



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, LINE PROTECTION ETU560, LSIG, IN=63A OVERLOAD PROTECTION IR=25,2A ...63A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT GROUND-FAULT, SWITCHABLE IG=0,25...1 X IN, TG=0,05-0,8S BUSBAR CONNECTION UNDERVOLTAGE RELEASE (UVR) 120-127 V AC 50/60 HZ 2 AUXILIARY SWITCH HQ

| Model                                                                                            |                                         |
|--------------------------------------------------------------------------------------------------|-----------------------------------------|
| product brandname                                                                                | SENTRON                                 |
| Product designation                                                                              | Molded case circuit breaker             |
| Design of the product                                                                            | Line protection                         |
| Design of the overcurrent release                                                                | ETU560                                  |
| Protective function of the overcurrent release                                                   | LSIG                                    |
| 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                                   |
| Active power loss / for rated value of the current / at AC / in hot operating state / per device | 6.5 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                                                    | Yes                                     |
| Ground fault monitoring version                                                                  | Summation current formation L-conductor |

|                              |         |
|------------------------------|---------|
| Product function             |         |
| • communication function     | Yes     |
| • Phase failure detection    | No      |
| • other measurement function | No      |
| Net weight                   | 2.47 kg |

#### Electricity

|                                                                   |           |
|-------------------------------------------------------------------|-----------|
| Max. rated operational voltage of the size of the circuit-breaker | 160 A     |
| Courant permanent assigné Iu                                      | 63 A      |
| Operating current                                                 |           |
| • at 40 °C                                                        | 63 A      |
| • at 45 °C                                                        | 63 A      |
| • at 50 °C                                                        | 63 A      |
| • at 55 °C                                                        | 60.6375 A |
| • at 60 °C                                                        | 58.275 A  |
| • at 65 °C                                                        | 55.9125 A |
| • at 70 °C                                                        | 53.55 A   |

#### Switching capacity according to IEC 60947

|                                                           |         |
|-----------------------------------------------------------|---------|
| Switching capacity class of the circuit breaker           | M       |
| Maximum short-circuit current breaking capacity (Icu)     |         |
| • at 240 V                                                | 85 kA   |
| • at 415 V                                                | 55 kA   |
| • at 440 V                                                | 55 kA   |
| • at 500 V                                                | 36 kA   |
| • at 690 V                                                | 2.5 kA  |
| Operational short-circuit current breaking capacity (Ics) |         |
| • at 240 V                                                | 85 kA   |
| • at 415 V                                                | 55 kA   |
| • at 440 V                                                | 55 kA   |
| • at 500 V                                                | 36 kA   |
| • at 690 V                                                | 2.5 kA  |
| Short-circuit current making capacity (Icm)               |         |
| • at 240 V                                                | 187 kA  |
| • at 415 V                                                | 121 kA  |
| • at 440 V                                                | 121 kA  |
| • at 500 V                                                | 79 kA   |
| • at 690 V                                                | 4.25 kA |

#### Adjustable parameters

|                                                         |      |
|---------------------------------------------------------|------|
| Adjustable response value current / I <sub>g</sub> min. | 25 A |
| Adjustable response value current / I <sub>g</sub> min. | 63 A |

|                                                                                                 |        |
|-------------------------------------------------------------------------------------------------|--------|
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.5    |
| Adjustable response value current / I <sub>g</sub> min.                                         | 25     |
| Adjustable response value current / I <sub>g</sub> min.                                         | 38 A   |
| Adjustable response value current / I <sub>g</sub> min.                                         | 630 A  |
| Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF                              | Yes    |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.05 s |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.5 s  |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.05 s |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.5 s  |
| Adjustable response value current / I <sub>i</sub> min.                                         | 95 A   |
| Adjustable response value current / I <sub>i</sub> max.                                         | 756 A  |
| Ground fault protection can be switched ON/OFF                                                  | Yes    |
| Adjustable response value current / I <sub>g</sub> min.                                         | 16 A   |
| Adjustable response value current / I <sub>g</sub> max.                                         | 63 A   |
| Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / min. | 0.25 A |
| Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / max. | 1 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   |
| Type of connectable conductor cross-section, connection screw, width x thickness , min. | 13 x 1 mm      |
| Type of connectable conductor cross-section, connection screw, width x thickness , max. | 25 x 8.5       |

#### 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="#">3VA2163-5JQ32-0AA0</a> |

- of the integrated auxiliary switch/alarm switch
- of the integrated auxiliary trip

[3VA9988-0AA12](#)

[3VA9608-0BB24](#)

