SIEMENS

## Data sheet 3VA6460-6HL31-0AA0



circuit breaker 3VA6 UL frame 600 breaking capacity class H 65kA @ 480V 3-pole, line protection ETU320, LI, In=600A overload protection Ir=240A...600A short-circuit protection Ii=1.5...10 x In without connection

| Model | |
|---|---|
| Product brand name | SENTRON |
| Product designation | Molded-case circuit breaker |
| Product designation / according to UL file | HLAE |
| 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 | ETU320 |
| Protective function of the overcurrent release | LI |
| Number of poles | 3 |

| General technical data | |
|---|---|
| Rated insulation voltage Ui | 600 V |
| Max. rated operational voltage Ue with AC 50/60Hz | 600 V |
| Power loss [W] / maximum | 151 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 50.33 W |
| Mechanical service life (switching cycles) / typical | 15 000 |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 4 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz | 2 500 |
| Electrical endurance (switching cycles) / at 480 V / at 50/60 Hz | 4 000 |
| Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz | 3 000 |
| Neutral conductors / upgradeable/retrofittable | No |
| Ground fault monitoring version | Without |
| Product function | |
| • communication function | No |
| • other measurement function | No |

| Current | |
|---|---|
| Marking / acc. to UL 489 / 100%-rated breaker | No |
| Max. rated operational current of the frame size | 600 A |
| Rated continuous current Iu | 600 A |
| Operating current | |
| • at 40 °C | 600 A |
| • at 45 °C | 600 A |
| • at 50 °C | 593 A |
| • at 55 °C | 575 A |
| • at 60 °C | 557 A |
| • at 65 °C | 538 A |
| • at 70 °C | 520 A |

| Switching capacity according to IEC 60947 | |
|---|---|
| Switching capacity class of the circuit breaker | H |
| Maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 110 kA |
| • at 415 V | 85 kA |
| • at 690 V | 6 kA |
| Operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 110 kA |
| • at 415 V | 85 kA |
| • at 690 V | 6 kA |
| Short-circuit current making capacity (Icm) | |
| • at 240 V | 242 kA |
| • at 415 V | 187 kA |
| • at 690 V | 9 kA |

| Switching capacity according to UL 489 | |
|---|---|
| Breaking capacity current | |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| • at 240 V | 100 kA |
| • at 480 V | 65 kA |
| • at 600 V | 22 kA |

| Adjustable parameters | |
|---|---|
| Adjustable response value current / Ir min. | 250 A |
| Adjustable response value current / Ir max. | 600 A |
| Adjustable response value time / tr min. | 0.5 |
| Adjustable response value time / tr max. | 15 |
| Adjustable response value current / Ii min. | 900 A |
| Adjustable response value current / Ii max. | 5 400 A |
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |

| Mechanical Design | |
|---|---|
| Height [in] | 9.8 in |
| Height | 248 mm |
| Width [in] | 5.4 in |
| Width | 138 mm |
| Depth [in] | 4.3 in |
| Depth | 110 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 | |
| • 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 |
| Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB | Yes |


Subject to change without notice
© Copyright Siemens

## General Product Approval

CCC CSA UL UL VDE EAC

| EMC | Declaration of Conformity | Shipping Approval | other |
|---|---|---|---|
| RCM | EG-Konf. | ABS | 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=3VA6460-6HL31-0AA0

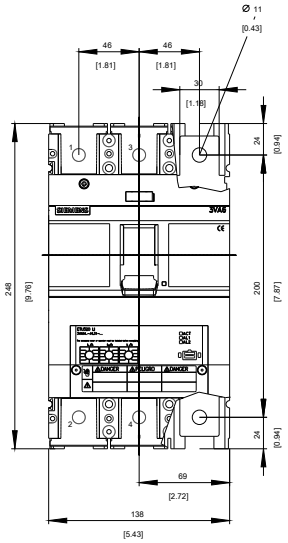
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA6460-6HL31-0AA0

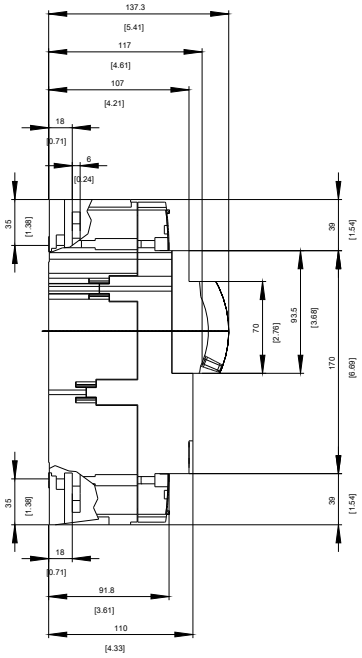
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6460-6HL31-0AA0

