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## Data sheet 3VA5112-1MU31-0AA0



CIRCUIT BREAKER 3VA5 UL FRAME 125 3-POLE,MOTOR STARTER PROTECTION TM120M, AM, IN=125A WITHOUT OVERLOAD PROTECTION SHORT CIRCUIT PROTECTION Ii=3...7 X IN W/O CONNECTION

| Model | |
|---|---|
| Product brand name | SENTRON |
| Product designation | Molded-case circuit breaker |
| Design of the product | Starter protection |
| Design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type) | Yes |
| Design of the overcurrent release | TM120M |
| Protective function of the overcurrent release | I |
| Number of poles | 3 |

| General technical data | |
|---|---|
| Tension assignée d'isolement Ui | 800 V |
| Max. rated operational voltage Ue with AC 50/60Hz | 690 V |
| Max. rated operational voltage Ue with DC | 500 V |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 30 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 10 W |
| Mechanical service life (switching cycles) / typical | 15 000 |


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| | |
|---|---|
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz | 8 000 |
| Electrical endurance (switching cycles) / at 480 V / at 50/60 Hz | 8 000 |
| Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz | 4 000 |
| Neutral conductors / upgradeable/retrofittable | No |
| Ground fault monitoring version | Without |
| Product function | |
| • communication function | No |
| • Phase failure detection | No |
| • other measurement function | No |

| Electricity | |
|---|---|
| Marking / acc. to UL 489 / 100%-rated breaker | No |
| Max. rated operational voltage of the size of the circuit-breaker | 125 A |
| Courant permanent assigné Iu | 125 A |
| Operating current | |
| • at 40 °C | 125 A |
| • at 45 °C | 122.07 A |
| • at 50 °C | 119.28 A |
| • at 55 °C | 116.604 A |
| • at 60 °C | 114.05 A |
| • at 65 °C | 111.607 A |
| • at 70 °C | 109.27 A |

| Switching capacity according to IEC 60947 | |
|---|---|
| Maximum short-circuit current breaking capacity (Icu) | |
| • at 240 V | 150 kA |
| • at 415 V | 70 kA |
| • at 690 V | 10 kA |
| Operational short-circuit current breaking capacity (Ics) | |
| • at 240 V | 150 kA |
| • at 415 V | 70 kA |
| • at 690 V | 5 kA |
| Short-circuit current making capacity (Icm) | |
| • at 240 V | 330 kA |
| • at 415 V | 154 kA |
| • at 690 V | 17 kA |

| Adjustable parameters | |
|---|---|
| Adjustable response value current / Ii min. | 375 A |
| Adjustable response value current / Ii max. | 875 A |


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| | |
|---|---|
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |

| Mechanical Design | |
|---|---|
| Height [in] | 5.5 in |
| Height | 140 mm |
| Width [in] | 3 in |
| Width | 76.2 mm |
| Depth [in] | 3 in |
| Depth | 76.5 mm |

| Connections | |
|---|---|
| Arrangement of electrical connectors / for main current circuit | Without connection |
| Type of electrical connection / for main current circuit | Without |

| Auxiliary circuit | |
|---|---|
| Number of CO contacts / for auxiliary contacts | 0 |

| Accessories | |
|---|---|
| Product extension / optional / motor drive | Yes |

| Environmental conditions | |
|---|---|
| Protection class IP / on the front | IP40 |
| Ambient temperature | |
| • during operation / minimum | -25 °C |
| • during operation / maximum | 70 °C |
| • during storage / minimum | -40 °C |
| • during storage / maximum | 80 °C |

| Certificates | |
|---|---|
| Equipment marking / acc. to DIN EN 81346-2 | Q |
| Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB | No |


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| General Product Approval | | | EMC | Declaration of Conformity | Shipping Approval |
|---|---|---|---|---|---|
| CSA | UL | | RCM | EG-Konf. | ABS |

## other

Miscellaneous

## Further information

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

**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5112-1MU31-0AA0

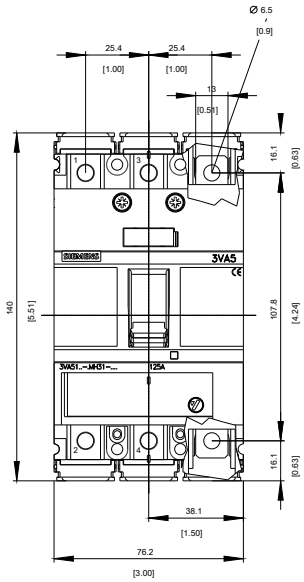
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3VA5112-1MU31-0AA0