## 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                                                                       |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>CCC | <br>VDE     | <br>EAC        |
|                                                                                          | <br>sonstig | <br>RCM      |
|                                                                                          |                                                                                              | <br>EG-Konf. |

| Test Certificates                                 | Shipping Approval                                                                                    |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <a href="#">Typprüfbescheinigung/Werkszeugnis</a> | <br>sonstig        |
|                                                   | <br>ABS            |
|                                                   | <br>BUREAU VERITAS |
|                                                   | <br>GL          |
|                                                   | <br>LRS         |

| Shipping Approval                                                                           | other                                                                                          |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <br>RMRS | <br>sonstig |

## 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/3VA2163-5JQ32-0CC0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2163-5JQ32-0CC0/all>

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

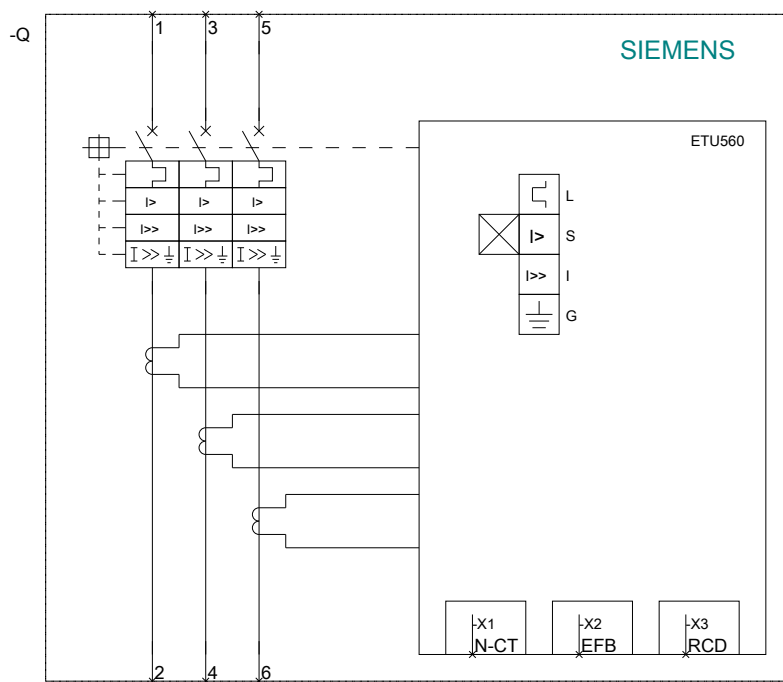
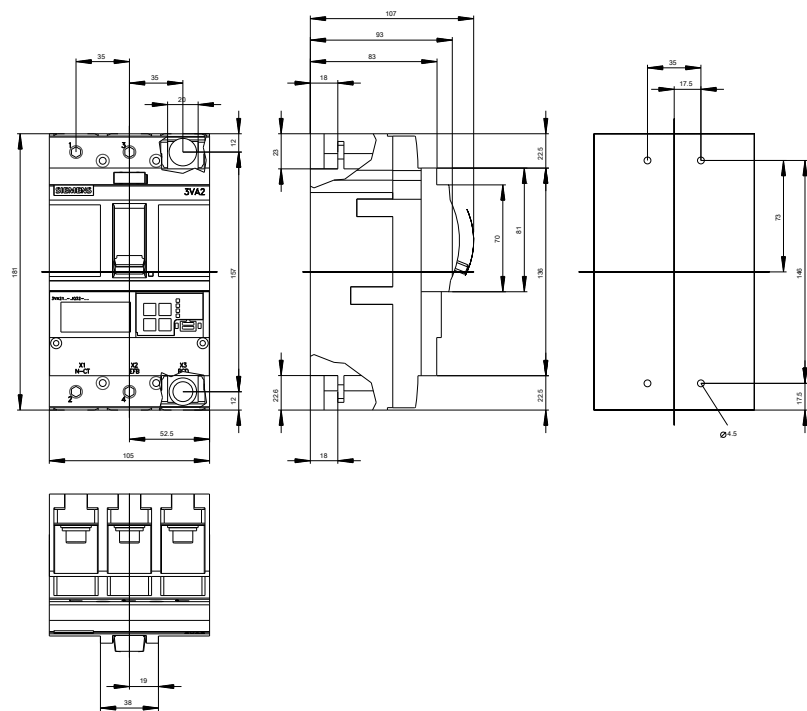
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2163-5JQ32-0CC0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-5JQ32-0CC0)

CAX-Online-Generator

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

Tender specifications

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



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