



circuit breaker 3VA1 IEC frame 630 breaking capacity class C  
Icu=110kA @ 415 V 4-pole, line protection TM240, ATAM, In=630A  
overload protection Ir=440A ...630A short-circuit protection Ii=4...8 x  
In N conductor unprotected nut keeper kit

| Model                                          |                             |
|------------------------------------------------|-----------------------------|
| product brand name                             | SETRON                      |
| product designation                            | Molded case circuit breaker |
| Product version                                | Line protection             |
| design of the overcurrent release              | TM240                       |
| protection function of the overcurrent release | LI                          |
| 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   |
| Max. rated operational voltage Ue with DC                                                      | 600 V   |
| power loss [W] / maximum                                                                       | 192.9 W |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 64.3 W  |
| mechanical service life (switching cycles) / typical                                           | 15 000  |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 4 000   |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 2 700   |

|                                               |         |
|-----------------------------------------------|---------|
| Neutral conductors / upgradeable/retrofitable | No      |
| ground fault monitoring version               | Without |
| product function                              |         |
| • communication function                      | No      |
| • other measurement function                  | No      |

#### Current

|                                                  |       |
|--------------------------------------------------|-------|
| Max. rated operational current of the frame size | 630 A |
| Courant permanent assigné lu                     | 630 A |
| operating current                                |       |
| • at 40 °C                                       | 630 A |
| • at 45 °C                                       | 630 A |
| • at 50 °C                                       | 630 A |
| • at 55 °C                                       | 618 A |
| • at 60 °C                                       | 607 A |
| • at 65 °C                                       | 595 A |
| • at 70 °C                                       | 583 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                                                | 200 kA                                                                                                                                                         |
| • at 415 V                                                | 110 kA                                                                                                                                                         |
| • at 440 V                                                | 110 kA                                                                                                                                                         |
| • at 500 V                                                | 70 kA                                                                                                                                                          |
| • at 690 V                                                | 10 kA                                                                                                                                                          |
| operational short-circuit current breaking capacity (Ics) |                                                                                                                                                                |
| • at 240 V                                                | 200 kA                                                                                                                                                         |
| • at 415 V                                                | 110 kA                                                                                                                                                         |
| • at 440 V                                                | 110 kA                                                                                                                                                         |
| • at 500 V                                                | 70 kA                                                                                                                                                          |
| • at 690 V                                                | 6 kA                                                                                                                                                           |
| short-circuit current making capacity (Icm)               |                                                                                                                                                                |
| • at 240 V                                                | 440 kA                                                                                                                                                         |
| • at 415 V                                                | 242 kA                                                                                                                                                         |
| • at 440 V                                                | 242 kA                                                                                                                                                         |
| • at 500 V                                                | 154 kA                                                                                                                                                         |
| • at 690 V                                                | 17 kA                                                                                                                                                          |
| design of short-circuit protection                        | For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter |

#### Adjustable parameters

|                                                                         |         |
|-------------------------------------------------------------------------|---------|
| Adjustable response value current / I <sub>g</sub> min.                 | 441 A   |
| Adjustable response value current / I <sub>g</sub> min.                 | 630 A   |
| Adjustable response value current / I <sub>i</sub> min.                 | 3 150 A |
| Adjustable response value current / I <sub>i</sub> max.                 | 5 040 A |
| design of the N-conductor protection                                    | Without |
| Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF | No      |

## Mechanical Design

|             |        |
|-------------|--------|
| height [in] | 9.8 in |
| Height      | 248 mm |
| width [in]  | 7.2 in |
| Width       | 184 mm |
| depth [in]  | 4.3 in |
| depth       | 110 mm |

## Connections

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| arrangement of electrical connectors / for main current circuit | Front terminal |
|-----------------------------------------------------------------|----------------|

## 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                                                                                      | Declaration of Conformity                                                                | Test Certificates                                                                               |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <br>CCC | <br>EAC | <br>RCM | <br>EG-Konf. |

[Miscellaneous](#)

[Miscellaneous](#)

| Test Certificates                                                                                                                              | Shipping Approval                        | other                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|
| <a href="#">Type Test Certificates/Test Report</a><br><br>LRS | <a href="#">Manufacturer Declaration</a> | <a href="#">Miscellaneous</a> |

#### 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=3VA1463-7EF42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1463-7EF42-0AA0>

