SIEMENS

Data sheet

3VA2110-6HL36-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=85KA @ 415 V 3POLE, LINE PROTECTION ETU320, LI, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION II=12 X IN CABLE CONNECTION

| Model | | |
|---|---|-----------------------------|
| product brand name | | SENTRON |
| Product designation | | Molded case circuit breaker |
| Design of the product | | Line protection |
| Product variations | | Selective Applications |
| Ground fault monitoring version | | Without |
| Design of the auxiliary release | | without auxiliaryrelease |
| Design of the auxiliary switch | | Without |
| Design of the operating mechanism | | toggle handle |
| Type of the driving mechanism / motor drive | | No |
| Design of the overcurrent release | | ETU320 |
| General technical data | | |
| Number of poles | | 3 |
| Trip class / of the L-trip / with I2t characteristic / initial value | | 0.5 |
| Trip class / of the L-trip / with I2t characteristic / Full- scale value | | 17 |
| Electrical endurance (switching cycles) | | |
| • at AC-1 / at 380/415 V / at 50/60 Hz | | 12 000 |
| circuit-breaker / Design | | 3VA |
| Mechanical service life (switching cycles) / typical | | 20 000 |
| Voltage | | |
| Insulation voltage / Rated value | V | 800 |
| Protection class | | |

