



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 BUSBAR CONNECTION SHUNT TRIP (STL) 110-127 V DC, AC 50/60 HZ

| 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 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                      | 2.4 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        | Lug terminal   |

### Auxiliary circuit

|                                                |     |
|------------------------------------------------|-----|
| Product component                              |     |
| • undervoltage release                         | Yes |
| • Voltage trigger                              | No  |
| • undervoltage release with leading contact    | No  |
| • Trip indicator                               | No  |
| Number of CO contacts / for auxiliary contacts | 2   |

### Accessories

|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| Product extension / optional / motor drive        | Yes                                |
| Manufacturer's article number                     |                                    |
| • of the supplied basic switch                    | <a href="#">3VA2110-7MS32-0AA0</a> |
| • of the integrated auxiliary switch/alarm switch | <a href="#">3VA9988-0AA12</a>      |
| • of the integrated auxiliary trip                | <a href="#">3VA9608-0BB11</a>      |

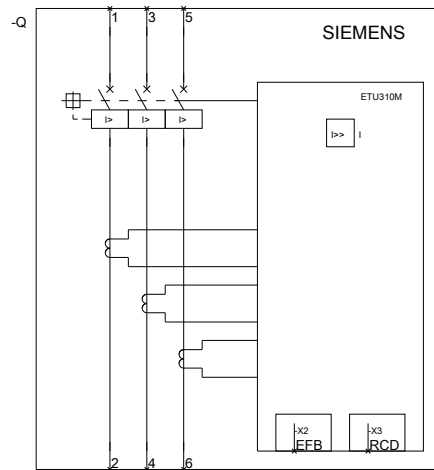
### Environmental conditions

|                                    |        |
|------------------------------------|--------|
| 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 |
|--------------------------------------------|---|





Siemens

3VA2xxx-xMS3x-0AA0

Format / Size: Hybrid quer

last modified:

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