SIEMENS

## Data sheet 3VA2110-7JP42-0AA0

Siemens EcoTech

circuit breaker 3VA2 IEC Frame 160 breaking capacity class C Icu=110 kA @ 415 V 4-pole, line protection ETU550, LSI, In=100 A overload protection Ir=40 A...100 A short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In neutral conductor protection adjustable (OFF, up to 160%) nut keeper kit

| | |
|---|---|
| **Model** | |
| product brand name | SENTRON |
| product designation | Molded case circuit breaker |
| design of the product | Line protection |
| design of the overcurrent release | ETU550 |
| protection function of the overcurrent release | LSI |
| number of poles | 4 |
| **General technical data** | |
| insulation voltage / rated value | 800 V |
| operating voltage / at AC / rated value | 690 V |
| power loss [W] / maximum | 10 W |
| power loss [W] / for rated value of the current / at AC / in hot operating state / per pole | 3.33 W |
| mechanical service life (operating cycles) / typical | 25 000 |
| electrical endurance (operating cycles) / at AC-1 / at 380/415 V | 14 000 |
| electrical endurance (operating cycles) / at AC-1 / at 690 V | 9 800 |
| product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof | No |
| ground-fault monitoring version | Without |
| product function | |
| ● communication function | Yes |
| ● other measurement function | No |
| Net Weight | 3.2 kg |
| **Current** | |
| operational current | |
| ● at 40 °C | 100 A |
| ● at 45 °C | 100 A |
| ● at 50 °C | 100 A |
| ● at 55 °C | 100 A |
| ● at 60 °C | 100 A |
| ● at 65 °C | 100 A |
| ● at 70 °C | 100 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 440 V | 110 kA |
| ● at 500 V | 85 kA |
| ● at 690 V | 3 kA |
| operating short-circuit current breaking capacity (Ics) | |
| ● at 240 V | 150 kA |
| ● at 415 V | 110 kA |
| ● at 440 V | 110 kA |
| ● at 500 V | 85 kA |
| ● at 690 V | 2.5 kA |
| short-circuit current making capacity (Icm) | |
| ● at 240 V | 330 kA |
| ● at 415 V | 242 kA |
| ● at 440 V | 242 kA |
| ● at 500 V | 187 kA |
| ● at 690 V | 3.7 kA |
| **Adjustable parameters** | |
| product feature / for L-tripping / can be switched on/off | No |
| adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic | |
| ● minimum | 40 A |
| ● maximum | 100 A |
| adjustable response value delay time (tr) / for L-tripping / with I2t characteristic | |
| ● minimum | 0.5 s |
| ● maximum | 25 s |
| adjustable response value setting current (Isd) / of S-trip / with I0t characteristic | |
| ● minimum | 60 A |
| ● maximum | 1 000 A |
| adjustable response value setting current (Isd) / of S-trip / with I2t characteristic | |
| ● minimum | 60 A |
| ● maximum | 1 000 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 | 150 A |
| ● maximum | 1 200 A |
| adjustable setting current (InN) / for N-tripping | |
| ● minimum | 20 A |
| ● maximum | 100 A |
| design of the N-conductor protection | adjustable OFF; 20% to 160% |
| product function / grounding protection | No |
| **Mechanical Design** | |
| product component | |
| ● undervoltage release | No |
| ● voltage trigger | No |
| ● trip indicator | No |
| height [in] | 7.13 in |
| height | 181 mm |
| width [in] | 5.51 in |
| width | 140 mm |
| depth [in] | 3.39 in |
| depth | 86 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-sections / for flat-bar terminal connection / minimum | 13 x 1 mm |
| type of connectable conductor cross-sections / for flat-bar terminal connection / maximum | 25 x 8 mm |
| design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) | tin |
| design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) | tin |
| **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** | |
| global warming potential [CO2 eq] / total | 61.814 kg |
| global warming potential [CO2 eq] / during manufacturing | 14.6 kg |
| global warming potential [CO2 eq] / during operation | 48.9 kg |
| global warming potential [CO2 eq] / after end of life | -2.2 kg |
| Siemens Eco Profile (SEP) | Siemens EcoTech |
| **reference code / according to IEC 81346-2** | Q |

## Approvals / Certificates

### General Product Approval

CCC | EG-Konf. | VDE | Miscellaneous | EAC

### EMV

RCM

### Test Certificates

Type Test Certific-ates/Test Report | Miscellaneous | Special Test Certific-ate

### Maritime application

ABS | BUREAU VERITAS

### Maritime application

DNV | LRS | RMRS | CCS (China Classifica-tion Society)