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

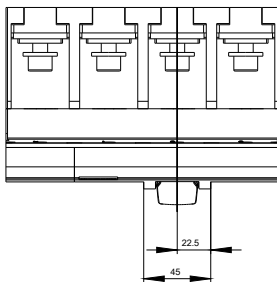
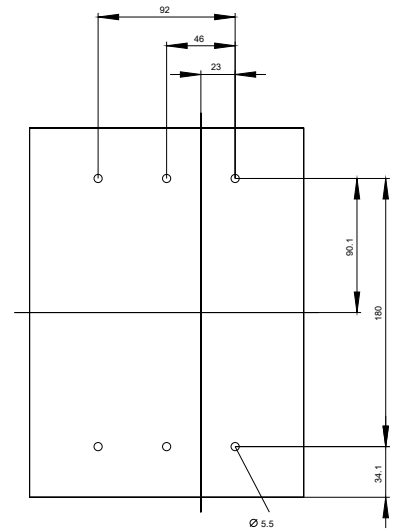
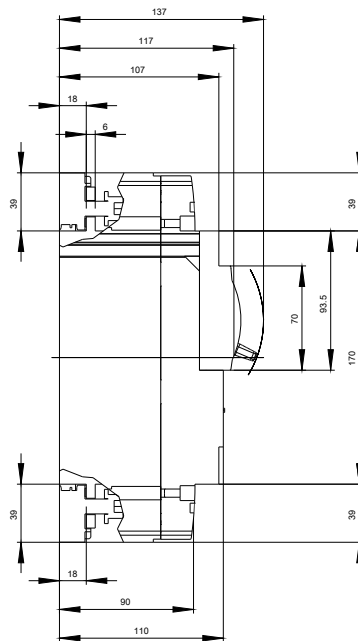
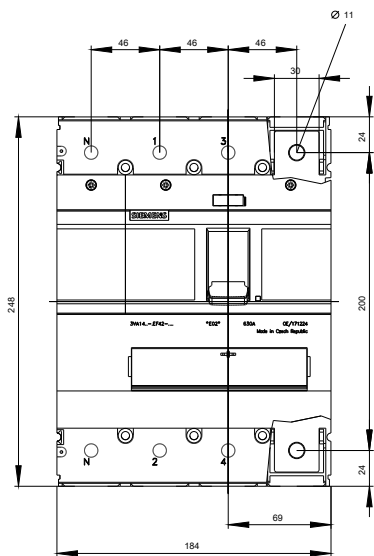
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1463-7EF42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1463-7EF42-0AA0)

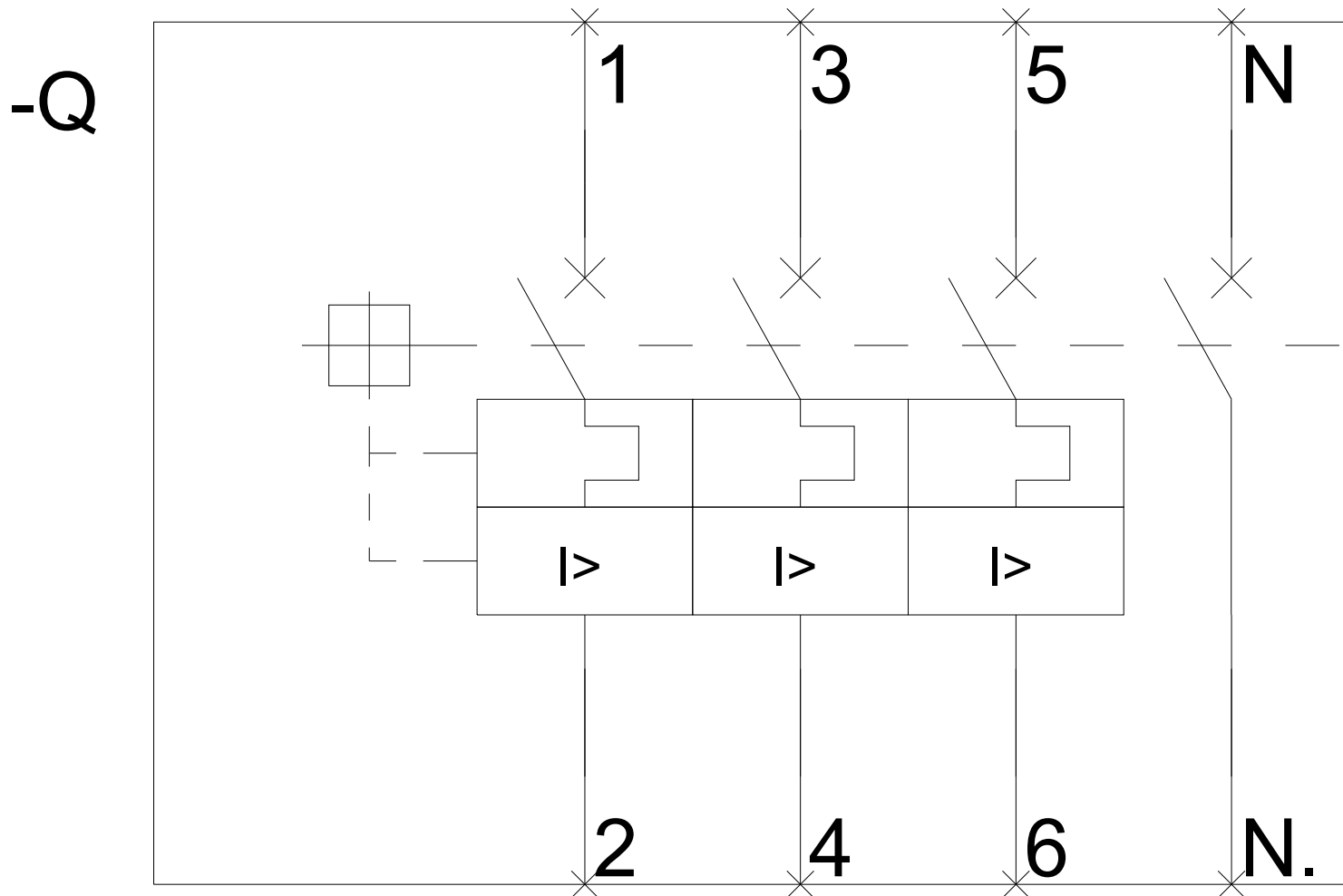
##### CAX-Online-Generator

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

##### Tender specifications

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





last modified:

10/30/2020