SIEMENS

## Data sheet 3VA2110-5KQ32-0AA0

CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3POLE, LINE PROTECTION ETU860, LSIG, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT,UPTO 160% GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8MS BUSBAR 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** | | Summation current formation L-conductor |
| **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** | | ETU860 |

| 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** | | 25 |
| **Electrical endurance (switching cycles)** | | |
| • at AC-1 / at 380/415 V / at 50/60 Hz | | 12 000 |
| **Total disconnection time / for G-tripping / with standard characteristic / initial value** | s | 0.05 |
| **Total disconnection time / for G-tripping / with standard characteristic / Full-scale value** | s | 0.8 |
| **circuit-breaker / Design** | | 3VA |
| **Mechanical service life (switching cycles) / typical** | | 20 000 |

| | | |
|---|---|---|
| **Voltage** | | |
| Insulation voltage / Rated value | V | 800 |
| **Protection class** | | |
| **Protection class IP** | | IP40 |
| Protection class IP / on the front | | IP40 |
| **Protective function of the overcurrent release** | | LSIG |
| **Switching capacity** | | |
| **Switching capacity class of the circuit breaker** | | M |
| **Dissipation** | | |
| **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 | 1.5 |
| **Main circuit** | | |
| **Operating voltage** | | |
| • with AC / at 50/60 Hz / Rated value | V | 690 |
| **Operating current** | | |
| • 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 70 °C / Rated value | A | 100 |
| **Auxiliary circuit** | | |
| **Number of NC contacts / for auxiliary contacts** | | 0 |
| **Number of NO contacts / for auxiliary contacts** | | 0 |
| **Suitability** | | |
| **Suitability for use** | | system protection |
| **Adjustable parameters** | | |
| **Adjustable response value current** | | |
| • for G-tripping / with I2t characteristic / initial value | A | 0.2 |
| • for G-tripping / with I2t characteristic / Full-scale value | A | 1 |
| • for G-tripping / with standard characteristic / initial value | A | 0.2 |
| • for G-tripping / with standard characteristic / Full-scale value | A | 1 |

| | | |
|---|---|---|
| • of I-trip / Full-scale value | A | 12 |
| • of the short-time delayed short-circuit release / initial value | A | 0.6 |
| • of the short-time delayed short-circuit release / Full-scale value | A | 10 |
| • of S-trip / with standard characteristic / initial value | A | 0.6 |
| • of S-trip / with standard characteristic / Full-scale value | A | 10 |
| **Adjustable delay time** | | |
| • for G-tripping / with I2t characteristic / initial value | s | 0.05 |
| • for G-tripping / with I2t characteristic / Full-scale value | s | 0.8 |
| • of S-trip / with I2t characteristic / initial value | s | 0.05 |
| • of S-trip / with I2t characteristic / Full-scale value | s | 0.5 |
| • of S-trip / with standard characteristic / initial value | s | 0.05 |
| • of S-trip / with standard characteristic / Full-scale value | s | 0.5 |
| **Adjustable response value current / of the current-dependent overload release / initial value** | A | 0.4 |

## Product details

| | | |
|---|---|---|
| **Product component** | | |
| • Trip indicator | | No |
| • display | | Yes |
| • undervoltage release | | No |
| **Product property** | | |
| • of the circuit breaker with tripping unit / Tripping characteristic adjustable | | Yes |
| • for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof | | Yes |
| Product expansion / optional / motor drive | | Yes |

## Product function

| | | |
|---|---|---|
| **Product function** | | |
| • Intrinsic device protection | | Yes |
| • communication function | | Yes |
| • Phase failure detection | | No |
| • other measurement function | | Yes |

## Accessories

| | | |
|---|---|---|
| **Manufacturer article number / of the supplied basic switch** | | 3VA2110-5KQ32-0AA0 |

## Short circuit

| | | |
|---|---|---|
| **Operational short-circuit current breaking capacity (Ics)** | | |
| • at 240 V / Rated value | kA | 85 |
| • at 415 V / Rated value | kA | 55 |
| • at 440 V / Rated value | kA | 55 |
| • at 500 V / Rated value | kA | 36 |
| • at 690 V / Rated value | kA | 2.5 |
| **Maximum short-circuit current breaking capacity (Icu)** | | |
| • at 240 V / Rated value | kA | 85 |
| • at 415 V / Rated value | kA | 55 |
| • at 440 V / Rated value | kA | 55 |
| • at 500 V / Rated value | kA | 36 |
| • at 690 V / Rated value | kA | 2.5 |
| **Short-circuit current making capacity (Icm)** | | |
| • at 240 V / Rated value | kA | 187 |
| • at 415 V / Rated value | kA | 121 |
| • at 440 V / Rated value | kA | 121 |
| • at 500 V / Rated value | kA | 79 |
| • at 690 V / Rated value | kA | 3.75 |