| Protection class IP / on the front IP40 Protective function of the overcurrent release L1 Switching capacity Switching capacity class of the olrcult breaker H Dissipation Active power loss In • maximum W 10 100 Adultation current / Rated value / maximum A Continuous current / Rated value / maximum A Continuous current / Rated value / maximum A Continuous current / Rated value / maximum A Operating propose value current / of the A Main circuit V Operating voltage • • with AC / at 50/80 Hz / Rated value V 6900 Operating current • at 50 °C / Rated value A • at 70 °C / Rated value A • at 70 °C / Rated value A • at 50 °C / Rated value A • at 70 °C / Rated value A • at 70 °C / Rated value A <th>Protection class IP</th> <th></th> <th>IP40</th> | Protection class IP | | IP40 |
|--|---|---|-------------------|
| Switching capacity Switching capacity class of the circuit breaker H Dissipation Active power loss H Active power loss • maximum W 10 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 100 Main circuit Operating voltage • with AC / a 50/60 Hz / Rated value V 690 Operating current - at 40 °C / Rated value A 100 - at 50 °C / Rated value V • at 60 °C / Rated value A 100 - at 65 °C / Rated value A 100 • at 60 °C / Rated value A 100 - at 65 °C / Rated value A 100 • at 60 °C / Rated value A 100 - at 65 °C / Rated value A 100 • at 60 °C / Rated value A 100 - at 65 °C / Rated value A 100 • at 60 °C / Rated value A 100 - at 65 °C / Rated value A </td <td>Protection class IP / on the front</td> <td></td> <td>IP40</td> | Protection class IP / on the front | | IP40 |
| Switching capacity class of the circuit breaker H Dissipation Active power loss W Imaximum W Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Operating voltage V 690 Operating voltage 0 0 • with AC / at 50/60 Hz / Rated value V 690 Operating voltage 0 0 • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • Adjustable response value current 0 | Protective function of the overcurrent release | - | LI |
| Switching capacity class of the circuit breaker H Dissipation Active power loss W Imaximum W Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Operating voltage V 690 Operating voltage 0 0 • with AC / at 50/60 Hz / Rated value V 690 Operating voltage 0 0 • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • Adjustable response value current 0 | | _ | |
| Dissipation Addive power loss W 10 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 100 Main circuit A 100 A 1.5 Operating voltage vith AC / at 50/60 Hz / Rated value V 690 690 Operating current at 40 °C / Rated value V 690 690 I at 40 °C / Rated value A 100 at 50 °C / Rated value A 100 at 65 °C / Rated value A 100 at 50 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value A 100 I at 65 °C / Rated value | | _ | |
| Active power loss W 10 Electricity Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Operating voltage V 690 Operating voltage • with AC / at 50/60 Hz / Rated value V 690 Operating current at 40 °C / Rated value A 100 • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 60 °C / Rated value A 100 • • at 70 °C / Rated value A 100 • • at 70 °C / Rated value O 0 • Number of NC contacts / for auxiliary contacts 0 0 Suitability System protection A Adjustable parameters A 12 Adjust | Switching capacity class of the circuit breaker | | п |
| • maximumW10ElectricityContinuous current / Rated value / maximumA160Continuous current / Rated valueA100Adjustable response value current / of the instantaneous short-circuit release / initial valueA1.5Main circuitA1.5Operating voltage • with AC / at 50/60 Hz / Rated valueV690Operating current • at 40 °C / Rated valueV690Operating current • at 60 °C / Rated valueA100• at 70 °C / Rated valueA100• at 70 °C / Rated value0ONumber of NC contacts / for auxiliary contacts0Number of NO contacts / for auxiliary contacts0SuitabilitySuitabilitySuitability for usesystem protectionAdjustable response value current • of I-trip / Full-scale valueA12Adjustable response value current / of the current- dependent overload release / initial valueA12Product detailsProduct detailsNoProduct detailsNoNo• undervoltage releaseNoNo | | | |
| Electricity A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Operating voltage v 690 Operating voltage V 690 Operating voltage A 100 • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value O Number of NC contacts / for auxiliary contacts 0 Number of NC contacts / for auxiliary contacts 0 0 Suitability Suitability Suitability Suitability Cull-scale value A 12 Adjustable param | Active power loss | | |
| Continuous current / Rated value / maximum A 160 Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Operating voltage V 690 Operating voltage V 690 • with AC / at 50/60 Hz / Rated value V 690 Operating voltage A 100 • at 40 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 Suitability Suitability Suitability Suitability Suitability A <td< td=""><td>• maximum</td><td>W</td><td>10</td></td<> | • maximum | W | 10 |
| Continuous current / Rated value A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Coperating voltage with AC / at 50/80 Hz / Rated value V 690 690 Operating current at 40 °C / Rated value A 100 at 60 °C / Rated value A 100 at 65 °C / Rated value A 100 • at 65 °C / Rated value A • at 65 °C / Rated value A • at 65 °C / Rated value A • at 70 °C / Rated value A • at 70 °C / Rated value A wildiary circuit Number of NC contacts / for auxillary contacts 0 Number of NO contacts / for auxillary contacts 0 Suitability Suitability Suitability Adjustable response value current • of 1-trip / Full-scale value <t< td=""><td>Electricity</td><td></td><td></td></t<> | Electricity | | |
| Adjustable response value current / of the instantaneous short-circuit release / initial value A 1.5 Main circuit Operating voltage • • with AC / at 50/60 Hz / Rated value V 690 Operating current A 100 • at 40 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 67 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 Number of NC contacts / for auxiliary contacts 0 0 Number of NO contacts / for auxiliary contacts 0 0 Suitability Suitability for use system protection Adjustable response value current A 12 • of 1-trip / Full-scale value A 12 Adjustable response value current / of the current- dependen | Continuous current / Rated value / maximum | А | 160 |
| Instantaneous short-circuit release / initial value Main circuit Operating voltage v • with AC / at 50/60 Hz / Rated value V • operating current | Continuous current / Rated value | A | 100 |
| Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value V 690 Operating current | Adjustable response value current / of the | A | 1.5 |
| Operating voltage v 690 Operating current | instantaneous short-circuit release / initial value | | |
| Operating voltage v 690 Operating current | Main circuit | | |
| Operating current A 100 • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts 0 Number of NC contacts / for auxiliary contacts 0 Suitability Suitability for use Suitability for use system protection Adjustable parameters A Adjustable response value current A • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value A 0.4 Product details Product component No • Trip indicator No No • undervoltage release No No | Operating voltage | | |
| • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 0 Suitability 0 system protection Adjustable parameters A 12 Adjustable response value current A 12 • of 1-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value A 0.4 Product component No No No • trip indicator No No No • undervoltage release No No No | • with AC / at 50/60 Hz / Rated value | V | 690 |
| e at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 • Auxiliary circuit 0 0 Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitability system protection Adjustable parameters A Adjustable response value current A • of I-trip / Full-scale value A • Adjustable response value current / of the current- A • dependent overload release / initial value A Product details No • undervoltage release No | Operating current | | |
| • at 60 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 65 °C / Rated value A 100 • at 70 °C / Rated value A 100 Auxiliary circuit A 100 Auxiliary circuit 0 0 Number of NC contacts / for auxiliary contacts 0 Suitability 0 0 Suitability for use system protection Adjustable parameters A 12 Adjustable response value current A 12 • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- A 0.4 ependent overload release / initial value A 12 Product details Volute component No • Trip indicator No No • undervoltage release No No | • at 40 °C / Rated value | А | 100 |
| • at 65 °C / Rated value A 100 • at 70 °C / Rated value A 100 Auxiliary circuit A 100 Number of NC contacts / for auxiliary contacts 0 0 Number of NO contacts / for auxiliary contacts 0 0 Suitability 0 0 Suitability Suitability for use system protection Adjustable parameters A 12 Adjustable response value current A 0.4 • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- A 0.4 ependent overload release / initial value No No Product details No No undervoltage release No No | ● at 50 °C / Rated value | А | 100 |
| • at 70 °C / Rated value A 100 Auxiliary circuit 0 Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 Suitability 0 Suitability system protection Adjustable parameters A Adjustable response value current A • of I-trip / Full-scale value A Adjustable response value current / of the current-dependent overload release / initial value A Product details No Product component No • display No • undervoltage release No | • at 60 °C / Rated value | А | 100 |
| Auxiliary circuit 0 Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 Suitability 0 Suitability Suitability Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current-dependent overload release / initial value A 0.4 Product details Product component No • display No No • undervoltage release No | ● at 65 °C / Rated value | А | 100 |
| Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 Suitability 0 Suitability system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- A 0.4 Product details Product component No • display No No • undervoltage release No No | • at 70 °C / Rated value | А | 100 |
| Number of NC contacts / for auxiliary contacts 0 Number of NO contacts / for auxiliary contacts 0 Suitability 0 Suitability system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- A 0.4 Product details Product component No • display No No • undervoltage release No No | Auxiliary circuit | | |
| Suitability Suitability for use system protection Adjustable parameters Adjustable response value current A • of I-trip / Full-scale value A Adjustable response value current / of the current- A dependent overload release / initial value A Product details Product component No • display No • undervoltage release No | | | 0 |
| Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- dependent overload release / initial value A 0.4 Product details No No • Trip indicator No No • display No No | Number of NO contacts / for auxiliary contacts | | 0 |
| Suitability for use system protection Adjustable parameters Adjustable response value current • of I-trip / Full-scale value A 12 Adjustable response value current / of the current- dependent overload release / initial value A 0.4 Product details No No • Trip indicator No No • display No No | Suitability | _ | |
| Adjustable parametersAdjustable response value current • of I-trip / Full-scale valueA12Adjustable response value current / of the current- dependent overload release / initial valueA0.4Product detailsProduct component • Trip indicator • display • undervoltage releaseNoNoNo | | - | system protection |
| Adjustable response value currentA12• of I-trip / Full-scale valueA12Adjustable response value current / of the current- dependent overload release / initial valueA0.4Product detailsProduct componentNo• Trip indicatorNo• displayNo• undervoltage releaseNo | - | | |
| • of I-trip / Full-scale valueA12Adjustable response value current / of the current- dependent overload release / initial valueA0.4Product detailsProduct componentNo• Trip indicatorNo• displayNo• undervoltage releaseNo | | | |
| Adjustable response value current / of the current- dependent overload release / initial value A 0.4 Product details Product component No • Trip indicator No • display No • undervoltage release No | | | |
| dependent overload release / initial value Product details Product component • Trip indicator • display • undervoltage release | | | |
| Product details Product component • Trip indicator • display • undervoltage release | | A | 0.4 |
| Product component No • Trip indicator No • display No • undervoltage release No | dependent overload release / Initial value | | |
| • Trip indicatorNo• displayNo• undervoltage releaseNo | | | |
| • display No • undervoltage release No | Product component | | |
| undervoltage release No | Trip indicator | | No |
| | ● display | | No |
| Product property | undervoltage release | | No |
| | Product property | | |