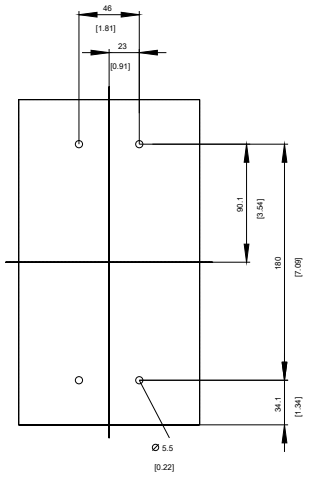
**CAx-Online-Generator**
http://www.siemens.com/cax

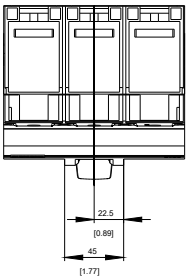
**Tender specifications**
http://www.siemens.com/specifications


© Copyright Siemens



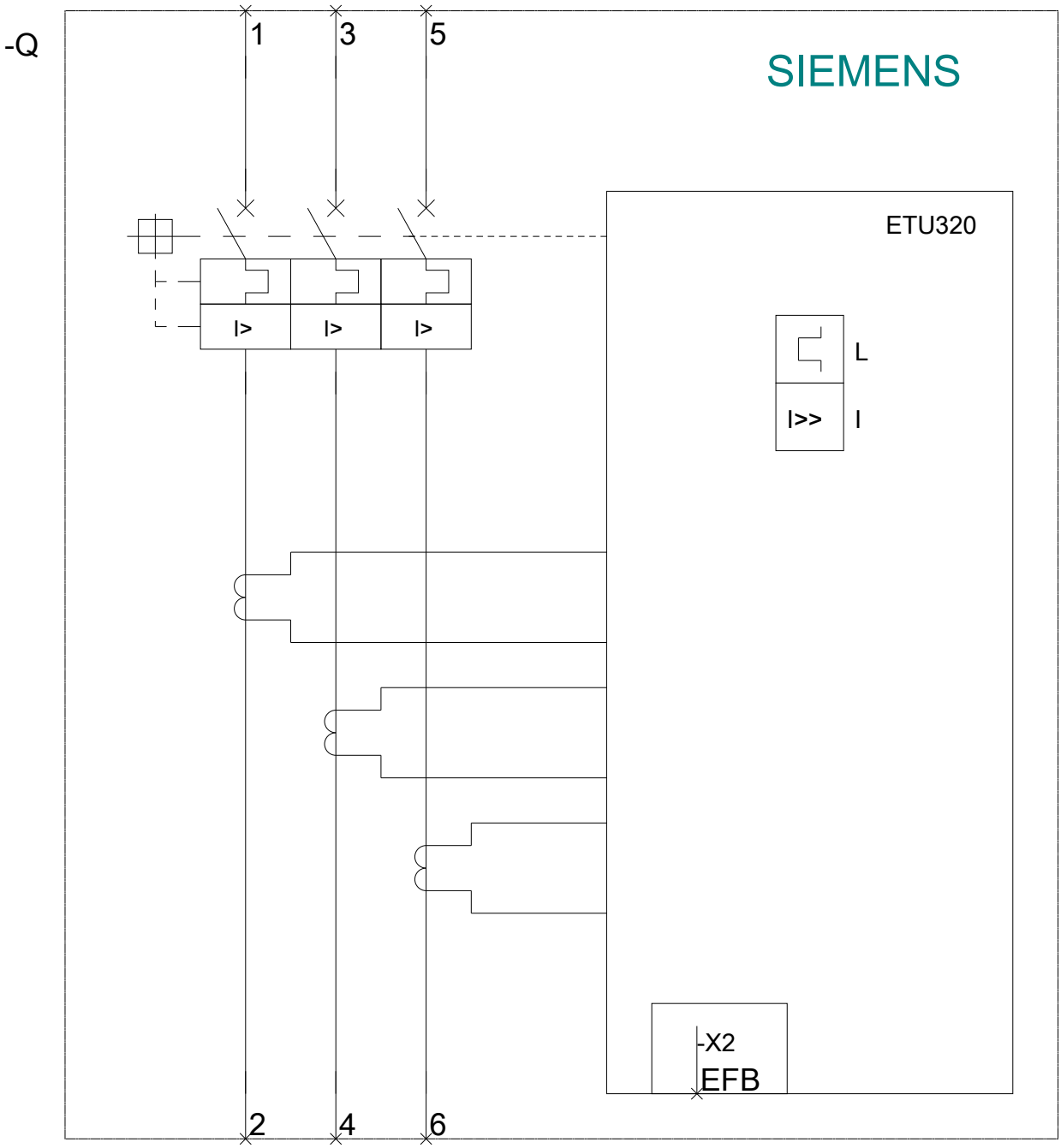