## Connections

| | | |
|---|---|---|
| Arrangement of electrical connectors / for main current circuit | | Front terminal |
| Type of connectable conductor cross-section | | |
| • for flat-bar terminal connection / minimum | | 13 x 1 mm |
| • for flat-bar terminal connection / maximum | | 25 x 8.5 |
| Type of electrical connection / for main current circuit | | Lug terminal |

## Mechanical Design

| | | |
|---|---|---|
| **Height** | mm | 181 |
| **Width** | mm | 105 |
| **Depth** | mm | 107 |
| **Mounting type** | | fixed mounting |

## Environmental 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 | | | EMC | Declaration of Conformity | Shipping Approval |
|---|---|---|---|---|---|
| CCC | VDE | EAC | other | EG-Konf. | DNV |

| Shipping Approval | other |
|---|---|
| GL | other |

## Further information

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

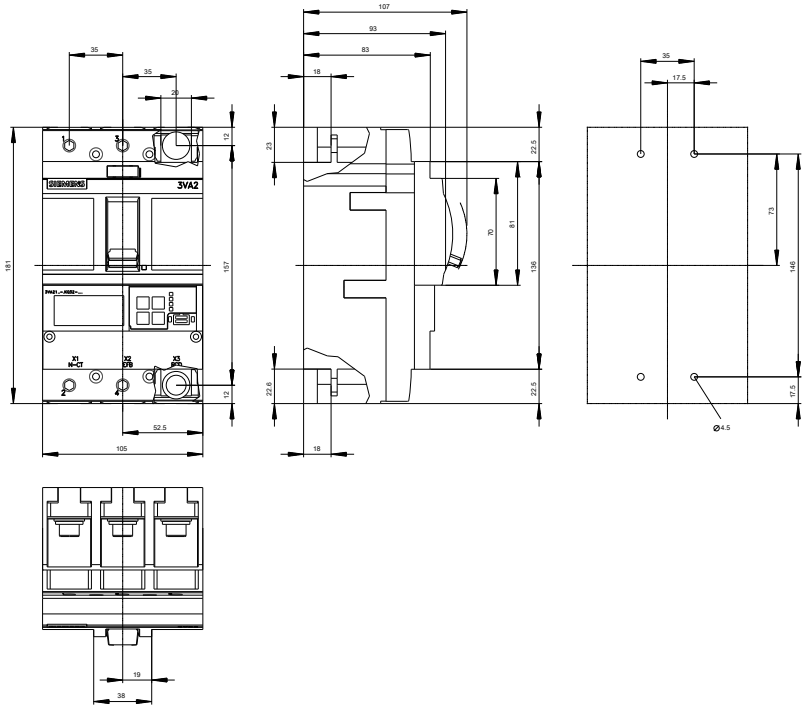
**Industry Mall (Online ordering system)**
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21105KQ320AA0

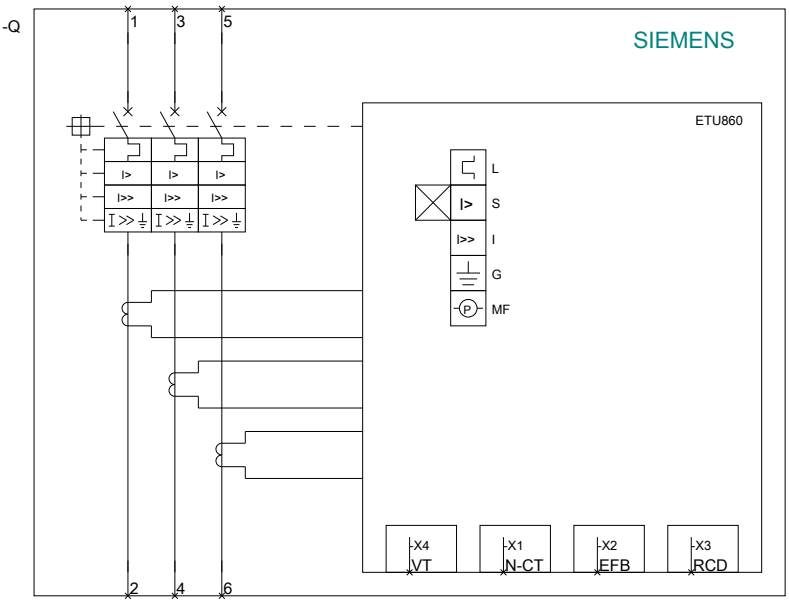
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
http://support.automation.siemens.com/WW/view/en/3VA21105KQ320AA0/all

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21105KQ320AA0

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

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



**last modified:** 11.03.2015