| for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof | | No |
|---|----|------------------------------|
| Product expansion / optional / motor drive | _ | Yes |
| Product function | | |
| Product function | | |
| Intrinsic device protection | | Yes |
| communication function | | No |
| Phase failure detection | | No |
| other measurement function | | No |
| Accessories | | |
| Manufacturer article number / of the supplied basic | | 3VA2110-6HL36-0AA0 |
| switch | | |
| Short circuit | | |
| Operational short-circuit current breaking capacity | | |
| (lcs) | | |
| • at 240 V / Rated value | kA | 110 |
| • at 415 V / Rated value | kA | 85 |
| • at 440 V / Rated value | kA | 85 |
| • at 500 V / Rated value | kA | 55 |
| • at 690 V / Rated value | kA | 2.5 |
| Maximum short-circuit current breaking capacity (Icu) | _ | |
| • at 240 V / Rated value | kA | 110 |
| ● at 415 V / Rated value | kA | 85 |
| • at 440 V / Rated value | kA | 85 |
| • at 500 V / Rated value | kA | 55 |
| • at 690 V / Rated value | kA | 2.5 |
| Short-circuit current making capacity (Icm) | | |
| • at 240 V / Rated value | kA | 242 |
| • at 415 V / Rated value | kA | 187 |
| • at 440 V / Rated value | kA | 187 |
| • at 500 V / Rated value | kA | 121 |
| ● at 690 V / Rated value | kA | 3.75 |
| Connections | | |
| Arrangement of electrical connectors / for main | | Front terminal |
| current circuit | | |
| Type of connectable conductor cross-section | | |
| • of the round conductor terminal / stranded | | 1 x (6-120 mm ²) |
| Type of electrical connection / for main current circuit | | Box terminal |
| Mechanical Design | | |
| Height | mm | 181 |

