

CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 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 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 | 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 |

| Insulation voltage / Rated value V 800 Protection class Protection class IP IP40 Protection class IP IP40 Protective function of the overcurrent release I.SIG Switching capacity Switching capacity class of the circuit breaker C Dissipation Active power loss • maximum W 10 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value / maximum A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value A 100 Operating current • at 40 °C / Rated value A 100 • at 50 °C / Rated value A 100 • at 60 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Adjustable response value current • for G-tripping / with 12t characteristic / initial value • for G-tripping / with standard characteristic / Full-scale value • for G-tripping / with standard characteristic / A 0.2 | Voltage | | |
|--|---|---|-------------------|
| Protection class IP Protection class IP / on the front Protective function of the overcurrent release Switching capacity Switching capacity class of the circuit breaker C Dissipation Active power loss • maximum W 10 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value / maximum A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • | | V | 800 |
| Protection class IP Protection class IP / on the front Protective function of the overcurrent release Switching capacity Switching capacity class of the circuit breaker C Dissipation Active power loss • maximum W 10 Electricity Continuous current / Rated value / maximum A 160 Continuous current / Rated value / maximum A 100 Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 40 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • | Protection class | | |
| Protective function of the overcurrent release Switching capacity Switching capacity Switching capacity class of the circuit breaker C 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 67 °C / Rated value • at 70 °C / Rated val | | | IP40 |
| Switching capacity class of the circuit breaker C 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 Main circuit 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 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 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Output Adjustable parameters Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value | | | |
| Switching capacity class of the circuit breaker C 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 | | | LSIG |
| Switching capacity class of the circuit breaker C 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value • at 40 °C / Rated value • at 50 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 | | | |
| Dissipation Active power loss • maximum M | | | C |
| Active power loss | Switching capacity class of the circuit breaker | | C |
| Percenticity 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 Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • for G-tripping / with 12t characteristic / initial value • for G-tripping / with 12t characteristic / Full-scale value • for G-tripping / with 12t characteristic / Full-scale value | | | |
| Electricity Continuous current / Rated value / maximum | Active power loss | | |
| Continuous current / Rated value / maximum | • maximum | W | 10 |
| Continuous current / Rated value Adjustable response value current / of the 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 • at 50 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value • for G - In auxiliary contacts Number of NO contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitable parameters Adjustable parameters Adjustable response value current • for G-tripping / with 12t characteristic / initial value • for G-tripping / with 12t characteristic / Full-scale value • for G-tripping / with 12t characteristic / Full-scale value | Electricity | | |
| Adjustable response value current / of the instantaneous short-circuit release / initial value Main circuit | | Α | 160 |
| 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 • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability for use Adjustable parameters Adjustable parameters Adjustable response value current • for G-tripping / with 12t characteristic / initial value • for G-tripping / with 12t characteristic / Full-scale value • for G-tripping / with 12t characteristic / Full-scale value | Continuous current / Rated value | А | 100 |
| Main circuit Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 100 • at 70 °C / Rated value • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with 12t characteristic / initial value • for G-tripping / with 12t characteristic / Full-scale value • for G-tripping / with 12t characteristic / Full-scale value | | Α | 1.5 |
| Operating voltage • with AC / at 50/60 Hz / Rated value Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value A 100 • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with 12t characteristic / initial value • for G-tripping / with 12t characteristic / Full-scale value • for G-tripping / with 12t characteristic / Full-scale value | instantaneous short-circuit release / initial value | | |
| with AC / at 50/60 Hz / Rated value Operating current at 40 °C / Rated value at 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 65 °C / Rated value at 670 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability or use Adjustable parameters Adjustable response value current of or G-tripping / with 12t characteristic / initial value of or G-tripping / with 12t characteristic / Full-scale value or for G-tripping / with 12t characteristic / Full-scale value A 100 A 10 | Main circuit | | |
| Operating current • at 40 °C / Rated value • at 50 °C / Rated value • at 60 °C / Rated value • at 65 °C / Rated value • at 65 °C / Rated value • at 70 °C / Rated value • at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current • for G-tripping / with l2t characteristic / initial value • for G-tripping / with l2t characteristic / Full-scale value | Operating voltage | | |
| at 40 °C / Rated value at 50 °C / Rated value at 60 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability Suitable parameters Adjustable parameters Adjustable response value current for G-tripping / with 12t characteristic / initial value for G-tripping / with 12t characteristic / Full-scale value for G-tripping / with 12t characteristic / Full-scale value at 100 A 100 A 100 A 100 A 100 A 100 Auxiliary circuit O 0 Suitability Suitability Suitability A 0.2 Value for G-tripping / with 12t characteristic / Full-scale value | • with AC / at 50/60 Hz / Rated value | V | 690 |
| at 50 °C / Rated value at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value at 70 °C / Rated value At 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current of or G-tripping / with 12t characteristic / initial value of or G-tripping / with 12t characteristic / Full-scale value A 100 Auxiliary circuit O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Operating current | | |
| at 60 °C / Rated value at 65 °C / Rated value at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O Suitability Suitability Suitability for use Adjustable parameters Adjustable response value current of or G-tripping / with 12t characteristic / initial value for G-tripping / with 12t characteristic / Full-scale value for G-tripping / with 12t characteristic / Full-scale value 100 A 100 A 100 A 100 D 2 Suitability Suitability A 0.2 | ● at 40 °C / Rated value | Α | 100 |
| at 65 °C / Rated value at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability Suitabile parameters Adjustable parameters Adjustable response value current a for G-tripping / with 12t characteristic / initial value for G-tripping / with 12t characteristic / Full-scale value a 100 A 100 A 100 D 2 Suitability Suitability Suitability for use System protection | ● at 50 °C / Rated value | Α | 100 |
| at 70 °C / Rated value A 100 Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 0 Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value | • at 60 °C / Rated value | Α | 100 |
| Auxiliary circuit Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value | • at 65 °C / Rated value | Α | 100 |
| Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value | • at 70 °C / Rated value | Α | 100 |
| Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Suitability Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale value | Auxiliary circuit | | |
| Suitability for use system protection Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial A value • for G-tripping / with I2t characteristic / Full-scale A 1 | | | 0 |
| Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale A 1 | Number of NO contacts / for auxiliary contacts | | 0 |
| Suitability for use Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial value • for G-tripping / with I2t characteristic / Full-scale value • for G-tripping / with I2t characteristic / Full-scale A 1 | Cuitability | | |
| Adjustable parameters Adjustable response value current • for G-tripping / with I2t characteristic / initial A 0.2 value • for G-tripping / with I2t characteristic / Full-scale A 1 value | | | system protection |
| Adjustable response value current • for G-tripping / with I2t characteristic / initial A 0.2 value • for G-tripping / with I2t characteristic / Full-scale A 1 value | · | | |
| for G-tripping / with I2t characteristic / initial A value for G-tripping / with I2t characteristic / Full-scale value | | | |
| value ● for G-tripping / with I2t characteristic / Full-scale A 1 value | | ۸ | 0.2 |
| value | | A | U.Z |
| • for G-tripping / with standard characteristic / A 0.2 | | Α | 1 |
| initial value | for G-tripping / with standard characteristic / initial value | А | 0.2 |
| • for G-tripping / with standard characteristic / A 1 Full-scale value | • for G-tripping / with standard characteristic / | А | 1 |

