**CAX-Online-Generator**

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

**Tender specifications**

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





last modified:

10/24/2024