| Width | mm | 105 | | |
|--|----|--------------|------------------------------|----------------------|
| Depth | mm | 107 | | |
| Mounting type | | fixed mour | nting | |
| nvironmental conditions | | | | |
| Ambient temperature | | | | |
| during operation / minimum | °C | -25 | | |
| during operation / maximum | °C | 70 | | |
| • during storage / minimum | °C | -40 | | |
| during storage / maximum | °C | 80 | | |
| Certificates | | | | |
| Equipment marking | | | | |
| • acc. to DIN EN 61346-2 | | Q | | |
| • acc. to DIN EN 81346-2 | | Q | | |
| General Product Approval | E | MC | Declaration of Conformity | Shipping Approval |
| | 1[| <u>other</u> | EG-Konf. | |
| Shipping other Approval | | | | |

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Further information

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

other

Industry Mall (Online ordering system)

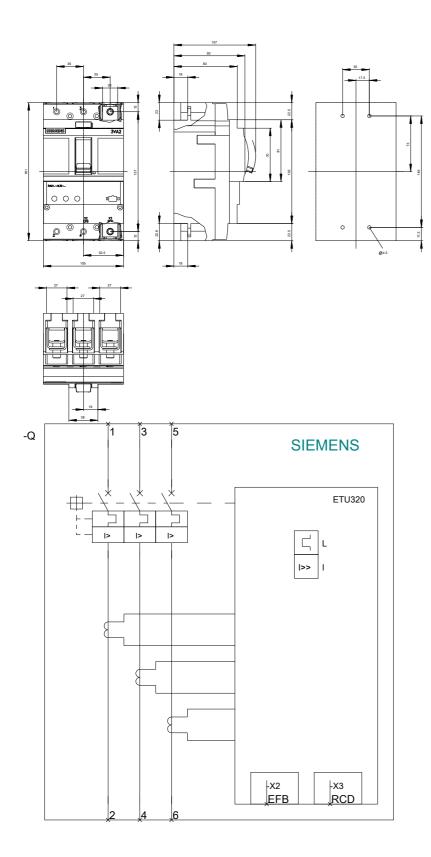
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21106HL360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21106HL360AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21106HL360AA0

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

Tender specifications http://ausschreibungstexte.siemens.com/tiplv



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