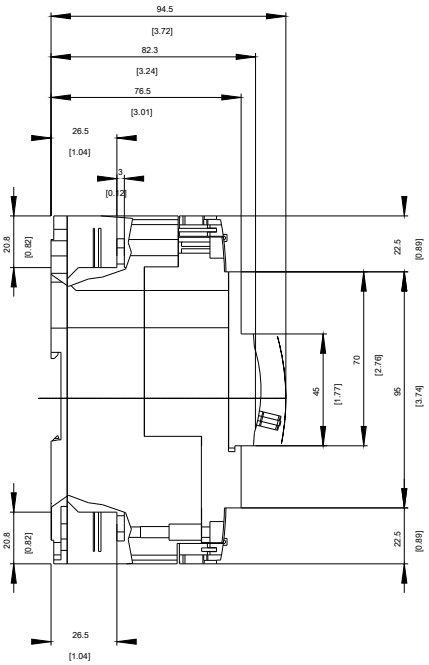
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5112-1MU31-0AA0

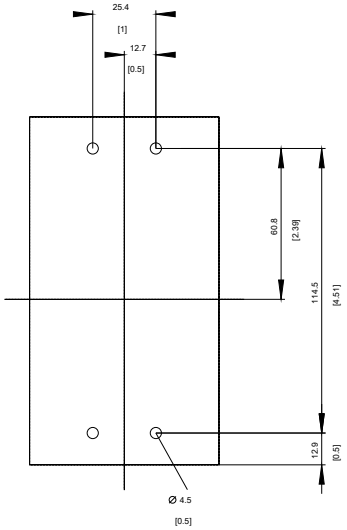
**CAx-Online-Generator**
http://www.siemens.com/cax

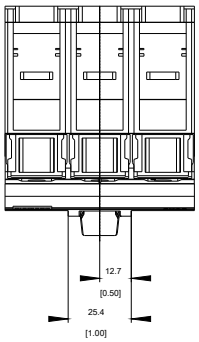
**Tender specifications**
http://www.siemens.com/specifications


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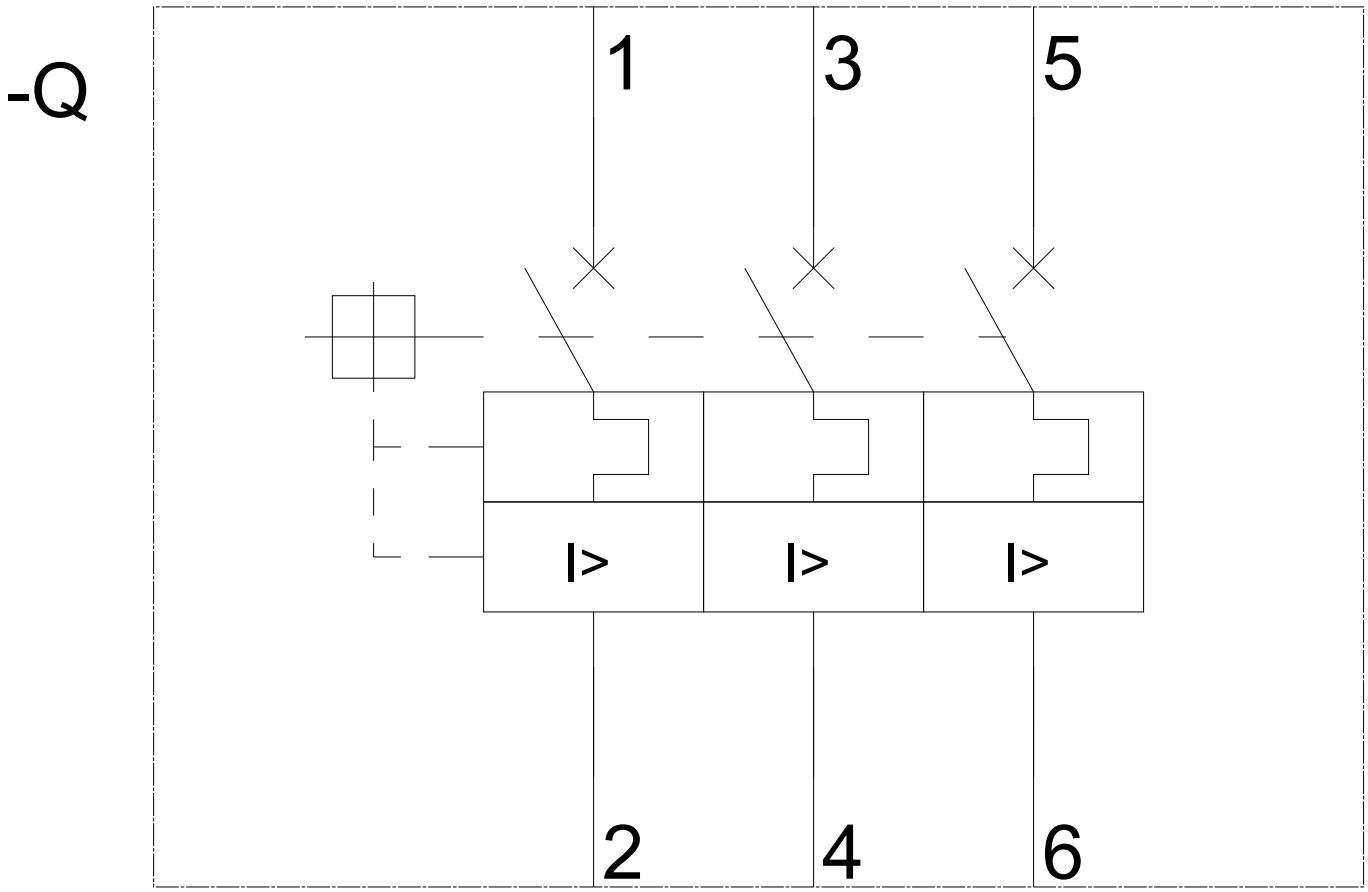



