# **SIEMENS**

## Data sheet

## 3VA2125-8KP42-0AA0



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS L ICU=150KA @ 415 V 4POLE, LINE PROTECTION ETU850, LSI, IN=25A OVERLOAD PROTECTION IR=10A ...25A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 160%) 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             | Without                     |
| 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           | ETU850                      |
| General technical data                      |                             |

| 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                                  | 12 000 |
| circuit-breaker / Design  | 3VA    |
| Mechanical service life (switching cycles) / typical                    | 20 000 |

| Voltage                          |   |     |
|----------------------------------|---|-----|
| Insulation voltage / Rated value | V | 800 |
| insulation voitage / Rated value | V | 600 |

#### Protection class

| Protection class IP  |   | IP40              |
|--|---|-------------------|
| Protection class IP / on the front   |   | IP40              |
| Protective function of the overcurrent release   |   | LSI               |
| Switching capacity   |   |                   |
| Switching capacity class of the circuit breaker  |   | L                 |
| D: 1.12  |   |                   |
| Dissipation Active power loss  |   |                   |
| maximum  | W | 0.5               |
| - maximum  |   | 0.0               |
| Electricity  |   |                   |
| Continuous current / Rated value / maximum   | Α | 160               |
| Continuous current / Rated value   | Α | 25                |
| Adjustable response value current / of the instantaneous short-circuit release / initial value | Α | 1.5               |
| instantaneous short-circuit release / initial value  |   |                   |
| Main circuit   |   |                   |
| Operating voltage  |   |                   |
| <ul><li>with AC / at 50/60 Hz / Rated value</li></ul>  | 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 |
| Adjustable parameters  |   |                   |
| Adjustable response value current  |   |                   |
| of I-trip / Full-scale value   | Α | 12                |
| of the short-time delayed short-circuit release /  | A | 0.6               |
| initial value  |   |                   |
| • of the short-time delayed short-circuit release /  | А | 10                |
| Full-scale value   |   |                   |
| <ul> <li>of S-trip / with standard characteristic / initial value</li> </ul>                   | Α | 0.6               |
| <ul> <li>of S-trip / with standard characteristic / Full-<br/>scale value</li> </ul>           | Α | 10                |
| Adjustable delay time  |   |                   |
| • of S-trip / with I2t characteristic / initial value  | S | 0.05              |

| <ul> <li>of S-trip / with I2t characteristic / Full-scale</li> <li>value</li> <li>of S-trip / with standard characteristic / initial</li> <li>0.5</li> <li>0.05</li> </ul>  |  |
|---|--|
|   |  |
|   |  |
| <ul> <li>of S-trip / with standard characteristic / initial</li> <li>value</li> </ul>   |  |
| • of S-trip / with standard characteristic / Full-  |  |
| scale value   |  |
| Adjustable response value current / of the current- A 0.4   |  |
| dependent overload release / initial value  |  |
| Product details   |  |
| Product component   |  |
| • Trip indicator No   |  |
| • display Yes   |  |
| • undervoltage release No   |  |
| Product property  |  |
| • for neutral conductors / No   |  |
| upgradeable/retrofittable / Short-circuit and   |  |
| overload proof  |  |
| 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  |  |
| Accessories   |  |
| Manufacturer article number / of the supplied basic 3VA2125-8KP42-0AA0  |  |
| switch  |  |
| Short circuit   |  |
| Operational short-circuit current breaking capacity   |  |
| (lcs)   |  |
| at 240 V / Rated value     kA 200   |  |
| at 415 V / Rated value     kA 150   |  |
| at 440 V / Rated value     kA 150   |  |
| at 500 V / Rated value     kA 100   |  |
|   |  |
| • at 690 V / Rated value kA 18  |  |
| • at 690 V / Rated value kA 18  Maximum short-circuit current breaking capacity (Icu)   |  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>kA</li> <li>200</li> </ul>  |  |
| at 690 V / Rated value  |  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>kA</li> <li>200</li> </ul>  |  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>kA</li> <li>150</li> </ul>  |  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>kA</li> <li>150</li> <li>at 440 V / Rated value</li> <li>kA</li> <li>150</li> </ul> |  |

| • at 240 V / Rated value | kA | 440 |
|--------------------------|----|-----|
| • at 415 V / Rated value | kA | 330 |
| • at 440 V / Rated value | kA | 330 |
| • at 500 V / Rated value | kA | 220 |
| • at 690 V / Rated value | kA | 48  |

| Connections   |                |
|---|----------------|
| Arrangement of electrical connectors / for main current circuit | Front terminal |
| Type of connectable conductor cross-section                     |                |
| • for flat-bar terminal connection / minimum                    | 13 x 1 mm      |
| • for flat-bar terminal connection / maximum                    | 25 x 8.5       |
| Type of electrical connection / for main current circuit        | Lug terminal   |

| Mechanical Design |    |                |
|-------------------|----|----------------|
| Height            | mm | 181            |
| Width             | mm | 140            |
| Depth             | mm | 107            |
| 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             |   |  |
|--------------------------|---|--|
| Equipment marking        |   |  |
| • acc. to DIN EN 61346-2 | Q |  |
| • acc. to DIN EN 81346-2 | Q |  |

| 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)
<a href="https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21258KP420AA0">https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21258KP420AA0</a>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21258KP420AA0/all

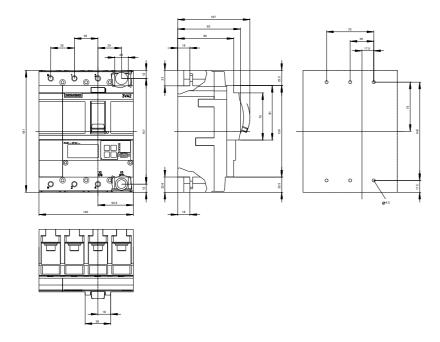
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21258KP420AA0

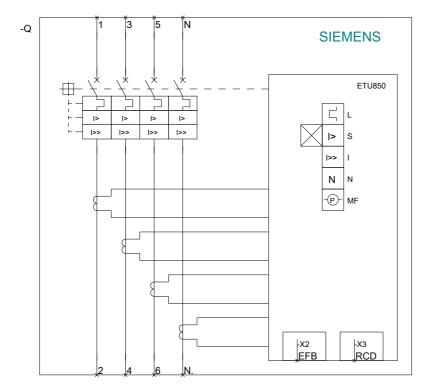
**CAx-Online-Generator** 

http://www.siemens.com/cax

### **Tender specifications**

http://ausschreibungstexte.siemens.com/tiplv





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