

circuit breaker 3VA1 IEC frame 160 breaking capacity class M  
Icu=55kA @ 415V 3-pole, starter protection TM110M, FM, In=4A  
without overload protection short-circuit protection Ii=15 x In clamp  
connection



| Model                                                                                          |                             |
|------------------------------------------------------------------------------------------------|-----------------------------|
| product brand name                                                                             | SETRON                      |
| product designation                                                                            | Molded case circuit breaker |
| Product version                                                                                | Starter protection          |
| design of the overcurrent release                                                              | TM110M                      |
| protection function of the overcurrent release                                                 | I                           |
| number of poles                                                                                | 3                           |
| 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                                                                       | 5.4 W                       |
| Active power loss / for rated value of the current / at AC / in hot operating state / per pole | 1.8 W                       |
| mechanical service life (switching cycles) / typical                                           | 15 000                      |
| Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz                      | 8 000                       |
| Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz                          | 8 000                       |
| Neutral conductors / upgradeable/retrofitable                                                  | No                          |

|                                 |         |
|---------------------------------|---------|
| ground fault monitoring version | Without |
| product function                |         |
| • communication function        | No      |
| • phase failure detection       | No      |
| • other measurement function    | No      |
| net weight                      | 0.9 kg  |

#### Current

|                                                  |       |
|--------------------------------------------------|-------|
| Max. rated operational current of the frame size | 160 A |
| Courant permanent assigné lu                     | 4 A   |
| operating current                                |       |
| • at 40 °C                                       | 4 A   |
| • at 45 °C                                       | 4 A   |
| • at 50 °C                                       | 4 A   |
| • at 55 °C                                       | 4 A   |
| • at 60 °C                                       | 4 A   |
| • at 65 °C                                       | 4 A   |
| • at 70 °C                                       | 4 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                                                | 30 kA  |
| • at 500 V                                                | 5 kA   |
| • at 690 V                                                | 5 kA   |
| operational short-circuit current breaking capacity (Ics) |        |
| • at 240 V                                                | 85 kA  |
| • at 415 V                                                | 55 kA  |
| • at 440 V                                                | 30 kA  |
| • at 500 V                                                | 5 kA   |
| • at 690 V                                                | 5 kA   |
| short-circuit current making capacity (Icm)               |        |
| • at 240 V                                                | 187 kA |
| • at 415 V                                                | 121 kA |
| • at 440 V                                                | 63 kA  |
| • at 500 V                                                | 7.5 kA |
| • at 690 V                                                | 7.5 kA |

#### Adjustable parameters

|                                             |      |
|---------------------------------------------|------|
| Adjustable response value current / li min. | 64 A |
| Adjustable response value current / li max. | 64 A |

|                                                            |    |
|------------------------------------------------------------|----|
| Ground fault protection / tripping switchable / I2t=ON/OFF | No |
|------------------------------------------------------------|----|

## Mechanical Design

|             |         |
|-------------|---------|
| height [in] | 5.1 in  |
| Height      | 130 mm  |
| width [in]  | 3 in    |
| Width       | 76.2 mm |
| depth [in]  | 2.8 in  |
| depth       | 70 mm   |

## Connections

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| arrangement of electrical connectors / for main current circuit                 | Front terminal     |
| Type of connectable conductor cross-section, round conductor terminal, stranded | 1 x (1.5 - 70 mm²) |

## 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>EG-Konf. | <br>RCM |

[Miscellaneous](#)

[Miscellaneous](#)

| Test Certificates                                                                              | Shipping Approval                                                                          | other                                                                                                                           |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Special Test Certificate</a><br><a href="#">Type Test Certificates/Test Report</a> | <br>LRS | <a href="#">CCS / China Classification Society</a><br><a href="#">Manufacturer Declaration</a><br><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=3VA1104-5MG36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1104-5MG36-0AA0>