| ● of I-trip / Full-scale value | Α | 12 |
|---|---|------|
| of the short-time delayed short-circuit release / initial value | Α | 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 | Α | 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 |
| | | |

Accessories

• other measurement function

Yes

| Manufacturer article number / of the supplied basic switch | | 3VA2110-7KQ36-0AA0 |
|---|----|--------------------|
| Short circuit | | |
| Operational short-circuit current breaking capacity | | |
| (Ics) | | |
| • at 240 V / Rated value | kA | 150 |
| • at 415 V / Rated value | kA | 110 |
| • at 440 V / Rated value | kA | 110 |
| ● at 500 V / Rated value | kA | 85 |
| ● at 690 V / Rated value | kA | 2.5 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| ● at 240 V / Rated value | kA | 150 |
| ● at 415 V / Rated value | kA | 110 |
| ● at 440 V / Rated value | kA | 110 |
| • at 500 V / Rated value | kA | 85 |
| • at 690 V / Rated value | kA | 2.5 |
| Short-circuit current making capacity (lcm) | | |
| • at 240 V / Rated value | kA | 330 |
| • at 415 V / Rated value | kA | 242 |
| • at 440 V / Rated value | kA | 242 |
| • at 500 V / Rated value | kA | 187 |
| • 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 | | |
| of the round conductor terminal / stranded | | 1 x (6-120 mm²) |
| Type of electrical connection / for main current circuit | | Box 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

• acc. to DIN EN 81346-2

Q

Q

General Product Approval

EMC

Declaration of Conformity

Shipping 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/3VA21107KQ360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21107KQ360AA0/all

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

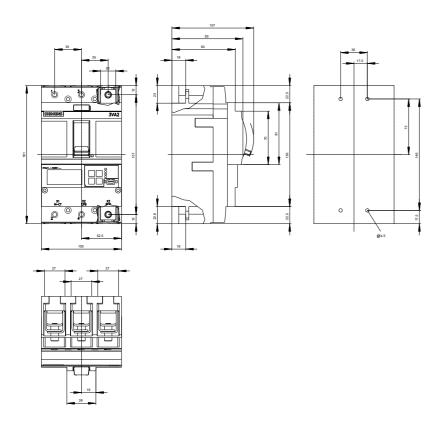
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21107KQ360AA0

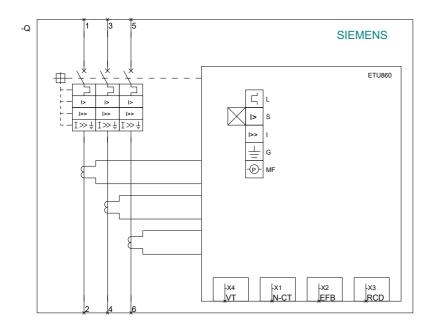
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://ausschreibungstexte.siemens.com/tiplv





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