Data sheet



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3POLE, LINE PROTECTION ETU860, LSIG, IN=25A OVERLOAD PROTECTION IR=10A ...25A 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 | | | |
| Switching capacity class of the circuit breaker | | IVI | | | |
| Dissipation | | | | | |
| Active power loss | | | | | |
| • maximum | W | 0.6 | | | |
| Electricity | | | | | |
| Continuous current / Rated value / maximum | Α | 160 | | | |
| Continuous current / Rated value | Α | 25 | | | |
| Adjustable response value current / of the | Α | 1.5 | | | |
| instantaneous short-circuit release / initial value | | | | | |
| Main circuit | | | | | |
| Operating voltage | | | | | |
| with AC / at 50/60 Hz / Rated value | V | 690 | | | |
| Operating current | | | | | |
| • at 40 °C / Rated value | Α | 25 | | | |
| • at 50 °C / Rated value | Α | 25 | | | |
| • at 60 °C / Rated value | Α | 25 | | | |
| • at 65 °C / Rated value | Α | 25 | | | |
| • at 70 °C / Rated value | Α | 25 | | | |
| Auxiliary circuit | | | | | |
| Number of NC contacts / for auxiliary contacts | | 0 | | | |
| Number of NO contacts / for auxiliary contacts | | 0 | | | |
| · | | | | | |
| Suitability Suitability for use | | system protection | | | |
| Cultability for use | | System protection | | | |
| Adjustable parameters | | | | | |
| Adjustable response value current | | | | | |
| for G-tripping / with I2t characteristic / initial value | Α | 0.6 | | | |
| | Α | 1 | | | |
| for G-tripping / with I2t characteristic / Full-scale value | ^ | | | | |
| for G-tripping / with standard characteristic / | А | 0.6 | | | |
| initial value | , , | | | | |
| for G-tripping / with standard characteristic / | Α | 1 | | | |
| Full-scale value | | | | | |
| | | | | | |

| • of I-trip / Full-scale value | Α | 12 |
|---|---|------|
| of the short-time delayed short-circuit release / initial value | А | 0.6 |
| of the short-time delayed short-circuit release / Full-scale value | Α | 10 |
| of S-trip / with standard characteristic / initial value | Α | 0.6 |
| of S-trip / with standard characteristic / Full- scale value | Α | 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 |
| | | |

Accessories

• Phase failure detection

• other measurement function

No Yes

| Manufacturer article number / of the supplied basic switch | | 3VA2125-5KQ32-0AA0 |
|--|----|--------------------|
| 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 (lcm) | | |
| ● 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 | | Front terminal |
| current circuit | | |
| Type of connectable conductor cross-section | | 12 v 1 mm |
| • for flat-bar terminal connection / minimum | | 13 x 1 mm |
| for flat-bar terminal connection / maximum Type of electrical connection / for main current circuit | | 25 x 8.5 |
| | | Lug terminal |
| Mechanical Design | | |
| Height | mm | 181 |
| Width | mm | 105 107 |
| Depth Mounting type | mm | 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 |
| daming otorago / maximum | | |

Certificates **Equipment marking** • acc. to DIN EN 61346-2 Q Q • acc. to DIN EN 81346-2 **General Product Approval EMC Declaration of Shipping** Conformity **Approval** other

Shipping other **Approval**



other

GL

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/3VA21255KQ320AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21255KQ320AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

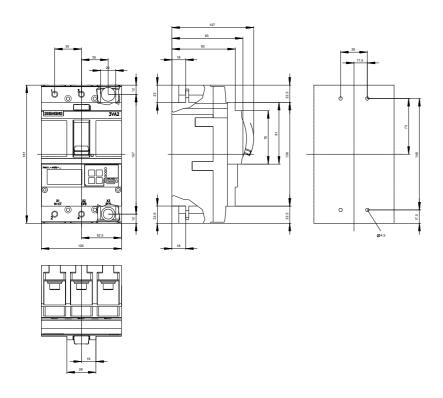
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21255KQ320AA0

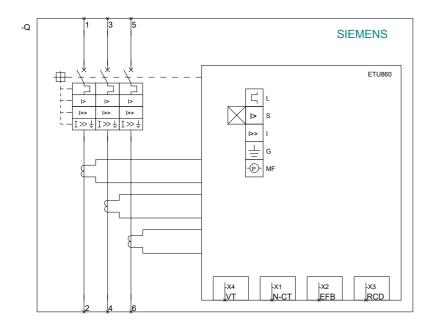
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





last modified: 11.03.2015