



circuit breaker 3VA2 IEC frame 160 breaking capacity class C  
Icu=110kA @ 415V 4-pole, line protection ETU330, LIG, In=63A  
overload protection Ir=25A...63A short-circuit protection li=1.5...12 x  
In N conductor protection adjustable (OFF, 100%) ground-fault  
protection Ig=0.25...1 x In= tg=0.1/0.3s nut keeper kit

| Model                                          |                             |
|------------------------------------------------|-----------------------------|
| product brand name                             | SETRON                      |
| product designation                            | Molded case circuit breaker |
| Product version                                | Line protection             |
| design of the overcurrent release              | ETU330                      |
| protection function of the overcurrent release | LIG                         |
| number of poles                                | 4                           |

| General technical data                                                                         |        |
|------------------------------------------------------------------------------------------------|--------|
| Tension assignée d'isolement Ui                                                                | 800 V  |
| Max. rated operational voltage Ue with AC 50/60Hz                                              | 690 V  |
| power loss [W] / maximum                                                                       | 4 W    |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 1.33 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 |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 8 000  |
| Neutral conductors / upgradeable/retrofitable                                                  | No     |

|                                 |                                             |
|---------------------------------|---------------------------------------------|
| ground fault monitoring version | Summation current formation L + N conductor |
| product function                |                                             |
| • communication function        | No                                          |
| • other measurement function    | No                                          |
| net weight                      | 2.93 kg                                     |

#### Current

|                                                  |       |
|--------------------------------------------------|-------|
| Max. rated operational current of the frame size | 160 A |
| Courant permanent assigné lu                     | 63 A  |
| operating current                                |       |
| • at 40 °C                                       | 63 A  |
| • at 45 °C                                       | 63 A  |
| • at 50 °C                                       | 63 A  |
| • at 55 °C                                       | 63 A  |
| • at 60 °C                                       | 63 A  |
| • at 65 °C                                       | 63 A  |
| • at 70 °C                                       | 63 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                                                | 2.5 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                                                | 2.5 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                                                | 3.8 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.                                         | 17                   |
| Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF                              | No                   |
| Adjustable response value current / I <sub>i</sub> min.                                         | 95 A                 |
| Adjustable response value current / I <sub>i</sub> max.                                         | 756 A                |
| design of the N-conductor protection                                                            | adjustable OFF; 100% |
| Ground fault protection can be switched ON/OFF                                                  | No                   |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =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 / t <sub>g</sub> min.                                         | 0.1 s                |
| Adjustable response value current / I <sub>g</sub> min.                                         | 0.3 s                |
| Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / min. | 0 A                  |
| Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / max. | 0 A                  |

#### Mechanical Design

|             |        |
|-------------|--------|
| height [in] | 7.1 in |
| Height      | 181 mm |
| width [in]  | 5.5 in |
| Width       | 140 mm |
| depth [in]  | 3.4 in |
| depth       | 86 mm  |

#### Connections

|                                                                                         |                              |
|-----------------------------------------------------------------------------------------|------------------------------|
| arrangement of electrical connectors / for main current circuit                         | Front terminal               |
| type of electrical connection / for main current circuit                                | on both sides nut keeper kit |
| 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 mm                  |

#### 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

reference code / acc. to DIN EN 81346-2

Q

### General Product Approval

EMC



CCC



VDE

**CB**

CB

[Miscellaneous](#)

**EAC**



RCM

### Declaration of Conformity

### Test Certificates

### Shipping Approval



EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



LRS

### Shipping Approval

### other

[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

[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=3VA2163-7HM42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-7HM42-0AA0>

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

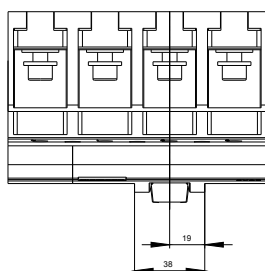
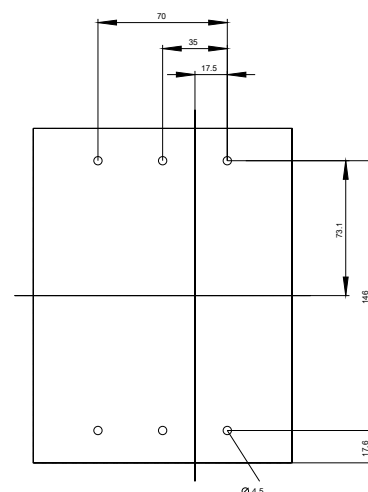
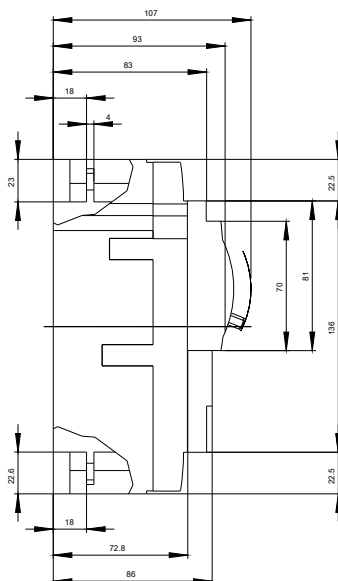
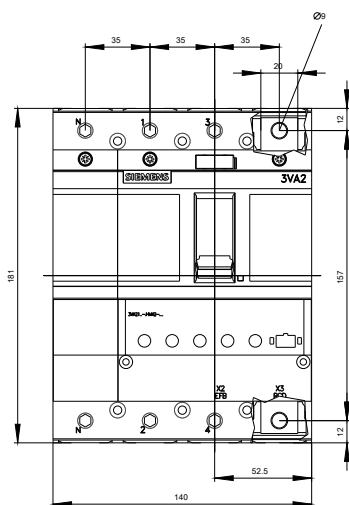
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2163-7HM42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-7HM42-0AA0)

