# **SIEMENS**

## **Datasheet**

## 3VA1112-4EE46-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 4-POLE, LINE PROTECTION TM220, ATFM, IN=125A OVERLOAD PROTECTION IR=87,5A ...125A SHORT CIRCUIT PROTECTION II=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           | TM220                       |  |  |  |  |

| 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   |   |                   |
|--|---|-------------------|
| Protective function of the overcurrent release                                       |   | LI                |
| Switching capacity   |   |                   |
| Switching capacity class of the circuit breaker                                      |   | S                 |
|  |   |                   |
| Dissipation  |   |                   |
| Active power loss  |   |                   |
| • maximum  | W | 23.2              |
| Electricity  |   |                   |
| Operating current / at 45 °C / Rated value   | А | 125               |
| Continuous current / Rated value / maximum   | Α | 160               |
| Continuous current   |   |                   |
| Rated value  | Α | 125               |
| Adjustable response value current  |   |                   |
| <ul> <li>of the current-dependent overload release /<br/>Full-scale value</li> </ul> | Α | 1                 |
| • of the instantaneous short-circuit release / initial value                         | Α | 10                |
| Net weight   | g | 1 200             |
| 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   | Α | 125               |
| • at 50 °C / Rated value   | Α | 125               |
| ● at 55 °C / Rated value   | Α | 122               |
| • at 60 °C / Rated value   | Α | 120               |
| • at 65 °C / Rated value   | Α | 117               |
| • at 70 °C / Rated value   | Α | 114               |
| 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   | Α | 10                |
| • for N-conductor protection / initial value   | Α | 0                 |
| • for N-conductor protection / Full-scale value                                      | Α | 0                 |

| Adjustable response value current / of the current-<br>dependent overload release / initial value                 | Α  | 0.7                |
|---|----|--------------------|
| Appearance  |    |                    |
| Product details   |    |                    |
| Product component   |    |                    |
| Trip indicator  |    | No                 |
| • display   |    | No                 |
| <ul> <li>Voltage trigger</li> </ul>   |    | No                 |
| <ul> <li>undervoltage release</li> </ul>  |    | No                 |
| <ul> <li>undervoltage release with leading contact</li> </ul>   |    | No                 |
| Product property  |    |                    |
| <ul> <li>for neutral conductors /<br/>upgradeable/retrofittable / Short-circuit and<br/>overload proof</li> </ul> |    | No                 |
| Product expansion   |    |                    |
| <ul><li>optional</li></ul>  |    |                    |
| — motor drive   |    | Yes                |
| Product function  |    |                    |
| Product function  |    |                    |
| Intrinsic device protection   |    | Yes                |
| • communication function  |    | No                 |
| Phase failure detection   |    | No                 |
| <ul> <li>other measurement function</li> </ul>  |    | No                 |
| Accessories   |    |                    |
| Manufacturer article number / of the supplied basic switch  |    | 3VA1112-4EE46-0AA0 |
| Short circuit   |    |                    |
| Operational short-circuit current breaking capacity   |    |                    |
| (Ics)   | Lα | EE                 |
| at 240 V / Rated value  | kA | 55                 |
| • at 415 V / Rated value  | kA | 36                 |
| • at 440 V / Rated value  | kA | 25                 |
| at 500 V / Rated value  | kA | 15                 |
| at 690 V / Rated value  | kA | 5                  |
| Maximum short-circuit current breaking capacity (Icu)   | Lα | EE                 |
| at 240 V / Rated value  | kA | 55                 |
| at 415 V / Rated value  | kA | 36                 |
| • at 440 V / Rated value  | kA | 25                 |
| at 500 V / Rated value  | kA | 16                 |
| at 690 V / Rated value  | kA | 7                  |
| Short-circuit current making capacity (lcm)   |    |                    |

| at 240 V / Rated value   | kA | 121  |
|--------------------------|----|------|
| • at 415 V / Rated value | kA | 75.6 |
| • at 690 V / Rated value | kA | 7.5  |

| 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 (1.5 - 70 mm²) |  |  |
| Design of the electrical connection          |  |                    |  |  |
| • for main current circuit                   |  | Box terminal       |  |  |
|  |  |                    |  |  |

| Mechanical Design |    |                |  |  |
|-------------------|----|----------------|--|--|
| Height            | mm | 130            |  |  |
| Width             | mm | 101.6          |  |  |
| Depth             | mm | 70             |  |  |
| 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  |  |  |
| <ul><li>during storage / minimum</li></ul>   | °C | -40 |  |  |
| <ul><li>during storage / maximum</li></ul>   | °C | 80  |  |  |

|   | Certificates             |   |   |  |  |
|---|--------------------------|---|---|--|--|
| _ | Reference code           |   |   |  |  |
|   | ● acc. to DIN EN 61346-2 |   | Q |  |  |
|   | ● acc. to DIN EN 81346-2 |   | Q |  |  |
|   |                          | _ |   |  |  |

| Product Conformity Approval Approval | General  | EMC | Declaration of | Shipping | other |
|--------------------------------------|----------|-----|----------------|----------|-------|
| Approval                             | Product  |     | Conformity     | Approval |       |
|                                      | Approval |     |                |          |       |



other





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/3VA11124EE460AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA11124EE460AA0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA11124EE460AA0

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

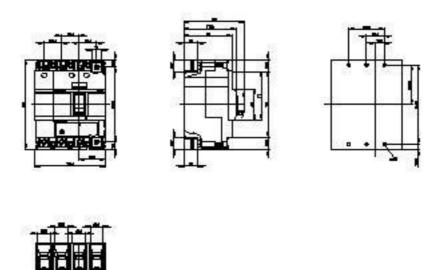


Figure similar

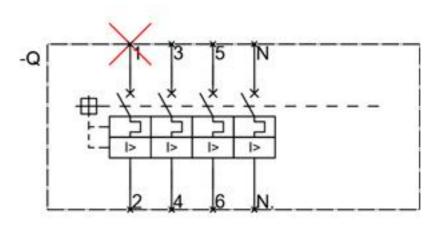


Figure similar

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