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

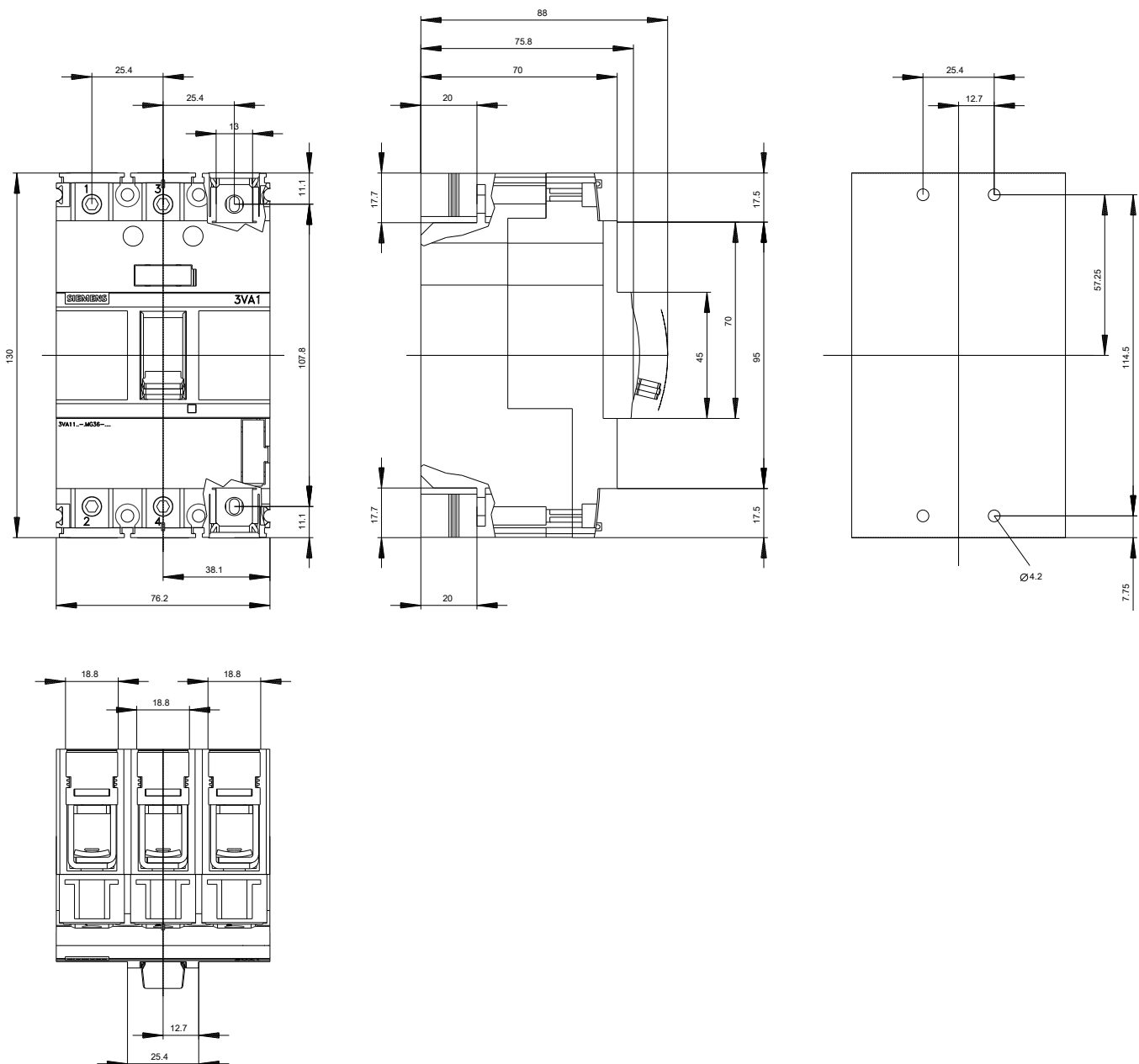
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1104-5MG36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1104-5MG36-0AA0)