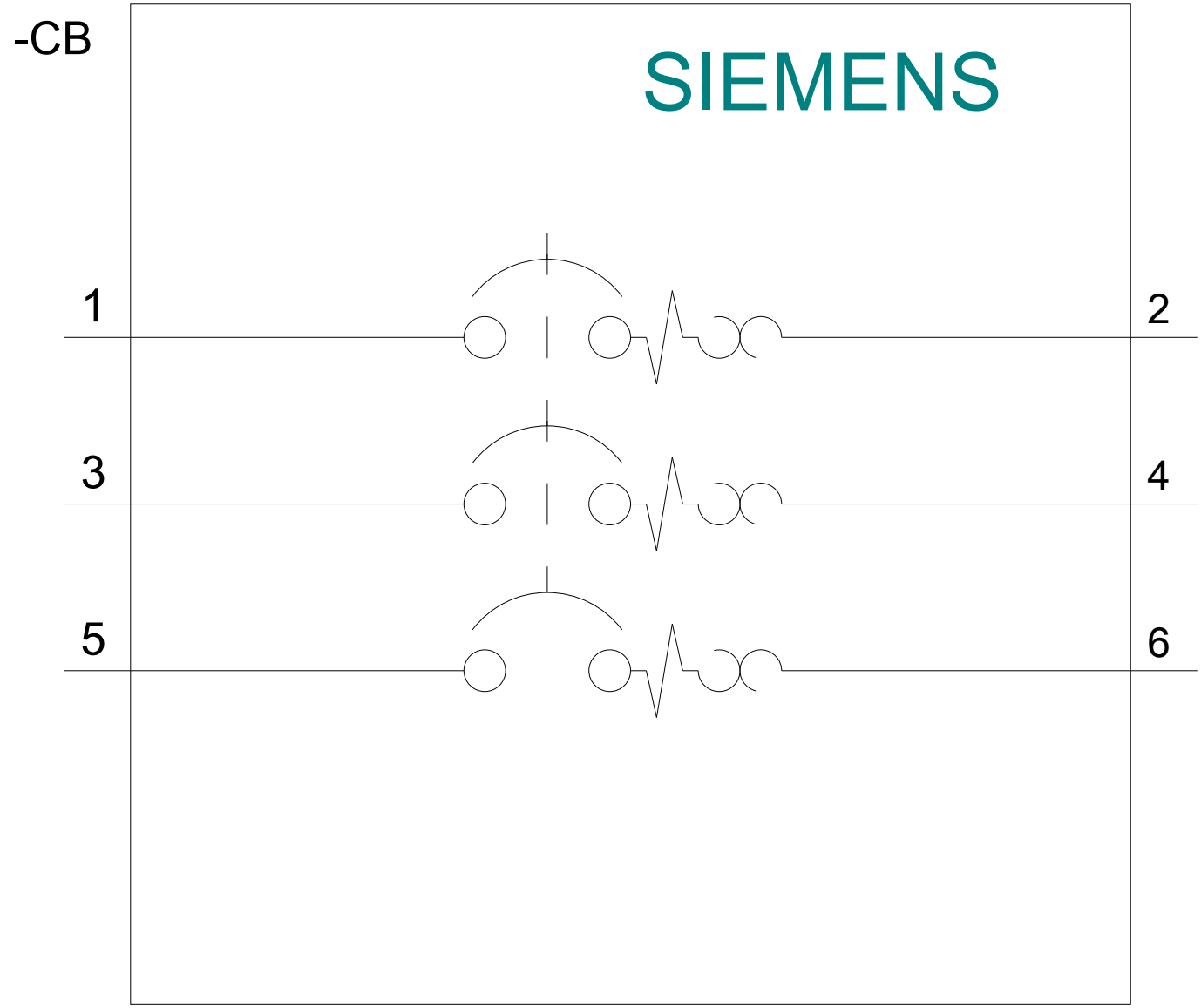


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