## **SIEMENS**

## Data sheet

## 3VA2440-7KQ42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4-POLE, LINE PROTECTION ETU860, LSIG, IN=400A OVERLOAD PROTECTION IR=160A ...400A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..15X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) GROUND-FAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,05-0,8MS BUSBAR CONNECTION

Figure similar

| 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 + N 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   |   | 4      |
| 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  |   | 4 000  |
| 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  |   | 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                     |     | LSIG              |
|  |     |                   |
| Switching capacity Switching capacity class of the circuit breaker |     | C                 |
| Switching capacity class of the circuit breaker                    |     | C                 |
| Dissipation  |     |                   |
| Active power loss  |     |                   |
| • maximum  | W   | 70                |
| Electricity  |     |                   |
| Continuous current / Rated value / maximum                         | А   | 630               |
| Continuous current / Rated value                                   | Α   | 400               |
| 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   | 400               |
| ● at 50 °C / Rated value   | Α   | 400               |
| ● at 60 °C / Rated value   | Α   | 380               |
| ● at 65 °C / Rated value   | Α   | 368               |
| ● at 70 °C / Rated value   | Α   | 352               |
| 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                 | Α   | 0.2               |
| value  | , . | 0.2               |
| for G-tripping / with I2t characteristic / Full-scale              | Α   | 1                 |
| value  |     |                   |
| • for G-tripping / with standard characteristic /                  | Α   | 0.2               |
| initial value  |     |                   |
| • for G-tripping / with standard characteristic /                  | Α   | 1                 |
| Full-scale value   |     |                   |

| ● of I-trip / Full-scale value  | Α | 15   |
|---|---|------|
| <ul> <li>of the short-time delayed short-circuit release /<br/>initial value</li> </ul>                           | Α | 0.6  |
| <ul> <li>of the short-time delayed short-circuit release /<br/>Full-scale value</li> </ul>                        | Α | 10   |
| <ul> <li>of S-trip / with standard characteristic / initial<br/>value</li> </ul>                                  | Α | 0.6  |
| <ul> <li>of S-trip / with standard characteristic / Full-<br/>scale value</li> </ul>                              | Α | 10   |
| • for N-conductor protection / initial value  | Α | 0.2  |
| • for N-conductor protection / Full-scale value   | Α | 1    |
| Adjustable delay time   |   |      |
| <ul> <li>for G-tripping / with I2t characteristic / initial<br/>value</li> </ul>                                  | S | 0.05 |
| <ul> <li>for G-tripping / with I2t characteristic / Full-scale<br/>value</li> </ul>                               | S | 0.8  |
| • of S-trip / with I2t characteristic / initial value   | s | 0.05 |
| <ul> <li>of S-trip / with I2t characteristic / Full-scale<br/>value</li> </ul>                                    | S | 0.5  |
| <ul> <li>of S-trip / with standard characteristic / initial<br/>value</li> </ul>                                  | S | 0.05 |
| <ul> <li>of S-trip / with standard characteristic / Full-<br/>scale value</li> </ul>                              | S | 0.5  |
| Adjustable response value current / of the current-   | Α | 0.4  |
| dependent overload release / initial value  |   |      |
| Product details   |   |      |
| Product component   |   |      |
| Trip indicator  |   | No   |
| • display   |   | Yes  |
| undervoltage release  |   | No   |
| Product property  |   |      |
| of the circuit breaker with tripping unit / Tripping characteristic adjustable                                    |   | No   |
| <ul> <li>for neutral conductors /<br/>upgradeable/retrofittable / Short-circuit and<br/>overload proof</li> </ul> |   | No   |
| 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  |
| outer modest entertained of   |   |      |

| Accessories  |    |                    |
|--|----|--------------------|
| Manufacturer article number / of the supplied basic            |    | 3VA2440-7KQ42-0AA0 |
| switch   |    |                    |
| Short circuit  |    |                    |
| Operational short-circuit current breaking capacity            |    |                    |
| (Ics)  |    |                    |
| • at 240 V / Rated value                                       | kA | 150                |
| ● at 415 V / Rated value                                       | kA | 110                |
| • at 690 V / Rated value                                       | kA | 6                  |
| Maximum short-circuit current breaking capacity (Icu)          |    |                    |
| • at 240 V / Rated value                                       | kA | 150                |
| • at 415 V / Rated value                                       | kA | 110                |
| • at 690 V / Rated value                                       | kA | 6                  |
| Short-circuit current making capacity (lcm)                    |    |                    |
| • at 240 V / Rated value                                       | kA | 330                |
| • at 415 V / Rated value                                       | kA | 242                |
| • at 690 V / Rated value                                       | kA | 9                  |
| Connections  |    |                    |
| Arrangement of electrical connectors / for main                |    | Front terminal     |
| current circuit  |    |                    |
| Type of connectable conductor cross-section                    |    |                    |
| <ul> <li>for flat-bar terminal connection / minimum</li> </ul> |    | 20 x 1             |
| <ul> <li>for flat-bar terminal connection / maximum</li> </ul> |    | 35 x 10            |
| Type of electrical connection / for main current circuit       |    | Lug terminal       |
| Mechanical Design  |    |                    |
| Height   | mm | 248                |
| Width  | mm | 184                |
| Depth  | mm | 137                |
| Mounting type  |    | fixed mounting     |
| Environmental conditions                                       |    |                    |
| Ambient temperature  |    |                    |
| <ul><li>during operation / minimum</li></ul>                   | °C | -25                |
| <ul><li>during operation / maximum</li></ul>                   | °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 | other |
|--------------------------|-----|----------------|-------|
|                          |     | Conformity     |       |





other



other

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
<a href="https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA24407KQ420AA0">https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA24407KQ420AA0</a>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3VA24407KQ420AA0/all

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

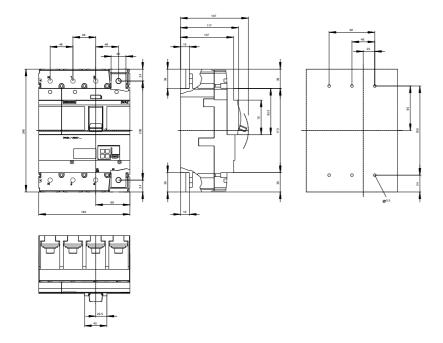
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA24407KQ420AA0

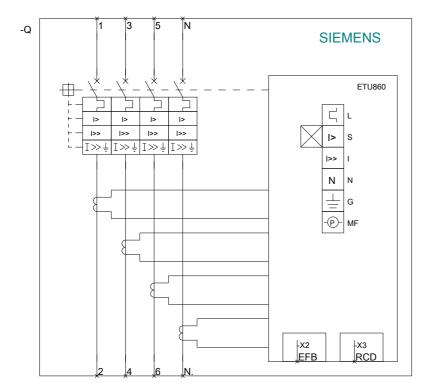
**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv





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