



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 3-POLE,MOTOR STARTER PROTECTION ETU310M, I, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION II=6 X IN CABLE CONNECTION SHUNT TRIP (STL) 220-250 V DC, 208-277 V AC 2 AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ

| Model                                          |                                                                           |
|------------------------------------------------|---------------------------------------------------------------------------|
| product brandname                              | SENTRON                                                                   |
| Product designation                            | Molded case circuit breaker                                               |
| Design of the product                          | Starter protection                                                        |
| Design of the overcurrent release              | ETU310M                                                                   |
| Protective function of the overcurrent release | I                                                                         |
| Number of poles                                | 3                                                                         |
| Design of the auxiliary release                | Undervoltage release (UVR)                                                |
| Design of the auxiliary switch                 | 2 auxiliary switches + 1 trip alarm switch + 1 electrical alarm switch HQ |

| General technical data                                                                           |        |
|--------------------------------------------------------------------------------------------------|--------|
| Tension assignée d'isolement Ui                                                                  | 800 V  |
| Max. rated operational voltage Ue with AC 50/60Hz                                                | 690 V  |
| Operating power / at AC-3 / at 400 V                                                             | 45 W   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 75 W   |
| Mechanical service life (switching cycles) / typical                                             | 20 000 |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                        | 12 000 |

|                                               |         |
|-----------------------------------------------|---------|
| Neutral conductors / upgradeable/retrofitable | No      |
| Ground fault monitoring version               | Without |
| Product function                              |         |
| • communication function                      | No      |
| • Phase failure detection                     | No      |
| • other measurement function                  | No      |
| Net weight                                    | 2.5 kg  |

#### Electricity

|                                                                   |       |
|-------------------------------------------------------------------|-------|
| Max. rated operational voltage of the size of the circuit-breaker | 160 A |
| Courant permanent assigné lu                                      | 100 A |
| Operating current                                                 |       |
| • at 40 °C                                                        | 100 A |
| • at 45 °C                                                        | 100 A |
| • at 50 °C                                                        | 100 A |
| • at 55 °C                                                        | 96 A  |
| • at 60 °C                                                        | 94 A  |
| • at 65 °C                                                        | 92 A  |
| • at 70 °C                                                        | 90 A  |

#### Switching capacity according to IEC 60947

|                                                           |         |
|-----------------------------------------------------------|---------|
| Switching capacity class of the circuit breaker           | C       |
| Maximum short-circuit current breaking capacity (Icu)     |         |
| • at 240 V                                                | 150 kA  |
| • at 415 V                                                | 110 kA  |
| • at 440 V                                                | 110 kA  |
| • at 500 V                                                | 85 kA   |
| • at 690 V                                                | 25 kA   |
| Operational short-circuit current breaking capacity (Ics) |         |
| • at 240 V                                                | 150 kA  |
| • at 415 V                                                | 110 kA  |
| • at 440 V                                                | 110 kA  |
| • at 500 V                                                | 85 kA   |
| • at 690 V                                                | 25 kA   |
| Short-circuit current making capacity (Icm)               |         |
| • at 240 V                                                | 330 kA  |
| • at 415 V                                                | 242 kA  |
| • at 440 V                                                | 242 kA  |
| • at 500 V                                                | 187 kA  |
| • at 690 V                                                | 52.5 kA |

#### Adjustable parameters

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| Adjustable response value current / I <sub>g</sub> min.            | 0 A     |
| Adjustable response value current / I <sub>g</sub> min.            | 0 A     |
| Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF | No      |
| Adjustable response value current / I <sub>i</sub> min.            | 300 A   |
| Adjustable response value current / I <sub>i</sub> max.            | 1 500 A |

### Mechanical Design

|        |        |
|--------|--------|
| Height | 181 mm |
| Width  | 105 mm |
| Depth  | 86 mm  |

### Connections

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Arrangement of electrical connectors / for main current circuit | Front terminal |
| Type of electrical connection / for main current circuit        | Box terminal   |

### Auxiliary circuit

|                                                |     |
|------------------------------------------------|-----|
| Product component                              |     |
| • undervoltage release                         | Yes |
| • Voltage trigger                              | No  |
| • undervoltage release with leading contact    | No  |
| • Trip indicator                               | Yes |
| Number of CO contacts / for auxiliary contacts | 4   |

### Accessories

|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| Product extension / optional / motor drive        | Yes                                |
| Manufacturer's article number                     |                                    |
| • of the supplied basic switch                    | <a href="#">3VA2110-7MS36-0AA0</a> |
| • of the integrated auxiliary switch/alarm switch | <a href="#">3VA9988-0AA12</a>      |
| • of the integrated auxiliary switch/alarm switch | <a href="#">3VA9988-0AB12</a>      |
| • of the integrated auxiliary switch/alarm switch | <a href="#">3VA9988-0AB22</a>      |
| • of the integrated auxiliary trip                | <a href="#">3VA9608-0BB24</a>      |

### 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 |
|--------------------------------------------|---|

| General Product Approval                                                                 | EMC                                                                               | Declaration of Conformity                                                                | Test Certificates                                                                             | other                                                    |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <br>CCC |  | <br>RCM | <br>EG-Konf. | <a href="#">sonstig</a><br><a href="#">Bestätigungen</a> |

|                                  |
|----------------------------------|
| other<br><a href="#">sonstig</a> |
|----------------------------------|

#### 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/3VA2110-7MS36-0CL0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2110-7MS36-0CL0/all>

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

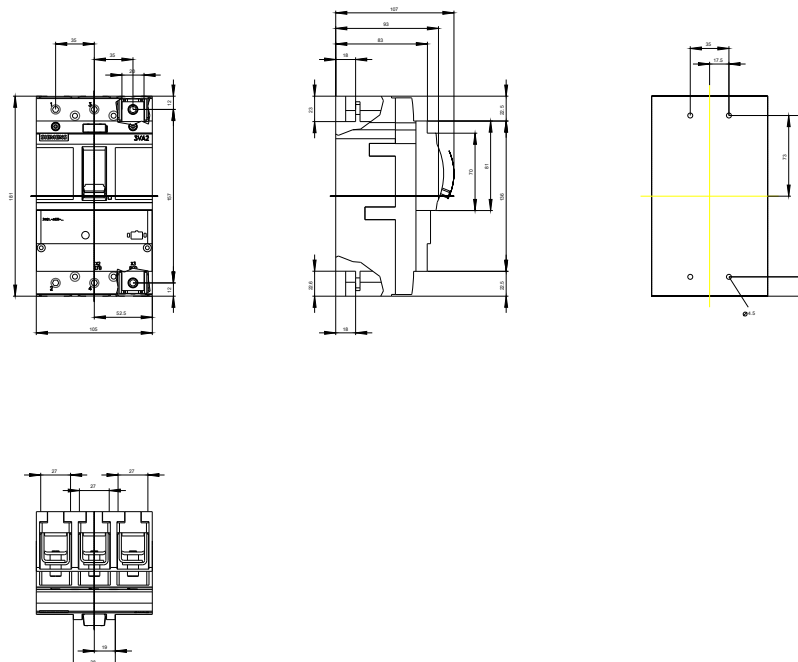
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2110-7MS36-0CL0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2110-7MS36-0CL0)

**CAX-Online-Generator**

<http://www.siemens.com/cax>

**Tender specifications**

<http://www.siemens.com/specifications>





Siemens

3VA2xxx-xMS3x-0AA0

Format / Size: Hybrid quer

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