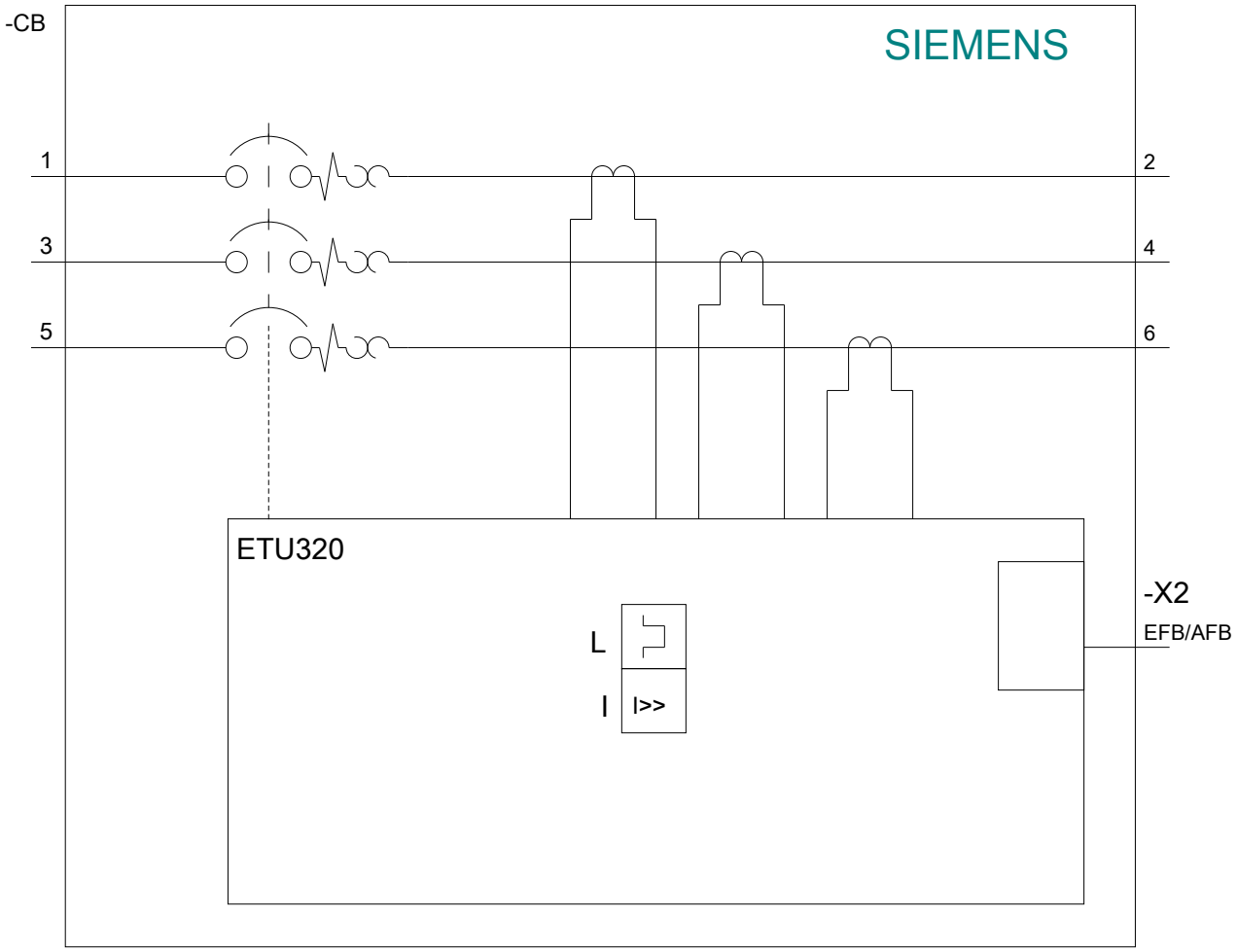


© Copyright Siemens





Subject to change without notice
© Copyright Siemens





Subject to change without notice
© Copyright Siemens

**last modified:** 03/13/2020


Subject to change without notice
© Copyright Siemens