SIEMENS

## Data sheet 3VA6460-7JQ32-0AA0

Siemens EcoTech

circuit breaker 3VA6 UL Frame 600 breaking capacity class C 100 kA @ 480 V 3-pole, line protection ETU560, LSIG, In=600 A overload protection Ir=240 A ...600 A short-circuit protection Isd=0.6..9x In, Ii=1.5..9x In neutral conductor protection optionally with ext. CT; up to 160% ground-fault protection IG=0.2... 1xIn, tg=0.05-0.8s nut keeper kit on two sides

| | |
|---|---|
| **Model** | |
| product brand name | SENTRON |
| product designation | Molded-case circuit breaker |
| product designation / according to UL file | CLAE |
| 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 | ETU560 |
| protection function of the overcurrent release | LSIG |
| 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/retrofittable / short-circuit and overload proof | Yes |
| ground-fault monitoring version | Summation current formation L-conductor |
| product function | |
| ● communication function | Yes |
| ● other measurement function | No |
| Net Weight | 5.596 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 | C |
| maximum short-circuit current breaking capacity (Icu) | |
| ● at 240 V | 150 kA |
| ● at 415 V | 110 kA |
| ● at 690 V | 6 kA |
| operating short-circuit current breaking capacity (Ics) | |
| ● at 240 V | 150 kA |
| ● at 415 V | 110 kA |
| ● at 690 V | 6 kA |
| short-circuit current making capacity (Icm) | |
| ● at 240 V | 330 kA |
| ● at 415 V | 242 kA |
| ● at 690 V | 9 kA |
| **Switching capacity according to UL 489** | |
| current breaking capacity | |
| ● at 240 V | 200 kA |
| ● at 480 V | 100 kA |
| ● at 600 V | 35 kA |
| **Adjustable parameters** | |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic | |
| ● minimum | 250 A |
| ● maximum | 600 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| ● minimum | 0.5 s |
| ● maximum | 15 s |
| adjustable response value setting current (Isd) / of S-trip / with I0t characteristic | |
| ● minimum | 360 A |
| ● maximum | 5 400 A |
| adjustable response value setting current (Isd) / of S-trip / with I2t characteristic | |
| ● minimum | 360 A |
| ● maximum | 5 400 A |
| adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.5 s |
| adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.5 s |
| adjustable response value setting current (Ii) / 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 (tg) / for G-tripping / with I0t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.8 s |
| adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic | |
| ● minimum | 120 A |
| ● maximum | 600 A |
| adjustable response value delay time (tg) / for G-tripping / with I2t characteristic | |
| ● minimum | 0.05 s |
| ● maximum | 0.8 s |
| adjustable setting current (InN) / for N-tripping | |

| | |
|---|---|
| ● minimum | 0.2 A |
| ● maximum | 1.6 A |
| design of the N-conductor protection | adjustable OFF; 20% to 160% |
| 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 |
| 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 | nut keeper kit on both ends |
| type of connectable conductor cross-sections / for flat-bar terminal connection / minimum | 20 x 1 mm |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 35 x 10 mm |
| **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 |
| **Environmental footprint** | |
| Siemens Eco Profile (SEP) | Siemens EcoTech |
| reference code / according to IEC 81346-2 | Q |

## Approvals / Certificates

### General Product Approval

Confirmation | Miscellaneous

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

| Dangerous goods | Environment | |
|---|---|---|
| Transport Information | | 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

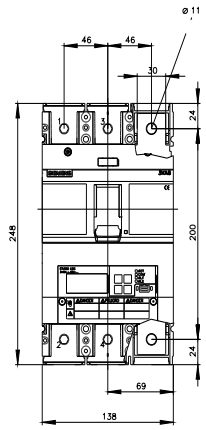
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6460-7JQ32-0AA0

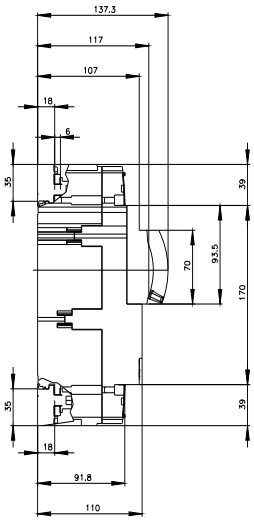
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA6460-7JQ32-0AA0

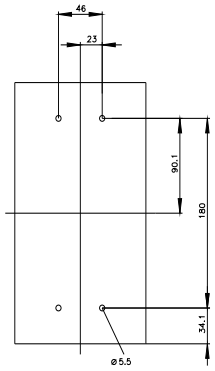
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6460-7JQ32-0AA0

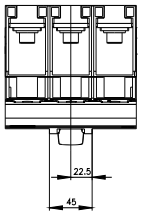
**CAx-Online-Generator**
http://www.siemens.com/cax