### CAX-Online-Generator

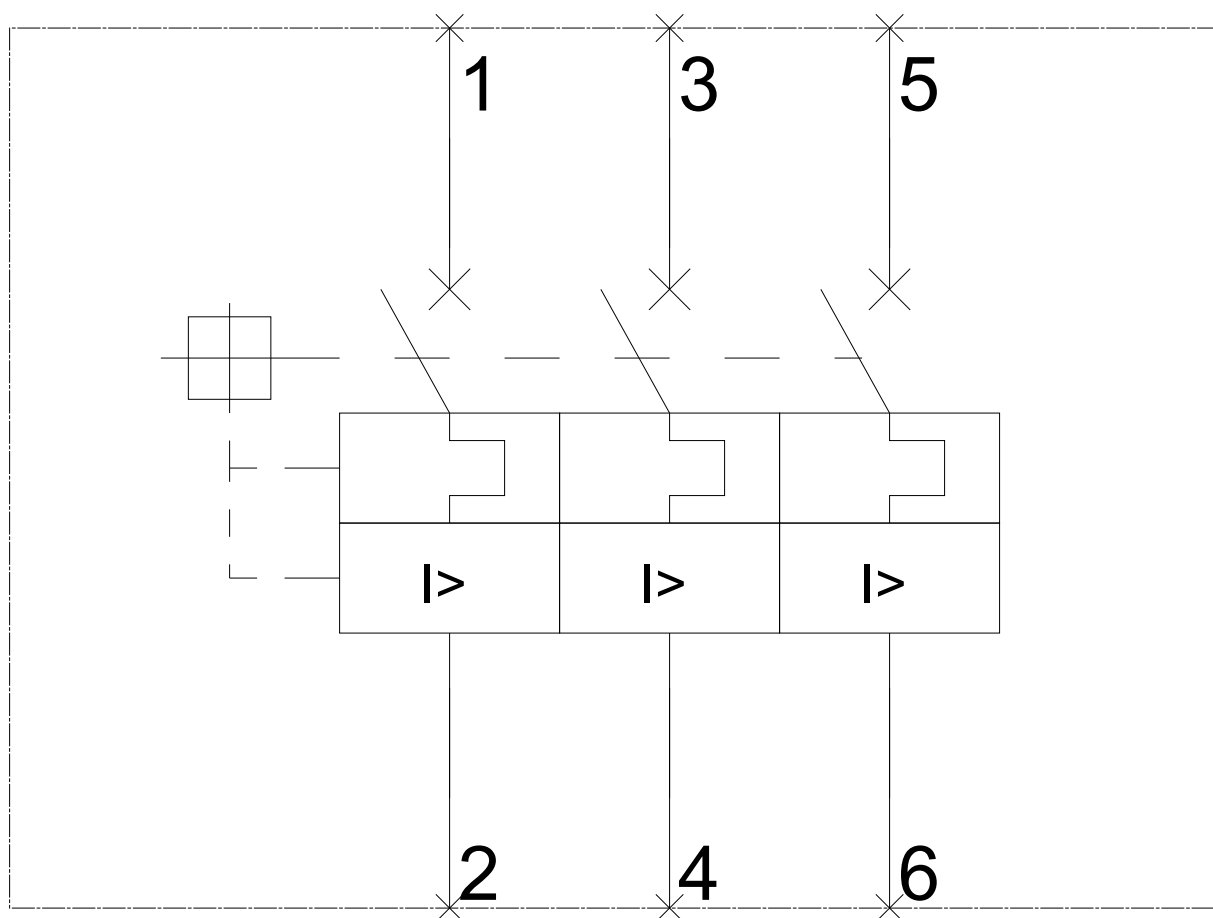
<http://www.siemens.com/cax>

### Tender specifications

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



-Q



last modified:

11/04/2020