### other

产品合格 QC PASS | Confirmation

### other

Miscellaneous

### Dangerous goods

Transport Information

### Environment

EPD | Siemens EcoTech | Environmental Con-firmations | Environmental Con-firmations

## Further information

**Information on the packaging**

https://support.industry.siemens.com/cs/ww/en/view/109813875

**Information for data generation and storage**
https://support.industry.siemens.com/cs/ww/en/view/109995012

**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/lowvoltage/catalogs

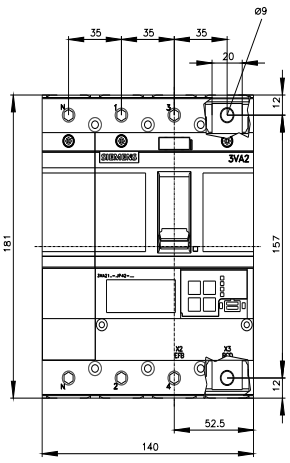
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2110-7JP42-0AA0

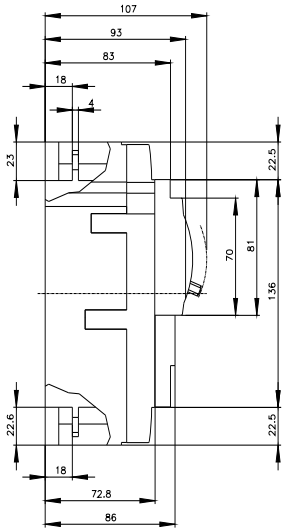
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA2110-7JP42-0AA0

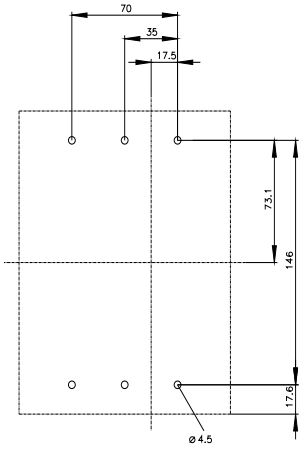
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2110-7JP42-0AA0

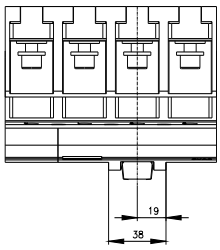
**CAx-Online-Generator**
https://www.siemens.com/cax

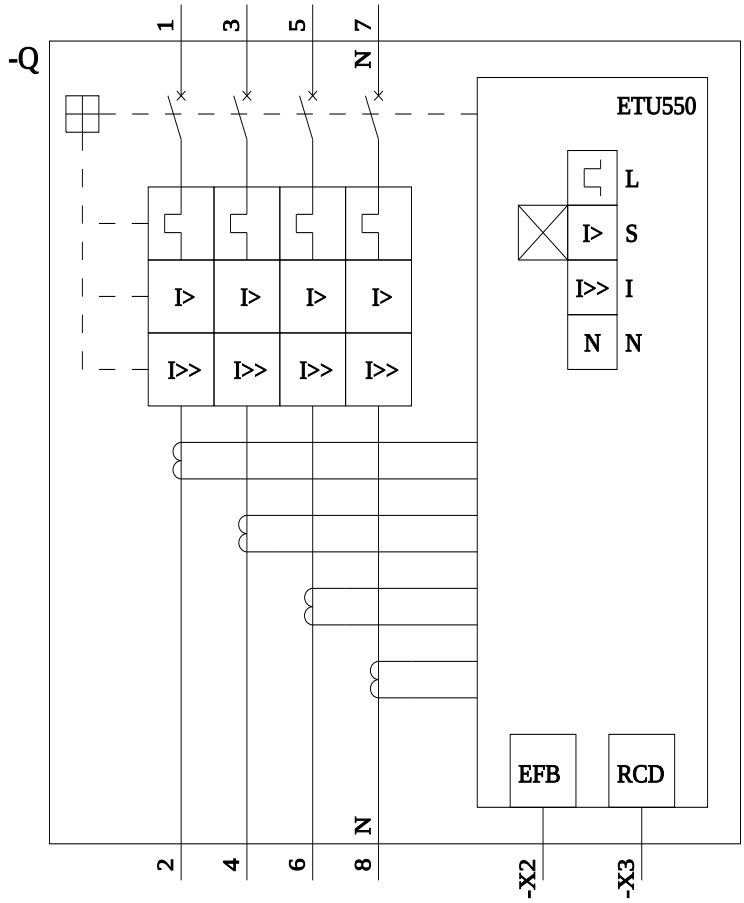
**Tender specifications**
https://www.siemens.com/specifications



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