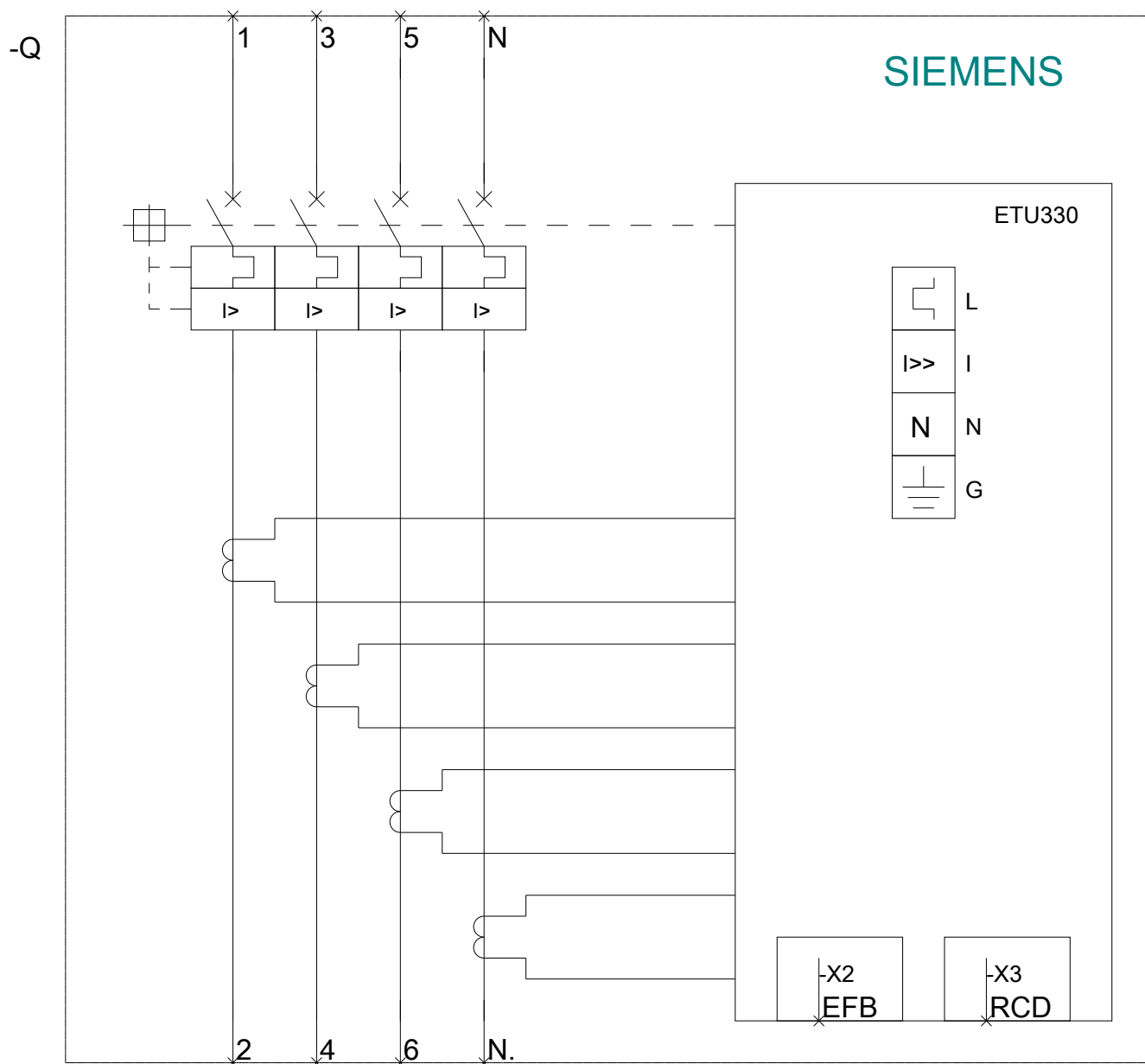
### CAX-Online-Generator

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

### Tender specifications

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





last modified:

10/30/2020