SIEMENS

Data sheet

3VA1120-6EF46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=20A OVERLOAD PROTECTION IR=14A ...20A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED CABLE CONNECTION

Figure similar

| Model | | | | | |
|---|---|-----------------------------|--|--|--|
| product brand name | | SENTRON | | | |
| Product designation | | Molded case circuit breaker | | | |
| Design of the product | | Line protection | | | |
| Product variations | | General Applications | | | |
| Ground fault monitoring version | | Without | | | |
| Design of the auxiliary release | | Without auxiliary release | | | |
| 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 | | TM240 | | | |
| General technical data | | | | | |
| Number of poles | | 4 | | | |
| Trip class / of the L-trip / with I2t characteristic / initial value | | 1 | | | |
| Trip class / of the L-trip / with I2t characteristic / Full- scale value | | 1 | | | |
| Electrical endurance (switching cycles) | | | | | |
| • at AC-1 / at 380/415 V / at 50/60 Hz | | 8 000 | | | |
| circuit-breaker / Design | | 3VA | | | |
| Mechanical service life (switching cycles) / typical | | 15 000 | | | |
| 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 | | LI |
| Cuitching consoit | _ | |
| Switching capacity Switching capacity class of the circuit breaker | _ | Н |
| Switching capacity class of the circuit breaker | | |
| Dissipation | | |
| Active power loss | | |
| • maximum | W | 12 |
| Electricity | | |
| Continuous current / Rated value / maximum | А | 160 |
| Continuous current / Rated value | А | 20 |
| Adjustable response value current | | |
| of the current-dependent overload release / Full-scale value | A | 1 |
| of the instantaneous short-circuit release / initial value | A | 5 |
| Main circuit | | |
| Operating voltage | | |
| with AC / at 50/60 Hz / Rated value | V | 690 |
| for DC / Rated value | V | 600 |
| Operating current | | |
| • at 40 °C / Rated value | А | 20 |
| • at 50 °C / Rated value | А | 20 |
| • at 55 °C / Rated value | А | 20 |
| ● at 60 °C / Rated value | А | 19 |
| ● at 65 °C / Rated value | А | 19 |
| • at 70 °C / Rated value | А | 19 |
| Auxiliary circuit | | |
| Number of CO contacts / for auxiliary contacts | | 0 |
| Suitability | | |
| Suitability for use | | system protection |
| Adjustable parameters | | |
| Adjustable response value current | | |
| • of I-trip / Full-scale value | А | 10 |
| for N-conductor protection / initial value | А | 0 |
| for N-conductor protection / Full-scale value | А | 0 |
| Adjustable response value current / of the current- dependent overload release / initial value | A | 0.7 |
| Product details | | |
| Product details Product component | | |
| | | |

| Trip indicator | | No |
|---|----|--------------------|
| • display | | No |
| Voltage trigger | | No |
| undervoltage release | | No |
| undervoltage release with leading contact | | 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 | | 3VA1120-6EF46-0AA0 |
| switch | | |
| Short circuit | | |
| Operational short-circuit current breaking capacity (Ics) | | |
| • at 240 V / Rated value | kA | 100 |
| • at 415 V / Rated value | kA | 70 |
| • at 440 V / Rated value | kA | 36 |
| • at 500 V / Rated value | kA | 15 |
| • at 690 V / Rated value | kA | 5 |
| Maximum short-circuit current breaking capacity (Icu) | - | |
| • at 240 V / Rated value | kA | 100 |
| • at 415 V / Rated value | kA | 70 |
| • at 440 V / Rated value | kA | 36 |
| • at 500 V / Rated value | kA | 20 |
| • at 690 V / Rated value | kA | 10 |
| Short-circuit current making capacity (Icm) | - | |
| • at 240 V / Rated value | kA | 220 |
| • at 415 V / Rated value | kA | 154 |
| • at 690 V / Rated value | kA | 17 |
| Connections | | |
| Arrangement of electrical connectors / for main | | Front terminal |
| current circuit | | |
| | | |

Type of connectable conductor cross-section

| • of the round co | onductor terminal / str | randed | | 1 x (1.5 - 70 mm²) | |
|--------------------------------------|-------------------------|---------------------------|----|--------------------|-------|
| Type of electrical co | nnection / for main cu | urrent circuit | | Box terminal | |
| Mechanical Design | | | | | |
| Height | | | mm | 130 | |
| Width | | | mm | 101.6 | |
| Depth | | | mm | 70 | |
| Mounting type | | | | fixed mounting | |
| Environmental conc | litions | | | | |
| Ambient temperature | e | | | | |
| during operation | on / minimum | | °C | -25 | |
| during operation | on / maximum | | °C | 70 | |
| during storage | / minimum | | °C | -40 | |
| during storage | / maximum | | °C | 80 | |
| Certificates | | | | | |
| Equipment marking | | | | | |
| acc. to DIN EN | l 61346-2 | | | Q | |
| acc. to DIN EN | V 81346-2 | | | Q | |
| General Product Approval | EMC | Declaration Conformity | | pping Approval | other |
| EHC | other | EG-Konf. | | | other |

Further information

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

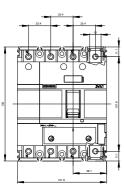
Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11206EF460AA0

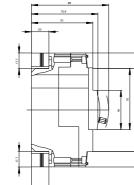
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11206EF460AA0/all

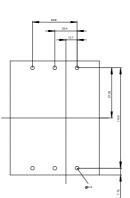
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11206EF460AA0

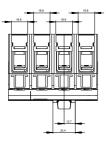
CAx-Online-Generator http://www.siemens.com/cax

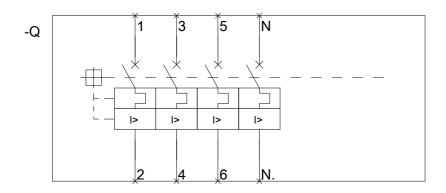
Tender specifications http://ausschreibungstexte.siemens.com/tiplv











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