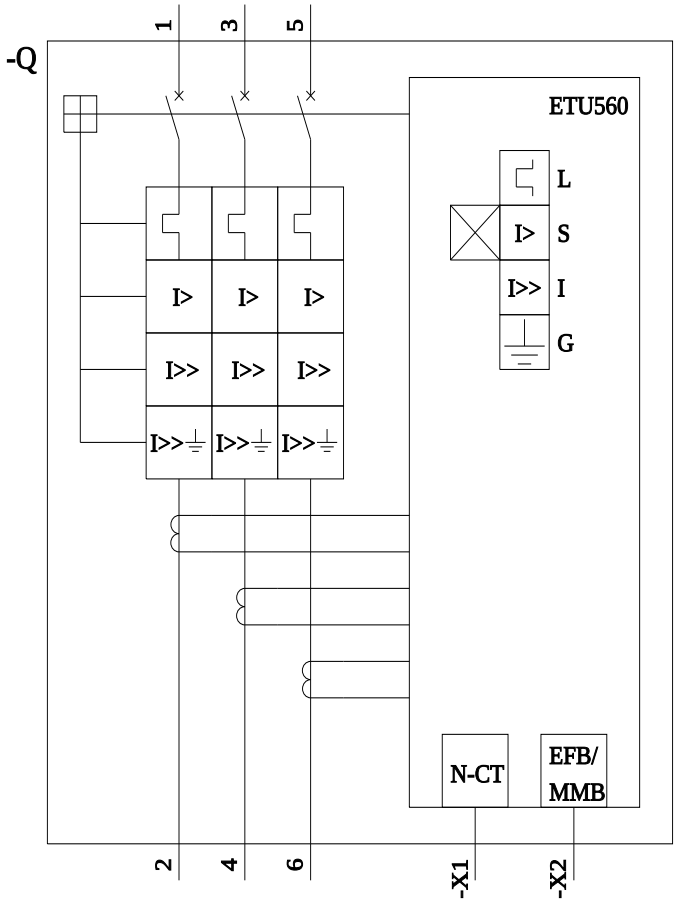
**Tender specifications**
http://www.siemens.com/specifications

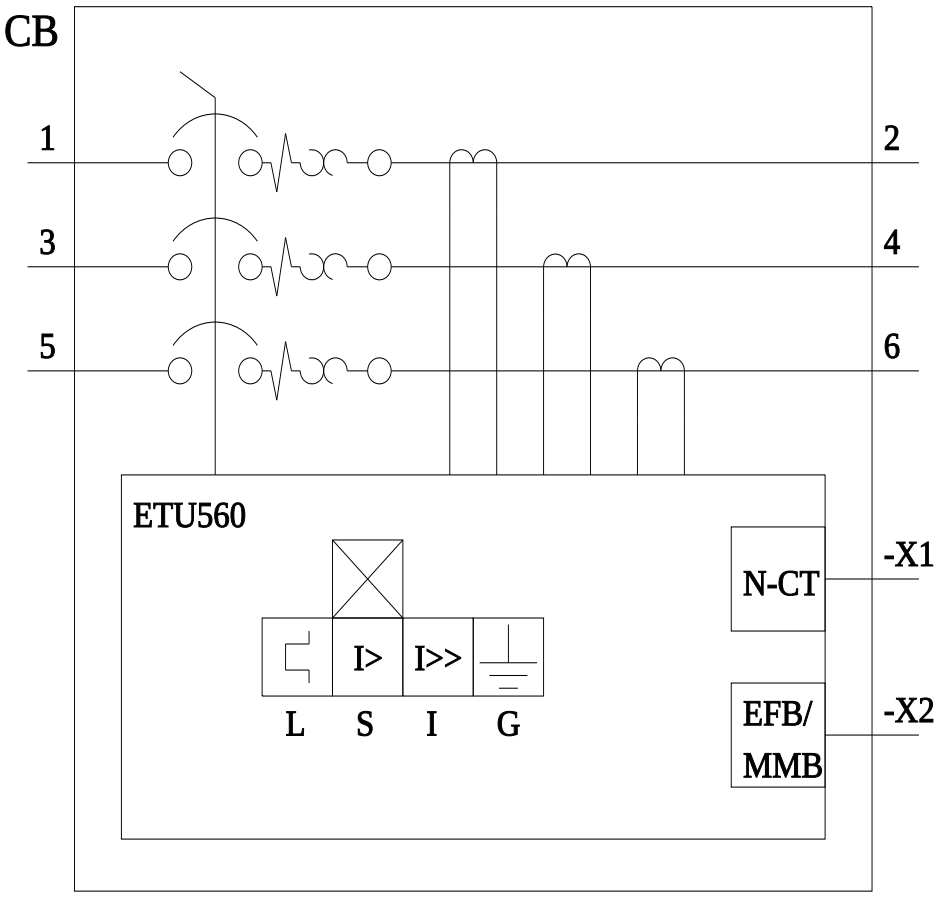





**last modified:** 3/11/2024